

CITY OF LAS VEGAS

2050 Master Plan

A COMPREHENSIVE THIRTY-YEAR PLAN PREPARED FOR THE RESIDENTS AND BUSINESSES OF LAS VEGAS TO PROVIDE FOR THEIR HEALTH, SAFETY, PROSPERITY, SECURITY, COMFORT, AND GENERAL WELFARE

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THIS PLAN

WAS ADOPTED BY THE PLANNING COMMISSION

PURSUANT TO NRS 278.170 AND 278.210

ON _____ , 20_____

AND ADOPTED BY THE LAS VEGAS CITY COUNCIL

AND PUT INTO EFFECT

PURSUANT TO NRS 278.220 AND NRS 278.230

ON _____ , 20_____

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ADOPTED 2050 SPECIAL AREA PLANS

Vision 2045 Downtown Las Vegas Masterplan
DIR-64287 - R-25-2016
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Nuestro Futuro Este Las Vegas Special Area Plan
23-0094-DIR1 - R-30-2023
5.9.23 PC / 6.21.23 CC



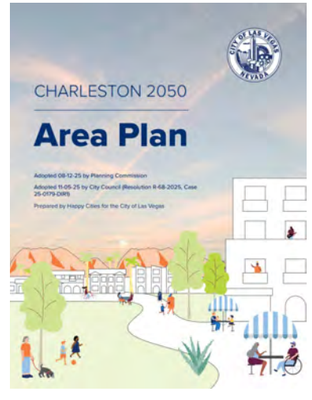
Kyle Canyon Special Area Plan
24-0615-DIR1 - R-27-2025
3.11.25 PC / 4.16.25 CC



La Madre Foothills Special Area Plan
25-0002-DIR1 - R-63-2025
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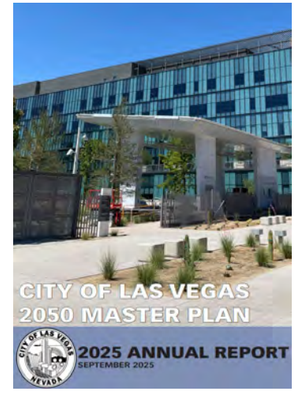


Charleston 2050 Special Area Plan
25-0179-DIR1 - R-68-2025
8.12.25 PC / 11.5.25 CC



ANNUAL REPORTS

Archived at www.masterplan.vegas
2022: 22-0413-DIR1 - 9.13.22 PC / 10.19.22 CC
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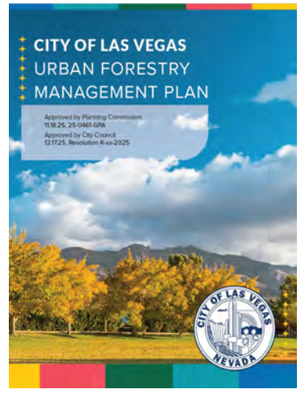


SUPPLEMENTAL PLANS

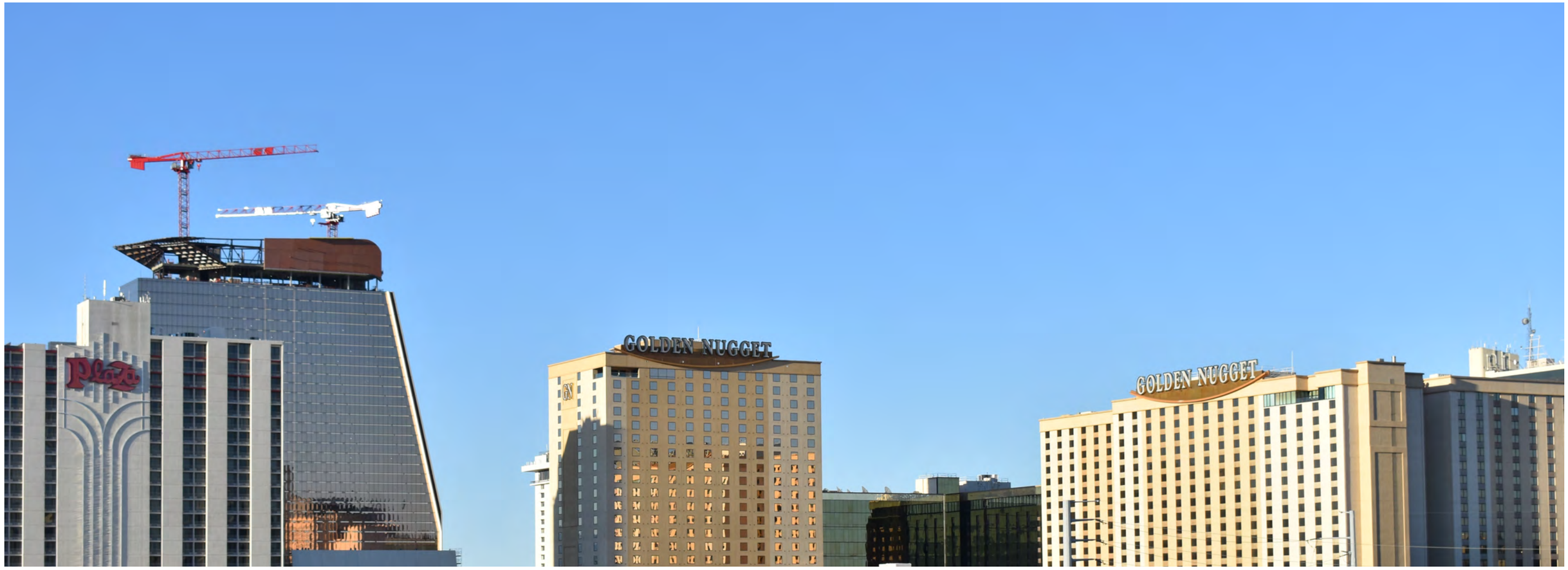
Imagine LV Parks - System Plan
23-0092-GPA1 - 5.9.23 PC / 6.21.23 CC



Urban Forestry Management Plan
25-0461-GPA1 - 11.18.25 PC / 12.17.25 CC



Sustaining Las Vegas 2050 Action Plan
R-15-2026 - 4.1.26 CC



FOREWORD

From the beginning, Las Vegas has been a city where enterprising and visionary individuals have made the impossible real in both good and challenging times. Today, the city remains an international destination with a world-class economy whose population and industry will continue to grow and excel over the long term. The global coronavirus pandemic has emphasized inequities in communities across the country and world. While the majority of this plan process and document were developed before the pandemic, a final review while the City grapples with these historic crises has reinforced many of the core principles of the plan, even though success may be realized in new ways.

Paired with its past success, Las Vegas is experiencing changes of many kinds, and will continue to do so in years to come. A changing climate is bringing drier and hotter weather to the American West. Changing demographics are creating new health, civic, social and cultural conditions that will shape Las Vegas communities and the services they will need. The amount of land available for new development is changing, too: the water, energy and transportation costs associated with continuing to build and develop using today's standards and practices are becoming more challenging.

Building on the work of dozens of city staff and outside professionals together with thousands of residents, a new vision for the City of Las Vegas has taken shape. This vision brings together continued success with long-term sustainability. It is designed to ensure that Las Vegas not only remains a sustainable, livable and desirable city for decades to come but also enjoys even greater potential for health, education, investment, talent, leisure, and the other hallmarks of a desirable quality of life for all of its residents, business owners, and visitors.

This vision is both thoughtful and bold, practical and ambitious. It is the vision of a city that is responsible and responsive, and that will inspire others by the leadership it shows.



REFLECTIONS ON LAS VEGAS FROM MAYOR CAROLYN G. GOODMAN

What was it like moving to Las Vegas for the first time?

Our route to Las Vegas ended up as our only move! My husband, Oscar, had been working part-time in the District Attorney's Office in Philadelphia to earn a little extra money during his law school years at Penn while we scraped along on the pittance of my salary as a secretary at Sun Oil Company. His boss, then District Attorney Arlen Specter (who would become a U. S. Senator), had some detectives in town from Las Vegas on a homicide case, and Oscar was assigned to take the detectives to dinner. As it can be in November in Philly, it was a cold, rainy, dreary night, and while he'd ask me to join him, work early the next morning precluded me from doing so. At 1 a.m. in great excitement he woke me up and asked, "how'd you like to move to the land of milk and honey?" Of course I thought he was asking me to move to Israel which I thought was nuts! What I learned, naturally, was the detectives had told Oscar about the glorious weather in Las Vegas, and what a great place it was to live. So later after graduation and in August 1964 with 37 boxes of books and a bedroom set in a moving van, we set off for the southern Nevada desert in a brand new Chrysler convertible. Arriving with what was left of all of our funds ($87 between us) and a week after the inaugural, blockbuster Beatles' performance at the Convention Center, Las Vegas was in hyper and explosive excitement!

I remember it was like an oven with 120 degrees at Lake Mead as we stopped briefly to take a real look at the dam. Fortunately, the air conditioning in the car held as we drove on to Railroad Pass and peering out the window into what was to be our new home... as far as the eye could see, I saw nothing but raw desert and tumbleweeds everywhere. My immediate thought was, "oh, I should have listened to my parents and never married this man," for far off in the distance to the west were a few scattered three/four story buildings, and far, far ahead, just a trickling of some low buildings. That was Fremont Street, and the population of Las Vegas was less than 100,000! Has there been any change since then? Huge!

What do you love most about your neighborhood?

We have been in our home in the Scotch 80's for 44 years, raising a family and loving life. Our home was and remains central and close to downtown and nearby all major thoroughfares and where they connect. Over the years we have had lovely, normal and occasionally famous (even infamous) neighbors and have enjoyed the enriching blend of them all. My fondest memories, of course, are of our four wonderful children growing up in this home. They had such great times playing, exploring and learning in the neighborhood.

How did you decide to be involved in founding The Meadows School? Why has education been such an important issue for you?

Oscar and I always planned to provide our children with at least that with which we had growing up and hoped we could do even better for them. Both of us had been blessed with the greatest parents and great educations, and thus we knew those were the ingredients and true guides for us to follow in raising our children. Doing research the hard way and before we chose to move to Las Vegas (and before Google), I had learned that the Clark County School District was ranked #2 nationally behind the top ranked New Trier Township School District in Illinois. That satisfied me for the future of the family we envisioned. In 1969 our first child was born, the next three in 1970, 1971, and 1973. By 1976, the explosive growth of the city was already challenging and changing the dynamics of education in area. As I began an elementary school search, it didn't take a rocket scientist to discern that Spanish was already becoming a second language, and the wisdom of being bi-lingual was more than evident. While the three R's remained the centerpiece of learning, computer-learning was also invading life, and knowing the sooner one introduces any element of education to a child, the better, I looked at all alternative choices. There were public schools, religious schools and only one private school that operated as a for-profit program. There were no schools offering Pre-K through high school continuum and none operated as not-for-profit. The formula I sought did not exist, and thus I went to the Superintendent of CCSD with my suggestions. He naturally informed me, "Mrs. Goodman, I have neither the curriculum nor the funding to implement any of your requests, so you'll have to go to the Legislature to get any of this on." My response: "My daughter is 3-years-old, and by the time I might get this on, my daughter will be 40."

I've always believed if one door closes, find another that is open, or make it happen yourself if you are sure of what you are doing. The key to quality education is having a purposeful mission/program and having top quality educators/professionals deliver that program. This happens because one can attract, and retain the best among them.

That became the foundation of The Meadows School: a school dedicated to teaching a diverse and socio-economically student body, and for my mission: one serving academically ambitious children. Financial assistance to those families who could not afford tuition was basic, and filling every classroom with the finest educator, teaching to the top (inspiring and having each student reach to a higher level) in a Pre-K – 12th graduation was the focus. It was the first of its kind.

At one point, Southern Nevada was one of the fastest growing cities in the country, what do you remember most about the city during that period of fast growth?

I remember such excitement and incredible entertainment and that the governments and agencies were just trying to keep pace with the growth. Roadways and freeways were under construction 24/7; housing and neighborhoods were developing; hospitals, schools, banks, businesses, commercial centers were developing out from the historic core, and of course, hotel-casinos were rising out of the desert or expanding on the ever-enticing Strip. That type of explosive growth demanded matching services as well, and the trick was and remains managing all of these challenges with plans, control and quality. One very clear example was/is how necessities and demand created our flood control infrastructure. This was not something that existed valley-wide in the mid-late 1970's. As businesses, hotels, residences experienced the devastating impact of flash flooding through the 1980's, 90's and 2000's, funding lagged to address an immediacy of need and residential growth spreading to the edges of the valley. When it would rain, the streets would flood and the Charleston underpass would become impassible. Now an intricate flood control system is in place and is continually monitored for repair, growth and/or expansion.



What was the moment that you realized downtown Las Vegas was changing?

I really have to go back to 1999 when my husband was elected mayor. He had a vision and a passion for Las Vegas to become a world-class city. Together, he and I visited with experts, listened, learned and then set about making his vision become reality. So here we are in 2020 when you can see that vision being built upon and bringing downtown to an amazing, vivid threshold. The arts are thriving, the healthcare/medical world is developing and expanding, and the beneficiaries are all of us as residents, business people, tourists and convention goers. Strong and new infrastructure, new museums and parks, a new canopy at the Fremont Street Experience, a convention center, and so much more are just pieces of the basic fabric of the whole. Talk about an amazing story of the heights, a deep recession, and the turnaround of an urban area, this has been it. I will let you in on a secret, we haven't begun to scratch the surface of what's to come. The best is yet ahead for downtown Las Vegas.

What do you hope stays the same or remains the way it is today in Las Vegas?

I really love the diversity and inclusive nature of our city. Anyone from anywhere can come to Las Vegas and find a wonderful and a good life. Las Vegas has always been a youngster and a chameleon changing and growing, reaching ever-higher and seeking the cutting edge of the next excitement on the horizon. Our entire community is unique and seeks to remain so. Ultimately, we are family, a strong and loyal group of individuals that seeks each other out and works together to solve issues and help our most vulnerable. We aspire to stay strong and always united in community living.

What did you find most inspiring about Las Vegas?

The entrepreneurial spirit in our city forever inspires me. From major new projects like Derek Stevens' Circa hotel-casino to new, homegrown restaurants like Esther's Kitchen, Hatsumi, and La Monja to mention just a mere few, people are encouraged to take risks in Las Vegas, risks you can win and which incentivize other investments. What is remarkable has been to see all the wins in our downtown and the entrepreneurial, free spirit of our people.

Is there a place in the city that you have shown your grandkids because it was important to you?

Walking through the historic downtown core with the varied and charming old homes built during the days of the construction of Hoover Dam; horseback riding out in the desert in Floyd Lamb Park at Tule Springs or visiting the beautiful Red Rock National Conservation Area, these sites are special. When the children were very young, sledding at Mount Charleston and boating/fishing Lake Mead were favorite jaunts. Even in those earlier days, the variety of nature's offerings were compelling and drawing us into the peaceful and quiet surroundings where time stood still for us all and still does.

What is a special place or spot in the city for you and Oscar?

Of course, our home, but beyond that island of true serenity, there are so many special places, but I think one place that is the biggest draw is Symphony Park. No one thought we could redevelop downtown, and no one thought anything would ever be built on an old, soil-polluted railroad brownfield. Now Symphony Park is home to the world acclaimed, David Schwarz-designed Smith Center for Performing Arts, boasts the Frank Gehry designed Cleveland Clinic Lou Ruvo Center for Brain Health, and is also booming with new amenities such as a much-needed convention center, residential and retail complexes, and additional hotels, and more retail spaces being planned. These all complement the adjacent core of the city as a center of federal, state, and local government buildings, court houses, the Fremont Street Experience, Fremont East Entertainment District, and the nexus of the burgeoning and very popular Arts District.

What has been the biggest change in Las Vegas since you arrived in the 1960s?

Since the mid-1960's, Las Vegas continues on its path to becoming a world-class city. Our name, "Las Vegas," is on lips and in minds of individuals around the world, evoking intrigue, excitement, and encouraging a visit, or for doing business, investing and/or moving to as a residency. We have truly become a destination for the world by adding the elements that make a world-class city vibrant, meaningful, sustainable, and successful.

Certainly, Las Vegas offers the best in resorts, spas, five-star dining, boutique shopping, and is an outstanding entertainment and recreational capital. Nowhere else in such a confined area can one find more than 150,000 hotel rooms or find the high hospitality that the city offers. However, always attuned to adding new elements of appeal to the world and our growing resident population, Las Vegas is now boasting additional specialties in health care and medicine, a varied tableau in cultural offerings, and a newly expanding professional sports menu. The city has added top tier medical research in the Las Vegas Medical District boasting entities like the Cleveland Clinic Lou Ruvo Center for Brain Health, cancer research, and a new medical school. The Smith Center for the Performing Arts and the Arts District (18b) are standouts for cultural visitation and enjoyment, and finally, Las Vegas has become a major league sports venue with the NHL Vegas Golden Knights, Las Vegas WNBA Aces and soon-to-call-home, the NFL Las Vegas Raiders.

What type of city do you hope your grandchildren get to live in?

Everyone should want to leave his/her home better than he/she found it, and that is what we are working toward in the city of Las Vegas with energized concentration on sustainability in a healthy environment and one in which the highest, comprehensive quality of life are assured. Safety always is the priority in all that the city undertakes. Yet as it invests in new avenues for moving people, safely, expeditiously, comfortably, and continuously around the community and to varied destinations, these are also foremost initiatives. Sensitivity to the expanding and purposeful use and integration of technology must be fundamental to assuring all aspects of the good life going forward can be achieved. This focus, too, is paramount.



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EXECUTIVE SUMMARY

This 2050 Master Plan develops a comprehensive, clear vision and framework for the future of Las Vegas. It provides strong direction and practical guidelines for development, as well as recommendations that are implementation-focused, relevant, clear, and adaptable to change. As required by NRS 278, this plan addresses numerous and diverse inter-related and complex opportunities and challenges. The plan includes a wide range of public involvement that is inclusive and transparent and is broadly-supported by community consensus. It is developed using guiding principles that measure success, weigh recommendations, foster community-driven implementation, and improve quality of life for all residents:

- **Equitable**: Las Vegas is welcoming and accessible to all people.
- **Resilient**: the city is prepared and adaptable to shocks and stresses.
- **Healthy**: residents can improve personal health outcomes.
- **Livable**: quality of life is distinct and uniquely "Vegas."
- **Innovative**: the region educates and attracts the boldest and brightest.

Using these principles as a foundation for the goals of this plan, by 2050, it is envisioned that:

THE CITY OF LAS VEGAS WILL BE A LEADER IN RESILIENT, HEALTHY CITIES - LEVERAGING THE PIONEERING INNOVATIVE SPIRIT OF ITS RESIDENTS TO PROVIDE EQUITABLE ACCESS TO SERVICES, EDUCATION, AND JOBS IN THE NEW ECONOMY.

To meet this vision and future growth, measurable change will occur:

- More than 300,000 new residents will live within the City, increasing the City's population to more than 900,000 and the regional population to more than 3 million
- 9,500 acres of new parks and open space will be accessible and available
- 100,000 housing units will be developed
- 72 million square feet of new commercial space
- At least 600 new police officers will be needed, as well as 30 new schools, 2,500 new teachers, and more than 1,500 City employees

WHAT WE'VE HEARD

PUBLIC OUTREACH

To develop the 2050 Master Plan's Vision, Goals, and Guiding Principles the City and SmithGroup consultant team heard from more than 6,000 residents, local stakeholders, regional agencies, and a number of the City's youth. In total, the Master Plan's development team has:

- Received input from more than 3,400 individuals
- Attended 70 community events
- Held more than 30 stakeholder meetings

In addition, the City conducted a number of informational surveys and reports for this effort, as well as an online mapping exercise to determine places to preserve, enhance, or transform. Two statistically significant surveys were conducted by Applied Analysis and received more than 1,700 completed responses - one of which was citywide, and the other which was ward-specific in an effort to hear responses from individuals from a variety of backgrounds.

TOP CHALLENGES

Throughout public outreach and surveys and across all wards of the City, residents consistently responded with common answers. The top challenges that were reported included:

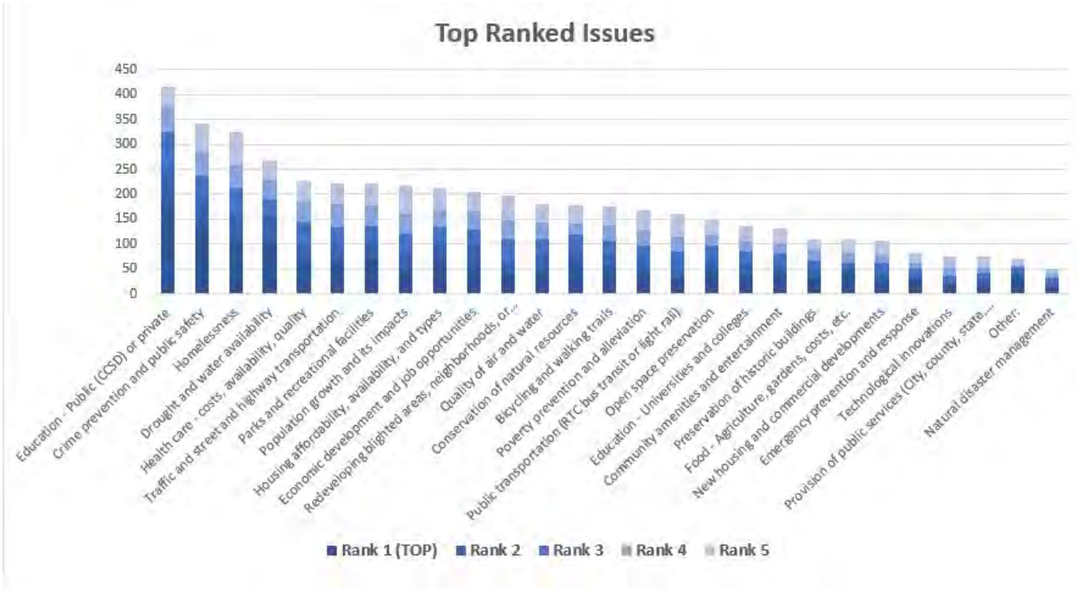
- Education
- Crime and Public Safety
- Homelessness
- Health Care
- Drought and Water Availability
- Parks and Open Space

When prompted with the top things that they could change about the City, most responded that they wanted a better educational system, less crime, less homelessness, and increased affordability. City residents believe the future is:

- Less about progress and more about preservation
- Both opportunistic and strategic
- Tomorrow, not 30 years from now

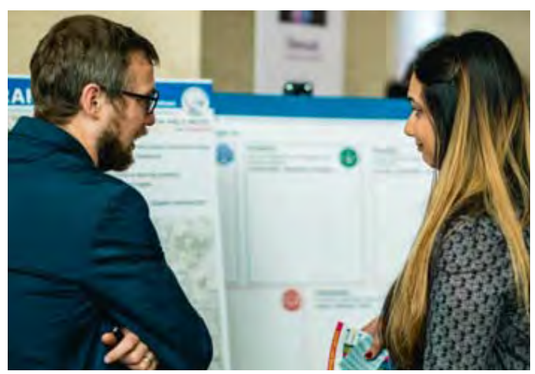
The City and its residents are not one thing; they are continuing to seek a sense of community and pride. This is the community they have chosen, and the City needs to justify the benefits of growth and progress. Ultimately, residents expect the City to:

- Preserve quality of life
- Create opportunities for all residents to thrive
- Make Las Vegas among the safest cities in America
- Increase accessibility to quality health care
- Expect equality, inclusion and acceptance
- Work harder on issues related to poverty
- Maintain financial responsibility while ensuring asset maximization
- Create partnerships as a "can-do, will-do city"











LAND USE & ENVIRONMENT

LAND USE

The plan for existing and future land use recognizes that land supply will greatly reduce over the next thirty years. As existing development agreements and new subdivisions are completed in the western and northwestern part of the City, this plan recognizes the need to shift to a strategy of infill and redevelopment.

2050 GENERAL PLAN

To accomplish an infill strategy that ties with many additional goals throughout the plan, the plan links identified regional centers with mixed-use transit-oriented development (TOD) corridors, accented at key nodes. These corridors must be prioritized for higher density development that integrates a diverse range of affordable housing types. A number of new placetypes are recommended, as well as a corresponding land use tool-box, zoning typology, and modest amendments to Title 19, including:

- **Regional Centers**: major hubs of activity and density.
- **Mixed-Use Centers**: TOD nodes.
- **Corridor Mixed Use**: major streets linking regional centers and TOD.
- **Neighborhood Centers**: smaller-scale neighborhood serving mixed-use hubs.
- **Existing development**: mixed residential, traditional neighborhoods, and subdivisions may have opportunities to be preserved or enhanced.
- **New subdivisions**: newly developed areas of the City.
- **Rural preservation**: existing low-density estate areas.

HISTORIC PRESERVATION

The Land Use strategy strives to ensure established traditional neighborhoods, key buildings, and landmarks are preserved and well maintained, while also providing flexibility for property owners to make adaptive reuse of buildings.

AREAS OF THE CITY

The plan creates 16 unique areas of the City comprised of numerous neighborhoods that build identity and a sense of place. Each area includes a thorough analysis of existing conditions and proposed future improvements including:

- Area demographics and socio-economics
- Proposed land use plan
- Water consumption
- Proximity of housing to services
- Park access and availability
- Job and employment supply, as well as proximity
- Transportation access and equity

Future area plans will provide specific recommendations from members of the community on projects, improvements, and changes.

ENVIRONMENT

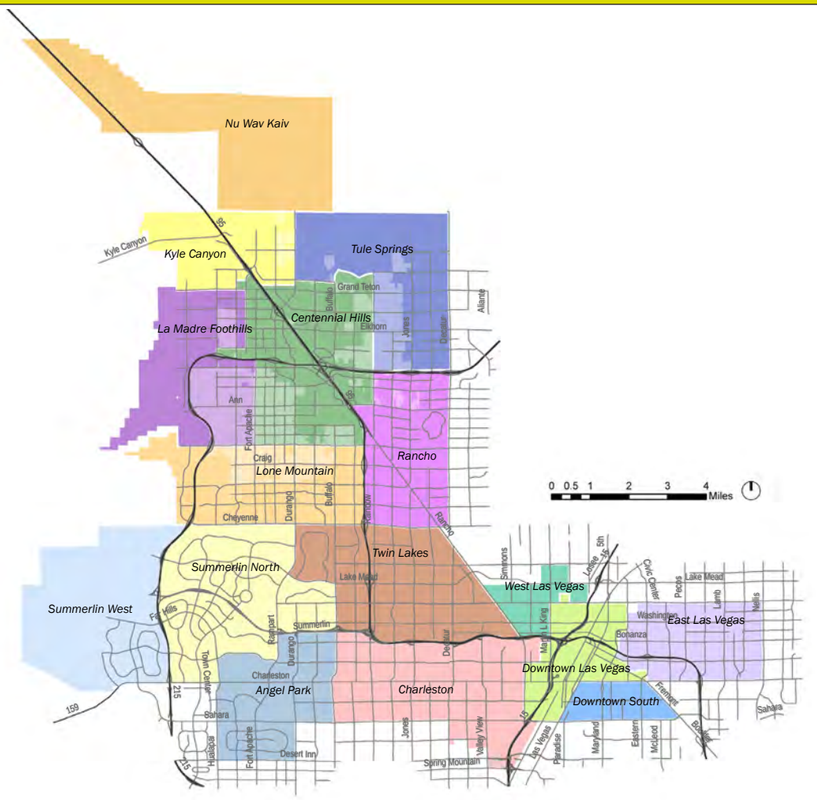
NATURAL FEATURES

A complete inventory of the City's Mojave Desert environment was conducted, noting issues related to ecosystems, plant and animal species, climate, topography, hydrology, and geology. SNPLMA and the Clark County MSHCP are tools that protect and enhance the environment and provide funding for parks and open spaces, while resulting in no net loss of species or landforms.

URBAN FORESTRY

Due to notable increases in the urban heat island effect, steps must be taken to reduce heat hazards with appropriate green infrastructure, including:

- LVMC and zoning amendments for trees
- At least 100,000 public and private high quality, native and adaptive trees that increase the canopy are planted to increase the canopy to 20%



PARKS AND CONNECTIVITY

Because parks and recreational facilities are an important quality of life component, park facilities, amenities, connections, and safety were frequently noted throughout public outreach. As a result, the City will

- Develop a Parks System Plan and achieve CAPRA certification
- Increase park acreage to 7 acres per 1,000 residents, specifically in noted areas of need
- Ensure 85% of dwelling units are within a short walk of a park or trail

FOOD AND URBAN ARGICULTURE

Given the lack of regional agriculture, it is necessary to ensure supply chain security and redundancy. To supplement these efforts, the City must ensure:

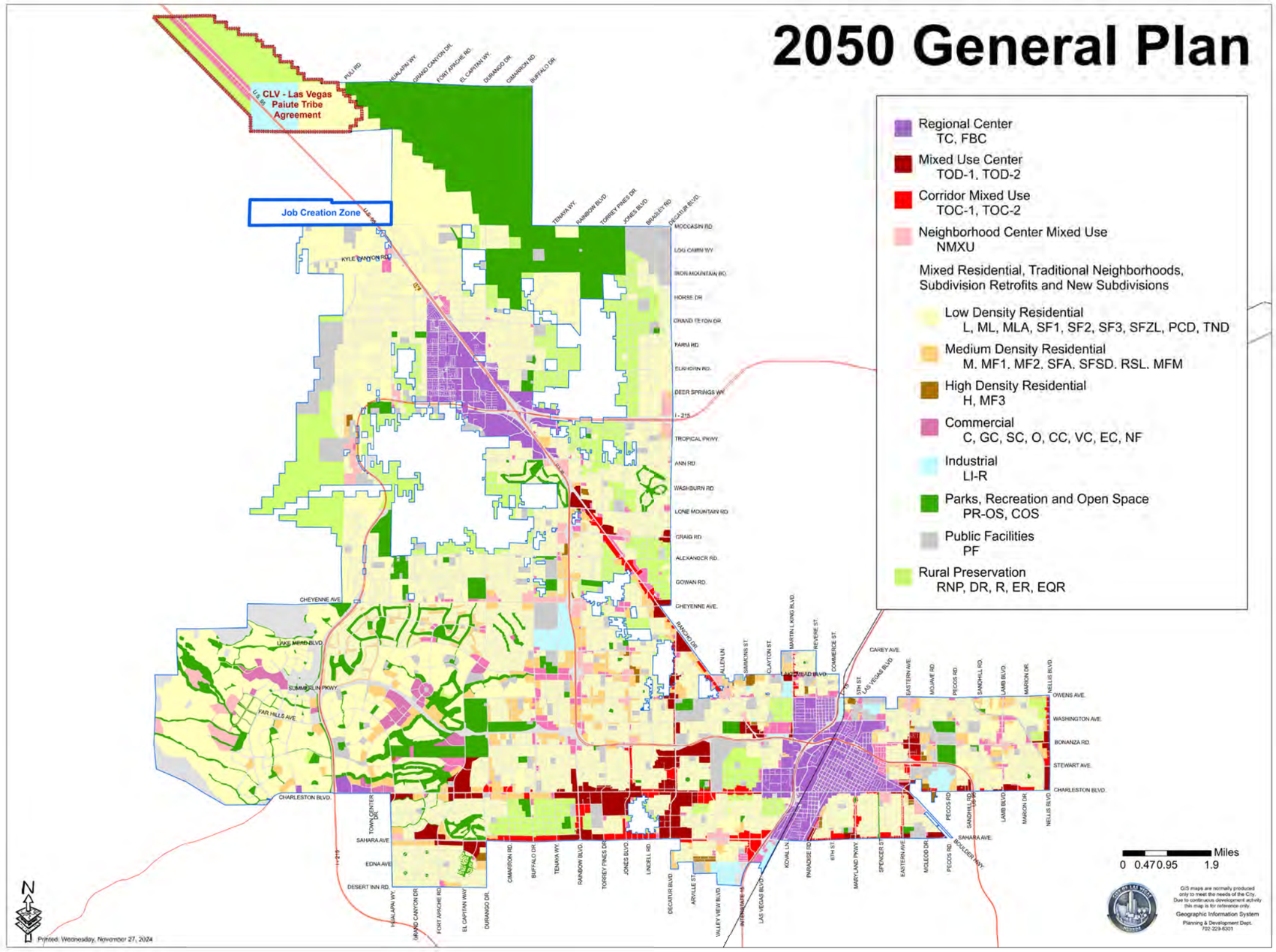
- No food deserts and reduce food swamps by increasing healthy food access
- Provide accessibility to community gardens and increase allowable small agricultural uses

ENVIRONMENTAL JUSTICE

Reducing exposure and risk to low-income and minority communities must be prioritized, especially for new transportation and infrastructure projects. The City must:

- Ensure an air quality index of 100 or better
- Eliminate brownfields within the City by redevelopment
- Improve stormwater pollution prevention efforts
- Engage residents of all races, ethnicities, abilities and means in the planning and transportation decision-making process

LAND USE & ENVIRONMENT









ECONOMY & EDUCATION

EDUCATION

EQUITABLE EDUCATION

The quality of the City's educational system is among the top rated public concerns and leading priority areas for residents. Educational outcomes have varied widely between different cohorts. The City recognizes that education is an important quality of life issue and is building upon the successes fostered by the City's Department of Youth Development and Social Innovation:

- Ensure equitable improvement of overall educational outcomes for K-12
- Enhance early education programs and support coordinated efforts with Clark County School District
- Attract or educate new teachers

LINK SCHOOL FACILITIES WITH LAND USE

Due to existing overcrowding and projected long-term student population growth, the City must improve the development process for new schools and prioritize construction of 30 new schools and classroom additions.

ECONOMY

ECONOMIC & WORKFORCE DEVELOPMENT

Alignment of Economic and Urban Development's efforts with the region's Comprehensive Economic Development Strategy to diversify the economy will make Las Vegas more competitive in the 21st Century by:

- Promoting and attracting occupations in target industries, including gaming and tourism, technology, health care, global finance, clean energy, logistics, and light manufacturing
- Developing new partnerships with UNLV and CSN, expand campuses, and develop workforce training in identified areas
- Requesting development of a new 2-4 year NSHE institution tailored toward workforce development in target sectors

REDEVELOPMENT

Redevelopment efforts must be closely coordinated with land use goals and the 2050 General Plan's implementation. Refining criteria to attract appropriate development will assist in this effort.

PUBLIC FINANCE

The City must balance business friendliness with government efficiencies, property tax cap reforms, and reduced dependence on C-TAX sources with enabled revenue options. To aid in the plan's implementation, it is recommended to align the CIP and budget making process with City Council priorities and Master Plan outcomes.

HOUSING

HOUSING

Because there is such a high proportion of single-family residential and apartment-type multi-family units, the City must improve the diversity of housing types with TOD, infill, and diverse housing options identified for each area of the city:

- Through removal of zoning barriers and incentivizing and integrating affordable housing
- By increasing affordable housing options and removing barriers to affordability
- By providing financial tools and strategies for developers, homeowners, and investors

HOMELESSNESS

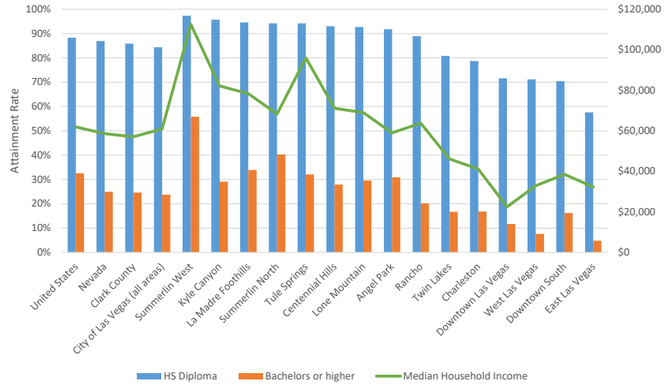
The plan anticipates to continue and enhance coordinated provision of early and direct prevention and diversion measures with regional stakeholders to reduce the total unsheltered homeless population by 50%, with functional zero homelessness in 2050.

- Continue to play an intervention role with the City's Courtyard and MORE team
- Employ a "Housing First" approach
- Reduce the number of individuals in poverty

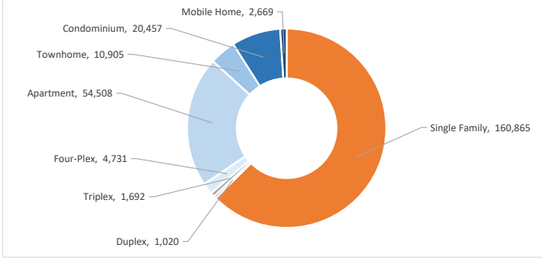




EDUCATIONAL ATTAINMENT - INCOME



DWELLING UNITS BY TYPE







SYSTEMS & SERVICES

TRANSPORTATION

COMPLETE STREETS

A comprehensive transportation analysis links a wide range of improvements to move people and freight. The plan recommends a new layered Complete Street network to improve the City's overall modal split and jobs-housing balance. In addition to complete streets and bicycle and trail improvements identified in the Mobility Master Plan, this plan also recommends coordination and completion of major projects with state and regional partners, including:

- the Downtown Access Project and future I-15 improvements
- Sheep Mountain Pkwy and I-11
- Summerlin Parkway improvements
- System-to-System interchanges

TRANSIT

Tied closely to the 2050 General Plan for future land use, the City and RTC must develop and implement the recommendations from RTC's On Board Mobility Plan that will enable high capacity transit to be built on key TOD corridors, including Maryland Pkwy, Charleston Blvd, Decatur Blvd, Sahara Ave, and Las Vegas Blvd.

SMART SYSTEMS

As technology improves over time, the City must be prepared to embrace the Internet of Things, which greatly enhances and supports economic development strategies. Implementing the Smarter Vegas plan, a citywide fiber network, and transportation electrification will enable a range of new options, including connected and autonomous vehicles.

RESOURCE CONSERVATION

WATER

In the face of a changing climate, this plan is closely linked to Southern Nevada Water Authority's Water Resources Plan and aligns a target to reduce water consumption to 90 gallons per person per day. This can be done by making corresponding code changes, pricing, incentives, and education efforts to meet regional water resources and conservation goals.

ENERGY

The City has been known for its efforts in renewable energy and energy efficiency. This plan will enable both municipal operations and the community to increase its overall share of renewable energy in line with the state's renewable portfolio standard while reducing energy consumption.

WASTE

Through close work with the City's franchisee and exploring new waste management opportunities, the City can continue to improve both its municipal and community recycling rates and reduce municipal solid waste.

GREENHOUSE GAS EMISSIONS

Because of the City's leadership in sustainability, the City will boldly work to attain municipal and community carbon neutrality through reductions from stationary and mobile sources of emissions.

PUBLIC FACILITIES AND SERVICES

PUBLIC FACILITIES

As the City grows, so must its commitment to ensuring the provision of City services and equitable access to city facilities through:

- Coordination of above and below-ground wet and dry utilities
- Dedication of more space and future growth for cultural activities, libraries, and the arts









PUBLIC HEALTH AND SOCIAL SERVICES

Due to relatively poor community health metrics and because of the public's responses with respect to improved health care, the City must work to improve community health indicators by:

- Adopting Health-in-all-policies and strengthening partnerships with Southern Nevada Health District
- Increasing hospital and ICU capacity, as well as health care access in medically underserved areas
- Completing the build-out of the UNLV School of Medicine and leverage the Las Vegas Medical District
- Developing local Health and Wellness Centers

SAFETY

HAZARDS

As a part of this Master Plan, the City completed a vulnerability assessment factoring adaptive capacity and sensitivity for a variety of hazards, as well as recommendations and a framework for mitigation, adaptation, response, and recovery, including:

- Drought, Extreme Heat, Flooding
- Terrorism, Civil Disobedience-Riots-Social Disturbances
- Seismic Activity
- Hazardous Materials
- Infectious Disease

PUBLIC SAFETY

Overall, crime rates are decreasing, but are concentrated in specific areas. This plan recommends the development of a proactive, collaborative, Safe Communities strategy for each area that is community oriented and inclusive that:

- Maintains Fire and Rescue accreditations
- Maintains LVMPD sworn officer strength
- Adds a new LVMPD area command and fire stations

FLOODING

As a specific disruptive hazard that has potential to increase in intensity and frequency over time, specific recommendations and projects from the Regional Flood Control District are included.

HEAT MITIGATION

Similarly, heat also has potential to increase in intensity and frequency over time. Specific recommendations relating to cooling centers, building practices and drinking water are considered for implementation.

IMPLEMENTATION



This Master Plan tackles a diverse range of opportunities and challenges to help achieve the City's vision. Successful plan implementation relies upon committed city leadership, linking policy and the budgetary process directly to the plan, use of strategic action planning efforts to accomplish both short and long-term goals, and strategic citywide utilization of use of tools, key actions, strategies, and partnerships.

TOOLS

To implement the 2050 Master Plan, various tools are recommended in each of the Key Actions that can be implemented short-term, long-term, or on an ongoing basis. These tools include:

- **Local policy or regulation**: at the heart of plan implementation is action taken by the City Council or Planning Commission, conferring power on the City Manager or the City's departments to do something by ordinance or resolution. Local policies and regulation are the most direct and effective means of plan implementation and should be done with plan consistency in mind.
- **City Programs**: many implementation strategies involve carrying out existing City programs or the developing new ones, provided authorization delegated from the Plan, a strategic action plan, through the City Manager, or Nevada Revised Statutes (NRS).
- **Capital Improvements**: development, provision, and maintenance of physical infrastructure, recommended through the annual Capital Improvement Planning process, consistent with this plan and associated sub-plans is a major component of the plan.
- **Federal/State Legislative policy**: due in part to the limitations of limited functional home-rule, supportive changes to NRS, or to the City's Charter, that enable the City to implement the plan are tools that the City may advocate for in Carson City. Similarly, Federal tools and resources can assist the City through one-time projects or ongoing support of required programs or service provision.
- **Partnerships**: Working with the City's regional partners and external agencies, the plan can be implemented through collaborative efforts in which a regional issue is addressed or managed.

FIFTY BY '50

In order for the plan's progress to be assessed throughout its thirty year horizon, reasonable measurable outcomes are established for each goal. With defined outcomes, the City will be able to measure and evaluate progress to ensure resources are spent accordingly and are worth the investments made. This is done to understand which strategies have made an impact, which goals were achieved, and to determine the cause of any deviations from the plan.

Contained within the plan are "Fifty by '50" – the most important outcomes within this plan that the City looks to measure. These outcomes are largely the basis for determining achievement of the plan's goals.

For transparent communication of the plan's outcomes and performance, the City will publish a prepared annual report to evaluate and discuss annual progress and implementation of the plan, progress of the "Fifty by '50" outcomes and others highlighted for each goal, and recommendations for plan improvement.

STRATEGIC ACTION PLANS

The plan recommends that the City Council and city management adopt 2-year strategic action plans to implement various strategies and to achieve outcomes. A strategic action plan is guided using the plan's goals, outcomes, and key actions with direct input from the general public, the Mayor and City Council, City leadership, and the City's departments. For each strategic action plan, the priorities of the City Council and department level strategic business plans are all aligned with the plan's outcomes, as well as the budget process and CIP. During each strategic planning and budgeting process, ideas must be clearly communicated throughout the City.

PARTNERSHIPS

To implement the Master Plan, the City must rely upon a combination of government operations and an array of partnerships with the public and private sector, ranging from sharing information to funding and shared services. Cooperation through alliances and partnerships will be sustained to benefit everyone in the region. Only through public and private collaboration can the plan's vision be realized. The City facilitates plan implementation through:

- **Mayor and City Council**: The City Council is empowered to develop regulations and laws by ordinance, programs and policies, capital projects, and support partners by interlocals and resolutions.
- **City Manager**: The City Manager oversees the administration of the City's affairs, submits the annual budget, advises the Council on the adoption of measures, and ensures general laws and ordinances are carried out.
- **City departments**: Consisting of groups of departments from Community and Development Services, Operations and Development, Community Services, Public Safety Services, and Internal Services, each group of departments plays a different role in implementing whether it is a public facing service provision, infrastructure development, or internal services integral for municipal operations.
- **External partnerships**: An array of stakeholders play major roles for various facets of plan implementation, such as CCSD, Clark County, Chambers of Commerce, SNWA, RTC, regional recreation and tourism organizations, neighboring municipalities, and local businesses. Each partnership, which may range from sharing information to funding and shared promotions or services, will lead to successful implementation of the plan's key actions.

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01. INTRODUCTION

The City of Las Vegas is an internationally renowned leader in the global economy with strong, livable neighborhoods. From humble beginnings to exponential growth and the reinvention of its downtown, the city has been driven by determination, ambition, and innovation. As Las Vegas is projected to continue its growth over the next 30 years, the City has prepared this Master Plan to build on its legacy and address future challenges. It serves as a comprehensive roadmap for residents and businesses to provide for their health, safety, prosperity, security, comfort, and general welfare.

The 2050 Master Plan addresses challenges head-on. The plan examines the land use and environment of the city, its economy and educational opportunities, and the systems and services that make the city run. It provides the City and its constituents with a strategic set of clear and measurable goals to guide future growth and development, align capital improvement projects, and coordinate City programming. The 2050 Master Plan is not a stand-alone document: It integrates existing and ongoing City and regional planning efforts to advance the City's vision for a future that enhances the quality of life for every resident.

A GUIDING FRAMEWORK

The 2050 Master Plan serves as a guiding framework to achieve a cohesive set of economic, social, cultural and environmental goals for the City for the next 30 years, guided by an overarching vision for an enhanced, sustainable quality of life. The 2050 Master Plan replaces the 2020 Master Plan adopted by the Las Vegas City Council on September 6, 2000. Elements of the previous plan underwent multiple additions and updates between 2000 and 2013. Today, most of the goals, objectives, and policies identified in that plan have been achieved. Simply put, a new plan is needed.

The plan chooses to proactively address shifting opportunities and challenges the City will face over the next several decades, including but not limited to a growing population, health and education, water conservation, and economic diversification. It incorporates Nevada Revised Statue (NRS) requirements pursuant to NRS 278.160, including required recommendations for conservation, historic preservation, housing, land use, public facilities and services, recreation and open space, safety, transportation, and urban agriculture. This master plan sets direction for Las Vegas Municipal Code and complement the City's zoning standards.

Organized around guiding principles inspired by City-developed strategic planning themes and priorities, the plan is reinforced by extensive community outreach to ensure that recommendations and outcomes lead to a City that is livable, equitable, innovative, resilient and healthy.



A CASE FOR CHANGE

LAS VEGAS: A HISTORY OF MAKING THE IMPOSSIBLE REAL

Las Vegas is a global city that thrives in a high desert environment in Southern Nevada. The City has sustained decades of rapid growth and intensive development with an against-all-odds mentality. Over the years, the people of Las Vegas have realized ambitious dreams with a determination and ingeniousness that few can surpass. The City and region have become an international destination and world-class economy in a place few would have thought possible.

Inspired by necessity, the City has developed livable neighborhoods and has led the way in water conservation. In recent years, the City has shown how it is possible to reinvigorate its downtown in a remarkable, authentic way. The world is watching as the City develops new solutions to meet the needs of its residents amongst a new set of challenging conditions.

A CITY AT AN INFLECTION POINT

As Las Vegas continues to grow, key resources such as water, natural lands, open space, and transportation infrastructure face stresses that can affect health, quality of life, and economic vitality. These resources are reaching their capacity to support the levels of growth that the City has experienced in recent decades.

Recognizing that available land and water are finite, now is the time to make important decisions for the future. The water, energy and transportation costs associated with continuing to build outward using conventional development standards and practices are growing prohibitive. Changing demographics are creating new civic, social, and cultural conditions that will shape Las Vegas communities and the services that they will need.

This Plan provides a strategic framework for the City to proactively adapt to growth while improving equity and quality of life for all residents.

PLANNING FOR A RESILIENT COMMUNITY

At its core, the 2050 Master Plan is a resilience strategy focused on smart and proactive planning around population health and key resources, beginning with water. Water is central to any consideration of public health, economic strength and quality of life in Las Vegas. The Colorado River, which provides 90 percent of the region's water, supports shrinking resources due to prolonged drought and climate change. Shortages are likely in the near term.

Las Vegas faces not only the prospect of increased water shortage but also urban heat island effects often in the City's most challenged urban neighborhoods. Thanks to impactful regional collaboration over the past twenty years, Las Vegas has emerged as a recognized leader in sustainable infrastructure and best practices. The 2050 Master Plan builds upon these successes and addresses these issues head-on. It sets forth a vision of creative and forward-thinking land use planning to improve health outcomes, reduce water demand and heat island impacts, and improve quality of life for all Las Vegas residents today and in the future.

EMPLOYING METRICS, ENGAGING COMMUNITIES

With additional residents come increasing demands on public services, transportation, utility infrastructure, and commercial activity. Planning to accommodate them is a challenging prospect. However, through extensive public and stakeholder engagement, local knowledge and expertise, and metric-based decision making, the 2050 Master Plan is able to present multiple potential future directions to better understand which is best for the long term health and vitality of Las Vegas.

The central question is understanding where current and future residents might live and in what types of housing. Conventional suburban-style neighborhoods consume relatively large quantities of land and resources. In Las Vegas, the continued viability of these types of neighborhood is challenging, given growing resource and quality of life constraints. What alternative development practices can be explored? How might new typologies fit within the existing fabric of Las Vegas?



BRINGING THE PLAN TO THE PEOPLE

PUBLIC OUTREACH

In order to increase the number and diversity of responses gathered during a traditional public outreach process, the Department of Planning designed an outreach strategy for the 2050 Master Plan that engaged residents where they were. Long Range Planning staff attended over 68 community events during a 5 month period throughout the city by attending concerts, community centers, neighborhood block parties, swap meets, farmers markets, after school events, transit centers, and public events. These activities, along with electronic engagement tools available on masterplan.vegas, resulted in engaging with over 5,000 people all across the valley. To encourage participation, Planning staff raffled off prizes every month to those who completed a survey either online or in-person at a community event.

- 5,120 total people reached.
- 3,403 individuals provided input.
- 1,717 professional surveys completed.
- 420 Statistical surveys conducted.
- 68 community events.
- 28 stakeholder meetings.



MARKETING EFFORTS

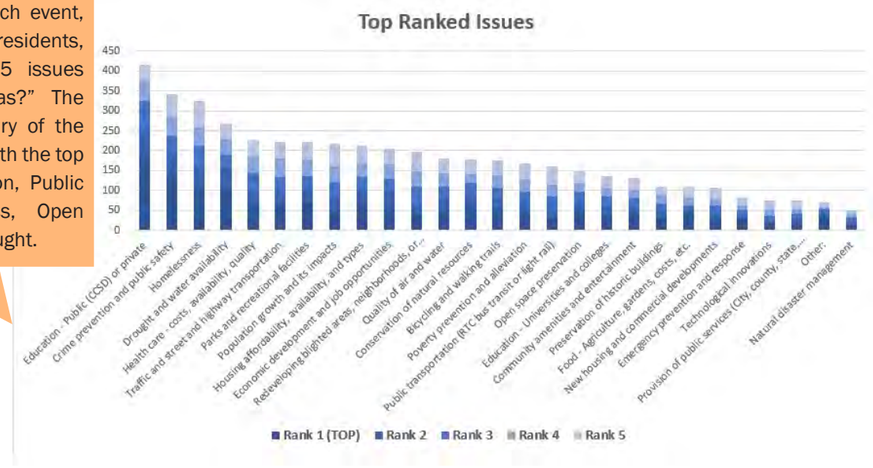
With the help of the City's Office of Communications, the Planning Department deployed a marketing campaign encouraging the community to participate in the public engagement process. The City kicked-off the engagement phase with a live remote broadcast with Mercedes from 94.1 FM. Digital ads, public service announcements, social media posts, newsletter messages, and direct e-mail campaigns were all produced.

- Digital ads saw approximately 45,403 impressions and 115 clicks.
- E-mails were sent to over 2,500 recipients.
- Social media posts saw over 205 clicks.
- Public Service Announcements aired 125 times on KCLV.



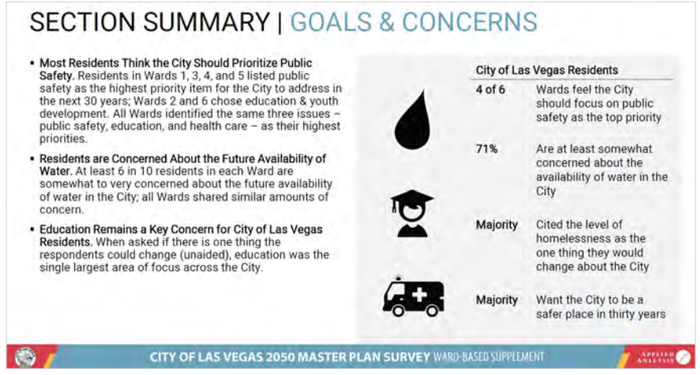
WHAT ARE THE TOP 5 ISSUES AFFECTING LAS VEGAS?

At each public outreach event, the team asked residents, "What are the top 5 issues confronting Las Vegas?" The following is a summary of the responses received, with the top issues being Education, Public Safety, Homelessness, Open Space, Water and Drought.



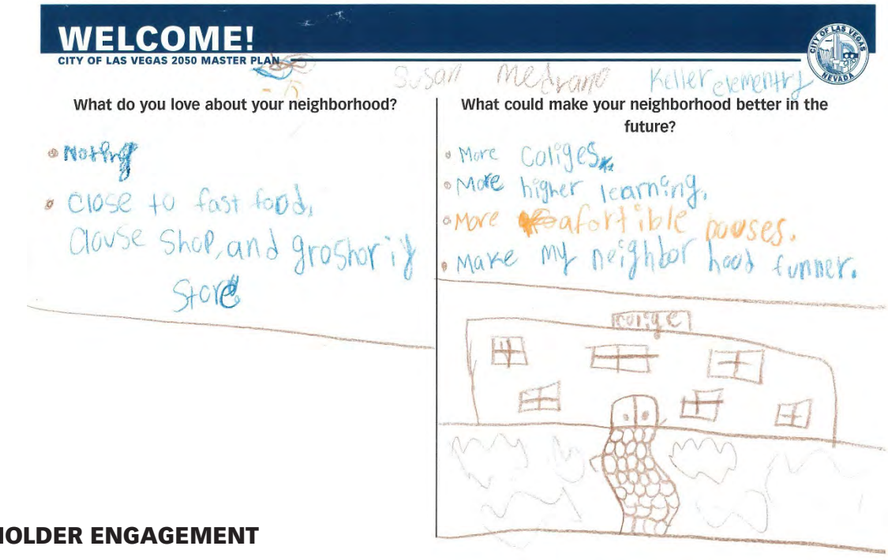
SURVEY

Applied Analysis conducted a city-wide and ward-specific statistically significant survey. Respondents ranked issues the City should prioritize over the next 30 years. The following emerged as the top three issues: public safety, education, and health care. The surveys, conducted in late 2019, concluded that City residents were generally satisfied with their quality of life and would recommend others to move to Las Vegas.



YOUTH RESPONSES

The Planning Department made a considerable effort to elicit feedback from some of the brightest and youngest residents: the City's youth. The Departments of Youth Development and Social Innovation and Parks and Recreation were instrumental in gathering quality feedback from youth of all ages across the City. Over 100 kids provided feedback on the 2050 Master Plan by answering the prompt "What would make Las Vegas better in the future?" Their top responses were Parks, Homelessness, Education, and Water.



STAKEHOLDER ENGAGEMENT

The Planning Department wanted to ensure a varied team of stakeholders could provide valuable feedback throughout the drafting of the 2050 Master Plan. The composition of the plan's Citizens Advisory Committee (CAC) was purposefully designed to be representative of the issues and opportunities the plan was destined to feature. The CAC included approximately 30 residents representing non-profits, businesses, critical industry sectors, and offered key subject matter expertise to frame the objectives and recommendations in the plan. They also were encouraged to engage their respective groups to provide feedback through the "Workshop in a Box" exercise.

- 7 Citizens Advisory Committee Meetings
- 6 Issue Specific Workshops (Sustainability, Health, Equity, Economy, Infill development, land use)
- More than 25 Stakeholder Meetings



ENGAGEMENT TIMELINE

Throughout plan development, ideas were tested, experts provided feedback, the public was polled on priorities, and the stage was set for implementation by building a coalition of implementors through the various committees and stakeholders identified below.

EXECUTIVE STEERING COMMITTEE

- Staff/department head briefings
- Confirm Plan Direction

CITIZENS ADVISORY COMMITTEE

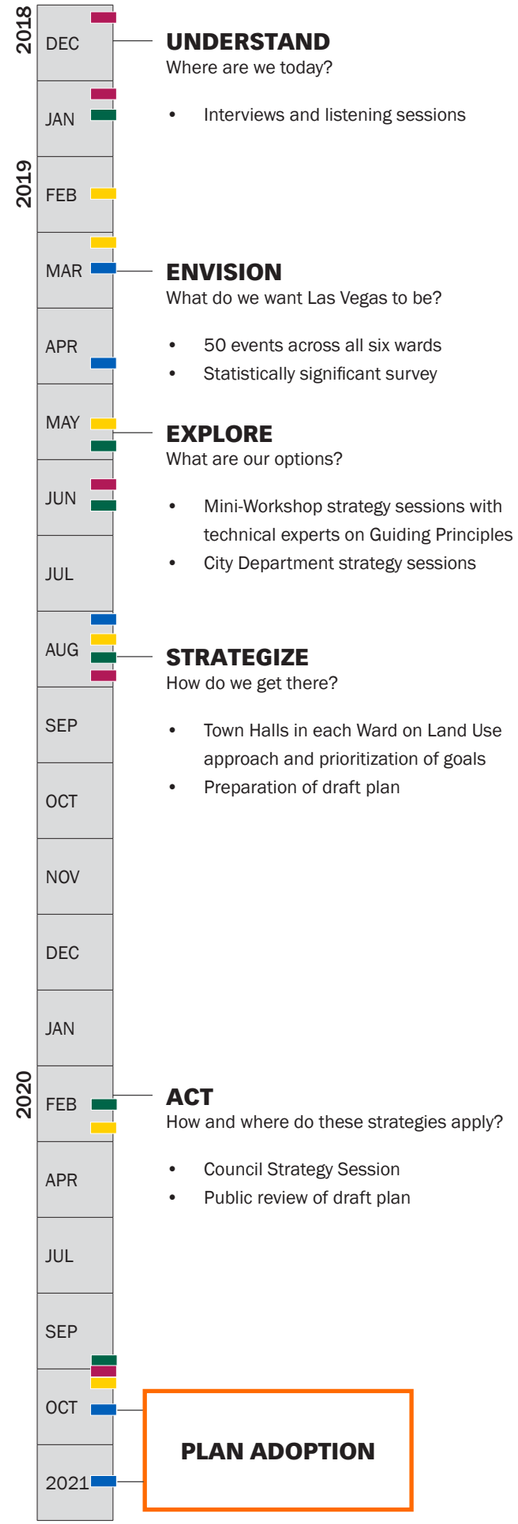
- Nominated by council members (geographic representation)
- Local leaders and experts
- Gauge plan direction

STAKEHOLDER INTERVIEWS AND BRIEFINGS

- Agencies (i.e. SNWA, RTC, utilities, CCSD, BLM, CCHA)
- Advocacy groups (i.e. SNHBA, LVGEA, GOED, Fremont Street Experience)
- Neighboring communities (i.e. North Las Vegas, Clark County, City of Henderson, Creech/Nellis AFB)

PUBLIC INPUT

- Public visioning sessions
- Open houses
- Online feedback
- Statistically significant surveys (citywide and ward-specific)



PLAN ORGANIZATION

In order to realize a broad and transformative vision for what the City of Las Vegas can successfully become it is necessary to translate vision into clear practical goals and measurable outcomes, such that are clear to residents, community leaders, businesses, and stakeholders how progress can be achieved.

The recommendations of the 2050 Master Plan provide tools, strategies, and actions that can be used in order to meet the desired outcomes.

The 2050 Master Plan also identifies three major themes, which organize the plan elements across individual chapters. These themes include:

- Land Use and Environment
- Economy and Education
- Systems and Services

Collectively, these terms give structure to the plan document, providing clarity and consistency throughout. The graphic to the right shows the relationship between these organizing elements.



The next three chapters are organized by themes, each of which relates to the Southern Nevada Strong Regional Plan's areas of focus:

Land Use and Environment (Chapter 2)

- Land use + Areas of the City
- Environment

Economy and Education (Chapter 3)

- Education
- Economy
- Housing

Systems and Services (Chapter 4)

- Transportation
- Resource Conservation
- Public Facilities and Services
- Safety

Each chapter contains a set of **Goals** for each **Theme**. These goals are used to organize the recommendations under different topics. Each topic contains an overview of existing conditions, public input, specific recommendations, and implementation strategies. Where a topic and goal directly relates to meeting Nevada Revised Statutes, a reference is provided: ☑ **NRS 278.160**

Desired Outcomes are listed for each goal to provide a measure to indicate how well the City is progressing toward each goal. Many of these outcomes are derived from two programs the City has participated in: STAR Communities and LEED for Cities. Prior to being integrated into the LEED rating system, the City used the STAR Communities sustainability tracking and rating system to assess a diverse array of metrics. Under LEED for Cities, which the City has been certified as "Gold" in August 2020, the City closely assessed and aligned its outcomes for Natural Systems, Transportation and Land Use, Water Efficiency, Energy and Greenhouse Gas Emissions, Materials and Resources, Quality of Life, Innovation, Regional Priorities, and Integrative Processes. Depending on whether goals or credits were achieved in either rating system, both STAR and LEED offered useful tools to establish future outcomes, as well as determine appropriate implementation strategies to achieve them.

The concluding chapter on implementation (Chapter 5) ties the preceding Guiding Principles together with the action plan. Implementation strategies are categorized by priority, timeframe, and responsibility. This action plan can serve as a checklist to ensure the plan's implementation.

References to other sections in this plan and external documents are indicated with this symbol

VISION

THE CITY OF LAS VEGAS WILL BE A LEADER IN RESILIENT, HEALTHY CITIES - LEVERAGING THE PIONEERING INNOVATIVE SPIRIT OF ITS RESIDENTS TO PROVIDE EQUITABLE ACCESS TO SERVICES, EDUCATION, AND JOBS IN THE NEW ECONOMY.



LAS VEGAS IN 2050 WILL BE BOLD, INNOVATIVE, ICONIC, WORKING, SMART, ACCESSIBLE, AND COLLABORATIVE.

BOLD, VISIONARY PLANNING

The City's future upon depends how its leaders and residents respond to opportunities and challenges today and plan for continued change tomorrow. Las Vegas residents have already witnessed the power of visionary, implementable planning in several key areas of the City. Now is the time for all areas of the City to benefit from this kind of strategic thinking.

The 2050 Master Plan announces to the region and world that Las Vegas is actively moving forward in order to address key challenges and capitalize on key opportunities and move boldly as it has in the past, leading other desert and global cities in equitable outcomes and the competition for investment, talent, health, education, leisure and other hallmarks of a uniquely Las Vegas quality of life.

The 2050 Master Plan continues the tradition of forward-thinking planning in the City and Las Vegas Valley, including regional plans like Southern Nevada Strong, and district plans like the Vision 2045 Downtown Las Vegas Masterplan. The previously adopted 2020 Master Plan reached the end of its useful life as most of the goals, objectives and policies identified in that plan were achieved. This Plan builds upon the existing strengths of the City and region to establish a vision for the future with measurable goals and actionable implementation recommendations.

GUIDING PRINCIPLES

Overall, this master plan differs from previous master plans in how it integrates recommendations related to the long-term sustainability of the City of Las Vegas. Although previous plans looked to address guiding principles, this plan shifts to incorporate measurable principles directly into the planning process.

This plan looks to the future of Las Vegas in 2050 with a different set of eyes than was done in previous planning processes. It recognizes that development as usual is not enough to achieve long-term sustainability. If the Las Vegas of 2050 wants to be an even better destination for living, working, and playing, it must operate in an increasingly challenging environment. Las Vegas in 2050 will be better than Las Vegas is now- it will be resilient, equitable, healthy, livable, and innovative.

Built on the vision, this Plan's Guiding Principles shape each recommendation. Together, the Guiding Principles will be used to:

- Measure success.
- Weigh recommendations.
- Foster community-driven implementation.
- Improve quality of life for all residents.

These Guiding Principles were developed based on input from the public, officials, staff, and stakeholders that prioritized a common set of quality of life measures that this plan seeks to address.

Each Guiding Principle was the focus of a series of workshops held in May 2019 for local experts and implementors to strategize with national experts from the consulting team.

EQUITABLE	An equitable Las Vegas provides opportunity for all, with access to education, health care, resources and jobs no matter where in the City one lives, all while acknowledging that each neighborhood has its own distinctive character and clean environment
RESILIENT	A resilient and sustainable Las Vegas deliberately prepares the City against acute shocks and chronic stresses like health crises, drought, extreme heat, or flash flooding
HEALTHY	A healthy Las Vegas improves physical and mental health outcomes, improves safety, sustains families and encourages healthy choices for all residents
LIVABLE	A livable Las Vegas emphasizes quality of life in a distinctive way that is unique to the City and meets emerging market trends and demands
INNOVATIVE	An innovative Las Vegas meets new demands of residents while continuing to attract the boldest and brightest by pioneering smart city technologies that drive new markets and diversify the economy

EQUITABLE

Synonyms: Inclusive, fair, welcoming

def. the fair treatment, access, opportunity, and advancement for all people

When they imagine their city in the future, Las Vegas residents see a city of clean air and water for all. They see a city that provides access to education, healthcare, resources, and jobs no matter where in the city they happen to live—all while acknowledging that each neighborhood has its own distinctive character. Las Vegas is recognized by experts as a leader in diversity, equity and inclusion. A dynamic city that values all individuals and creates opportunities for everyone.

PRESENT CHALLENGES	KEY PRIORITIES	RECENT SUCCESSES
• Increasing equity in housing, employment, education • Expanding public participation, collaboration, and community partnerships • Developing affordable housing supply	• Prevent homelessness • Prioritize affordable housing development • Support workforce development • Increase transit options • Support robust community services • Build philanthropy • Celebrate and preserve Las Vegas' histories, places, and cultures • Expanding broadband access in the cities urban core and in other underserved communities to address the digital divide. • Financing and construction of health and wellness centers in medically underserved communities. • Ongoing criminal justice reform through enhanced alternative sentencing services and targeted Justice Courts. • Exceeding the $1 million goal of donations and in-kind support for the Mayor's Fund for LIFE philanthropic entity. • Expansion of green space in underserved communities through a $50 million park bond. • Creation of a Crisis Response Team within the fire department to respond to mental health emergencies.	• City Council adopted diversity, equity and inclusion resolution with an emphasis in equity in all policies • Active "second chance" employer for homeless persons with criminal justice system involvement. • Nearly 10 years of a perfect score of 100 from the Human Rights Campaign Initiative as a welcoming and diverse city. • Founding and sustaining member of the Harbor, a youth juvenile justice navigation center. • Establishment of the first low barrier homeless resource navigation center in the state. • Achieving functional zero for veterans homelessness and one of the first cities to establish a regional suicide prevention network for service members, veterans, and their families. • Sustaining member of the My Brother's Keeper movement, focused on academic success and wraparound services for at risk black and brown boys. • Designation in 2018 as an All-American city based on existing diversity and inclusion in policies and programs. • Implementation of resident led neighborhood revitalization strategy areas.



Equity is not equality. *Equity is giving each individual what they need to be successful, while equality is treating everyone the same.*

AN EQUITABLE LAS VEGAS:

- Acknowledges national and local trends
  - The nation, and our city, is becoming more diverse
  - There are socio-political challenges
  - There are rising costs in housing, health care and education
  - Decisions increasingly made the context of equitable indicators
- Advances socioeconomic mobility for all Las Vegas residents
  - Diversify our workforce and provide opportunity, for equitable access to high-quality education and relevant training
- Embraces our key challenges
- Creates opportunities for adequate, diverse housing that meets the needs of the community
- Emphasizes talent recruitment and retention of residents
- Builds empathy for better urban design outcomes in economically disadvantaged areas
- Anticipates and innovate for new economies
- Creates a just, equitable, diverse, and inclusive culture





STAR/LEED OBJECTIVES

- **Social and Cultural Diversity:** Celebrate and respect diversity in community decision-making
- **Civil and Human Rights:** Promote civil and human rights
- **Equitable Services and Access:** Ensure equitable access to foundational community assets

RESILIENT

Synonyms: sustainable, adaptable, flexible

def. able to withstand or recover quickly from difficult conditions

To ensure a quality of life well into the future, experts acknowledge that Las Vegas will need to better prepare for health crises. The city will need to continue to reduce water consumption. The City will need new transportation solutions to support higher densities. It will benefit, too, from acknowledging how urbanized so much of its environment has become. Las Vegas has always needed sound planning for drought, earthquakes, and flooding. Today, planners must look to the impacts of a changing climate as well.

PRESENT CHALLENGES	KEY PRIORITIES	RECENT SUCCESSES
• Changing weather patterns and rising temperatures • Shared water supply is shrinking • Populations at risk due to the rising heat • Fear of change • Waste reduction	• Adapt development patterns better suited to the desert • Improve water conservation and decrease demand • Reduce auto dependence • Continue to diversify the economy • Continue to foster education • Improve access to healthcare • Program waste reduction policies • Improve environmental hazard mitigation/conservation policy	• Water conservation efforts • The fastest growing solar region in the US • Re-investing in downtown • Creating new, more efficient developments downtown and adjacent areas • Community healing garden • Partnerships with RTC, UNLV, SNHD, and Clark County on extreme heat and regional sustainability

STAR/LEED OBJECTIVES:

- **Climate Adaptation:** Strengthen the resilience of communities to climate change
- **Greenhouse Gas Mitigation:** Reduce greenhouse gas emissions
- **Emergency Prevention and Response:** Reduce harm to humans and property
- **Natural and Human Hazards:** Ensure communities are prepared to respond and recover from extreme events
- **“Green” Infrastructure:** Design and maintain a network of “green”infrastructure
- **“Green” Building:** Encourage the design, construction, and retrofit of buildings using green building practices

*Quotation marks are added to “Green” to indicate that Las Vegas, with its desert climate, does not meet the sustainable and resilience goals in a traditionally green way that other communities across the country do. This plan advocates for alternatives to relying on green vegetation to reduce the urban heat island and water challenges facing the city. Resilience and sustainability are at the heart of meeting those objectives.

TO ACHIEVE A RESILIENT LAS VEGAS, WE MUST:

- Infuse resilience in all aspects of City development and systems at a physical and operational level.
- Focus on how environmental and infrastructure issues can be addressed through plan recommendations, including water scarcity, drought, urban heat island, public health and safety, food security, and air quality
- Understand the anticipated context of a hotter, drier future in Las Vegas and how limited and shrinking water resources and climate change will affect the region
- Acknowledge both heat island effect and climate change are threats





- Intentionally incorporate key issues of resiliency and climate action/adaptation into all land-use planning, policies, and standards.
- Lead policy and actions as a City within a framework of increased multi-jurisdictional cooperation and regional partnership building.
- Plan for uncertainty by considering multiple scenarios for future risk and vulnerability, including climate change.
- Protect the environment for future generations, using smart growth development practices to protect and maintain limited resources.
- Effectively communicate the issues and risks we are facing as a community and the steps we are taking to address them, and that ensure our communication efforts promote, incentivize and celebrate the goals that we set.
- Celebrate water as core to public health, economic strength and quality of life. While Las Vegas is conserving water better than any U.S. city, major steps are needed to protect water resources for current and future generations.
- Emphasize land use planning can reduce water demand and heat island impacts
- Mitigate urban heat island by planting and maintaining trees, encouraging the use of appropriate building and site materials.
- Consider energy and energy-water nexus related goals including site goals to reduce demand via human-scaled interventions, building scale incentive programs, deep energy retrofits, building code provisions, green city buildings and fleet, understanding intersections at the system scale, and establishing policy and partnerships at the City scale.

HEALTHY

Synonyms: strong, accessible, well

def. in good physical condition, in good shape, in top form

Beyond access to clean air and water, the people of Las Vegas envision a city that improves physical and mental health outcomes, improves safety, sustains their families and encourages healthy choices. They see opportunities to make more communities walkable and responsive through mixed use developments together with ample parks, open spaces and recreational opportunities.

PRESENT CHALLENGES	KEY PRIORITIES	RECENT SUCCESSES
• Lack of doctors • Aging population • Changing climate • Poor walkability • Poor childhood wellbeing data • Addiction, abuse, trafficking • Access to healthy foods • Food desert - little food is produced locally • Mental health	• Promote walkability • Increase outdoor recreation • Build a healthcare “destination economy” • Make the healthy choice the easy choice • Prioritize safe homes, schools, streets • Improve air quality	• Development of the Las Vegas Medical District • Creation of the UNLV School of Medicine • Walkability improvements in several neighborhoods, downtown and the Arts District • GoMed AV shuttle to the Medical District • Training first responders in Mental Health



STAR/LEED OBJECTIVES:

- **Environmental Justice:** Reduce polluted and toxic environments
- **Active Living:** Enable adults and kids to maintain healthy, active lifestyles
- **Community Health and Systems:** Achieve positive health outcomes and minimize health risks
- **Food Access and Nutrition:** Ensure access to fresh, healthful food
- **Indoor Air Quality:** Ensure healthy indoor air quality

A healthy Las Vegas is rooted in a hyper-local understanding of the social determinants of health and the unique community conditions in the varied and diverse places where people live, learn, work, and play and that affect a wide range of health risks and outcomes.

This planning process included a series of focused conversations in conjunction with UNLV School of Medicine students and other key stakeholders to discuss social determinants of health and develop principles rooted in the Center for Disease Control (CDC) Healthy Community Checklist.

TO ACHIEVE A HEALTHY LAS VEGAS, WE MUST:

- Increase options for physical activity and opportunities to be able to go more places without a car
- Develop livable places in clean environments
- Invest in public transportation
- Improve walkability and safety
- Reduce food insecurity and hunger
- Increase affordable housing options
- Improve access to care
- Improve accessibility and availability of mental health care resources
- Reduce loneliness and isolation
- Mitigate the impact of the personal automobile
  - Prioritize placemaking on key transit corridors
  - Make transit hubs more safe and comfortable
  - Incorporate complete street guidelines
  - Reduce speed limits
  - Reduce parking requirements
- Improve air quality
  - Plant more trees for multiple environmental, health, economic benefits
  - Enforce/manage the tree canopy
  - Make data-informed and metrics-based decisions
- Improve pedestrian safety and walkability
  - Prioritize universal design
  - Improve mixed use with more eyes on the street
  - Improve lighting
  - Empower neighborhood based organizations
- Improve and increase park spaces and access
- Improve connectivity
  - Incentivize walking and biking
  - Eliminate neighborhood walls
  - Improve connectivity ratio
  - Develop additional safe and high comfort routes and walkways/bikeways
  - Build smaller community centers
  - Fill in sidewalk gaps
- Develop alternative housing strategies that respond to need and resources of today
  - Consider micro units/granny flats
  - Explore creative unit construction, ie. container units



LIVABLE

Synonyms: Unique, complete, enjoyable

def. an environment worth living in

For all the change the future will bring, the people of Las Vegas want to maintain strong ties to qualities of the city that make it distinctive and meaningful. The City wants to hold on to cherished icons of its past while acknowledging its diverse cultural traditions, and it wants to reaffirm its deep ties to the desert and the West.

PRESENT CHALLENGES	KEY PRIORITIES	RECENT SUCCESSES
• Define the city's role beyond its gaming culture • Relatively recent local history – getting people invested in their community, putting down roots • Neglect and demolition of cultural resources	• Emphasize placemaking • Embrace the entertainment and recreation sectors and what makes Las Vegas special • Attract families and new residents • Provide sufficient recreation and youth-focused amenities	• 18b Arts District, Fremont East, and Historic Westside • Symphony Park developments • Mayor's fund for LIFE • New sports franchises



STAR/LEED OBJECTIVES:

- **Arts and Culture:** Provide a broad range of arts and cultural activities
- **Community Cohesion:** Ensure a cohesive, connected community
- **Civic Engagement:** Improve well-being by participating in decision-making and volunteering
- **Safe Communities:** Prevent and reduce violent crime





TO ACHIEVE A LIVEABLE LAS VEGAS, WE MUST:

- Continue to be a unique entertainment and recreation destination with a vibrant character and economy:
  - Embrace our world-class tourism economy.
  - Understand what is "authentic" Las Vegas and how this can be leveraged to create more livable communities.
  - Drive additional economic development diversification and attract and retain residents and businesses.
- Improve the quality of life and sense of "place" for residents:
  - Create a more inclusive community built on grassroots involvement and pride .
  - Break down the walls of our community and bring people together.
  - Encourage neighborhood branding as part of defining planning areas to embrace unique identities and facilitate neighborhood pride.
  - Improve education, both traditional and lifelong learning opportunities.
- Create and maintain safe neighborhoods:
  - Create a more walkable community to attract and retain residents.
  - Safe streets with lighting, sidewalks and trees.
  - Improve crosswalks and bike lanes.
  - Reduce vehicle speed on residential streets.
  - Create opportunities to get more "eyes on the street" day and night.
- Design places for all people to live regardless of age, abilities or income.
- Increase opportunities where residents can make healthier and more affordable food choices:
  - Strengthen housing types to support a variety of age groups, family types, and funding strategies.
- Celebrate the history and culture of Las Vegas to build greater neighborhood pride and investment:
  - Increase family-focused entertainment.
  - Increase the percentage of accessible open space.
  - Build a philanthropic culture to invest in community priorities.
- Support strong neighborhoods with access to key services and amenities:
  - Expand upon neighborhood community center model to include cultural and recreation options in more locations throughout the city.
- Capitalize on the resurgence of downtown, the Arts District, and urban lifestyle.
- Continue collaboration with LVMPD to provide outstanding public safety.



INNOVATIVE

Synonyms: Smart, diverse, bold

def. new ideas; original and creative in thinking

An Innovative Las Vegas will meet new demands of residents while continuing to attract the boldest and brightest by pioneering smart city technologies that drive new markets and diversify the economy.

PRESENT CHALLENGES	KEY PRIORITIES	RECENT SUCCESSES
• Overcome dependence on entertainment and service industry • Fast-paced technology is ever-changing and may not be accessible to the poor • Differentiate Las Vegas's role as a tech hub city – what makes it different than other tech centers? • Limited capacity to accommodate a diverse population • Deficient talent retention from the university, transient population	• Redefine place types to be integrated, mixed-use centers • Lead with cutting edge transportation improvements • Cultivate the tech side of the gaming industry • Build a highly skilled workforce • Diversify industries in tune with emerging technologies	• Embracing emerging technologies and advanced data analytics • Application development • Mobility improvements • Smart City pilots • Innovation District • Electric vehicle charging infrastructure • NAVEA and GoMed (AV shuttles) • International Innovation Center @ Vegas (IIC@V)



STAR/LEED OBJECTIVES

- **Business Retention and Development:** Foster economic prosperity and stability
- **Targeted Industry Development:** Increase local competitiveness
- **Green Market Development:** Increase overall green market demand
- **Energy:** Transition the local energy supply toward the use of renewables

TO ACHIEVE AN INNOVATIVE LAS VEGAS, WE MUST:

- Embrace that a smart city is where there is effective integration of physical, digital and human systems in the built environment to deliver a sustainable, prosperous and inclusive future for its citizens.
- Understand the biggest barrier to innovation is lack of connectivity.
- Embrace the six pillars of Smart Vegas, including:
  - Iconic Las Vegas
  - Workforce development
  - Smart Vegas
  - At-risk populations
  - Neighborhood preservation and quality of life
  - Public safety
- Embrace the economic impact promise of Smart City improvements for the city of Las Vegas, including:
  - Cost savings
  - Efficient city operations
  - Risk mitigation
  - Quality of life improvements
  - Improved connectivity
  - Talent attraction
  - Sustainability
  - Better mobility and greener buildings
  - Monetization of big data
- Understand potential limitations to Smart City improvements in the City of Las Vegas, including:
  - Difficult to demonstrate return on investment
  - One-sided P3s, because the general public doesn't know what they need
  - Industry fatigue on "freebies" (it can't all be free)
  - State and federal preemption
  - Pilots challenging to scale (financing and governance are important)
  - Public awareness, because a lot of data is being captured in rights-of-way with no conversation about privacy in the 21st century
- Address key elements the City desires to move forward regarding Smart Vegas, including:
  - 5G infrastructure, leveraging disruption, leading deployment, scaling beyond the district and considering urban design implications
  - Utilities and changing demand, including fleet electrification, microgrids and local generation
  - land use, including hyper local planning and resource management
  - workforce development, including skills training, supporting management and transforming the workforce
  - focusing on outcomes, including public health, sustainability, and mobility, amongst others
  - business models including P3s for public benefit, flexible innovation, and data and security
- Become a less one-dimensional economy and thus less susceptible to sharp market shifts.
- Diversify our knowledge-based economy that leverages our innovative enterprises including resilience and sustainability research, advanced mobility platforms, and improved data collection, analysis and evaluation.
- Improve the disconnect between land use policy and economic development goals.
- Continue to be the top city for open data, balance between open public data, secure data and data that can be monetized.
- Improve institutional partnerships.
- Address the "digital divide."

QUANTIFYING CHANGE

To fully realize the City's vision, it will need to quantify measurable change. Here are some facts and figures, for a baseline understanding of what is facing the city, particularly related to growth and development.

IN 2050, LAS VEGAS WILL LIKELY HAVE:

300,000+
NEW RESIDENTS
- A total city population of approximately 900,000+
- A total regional population of 3 million (in line with UNLV estimates)

9,500+
ACRES OF NEW PARKS NEEDED
- Tule Springs National Monument included

100,000+
NEW HOUSING UNITS IN THE CITY
- 550,000+ more total housing units in the region

72 MILLION
SQUARE FEET OF NEW COMMERCIAL SPACE

and at least:

600
NEW LVMPD OFFICERS

2,500
NEW TEACHERS

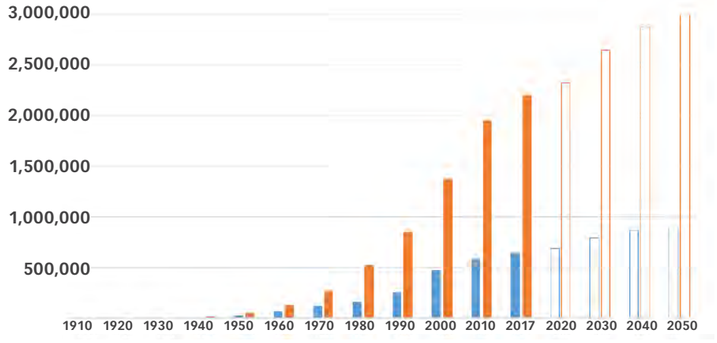
30
NEW CCSD SCHOOLS

450
NEW PUBLIC SAFETY EMPLOYEES

1,100
NEW CITY EMPLOYEES

HOW DO WE PLAN FOR THIS?

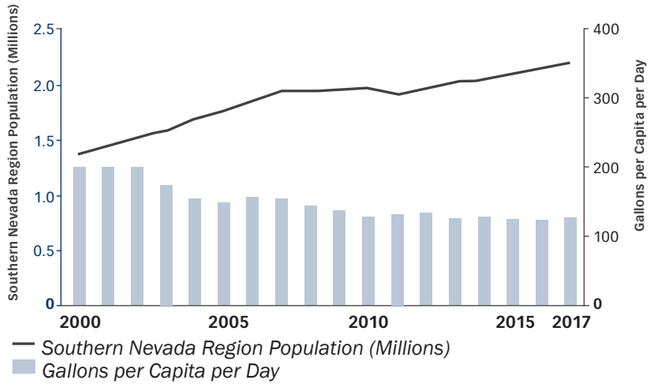
POPULATION HISTORY AND FORECAST



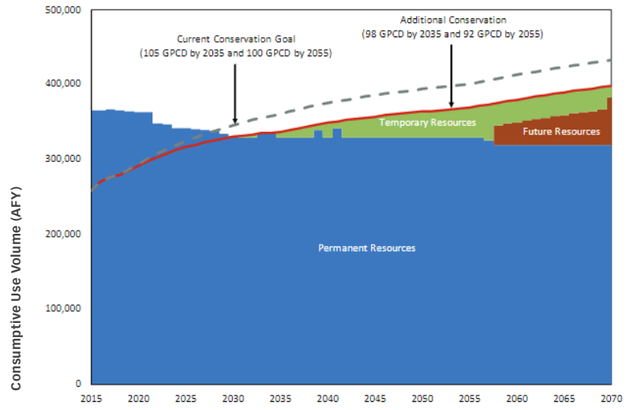
Source: UNLV

The population in Southern Nevada is projected to reach 3 million by 2050, with 300,000 future City of Las Vegas residents.

WATER CONSUMPTION



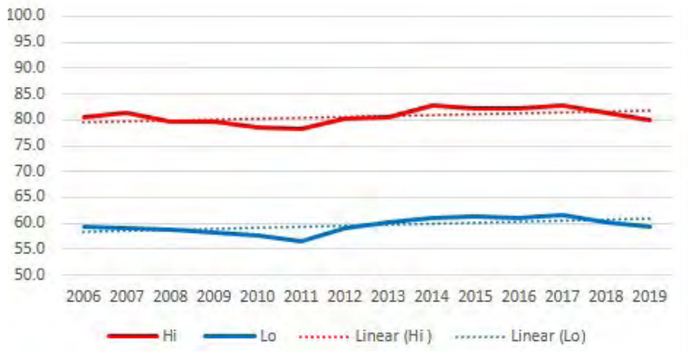
Despite the population increase, drought, and urban development, SNWA has produced significant decreases in per person water use with the same water supply from the Colorado River.



Source: SNWA

Even with increased conservation, Lake Mead's levels are expected to decrease in the face of drought and climate change. Water conservation is a key element of SNWA's success in managing water resources to meet the region's expected water demand, and the City can contribute to this effort in a collaborative role.

AVERAGE ANNUAL TEMPERATURE



The average annual temperature is rising, meaning the city must plan for ways to alleviate the increasing adverse effects of the urban heat island.



SHAPING LAS VEGAS

FROM GUIDING PRINCIPLES TO MEASURABLE RECOMMENDATIONS

The Las Vegas 2050 Master Plan identifies the vision and goals of the community and provides a “road map” identifying where land use changes may be anticipated or desired. The Plan provides guidance and recommendations on the forms and functions of these future land uses.

Understanding how future demographic changes, such as increasing population or socio-economic shifts, affect land uses is essential for effective master planning. In Las Vegas, demographic projections anticipate upwards of 300,000 new residents within the city limits by 2050.

We know that past development practices relied on a suburban expansion model, where undeveloped lands at edge of city are incorporated into the City proper and developed - primarily as single-family housing developments.

This pattern of development may ultimately prove unsustainable should it continue, exacerbating a range of issues and associated mitigation costs. Single-family housing consumes the greatest amounts of water - are preciously and tightly managed resources, especially if needing to accommodate 300,000 new residents. Further suburban expansion requires significant infrastructure investment to expand sewer and water service, while often leaving aging infrastructure in older parts of the city in poorer condition.

Suburban expansion means ever increasing commute times for workers, while making it increasingly expensive to provide mass transit service to outlying areas. Collectively this places an even greater burden on an already stressed roadway network. At the same time, Las Vegas struggles with the same issues of equality that are common across urban environments in the US: gentrification, affordable housing, and fair access to schools, hospitals, and critical services.

The city has evaluated its actions and recognizes that state-level efforts are helping to reduce some of these burdens. Energy, for instance, is being shifted towards renewable generation in the electrical grid, reducing the amount of green house gas emissions from building use. But other critical resources, such as water, remains front and center in future planning needs.

GUIDING RESILIENT GROWTH

Thankfully, a number of alternative strategies and development practices are at the city’s disposal, which have the ability to accommodate future population growth in a more resilient manner, leading to better outcomes for all of Las Vegas. Key land use planning strategies include the following:

- Increase the density of key parts of the city, driven by water-centric and transportation-oriented planning.
- Prioritize and incentivize construction of “Missing Middle” housing: low-rise (3-5 story) multi-family units in key areas that have the smallest water footprint per dwelling unit. This typology creates a unit per acre density that aligns with transit-oriented development density (30-40 units per acre).
- Optimize the efficient use of limited resources such as land and water. Adaptively reuse and renovate the city’s existing infrastructure and buildings to be higher performing and more responsive to future stresses.
- Use resilient, climate adaptive and water efficient tree and plant species that reduce the urban heat island and improve air quality in all neighborhoods, prioritizing those that are the most in need.

For Las Vegas, increasing density and population in select areas is vital to help maximize the efficiency of existing city services and to accommodate an increasing population. It will also provide the population concentration needed to support more accessible and equitable mobility and transportation systems and nearby, walkable neighborhood stores and businesses.

Density is frequently perceived as a “bad” word because it connotes a wide array of ill-conceived or poorly-designed buildings and developments. These include past attempts at public housing, overcrowded and out-of-scale apartment complexes, and the conversion of single-family homes into multi-unit boarding houses.

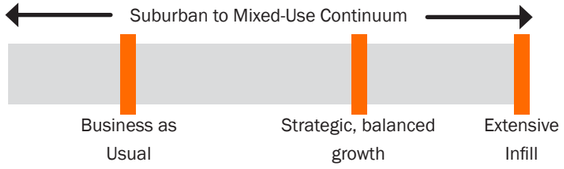
Well-planned and designed medium- to higher-density housing strategies could help transform and re-energize certain areas. Depending on the neighborhood, the least intrusive of these may be to infill vacant lots with compatible single-family homes. More substantial options include redeveloping an area to accommodate mixed land uses that offer a variety of residential options.

EXPLORING FUTURE ALTERNATIVES

To help answer the question of where and how residents will be housed in the future, the planning team developed a sophisticated modeling tool to predict potential land use changes and assess their associated impacts. Different sets of assumptions were used to explore different future land use alternatives. This tool allowed the planning team to leverage public and stakeholder engagement and then:

- Assess the potential for different land uses to change in the future, based on the existing development patterns and uses of individual areas along with feedback from public engagement through the Preserve-Enhance-Transform (PET) analysis;
- Characterize how a given area could change and what mix of Place Types (i.e. future land use patterns) might be desired in that area in order to achieve desired outcomes and goals;
- Understand the capacity for changing land areas to absorb new population growth and what the impacts and benefits of those changes might be - most importantly in terms of impacts to water use.

Being able to anticipate land use changes and future population densities across Las Vegas can shed insight on critical elements that shape the quality of life for residents and the resilience of the City and broader region. For instance, differences in the amount of water different types of housing (e.g. single-family vs. apartment buildings) utilizes is important for achieving a smart use of finite water resources. Similarly, understanding how and where greater densities of population can be located to support an accessible and robust transportation system impacts how people live and move about the city.



"WHAT IF" ALTERNATIVES

The land use tool allowed the planning team to explore three different alternatives (or "what-ifs") for how future population growth of approximately 300,000 people could be accommodated.

The first alternative looked citywide and loosely followed a "Business-as-usual" approach. Under Business-as-usual, future population growth would largely be accommodated through creation of new single-family neighborhoods that expand the developed footprint of the City of Las Vegas. This approach requires constructing new roads and public infrastructure to provide services to these new suburban-style developments. This alternative demonstrates one scenario of assuming very little change in land controls or proactive measures are taken to inform land use decisions.

The second alternative looked citywide and explored a more aggressive "Extensive Mixed-Use Infill" approach. While still allowing for some development of currently undeveloped land areas, the majority of new housing would be accommodated through utilization of vacant land within existing development footprint, redevelopment of portions of lower-density commercial areas into high-density mixed-use areas, and smaller scale infill in portions of existing residential zones. This alternative takes the opposite scenario of requiring or highly incentivizing denser land use patterns and minimizing expansion into undeveloped areas.

The third alternative, which forms the basis for the future place type maps (see Chapter 2), takes a strategic, balanced, district-by-district growth approach to identify key opportunities for increasing density and mixed-use development patterns where they are most feasible and desired. The opportunity was taken to align higher density redevelopment opportunities with future transit and transportation infrastructure improvements, allowing for a clearer Transit-Oriented Development (TOD) approach to the place types map. Based on a reasonable amount of mixed-use redevelopment within the city, outlying land were then projected for development using a denser traditional neighborhood place type pattern, which predominantly utilizes single-family housing.



A NEW DIRECTION: OUTCOMES AND ACTIONS

The future place type framework and associated strategies, tools, and recommendations (see Chapter 2), sets the stage for a healthy, equitable, resilient, livable, and innovative Las Vegas.

The plan accommodates 300,000 new residents, while minimizing additional incursions into vacant and outlying lands. Achieving this relies on redeveloping vacant or underutilized lands within the city as primarily mid-density mixed-use developments, that bring residents in closer proximity to stores, jobs, public services, and transit while reducing water consumption and infrastructure costs.

Compared to the "Business as Usual" alternative, the "Strategic, balanced growth" alternative accommodates the same 300,000 residents in a manner that is anticipated to consume nearly 20% less water. Overall, under this scenario the average gallons of water used per unit of housing per day would decline. In comparison, under the "business as usual" scenario, relying primarily on suburban singe-family housing would continue to increase the average amount of water used per housing unit per day across the city.

In addition to reducing the rates of water consumption, the "Strategic, balanced growth" alternative places the majority of new residents along existing or potential mass transit corridors - increasing the mobility options for residents while reducing the burden of additional remote vehicle trips on the transportation infrastructure.

CONFRONTING ACTIVE CHALLENGES



As this master plan was under development and nearing completion, the world was thrust into the COVID-19 global pandemic. Given the dramatic impacts of these events and the ongoing active challenges for the community, and because both occurred during the planning process, several lessons learned have been interwoven into this plan. While COVID-19 affected the timeline to consider adoption for the plan and impacted some of the plan's underlying assumptions, it has been important for the City to describe how it can be used to confront these active challenges and how the City can take action, make recommendations, and formulate the best response possible to events that occur unforeseen. These events set amid a national scene, however, underscore the necessity of adhering to the guiding principles of this plan and their application as the plan is implemented.

COVID-19 IS NOT SOLELY A PUBLIC HEALTH CRISIS

After the discovery of the novel coronavirus in the city of Wuhan, China in late 2019, the highly infectious respiratory disease rapidly spread throughout the world, eventually making its way across Asia, throughout the European Union, and into the United States. On March 5, 2020, a 55 year old man returned to Las Vegas from a trip to Washington state. After exhibiting symptoms, he tested positive for COVID-19, confirming that COVID-19 had arrived in Las Vegas. Three days later, the state's total cases rose to four with presumptive-positive tests reported in Southern Nevada. Suddenly, major conventions and events were being postponed, professional sports paused games mid-season, and NCAA basketball tournaments scheduled in Las Vegas were cancelled. By March 12, Nevada Governor Steve Sisolak declared a state of emergency for Nevada and began issuing a series of directives to address the impacts of the outbreak; Mayor Goodman and other local governments would issue their own respective declarations within the week. Shortly thereafter, President Trump declared an emergency using the Stafford Act and used special authority to increase production of medical supplies and equipment and to use the National Guard to keep supply chains operational. Since then, Las Vegas – and the state of Nevada – has seen tremendous, dramatic shifts in infection rates, employment, and economic impacts.

Once the reality of COVID-19 being an easily transmitted, airborne disease was recognized by the health and public policy communities, Governor Sisolak took the unprecedented step of ordering all non-essential businesses, including gaming operations, to close and shut down, a decision that weighed the health of the public against economic viability and set the trajectory for future directives from the Governor's Office. In a matter of days, Las Vegas residents, businesses and their employees, were confronted with a dramatic new reality. By March 19, just two days after announcing closures, 206,000 direct casino employees across Nevada found themselves without work. With one of every four workers in Nevada employed by the leisure and hospitality industries, the livelihoods of Las Vegas residents and strength of the city's primary industry were compromised. By the end of April, Nevada had the worst-ever unemployment rate in history and the highest unemployment rate in the country with nearly 245,000 jobs lost.

With much of the city and state shut down, life in Las Vegas changed dramatically. In addition to the impact of COVID-19 on job security, livelihoods, and public health, the everyday living patterns of residents was altered due to the shutdown of all non-essential business. Instead of being able to enjoy a dinner out at a restaurant, people had to instead rely on takeout and curbside pickup options. No longer could a person patronize a supermarket without wearing a mask or waiting in line to enter so stores could ensure a six-foot distance between customers. Rather than dropping kids off at school, parents were left to homeschool their children with online support from educators; some had no support at all through the end of the school year. Those reliant on public transportation were faced with longer wait times for transportation. Public gatherings were limited to 10 people in late March. Many employees had to transition to at-home work protocols while others faced the strong likelihood that their jobs would be eliminated. Travel – particularly air travel – was severely limited by flight cancellations while road travel was punctuated by required self-quarantine periods upon arriving at one's destination.

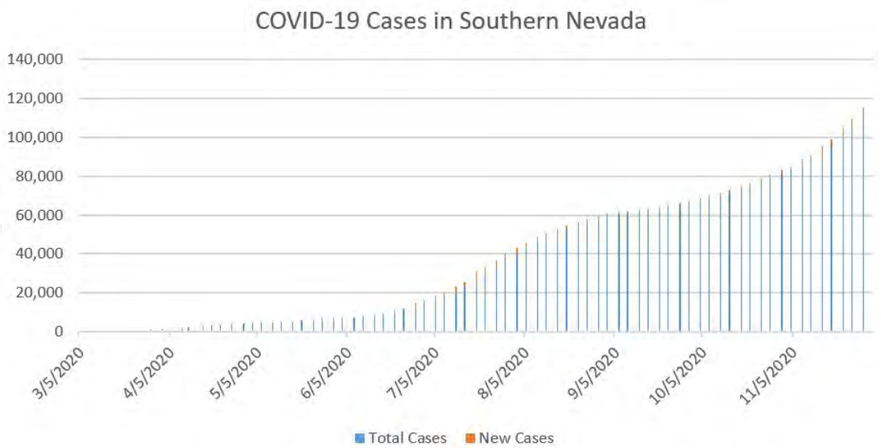
While COVID-19 has tended to have a greater impact on those who are older, have a pre-existing condition, or are immuno-compromised, approximately 80% of Clark County cases show sub-populations having a disproportionate impact, especially for black, Latino, and Asian populations, as well as men. A likely explanation for this could be inequitable lack of access health care, the lack of outreach on the risks of COVID-19, or the lack of personal protective equipment at home or on the job. Furthermore, these sub-populations may have no other options to earn income, thus working at a job that requires public service or interaction. Because this novel coronavirus spreads via human contact, individuals who engage in public-facing activities like riding the bus, live in multi-family residences, or face barriers to health care are more likely to contract and spread COVID-19.

THE PANDEMIC ONCE AGAIN EXPOSED NEVADA'S OVER-RELIANCE ON THE GAMING AND TOURISM SECTORS AND EXEMPLIFIED THE NEED FOR CONTINUED ECONOMIC DIVERSIFICATION

In Nevada, the stark reality of having a state economy based primarily on gaming and tourism, with tax revenue derived from those sources, puts Las Vegas in an unprecedented economic situation. Nevada's economy is heavily dependent upon its sales tax, which accounts for nearly 1/3 of total state revenue. Of this, leisure and hospitality account for the largest contribution. With casinos closed during the COVID-19 shutdown and visitation hitting historic lows, the financial impacts to the state's biennial budget are substantial. Pressure was placed on Federal, state, and local leaders to respond to the pandemic and reopen the economy as quickly as possible.

As historic layoffs occurred, claims for regular state unemployment and pandemic unemployment assistance rapidly increased and overwhelmed an existing state unemployment system wholly unprepared for a staggering volume of new claims. While new unemployment claims increased and leveled off over time, continual weekly claims for unemployment, indicating long-term layoffs, saw steady growth throughout the majority of May.

COVID CASES IN SOUTHERN NEVADA (AS OF DECEMBER 2020)



As COVID-19 spread, Clark County and City of Las Vegas officials jointly opened the ISO-Q (Isolation and Quarantine) Complex at Cashman Center in Downtown Las Vegas. Funded through the CARES Act, the facility supported up to 500 homeless patients as a ground up preemptive observation and care facility. The complex allowed space for homeless individuals that were asymptomatic, an isolation area for those with symptoms and awaiting test results and presumed positive, and an isolation area for confirmed positive cases. Separate tents were set up providing beds, restrooms, and shower facilities for each area.

At the end of March 2020, Congress approved the $2.2 trillion Coronavirus Aid, Relief and Economic Security (CARES) Act that provided an unprecedented aid package for the country to combat the effects of the virus and the toll on the economy. Among its features was a massive infusion of money into the health care system, as well as development of therapeutic drugs and for the development of a vaccine. The CARES Act also provided relief to businesses and individuals, including:

- An economic stabilization fund with $340 billion in direct funds to states and municipalities responding to the virus and $500 billion to large corporations
- A $350 billion small business Paycheck Protection Program
- $300 billion in one-time cash payments to individuals
- $260 billion for unemployment benefits
- Provisions for student loans and grants
- Changes to minimum distributions for retirement accounts and permitted early access to funds with no penalty
- A temporary foreclosure and eviction moratorium

The efficacy of the CARES Act funding and provisions, as well as the overall Federal response from the Trump Administration and CDC continue to be debated, but the infusion allowed Nevada and the City to supplement budgets and mount a response.

Between March and May, 2020 as testing, tracing, and treating protocols were put into place to help “flatten the curve” and reduce the rate of new infections and hospitalizations, Governor Sisolak formed and implemented a phased reopening schedule led by Nevada’s counties and supported by local governments. Named Nevada United: Roadmap to Recovery, this schedule shifted the City from a stay-at-home order to Phase 1 reopenings (Battle Born Beginnings) to Phase 2 reopenings (Silver State Stabilization). As the City transitioned from a stay-at-home order to different phases, the moves were not without challenges due to the enforcement of business compliance with directives and orders. However, by the end of May, many resorts issued phased reopening plans, subject to the approval of the Nevada Gaming Control Board. By the beginning of June, Phase 2 reopenings began with a limited reopening of the economy, as well as with directives to wear masks and face coverings in public spaces.

Despite some job growth attributed to advancing to Phase 1 and Phase 2, the Las Vegas metropolitan area experienced a 29% unemployment rate in May, a stark contrast to the 4% unemployment rate from May 2019. In spite of development projects advancing and casinos opening to the public, only a fraction of those experiencing unemployment were brought back to work.



Even with funding from the CARES Act, the greatly diminished gaming and sales taxes forced both City and state to make drastic budget cuts. The City adopted its Final Budget for Fiscal Year 2021 in late May, with a pared-down general fund budget of $572 million that depleted its fiscal stabilization fund and required transfers from the capital projects and other funds. While layoffs to employees were avoided, the City faces a $44 million deficit over the next four years. Other local and regional governments have been confronted with similar situations, including cuts to transit service at RTC and scaled back operations across Clark County.

Facing a fiscal emergency and an estimated budget gap of $1.2 billion, Governor Sisolak was forced to convene a special session of the Legislature. The July session considered $500 million in reductions to agency budgets including K-12 and higher education, reductions in one-time appropriations, reversions of contingency funds and transfers to the State’s general fund, state employee furloughs and position freezes, and consideration of the acceleration of mining tax. While the session helped close the gap, it does not signify the end of the state’s budget woes. Preparations have continued for the 2021 Legislative session amid further fiscal drops amid uncertainty over additional Federal assistance, continued spread of COVID-19, and poor economic trends.

Fortunately, after the Phase 2 reopenings over the summer of 2020 and fueled by holiday weekends, visitation to Las Vegas increased, and a degree of normalcy returned, but so too did COVID-19 cases. Much of this was attributable to the relaxation of social distancing, mask and facial covering use, and business reopening policies intended to protect residents. As cases continued to rise, fears of overstressing the health care system and its capacities re-emerged, as did concerns over additional directives that caused further business closures, growing layoffs, and unemployment. Added to that were continued questions as to how residents afford the basic cost of living, navigate a potential housing crisis that could result in a wave of evictions and foreclosures, and question how child care should be provided, how kids go back to school, and how to return to normal routines in an already overburdened and overwhelmed city.

In 2021, vaccination efforts began, with state and local rates of steadily increasing and COVID-19 cases declining. With passage of the American Rescue Plan to provide individual payments, housing and nutrition assistance, child care credits, health care improvements, and the ramp-up of vaccine distribution efforts, attenion has been turned to long-term economic improvement, reopening, and recovery.

APPLICATION OF GUIDING PRINCIPLES TO IMPLEMENTATION

No matter the current or active challenge the City faces, the City must develop nimble, strategic responses that adhere to the guiding principles of this plan. Throughout the master plan are goals with recommended implementation strategies designed to reduce or remove barriers to innovation, strengthen resilience and livability, and promote health and equity.

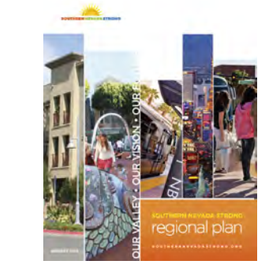
As of this writing, $6.4 trillion has been spent on the Federal government's response to COVID-19, not to mention trillions more by state and local authorities. restrictions are lifting and the City is expected to fully reopen in the near future, possibly by the time this plan is adopted. But, challenges remain as the economy recovers from the impact of the pandemic. Las Vegas is built on gaming and tourism, and it should rightfully remain as a top global destination, but it must continue to make investments in innovative industries that increase the share of jobs in other sectors. As discussed in the respective goals on Economic Development, Redevelopment, and Public Finance, attracting and developing other economic sectors can ultimately reduce the impact of down economic cycles. Investing in health care, especially in communities and areas of the City with higher rates of poverty and chronic illness that exacerbate the symptoms and outcomes of COVID-19 and future crises is needed, as described in the Public Health goal. Preparing for hazards, whether naturally occurring or man-made, should be a priority means of developing community response, no matter what it may be.

The COVID-19 pandemic and ongoing recovery illustrate how guiding principles can be applied to components of the master plan to yield a resilient and livable Las Vegas for all, and the next 30 years will provide a golden opportunity for the City.

REFERENCES AND ABBREVIATIONS

RECENT PLANS PUBLISHED SEPARATELY

- **Southern Nevada Strong:** Adopted in 2015, the Southern Nevada Strong Regional Plan (SNS) is the comprehensive regional policy plan administered by the RTC. SNS envisions how Southern Nevada and its jurisdictions can develop for long-term economic success by integrating education, transportation, the environment, economic competitiveness, health care, and housing. This master plan conforms with the goals, objectives, and strategies established by SNS and is intended to align with overarching regional efforts for balanced economic, social, physical, environmental, and fiscal growth and development.
- **Vision 2045 Downtown Las Vegas Masterplan:** In 2016, the City of Las Vegas adopted a new special area plan for Downtown Las Vegas to guide the city policies and regulations and provided specific recommendations for an expanded Downtown area. The plan incorporates catalytic mixed-use hubs for future investments within twelve districts that constitute downtown. Other recommendations include adoption of a form-based zoning code, economic diversification efforts, complete street improvements, new parks, civic spaces, and tree-lined streets, and a revamped and streamlined governance effort.
- **Mobility Master Plan:** the Mobility Master Plan was developed to inform the City of specific street, transit, bicycle, and pedestrian projects throughout the City. This sub-plan helps inventory and explain the needs for transportation improvement projects.
- **On Board Future Mobility Plan:** In response to the need for more alternative mode solutions, the RTC developed On Board as a comprehensive mobility plan for Southern Nevada. With community input, the plan identifies enhancements to the current RTC Transit system, a new high capacity transit network, and emerging transportation technologies can improve future mobility.
- **Southern Nevada Water Resources Plan:** SNWA's Water Resource Plan provides an overview and outline of the region's water resources and conservation efforts. Given future population forecasts and the water resource portfolio and supplies for Southern Nevada, the plan describes SNWA's efforts to meet demands of its member entities, including the LVVWD that serves much of the City. It also provides important considerations and scenarios for climate change that may impact the availability of its most important resource, the Colorado River.











ABBREVIATIONS GLOSSARY

BLM – Bureau of Land Management

CC - Clark County

CCSD – Clark County School District

CIP – Capital Improvement Plan

CSN – College of Southern Nevada

DCP – Clark County Desert Conservation Program

DCNR – Nevada Department of Conservation and Natural Resources

FBC – Form-Based Code

GHG - Greenhouse Gas

GOED – Governor's Office for Economic Development

GPCD – gallons per capita per day

HPC – Historic Preservation Commission

HPO – Historic Preservation Officer

LEED – Leadership in Energy and Environmental Design

LOC - Level of Comfort

LOS - Level of Service

LVCVA – Las Vegas Visitors and Convention Authority

LVGEA – Las Vegas Global Economic Alliance

LVMC – Las Vegas Municipal Code

LVMPD – Las Vegas Metropolitan Police Department

LVVWD – Las Vegas Valley Water District

MSHCP – Clark County Multiple Species Habitat Conservation Plan

NDA – Nevada Department of Agriculture

NDEP – Nevada Division of Environmental Protection

NDOT – Nevada Department of Transportation

NDOW – Nevada Department of Wildlife

NLV - North Las Vegas

NRS – Nevada Revised Statutes

NSHE – Nevada System of Higher Education

RBPP - Regional Bicycle & Pedestrian Plan

RDA – Redevelopment Agency

RFCD – Regional Flood Control District

RTC – Regional Transportation Commission of Southern Nevada

RTP - Regional Transportation Plan Access 2040

SNPLMA – Southern Nevada Public Land Management Act

SNS – Southern Nevada Strong Regional Plan

SNHD – Southern Nevada Health District

SNRPC – Southern Nevada Regional Planning Coalition

SNWA – Southern Nevada Water Authority

Title 19 – Title of Las Vegas Municipal Code, the City's Unified Development Ordinance, comprised of zoning, subdivision, and other related development standards

TOD – Transit-Oriented Development

USGBC – United States Green Building Council

UNCE – University of Nevada Cooperative Extension

UNLV – University of Nevada, Las Vegas

VMT – Vehicle Miles Traveled

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- Land Use Toolkit
- Historic Preservation

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- Natural Features
- Urban Forestry
- Parks and Connectivity
- Environmental Justice

02. LAND USE & ENVIRONMENT

INTRODUCTION

Perhaps the greatest impact of the Las Vegas 2050 Master Plan will be the dynamic way that it integrates near and long-term planning with sound sustainability principles. Future-focused land-use and environment strategies will guide development in a way that yields greater density citywide, while also protecting and conserving the natural resources that are critical to Las Vegas's future. The shifting land use paradigm to increase density along primary corridors, transit lines, and within specifically identified development clusters serves the dual purpose of increased multi-modal options while maximizing the efficiency of infrastructure, particularly water. While a strategy for utilizing new development typologies is often about where density is placed, it is also about where it is not placed.

The desired result is a master plan and development strategy that:

- Fosters underlying agglomerating economies (the sharing/buying of goods, services, and ideas) that enhance the value proposition of new development typologies that are uniquely desirable in the City of Las Vegas as an alternative to the suburbs
- Diversifies mobility options to increase walkability and accessibility to transit routes
- Drives sufficient density to supplement farebox revenue for the capital development and operations of transit systems
- Increases affordability in the housing market, especially in areas where demand is high and where gentrification is already occurring
- Yields more relevant and marketable housing products, like multi-family residential and mixed-use development, to meet the current and emerging market demand, especially to retirees, Millennials and Generation Z
- Supports brick and mortar "experience-based" retail, in response to online shopping's growing dominance
- Builds vibrant, mixed-income neighborhoods centered on building a place
- Strengthens the character of mature neighborhoods with infill development, redevelopment, and additional parks and open spaces to encourage active living and a sense of pride
- Promotes preservation of and access to key natural features of the Mojave Desert

GOALS

NRS 278.160.1(d)

LAND USE

- Develop compact and mixed-use neighborhoods with walkable access to jobs, amenities, education, services, and transit.
- Focus new development in infill and redevelopment areas.
- Utilize new development models that provide a broad mix of housing and neighborhood types to accommodate residents with varied incomes and in different stages of life.
- Improve the quality of districts and neighborhoods to promote an authentic, vibrant sense of place.
- Preserve and reuse historic structures and sites.

NRS 278.160.1(f)

ENVIRONMENT

- Protect, enhance, and restore natural features and resources of the Mojave Desert.
- Improve access and connectivity of open spaces for ecological, social, health, and quality of life benefits.
- Prioritize increasing tree canopy across all areas of the City for multiple public health and environmental benefits.
- Strengthen recreation and cultural opportunities for residents and visitors across the City.

RELATION TO SOUTHERN NEVADA STRONG

INVEST IN COMPLETE COMMUNITIES

Goals focus on fostering complete communities within the region by integrating placemaking, safety, a variety of housing options, fresh food options, health services, cultural amenities, natural resources, and recreation and parks.

1. Stabilizing and strengthening existing neighborhoods through placemaking improvements.
2. Encouraging an adequate supply of housing in a range of price, income, density, ownership and building types.
3. Supporting access to healthcare facilities, healthy food, parks, and community services.
4. Improving neighborhood safety and protecting residents from the harmful effects of pollution and hazardous materials.
5. Promoting resource-efficient land use and development practices.

SUMMARY OF LAND USE & ENVIRONMENT STRATEGIES BY GUIDING PRINCIPLE

EQUITABLE

- Diversify housing options and promote affordable access
- Prevent displacement and gentrification (people and businesses)
- Improve access to education, healthcare, jobs, resources, amenities
- Address unique needs and opportunities of each planning area

RESILIENT

- Project and plan for impacts of changing climate
- Enact water utilization plan to reduce demand
- Develop higher density neighborhoods connected to transportation
- Reduce heat island effects
- Promote xeriscaping
- Increase tree cover
- Utilize cutting edge green building and energy efficiency technologies
- Develop mid-rise buildings for maximum water use efficiency
- Consider adaptive reuse of aging buildings

HEALTHY

- Create mixed-use, walkable, and accessible neighborhoods
- Prioritize clean air & water
- Regulate emissions
- Improve parks & open spaces and recreation
- Rehabilitate housing
- Create more opportunities for urban agriculture

LIVEABLE

- Meet emerging market demand & support livable densities
- Emphasize unique placemaking
- Prioritize arts & culture
- Celebrate historic preservation
- Prioritize cultural and historic neighborhoods and corridors
- Consider desert and western identity

INNOVATIVE

- Integrate with industry, core and emerging economic sectors
- Support multiple transportation types and mixed of uses
- Create flexible zoning regulations - place types instead of purely land uses
- Simplify zoning and development of form-based code
- Promote infill development

LAND USE

NRS 278.160.1(d)

GOALS

A. Develop compact and mixed-use neighborhoods with walkable access to jobs, amenities, education, services, and transit.

B. Focus new development in infill and redevelopment areas.

C. Utilize new development models that provide a broad mix of housing and neighborhood types to accommodate residents with varied incomes and in different stages of life.

D. Improve the quality of districts and neighborhoods to promote an authentic, vibrant sense of place.

E. Preserve and reuse historic structures and sites.

I.A INTRODUCTION



A VISION FOR LAND USE AND CHARACTER

While previous master plans have focused on ways to classify use, density, and land use arrangements, this plan adds character and scale as key considerations. Character impacts how residents and visitors feel about a place and influences their decisions on where to live and visit. First impressions about a place go well beyond just land use and design plays a more significant role. Blending land use and character will guide future development and redevelopment that best fit the goals of this Master Plan. This builds upon the strategies in the Downtown Vision 2045 and subsequent zoning amendments towards a form-based approach that prioritizes character and place.

APPROACH

It is necessary to plan for future land use and development in a manner consistent with community goals and objectives. Las Vegas is a community with quality residential neighborhoods, commercial and industrial areas to provide tax base and employment, with quality municipal services and recreational opportunities. The land use plan provides a long-range focus to help continue this balance.

New land use and community character challenges arise as Las Vegas continues to mature: Competition for desirable land uses from surrounding communities will increase; redevelopment of aging sites will increase in importance; management of traffic on an existing roadway network will continue to be a priority; greater transit support will require greater supportive densities; and public infrastructure systems will continue to age. As a result, the development strategy has shifted towards focusing on vacant or under utilized property to provide for quality redevelopment.

The Place Types Framework Map is a representation of general physical features/land use activities in the city in 2050 and does not imply that all of the changes will or should occur in the near term. Development and redevelopment will proceed in a manner consistent with policies on the environment, transportation, and infrastructure capacity, and other matters which help determine the appropriate timeframe. Also, zoning decisions should, over time, produce changes that gradually establish greater conformity between the Zoning Map and General Plan. The General Plan should be carefully considered to ensure consistency is maintained when making decisions on planning and development matters: community changes which directly conflict could undermine the long-term objectives of the city and should be avoided.

MASTER PLAN	GENERAL PLAN	ZONING ORDINANCE
Provides general policies, a guiding framework	Finer grain detail of parcel-specific future land use	Provides specific regulations, the law
Describes what should happen in the future, recommends land use for the next 10 to 20 years	Implements the goals and strategies of this plan and sets the stage for future rezonings	Describes what is and what is not allowed today
Adopted under NRS 278.150	Adopted under NRS 278.160.1(d)	Adopted under NRS 278.250 as LVMC Title 19
Includes recommendations that involve other agencies and groups		Deals only with development-related issues under city control
Flexible to respond to changing conditions	Amended over time via subarea planning to implement place type strategies	Fairly rigid, requires formal amendment to change

SECTION ORGANIZATION

LAND USE TOOLS

Throughout the place type descriptions, land use tools applicable to each are highlighted. Read more about these in the "Land Use Tools" section where best practices are described that apply to mixed-use, neighborhoods, and redevelopment.

GOALS

Each of the land use goals listed below are applied to varying degrees in each place type. Additionally, they are highlighted in the Land Use Tools section where they best apply:

A. Develop compact and mixed-use neighborhoods with walkable access to jobs, amenities, education, services, and transit.

B. Focus new development in infill and redevelopment areas.

C. Utilize new development models that provide a broad mix of housing and neighborhood types to accommodate residents with varied incomes and in different stages of life.

D. Improve the quality of districts and neighborhoods to promote an authentic, vibrant sense of place.

E. Preserve and reuse historic structures and sites.

AREAS OF THE CITY

The city is divided into 16 areas for targeted recommendations and evaluation related to Land Use and the Environment. Each planning area is evaluated for future study and recommendations related to land use, connectivity, and parks. See Section II: Planning Areas Analysis.

Future land uses (i.e. Future Place Types) were explored using the PlaceBuild tool to understand where and how land use changes might occur. This tool provided a planning area level means of quantifying potential changes and anticipating outcomes in terms of residential housing, open space, and water utilization.

OUTCOMES

- Each TOD placetype achieves a minimum score of 70 using the EPA's Smart Location Calculator by 2050.
- The percentage of all development that occurs within this plan's Regional Centers, Mixed-Use Centers, Corridor Mixed-Use, or Neighborhood Center Mixed-Use place types increases over time.
- At least 60% of new residential and non-residential development occurs in designated placetypes, infill, and redevelopment areas by 2050
- 1 local historic district per 100,000 residents.
- The number of designated historic districts and neighborhoods increases.
- The number of eligible structures and sites designated as local historic landmarks, added to local historic districts, and/or rehabilitated, restored, or converted through adaptive reuse increases annually.
- With community support, adopt a specific plan for each area of the city.

OPPORTUNITIES + CHALLENGES

- The City has just about reached its growth boundary - limited opportunities for greenfield development at the periphery
- The City lacks sufficient diversity of housing types - too much single-family and not enough "missing middle" attached housing typologies
- While some master planned neighborhoods have mixed-use "main street" centers, many older parts of the city rely on aging commercial corridors for local shopping and services that lack the walkable character desired by residents
- Employment is centered in a few locations, making commuting patterns that often require the use of a personal automobile
- Underutilized land with excess parking, vacant sites, and obsolete buildings are prime opportunities for infill redevelopment

KEY ACTIONS

- Transform zoning regulations for corridors and nodes to encourage a greater mixture of uses and densities to support transit.
- Create subarea plans for each planning area.
- Prioritize catalytic redevelopment sites.
- Require new subdivisions to be built with greater emphasis on traditional neighborhood design principles.
- Incentivize new development types by streamlining the development review process.
- Develop a strategy for integrating "missing middle" housing types into existing neighborhoods.
- Strengthen neighborhood identity and pride by planning area.
- Promote and expand awareness of historic preservation and embed into development decisionmaking.

RELATIONSHIP TO PREVIOUS LAND USE DOCUMENTS

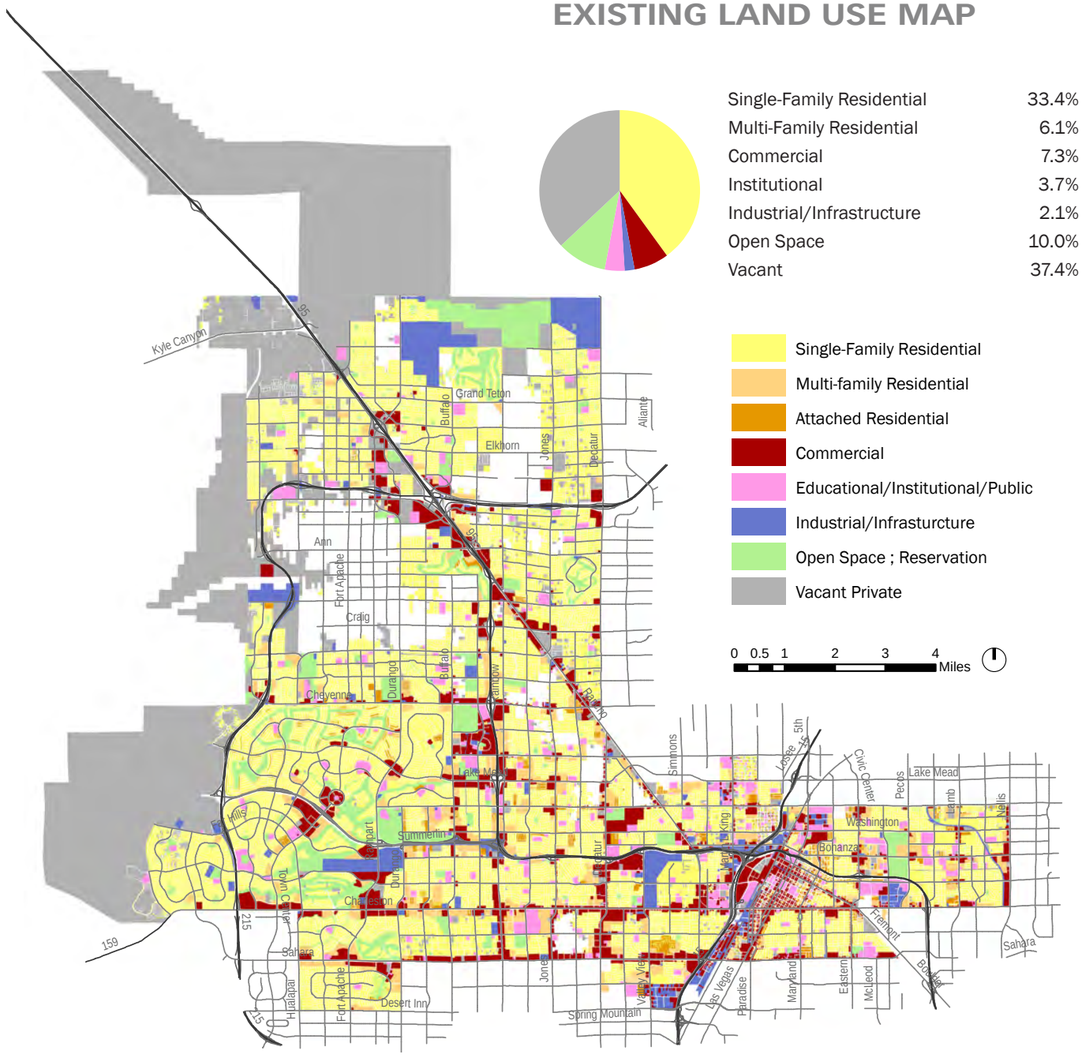
Because the city has developed over time through a series of subdivisions and development agreements, a variety of other documents govern land use and development in those areas. As each area has its own definition of land use types (over two dozen), this planning process sought to unify them based on similar place-based characteristics. These resulting existing land uses provide a glimpse at how land is used at the time of this plan's adoption.

Moving forward, the future land use place types provide an overarching framework for future development decisions. The place type framework does not replace the general plan or any development agreements, but rather supplements them, especially for urban infill and catalytic sites. The place types are used as a way of thinking about strategies that are common for areas across the city that will be implemented differently depending on their context. Future area planning will guide more specific decisionmaking around place types defined in this plan and those not addressed (i.e. industrial land uses).

For a detailed comparison of General Plan categories and future place types, please see Chapter 5.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Providing a broad mix of housing types accommodates residents with varied incomes and in different stages of life.	Protecting and reusing historic structures and sites allows for limited impact on the surrounding region resulting in reduced negative environmental impacts.	Improved walkability in compact and mixed-use neighborhoods allows greater participation in active transportation between jobs, amenities, education, and services.	Focused development in infill and redevelopment areas improves the quality of districts and neighborhoods and promotes a vibrant sense of place.	New innovative development models will be utilized to provide a mix of housing types for all residents regardless of income.

EXISTING LAND USE MAP


Kyle Canyon
Grand Teton
Buffalo
Elkhorn
Jones
Decatur
Allante
Ann
Fort Apache
Craig
Cheyenne
Durango
Rainbow
Rampart
Lake Mead
Simmons
Lamb
Nellis
Pecos
Civic Center
Washington
Bonanza
Summerlin
Charleston
Sahara
Desert Inn
Spring Mountain
Las Vegas
Paradise
Maryland
Eastern
Valley View
Jones
Durango
Hualapai
Torrey Pines
Rainbow
Decatur
Fort Apache
Buffalo
Rampart
Jones
Eastern
Maryland
Paradise
Las Vegas
Valley View
Jones
Decatur
Fort Apache
Hualapai
Torrey Pines
Rainbow
Durango

LAND USE PLACE TYPES

DEVELOP COMPACT AND MIXED-USE NEIGHBORHOODS WITH WALKABLE ACCESS TO JOBS, AMENITIES, EDUCATION, SERVICES, AND TRANSIT

RELATION TO GENERAL PLAN AND ZONING

Detailed below are the place type descriptions that correlate to the areas identified on the Place Types Framework Map. The Framework Map summarizes the place types should be in Las Vegas in 2050. Most of the land uses and their corresponding zoning districts, especially those along major corridors, will change as a result of adoption of this plan, and are recommended for greater design standards and flexibility in uses as short-term General Plan and zoning amendments. Others may have longer-term future or incremental General Plan Amendments (GPA) based on the Place Types Framework Map and OnBoard Mobility Plan build out, including Regional Centers. Others may be required to utilize a new GPA and zoning if requesting a rezone within the areas on the map that have yet to transition to the Framework Plan's designated place types.

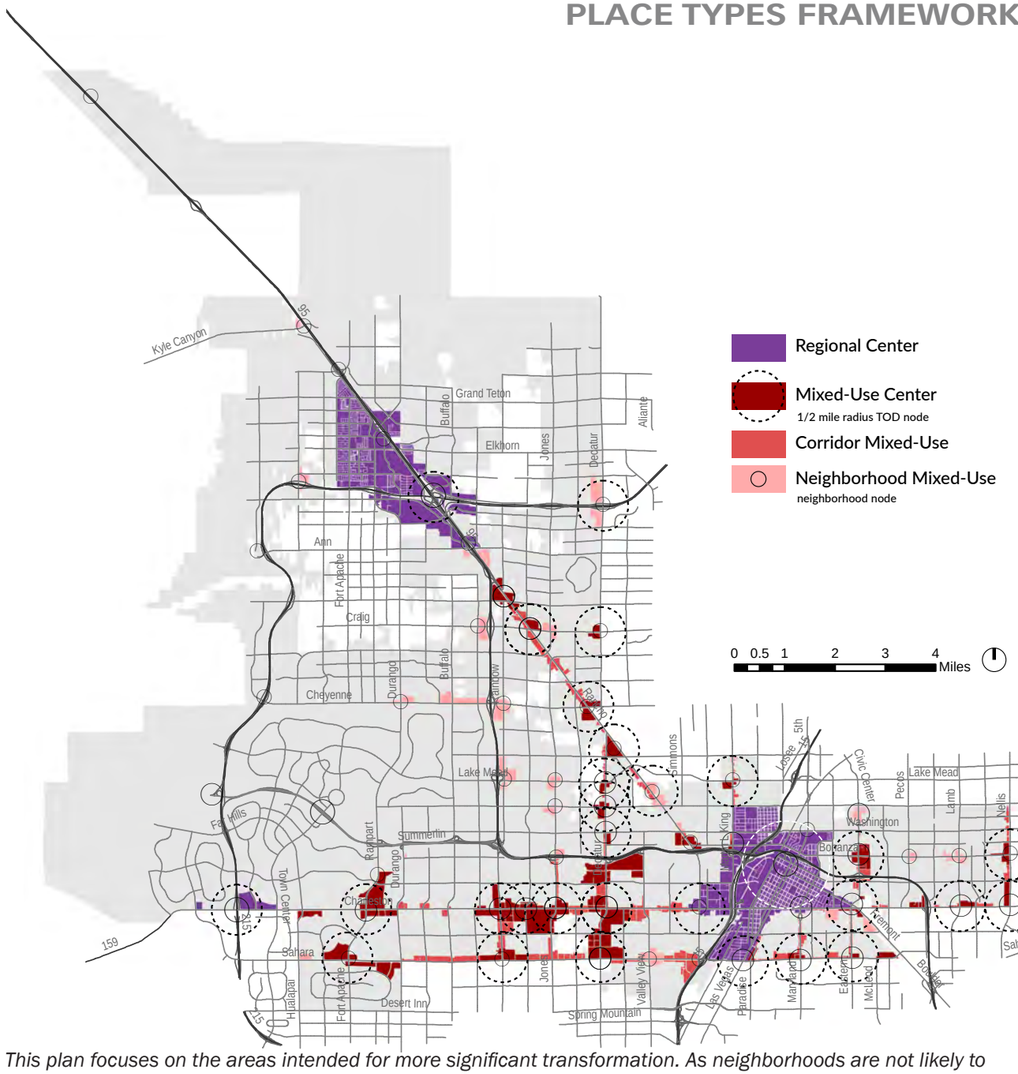
Some of the designations will match existing conditions while others will not. These place types should be a "road map" for the location of land uses and character in Las Vegas over the long term. Each place type description includes strategies that can be followed to guide land use decisions and implement the intent of the different categories over time.

FACTORS CONSIDERED

This Master Plan's land use approach incorporates input received during the public participation process, acknowledges existing land use patterns, and reflects planning best practices. More specifically, the following factors were taken into consideration in preparing the Place Types Map:

- **Existing Land Use.** Many residential neighborhoods are not expected to change. Much of the change (as described in Chapter 1: Case for Change) is expected to be along commercial corridors.
- **Existing Zoning.** Las Vegas currently has dozens of zoning districts that are expected to condense over time to a more streamlined set of place-based zoning districts. The current zoning was utilized as a tool in developing the propensity for change tool as described in Chapter 1, which helps guide the future transition to the place type approach. Many master planned neighborhoods are governed by land development agreements that restrict their ability to change.
- **Capacity of Streets, Infrastructure, Facilities, and Services.** Accessibility to and the capacity of the street network help establish the types and intensity of uses that may be served in an area without adversely impacting traffic operations. The RTC's planned transit corridors were prioritized for increased density to maximize the potential success of those routes. Nodes planned for stations, connector corridors, and increased pedestrian access from existing neighborhoods will all help build the development required to support a robust transit system. As described in Chapter 1: A Case for Change, the limitations of the water supply from Lake Mead place an emphasis on decreasing water demand and maximizing efficiency of new development. Utilizing the existing utility network already established within the city rather than expanding outward will most efficiently use the systems already in place. The availability of community facilities such as schools and recreational facilities affects the areas that are especially attractive for residential development, while police and fire protection also assist with the quality of life provided to all land uses.
- **Market Conditions.** The nature of residential, commercial, and industrial land uses are evolving, with aging development types often becoming less desirable or obsolete. This can result in an oversupply of certain types of development, especially commercial. Meanwhile, market segments of the population are seeking alternatives to the single family

PLACE TYPES FRAMEWORK



This plan focuses on the areas intended for more significant transformation. As neighborhoods are not likely to see significant change, they are not indicated on the map. Further planning area study will result in more targeted recommendations for neighborhood place types.

home, driving demand for flats, townhouses, and walkable urban amenities. Redevelopment of existing uses, especially commercial into mixed uses, is encouraged, and the place types reflect a balance and mixture of uses targeted to key areas.

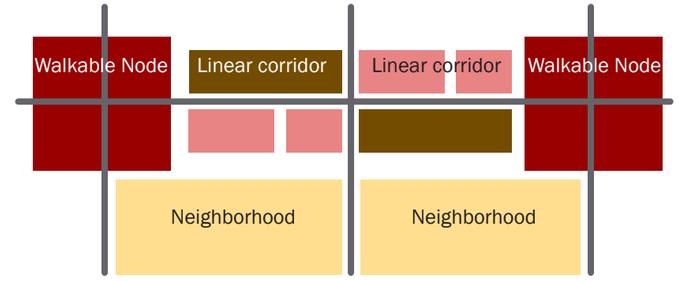
- **Land Use Patterns in the Region**. Land use patterns for surrounding communities and the region were also considered. This plan supports the Southern Nevada Strong regional plan's strategy to grow from within, not out by redeveloping underutilized property within city limits and limiting further expansion outward. This includes limiting future expansion of the SNPLMA disposal boundary and instead redeveloping existing land within the city and the 29,000 acres remaining for disposal within city limits. See Section II.B Natural Features for more on how BLM land is disposed.
- **Public Input - Preserve, Enhance, Transform (PET)** Comments and opinion about land use patterns and related community planning issues as conveyed at various public forums and stakeholder interviews helped shape this plan's place type direction. The Preserve, Enhance, Transform mapping tool that helped guide conversations during the planning process helps shape to what extent different areas of the city are expected to change. There are features that must be preserved to promote the city's best assets or enhanced to better meet this plan's guiding principles. Other less desirable characteristcs have a different impact on community perceptions and economic vitality. These areas or characteristics must be either significantly changed or completely transformed. Transform areas are the focus of this plan to accommodate forecasted growth, support transit, and meet the guiding principles and generally are mixed-use place types that need short-term zoning changes to achieve this plan's vision.
    - **Preserve.** This master plan supports continued investment to preserve Las Vegas's distinctive identity, cultural assets, established neighborhoods, and committment to serve the broad needs of its diverse residents.
    - **Enhance.** This plan supports a commitment to enhance community assets in need of investment to reach their full potential.
    - **Transform.** Finally, this plan supports the development of strategies to transform underutilized properties into vibrant, walkable, mixed-use places that minimize their impact on the environment and support an efficient transit system.
    - **Future Zoning/Form-based approach.** At the time of this plan's writing, the City has been adopting major place-based amendments to zoning to implement the Downtown Vision 2045 plan. Title 19.09 articulates desired character through building types, open space types, and frontage types. The place types on the following pages are described by these key features to aid in future translation to potential character-based zoning changes. Each place type's implementation will be driven by its context and will represent a different intensity and character depending on where it is located in the city (related to the Form-based Code Transect approach). Similarly, a new chapter of Title 19 is recommended to facilitate future zoning that corresponds with these place types. The overall intent is consistent across the city with localized adaptation of the place type as future subarea planning or rezonings occur.
- **PlaceBuild Tool**. The planning team developed the PlaceBuild tool, which provided a planing area-level land use planning model that provided the following functionality:
    - Tabulation of existing land use patterns and zoning categories into a simpler set of working categories, These categories focused on the following land uses, which were those high a relatively more likely potential for change in the future: Single-Family Residential, Attached Residential, Multi-family Residential, Commercial, Industrial, Vacant Private.
    - Assessed the redevelopment potential of aggregated land use areas based on portion of site area currently containing a building. Areas with relatively less building ground floor square footage (i,e. places with large surface parking lots) were deemed to have greater redevelopment potential in general.
    - PlaceBuild tool allows for percentages of each land use area, separately for high, medium, and low redevelopment potential, to be a assigned future Place Type for that percentage of the area. Future Place Type assignments considered the density (FAR) of future development alongside setting targets for housing units per acre, amount of public open space, and land area for infrastructure (setbacks, road circulation, etc.)
    - Based on forecasting potential land use changes, the PlaceBuild tool provides a projection of future housing capacity, open space, commercial space creation, and water utilization.

CHARACTER TYPES

Walkable Node	Regional Center Mixed-Use Center Neighborhood Mixed-Use
Linear Corridor	Mixed-Use Corridor Mixed Residential
Neighborhood	Mixed Residential Traditional Neighborhood Subdivision Retrofit

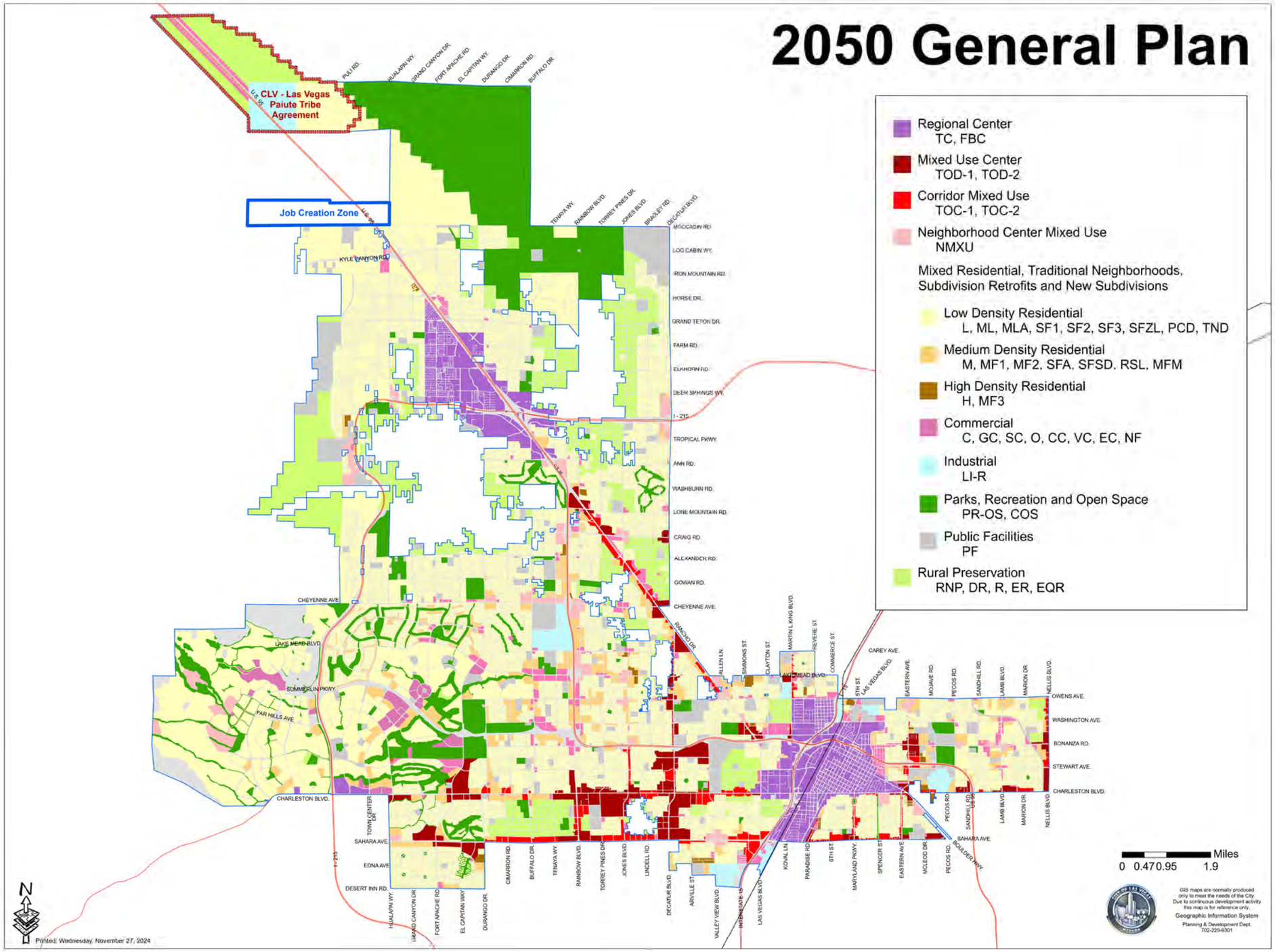
Limit corridor "connectors" to residential, personal service, and office, gradually reducing retail. Opportunity to assemble small parcels for better planned development

Cluster retail at mixed-use walkable nodes



Public Input	Place Build (Change Propensity)	Implementation Priority (zoning changes)	Place Types (generally)
Preserve	Low	Case by case	• Subdivision Retrofit • Rural Preservation
Enhance	Medium	Gradual	• Traditional Nbhd. • Mixed Residential • Regional Center
Transform	High	Immediate (gradual when dependent on RTC rapid transit expansion)	• Nbhd. Center Mixed-Use • Mixed-Use Center • Corridor Mixed-Use • (Regional Center)

Because this plan focuses on the Transform areas, Preserve and Enhance areas are not identified on the map with new Place Types. Future planning will provide more targeted recommendations in these areas.


2050 General Plan
CLV - Las Vegas Paiute Tribe Agreement
Job Creation Zone
Regional Center
TC, FBC
Mixed Use Center
TOD-1, TOD-2
Corridor Mixed Use
TOC-1, TOC-2
Neighborhood Center Mixed Use
NMXU
Mixed Residential, Traditional Neighborhoods, Subdivision Retrofits and New Subdivisions
Low Density Residential
L, ML, MLA, SF1, SF2, SF3, SFZL, PCD, TND
Medium Density Residential
M, MF1, MF2, SFA, SFSD, RSL, MFM
High Density Residential
H, MF3
Commercial
C, GC, SC, O, CC, VC, EC, NF
Industrial
LI-R
Parks, Recreation and Open Space
PR-OS, COS
Public Facilities
PF
Rural Preservation
RNP, DR, R, ER, EQR
Miles
0 0.470.95 1.9
Printed: Wednesday, November 27, 2024
GIS maps are normally produced only to meet the needs of the City. Due to continuous development activity this map is for reference only.
Geographic Information System
Planning & Development Dept.
702-229-6301

COMPATIBLE ZONING CATEGORIES: LVMC TITLE 19

General Plan Categories	Character and Density	Applicable Special Areas	TITLE 19.06											TITLE 19.08									TITLE 19.10				TITLE 19.09 / 19.10										
			U	R-E	R-D	R-1	R-SL	R-CL	R-TH	R-2	R-3	R-4	R-MH	P-O	O	C-D	C-1	C-2	C-PB	C-M	M	C-V	P-C	PD	R-PD	T-C	T-D	T6-UC	T6-UG	T5-C	T5-M	T5-MS	T5-N	T4-C	T4-MS	T4-N	T3-N	TOD-O
Regional Center	See Page 2-22 - 2-23																																				
FBC - Form-Based Code	Diverse, human-scale, walkable mixed use built environment throughout Downtown (Variable: > 5.5 du/acre)	DTLV																								X	X	X	X	X	X	X	X	X		
TC - Town Center	Mixed-use suburban regional center (includes L, M, ML, MLA, SC, GC, MS, SX, UC, EC, PF - < 25 du/acre)	TC, (MTC)																							X												
Mixed Use Center	See Page 2-24 - 2-25																																				
TOD-1 - Transit-Oriented Development (H)	Higher intensity, mixed-use TOD, suitable for LRT (Variable density - > 15 du/acre)		T	T	T	T	T	T	X	T	X	X	T	T	X	T	X	X	T	T	T	X		T			T										X
TOD-2 - Transit-Oriented Development (L)	Moderate intensity, mixed-use TOD, suitable for BRT (< 30 du/acre)		T	T	T	T	T	T	X	T	X	X	T	T	X	T	X	X	T	T	T	X		T			T										X
Corridor Mixed Use	See Page 2-26 - 2-27																																				
TOC-1 - Transit-Oriented Corridor (High)	Higher intensity, linear corridor oriented mixed-use, suitable for LRT (< 40 du/acre)		T	T	T	T	T	T	X	T	X	X	T	T	X	T	X	X	T	T	T	X		T			T										X
TOC-2 - Transit-Oriented Corridor (Low)	Moderate intensity, linear corridor oriented mixed-use, suitable for BRT (< 30 du/acre)		T	T	T	T	T	T	X	T	X	X	T	T	X	T	X	X	T	T	T	X		T			T										X
Neighborhood Mixed Use Center	See Page 2-28 - 2-29																																				
NMXU - Neighborhood Mixed-Use Center	Moderate intensity neighborhood-oriented mixed use and town centers (Variable density)		T	T	T	T	T	T	X	T	X	X	T	T	X	T	X	X	T	T	T	X		T			T										X
Low Density Residential -																																					
L - Low	Single family housing, detached homes, manufactured housing (< 5.5 du/acre)	CE, GTV, IMR, LM	X	X	X	X	X						X											S	S													
ML - Medium Low	Single family housing, detached homes, compact lots and zero lot lines (< 8.5 du/acre)	CE, GCV, GTV, LM	X	X		X	X	X		X			X											S	S													
MLA- Medium Low Attached	Single and multi-family housing, typically attached, townhomes, condos and x-plexes (< 12.5 du/acre)	GTV, LM							X	X			X											S														
SF1- Single Family Detached 1	Low density single family detached housing within Summerlin (< 3.5 du/acre)	SUM																					X															
SF2- Single Family Detached 2	Low density single family detached housing within Summerlin (< 6 du/acre)	SUM																					X															
SF3- Single Family Detached 3	Medium low density single family housing within Summerlin (< 10 du/acre)	SUM																					X															
SFZL- Single Family Zero Lot Line	Attached or detached single family housing with a zero lot line (< 12 du/acre)	SUM																					X															
PCD - Planned Community Development	Mixed residential development, subject to conditions and adjacency standards (< 8 du/acre)																							X														
TND - Traditional Neighborhood Dev.	Balanced mix of residential, commercial, and civic uses with multi-modal complete streets (Variable density)			X		X				X	X	X			X		X	X								X											
Medium Density Residential																																					
M- Medium	Multi-family housing, townhomes, and plexes (< 25.5 du/acre)	CE							X	X	X													S														
MF1- Multi-Family Low Density	Multi-family housing, townhomes, and plexes (< 14 du/acre)	SUM																					X															
MF2- Multi-Family Medium Density	Multi-family housing, townhomes, and plexes (< 21 du/acre)	SUM																					X															
SFA- Single Family Attached	Attached single family housing (< 18 du/acre)	SUM																					X															
SFSD- Single Family Special Lot	Single family housing (< 18 du/acre)	SUM																					X															
RSL- Residential Small Lot	Attached or detached single family housing (< 15 du/acre)	CE																						S														
MFM- Multi-Family Medium	Multi-family housing, townhomes, and plexes (15-25 du/acre)	GCV, GTV, LM																						S														
High Density Residential																																					
H- High Density	Multi-family housing, apartments, condominiums, townhomes, and high-rise residential (> 25.5 du/acre)								X	X	X	X																										
MF3- High Density Multi-Family	Large apartments, condominiums, and other multi-family dwellings (No maximum density)	SUM																					X															
Commercial																																					
GC - General Commercial	All types of commercial offices, businesses or retail												X	X		X	X																					
SC - Service Commercial	Low intensity commercial offices, businesses, or retail												X	X		X																					
O - Office	Low intensity, small lot commercial office buildings												X	X																							
CC - Community Commercial	Medium intensity offices, businesses, or retail	GCV																						X														
VC - Village Commercial	Medium intensity mix of neighborhood-oriented offices, businesses, and retail	CE, LM, SUM																					X	S														
TC- Town Center* (Summerlin)	Large commercial, community complexes that become a primary business center for Summerlin	SUM																					X															
EC - Employment Center	Office, light industry, business and support commercial services and higher density multi-family residential	SUM																					X															
NF - Neighborhood Focus	Low intensity, neighborhood-oriented retail, offices, services, and recreational amenities	SUM																					X															
NC - Neighborhood Commercial	Low intensity, neighborhood-oriented retail and services	LM																						X														
Industrial																																					
LI-R - Light Industrial and Research	Medium to low intensity industrial activities, light assembly, commercial, business parks												X	X		X	X	X	X	X																		
Parks and Open Space																																					
PR-OS	Parks, recreational facilities, golf courses, open spaces, trails	All																				X																
COS	Public and semi-public parks, recreational facilities, golf courses, open spaces, trails, and civic spaces	SUM																					X															

COMPATIBLE ZONING CATEGORIES: LVMC TITLE 19

General Plan Categories	Character and Density	Applicable Special Areas	TITLE 19.06											TITLE 19.08								TITLE 19.10						TITLE 19.09 / 19.10							
			U	R-E	R-D	R-1	R-SL	R-CL	R-TH	R-2	R-3	R-4	R-MH	P-O	O	C-D	C-1	C-2	C-PB	C-M	M	C-V	P-C	PD	R-PD	T-C	T-D	T6-UC	T6-UG	T5-C	T5-M	T5-MS	T5-N	T4-C	T4-MS	T4-N	T3-N	TOD-O
Public Facilities																																					
PF	Public and semi-public buildings and facilities, civic uses and spaces, infrastructure, and utilities	All																				X	S	S													
Rural Preservation																																					
RNP - Rural Neighborhood Preservation	Large lot, single family estates, ranches, typically in suburban areas designated for preservation (< 2 du/acre)		X	X																																	
DR - Desert Rural	Large lot, single family estates, ranches, typically in suburban or peripheral rural areas (< 2.5 du/acre)	IMR	X	X																				S													
R- Rural	Medium large lot, single family estates, ranches, typically in suburban or peripheral rural areas (< 3.6 du/acre)	IMR	X	X	X	X																		S													
ER- Estate Residential	Large lot, suburban single family estates (< 2 du/acre)	SUM																					X														
EQR- Equestrian Residential	Large lot, suburban single family estates (< 2 du/acre)	SUM																					X														

Notes

- X: Allowed zoning category.
- S: Applicable to Special Area, Master Planned Community or Development Agreement.
- T: Existing uses temporarily allowed but will phase into another category after action is taken by Planning Commission or City Council.
- TOD-O is an overlay zoning district for the TOD-1, TOD-2, TOC-1, TOC-2, and NMXU general plan categories that can apply to the R-TH, R-3, R-4, C-1, C-2, O, C-V zoning districts pursuant to LVMC Title 19.10.200.

Redevelopment Area Categories

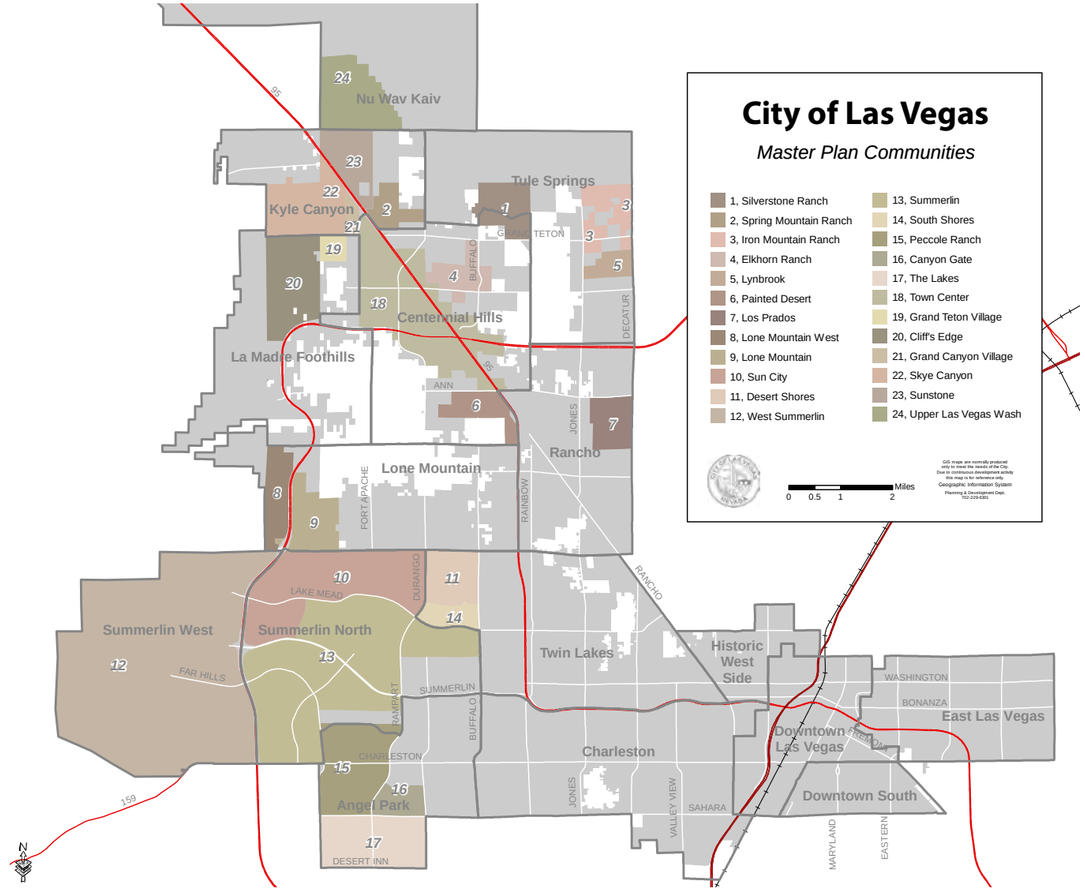
The following designations are legacy general plan categories within the City's Redevelopment Areas (RDA-1, 2, 3). These categories and their corresponding compatible zoning continue to exist but may phase into another category, including FBC, TOD-1, TOD-2, TOC-1, TOC-2, or NMXU after action is taken by the Planning Commission or City Council.

- C - Commercial: corresponds with O, SC, GC general plan categories (O, P-O, C-1, C-2 zoning districts.
- MXU - Mixed Use: corresponds with L, ML, M, H, O, SC, GC general plan categories (R-E, R-MH, R-1, R-2, R-3, R-4, R-TH, O, P-O, C-1, C-2 zoning districts).

Special Areas, Master Planned Communities, and Development Agreements

- CE: Cliff's Edge - Providence
- DTLV: Downtown Las Vegas
- GCV Grand Canyon Village:
- GTV: Grand Teton Village
- IRM: Iron Mountain Ranch
- LM: Lone Mountain / Lone Mountain West
- MTC: Montecito Town Center
- SUM: Summerlin North/Summerlin West
- SKYE: Skye Canyon
- ULVW: Upper Las Vegas Wash (Future)
- TC: Town Center

See Chapter 5 for complete land use descriptions



1. REGIONAL CENTER







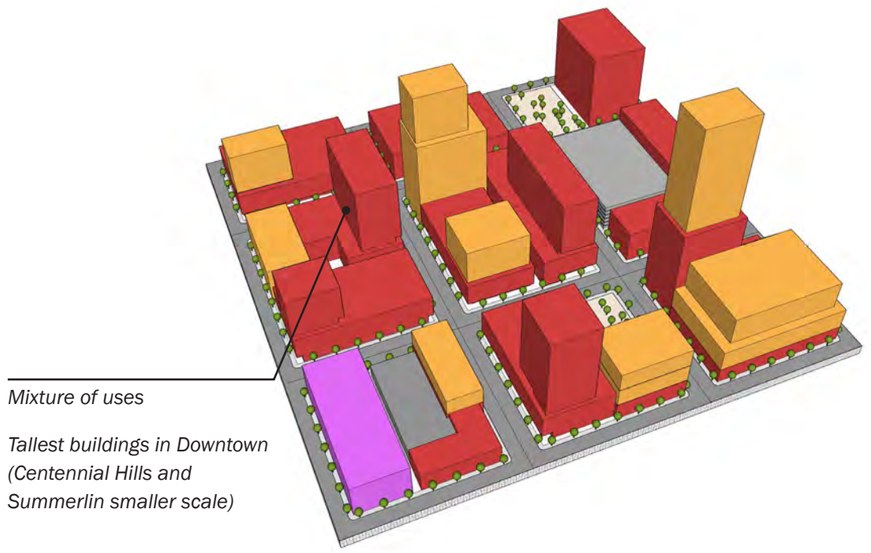
INTENT AND STRATEGIES

While the scale and intensity varies, Regional Centers are intended to be the regional hubs of activity comprised of employment centers and destinations for both residents and visitors. Downtown, Centennial Hills, and Downtown Summerlin share the “park once and walk” vision for the most intense of the mixed-use node place types. While accessible by transit, each Regional Center’s character and density is driven more by their own plans published separately from this master plan.

TOOLS

- Mixed-use
- Historic preservation
- Infill housing
- Diverse housing options
- Neighborhood character

REGIONAL CENTER CHARACTER	
PRESERVE, ENHANCE, OR TRANSFORM	Generally Enhance or Preserve, Downtown has more Transform opportunities
CHARACTER TYPE	Walkable Node
USES	Shopping, services, dining, employment, residential and office (especially on upper floors), civic, transportation
CONNECTIVITY	Walkable multi-modal emphasis; grid system
BUILDING FRONTAGE	Storefronts with direct access to sidewalk
BUILDING TYPES	High-rise; mid-rise
BUILDING FEATURES	Storefronts facing street; pedestrian entrances connected to sidewalks; strong emphasis on placemaking and character
SITE DESIGN	• Reduce dominance of surface parking lots • Greenbelt streetscape • Drive-thrus discouraged
REDEVELOPMENT OPPORTUNITIES	• 25-50+ DU/acre
PARK TYPES	Plazas, mini/pocket parks, squares, neighborhood parks
LOCATION EXAMPLES	• Downtown (comprised of 12 subdistricts, see Downtown Vision 2045 Plan) • Centennial Hills Town Center • Summerlin Centre (collaborate with Clark County)
GENERAL PLAN CATEGORIES	Town Center (TC, including all associated subcategories), Form-Based Code (FBC); appropriate categories within Summerlin (if desired)

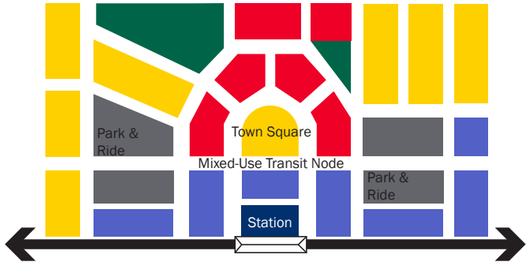


Mixture of uses

Tallest buildings in Downtown (Centennial Hills and Summerlin smaller scale)

2. MIXED-USE CENTER







INTENT AND STRATEGIES

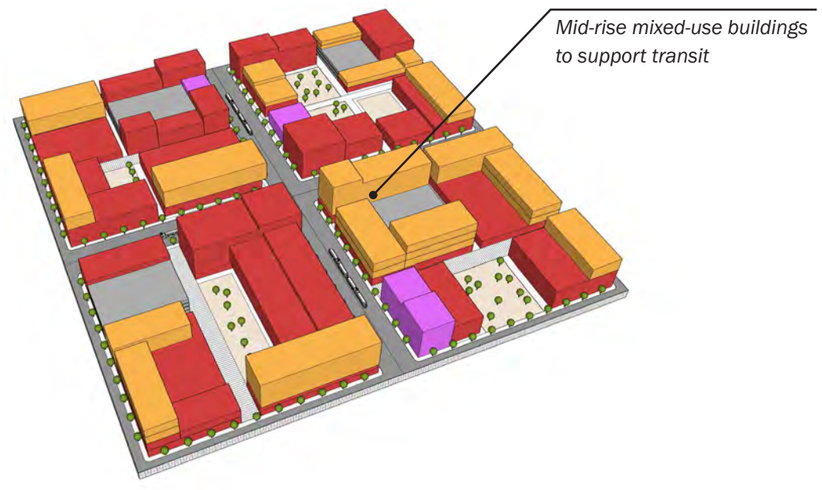
Mixed-use Centers are the primary nodes intended for the greatest transit-oriented development potential. Whether light rail, bus rapid transit, or improved local buses, the type of transit will dictate the scale and density each node is able to sustain. No matter the eventual transit type, these areas are planned to support a mixture of uses, walkable character, and serve as hubs for the nearby neighborhoods

- Prioritize mid-rise density to support transit stops
- Commercial retrofit, often repurposed shopping centers
- Transit-oriented development priority areas

TOOLS

- Mixed-use
- Walkable site design
- Transit-Oriented Development
- Placemaking through arts and culture
- Adaptive reuse
- Diverse housing options

MIXED-USE CENTER CHARACTER		
PRESERVE, ENHANCE, OR TRANSFORM	Transform	
CHARACTER TYPE	Walkable Node	
USES	Shopping, services, dining, employment, residential and office (especially on upper floors), civic, transportation	
CONNECTIVITY	Walkable multi-modal emphasis, re-establish grid system; access management	
BUILDING FRONTAGE	Storefronts with direct access to sidewalk	
BUILDING TYPES	Mid-rise; low-rise; flats; live/work	
BUILDING FEATURES	Storefronts facing street; Pedestrian entrances connected to sidewalks	
SITE DESIGN	• Substantially reduce surface parking lots • Urban style streetscape	
REDEVELOPMENT OPPORTUNITIES	• 4-5 stories typical	
	TOD-1	TOD-2
	Variable density greater than 15 DU/acre LRT supportive	30 units per acre BRT supportive
PARK TYPES	Mini/pocket parks, squares, neighborhood parks, schools	
LOCATION EXAMPLES	Hubs of the planning areas at major intersections along transit corridors	
GENERAL PLAN CATEGORIES	TOD-1, TOD-2	



3. CORRIDOR MIXED-USE







INTENT AND STRATEGIES

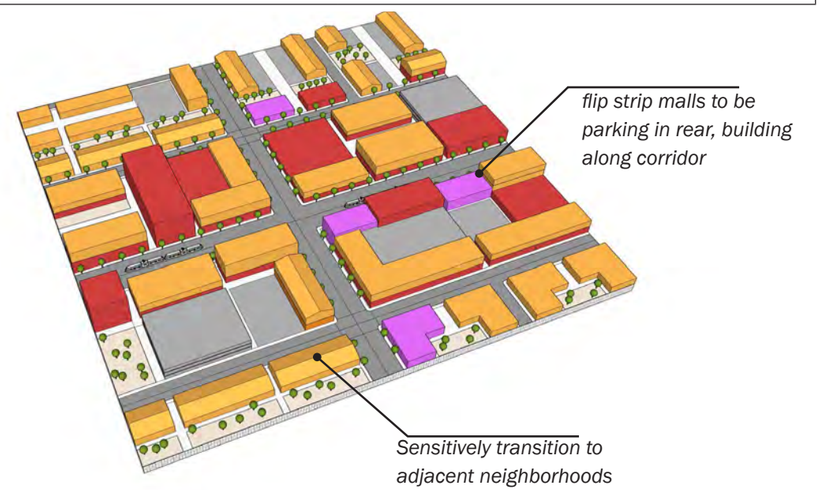
Areas designated Corridor Mixed-Use are currently predominantly commercial corridors that are intended to transition to accommodate a mixture of uses, particularly residential. These traditionally auto-oriented areas are planned to gradually transform to more walkable corridors to better support transit.

- Maximize potential of existing corridors
- Improve walkability and site and building aesthetics
- Gradually reduce the number of driveways and auto-oriented uses to support greater walkability
- Build transit-supportive density
- Integrate linear park spaces, non-motorized connections, and better connectivity to adjacent neighborhoods
- Retrofit with infill housing and employment uses
- Retrofit of existing suburban / auto-dominant commercial corridors with a broader mixture of uses and infill
- Connect Regional Centers with Mixed-Use and Neighborhood Centers; accessible from adjacent neighborhoods to feed population to nodes

TOOLS

- Mixed-use
- Walkable site design
- Transit-Oriented Development
- Placemaking through arts and culture
- Adaptive reuse
- Diverse housing options

CORRIDOR MIXED-USE CHARACTER		
PRESERVE, ENHANCE, OR TRANSFORM	Transform	
CHARACTER TYPE	Linear corridor	
USES	Shopping, services, dining, employment, residential and office (especially on upper floors), civic	
CONNECTIVITY	Walkable multi-modal emphasis; access management; fixed route transit	
LOT SIZE	Consider elimination of minimum lot widths/depth/lot area - allow smaller units, more flexibility	
BUILDING FRONTAGE	Storefronts with direct access to sidewalk; one bay of parking in front acceptable	
BUILDING TYPES	Mid-rise; low-rise; flats; row houses; live/work	
BUILDING FEATURES	Storefronts facing street; Pedestrian entrances connected to sidewalks	
SITE DESIGN	• Reduce dominance of surface parking lots • Greenbelt streetscape • Drive-thrus acceptable	
REDEVELOPMENT OPPORTUNITIES (RELATION TO PLACE BUILD)	• 2-5 stories typical • Residential densities ~30 units/acre for low rise apartment buildings (greater densities if more rapid transit)	
	TOC-1 • 40 DU/acre • LRT supportive	TOC-2 • 30 DU/acre • BRT supportive
PARK TYPES	Greenways, neighborhood parks	
LOCATION EXAMPLES	Charleston, Rancho, Eastern, Maryland, Nellis, Decatur, Las Vegas Boulevard	
GENERAL PLAN CATEGORIES	TOC-1, TOC-2	



4. NEIGHBORHOOD CENTER MIXED-USE







INTENT AND STRATEGIES

Neighborhood Center Mixed-use may refer to either a catalytic redevelopment site or a new suburban site that is a neighborhood-serving town center. These places can be thought of as “micro-TOD” given that they have many transit-oriented features: they often transit-serving hubs or locations, have the features of a walkable main street, mixed housing types, community supporting retail, but at a scale that’s not as dense or intense as other types and compatible with surrounding neighborhoods.

- Utilization of mixed-use, transit-oriented design features
- Limits to height, bulk, size, density, and intensity
- Walkable neighobrhood design, possibly characterized with a “main street”
- Adjacent properties and neighborhoods served by community oriented retail and employment and is within a short walk or bike-ride

TOOLS

- Mixed-use
- Walkable site design
- Placemaking through arts and culture
- Adaptive reuse
- Diverse housing options

NEIGHBORHOOD CENTER MIXED-USE CHARACTER	
PRESERVE, ENHANCE, OR TRANSFORM	Transform and Enhance
CHARACTER TYPE	Walkable Node
USES	• Shopping, services, dining, employment • Residential and office (especially on upper floors) • Civic
CONNECTIVITY	Walkable emphasis, establish grid system when converted from strip malls; access management
BUILDING FRONTAGE	Limit front-yard parking;
BUILDING TYPES	Mid-rise; low-rise; flats; live/work
BUILDING FEATURES	Storefronts facing street; pedestrian entrances connected to sidewalks; strong emphasis on placemaking and character
SITE DESIGN	• Reduce parking lots • Landscape greenbelt • Shade trees
REDEVELOPMENT OPPORTUNITIES	• Strip mall retrofit • 2-3 stories typical • 25 units per acre or less
PARK TYPES	Mini/pocket parks, squares, neighborhood parks, schools
LOCATION EXAMPLES	Neighborhood-serving “main streets” at major intersections citywide
GENERAL PLAN CATEGORIES	NMXU



5. MIXED RESIDENTIAL







INTENT AND STRATEGIES

Mixed residential is intended for a mixture of housing types along corridors, adjacent to single-family detached neighborhoods, and near mixed-use nodes to integrate a variety of multiple-family building types. Infill development consisting of urban-style attached residential units including rowhouses, flats, and small apartment buildings should be designed to fit the context of the adjacent residential neighborhoods.

- The “multi-family” of the future, more than just apartment buildings
- More units in less space, but emphasis on place and walkability
- Easy transit access
- Permit a variety of attached housing types
- Accommodate a variety of income levels
- Opportunities for pathway to ownership (rent to own) for condo/townhouse style developments
- Complementary to mixed-use corridor but less of a commercial emphasis

TOOLS

- Diverse housing options
- Neighborhood Character
- Infill housing
- Adaptive reuse

MIXED RESIDENTIAL CHARACTER	
PRESERVE, ENHANCE, OR TRANSFORM	Enhance
CHARACTER TYPE	Neighborhood; Linear Corridor
USES	• Predominantly attached residential • Some detached residential with accessory dwelling units • Some civic, small-scale commercial to support neighborhood uses only
CONNECTIVITY	Retrofit existing multi-family complexes to emphasize sidewalks, bike connections; access management opportunities for shared/cross access; blend of curvilinear and grid street/block types
LOT SIZE	Consider elimination of minimum lot widths/depth/lot area - allow smaller units, more flexibility; zoning changes to accommodate the mixture
BUILDING FRONTAGE	Front street where possible, especially along corridors.
BUILDING TYPES	Flats; courtyard cottages; live/work, row house; duplex/quadplex
BUILDING FEATURES	Reduce front-facing garages; porches/balconies; building-integrated parking
SITE DESIGN	• Xeriscape focus, increase tree canopy cover using resilient Mojave species • internal campus style complexes emphasize walkable neighborhood character, not parking lots
REDEVELOPMENT OPPORTUNITIES	Integrate new “missing middle” housing on transforming commercial lots
PARK TYPES	Mini parks; Neighborhood Parks; Schools
LOCATION EXAMPLES	Downtown South, East Las Vegas, West Side, Charleston, Meadows, Rancho, Angel Park
GENERAL PLAN CATEGORIES	Multi-Family Medium (MFM and MF2); Single-family Attached (SFA); Medium (M); Multi-Family Low (MF1)



6. TRADITIONAL NEIGHBORHOOD





INTENT AND STRATEGIES

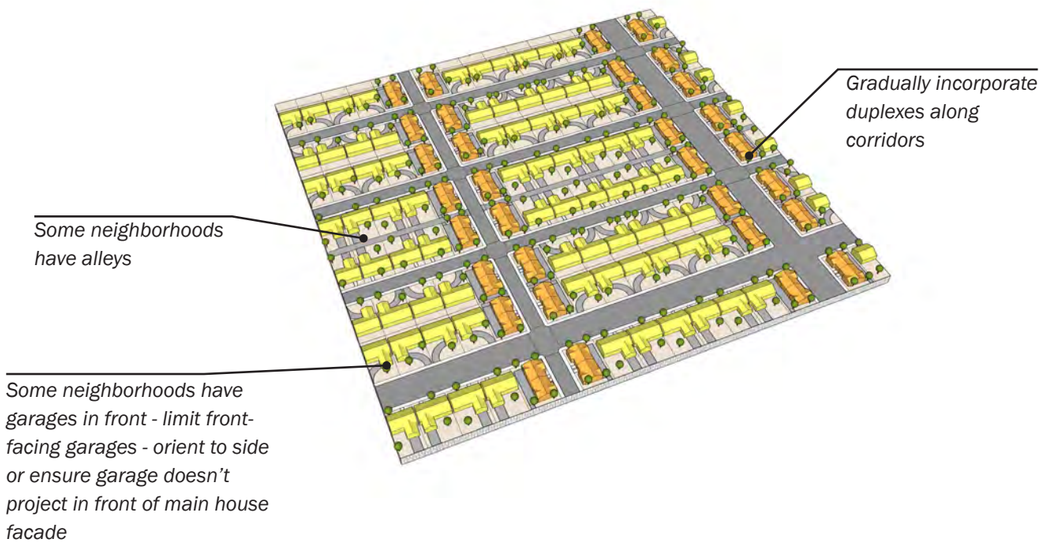
The city's mid-century historic neighborhoods, the first ring of neighborhoods surrounding downtown, are typically walkable, grid patterned neighborhoods with ranch-style detached houses. These areas should focus on rehabilitation and preservation of historic mid-century homes and infill should be sensitive to the existing character.

- Integration of non-detached houses or accessory dwellings should be gradual and context sensitive, which may include the relaxation of some zoning district standards over time pending further planning area analysis.
- Some homes that have converted to offices could be re-converted back to homes.
- Consider infill of cottage-style, smaller single-family units.

TOOLS

- Historic preservation
- Infill housing
- Diverse housing options
- Neighborhood Character

TRADITIONAL NEIGHBORHOOD CHARACTER	
PRESERVE, ENHANCE, OR TRANSFORM	Preserve/Enhance - *because limited change is expected here, these areas are not identified specifically on the Place Type map. Further area planning may occur in the future to identify specific areas to apply these strategies.*
CHARACTER TYPE	Neighborhood
USES	Residential, civic
CONNECTIVITY	Traditional neighborhood-style grid patterns; sidewalks, bike connections
LOT SIZE	Consider elimination of minimum lot widths/depth/lot area - allow smaller units, more flexibility
BUILDING FRONTAGE	Traditional neighborhood-style frontages; complete streets with sidewalks, bike connections
BUILDING TYPES	Detached house, duplex/triplex, live/work, row house
BUILDING FEATURES	Reduce front-facing garages
SITE DESIGN	• Xeriscape focus, increase tree canopy cover • Opportunity to adjust water consumption assumptions, especially for exterior uses/irrigation
REDEVELOPMENT OPPORTUNITIES	Gradual incorporation of alternative housing types, zoning changes to permit accessory dwelling units or permit splits to duplex
PARK TYPES	Mini parks; Neighborhood Parks; Schools
LOCATION EXAMPLES	Downtown South, East Las Vegas, West Side, Charleston, Meadows, Rancho, Angel Park
GENERAL PLAN CATEGORIES	High (H); Medium Low Attached (MLA); Medium Low (ML); Low (L)



7. SUBDIVISION RETROFIT + NEW SUBDIVISIONS







**Shown for neighborhood pattern only. Intent to substitute with vernacular southwest architecture and xeriscaping for a Las Vegas-appropriate TND.*

INTENT AND STRATEGIES

Much of the housing built in the last 50 years has been in subdivisions and master planned communities. Change in these areas is expected to be minimal. To better meet this plan's guiding principles, the following strategies should be employed in new residential developments and contemplated to integrate into existing subdivisions.

- Prioritize improving non-motorized connectivity
- Minimize dominance of parking by locating garages behind the front facade or along an alley
- Consider integrating 2, 3, and 4 unit attached single-family as infill in existing neighborhoods
- Explore integrating additional open space, especially in planning areas lacking the acreage (see Section II)

TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Diverse housing options

SEE ALSO II.4:
Neighborhood Connections and Buffers

SUBDIVISION CHARACTER	
PRESERVE, ENHANCE, OR TRANSFORM	Existing subdivisions: Preserve and enhance New subdivision: Transform *Because limited change is expected here, these areas are not identified specifically on the Place Type map. Further area planning may occur in the future to identify specific areas to apply these strategies.*
CHARACTER TYPE	Neighborhood
USES	Residential, civic
CONNECTIVITY	While curvilinear street patterns and cul-de-sacs predominate existing subdivisions, efforts should be made to improve connectivity to collector streets, especially for pedestrians and bicyclists. New subdivisions should prioritize sidewalks and more traditional neighborhood-style grid patterns.
BUILDING FRONTAGE	Small front setbacks, porch or stoop entrances, pedestrian access to front door, promote rear loading garages to support walkability through traditional neighborhood design
BUILDING TYPES	Detached house, duplex/triplex, (live/work, row house)
BUILDING FEATURES	Reduce front-facing garages
SITE DESIGN	• Xeriscape focus, increase tree canopy cover; • Opportunity to adjust water consumption assumptions, especially for exterior uses/irrigation
REDEVELOPMENT OPPORTUNITIES	• Gradual incorporation of alternative housing types, zoning changes to permit accessory dwelling units or permit splits to duplex • 11+ dwelling units/acre
PARK TYPES	Mini parks; Neighborhood Parks; Schools; Community Parks
LOCATION EXAMPLES	Summerlin North, Summerlin West, Lone Mountain, Rancho, Centennial Hills, La Madre Foothills, Tule Springs, Kyle Canyon
GENERAL PLAN CATEGORIES	High (H); Medium Low Attached (MLA); Medium (M); Medium Low (ML); Low (L); Single Family 1, 2, 3 Special Lot, Zero Lot Line (SF1 , SF2, SFSD, SFZL); Multi-Family High (MF3); Residential Small Lot (RSL); Estate (ER); Equestrian Residential (EQR); Master Planned integrated Commercial (CC, NC, NF, VC); (Some subdivisions are contained within the Centennial Town Center "Regional Center" classification)



GAMING ENTERPRISE OVERLAY DISTRICTS

✅ **NRS 278.160(1)(d)(2)(I) and NRS 463.0158**

INTENT AND STRATEGIES

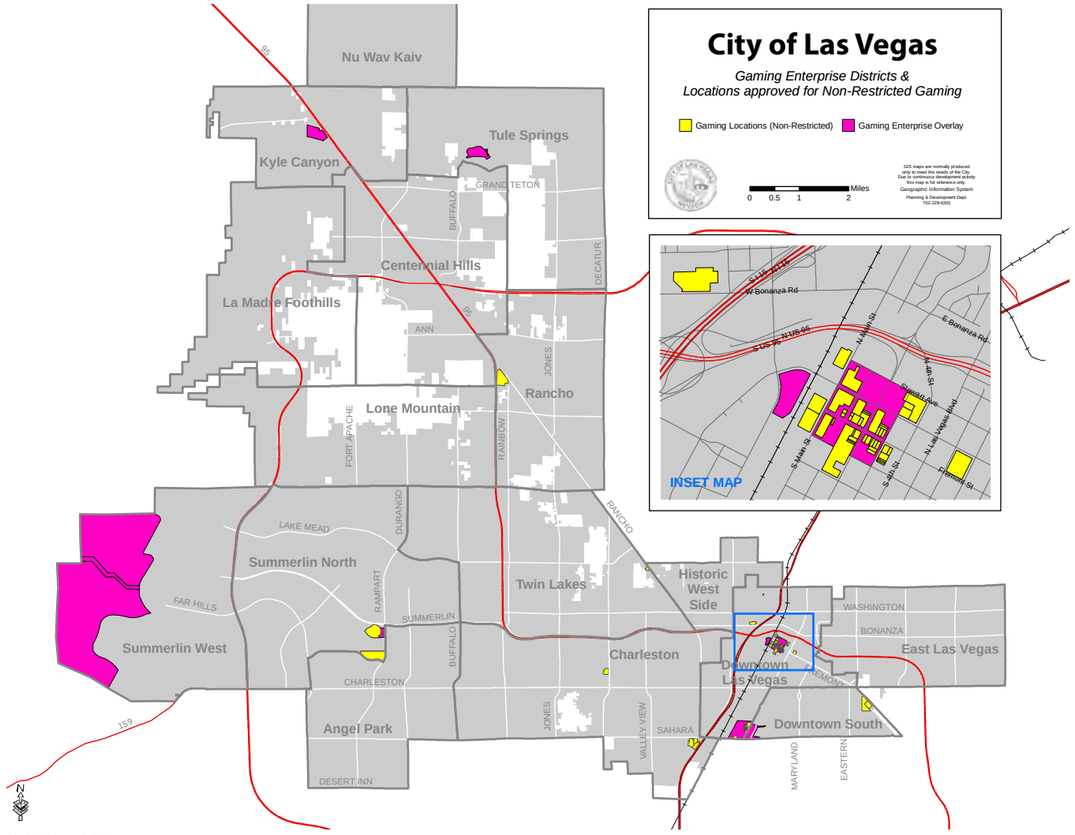
- Gaming Enterprise Districts are stipulated for resorts and casinos that offer non-restricted gaming
- Non-restricted gaming is permitted in a series of overlay districts (LVMC Title 19.10.130)
- Development in these districts should be compatible with the applicable place type intents:
  - Downtown casinos should continue the historic casino atmosphere that differentiates Downtown from The Strip and utilize the Regional Center Place Type strategies.
  - Neighborhood casinos should follow the strategies outlined for Mixed-Use Centers and Neighborhood Mixed-Use, emphasizing walkability, minimizing the dominance of parking lots, and integrating a variety of uses.
  - Resort-style casinos should reflect their natural settings, embracing the desert resources through pathways and sensitive site design and blending into the natural environment as much as possible.







GAMING ENTERPRISE OVERLAY MAP



RURAL PRESERVATION

✓ NRS 278.160(1)(d)(3)

INTENT AND STRATEGIES

- Rural neighborhood preservation ensures that the rural character is preserved.
- Rural areas are stipulated through zoning overlay districts (LVMC Title 19.10.180), General Plan Categories: Rural (R), Desert Rural (DR), Rural Neighborhood Preservation (RNP)
- Historically, the neighborhood type that embraced rural living was zoned to preserve ranch-style development, which permitted a greater variety of domestic animals; no sidewalks, curbs, gutters, or streetlights; and more flexibility in live/work uses. Over time, some of these areas have seen traditional urban and suburban subdivisions develop around them. In the future, some of these areas may face pressure to retrofit into less rural neighborhoods and could transition into one of the other neighborhood place types. New ranch-style estates are best suited to areas at the periphery of the city where open space preservation is prioritized in this plan as a transition to the nature preserves and mountains.
- Developers are required to provide adequate buffer areas, screening, and a transition of land uses, with the exception of those properties that raise animals and livestock.
- The City has established a basis and must adopt a modification of standards for the development of infrastructure to maintain the rural character of the rural preservation neighborhood.
- Unless a rural preservation neighborhood is located within three hundred thirty feet of an existing or proposed street or highway that is more than ninety-nine feet wide, maintain the rural character of the area developed as a low density residential development using appropriate standards for rural improvements within Title 19.



LAND USE PLAN IMPLEMENTATION

IMPLEMENTATION STRATEGIES

PHASED APPROACH BY AREA

To implement the land use plan, a phased approach is recommended in which the City makes General Plan Amendement (GPA) changes for entire Areas of the City at a time, timed and prioritized in a way in which where there is anticipated, market-driven indicators or development, or major infrastructure investment, especially an RTC high capacity transit project. Each Area Plan would involve a comprehensive, holistic planning process that includes neighborhood involvement, GPA, and text amendment that involves City departments, RTC, and other stakeholders. Downtown Las Vegas, Summerlin North, Summerlin West, and portions of Centennial Hills have already been addressed, but other Areas of the City would be incrementally implemented.

IDENTIFIED OPPORTUNITY SITES

As the phased area approach takes place, opportunity or catalytic sites identified in this plan or by the City's departments are formally designated as market ready or ripe vacant sites, or realistic development or redevelopment opportunities. In this case, applicants would enter into a development agreement pursuant to 19.16.015 for those areas as a part of the rezoning. This is done on a continuous basis, largely City-driven or initiated upon request from a major developer.

MANAGEMENT OF GENERAL PLAN AMENDMENTS

NRS 278.210 limits the number of amendments to the land use plan to up to four per year. Presently, this ease for property owners or developers to request and obtain a GPA change and zoning presents a fundamental problem; because the cyclical process is so frequent, such flexibility removes the deliberativeness of the plan itself. Should the City want to be more strategic and disciplined with land use planning implementation, changes to the process as currently adopted are recommended:

- Future development applications and approvals, shall largely conform with the plan's vision or with the Area plan for a portion of the City. For any project that affects the new placetypes, the City's planners must discuss the projects attributes and relationship to the planning area itself, considering additional measures that are recommended within other chapters of the plan. Projects that clearly or closely align with the plan's vision and the 2050 general plan map may receive an expedited review and priority to change or approval, no matter the location within the City.
- Any projects running counter to the plan's vision may be subject to (at the discretion of the City Council and Planning Commission, after approval to LVMC Title 19:
  - Higher GPA application fees,
  - Approval of a non-conforming GPA's annually or semiannually,
  - Making GPA's only available during a special Planning Commission or City Council meeting to discuss why changes are necessary.

ADDITIONAL STRATEGIES

- Transform zoning regulations for corridors and nodes to encourage a greater mixture of uses and densities to support transit.
  - Create subarea plans for each planning area.
  - Prioritize catalytic redevelopment sites.
  - Require new subdivisions to be built with greater emphasis on traditional neighborhood design principles.
- Incentivize new development types by streamlining the development review process.
- Utilize the recommendations and strategies within the Mixed-Use, Neighborhood, and Redevelopment toolkits and incorporate each into a program or into LVMC.

I.C LAND USE TOOLS

IMPROVE THE QUALITY OF DISTRICTS AND NEIGHBORHOODS TO PROMOTE AN AUTHENTIC, VIBRANT SENSE OF PLACE

As redevelopment occurs over the lifespan of this plan, a set of best practices can be applied to the place types and planning areas to help them reach their full potential and meet this plan's guiding principles. These best practice "tools" are referenced in the place type and planning area descriptions.

A. MIXED-USE TOOLKIT

MIXED-USE

Mixed-use development blends a combination of residential uses or integrates residential and non-residential uses into a cohesive, planned setting that promotes social interaction, adds character to the community, fosters relationships among uses and lessens the need for vehicular trips.

Historically, mixed-use environments were the norm. People lived, worked and shopped within a fairly confined geographic area. As travel options increased and post-World War II suburbanization began, the new mobility offered freedom to live in one place and work, shop and recreate elsewhere. Traffic congestion, social isolation, and sterile development followed.

A desire to reverse this trend and create more opportunity within vibrant communities and neighborhoods has caused many communities to embrace the concept of integrating varied uses, rather than segregating them as has been the practice with traditional zoning. Among the benefits are:

- Greater housing choice
- Reduced travel time and improved convenience
- More efficient use of public services, utilities and infrastructure
- Increased social interaction
- Walkable, bikeable neighborhoods
- Improved community health

More integration of uses are recommended along corridors and at nodes to support transit and create a greater sense of place for each planning area. Today, the building patterns along many of the City's corridors are not cohesive and do not contribute to a distinct sense of "place".

APPLICABLE PLACE TYPES	
✓	Regional Center
✓	Mixed-Use Center
✓	Corridor Mixed-Use
✓	Neighborhood Center Mixed-Use
	Mixed Residential
	Traditional Neighborhoods
	New Subdivision
	Subdivision Retrofit

Mixed-Use Defined: Varied uses within a defined area or even a single building offers flexibility and synergy. A mixed-use development may be a cohesive project with shared parking, common internal circulation, complementary uses and unifying design, while a mixed-use building may contain varied uses within one structure. Live/work units are a common example in which a commercial use occupies the street level space and a residence is located on the upper level.

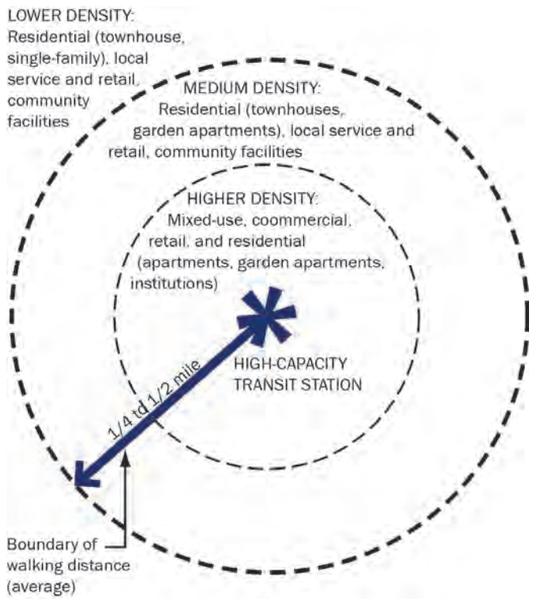
WALKABLE SITE DESIGN

Safe pedestrian environments are a critical element of a vibrant mixed-use center. A pedestrian's needs are fairly basic: comfortable, safe and destinations within walking distance. The following are several of the necessary ingredients of an inviting walking environment:

- A mixed-use development pattern that is compatible with walking; trips are short and can be made on foot.
- Continuous sidewalks of appropriate width.
- Safe and frequent locations for crossing.
- Buffers between pedestrians and traffic in the travel lane.
- Interesting and inviting buildings which address the street with observable doors and windows.
- Comfortable places to sit and wait.
- Streetscape of trees and lighting that provide shade, security and help define the pedestrian realm.
- Improve attractiveness of buildings and amenities
- Strengthen the corridor character and neighborhood identity
- Better delineate parking areas and reduce their visual dominance on the corridor
- Improve visibility of existing businesses
- Promote uses that will be successful to fit the character of the area, gradually reducing auto-oriented uses
- Promote uncluttered signs
- Incorporate missing-middle housing types such as lofts, townhouses, and stacket flats to transition to adjacent residential neighborhoods

APPLICABLE PLACE TYPES	
✓	Regional Center
✓	Mixed-Use Center
✓	Corridor Mixed-Use
✓	Neighborhood Center Mixed-Use
	Mixed Residential
	Traditional Neighborhoods
	New Subdivision
	Subdivision Retrofit





TRANSIT-ORIENTED DEVELOPMENT

Transit-oriented development (TOD) uses land use to encourage use of public transportation systems through directing certain types of development to transit corridors or nodes and compact site design. It involves pedestrian-friendly development that includes mixed-use land forms and increased accessibility for pedestrians, bicyclists, and transit users. TOD is an attempt to provide compact, walkable communities with a heightened sense of place. TODs typically involve uses that best support transit, transit-friendly site/building design, a mixture of uses clustered around a transit stop or transit corridor, and a walkable environment.

TOD development can improve the local economy along corridors and increase transit ridership by making the environment, especially around transit stops, attractive to pedestrians and bicyclists. This typically involves inviting building design, careful interface between public and private land, and thoughtful placement of vehicular parking lots. It often results in more pleasing aesthetic environments and reduced auto-dependency, which then can lead to a host of secondary benefits:

- Safer pedestrian and bicycle environments
- Improved accessibility for those less able
- Increased walk-by traffic for local businesses
- More convenient access to businesses for local residents
- Less congestion and associated fuel emissions
- Creation of a “sense of place” for the community

Plan around Transit Stations

- Allow the highest commercial intensity in areas within ¼ mile of locations that seem most suitable for transit stations. Expand maximum building heights, encourage high floor-to-area ratios, or minimize lot coverage limitations to provide greater development potential.
- Incentivize TOD and assist developers with the offset of infrastructure costs.
- Consider increased residential densities within ½ mile area from station locations.
- Allow for intensification of uses over time, such as increased building heights or allowing surface parking lots to be gradually replaced by buildings and parking structures.
- Consider revisions to the General Plan and zoning map to allow deepening of commercial lots along key transit corridors (Corridor Mixed-Use Place Types), especially at TOD nodes and where taller buildings are allowed (Mixed-Use Centers). This may involve rezoning of some residential lots to accommodate redevelopment or additional parking needs. Where such changes will advance the goals of this Plan, they should be carefully considered to ensure proper transitions to the residential areas, screening and other site design elements are included to protect the integrity of nearby neighborhoods.

Use Regulations

- Encourage transit-supporting uses, especially within ¼ to ½ mile of transit stops. This includes commercial and mixed uses that provide activity throughout the day and into the evening, such as retail, restaurants, personal and business services, high-density residential (including senior housing), universities, civic centers, and upper-story office and residential.
- Discourage uses that will either dilute the concentration of residents or employees, or those which, by nature of the business will create activity likely to disrupt the pedestrian and transit-friendly environment. These include uses such as drive-through facilities, automobile dealerships, regional “big box” retailers, and other uses with large front yard surface parking lots.

Bulk, Setback and Area Controls

- Encourage land to be used for buildings rather than surface parking or expansive yards. This includes reducing the amount of parking allowed or required, and increasing the amount of building that may or must be built.
- Locate buildings close to the street and sidewalk so those on foot, bike or transit can easily reach building entrances.
- Remove maximum lot coverage requirements in core TOD areas.
- Encourage building design that will engage passersby. First floor uses should include active storefronts that attract customers, pedestrian-scale design, with the primary operable pedestrian entrance oriented to the corridor.

Impact Studies

- Require study of potential development impacts on the entire transportation system. Where already required, modify Traffic Impact Study standards into Transportation Impact Studies that evaluate development impacts to all modes of travel.
- Shift transportation planning priorities in core and transitional areas from improving the speed and efficiency of automobile travel, to one that emphasizes safety for pedestrians, bicyclists, and transit users.
- Apply access management to minimize the number of driveways that pedestrians must cross using access management techniques.

Parking Management

- Implement standards to limit parking in core TOD areas. Regulations like maximum parking standards, parking space reductions, shared parking, payment-in-lieu of parking programs, floor-to-area ratios (or requiring them where they do not exist) can be applied for this purpose.
- Provide incentives in core TOD areas to reduce parking, or encourage structured lots over surface lots.
- Include amenities for bicyclists, pedestrians and transit riders, including wider sidewalks, bike storage facilities, bus shelters, lighting and landscaping in the standards for site plan review.
- Arrange parking in the rear yard (or side only if necessary) to provide safer pedestrian access to store fronts.
- Recognize the variables contributing to parking demand, and match local policies to individual geographic factors such as density, transit access, income, and household size.

APPLICABLE PLACE TYPES	
✓	Regional Center
✓	Mixed-Use Center
✓	Corridor Mixed-Use
	Neighborhood Center Mixed-Use
	Mixed Residential
	Traditional Neighborhoods
	New Subdivision
	Subdivision Retrofit

PLACEMAKING THROUGH ARTS AND CULTURE

Placemaking promotes healthy, sustainable, attractive places where people can live, work, shop, and recreate. This includes striving for a desirable recreation and trailway systems, a balanced economy and local employment options, variety of housing choices, attractive neighborhoods, and overall positive quality of life.

Culture and entertainment is an important part of a community's quality of life. Cultural amenities include museums, historic resources, a wealth of ethnic influences, and access to the arts. Cultural resources shape the character of the city, and a shared understanding of the past and future reinforces a sense of community. Entertainment resources, like performance venues, restaurants, night-life, and other attractions help bring people together, contribute to vibrant and successful city districts, and attract outside visitors and investment. Cultural and entertainment resources also attract a diverse population to the city.

While Las Vegas has no shortage of entertainment venues, often these are limited to adult entertainment. Residents desire additional venues for arts, entertainment, and events, especially for families and permanent residents. Expansion of cultural resources, including museums, will help attract a broader demographic of new residents, businesses, and visitors to Las Vegas.

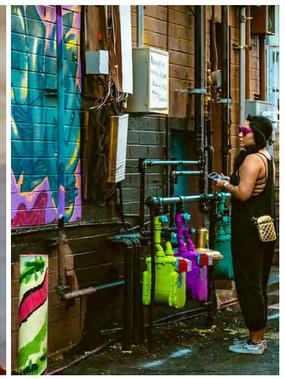
Downtown's role as the city's primary cultural destination, as outlined in the 2045 Downtown Plan, would be supported through the development of additional cultural opportunities in the neighborhood and mixed-use nodes

New venues that draw from a citywide or regional market should be directed downtown; smaller venues that draw primarily from the nearby neighborhoods should be directed to commercial nodes and park spaces within walking distance. Locations in or adjacent to parks create a focal point for community or neighborhood gatherings.

Private development can make special places through art by implementing it into projects. The City may therefore consider requiring developer responsibility for art projects, art work as part of development conditions, or the integration of an in-lieu of fee that is directed to the City's Municipal Arts Fund.







APPLICABLE PLACE TYPES	
✓	Regional Center
✓	Mixed-Use Center
✓	Corridor Mixed-Use
✓	Neighborhood Center Mixed-Use
	Mixed Residential
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	New Subdivision
	Subdivision Retrofit



A DAY IN THE LIFE

THRIVING ON ART

Jim Brooks, Music Producer

When friends across town call Jim to see if he wants to get together for coffee, he tends to say no. Not because he doesn't want to see them but because, as he puts it, it feels like they live on the far side of the moon. The city's sprawling transportation infrastructure makes getting across town quite a challenge, whether you're driving your own car or relying on mass transit.

In fact, Jim says he almost never goes Downtown. At the heart of it, Fremont Street simply isn't geared to locals, he feels. Jim acknowledges that the city has made an effort to encourage a more inclusive downtown hub. Results on that aren't yet in, he feels.

As someone whose life centers on music, Jim believes that continuing to develop a more thriving arts district would create a more centralized area for those with a common passion. As things stand today, the relatively new Smith Center for Performing Arts is a good 20-minute drive from, say, the Las Vegas Philharmonic.

As a model to revitalize the arts and bring more life to downtown, Jim looks to his hometown of Dayton, Ohio. It boasts a reasonably new concert hall with opera, ballet and symphony all under one roof. A single board of directors controls it all.

"In my home town," he says, "disparate efforts in the arts there have now come together so wonderfully. Why not here, too?"

LAND USE TOOLS

UTILIZE NEW DEVELOPMENT MODELS THAT PROVIDE A BROAD MIX OF HOUSING AND NEIGHBORHOOD TYPES TO ACCOMMODATE RESIDENTS WITH VARIED INCOMES AND IN DIFFERENT STAGES OF LIFE

B. NEIGHBORHOOD TOOLKIT

DIVERSE HOUSING OPTIONS



In order for housing to be affordable for multiple income levels and family types, a balance of owner- and renter-occupied units for a variety of incomes should be prioritized. Smaller families and couples may desire alternatives to single-family detached, owner-occupied housing, such as townhomes, flats, and apartments above storefronts. Other households may choose to rent to maintain mobility. As employers decide to seek out new expansion opportunities, nearby workforce housing becomes a critical component to site selection.

To attract and retain residents, Las Vegas must capitalize on changing demographics by encouraging an expanded range of housing choices for rent and for sale. To appeal to empty nesters, seniors, and young professionals, Las Vegas can promote its distinctive character, proximity to natural resources, and housing affordable to a range of income groups.



Rental housing for lower income residents or supportive housing must be integrated with support services and its design and construction should consider both long-term durability and security.

The key will be to balance rental housing, so that it fits the context of a neighborhood in a way that does not overwhelm, overburden or oversaturate it and that provides quality, secure, and affordable housing.

In order to strengthen existing housing and a range of affordable options, new infill attached units should be



APPLICABLE PLACE TYPES	
✓	Regional Center
✓	Mixed-Use Center
✓	Corridor Mixed-Use
✓	Neighborhood Center Mixed-Use
✓	Mixed Residential
✓	Traditional Neighborhoods
✓	New Subdivision
✓	Subdivision Retrofit

integrated into the city's neighborhoods. Undeveloped areas should be planned with a mixture of housing options (see section below on Traditional Neighborhood Design).

TRADITIONAL NEIGHBORHOOD DESIGN

Also called neo-traditional development, traditional neighborhood development (TND) refers to a development pattern designed to emulate the characteristics of communities of the 18th through the early 20th centuries. A central feature of TND is to focus on how private development can shape a sense of place and improve quality of life. Often TNDs focus more on pedestrian interaction than vehicular access and convenience. For this reason, TNDs often include rear alleys to meet the modern parking and service needs of residents, narrower streets, shorter front yard setbacks, and key architectural elements.

The reason so many places are reversing land use trends toward more traditional patterns are because of the social, physical and economic benefits they can provide:

- **Walkability and Connectivity.** By providing more compact development and uses within closer proximity, TNDs reduce the need to drive.
- **Housing Options.** Mixed housing options provide options for residents of varying socio-economic characteristics.
- **Community Gathering Places.** TNDs provide for central gathering places or identifiable neighborhood centers; usually in the form of a park or plaza, which encourages interaction among residents.
- **Public Places.** TNDs often provide for parks, walking trails, and bike paths, with a focus on connecting these recreational components. Sometimes, density bonuses can be used to encourage inclusion of additional public amenities.
- **Efficiency of Design.** When the principles of traditional design are applied, they result in more efficient use of public infrastructure. For example, a neighborhood with 80-foot wide lots will require 800 linear feet of roads, public sewer and water service lines for each 10 homes, whereas a neighborhood with 40-foot wide lots will require half as much. Accommodating more "users" within the same land area provides better use of public resources and reduces the cost of services for both the municipality and the resident.

The following elements should be implemented into the development agreements for new subdivisions:

- **Street Design.** The design of streets can impact how far residents have to walk to local parks, neighbors or other destinations. The idea is to provide a critical mass of residents, in close proximity to jobs, shopping, and transit to help reduce reliance on the automobile for transportation. TND streets often include the following:
  - Grid pattern
  - Narrower widths
  - Rear alleys for vehicle parking and service access
  - Terminations at focal points
- **Neighborhood Elements.** TNDs consider how public places can shape how residents enjoy their neighborhood. They include elements that will encourage gathering, interaction and activity, such as:
  - Community open spaces, including active parks, passive pathways or open space, playgrounds, pocket parks, civic squares, etc.
  - Safe sidewalks with convenient routes and access
  - Historic preservation and cultural amenities
- **Housing and Density.** TNDs can minimize the environmental impacts associated with extensive roadways. TNDs often employ a variety of land use activities in a single project.
  - Narrower lot widths
  - Variety of housing types, depending on the context, including townhomes, detached homes, residential over neighborhood commercial uses, live-work units, etc.
- **Site and Home Design.** While the public realm (streets and public property) create a framework for development, they are only a small part of the overall character that is created when a neighborhood is fully developed. TNDs strive to provide a human scale development, so individual home sites typically include:

- Smaller front yards
- Prominent front porches that can extend close to sidewalks
- Rear yard garages and/or access
- Two-story homes to maximize square footage on smaller sites

NEIGHBORHOOD CHARACTER

Residents celebrate the fact that Las Vegas's neighborhoods are varied and those characteristics help define areas to preserve, enhance, or transform.

Whether historic, urban, or more suburban in character, the public has expressed a desire to retain the character of the city's neighborhoods. However, even the most stable and vital neighborhoods were recognized as needing some level of intervention to make them more sustainable.

Based on character, investment in neighborhoods located at the core of the city will improve quality of life by promoting a more efficient use of land and infrastructure and by directing growth back into the city's core. This can serve to reduce reliance on the automobile, minimize environmental impacts, and lessen the strain on public services. Further from the core, neighborhoods can be enhanced with strategic investments: improving streetscapes and lighting, connecting sidewalks and paths, and interconnecting open spaces.

The creation of Areas of the City in this plan intends to spearhead a more formalized neighborhood strategy that focuses on branding the Areas to promote a greater sense of identity and pride. Some master planned communities have already identified this way and the City hopes to deploy a set of strategies for ongoing coordination and implementation citywide.

Several current zoning overlays help promote and enforce neighborhood character standards;

- **Downtown Casino Overlay (DC-O):** Requires the usage of neon signage and architecture within the Resort and Casino District of Downtown Las Vegas
- **Downtown Entertainment Overlay (DE-O): Includes special standards, uses, and requirements for the Fremont East Entertainment District**
- **Scenic Byway Overlay (SB-O):** Because Las Vegas Boulevard is designated as a Scenic Byway, the City equires the usage of neon signage and architecture within the Resort and Casino District of Downtown Las Vegas
- Live-Work Overlay (LW-O): Covering much of Downtown Las Vegas, this overlay enables businesses owners to occupy joint living and work quarters in commercial and industrial areas where other types of residential uses are inappropriate.

When warranted, additional overlays or design standards could be integrated into zoning to help promote the character of specific place or area.

APPLICABLE PLACE TYPES	
	Regional Center
	Mixed-Use Center
	Corridor Mixed-Use
	Neighborhood Center Mixed-Use
	Mixed Residential
	Traditional Neighborhoods
✓	New Subdivision
✓	Subdivision Retrofit





APPLICABLE PLACE TYPES	
✓	Regional Center
	Mixed-Use Center
	Corridor Mixed-Use
	Neighborhood Center Mixed-Use
✓	Mixed Residential
✓	Traditional Neighborhoods
✓	New Subdivision
✓	Subdivision Retrofit

A DAY IN THE LIFE

MAKING THE SUBURBS MORE SOCIAL

USAF Captain Phil Sterling, Pilot and Instructor, Creech AFB

Born and raised in Montreal, Captain Phil Sterling has lived throughout the United States since he was a teen. Not surprisingly, he has plenty to draw from when he compares life in Las Vegas to other places he's been. A Las Vegas resident for three years and now a new father, Captain Phil happy with his life here. The Northwest Corridor suits him and his family well. It feels safe, is home to lots of families, and is free of urban blight.

Captain Phil and his wife Alison have lengthy commutes, but they don't really mind because traffic is light. What the captain does mind is the seemingly slow pace of construction. In Las Vegas, he feels, building things just takes longer—and he'd like to see construction speed up. He points out that when he and his wife want to go to a nice restaurant or take in a show, their suburban neighborhood has little to offer. For the most part, they end up on The Strip, which they find expensive and congested. Great for tourists, sure. For the locals, not so much.

Captain Phil prizes the quiet, pleasant quality of his residential community, and appreciates his friendly neighbors. That said, it doesn't exactly feel close-knit. He misses the way he and his wife used to socialize the way they did when they lived in Southern California. With more nearby sitdown restaurants and local attractions, he can envision socializing closer to home and feeling even more rooted in community than he does today.

LAND USE TOOLS

FOCUS NEW DEVELOPMENT IN INFILL AND REDEVELOPMENT AREAS

C. REDEVELOPMENT TOOLKIT

INFILL HOUSING

Since the city is relatively built out, anyone seeking a brand new house often looks to the outskirts of the city or other communities in the valley. However, Las Vegas can build on its strengths for “city living” and provide greater choices and opportunities for new homes within the existing urban fabric. Prospects for infill housing, either a single lot or a small redevelopment cluster of several new houses, built to fit the character of its surroundings, could have a positive impact on the neighborhood as a whole. To support such opportunities, the city should develop standards for infill development that define and are consistent with desired neighborhood character. For most of the city’s older, traditional neighborhoods, this means exploring options for integrating attached single-family that complements the historic character.

APPLICABLE PLACE TYPES	
✓	Regional Center
	Mixed-Use Center
	Corridor Mixed-Use
	Neighborhood Center Mixed-Use
✓	Mixed Residential
✓	Traditional Neighborhoods
	New Subdivision
	Subdivision Retrofit

ADAPTIVE REUSE

Over the last half-century, many urban economies have entered a structural shift from primarily industrialized production to more knowledge-based services, including finance, creative enterprise, and digital technology. While having less of an industrial past than many other American cities, and as the economy in Las Vegas continues to evolve from its entertainment roots, the need to consider adaptive reuse of outmoded spaces, facilities, and infrastructure grows.

Vacant and underutilized sites present unique opportunities to re-engage urban spaces previously seen as liabilities. The reutilization of former rail and traffic corridors, parking lots, alleys, and industrial sites creates the potential to reclaim these spaces as a dynamic part of the public realm. These spaces help bring people, energy and activity back to formerly cut-off areas of a city, providing a renewed sense of identity and connection.

Adaptive reuse for mixed-use development can create compelling environments. They can invite inclusive participation, engage broadening lifestyle needs, integrate changing mobility patterns, and connect to a richer context of neighborhoods and infrastructure. Creative adaptation can occur seamlessly, turning aging sites and historic properties into valuable contemporary assets.

Buildings within Downtown Las Vegas, including within the Fremont East, Arts, and Gateway Districts that were former commercial and industrial uses have been converted to restaurants, live-work buildings, offices, and retail establishments. One notable adaptive reuse effort was the conversion of the former US Post Office and Federal Building to the National Museum of Organized Crime and Law Enforcement. The Post Office was designated on the National Register of Historic Places in 1983, the Nevada State Register of Historic Places in 2002, and the Las Vegas Historic Property Register in 2003. Built in 1933, this building changed uses multiple times; it served as a post office, Federal building, and courthouse and was the location of historic trials of former members of the mob and the Kefauver Committee’s investigation into organized crime. After extensive renovations funded in part by grants from the National Park Service, Nevada Commission for Cultural Affairs, and the Commission for the Las Vegas Centennial, the building has been home to the “Mob Museum” since 2012.

More recently, mid-century modern housing, shopping centers, and buildings have undergone adaptive reuse to breathe new life into the structure while preserving its history and character. An example of this are structures and shopping centers located within the Founders District of Downtown Las Vegas. Adaptive reuse and structural upgrades of the Huntridge Theater and the Huntridge Shopping Center have been made or have been planned in an effort to improve the properties and bring new vitality to the area.

PRECEDENT PROJECT



Adaptive Reuse: Converted historic post office to the Mob Museum, The “greenest” form of construction is retrofitting existing buildings. Therefore, a key tool is to promote the rehabilitation of older buildings, historic or otherwise. Deconstruction, where buildings are disassembled and components are salvaged, should be utilized rather than demolition when rehabilitation is not feasible.



APPLICABLE PLACE TYPES	
	Regional Center
✓	Mixed-Use Center
✓	Corridor Mixed-Use
✓	Neighborhood Center Mixed-Use
	Mixed Residential
	Traditional Neighborhoods
	New Subdivision
	Subdivision Retrofit

ECONOMIC REDEVELOPMENT TOOLS

The following tools must be considered based on existing practice, whether new legislation is required, the ease of implementation, whether the tool is revenue positive/neutral, whether there is stakeholder support, and institutional capacity from City departments

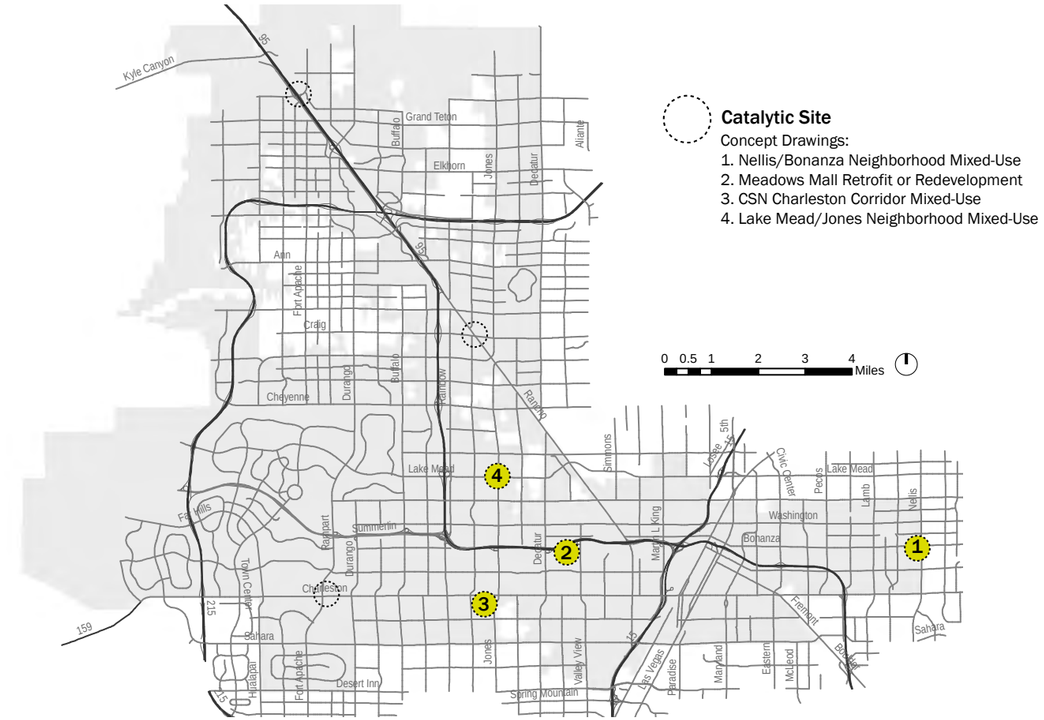
- **Discretionary Developer Impact fees:** imposed on developers by municipalities to help fund additional public services, infrastructure, or transportation facilities required due to the new development. CLV currently imposes these for traffic signals.
    - NRS 278B (see also Chapters 4 and 5) indicates that “streets, including all their appurtenances, traffic signals and incidentals necessary for any such facilities” are an allowable use for impact fees. NRS 278B 160.1 specifies that “a local government may by ordinance impose an impact fee in a service area to pay the cost of constructing a capital improvement or facility expansion necessitated by and attributable to new development.”
- **Exactions:** The City currently imposes one-time, negotiated requirements (usually through development agreements) to provide in-kind services, property, or payment as a condition for development approval where existing infrastructure, including transportation, lacks the capacity to accommodate new development.
- **Joint Development/Operating Agreements (NRS 277)**: groups of agencies partner with a private developer to improve land use, specifically for 2050 place types. The City may solicit private developer involvement and then provide the partner with access to land near infrastructure, as was done with Symphony Park and City Hall unde lease-purchase agreements. The City has also altered zoning and other regulations to incentivize the private partner to improve the land.
- **TIF: NRS 279 / Artcile VIII LV City Charter**. TIF captures additional tax revenue generated when properties increase in value. TIF districts are already established and split between the existing tax districts and the fund for projects inside RDA, with a focus on those that attract new economic activity. CLV uses TIF to provide rebate incentives for key infrastructure costs for projects in RDA-1 and 2. These may be for streets, water lines, storm drains, traffic signals, utilities and other infrastructure costs. RDA assesses the current property value before development then after. A portion of the tax increment is then rebated annually to developer.
- **Land Banking:** Establishment of a new bank through legislation or a community land trust (CLT) authorized under NRS 82 - a non-profit property trust to ensure the long-term availability / access to land. Land is taken off the market and separated so that land appreciation is removed. The trust is thus reserved for desired place types and affordable housing or assemblage.
- **Transfer of Development Rights and conservation easements** – NRS 111.390. Currently, there are no TDR programs in Southern Nevada, but the development of one could allow certain rights to be moved or swapped (maybe moreso for peripheral areas). Establishment of such a program could potentially be used to swap private lands or public lands.
- **Discretionary and/or voluntary Inclusionary Zoning** (See Chapter 3: Housing)
- **Incentive programs:**
    - Density Bonus – Currently authorized under the Title 19.09 Form-Based Code; this can be expanded into other parts of the City.
    - Fee Reductions and Waivers – reduce project costs for desired place type development. A fee study may also determine whether certain fee types must increase.
    - Parking Maximums and reductions (See Chapter 4)
    - Expedited Approvals – Under discussion

CATALYTIC REDEVELOPMENT SITES

This plan provides the framework for future redevelopment. Together, the place types, land use tools, and redevelopment strategies in Chapter 3 can help shape redevelopment to meet this plan’s vision. To demonstrate how redevelopment could occur, especially in the mixed-use nodes and corridors, the following sites were identified as catalytic redevelopment opportunities. These sites are currently vacant, underutilized, or prime anchors in their area that, when redeveloped, will spur further redevelopment. They are intended as illustrative examples of this plan’s recommendations to help visualize the intent, not dictate how redevelopment should happen. These concepts should be further refined and studied with future subarea planning.

KEY ACTIONS

- Amend zoning for corridor and mixed-use place types to incorporate stronger design standards and a more flexible mixture of uses.
- Develop a set of incentives for sites outside the RDA to help finance redevelopment.
- Work with property owners of catalytic sites to encourage packaging their sites for redevelopment by marketing them via requests for proposals or qualifications.
- Host investor tours, developer matchmaking events to spark interest in key redevelopment sites.
- Streamline the development review process and entitlements for priority redevelopment sites.



SEE ALSO CHAPTER 3
Economic Development: Redevelopment

Existing shopping centers can retrofit their parking lots to turn underutilized outlot spaces into mixed-use development projects including housing. This will support the density required to secure rapid transit.

1. NELLIS/BONANZA MIXED-USE CENTER



2. MEADOWS MALL RETROFIT



Concept 1: Outlot Development

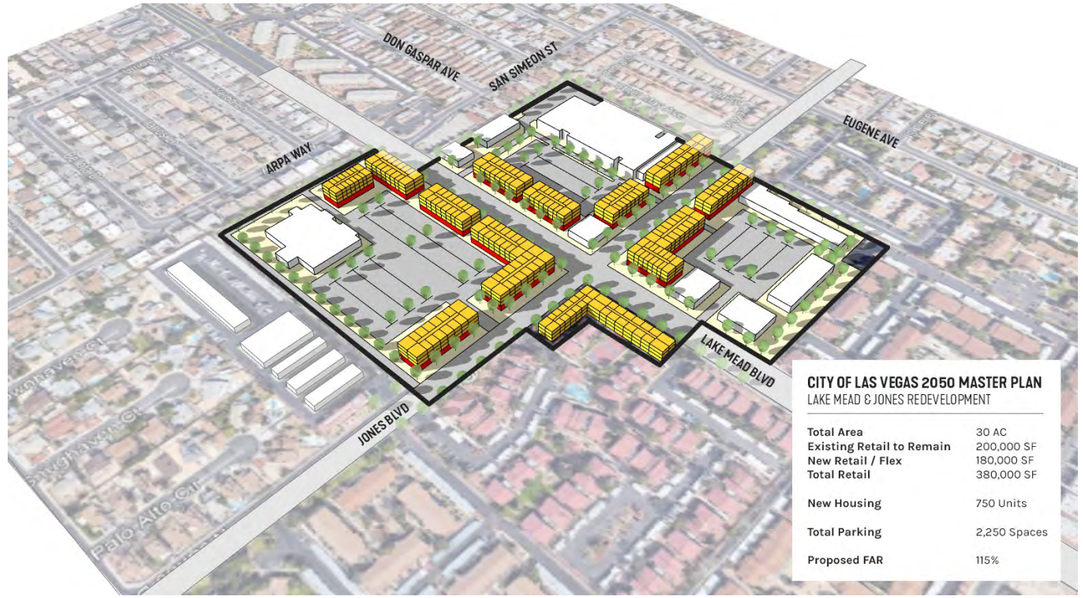


Concept 2: Partial Redevelopment

3. CSN/CHARLESTON CORRIDOR MIXED-USE



4. LAKE MEAD NEIGHBORHOOD MIXED-USE



HOW PLANNING AND ZONING SHAPES REDEVELOPMENT

- Redevelopment happens gradually over time – as sites redevelop, they must follow the new general plan and zoning standards
- Existing development that does not conform to the new zoning standards may remain – this plan and subsequent zoning changes does not mean the City forces current owners to immediately conform to new standards
- Zoning is a regulatory framework for future development that fits the community vision
- Development is privately designed and implemented within standards of Title 19 under City review
- City can market vision to developers and partner with private owners to spur redevelopment

I.D HISTORIC PRESERVATION

✓ NRS 278.160.1(b)

PRESERVE AND REUSE HISTORIC STRUCTURES AND SITES

Since the founding of Las Vegas on May 15, 1905, where 110 acres of the original townsite were auctioned off upon completion of the San Pedro, Los Angeles, and Salt Lake Railroad, the city has maintained a remarkable modern, yet rapidly evolving story. Through the Depression and construction of Hoover Dam, the legalization of gaming, the rise and fall of the Mob, to the explosive and exponential growth that made Las Vegas the fastest growing city in America, preserving the storied living history of Las Vegas has been an important effort for the City. To help achieve this, a Historic Preservation Commission (HPC) was created in 1991 to oversee preservation efforts.

Through planning and land use protections, the City regulates historic properties, buildings, landmarks, neighborhoods, and districts pursuant to LVMC Title 19.150, which creates the H-O historic preservation overlay, the HPC, the position of Historic Preservation Officer (HPO). The HPO serves as the Secretary to the HPC and administratively supports it. The HPO also:

- Accepts applications for the designation of historic locations and structures and make recommendations to HPC and Planning Commission
- Provides technical information to the HPC and liaises between the HPC and City departments.
- Approves or disapproves applications for new construction, alteration, demolition or removal of elements associated with minor improvements or to act immediately to protect the structure or property.
- Prepares reports of HPC activities to the State Historic Preservation Office (SHPO), the state agency that helps document, and preserve historic, archaeological, and cultural resources
- Maintains the Las Vegas Historic Property Register. For properties on the register, the HPC has authority to review work that may have an impact on those properties' historic character. They may also provide recommendations to the Planning Commission and City Council to list new properties on the local register.

The HPC is also the primary body concerned with preservation work including historic surveys, updating state and national register nominations, and conducting public outreach. In addition, the City, its HPC, and its HPO comply with a variety of laws covering different aspects of historic preservation:

- the National Historic Preservation Act (NHPA), as amended
- the Archaeological Resources Protection Act, as amended
- the Paleontological Resources Preservation Act, and
- other related and applicable Federal laws and state statutes

Properties may also be listed on the Nevada Register of Historic Places and the National Register of Historic Places. The state historic register is overseen by the SHPO, while the National Register is overseen by the National Park Service. This is largely a ceremonial designation because, unless the property is also listed on the local or state registers, there are no limits on development.

Currently, there are 35 buildings, sites, and districts in the City of Las Vegas that are designated on one or more of the historic registers. Additionally, portions of the Tule Springs National Monument, administered by the National Park Service, are within the city limits which contain a wide range of Paleolithic resources, including fossilized remains of prehistoric mammoths, camels, lions, and ground sloths from the last Ice Age. Many sites, particularly in the City's downtown core, meet the criteria for designation and there is interest for more historic districts and neighborhoods.

APPLICABLE PLACE TYPES	
✓	Regional Center
	Mixed-Use Center
	Corridor Mixed-Use
	Neighborhood Center Mixed-Use
	Mixed Residential
✓	Traditional Neighborhoods
	New Subdivision
	Subdivision Retrofit

KEY ACTIONS

- Continue to strengthen the City's Historic Preservation Office and Commission
- Conduct proactive historic surveys for the following locations and resource types
- Prioritize education about value of historic preservation resources available, celebrating cultural heritage
- Balance redevelopment pressures with preservation efforts to preserve key resources while encouraging adaptive reuse and sensitive infill development





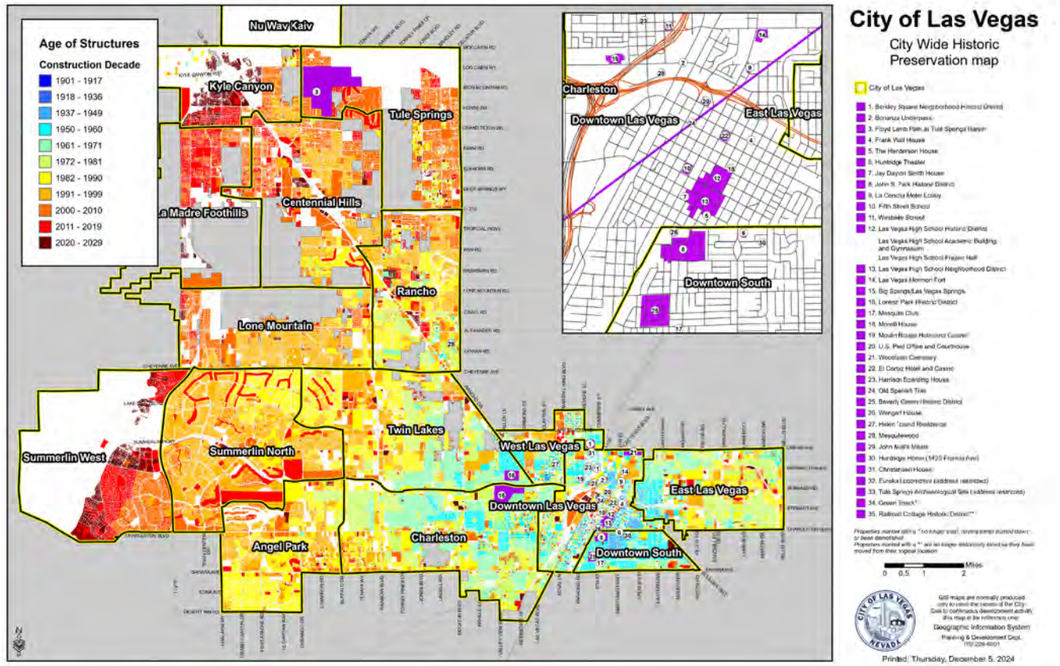


THE CITY HAS BEEN, AND MUST CONTINUE TO BE, A LEADER IN PRESERVING HISTORIC NEIGHBORHOODS AND STRUCTURES, DESPITE UNIQUE CHALLENGES OF MAKING WAY FOR NEW AND INNOVATIVE PLACES

While Las Vegas has been successful at preserving its neighborhoods and some of its structures, many properties tend to be demolished to make way for something new, perhaps best exemplified by the demolition and implosion of resort hotels and casinos along the Las Vegas Strip. Within the City, the greatest challenges to historic preservation are development pressures on historic properties and property owners not properly understanding the value that comes from preservation. In addition, cultural resources such as archaeological ruins or ethnographic material located on undeveloped or redeveloped property can be lost or damaged during construction or other ground disturbing operations. Without contingencies in place that require a cultural resource inventory on property slated for development, these resources could be lost. However, these challenges present opportunities for the HPC and city staff to reach out to and inform property owners and the public about what historic preservation brings to the City. Efforts were made to save and preserve the La Concha motel lobby; after transporting it from its original location on the Las Vegas Strip to its present location in Downtown Las Vegas' Cashman District.

Another challenge the City has faced has been "demolition by neglect" in which a historic property or structure is allowed to deteriorate or become blighted, making rehabilitation, restoration, and preservation cost prohibitive and unreasonable. A recent example of this was the destruction of the Moulin Rouge property; over time, the hotel's structures, its sign, and the property itself burned in a series of fires.

A wide range of actions can be taken to incentivize property owners to seek designation on the local, state, or national registers, provided funding and resources are dedicated to those efforts. Properties listed on the local, state or national register can be eligible for grants earmarked specifically for historically listed properties. This includes the State Commission for Cultural Centers and Historic Preservation (CCCHP) grant program as well as Bricks & Mortar Grants administered by the HPC. The Federal Historic Tax Credit also provides a 20% credit to property owners that undertake a substantial rehabilitation of a historic building in a commercial use, while maintaining its historic character



DECADE	YEAR OF CONSTRUCTION
1900's-1910's	4
1920's	33
1930's	171
1940's	2,269
1950's	9,178
1960's	14,630
1970's	1,780
1980's	23,701
1990's	54,125
2000's	42,520
2010's	13,826

Map and Table Note:

*Properties marked with a * no longer exist, having either burned down or have been demolished.*

*Properties marked with a ** are no longer historically listed as they have moved from their original location.*

NATIONAL SCENIC BYWAY	THE NATIONAL SCENIC BYWAYS PROGRAM IS PART OF THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION	
Las Vegas Boulevard	Beginning in the north at the Old Mormon Fort (500 E Washington Ave), and ending near Stratosphere Tower (2000 S. Las Vegas Blvd)	3.4 miles in length

HISTORIC PROPERTIES WITHIN THE CITY AND DATE OF DESIGNATION				
MAP NUMBER / NAME	LOCATION	LOCAL	STATE	NATIONAL
1. Berkley Square Neighborhood Historic District	Area bounded by Byrnes Ave; D St; Leonard Ave; and G St.		-	10/23/2009
25. Beverly Green Historic District	Area bounded by Sahara; 6th; Oakey; Las Vegas Blvd	9/21/2016	-	-
15. Big Springs/Las Vegas Springs Archaeological Site [Springs Preserve]	309 S Valley View Blvd	-	3/4/1981	12/14/1978
2. Bonanza Underpass	200 W Bonanza Rd	-	-	1/8/2004
31. Christensen House	500 W Van Buren Ave	4/17/2024		2/9/2024
22. El Cortez Hotel and Casino	600 Fremont St	-	-	2/13/2013
32. Eureka Locomotive	Address Restricted			1/12/1995
10. Fifth Street School (Las Vegas Grammar School)	401 S 4th St	2/19/1992	3/4/1981	5/20/1988
4. Frank Wait House	901 E Ogden Ave	6/3/1994	-	-
34. Green Shack*	2504 E. Fremont			6/3/1994
23. Harrison Boarding House	1001 F St	8/20/2014	6/27/2014	5/3/2016
27. Helen Toland House	1134 Comstock Dr	12/16/2020		
5. Henderson House	704 S 9th St	8/20/2006		
30. Huntridge Home	1425 Francis Ave	12/21/2024		
6. Huntridge Theater	1208 E Charleston Blvd	9/1/2021	1/15/1999	7/22/1993
7. Jay Dayton Smith House	624 S 6th St			2/20/1987
29. John Mulls Meats	3730 Thom Blvd	12/21/2022		
8. John S. Park Historic District	Roughly bounded by Charleston Blvd; Las Vegas Blvd; Franklin Ave; and S. Ninth St.	3/19/2003	-	5/16/2003
9. La Concha Motel Lobby	770 N Las Vegas Blvd	8/1/2007	7/19/2015	-
12a. - 12b. Las Vegas High School Academic Building, Gym, Frazier Hall	315 S. 7th Street	4/2/2003		9/24/1986 7/22/2021
12. - 13. Las Vegas High School Neighborhood District	Roughly bounded by Bridger; 9th; Gass; and 6th Sts.;	-	-	1/30/1991 1/5/2022
14. Las Vegas Old Mormon Fort	500 E Washington Ave	-	3/4/1981	2/1/1972
16. Lorenzi Park Historic District	730 Twin Lakes Dr	5/20/2009	12/6/2013	-
17. Mesquite Club	702 E St Louis Ave	5/20/2009	-	-
28. Mesquitewood	418 W Mesquite Ave	5/18/2022		
18. Morelli House	861 S Bridger Ave	3/8/2007	10/1/2001	6/3/2012
19. Moulin Rouge Hotel and Casino*	840 W Bonanza Rd	6/17/1992	-	12/22/1992
35. Railroad Cottage Historic District**	601–629 S. Casino Center			12/22/1987
24. Spanish Trail (Mormon Road Historic District)	From California border to Arizona across southern Nevada, through Las Vegas			8/22/2001
33. Tule Springs Archaeological Site	Address Restricted		3/4/1981	4/10/1979
3. Tule Springs Ranch (Floyd Lamb Park)	9200 Tule Springs Rd	1/9/2008		9/23/1981
20. U.S. Post Office and Courthouse	300 Stewart Ave	4/2/2003	5/15/2002	2/10/1983
26. Wengert House	600 E Charleston Blvd	2/17/2016	-	-
11. Westside School	330 W Washington Ave	5/19/2010	3/4/1981	4/2/1979
21. Woodlawn Cemetery	1500 N Las Vegas Blvd	8/6/2008	-	11/21/2006

AS BUILDINGS AND NEIGHBORHOODS AGE, THE CITY MUST CONTINUALLY MAKE ASSESSMENTS OF PRESERVATION OPPORTUNITIES AND CHALLENGES

Buildings and sites typically become eligible for designation once they are at least 40 to 50 years old. Each year, hundreds of new properties in Las Vegas reach this threshold. However, due to the vast majority of the City's historic properties or potential historic properties being located within Downtown Las Vegas, East Las Vegas, Downtown South, West Las Vegas, Twin Lakes, and the Charleston planning areas, which are seeing the greatest redevelopment pressures, many of these properties have the potential to be lost to redevelopment or modifications before they can be preserved

While other neighborhoods and structures outside of Downtown Las Vegas will continue to age, many may not show signs of being historically, archaeologically or culturally significant. However, historic surveys can be conducted to identify properties within a certain geographic area, historic period, or architectural styles that may be eligible for a historic designation either individually or as a group. Historic surveys are useful for informing the City about what historic resources are available in the community and where efforts should be focused. The HPC can provide recommendations on what criteria should be included in surveys and specific measures that could be taken to ensure preservation and/or adaptive reuse.

Cultural Resource Inventories must be conducted on property that is scheduled for construction. Such an inventory would identify any ruins, structures, or cultural material that is present, evaluate how ground disturbing activities have potential to impact the property's historical or archaeological context, and provide guidance on mitigating such damages.

Ultimately, the decision to seek historic designation lies with individual property owners. Many owners may not be aware of the benefits of preservation (tax incentives, grant opportunities, providing character to neighborhoods, etc.) and do not seek that option as a result. Others may be more amenable to the option if they are sought out by the City or HPC. While buying historically important properties is always an option for the City, Las Vegas will be a better community if its residents and business community take it upon themselves to preserve these sites. Because historic preservation attempts to balance property rights with the underlying value to the community, undertaking a historic survey or preservation outreach can be a delicate balancing act. Developing that mindset can come about if the HPC and City staff proactively conduct outreach with the owners of historic properties.

OUTCOMES

- At least 1 local historic district per 100,000 residents
- The number of designated historic districts and neighborhoods increases
- The number of eligible structures and sites designated as local historic landmarks, added to local historic districts, and/or rehabilitated, restored, or converted through adaptive reuse increases annually

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Inclusion of history and culture, as well as investment in older properties, especially in urban neighborhoods, enables appreciation by future generations.	Preserving Las Vegas' history allows the stories of the past to be shared with future generations. Historic preservation is more efficient than building new.	Rehabilitating historic buildings gives them new life and vitality while mitigating unsafe or blighting conditions.	Historic neighborhoods with diverse structures, sites, and landmarks helps create place and character.	Adaptive reuse of buildings preserves architectural integrity while also creating new uses and experiences for owners or visitors.

IMPLEMENTATION STRATEGIES

- Promote and expand awareness of historic preservation and embed into development decisionmaking.
- Continue to strengthen the City's Historic Preservation Office and Commission.
  - Continue review of applications for certificates of appropriateness for work on locally designed historic sites against the standards contained in LVMC Title 19.10.150, historic district design guidelines (as applicable), and the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.
  - Maintain Certified Local Government status, as recognized by the National Park Service and SHPO, through this plan, and maintenance of the HPC and historic preservation ordinance
  - Provide technical assistance to property owners or non-profit organizations seeking to add properties or historic districts to the National Register of Historic Places
  - Continue to update the inventory of designated and eligible historic structures and sites in the community, as well as include any archeological resources
  - Consider a demolition review or delay ordinance for historically or culturally significant sites or structures
- Conduct proactive historic surveys for the following locations and resource types:
  - In areas targeted for redevelopment or when they reach the 40 to 50-year old threshold for historic eligibility
  - Potential historic properties and neighborhoods located within Downtown Las Vegas, East Las Vegas, Downtown South, West Las Vegas, and the Charleston planning areas shall receive primary consideration.
  - Scenic byways
  - Signage
  - Paleolithic and archaelogical sites within or near the Tule Springs National Monument or the Red Rock Canyon National Conservation Area
- Prioritize education about value of historic preservation resources available, celebrating cultural heritage.
  - Collaborate with local non-profit or for-profit entities to support local events, recognition programs, and tourism efforts that celebrate and leverage the economic value of local historic resources
  - Install additional historic markers to commemorate dates, events, or structures that highlight the contributions of people and places past, including monuments, signage, and historic roadside markers (NRS 383.091)
- Balance redevelopment pressures with preservation efforts to preserve key resources while encouraging adaptive reuse and sensitive infill development.
  - Develop outreach plans and actions to target owners of critically endangered historic properties.
  - Study and consider the adoption of a demolition by neglect ordinance
  - Consider proactive purchase of key resources to hold in the public trust
  - Cosider adoption of an adaptive reuse ordinance, subject to appropriate review by the Planning Commission and/or the HPC.
  - Require a cultural resources inventory as part of redevelopment projects
  - Provide incentives to encourage the rehabilitation of historic buildings and reinvestment in older and historic neighborhoods and commercial areas
  - Provide local financial assistance to low- and moderate-income homeowners, residents, seniors, and/or businesses vulnerable to rising real estate values and maintenance costs associated with historic preservation

II CITY OF LAS VEGAS AREAS

Residents and stakeholders identified a lack of community cohesion and pride as an obstacle to a strong quality of life during the planning process. Some areas of the city have a strong sense of identity, such as Summerlin, that was carefully cultivated during its development. Other parts of the city have strong homeowners' associations or neighborhood identity, but others lack a sense of "place". As "Las Vegas" is generalized to mean the greater metropolitan area, more can be done to formalize the city's neighborhoods into places that residents can identify, celebrate, protect, preserve, and establish connections with their neighbors. This section sets the stage for future implementation, including subarea planning and departmental shifts so the City can help harness the energy and enthusiasm of neighbors and translate that into meaningful, equitable implementation across the city.

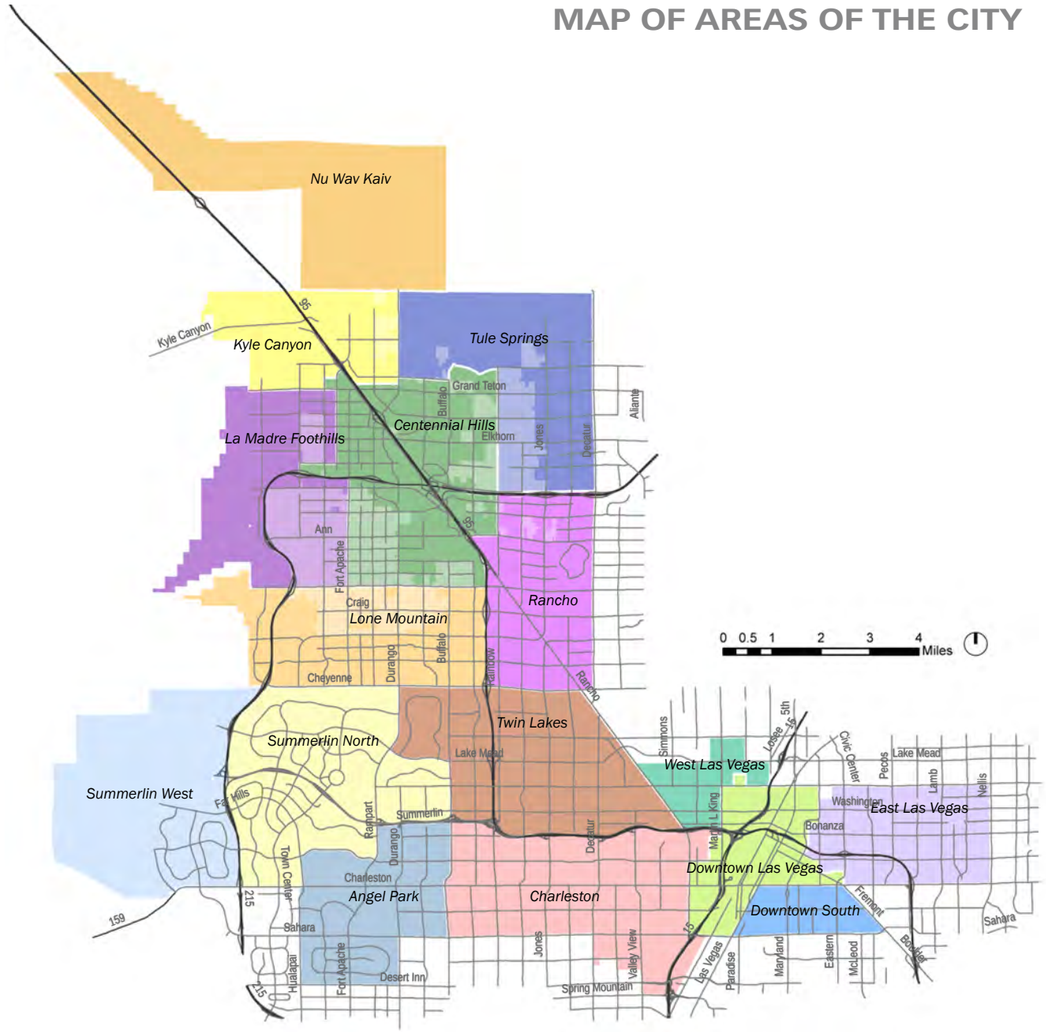
To build a framework for future subarea planning, the City of Las Vegas was divided into 16 "Areas." These areas are intended to allow for more detailed planning with greater analysis in evaluating each area's place type framework in the context of Chapter 1's Case for Change PlaceBuild analysis. As part of implementation, the City may create area plans and dedicate individual staff members from multiple disciplines or departments to address planning issues within the district itself.

Some areas already have this framework – either new plans or older plans that may be updated to drill down into greater detail the implementation of place types and possible zoning changes and overall planning direction (Recent plans include Downtown Las Vegas, Summerlin North/ West, and Centennial Hills "Town Center"). The recent Downtown Plan is a good model in establishing a collection of smaller neighborhoods (Medical District, Arts District, Fremont East, Historic Westside) into a larger whole to think strategically about branding, character, and collaboration.

KEY ACTIONS

- Working with community members, develop special area plans for each area.
- Develop branding and identities reflected on signage, infrastructure, wayfinding, and collateral for each area.
- Establish priorities across city departments for implementing planning area recommendations.
- Identify catalytic redevelopment sites in each planning area to spur redevelopment.
- Establish partnerships to identify deficiencies in community centers, schools, and open space and plan for equitable implementation of new facilities.

MAP OF AREAS OF THE CITY



These areas were identified by existing development agreement boundaries, character analysis, and Census geography boundaries to facilitate better data analysis and track implementation progress.

RELATION TO GUIDING PRINCIPLES

Each Area of the City will:

- Consist of place types
- Conserve resources and water
- Preserve historic buildings and neighborhoods
- Have affordable and market rate housing
- Be served by City services, utilities, and public infrastructure
- Have parks, community centers
- Have schools (new/existing) of different levels and places for workforce training
- Have jobs and employment opportunities of all types for all skill sets, including in primary industries and those that are developing
- Be safe and be protected from hazards, and within close proximity to LVFR and LVMPD
- Be connected by highways, streets, trails, bike lanes, and transit
- Have convenient access to food and community services

....all in a manner that's equitable, innovative, health-minded, livable, resilient; whether existing, in the months and years ahead, or by 2050.

AREA METRICS

This section summarizes opportunities in each area. Each Planning Area was analyzed to determine how well it currently meets the Guiding Principles according a set of metrics focused on the following topics. The following pages provides an overview of the district level metrics.

For more recommendations specific to these topics, please see the following sections:

Land Use and Development - See *Section I* of this chapter

Services - See *Chapter 4, Section III*

Parks and Open Space - See *Section III* of this chapter

Workforce - See Chapter 3

Transportation - See *Chapter 4, Section I*

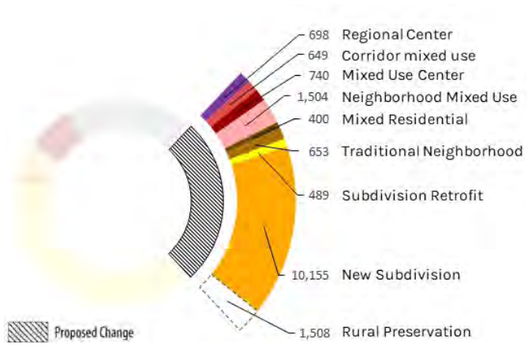
For each of the 16 planning areas, a series of metrics were assembled that relate existing conditions to city-wide averages, future targets, and/or projected conditions based on the PlaceBuild analysis tools. Critical assumptions for each of these analyses are described on the next few pages. Overall, these metrics connect back to the plan's guiding principles and how we can begin to measure progress towards desired outcomes and understanding the magnitude of change needed within each planning district.

LAND USE PLACE TYPE MAPS

Each district section contains a map showing existing land use patterns and potential areas of change, where existing land uses could overtime change into one of the new proposed place types. Below each map, a diagram shows how potential changes were modeled. The hatched area of the circle chart represents areas of existing land use that could potentially change, and to the right of that it shows the future place types it might change into. It is important to note that diagrams and map do not match one-to-one. The map indicates general patterns of potential change, whereas the diagram is based on assumptions of certain percentage of existing land areas changing from one pattern to another.

FUTURE PLACE TYPES (IN ACRES)

Land Use Change in City of Las Vegas



Education, Institution, Public and Open Space place types are not included in changes

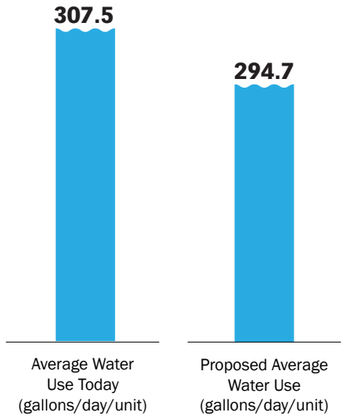
AVERAGE WATER CONSUMPTION

As land areas change in the City and new housing is built to accommodate future population growth, the form of housing can have a significant impact on household water consumption. The Place Build model uses historic metered data from LVVWD/SNWA associated with specific residential housing and land use types to assess average daily gallons of water used per housing unit, per day across the area, based on the specific mix of housing types in that area. This same value is calculated for the proposed condition, which in many cases shows the average water consumption per housing unit decreasing in the future as more water efficient forms of housing are constructed.

These values are compared against city-wide averages for comparative purposes and reflect a targeted outcome of 90 gallons per person, per day.

WATER USAGE

Average water consumption of housing units in the City of Las Vegas





PROXIMITY OF DWELLING UNITS TO SERVICES
Percentage of total units within 1/2 mile walk:

Parks	56%
Schools	31%
Grocery and retail services	19%

Percentage of total units within 2 mile drive:

Community Centers	45%

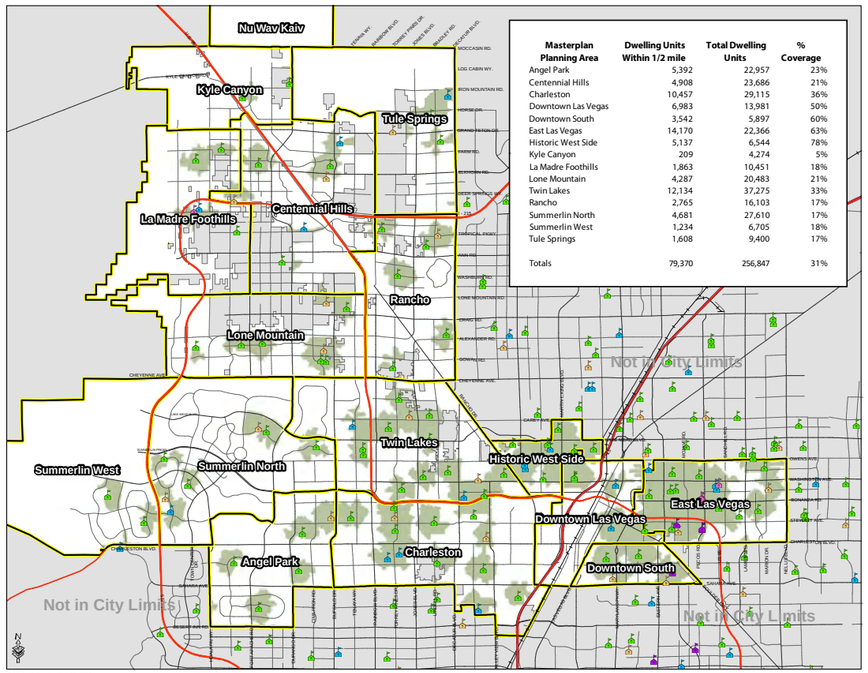
PROXIMITY TO SERVICES

Mapping accessibility and proximity to foundational assets within each planning area helps demonstrate prior decision-making and future changes that may be needed. These points are detailed in other goals throughout the plan.

Ease of access to daily needs is essential for residents and is an indicator of areas that are well-served, as well as an indicator of areas that have higher rates of auto-dependency. Unfortunately, much of Las Vegas's services are designed for, and accessible to, the car.

Because the City doesn't have many community centers, each serve a wider population that's accessible by walking, biking, or a short drive. The lack of these places indicates a need for more publicly facing neighborhood facilities.

Safe and suggested routes to school are important for every student within Las Vegas. The ability to walk to school in older areas, which have higher densities, walkable urban form, and more schools, is far easier, while auto-oriented suburban planning areas have fewer walkable routes.



Masterplan Planning Area	Dwelling Units Within 1/2 mile	Total Dwelling Units	% Coverage
Angel Park	5,392	22,957	23%
Centennial Hills	4,908	23,686	21%
Charleston	10,457	29,115	36%
Downtown Las Vegas	6,983	13,981	50%
Downtown South	3,542	5,897	60%
East Las Vegas	14,170	22,366	63%
Historic West Side	5,137	6,544	78%
Kyle Canyon	209	4,274	5%
La Madre Foothills	1,863	10,451	18%
Lone Mountain	4,287	20,483	21%
Twin Lakes	12,134	37,275	33%
Rancho	2,765	16,103	17%
Summerlin North	4,681	27,610	17%
Summerlin West	1,234	6,705	18%
Tule Springs	1,608	9,400	17%
Totals	79,370	256,847	31%

City of Las Vegas

1/2 Mile Walkable Distance to Public School

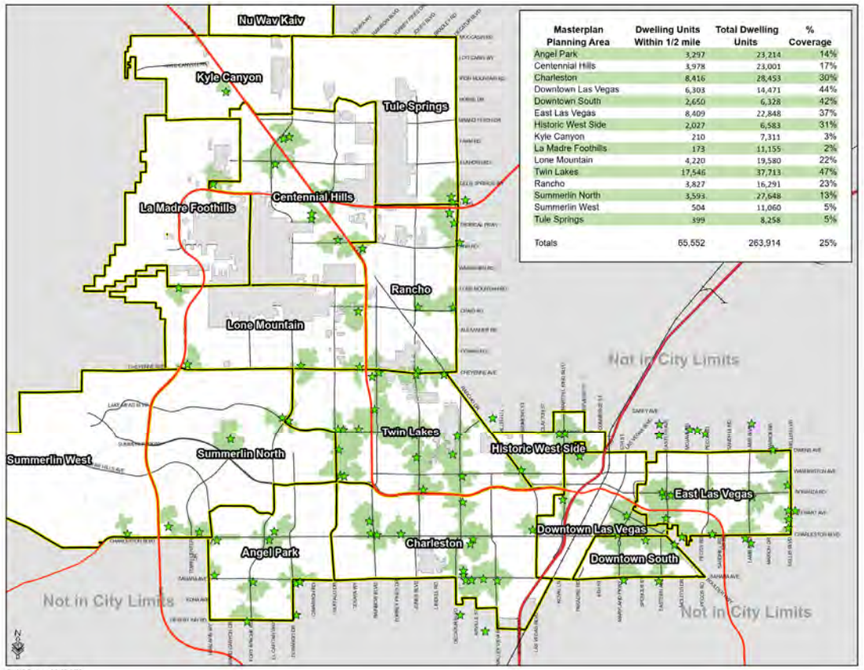
Legend
- City of Las Vegas
- 1/2 Mile walk distance

Public Schools
- Alternative
- Elementary
- High
- Middle
- Special

Miles 0 0.5 1 2

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Geographic Information System
Planning & Development Dept.
702-229-6301

Printed: Wednesday, May 27, 2020



Masterplan Planning Area	Dwelling Units Within 1/2 mile	Total Dwelling Units	% Coverage
Angel Park	3,297	23,214	14%
Centennial Hills	3,978	23,001	17%
Charleston	8,416	28,453	30%
Downtown Las Vegas	6,303	14,471	44%
Downtown South	2,650	6,328	42%
East Las Vegas	8,409	22,848	37%
Historic West Side	2,027	6,583	31%
Kyle Canyon	210	7,311	3%
La Madre Foothills	173	11,155	2%
Lone Mountain	4,220	19,580	22%
Twin Lakes	17,546	37,713	47%
Rancho	3,827	16,291	23%
Summerlin North	3,593	27,648	13%
Summerlin West	504	11,060	5%
Tule Springs	399	8,258	5%
Totals	65,552	263,914	25%

City of Las Vegas

Dwelling Units Map

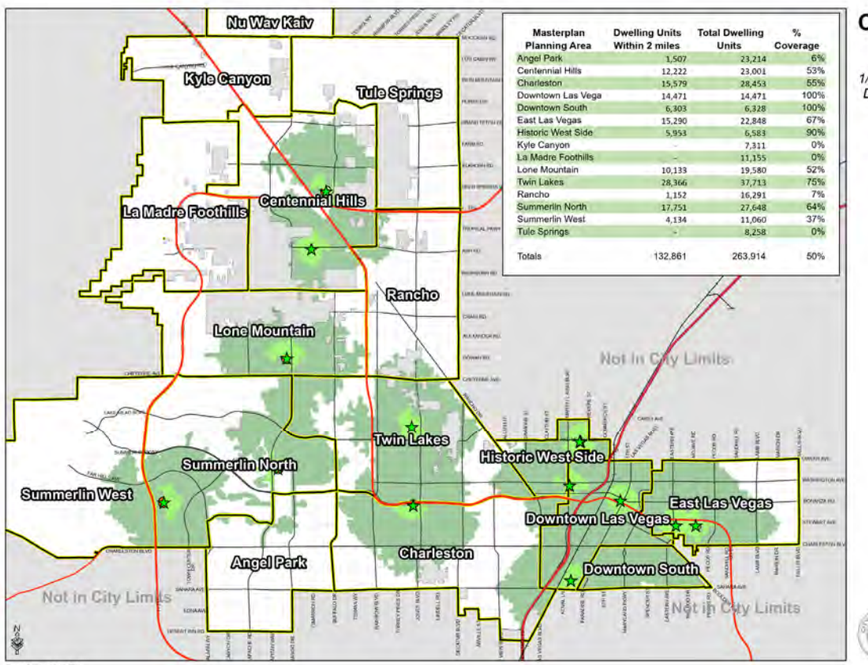
1/2 Mile Walkable Distance to Grocery Store (2024 tracking)

Legend
- City of Las Vegas
- Grocery Store
- 1/2 Mile walk distance

Miles 0 0.5 1 2

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Planning & Development Dept.
702-229-6301

Printed: Tuesday, July 16, 2024



Masterplan Planning Area	Dwelling Units Within 2 miles	Total Dwelling Units	% Coverage
Angel Park	1,507	23,214	6%
Centennial Hills	12,222	23,001	53%
Charleston	15,579	28,453	55%
Downtown Las Vega	14,471	14,471	100%
Downtown South	6,303	6,328	100%
East Las Vegas	15,290	22,848	67%
Historic West Side	5,953	6,583	90%
Kyle Canyon	-	7,311	0%
La Madre Foothills	-	11,155	0%
Lone Mountain	10,133	19,580	52%
Twin Lakes	28,366	37,713	75%
Rancho	1,152	16,291	7%
Summerlin North	17,751	27,648	64%
Summerlin West	4,134	11,060	37%
Tule Springs	-	8,258	0%
Totals	132,861	263,914	50%

City of Las Vegas

Dwelling Units Map

1/2 Mile Walkable & 2 Mile Drive Distance to Community Center (2024 tracking)

Legend
- City of Las Vegas
- Community Center
- 1/2 Mile walk distance
- 2 Mile drive distance

Miles 0 0.5 1 2

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Geographic Information System
Planning & Development Dept.
702-229-6301

PARKS AND OPEN SPACE ACCESS

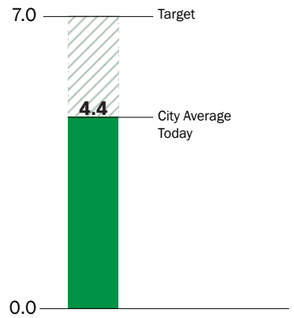
Access to parks and open space is important for the quality of life of residents. While overall quantity of open space is important, the proximity and quantity within short, walking distances of residences is most essential.

The parks and open space access metrics look at publicly owned and/or maintained open space and considers two key data points: (1) how many acres of park space, per 1,000 residents, are within a 1/4 mile walk distance on average; and (2) given the projected population of the district, how many total acres of park space are needed to achieve a target of 7.0 acres per person.

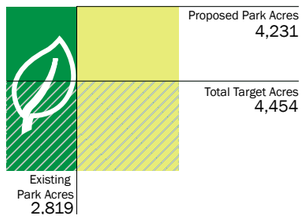
City-wide averages are shown for comparison purposes.

PARK ACCESS

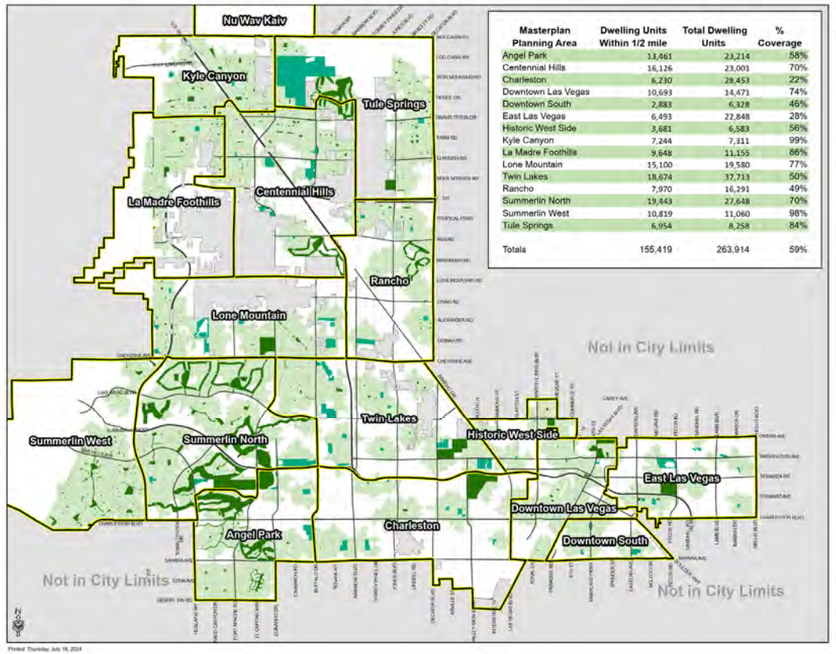
Acres of accessible park space per 1,000 residents within 1/4 mile of the City



PARK ACRES NEEDED TO ACHIEVE TARGET



Park access and proximity is convenient in areas with new subdivisions, where planning standards have required amenities, whether public or private. Distance to parks, open space, and green space as a place of refuge and respite is lacking in the areas surrounding Downtown Las Vegas.



Masterplan Planning Area	Dwelling Units Within 1/2 mile	Total Dwelling Units	% Coverage
Angel Park	13,461	23,214	58%
Centennial Hills	16,126	23,001	70%
Charleston	6,230	28,453	22%
Downtown Las Vegas	10,693	14,471	74%
Downtown South	2,883	6,328	46%
East Las Vegas	6,493	22,848	28%
Historic West Side	3,681	6,583	56%
Kyle Canyon	7,244	7,311	99%
La Madre Foothills	9,648	11,155	86%
Lone Mountain	15,100	19,580	77%
Twin Lakes	18,674	37,713	50%
Rancho	7,970	16,291	49%
Summerlin North	19,443	27,648	70%
Summerlin West	10,819	11,060	98%
Tule Springs	6,954	8,258	84%
Totals	155,419	263,914	59%

City of Las Vegas

Dwelling Units Map

1/2 Mile Walkable Distance to Public Park/ Greenspace (2024 tracking)

Legend

- City of Las Vegas
- CLV Public Park
- Greenspace or Private Park
- 1/2 Mile walk distance

Miles

JOB-TO-HOUSING AND JOB PROXIMITY

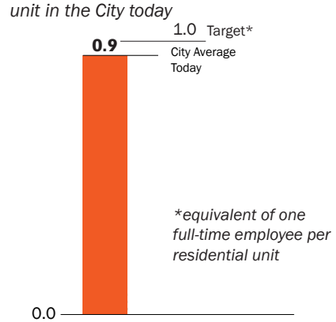
Access to employment opportunity is a critical quality of life and economic consideration for the City of Las Vegas. Two metrics are considered on a district-by-district basis:

(1) Existing ratio of jobs to housing units within the overall district and in comparison to the city-wide average. This can help identify whether a district tends to be a jobs "importer" (with more jobs than housing units, thus pulling people into the district for employment) or a jobs "exporter" with relatively more people leaving the district for employment. The City will strive for a citywide job-housing balance of 1.0 to 1.25.

(2) The second metric provides a measure of how many jobs are within a 1/2-mile or 1-mile radius on average from any point in the district. This analysis considers proximity of jobs outside of the district itself but still within the 1/2-mile or 1-mile distance.

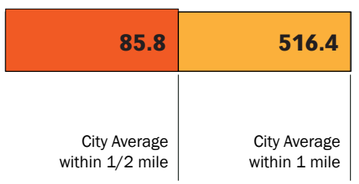
JOB SUPPLY IN DISTRICT

Average job opportunity per residential unit in the City today

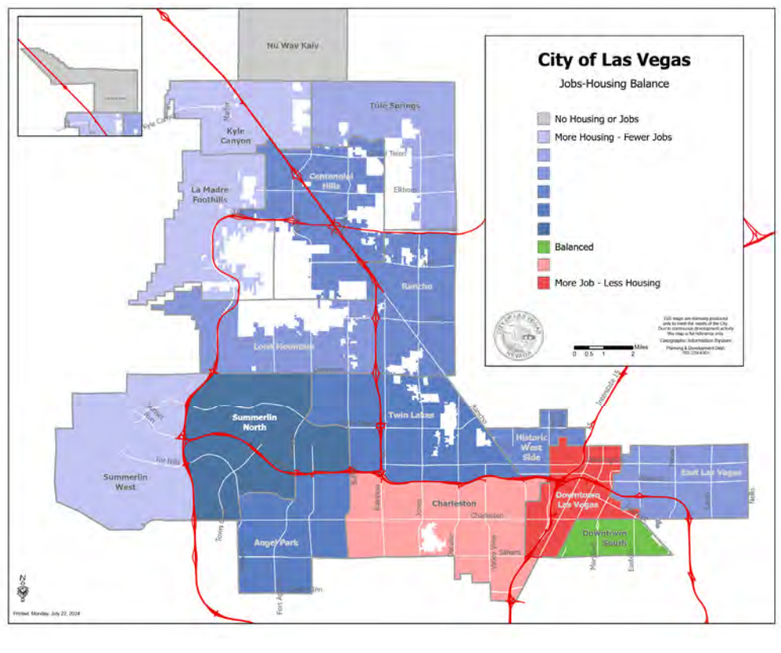


JOB PROXIMITY

Average job opportunity in proximity to the City



Suburban areas tend to have fewer jobs and an abundance of housing, thus necessitating a commute to employment locations.



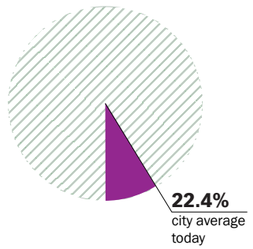


TRANSPORTATION & MOBILITY

The final set of metrics pertains to transportation and responds to an essential equity question: how easily are people able to access transportation services. Four different metrics are considered; projects that are developed or operated, whether by the City, Clark County, NDOT, or RTC, may have an improvement on different metrics.

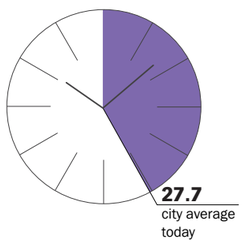
(1) Percentage of households without cars, relative to the city-wide average. Households without access to a motor vehicle must rely on other transportation options.

VEHICLE OWNERSHIP
Percentage of households without cars within the City



(2) Average time length of commute, relative to the city-wide average. Longer commute times may be an opportunity for providing more jobs or improving transportation options.

COMMUTE TIME TO WORK
Average commute time (in minutes) within the City



(3)Percentage of the area of the City within 1/2 mile of dedicated bicycle facilities. Bike trails are considered more desirable for all user groups, but much of the City only has bike lanes or no bike facilities at all.

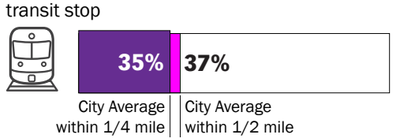
TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility

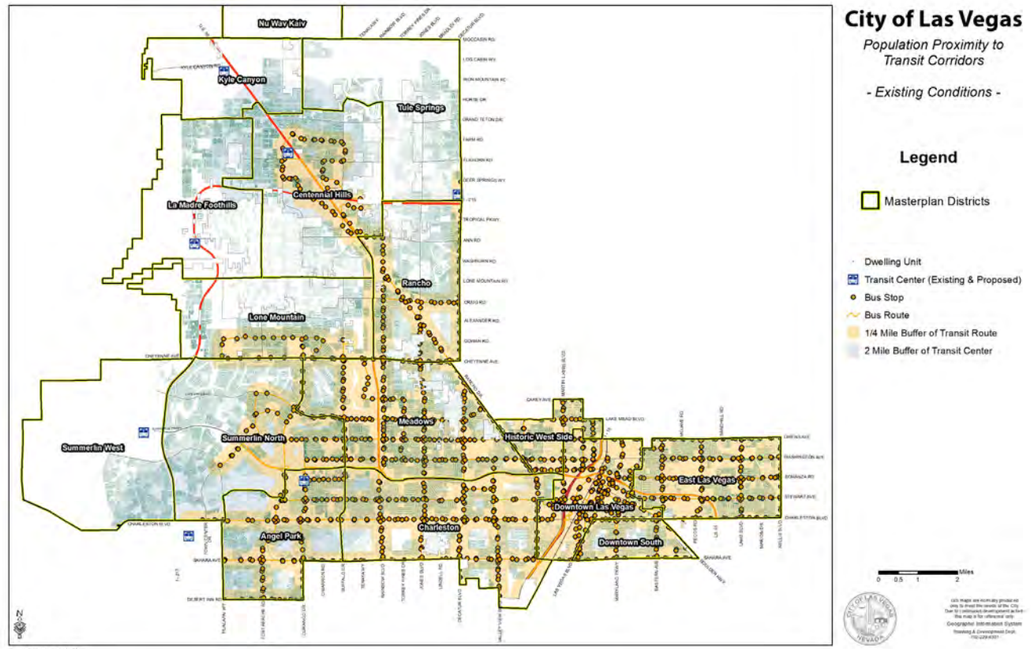


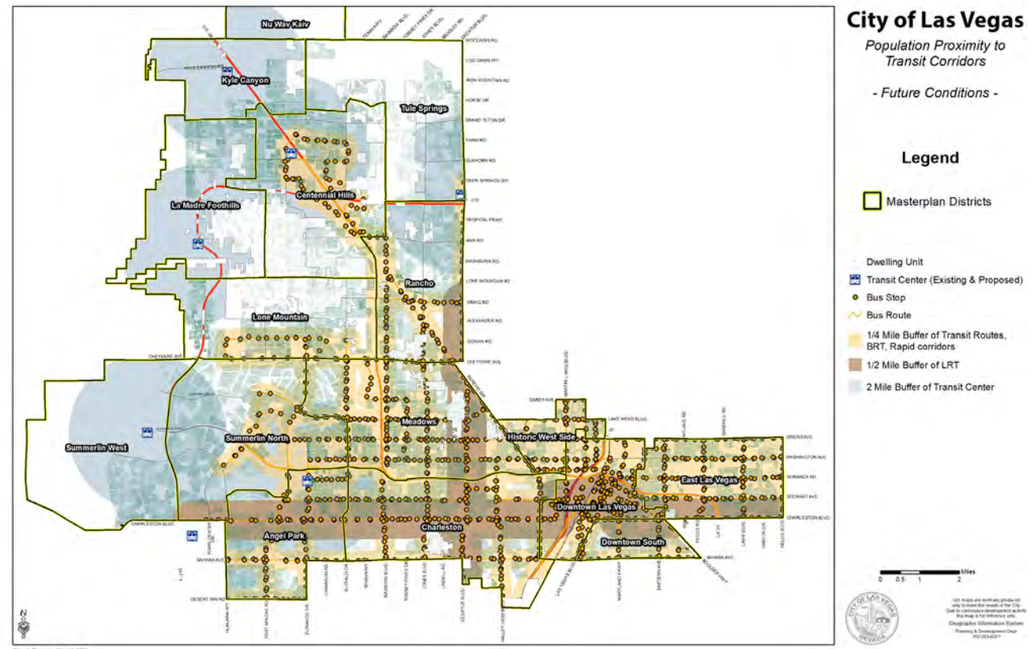
(4) Percentage of residents within 1/4 mile or 1/2 mile of a transit stop. 1/2 mile distance is typically used in transit planning, although from a convenience and attraction standpoint transit stops closer to home can provide better access.

% of residents in planning area within 1/4 or 1/2 mile of transit stop



Access to Public Transportation for Public Transit. Both existing conditions and future conditions are displayed to indicate a short walk to alternative transportation. Existing RTC Transit routes provide a minimum level of accessibility to older planning areas. Implementation of the strategies in RTC's OnBoard and development of the high capacity transit system will improve coverage as well as provide access to suburban areas.





DEMOGRAPHICS

A number of demographic indicators for each area helps explain the composition of the residents that live in the neighborhoods. Compiled from Census, American Community Survey, and Planning Department data, each tell a story about the area's socio-economic characteristics, the types of houses, and who lives there.

KEY

(1) The current population of the area

(2) The largest age group indicates variations in age cohorts

(3) Persons per household explains household composition, children, or multi-generational homes

(4) and (5) indicated the current number of dwellings within an area, whether single-family residential or multi-family dwelling unit types, such as duplex, triplex, four-plex, apartments, townhomes, condominiums, or mobile homes.

(6) Median household income measures the overall economic prosperity of the area

(7) Median rent and mortgage payments represent a snapshot of the housing costs and affordability

(8) Housing tenure indicate the percentage of people who rent their dwelling or own it outright

(9) and (10) show the levels and rates of educational attainment: those that have attained a high school diploma and those that have received a Bachelor's degree

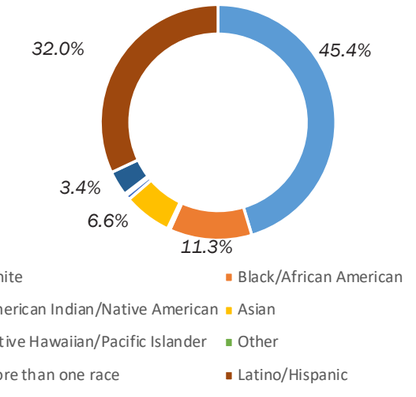
(11) The area's unemployment rate

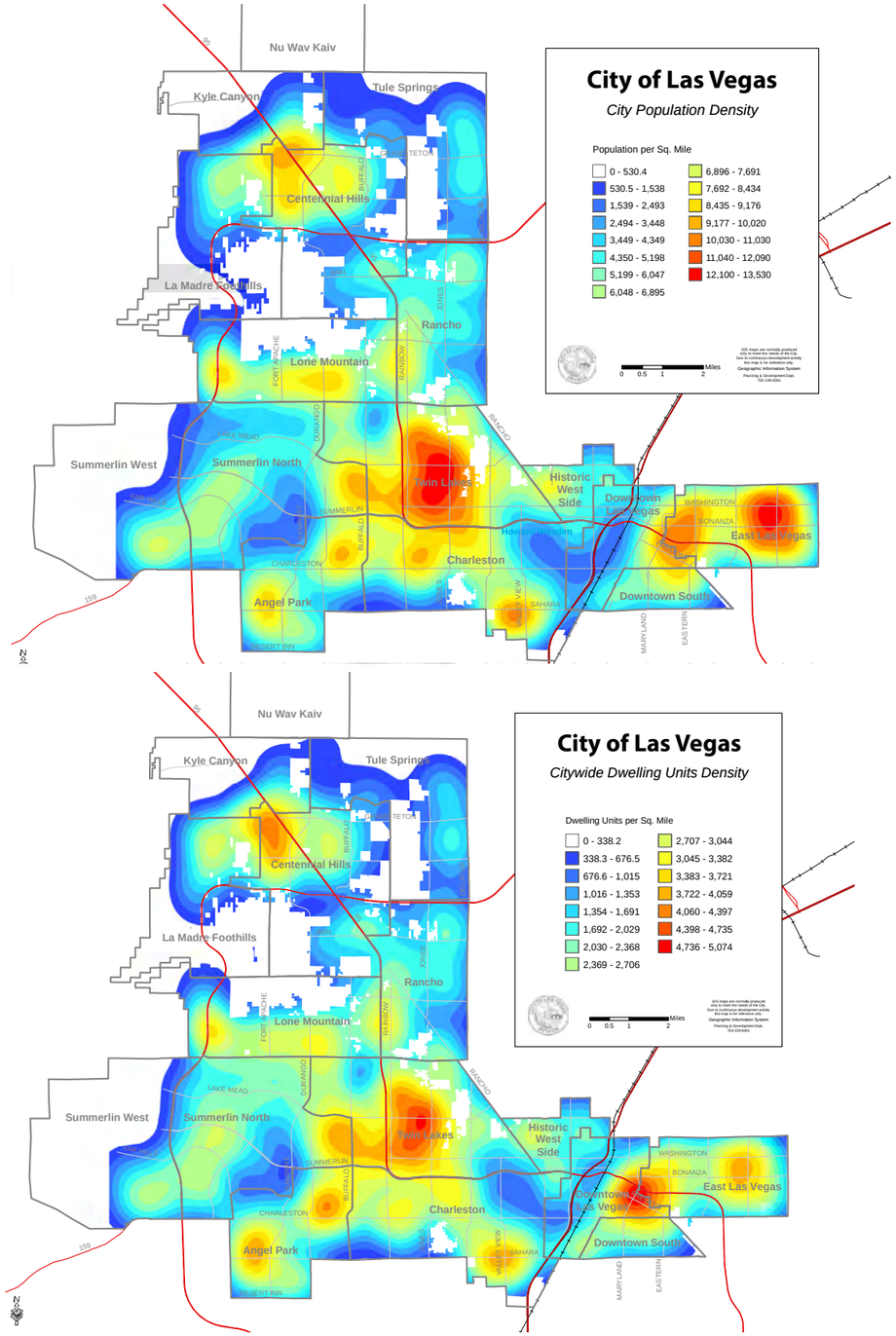
(12) and (13) Housing and population density

(14) The racial and ethnic composition of the area

TOTAL CITY DEMOGRAPHICS

1. Current population: 675,971
2. Largest Age Group: 25 - 34 years (avg age 34.5)
3. Persons per household: 2.83
4. Single Family Dwellings: 10,724 (avg/area)
5. Multi-Family Dwellings: 6,399 (avg/area)
6. Median Household income: $60,917
7. Median rent / mortgage: $1,159 / $1,468
8. Housing tenure: 45.86% rent / 54.14% own
9. Attained High School Diploma: 84.85%
10. Attained Bachelor's Degree: 24.89%
11. Unemployment rate: 8.62%
12. Housing Density: 5.14 dwelling units / acre
13. Population Density: 8,146 residents / square mile
14. Racial/ethnic composition





II.A DOWNTOWN LAS VEGAS









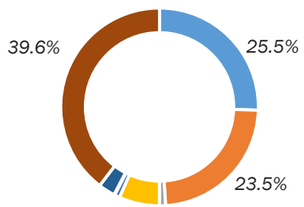
Downtown Las Vegas is the City's civic, commercial, and cultural hub. Located in the center of the Las Vegas Valley, encompassing the original 1905 Clark's townsite, it functions as a primary regional center of Southern Nevada together with the Las Vegas Strip. Centered along Fremont Street, Downtown is the original home to local gaming and tourism. It continues to attract visitors looking for a historic and authentic Las Vegas experience. The Downtown of tomorrow is envisioned as a vibrant and livable urban environment and will continue to "Reinvent the Legend" through complete implementation of the Vision 2045 Downtown Las Vegas Masterplan.

DEMOGRAPHICS

- Current population: 28,115 ▼
- Largest Age Group: 25 - 34 years (4,600) ▼
- Persons per household: 2.28 ▼
- Single Family Dwellings: 1,755 ▼
- Multi-Family Dwellings: 12,226 ▲
- Median Household income: $22,471 ▼
- Median rent / mortgage: $746 / $1,219 ▼ ▼
- Housing tenure: 84.8% rent / 15.2% own ▲ ▼
- Attained High School Diploma: 71.6% ▼
- Attained Bachelor's Degree: 11.7% ▼
- Unemployment rate: 15.3% ▲
- Housing Density: 6.56 dwelling units / acre ▲
- Population Density: 8,439 residents / square mile ▲

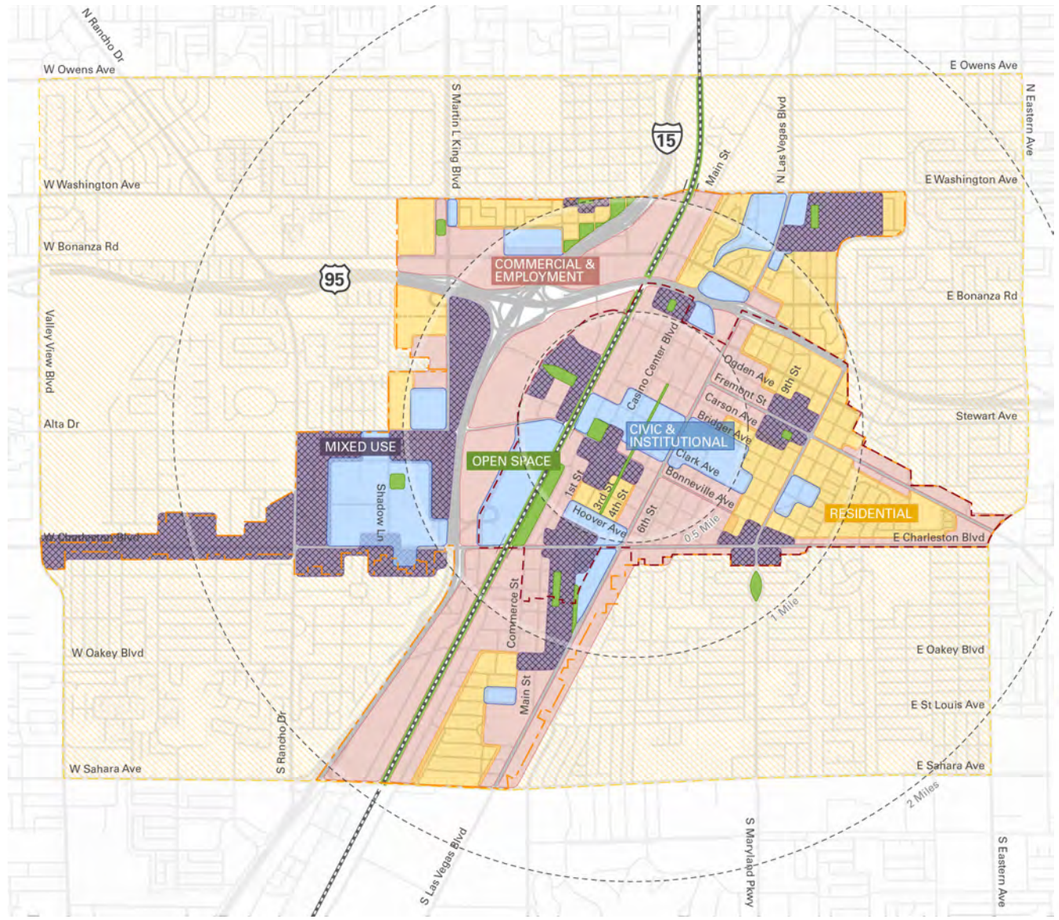
▲ ▼ *Above / Below citywide average*

Race & Ethnicity



- White
- Black/African American
- American Indian/Native American
- Asian
- Native Hawaiian/Pacific Islander
- Other
- More than one race
- Latino/Hispanic

DOWNTOWN FUTURE LAND USE
FROM VISION 2045 DOWNTOWN LAS VEGAS MASTERPLAN



SEE ALSO:
- Vision 2045: Downtown Las Vegas Masterplan
- Downtown Civic Space and Trails Plan
- Title 19.09 Form-Based Code
- Hundred Plan
- Maryland Pkwy TOD Plan

LAND USE AND DEVELOPMENT

TODAY

Downtown is characterized by a traditional urban fabric centered on Fremont Street. The Downtown is divided into several unique and culturally rich neighborhoods. The core districts include the Civic and Business District, Resort and Casino District, Fremont East Entertainment District, and Symphony Park District. Downtown also encompasses the Historic Westside and Cashman neighborhoods, the Las Vegas Medical District, and the gateway to the Strip. Downtown is bisected by US-95 and I-15, creating connectivity issues between the core and the downtown periphery.

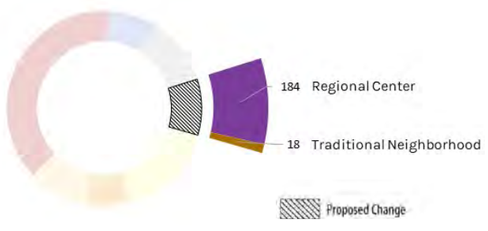
IN THE FUTURE

Downtown will achieve a compact, vibrant urban environment, focusing on higher density mixed-use, transit-oriented development. Downtown is governed by the special area plan and regulated by the City's Form-Based Code (Title 19.09). The Form-Based Code establishes Transect Zones and Building Types, Frontage Types, Open Space Types, and Thoroughfare Standards that apply within the 12 districts of the Downtown Las Vegas Overlay District. The area must also balance preservation with infill and redevelopment, including in the historic neighborhoods.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Downtown Las Vegas area: 2,132.1 acres

2050 PROJECTIONS

- Population: 51,539
- Total New Housing Units: 10,274 (83 Single family / 10,121 Multi-family)
- New Commercial (1,000 GSF): 12,320,270
- Housing Density: 11.38 dwelling units / acre
- Population Density: 15,471 residents / square mile

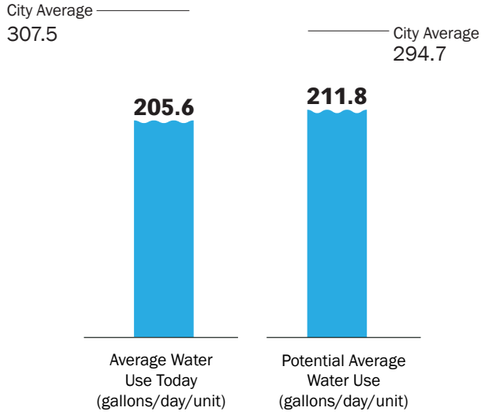
KEY LAND USE TOOLS

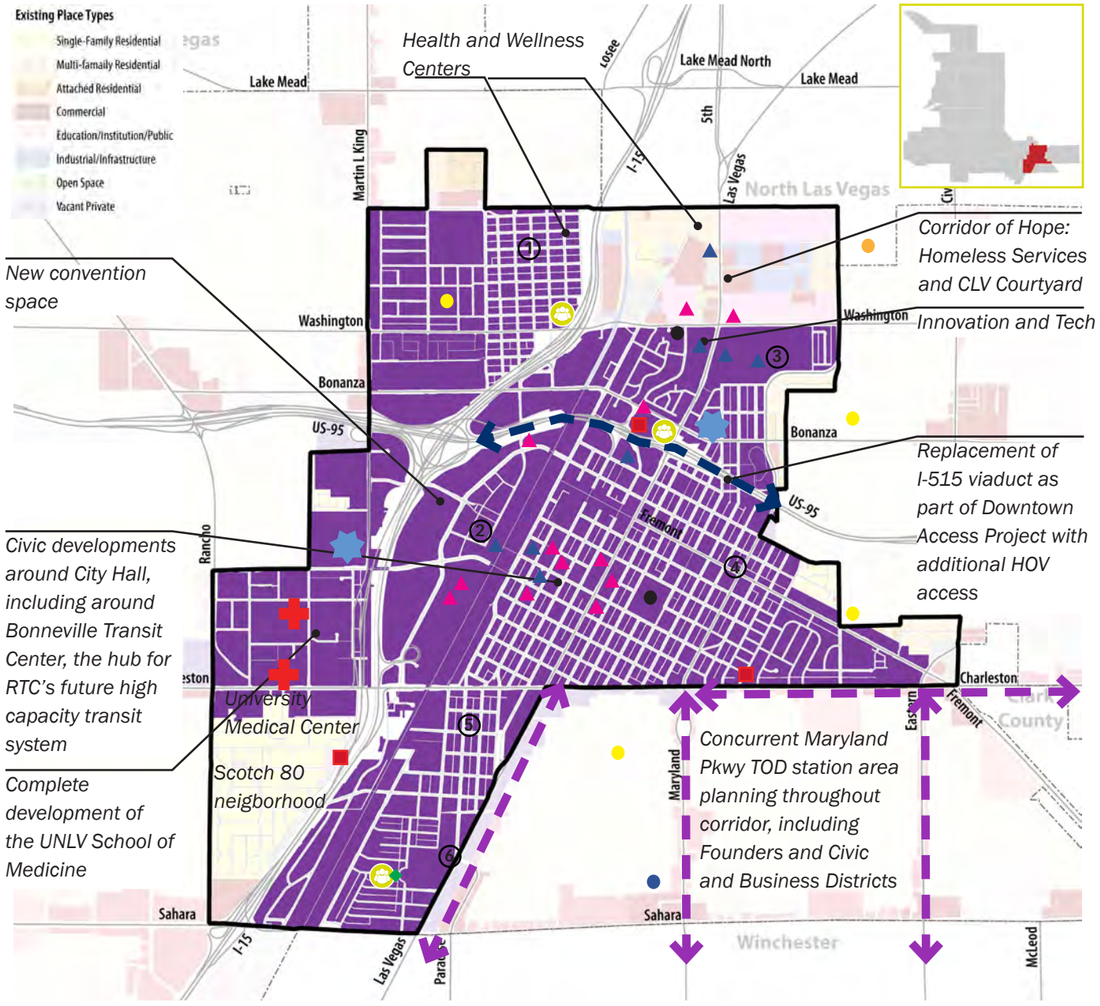
- Mixed-use
- Transit-oriented development
- Placemaking through arts and culture
- Diverse housing options
- Historic preservation
- Adaptive reuse
- Placemaking through arts and culture

Click each tool to read more.

WATER USAGE

Water consumption of residents in the planning area will be increase slightly with the planned buildout.





DOWNTOWN LAS VEGAS PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Implement the "Hundred Plan" to revitalize the Historic Westside
2. Sympony Park mixed-use development
3. Cashman Center redevelopment opportunity
4. Fremont East District redevelopment and complete street improvements
5. Arts District cultural improvements, investments, and redevelopment
6. Gateway District revitalization and improvements along Las Vegas Blvd

COMMUNITY FACILITIES

- *CLV Fire Station*
- *LVMPD Substation*
- *Hospital*
- *CCSD School (elementary/middle/high/alternative or special)*
- *Library*
- *City or other public facility*
- *Community Center*
- *Transportation improvement*
- *Planned High Capacity Transit*

SERVICES

Downtown has the greatest concentration of public facilities and services in the region. Federal, state, and local government civic buildings are located throughout Downtown, including the Clark County Government Center, Las Vegas Metropolitan Police Headquarters, and regional court and judicial facilities. Other private and non-profit services serve the City and Southern Nevada as a whole; most notably, homeless service providers are concentrated within Downtown and its periphery along the "Corridor of Hope." New Health and Wellness Centers in the Cashman District and Historic Westside will provide services to under-served populations

PROXIMITY OF DWELLING UNITS TO SERVICES

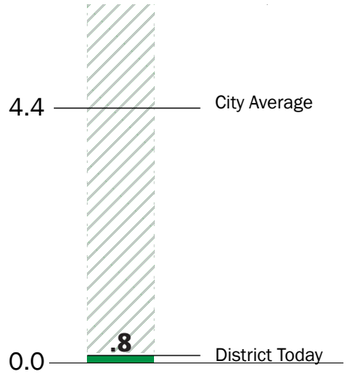
Percentage of total units within 1/2 mile walk:		*City*
Parks	66%	56%
Schools	50%	31%
Grocery and retail services	47%	19%
Percentage of total units within 2 mile drive:		
Community Centers	100%	45%

PARKS AND OPEN SPACE

Downtown has several notable and memorable places, including the Fremont Street Experience, Container Park, Symphony Park, and 3rd Street, but is notably lacking traditional parks, civic, and green spaces. In the past decade, Downtown witnessed the birth of a variety of museums and cultural amenities, including the Mob Museum, Neon Museum, and Smith Center for the Performing Arts. The Downtown Parks and Civic Spaces sub-plan provides an implementation framework for increased public and private parks, plazas, and other civic spaces, including a Civic Plaza and central park. The Title 19.09 form-based zoning code also similarly requires open space and specifies civic space standards.

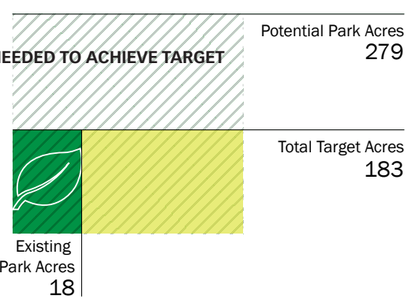
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile



PARK ACRES NEEDED TO ACHIEVE TARGET

Downtown has more than enough vacant land in the future place type model to convert to parks or open space to meet the target.

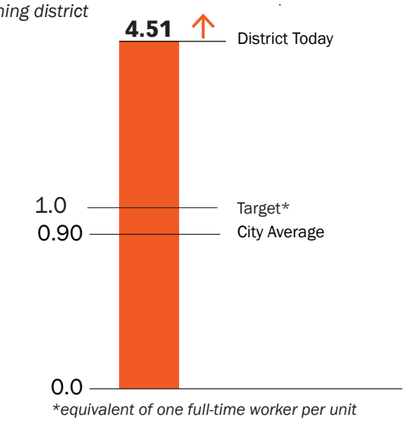


WORKFORCE

Downtown encompasses a variety of industry clusters. The Casino Center and the Fremont East District remain major economic drivers of Las Vegas and the region. In order to maintain that standing and address historic blighting conditions, the City has introduced downtown redevelopment areas and new economic development initiatives. Adaptive reuse has brought new life to underutilized industrial areas, creating vibrant places like the Arts District. The UNLV School of Medicine and several major hospitals located in the Medical District allow for growth in the health care and education sectors. Finally, major mixed-use and special purpose areas, including the Cashman Center and Symphony Park, allow for unique economic development and redevelopment opportunities. The Downtown residents are served by neighborhood CCSD schools and charter schools.

JOB SUPPLY IN DISTRICT

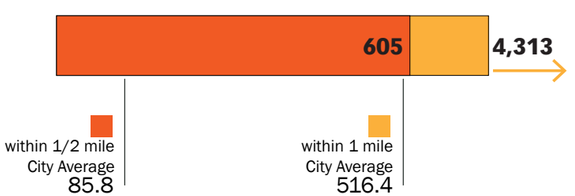
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

JOB PROXIMITY

Average job opportunity in proximity to the planning district



TRANSPORTATION

Located near the intersection of I-15, I-515, and US-95 (future I-11), Downtown is also the central hub of the RTC Transit system and future high capacity transit network. In terms of access and mobility, Downtown has the region's best complete street grid. The Union Pacific Railroad parallels I-15 which may allow Downtown to potentially be the central hub for high-speed rail connecting to Southern California. However, as the oldest part of the City, Downtown also has aging infrastructure of all types.

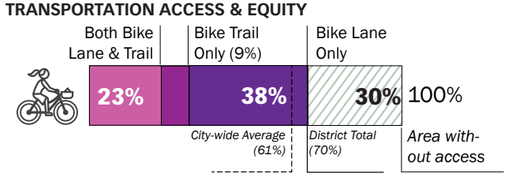
VEHICLE OWNERSHIP

Percentage of households without cars within the district

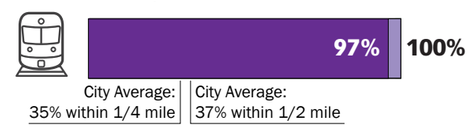
COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

TRANSPORTATION ACCESS & EQUITY



Percent of residents in the planning district within 1/4 and 1/2 mile of a transit stop



II.B EAST LAS VEGAS

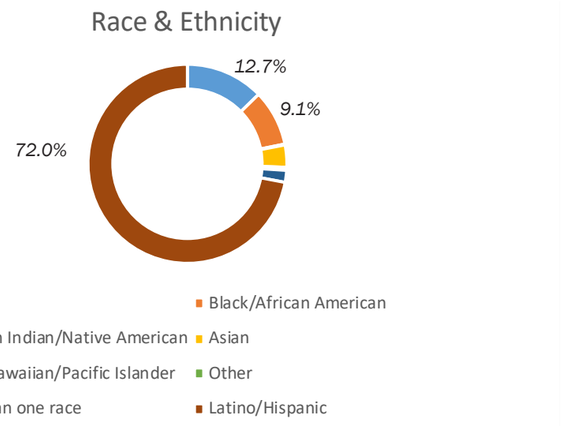


East Las Vegas is comprised of a network of higher density traditional neighborhoods, a thriving and growing Latinx community, and a well-connected street system; it does, however, face a number of challenges, including high poverty rates, higher rates of crime, and an overall lack of investment or under-investment in infrastructure and services to accommodate a rapidly changing population. The addition of high capacity transit along the edges and a “Grand Paseo” complete street transformation will enable East Las Vegas to transform itself into a diverse and cohesive sector of Las Vegas.

DEMOGRAPHICS

- Current population: 75,146 ▲
- Largest Age Group: 25 - 34 years (11,177) ▼
- Persons per household: 3.40 ▲
- Single Family Dwellings: 9,428 ▼
- Multi-Family Dwellings: 12,938 ▲
- Median Household income: $32,224 ▼
- Median rent / mortgage: $828 / $1,039 ▼ ▼
- Housing tenure: 63.2% rent / 36.8% own ▼ ▼
- Attained High School Diploma: 57.6% ▼
- Attained Bachelor’s Degree: 4.8% ▼
- Unemployment rate: 10.3% ▲
- Housing Density: 7.95 dwelling units / acre ▲
- Population Density: 16,095 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Redevelop substandard housing and incentivize infill housing
- Reduce food swamps
- Embrace Latinx culture through creative placemaking and design

SERVICES AND FACILITIES

- Consider locating additional facilities in the north/ northeast

PARKS AND OPEN SPACE

- Develop more accessible parks and open space
- Increased tree canopy target area - highest levels of ozone in City

WORKFORCE AND EDUCATION

- Focus on workforce training and job creation
- Address school overcrowding

TRANSPORTATION

- Complete sidewalk network, including a “Grand Paseo” complete street along Bonanza Rd
- Downtown Access Project
- Charleston Blvd interchange improvements
- Develop high capacity transit along Charleston Blvd and Eastern Ave and rapid bus along Nellis Blvd

Click each strategy to read more. Metrics for each topic are highlighted on the following pages

SEE ALSO:
Nuestro Futuro Este Las Vegas Special Area Plan
Spectrum Industrial Park Area Plan







LAND USE AND DEVELOPMENT

TODAY

East Las Vegas is generally characterized by higher density development with a mix of residential housing types. There are existing auto-oriented commercial nodes and retail strips along Bonanza at Eastern Ave and Nellis Blvd.

IN THE FUTURE

There are several opportunities to redevelop substandard housing stock with affordable high-quality housing and introduce higher density mixed-use development particularly along Bonanza Rd, Eastern Ave, and Nellis Blvd while remaining affordable. The construction of high capacity transit along Charleston Blvd along the area's southern edge will also help facilitate transit-oriented development at US-95, Lamb Blvd, and Nellis Blvd.

2050 PROJECTIONS

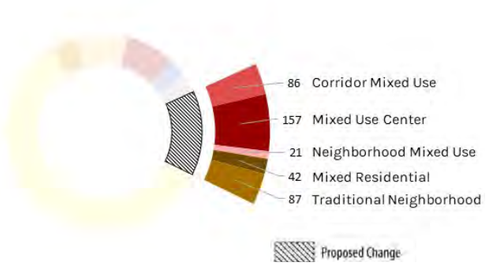
- Population: 84,936
- Total New Housing Units: 4,173 (326 Single-family / 3,848 Multi-family)
- New Commercial (1,000 GSF): 10,248,995
- Housing Density: 9.43 dwelling units / acre
- Population Density: 19,322 residents / square mile

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



East Las Vegas total area: 2,183.3 acres

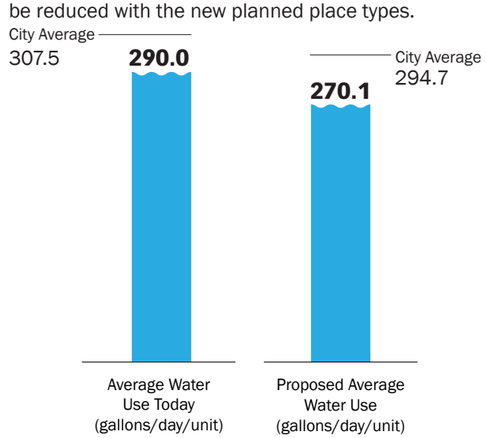
KEY LAND USE TOOLS

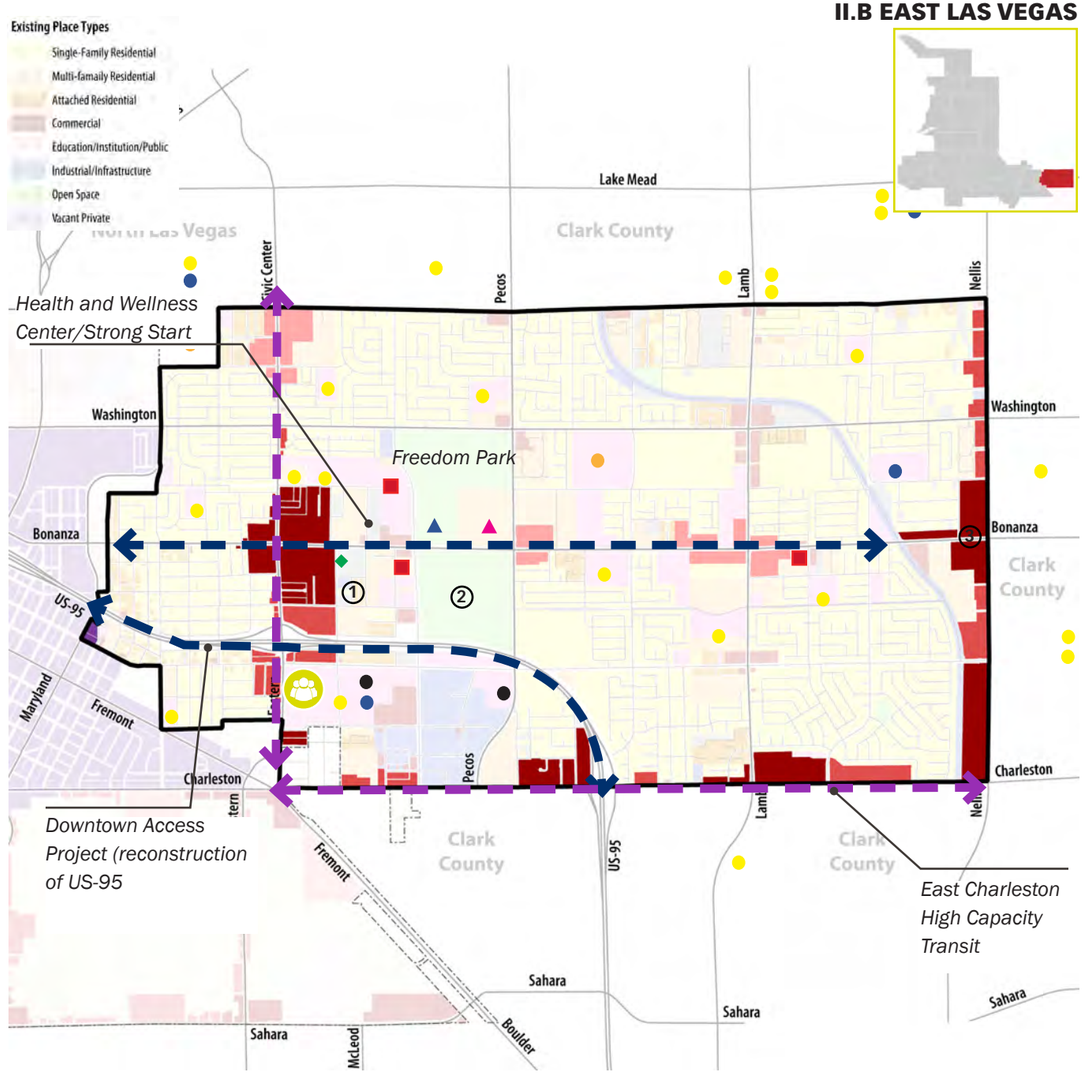
- Traditional Neighborhood Design
- Neighborhood Character
- Transit-Oriented Development
- Placemaking through arts and culture

Click each tool to read more.

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





EAST LAS VEGAS PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Mixed Residential Potential
2. Desert Pines Golf Course (city owned) - consider neighborhood mixed-use at Pecos intersection and retain greenspace
3. Mixed-use redevelopment priority

Transportation improvement

Planned High Capacity Transit

COMMUNITY FACILITIES

F *CLV Fire Station*

CCSD School (elementary/middle/high/alternative or special)

Library

City or other public facility

East Las Vegas Community Center

SERVICES + FACILITIES

East Las Vegas has several major city and regional facilities, including East Las Vegas Community Center, and Clark County Family Services, as well as several city operational facilities, including the City's East Service Yard, Fire training center, and Detention Center. The area lacks city facilities in the north and northeastern portions, and is plagued by higher overall crime rates throughout the district. A new Health and Wellness Center will be constructed

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

		City
Parks	27%	56%
Schools	63%	31%
Grocery and retail services	31%	19%

Percentage of total units within 2 mile drive:

Community Centers	66%	45%

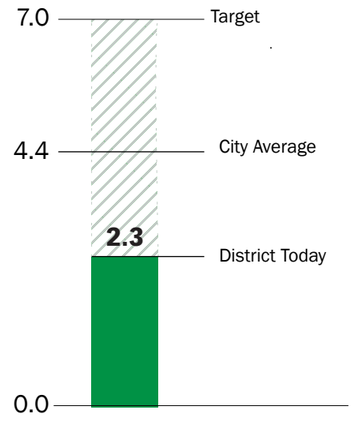
See Chapter 3, Section I.B School Facilities and Chapter 4, Section III.A Public Facilities

PARKS AND OPEN SPACE

Several large traditional parks have historically anchored East Las Vegas, including Freedom Park. A few new parks are under construction, including smaller neighborhood parks that will help provide green space to underserved areas, but more will still be needed, and of different types and varieties. Desert Pines Golf Course is also located within this area; while a major asset, it could be repurposed to another use while still incorporating much needed civic green space. User safety of parks, trails, and open space within the area has been noted as well.

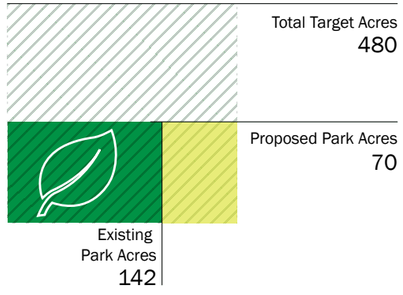
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile



PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, East Las Vegas still falls short of the target.



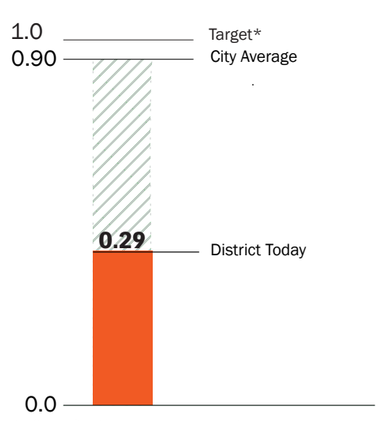
See Chapter 2, Section III Environment

WORKFORCE + EDUCATION

Over time, blighting conditions have led to the establishment of expanded redevelopment areas and new economic development initiatives. Many union halls and training centers are located throughout the district, as is the Spectrum Industrial Center. Many CCSD elementary schools are overcrowded and are in disrepair, despite a high concentration. Desert Pines High School is also over capacity. A Strong Start Academy will be built near Bonanza Road and Wardelle Street.

JOB SUPPLY IN DISTRICT

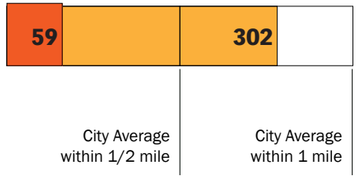
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

JOB PROXIMITY

Average job opportunity in proximity to the planning district



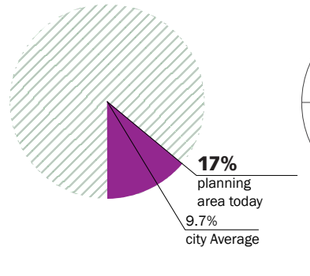
See Chapter 3, Economy & Workforce

TRANSPORTATION

As an older part of town, East Las Vegas has aging infrastructure of all types and needs substantial upgrades and complete street improvements in many neighborhoods. The Interstate 515 viaduct (potential future I-11) runs through the southern portion and could be reconstructed and replaced, which could impact surrounding neighborhoods. Charleston Blvd, Eastern Ave, and Nellis Blvd will continue to transition from auto-oriented arterials toward transit-based complete streets. Opportunities exist along bicycle-friendly corridors to connect and complement the Las Vegas Wash regional trail, including the Cedar Trail and a "Grand Paseo" complete street along Bonanza Rd.

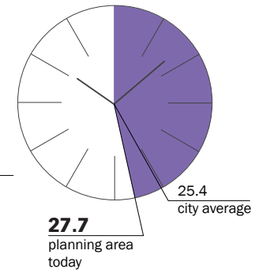
VEHICLE OWNERSHIP

Percentage of households without cars within the district



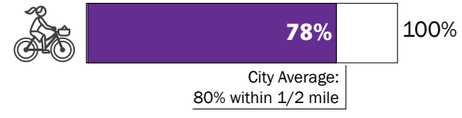
COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

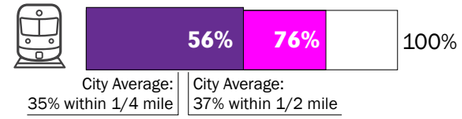


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



See Chapter 4, Section I Transportation

II.C WEST LAS VEGAS

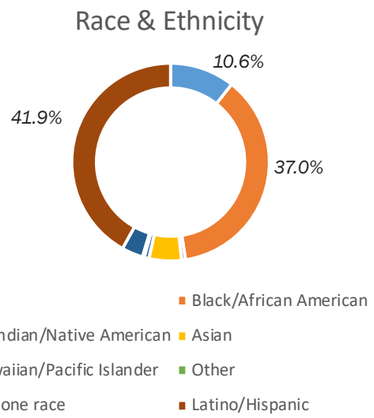


West Las Vegas is comprised of the neighborhoods immediately surrounding the Historic Westside district of Downtown Las Vegas, a culturally significant and diverse area including the Berkley Square Neighborhood, Bonanza Village, Vegas Heights, and Eastland Village neighborhoods. For many decades, West Las Vegas and its residents, predominantly African American, were physically and economically segregated from the rest of the community. West Las Vegas is comparatively poorer, homogeneous, and faces greater socio-economic challenges than other districts. By 2050, this area will gain new life and development that preserves the community's identity and heritage.

DEMOGRAPHICS

- Current population: 17,343 ▼
- Largest Age Group: 25 - 34 years (2,794) ▼
- Persons per household: 2.93 ▲
- Single Family Dwellings: 3,698 ▼
- Multi-Family Dwellings: 2,846 ▼
- Median Household income: $32,937 ▼
- Median rent / mortgage: $867 / $1,174 ▼ ▼
- Housing tenure: 67.2% rent / 32.8% own ▲ ▼
- Attained High School Diploma: 71.2% ▼
- Attained Bachelor's Degree: 7.6% ▼
- Unemployment rate: 11.3% ▲
- Housing Density: 6.60 dwelling units / acre ▲
- Population Density: 11,190 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Balance historic neighborhood preservation with housing infill
- Expansion of redevelopment areas to enable infill

SERVICES AND FACILITIES

- Increase equitable access to services

PARKS AND OPEN SPACE

- Develop more accessible parks and open space

WORKFORCE AND EDUCATION

- Consider a West Las Vegas high school
- Strengthen performance of schools

TRANSPORTATION

- Upgrade aging infrastructure
- Complete streets improvements, including on Lake Mead Blvd, Rancho Dr
- Develop Rapid Bus along Martin Luther King Blvd and Rancho Dr

Click each strategy to read more. Metrics for each topic are highlighted on the following pages.

SEE ALSO:
West Las Vegas Area Plan







LAND USE AND DEVELOPMENT

TODAY

The Martin Luther King Blvd corridor links the core neighborhoods of West Las Vegas. Many of these neighborhoods remain stable and offer a range of affordable single-family and multi-family housing types. Other neighborhoods have lost significant housing stock, leaving behind vacant or empty lots, providing an opportunity for infill mixed residential redevelopment. Places of worship are spread throughout the community and serve as an anchor for many neighborhoods.

IN THE FUTURE

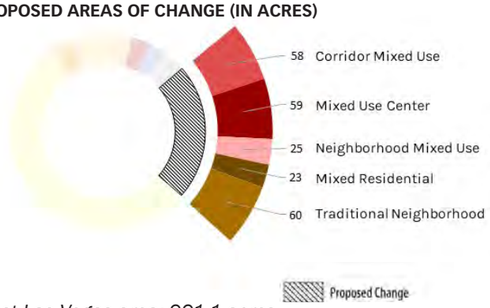
Transit-Oriented Development corridors and neighborhood centers are located throughout the district and offer prime areas for higher density development. The western half of West Las Vegas is typified by mature single-family residential neighborhoods and apartment complexes, with pockets of large estates. The southern end of the district contains substantial industrial land along the freeway.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



West Las Vegas area: 991.1 acres

2050 PROJECTIONS

- Population: 83,898
- Total New Housing Units: 2,987 (229 Single family / 2,758 Multi-family)
- New Commercial (1,000 GSF): 2,778,885
- Housing Density: 9.61 dwelling units / acre
- Population Density: 16,837 residents / square mile

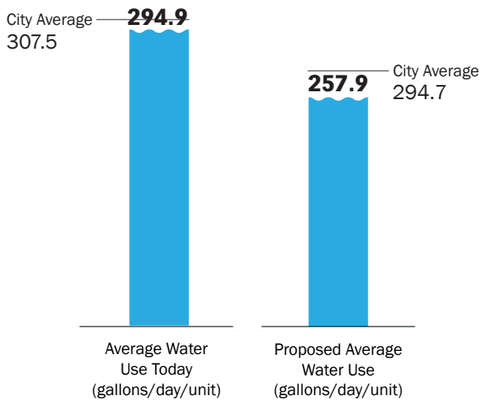
KEY LAND USE TOOLS

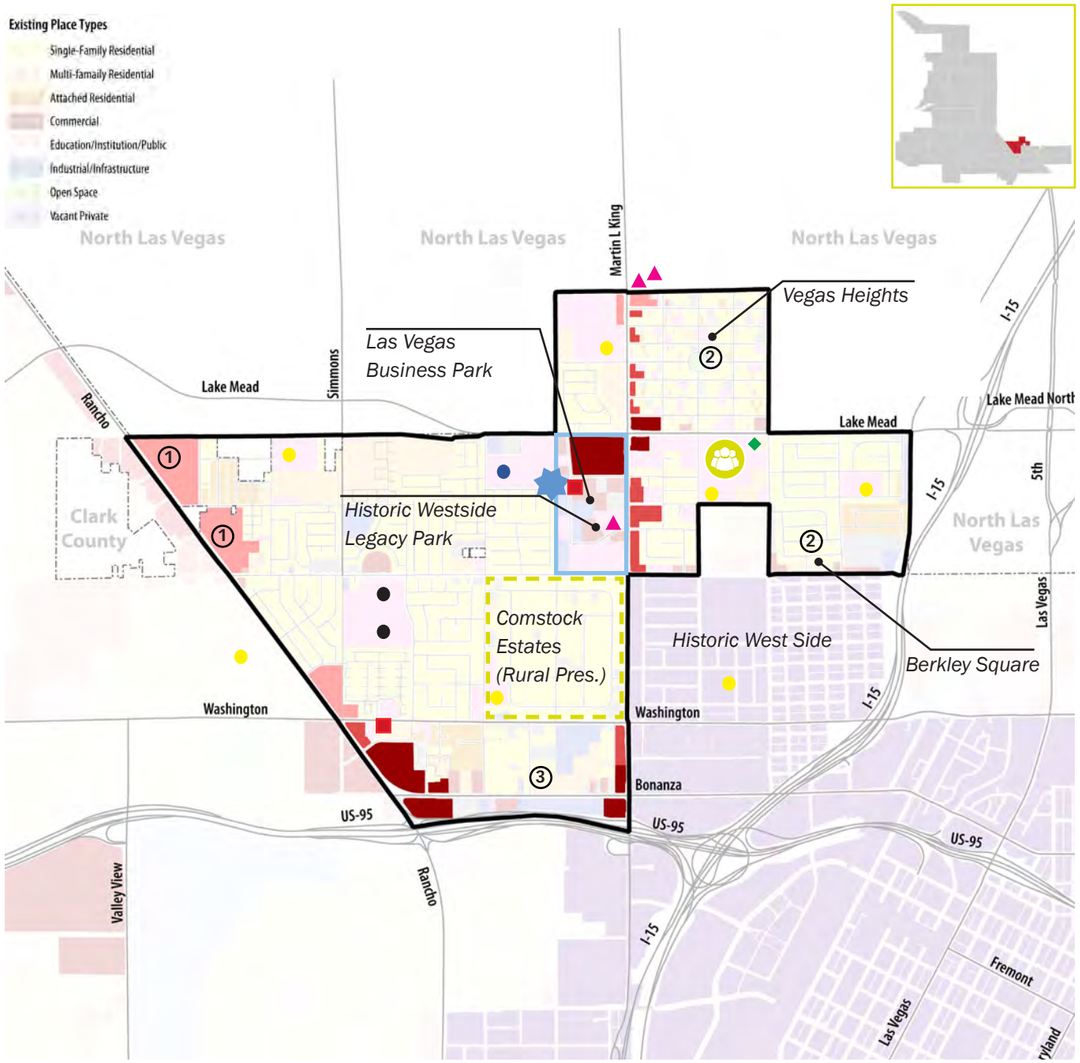
- Diverse Housing Options
- Infill housing
- Traditional Neighborhood Design
- Neighborhood Character
- Transit-Oriented Development
- Placemaking through arts and culture
- Adaptive Reuse
- Historic Preservation

Click each tool to read more.

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





WEST LAS VEGAS PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Key Redevelopment Sites
2. Historic Neighborhoods - balance preservation with infill
3. Ahern Properties Redevelopment Opportunity

COMMUNITY FACILITIES

- *CLV Fire Station*
- *LVMPD Substation*
- *CCSD School (elementary/middle/high/alternative or special)*
- *Library*
- *City or other public facility*
- *Doolittle Community/Senior Center*

SERVICES

West Las Vegas has a major need for upgraded infrastructure and additional public facilities and services. The area is served by two community centers: Pearson and Doolittle. However, the western half of West Las Vegas lacks significant investment and community services. West Las Vegas is served by the LVMPD's Bolden Area Command; however, higher crime rates, homelessness, drug use, and chronic illnesses and conditions continue to plague the area.

PARKS AND OPEN SPACE

While the new Historic Westside Legacy Park is a recent addtion, there is a lack of parks and open space in West Las Vegas. Existing facilities are limited to a scattering of small neighborhood and pocket parks exist and a major park (Kianga Isoke Palacio Park) at the Doolittle Community Center. An additional major park or open space should be constructed with quality amenities that will be safe and well utilized.

WORKFORCE

Historically West Las Vegas's commercial uses were dominated by small, local businesses. A few national fast food and fast casual chains have opened near Lake Mead and Martin Luther King Blvd. Through the efforts of the City's Redevelopment Agency, several major employment centers are now located within West Las Vegas, including the West Las Vegas Business Park and the Bonanza Rd corridor. Many CCSD and private schools are located throughout the district, but a major high school is lacking, and many schools routinely underperform, despite being in designated Opportunity or Achievement zones and receiving additional funding and resources. Also located in West Las Vegas is the Advanced Technologies Academy and the Veterans Tribute Career and Technical Academy.

TRANSPORTATION

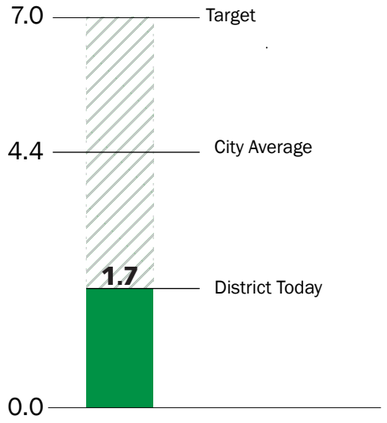
Rancho Dr, US-95 (potential future I-11), and I-15 make up the primary western, southern, and eastern edges of the district, while the northern edge is bounded by the City of North Las Vegas. West Las Vegas will be served by rapid bus service along Rancho and Martin Luther King. Infrastructure throughout the district is older; CDBG funds and FRI funding have helped to pay for select improvements, but capital funding is needed to support additional complete streets and public transportation projects. Efforts that further connect West Las Vegas and the Historic Westside to Downtown Las Vegas should continue to be encouraged.

PROXIMITY OF DWELLING UNITS TO SERVICES

		City
Percentage of total units within 1/2 mile walk:		
Parks	41%	56%
Schools	78%	31%
Grocery and retail services	17%	19%
Percentage of total units within 2 mile drive:		
Community Centers	91%	45%

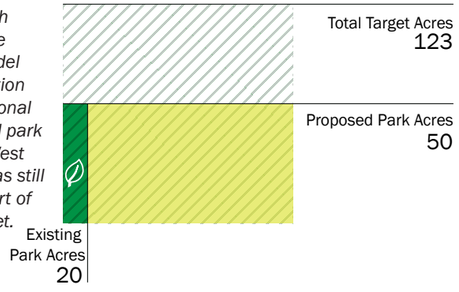
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



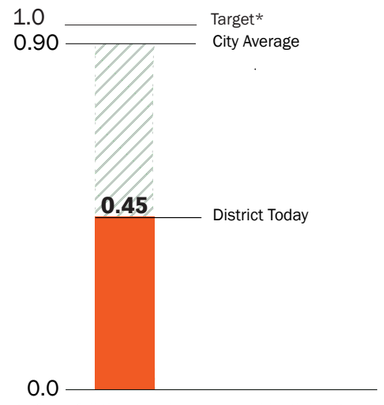
PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, West Las Vegas still falls short of the target.



JOB SUPPLY IN DISTRICT

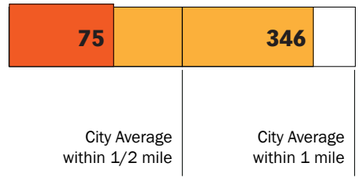
Average job opportunity per residential unit in the planning district



**equivalent of one full-time employee per residential unit*

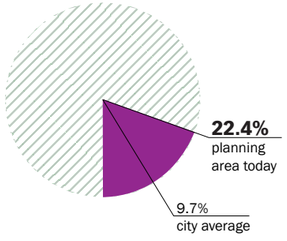
JOB PROXIMITY

Average job opportunity in proximity to the planning district



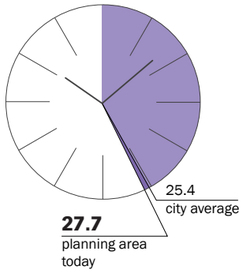
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

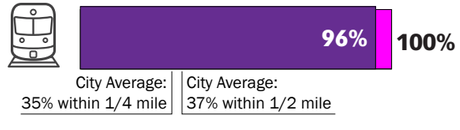


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.D DOWNTOWN SOUTH

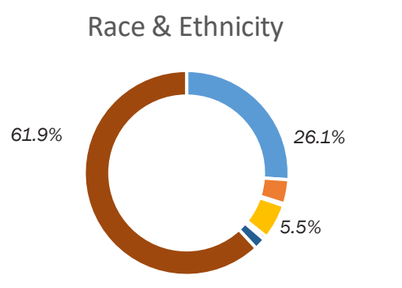


Downtown South is comprised of the City's earliest inner-ring traditional neighborhoods, including John S. Park, Huntridge, Beverly Green, Southridge, Mayfair, Hillside Heights, and Crestwood. Given its close proximity to Downtown Las Vegas and several major transportation corridors on its periphery, including Charleston Blvd, Maryland Pkwy, Sahara Ave, and Las Vegas Blvd, these historic areas are in flux and must be carefully balanced with preservation efforts with the increasing pressure and demand for transit-oriented development.

DEMOGRAPHICS

- Current population: 16,883 ▼
- Largest Age Group: 25 - 34 years (2,345) ▼
- Persons per household: 3.06 ▲
- Single Family Dwellings: 4,083 ▼
- Multi-Family Dwellings: 1,814 ▼
- Median Household income: $38,561 ▼
- Median rent / mortgage: $936 / $1,189 ▼ ▲
- Housing tenure: 50.7% rent / 49.3% own ▲ ▼
- Attained High School Diploma: 70.4% ▼
- Attained Bachelor's Degree: 16.2% ▼
- Unemployment rate: 10.5% ▲
- Housing Density: 5.70 dwelling units / acre ▲
- Population Density: 10,451 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Balance historic neighborhood preservation with development pressures along corridors

SERVICES AND FACILITIES

- Consider locating additional facilities to complete service offerings

PARKS AND OPEN SPACE

- Develop more accessible parks and open space

WORKFORCE AND EDUCATION

- Build a new specialized school at the former Bishop Gorman High School site along Maryland Pkwy to alleviate overcrowding

TRANSPORTATION

- Upgrade aging infrastructure over time
- Construct Spencer Greenway trail for additional multi-modal access to regional desinations
- Develop Maryland Pkwy, Eastern Ave, Charleston Blvd, and Las Vegas Blvd high capacity transit, and upgrade service along Sahara Ave

Click each strategy to read more. Metrics for each topic are highlighted on the following pages.

SEE ALSO:
Beverly Green/Southridge Neighborhood Plan
John S. Park Neighborhood Plan
Maryland Parkway TOD Plan







LAND USE AND DEVELOPMENT

TODAY

Comprised of traditional historic neighborhoods, Downtown South will focus on preservation of existing housing. However, as opportunities present themselves, higher density transit-oriented development and developing new place and housing types along the periphery will be thoughtfully done to ensure housing remains affordable and gentrification is minimized.

IN THE FUTURE

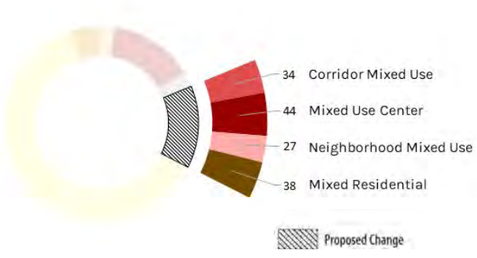
While the neighborhoods around Downtown South are well established, some areas along the edges of the planning area may require enhancements and transformations in an effort to redevelop and remove blighting conditions. Historic shopping centers and mixed-use corridors may potentially need to be redeveloped over time, especially at key nodes.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Downtown South area: 1,033.9 acres

2050 PROJECTIONS

- Population: 27,434
- Total New Housing Units: 3,448 (136 Single family / 3,312 Multi family
- New Commercial (1,000 GSF): 3,705,302
- Housing Density: 9.04 dwelling units / acre
- Population Density: 16,983 residents / square mile

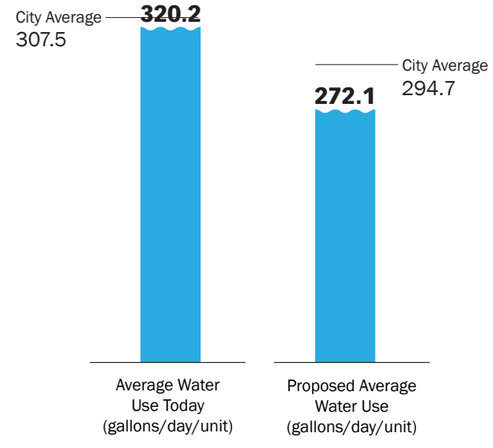
KEY LAND USE TOOLS

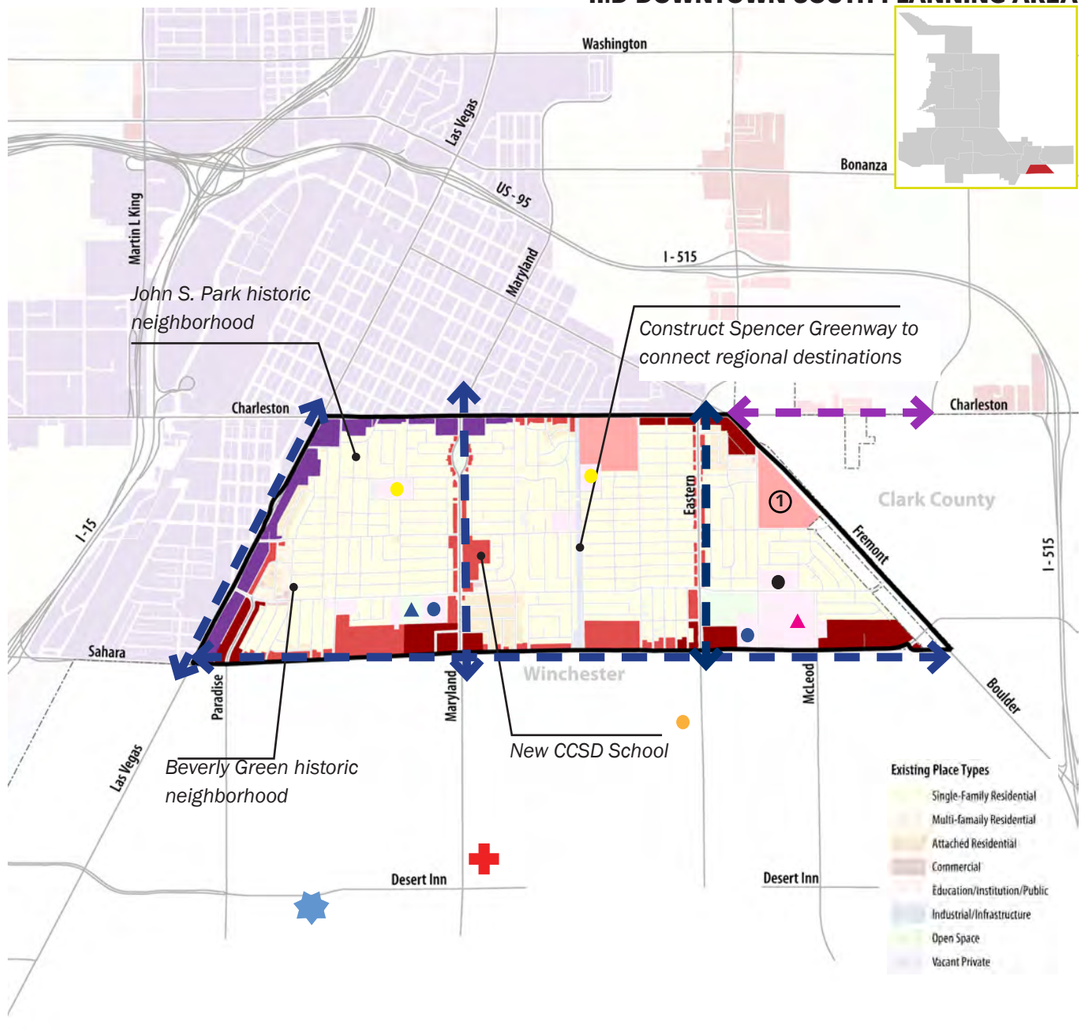
- Diverse Housing Options
- Infill housing
- Neighborhood Character
- Mixed-Use
- Transit-Oriented Development
- Placemaking through arts and culture
- Historic Preservation
- Adaptive reuse

Click each tool to read more.

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





DOWNTOWN SOUTH PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

① Key redevelopment site (former Castaways site)

Transportation improvement

Planned High Capacity Transit

Upgraded Bus Rapid Transit

COMMUNITY FACILITIES

LVMPD Substation

Hospital

CCSD School (elementary/middle/ high/alternative or special)

City or other public facility

SERVICES

Because Downtown South's close proximity to Downtown Las Vegas, major city and regional facilities located there serve this area, or may be located in Clark County; however, Downtown South does lack some facilities and services that would provide more complete offerings and public safety protections.

PARKS AND OPEN SPACE

Downtown South has several historic parks with mature trees and denser tree canopy, but more open space amenities are needed throughout the area. Several parks, including Leavitt Park and Baker Park are medium sized, but well-used neighborhood parks that have recently been upgraded. An opportunity for a unique civic space exists at Huntridge Circle Park, as well as constructing a multi-use trail along the Spencer Greenway.

WORKFORCE

Some CCSD schools, especially high schools, are overcrowded, but an opportunity exists to build a new specialized school at the former Bishop Gorman High School site along Maryland Pkwy to serve the community.

TRANSPORTATION

Downtown South is bordered by major transit corridors that will continue to transition from auto-oriented arterials toward transit-based complete streets. The Maryland Pkwy corridor will be among the first projects to be implemented within this area. A number of important bike-friendly corridors, including St Louis Ave and the proposed Spencer Greenway, provide multi-modal options. As an older part of town, aging infrastructure will need to be upgraded over time.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

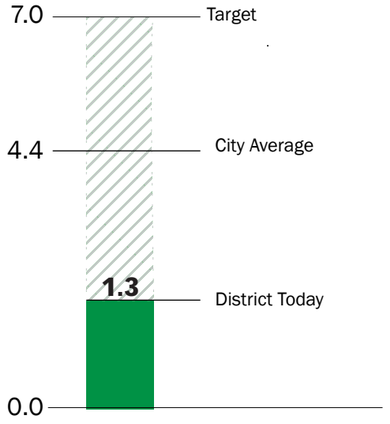
		City
Parks	46%	56%
Schools	60%	31%
Grocery and retail services	24%	19%

Percentage of total units within 2 mile drive:

Community Centers	100%	45%

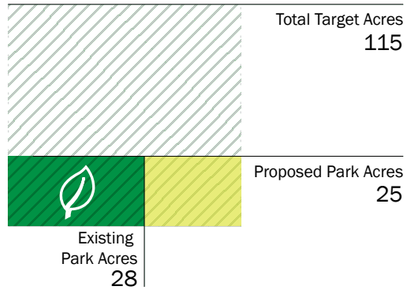
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



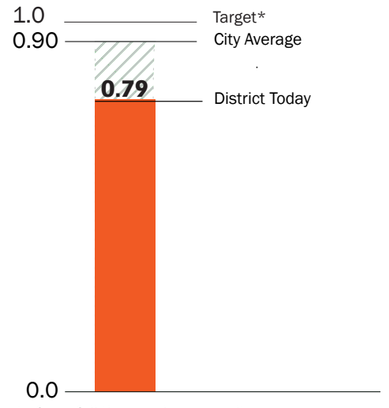
PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, Downtown South still falls short of the target.



JOB SUPPLY IN DISTRICT

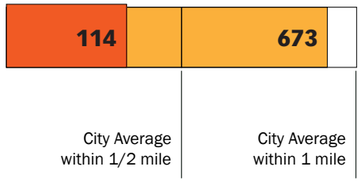
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

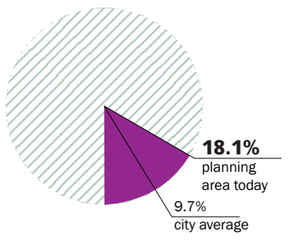
JOB PROXIMITY

Average job opportunity in proximity to the planning district



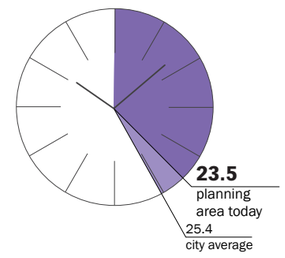
VEHICLE OWNERSHIP

Percentage of households without cars within the district



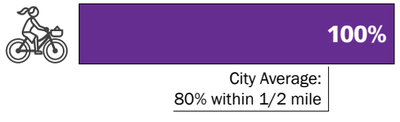
COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

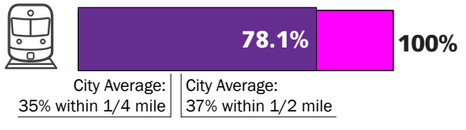


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.E CHARLESTON

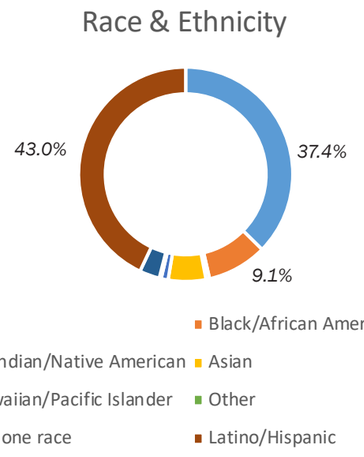


The Charleston Blvd corridor is the City's major east-west link and commercial corridor between Downtown Las Vegas and its western suburbs. Comprised of both the City's earliest inner-ring suburbs and new suburban neighborhoods, this area has high potential for transit-oriented development and new place types along multiple corridors with the introduction of high capacity transit over the next thirty years.

DEMOGRAPHICS

- Current population: 75,146 ▲
- Largest Age Group: 25 - 34 years (10,326) ▼
- Persons per household: 2.74 ▼
- Single Family Dwellings: 14,693 ▼
- Multi-Family Dwellings: 14,422 ▲
- Median Household income: $41,172 ▼
- Median rent / mortgage: $864 / $1,298 ▼ ▼
- Housing tenure: 59.7% rent / 40.3% own ▲ ▼
- Attained High School Diploma: 78.7% ▼
- Attained Bachelor's Degree: 16.8% ▼
- Unemployment rate: 9.0% ▲
- Housing Density: 5.65 dwelling units / acre ▲
- Population Density: 9,340 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Balance historic neighborhood preservation with development pressures along corridors
- Support transit-oriented development along corridors

SERVICES AND FACILITIES

- Explore additional city facilities in the southern area

PARKS AND OPEN SPACE

- More civic and green spaces are needed district-wide

WORKFORCE AND EDUCATION

- Address school overcrowding, expected to increase with the addition of high capacity transit

TRANSPORTATION

- Improve aging infrastructure and make complete streets improvements.
- Develop high capacity transit along Charleston and Decatur Boulevard corridors, as well as Rapid bus along Jones Boulevard and Sahara Ave corridors
- Construct improvements along I-15 corridor

Click each strategy to read more. Metrics for each topic are highlighted on the following pages.

SEE ALSO:
Charleston 2050 Special Area Plan







LAND USE AND DEVELOPMENT

TODAY

Comprised of traditional historic neighborhoods on its eastern end, Charleston must balance the preservation of its existing housing and businesses with new development. The transition from older neighborhoods to newer suburbs can will be carefully done to ensure housing remains affordable and gentrification is minimized. Areas with traditional shopping centers may have opportunities for future infill development.

IN THE FUTURE

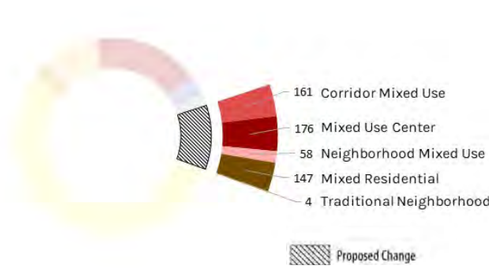
The Charleston area will focus on more intense, higher density transit-oriented development and developing new place and housing types at specific locations and strips along Charleston Blvd, Sahara Ave, and Decatur Blvd with the redevelopment of select opportunity sites.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Charleston area: 5,149.3 acres

2050 PROJECTIONS

- Population: 103,384
- Total New Housing Units: 10,306 (877 Single family / 9,429 Multi family
- New Commercial (1,000 GSF): 4,082,409
- Housing Density: 7.66 dwelling units / acre
- Population Density: 12,850 residents / square mile

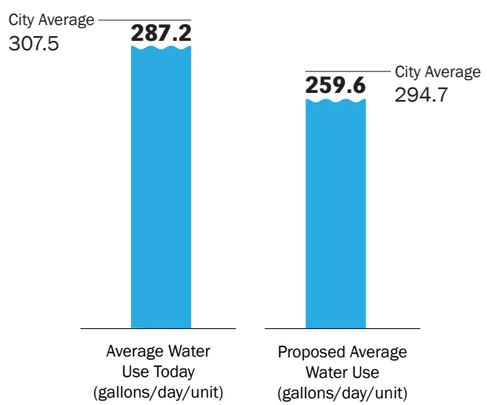
KEY LAND USE TOOLS

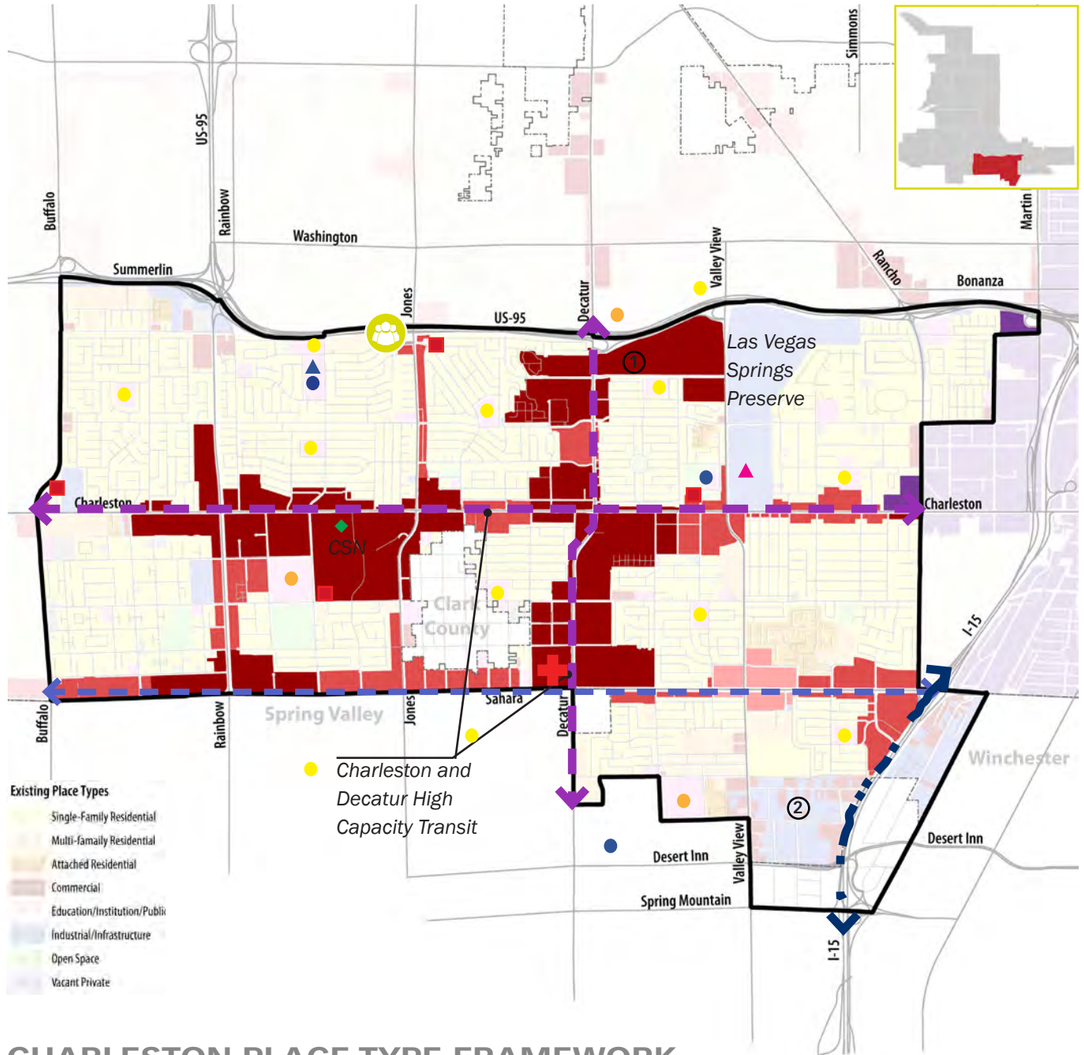
- Diverse Housing Options
- Neighborhood Character
- Mixed-Use
- Transit-Oriented Development
- Placemaking through arts and culture
- Adaptive reuse

Click each tool to read more.

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





CHARLESTON PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Meadows Mall Redevelopment Opportunity
2. Business Park Redevelopment Opportunity

Transportation improvement

Planned High Capacity Rapid Transit

Upgraded Bus Rapid Transit

COMMUNITY FACILITIES

CLV Fire Station

Hospital

CCSD School (elementary/middle/ high/alternative or special)

Library

City or other public facility

Mirabelli Community Center

SERVICES

The Charleston planning area has several major city and regional facilities, including Mirabelli Community Center, and the Las Vegas Valley Water District. It lacks city facilities in the southern area and has higher crime rates in the central and eastern portion of the district. With the addition of high capacity transit, already overcrowded school facilities will face increased pressure.

PARKS AND OPEN SPACE

The Charleston area's most notable open space asset is the Las Vegas Springs Preserve, a central park signifying the historical development of resilience of this Mojave Desert metropolis. Several large traditional parks have been constructed, including Rainbow Family Park and Firefighters Memorial Park. While other smaller neighborhood parks have been recently upgraded, more civic and green spaces are needed throughout the area.

WORKFORCE

Over time, blighting conditions have led to the establishment of expanded redevelopment areas and new economic development initiatives. Several large neighborhood casinos are located within the district. The large regional mall and shopping center currently serve as the major commercial anchor; however, the area is prime for future redevelopment. The College of Southern Nevada serves as a major institutional and employment anchor. Many CCSD schools are overcrowded and at least one new high school and middle school are needed.

TRANSPORTATION

The Charleston planning area is bordered on the east and north by I-15 and US-95 (Future I-11). Each of the corridors will continue to transition from auto-oriented arterials toward transit-based complete streets. Similarly, the area also contains important bicycle-friendly corridors, including the Downtown to Red Rock Trail along Alta Dr. However, as an older part of town, it also has aging infrastructure of all types and needs upgrades and complete street improvements in several neighborhoods.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

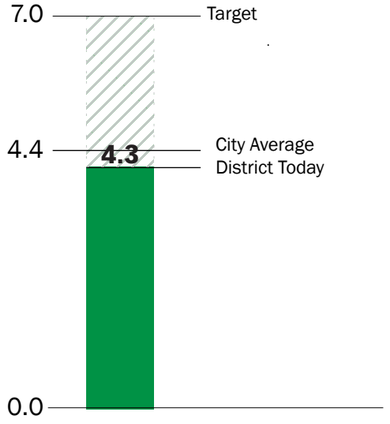
		City
Parks	20%	56%
Schools	36%	31%
Grocery and retail services	23%	19%

Percentage of total units within 2 mile drive:

Community Centers	51%	45%

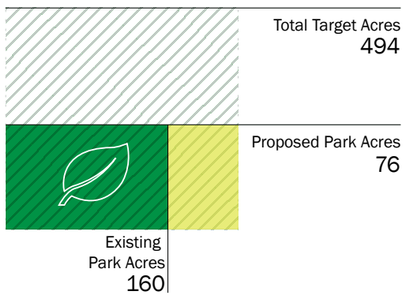
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



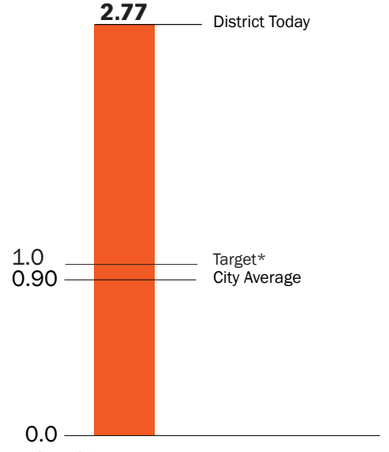
PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, Charleston still falls short of the target.



JOB SUPPLY IN DISTRICT

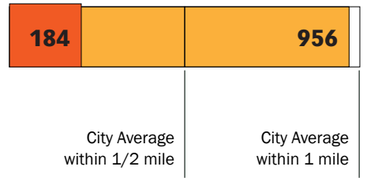
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

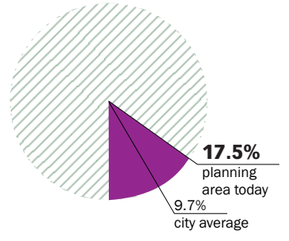
JOB PROXIMITY

Average job opportunity in proximity to the planning district



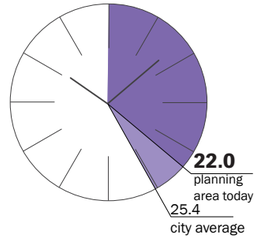
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

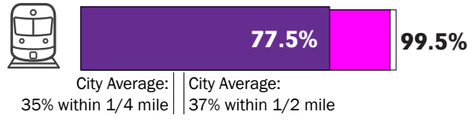


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.F TWIN LAKES

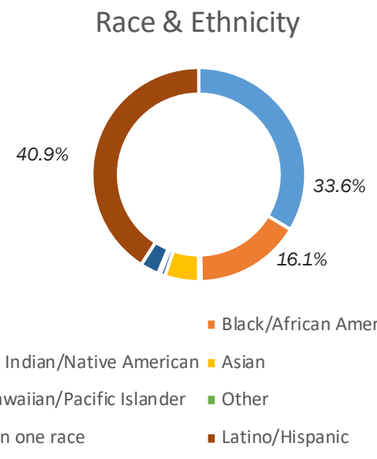


Twin Lakes contains a collection of inner-ring traditional suburban neighborhoods, including Golf Ridge, Charleston Heights, and Pittman, as well as some small and large traditional planned communities, like Desert Shores. So named for the springs of Lorenzi Park and waters at Desert Shores, the Las Vegas Tech Center serves as a regional employment center with medical offices and business park. The Decatur Blvd corridor will serve as a new spine for redevelopment and affordable housing choices.

DEMOGRAPHICS

- Current population: 105,220 ▲
- Largest Age Group: 25 - 34 years (16,254) ▼
- Persons per household: 2.93 ▲
- Single Family Dwellings: 19,932 ▲
- Multi-Family Dwellings: 17,343 ▲
- Median Household income: $46,152 ▼
- Median rent / mortgage: $957 / $1,241 ▼ ▼
- Housing tenure: 57.1% rent / 42.9% own ▲ ▼
- Attained High School Diploma: 80.8% ▼
- Attained Bachelor's Degree: 16.7% ▼
- Unemployment rate: 10.4% ▲
- Housing Density: 7.59 dwelling units / acre ▲
- Population Density: 13,712 residents / square mile: ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Balance historic neighborhood preservation with development pressures along corridors
- Add visual improvements throughout planning area

SERVICES AND FACILITIES

- Increase services, especially near county islands

PARKS AND OPEN SPACE

- Develop more accessible parks and open space

WORKFORCE AND EDUCATION

- Increase employment opportunities
- Improve school performance
- Build upon Tech Center as economic engine

TRANSPORTATION

- Improve walkability
- Improve aging infrastructure
- Street improvements to Rancho Dr
- Develop high capacity transit along Decatur Blvd and rapid bus along Jones Blvd and Rancho Dr

Click each strategy to read more. Metrics for each topic are highlighted on the following pages

SEE ALSO:
Desert Shores Planned Unit Development







LAND USE AND DEVELOPMENT

TODAY

The traditional neighborhoods of Twin Lakes include a range of mid-century housing, as well as a variety of multi-family housing types. Numerous apartment complexes and other multi-family housing types exist, although the quality varies. Several unincorporated county islands containing single-family residential and ranch estates present opportunities for annexation.

IN THE FUTURE

Redevelopment opportunities for transit-oriented development at older, vacant shopping centers exist along many of the major north-south arterial corridors including Rancho Drive, Decatur Blvd, Jones Blvd, and Rainbow Blvd.

2050 PROJECTIONS

- Population: 103,384
- Total New Housing Units: 8,506 (266 Single family / 8,241 Multi family
- New Commercial (1,000 GSF): 4,995,693
- Housing Density: 9.32 dwelling units / acre
- Population Density: 16,961 residents / square mile

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

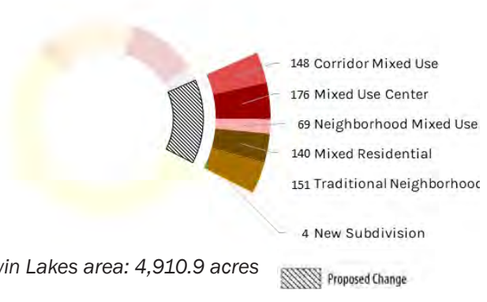
KEY LAND USE TOOLS

- Diverse Housing Options
- Neighborhood Character
- Mixed-Use
- Walkable Site Design
- Transit-Oriented Development
- Placemaking through arts and culture
- Adaptive reuse

Click each tool to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

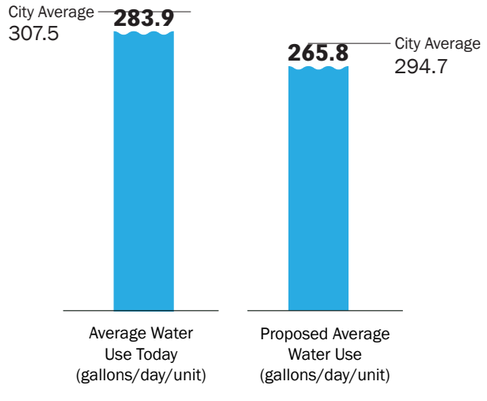
PROPOSED AREAS OF CHANGE (IN ACRES)

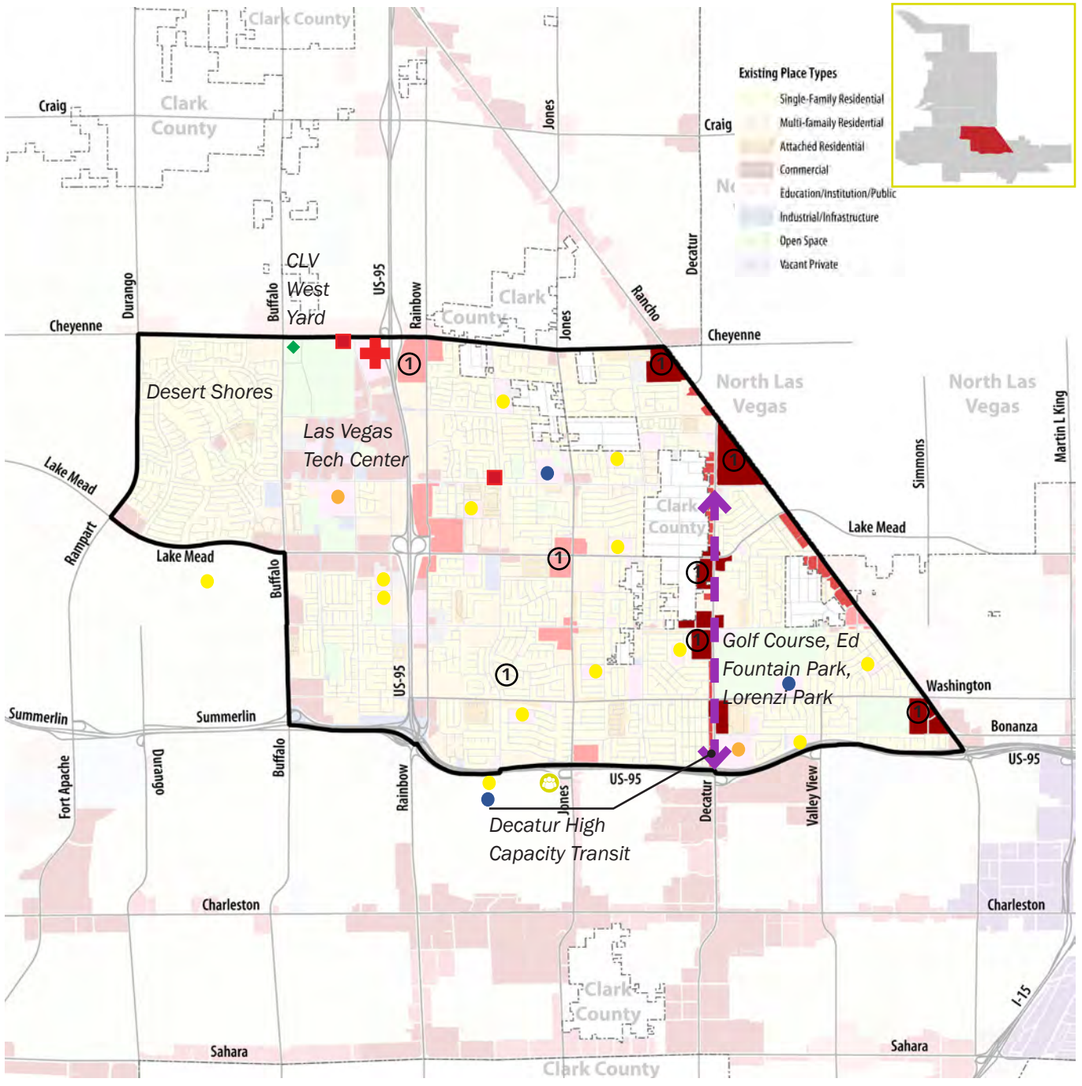


Twin Lakes area: 4,910.9 acres

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





TWIN LAKES PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

① Redevelopment Opportunities

Planned High Capacity Transit

COMMUNITY FACILITIES

- *CLV Fire Station*
- *Hospital*
- *CCSD School (elementary/middle/high/alternative or special)*
- *Library*
- *City or other public facility*
- *Mirabelli Community Center*

SERVICES

Twin Lakes has a number of city services, including the City's West Service Center; Mirabelli Community Center is also located in this area, but pockets of Twin Lakes are underserved, especially around the unincorporated county islands. The addition of a new community center would help connect residents with City services in an area that is underserved.

PARKS AND OPEN SPACE

Several major regional parks are in Twin Lakes including Lorenzi Park, Kellogg Zaher Park, Ed Fountain Park, and Doc Romeo Park; these are connected by the Lone Mountain and Bonanza Trails. Las Vegas Municipal Golf Course, the City's first golf course, can also be found within the area. While there are several smaller neighborhood parks, a few neigbhorhoods lack an accessible park or green space.

WORKFORCE

Twin Lakes includes a mix of business and economic development opportunities. Older arterial corridors contain strip retail and neighborhood shopping centers; the ones east and north of US-95 have higher rates of tenant vacancies. The Las Vegas Tech Center is a major planned business park containing the Mountain View Hospital. In newer suburban areas abutting Summerlin along the US-95 corridor, many shopping centers are stable and contain a wide range of national retail chains catering to an upscale market. There is a good distribution of public schools in Twin Lakes; however, the middle and high schools tend to suffer in academic performance. Western High School is located in Twin Lakes along with the College of Southern Nevada: Western Center.

TRANSPORTATION

Rancho Dr and US-95 (possible future I-11), as it transitions from east-west to north-south around the Rainbow Curve, make up the primary western, southern and eastern edges of the district. Twin Lakes will be served by several RTC's high capacity transit services; BRT and Rapid bus service will service most north-south arterial corridors. Infrastructure throughout the district varies; newer developed areas provide adequate capacity, while older areas will require new infrastructure investment.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

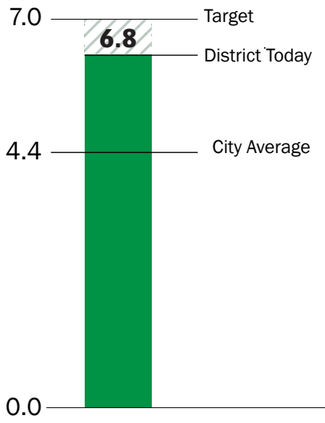
		City
Parks	44%	56%
Schools	33%	31%
Grocery and retail services	26%	19%

Percentage of total units within 2 mile drive:

Community Centers	40%	45%

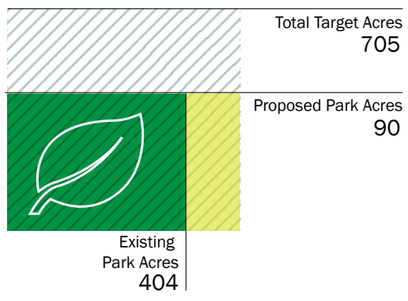
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



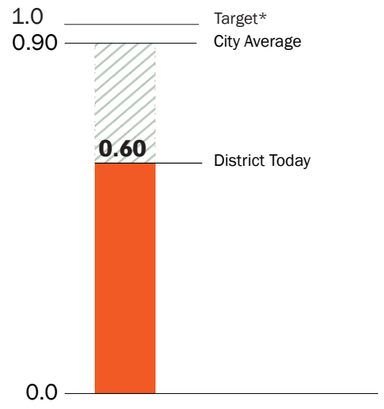
PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, Twin Lakes still falls short of the target.



JOB SUPPLY IN DISTRICT

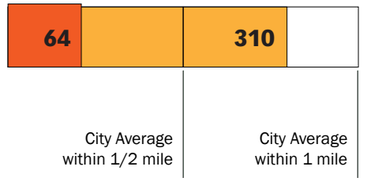
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

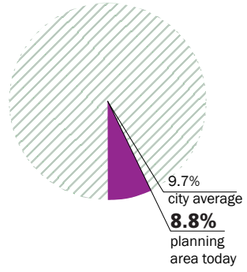
JOB PROXIMITY

Average job opportunity in proximity to the planning district



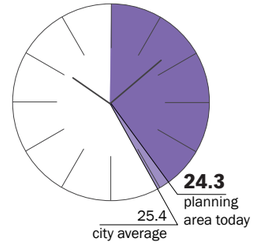
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

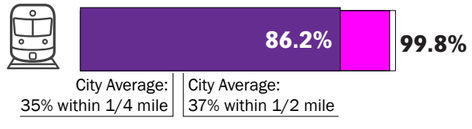


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.G ANGEL PARK

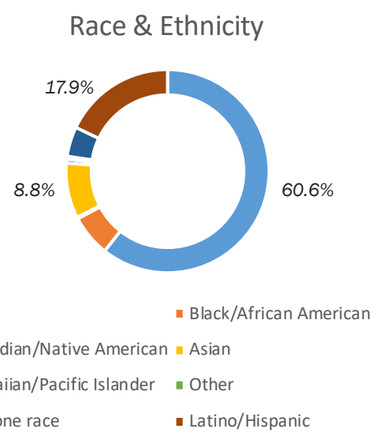


Located along the West Charleston Blvd corridor, the Angel Park neighborhoods serve as a transition from the older established areas to the east to the gateway of Summerlin development and Red Rock Canyon. With a mix of large lot homes, new residential and commercial subdivisions, and master planned communities, including Canyon Gate, The Lakes, Peccole Ranch, and Queensridge, the Angel Park area serves both existing residences with new development occuring to the west.

DEMOGRAPHICS

- Current population: 53,320 ▲
- Largest Age Group: 35 - 44 years (7,469) ▲
- Persons per household: 2.41 ▼
- Single Family Dwellings: 12,772 ▲
- Multi-Family Dwellings: 10,185 ▲
- Median Household income: $59,029 ▼
- Median rent / mortgage: $1,184 / $1,481 ▲ ▲
- Housing tenure: 48.2% rent / 51.8% own ▲ ▼
- Attained High School Diploma: 91.8% ▲
- Attained Bachelor's Degree: 30.9% ▲
- Unemployment rate: 6.2% ▼
- Housing Density: 6.85 dwelling units / acre ▲
- Population Density: 10,187 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Ensure transition of high quality mixed-use development that's compatible with established residential neighborhoods

SERVICES AND FACILITIES

- Add city facilities and services

PARKS AND OPEN SPACE

- Maintain and strengthen open space and connections between developments

WORKFORCE AND EDUCATION

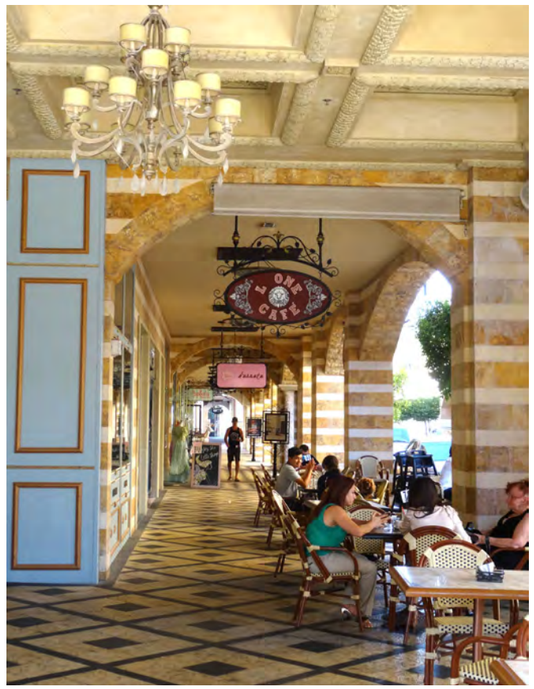
- Recruit employers and professional offices
- Address school overcrowding - consider a high school for the area

TRANSPORTATION

- Transition corridors from auto-oriented to complete streets
- Make improvements to Summerlin Pkwy

Click each strategy to read more. Metrics for each topic are highlighted on the following pages





LAND USE AND DEVELOPMENT

TODAY

Angel Park is characterized by significant open space amenities and master planned communities with an overall higher potential for transit-oriented development. There are several well-established shopping centers such as Boca Park, Tivoli Village, and Village Square along the major corridors. Existing large-lot estates and master planned communities, such as The Lakes, Queensridge, Canyon Gate, and Peccole Ranch are stable.

IN THE FUTURE

Along Charleston Blvd and Sahara Ave, the Angel Park district will focus corridor directed higher density transit-oriented development to support existing commercial nodes. Existing large-lot estates and master planned communities will remain.

2050 PROJECTIONS

- Population: 62,529
- Total New Housing Units: 3,821 (531 Single family / 3,290 Multi family
- New Commercial (1,000 GSF): 1,389,882
- Housing Density: 7.99 dwelling units / acre
- Population Density: 11,946 residents / square mile

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

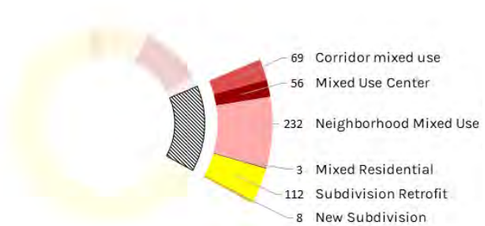
KEY LAND USE TOOLS

- Neighborhood Character
- Mixed-Use
- Walkable Site Design
- Placemaking through arts and culture

Click each tool to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)

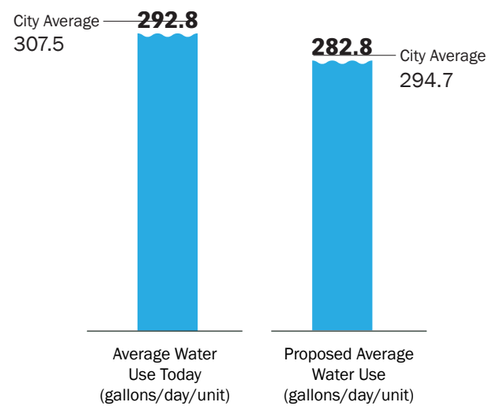


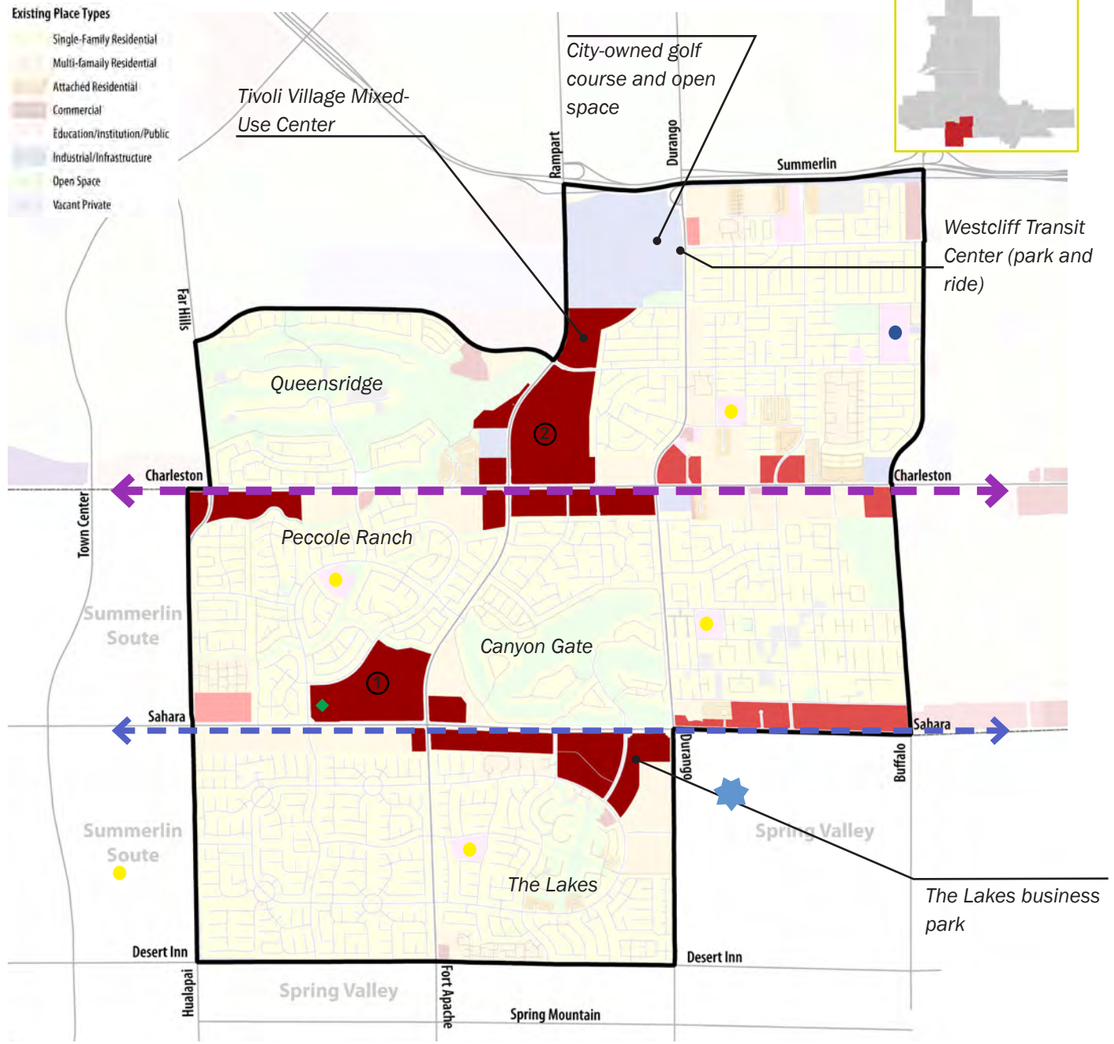
Angel Park area: 3,349.0 acres

Proposed Change

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





ANGEL PARK PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Village Square Mixed-Use Center Infill Potential
2. Boca Park Mixed-Use Center Infill Potential

Planned High Capacity Transit

Upgraded Bus Rapid Transit

COMMUNITY FACILITIES

LVMPD Substation

CCSD School (elementary/middle/ high/alternative or special)

Library

City or other public facility

SERVICES

Aside from parks and open spaces and the West Sahara Library branch, Angel Park generally lacks major city and regional facilities. Because the built environment transitions from urban to suburban, there is a need for a greater balance and presence of city services and community resources.

PARKS AND OPEN SPACE

Angel Park's most notable open spaces include the park and golf course for which the district is named. Other parks and open spaces, including those within the master planned communities, are well connected by trails and greenbelts. The area is served by several large parks, including All American Park and the Badlands development, a defunct golf course, provides an opportunity for new open space.

WORKFORCE

The shopping centers within Angel Park are generally auto-oriented and contain large general commercial uses. Long term, opportunities exist to improve their character and make them more walkable. One major employer (Sutherland Global) anchors Angel Park. No major high schools or higher education sites exist within Angel Park; to alleviate overcrowding additional space may be required.

TRANSPORTATION

Angel Park is bordered on the north by Summerlin Parkway and is bisected by Charleston Blvd and Sahara Ave. Each corridors will continue to transition from suburban auto-oriented arterials toward transit-based complete streets. Express transit service from Downtown Las Vegas and the Strip serves Angel Park and Summerlin. Angel Park contains the transition point of bicycle-friendly corridors, including the Bonanza Trail, Angel Park Trail, Summerlin Pkwy Trail, and Downtown to Red Rock Trail along Alta Dr. Because of the relatively new infrastructure of all types, upgrades may eventually be needed long-term.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

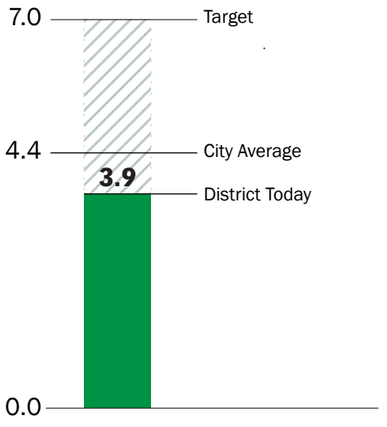
		City
Parks	69%	56%
Schools	23%	31%
Grocery and retail services	12%	19%

Percentage of total units within 2 mile drive:

Community Centers	5%	45%

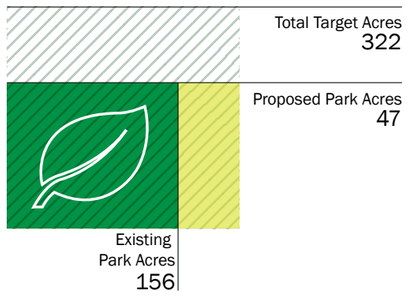
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



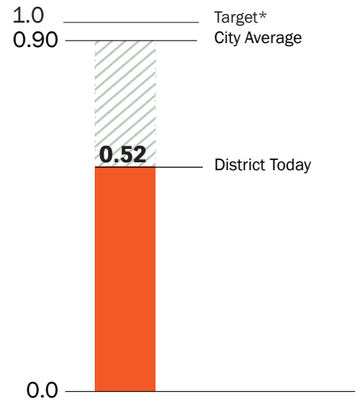
PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, Angel Park still falls short of the target.



JOB SUPPLY IN DISTRICT

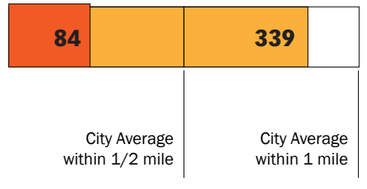
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

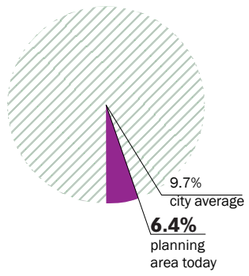
JOB PROXIMITY

Average job opportunity in proximity to the planning district



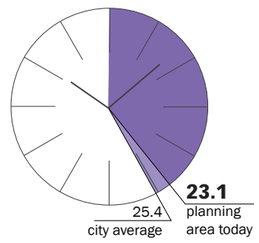
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

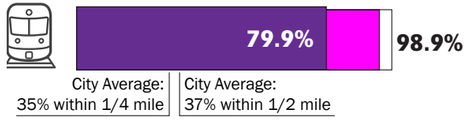


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.H SUMMERLIN NORTH

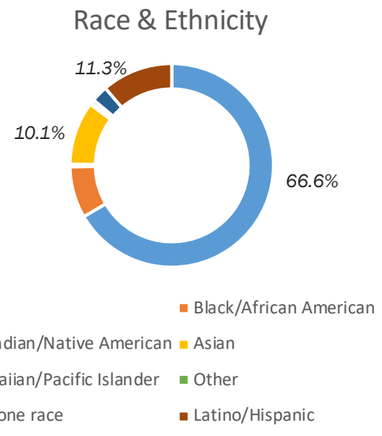


Originally intended for aerospace development, the development of the 25,000-acre master planned community of Summerlin began in the 1990s through a Planned Community development agreement. The first developments began in Summerlin North and included an age-restricted Sun City Summerlin. Today, Summerlin Corporation retains control of the area's open space and residential land through a master community association, divided into individual villages with additional HOAs. This northern portion of the community is now fully developed and mature with numerous neighborhood and village parks, more than 150 miles of trails, nine golf courses, shopping centers, medical and cultural facilities, Red Rock Resort, the Suncoast, and JW Marriott hotels-casinos, business parks and more than 30 public and private schools.

DEMOGRAPHICS

- Current population: 60,748 ▲
- Largest Age Group: 65 - 74 years (9,276) ▲
- Persons per household: 2.27 ▼
- Single Family Dwellings: 18,873 ▲
- Multi-Family Dwellings: 8,737 ▲
- Median Household income: $68,329 ▲
- Median rent / mortgage: $1,360 / $1,558 ▲ ▲
- Housing tenure: 31.8% rent / 68.2% own ▼ ▲
- Attained High School Diploma: 94.2% ▲
- Attained Bachelor's Degree: 40.3% ▲
- Unemployment rate: 8.6% ▼
- Housing Density: 5.79 dwelling units / acre ▲
- Population Density: 8,148 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Consider mixed-use infill long-term

SERVICES AND FACILITIES

- Add city facilities and services

PARKS AND OPEN SPACE

- Regional trail connections

WORKFORCE AND EDUCATION

- Alleviate school overcrowding

TRANSPORTATION

- As the area ages, improve infrastructure
- Construct high capacity transit along Charleston Blvd, linking to Summerlin Transit Center
- Complete Summerlin Pkwy improvements, Summerlin Pkwy Trail, and connections

Click each strategy to read more. Metrics for each topic are highlighted on the following pages

SEE ALSO:
Summerlin North Development Agreement







LAND USE AND DEVELOPMENT

TODAY

Summerlin North is characterized by a range of stable, upscale single-family detached and multi-family developments, many of which are auto-oriented, gated, and exclusive.

IN THE FUTURE

Much of the land within Summerlin North will remain in place as-is pursuant to the development agreement; however, there may be opportunities to replace aging development with higher intensity uses.

2050 PROJECTIONS

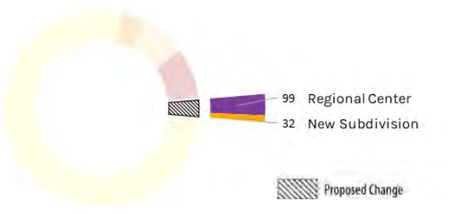
- Population: 63,903
- Total New Housing Units: 1,390 (0 Single family / 1,390 Multi family
- New Commercial (1,000 GSF): 600,203
- Housing Density: 6.08 dwelling units / acre
- Population Density: 8,572 residents / square mile

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



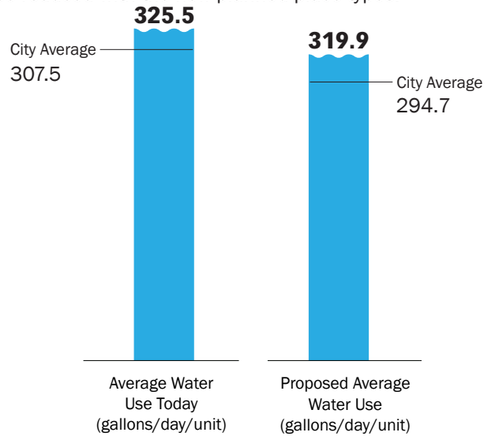
Summerlin North area: 4,771.3 acres

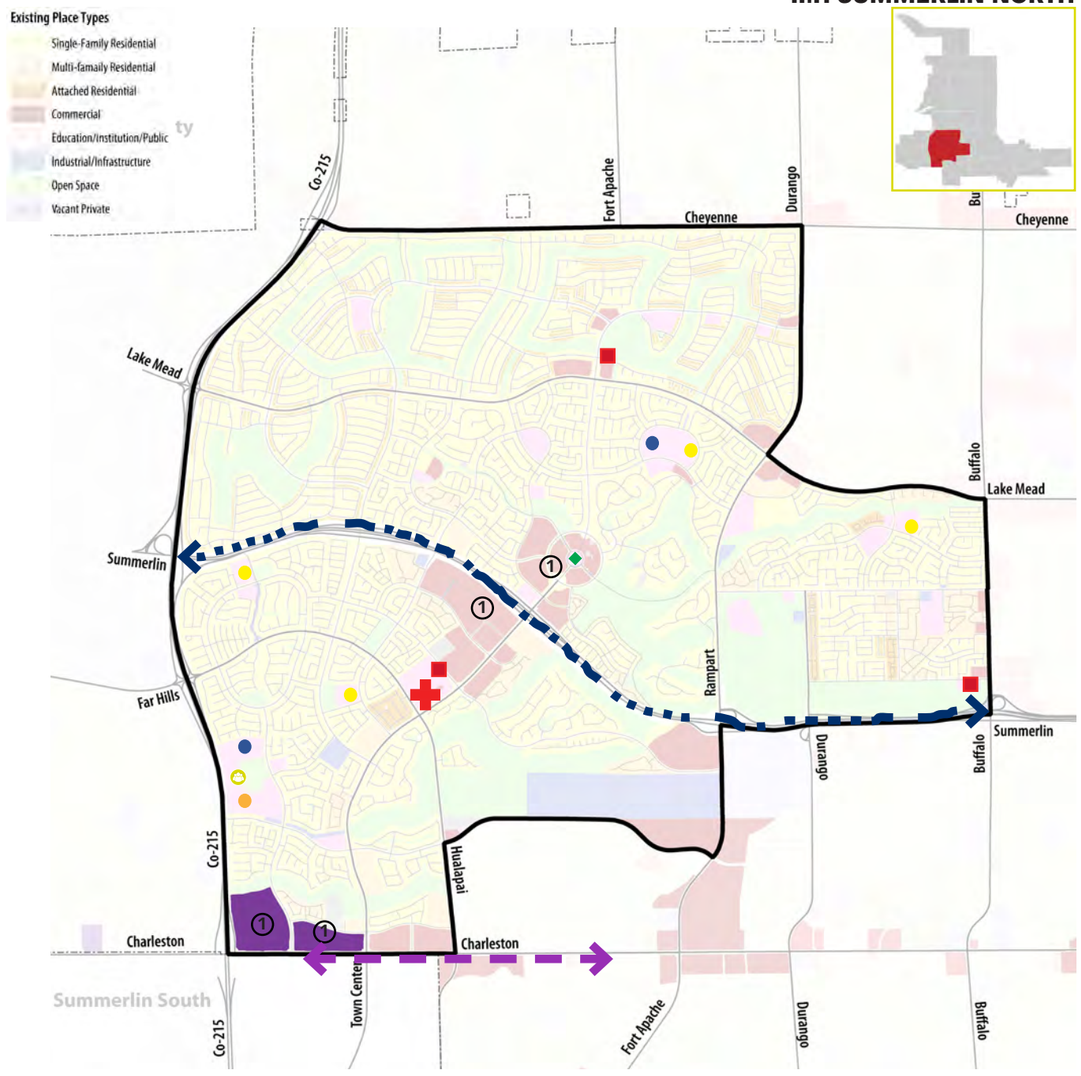
KEY IMPLEMENTATION STRATEGIES & TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





SUMMERLIN NORTH PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

① Should the opportunity for infill be desired in Summerlin North, these areas are appropriate

Transportation improvement

Planned High Capacity Rapid Transit

COMMUNITY FACILITIES

- *CLV Fire Station*
- *Hospital*
- *CCSD School (elementary/middle/ high/alternative or special)*
- *Library*
- *City or other public facility*
- *Veteran's Memorial Community Center*

SERVICES

Many City of Las Vegas services are supplemental in this area to those amenities provided through the Summerlin Association; Veteran's-Memorial Community Center anchors a portion of Summerlin North, and many medical services are easily accessed at Summerlin Hospital. Police and fire protection in this area are adequate.

PARKS AND OPEN SPACE

The area contains abundant parks, open spaces, and well-preserved washes and arroyos. Several public and private golf courses and county clubs, including Angel Park, TPC Summerlin, TPC Canyons, Palm Valley, Highland Falls, and Eagle Crest courses wind through Summerlin North and are well utilized amenities of the area.

WORKFORCE

Summerlin North is served by upscale retail and business establishments, primarily along the Charleston Blvd corridor near Summerlin Centre and along Town Center. Major office and professional service-oriented jobs are in business parks near the hospital; two major casino-resorts mark the entryway to Summerlin. Many high-quality public and private schools are found throughout Summerlin North.

TRANSPORTATION

Summerlin North is bisected by Summerlin Parkway and is bounded on the west by the 215 Beltway. Generally, the infrastructure is newer and well-maintained, but as the area continues to age, infrastructure should be programmed for upgrades and/or replacement. Summerlin North also has an extensive trail, bicycle, and shared-use path system. Improvements to Summerlin Parkway will help improve traffic flow and safety, especially as neighborhoods are developed in Summerlin West.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

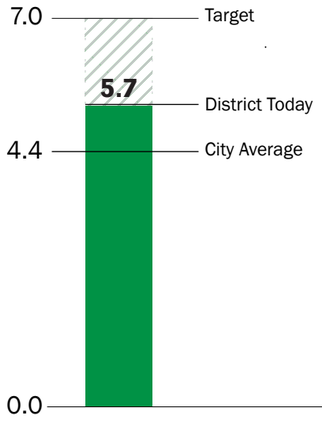
		City
Parks	73%	56%
Schools	17%	31%
Grocery and retail services	10%	19%

Percentage of total units within 2 mile drive:

Community Centers	63%	45%

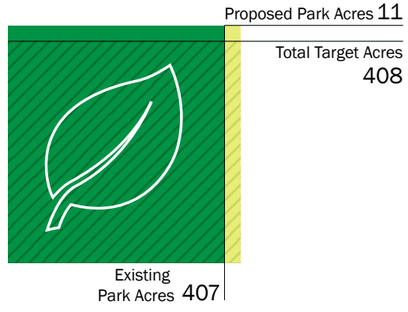
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



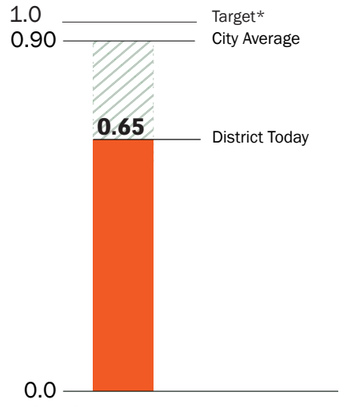
PARK ACRES NEEDED TO ACHIEVE TARGET

Summerlin North meets the target acreage at full build out.



JOB SUPPLY IN DISTRICT

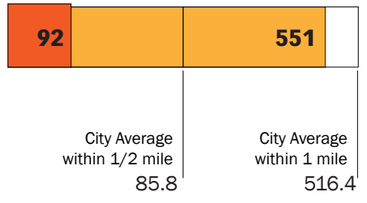
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

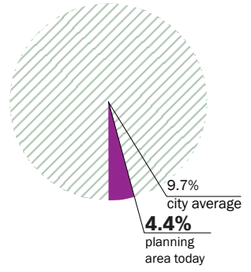
JOB PROXIMITY

Average job opportunity in proximity to the planning district



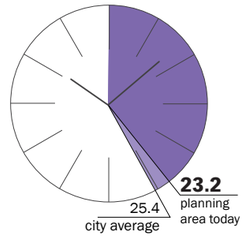
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

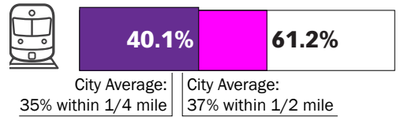


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.I SUMMERLIN WEST



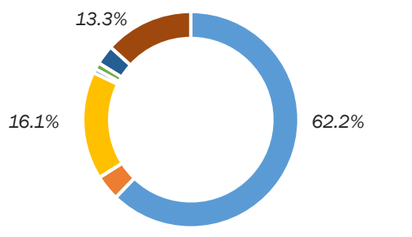
As a part of the Summerlin master planned community, Summerlin West is the gateway to Red Rock Canyon and will be home to approximately one third of Summerlin's 250,000 residents upon full build-out. As a part of the master development agreement, development will gradually progress west as more neighborhoods and villages are built out. The addition of a new neighborhood mixed use village center and new resorts will bring new commercial activities that are currently lacking in the area.

DEMOGRAPHICS

- Current population: 18,748 ▼
- Largest Age Group: 35 - 44 years (3,587) ▲
- Persons per household: 2.88 ▲
- Single Family Dwellings: 6,167 ▼
- Multi-Family Dwellings: 538 ▼
- Median Household income: $112,605 ▲
- Median rent / mortgage: $1,754 / $2,295 ▲ ▲
- Housing tenure: 33.6% rent / 66.4% own ▼ ▲
- Attained High School Diploma: 97.3% ▲
- Attained Bachelor's Degree: 55.8% ▲
- Unemployment rate: 5.7% ▼
- Housing Density: 0.83 dwelling units / acre ▼
- Population Density: 1,490 residents / square mile ▼

▲ ▼ *Above / Below citywide average*

Race & Ethnicity



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Creation of new mixed-use center
- Affordable housing options

SERVICES AND FACILITIES

- Continue expansion of facilities as development occurs.

PARKS AND OPEN SPACE

- Preserve natural features

WORKFORCE AND EDUCATION

- Support new schools as development occurs.

TRANSPORTATION

- Ensure non-motorized connections between neighborhoods, including trail bridges where appropriate.
- Complete Summerlin Pkwy interchange

Click each strategy to read more. Metrics for each topic are highlighted on the following pages

SEE ALSO:
Summerlin West Development Agreement







LAND USE AND DEVELOPMENT

TODAY

Summerlin West is mostly undeveloped at present, with only the Vistas, Paseos, Reverance, and Crossbridge villages under development.

IN THE FUTURE

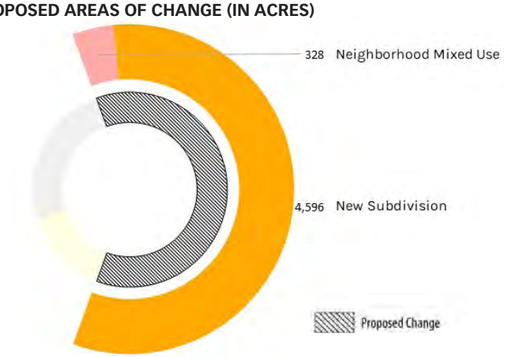
Summerlin West will continue to develop a range of upscale auto-oriented, gated, and exclusive single-family and multi-family developments. At build out, Summerlin West will have approximately six more villages with 20,250 homes, including a new mixed-use town and employment center near Summerlin Pkwy and I-215. As new subdivisions are built, nearly all the land west of the beltway will remain in place as-is pursuant to the Summerlin West Development Agreement.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Summerlin West area: 8,050.5 acres

2050 PROJECTIONS

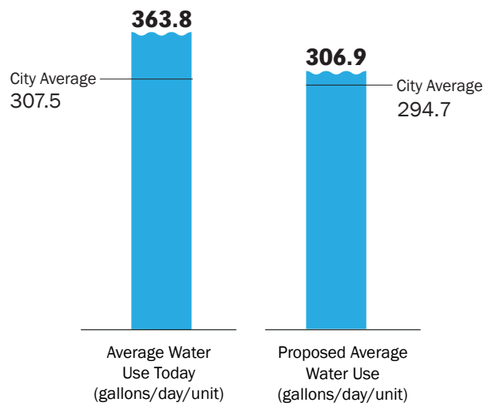
- Population: 74,788
- Total New Housing Units: 20,231 (13,255 Single family / 6,976 Multi family
- New Commercial (1,000 GSF): 5,317,228
- Housing Density: 3.35 dwelling units / acre
- Population Density: 5,945 residents / square mile

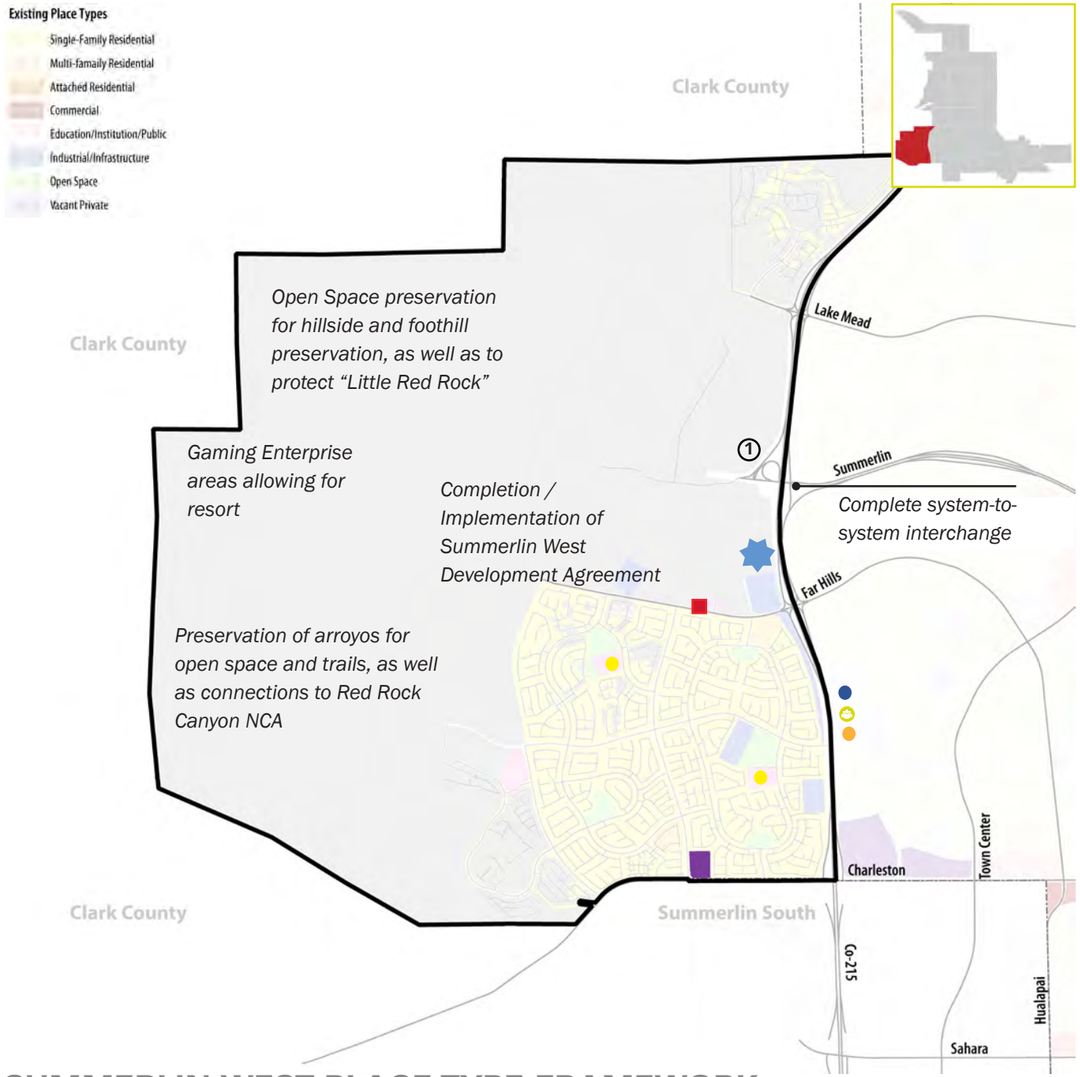
KEY IMPLEMENTATION STRATEGIES & TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





SUMMERLIN WEST PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Future higher density mixed-use center

COMMUNITY FACILITIES

- *CLV Fire Station*
- *LVMPD Substation*
- *CCSD School (elementary/middle/high/alternative or special)*
- *Library*
- *City or other public facility*
- *Veteran's Memorial Community Center*

SERVICES

As with Summerlin North, while many City of Las Vegas services are likely supplemental in this area to those amenities provided through the Summerlin Association; Veteran's-Memorial Community Center is close, and many medical services are easily accessed at Summerlin Hospital. A new LVMPD substation will be complete in 2020 and fire protection in this is adequate, with two new stations to be added as development progresses.

PARKS AND OPEN SPACE

Red Rock Canyon's natural beauty and proximity to Summerlin West provide excellent opportunities for additional open spaces. The district contains abundant open spaces, and well-preserved washes and arroyos; adjacent foothills and Little Red Rock will continue to be protected. While up to 90 holes of golf are permitted, such courses may only be developed if conditions allow for their construction.

WORKFORCE

Currently, Summerlin West has only one area with limited neighborhood commercial at Summerlin Centre and along Town Center. Future plans include a new village and employment center and up to 5.85 million square feet of commercial, along with office and professional service uses, as well as a possible resort area with up to two resort casinos adjacent to Red Rock Canyon. Several new public and private schools have recently been constructed with more to be built over time as demand warrants and to avoid overcrowding at current elementary schools, Rogich MS, and Palo Verde HS.

TRANSPORTATION

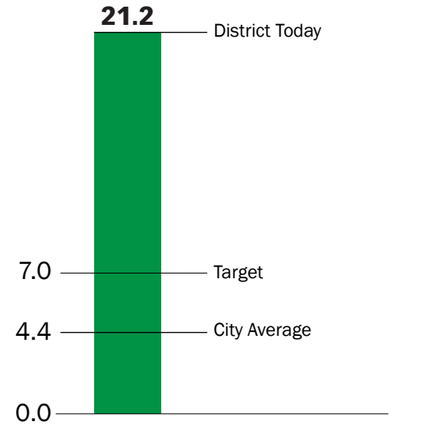
Summerlin West is bounded to the east by the 215 Beltway. Much of the roads and infrastructure will be new. Summerlin West is adding to its extensive trail, bicycle, and shared-use path system with several opportunities for linear parks and trails along natural arroyos, as well as along the regional Beltway Trail. No transit service is available, but opportunities exist for micro transit and several transit centers with direct connections for express service to Downtown Las Vegas, the Strip, and the airport.

PROXIMITY OF DWELLING UNITS TO SERVICES

		Percentage of total units within 1/2 mile walk:	*City*
	Parks	95%	56%
	Schools	18%	31%
	Grocery and retail services	4%	19%
Percentage of total units within 2 mile drive:			
	Community Centers	47%	45%

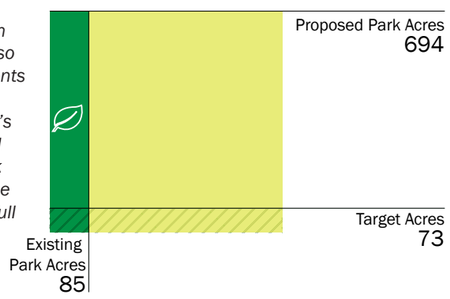
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



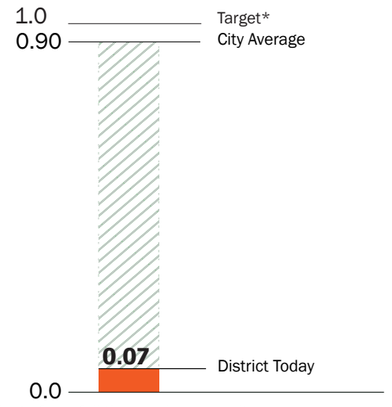
PARK ACRES NEEDED TO ACHIEVE TARGET

Because Summerlin West has so few residents today, it's meeting it's target and is on track to meet the target at full buildout.



JOB SUPPLY IN DISTRICT

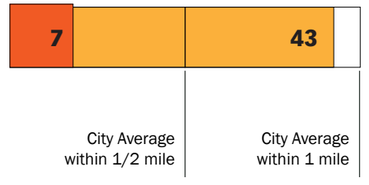
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

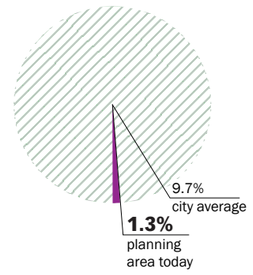
JOB PROXIMITY

Average job opportunity in proximity to the planning district



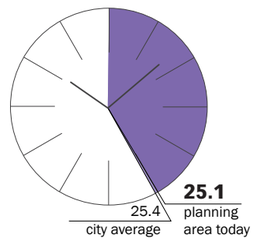
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

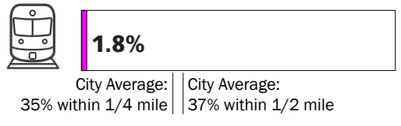


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.J LONE MOUNTAIN

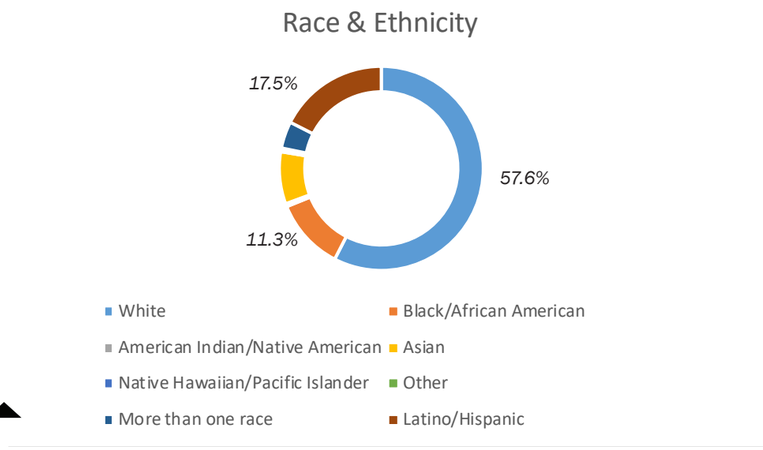


Lone Mountain, so named for the isolated mountain standing apart from the La Madre Mountains at the districts western edge, represents a transitional area between established and new suburban neighborhoods to lower-density areas. Due to its lower densities and array of neighborhood types, most of Lone Mountain has potential for subdivision retrofits and preservation of ranch-style neighborhoods.

DEMOGRAPHICS

- Current population: 56,848 ▲
- Largest Age Group: 25 - 34 years (7,071) ▲
- Persons per household: 2.86 ▲
- Single Family Dwellings: 15,924 ▲
- Multi-Family Dwellings: 4,559 ▼
- Median Household income: $68,989 ▲
- Median rent / mortgage: $1,264 / $1,465 ▲ ▼
- Housing tenure: 35.7% rent / 64.3% own ▼ ▲
- Attained High School Diploma: 92.7% ▲
- Attained Bachelor's Degree: 29.5% ▲
- Unemployment rate: 6.4% ▼
- Housing Density: 6.01 dwelling units / acre ▲
- Population Density: 10,682 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- New neighborhoods west of the beltway should consider traditional neighborhood design for highest efficiency of services
- Mixed-use opportunities along Cheyenne

SERVICES AND FACILITIES

- Consider fire station in western sector

PARKS AND OPEN SPACE

- Improve open space connections

WORKFORCE AND EDUCATION

- Ensure jobs-housing balance

TRANSPORTATION

- Reduce barriers to walkability
- Look for opportunities to improve connectivity

Click each strategy to read more. Metrics for each topic are highlighted on the following pages





SEE ALSO:
Cliff Shadows Special Area Plan

LAND USE AND DEVELOPMENT

TODAY

Lone Mountain has an established low-density suburban character. The Lone Mountain, Lone Mountain West, and Cliffs Edge master planned communities have diverse but separated neighborhoods.

IN THE FUTURE

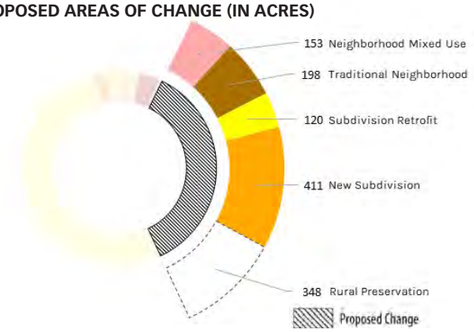
Increased density will take the form of several neighborhood mixed-use centers along the Cheyenne corridor and near freeway interchanges. The areas around Mountain View Hospital north of the Las Vegas Technology Center and at Craig Rd-US-95 (future I-11) have potential to further develop as a transit-oriented development. Some areas of unincorporated Clark County may be annexed into the City. New neighborhoods may be developed in undeveloped areas within the district, as well as west of the 215 Beltway.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Lone Mountain area: 3,406.1 acres

2050 PROJECTIONS

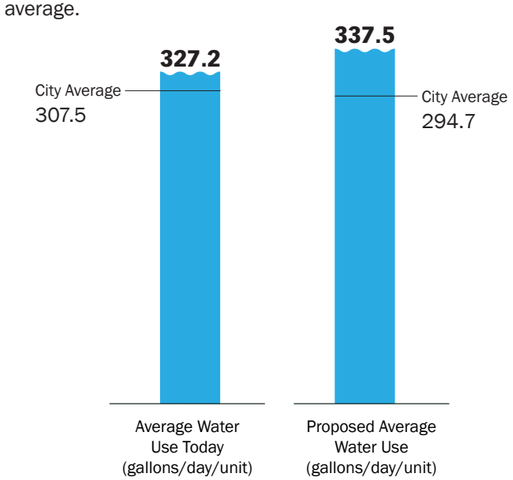
- Population: 71,136
- Total New Housing Units: 4,996 (4,851 Single family / 6,067 Multi family
- New Commercial (1,000 GSF): 832,619
- Housing Density: 7.48 dwelling units / acre
- Population Density: 13,367 residents / square mile

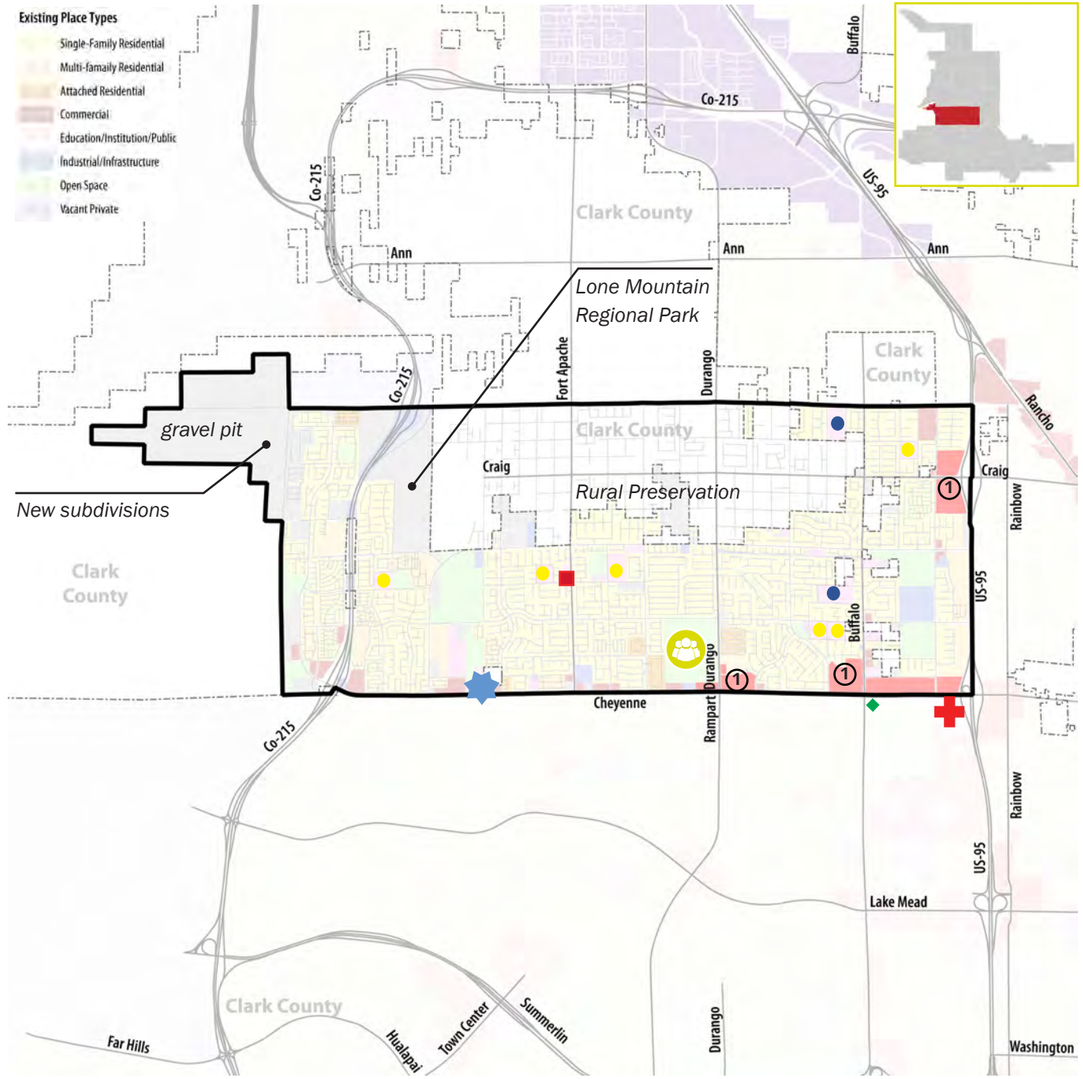
KEY IMPLEMENTATION STRATEGIES & TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture

WATER USAGE

The average water consumption of residents in the planning area will increase with projected new subdivisions. If the area develops with denser, more traditional neighborhood design, that will help lower the average.





LONE MOUNTAIN PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

① Mixed-use centers

COMMUNITY FACILITIES

- *CLV Fire Station*
- *LVMPD Substation*
- *Hospital*
- *CCSD School (elementary/middle/high/alternative or special)*
- *City or other public facility*
- *Durango Hills Community Center and golf course*

SERVICES

Lone Mountain has several major city and regional public community facilities, including Durango Hills Community Center and Golf Course. However, it lacks fire stations in the western quarter of the district and near unincorporated areas. Lone Mountain is home to the LVMPD's Northwestern Area Command and training center and has low crime rates.

PARKS AND OPEN SPACE

Lone Mountain has several large regional open spaces and parks, including Lone Mountain Regional Park, Majestic Park, Durango Hills Park and Community Center and parks and sports fields built within detention basins near the eastern edge of the district. The area would benefit from smaller neighborhood park along the Cheyenne corridor. Existing trails and bike lanes, including the Lone Mountain Trail, Beltway Trail, and the Alexander Rd corridor provide connections to other areas. The adjacent mountains and foothills provide additional opportunities for new open spaces, but require increased connectivity between urban trails and natural areas.

WORKFORCE

Employment areas are congregated along Cheyenne Avenue adjacent to the residential neighborhoods, and generally take the form of professional offices, services, and general retail located in strip malls and office parks. The closest major employment center is the Las Vegas Tech Center in Twin Lakes. A general increase in jobs and services will improve the jobs-housing balance. CCSD schools are interspersed throughout Lone Mountain. The area would benefit from a new high school and middle school on the western edge of the district.

TRANSPORTATION

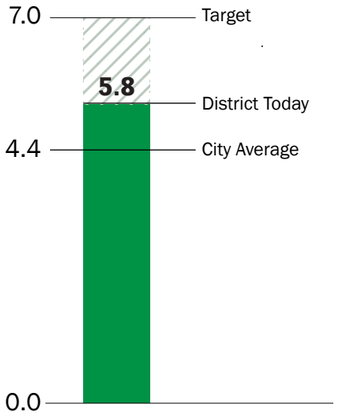
Cheyenne Avenue and Lone Mountain Rd define the edges of the Lone Mountain district and serve as primary east-west corridors. Lone Mountain is disconnected from Summerlin North, and that lack of any form of connection has created a hard edge spanning 2.5 miles. Except for the area serving Mountain View Hospital, Lone Mountain's low-density limits fixed-route transit; however, this area may be a candidate for both fixed-route express transit and microtransit circulators. Lone Mountain's existing infrastructure of all types is fairly adequate, but system capacity and capital improvements must be considered in planning future development.

PROXIMITY OF DWELLING UNITS TO SERVICES

		City
Percentage of total units within 1/2 mile walk:		
Parks	77%	56%
Schools	21%	31%
Grocery and retail services	13%	19%
Percentage of total units within 2 mile drive:		
Community Centers	52%	45%

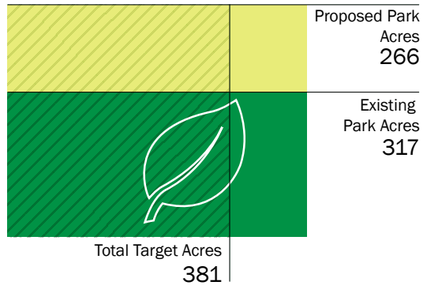
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



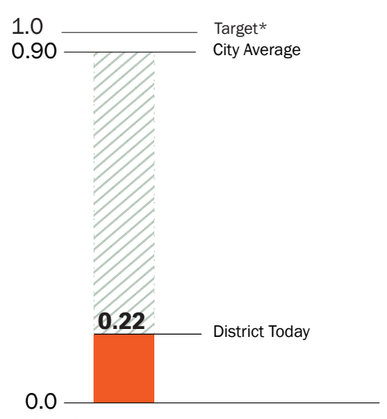
PARK ACRES NEEDED TO ACHIEVE TARGET

Should Lone Mountain develop as planned, it will exceed the target park acres.



JOB SUPPLY IN DISTRICT

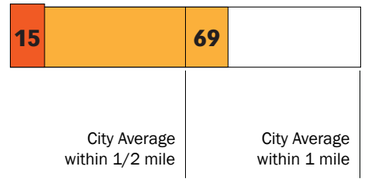
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

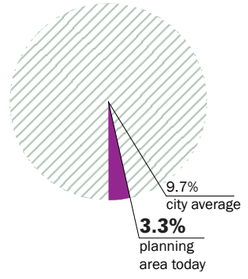
JOB PROXIMITY

Average job opportunity in proximity to the planning district



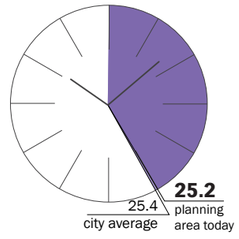
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

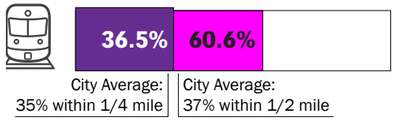


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.K RANCHO

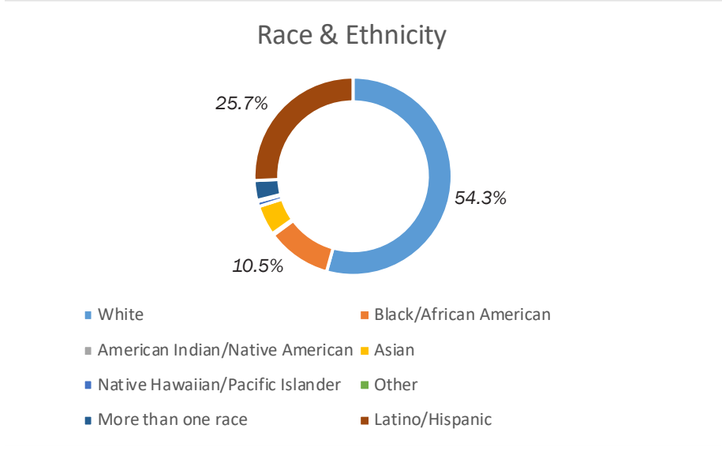


The suburbs and neighborhoods along the Rancho Dr corridor transition from older inner-ring suburbs to new subdivisions and “ranchos” moving northwest toward Centennial Hills. The area currently lacks cohesion, largely because of the lack of major city and community services. However, with a reimagination of Rancho Dr, and the addition of high capacity transit routes along it, Decatur Blvd, and Craig Rd, the area can develop a new identity that balances transit-oriented mixed-use and existing developments.

DEMOGRAPHICS

- Current population: 44,362 ▼
- Largest Age Group: 45 - 54 years (6,469) ▲
- Persons per household: 2.85 ▲
- Single Family Dwellings: 12,868 ▲
- Multi-Family Dwellings: 3,235 ▼
- Median Household income: $63,766 ▲
- Median rent / mortgage: $1,183 / $1,374 ▲ ▼
- Housing tenure: 31.1% rent / 68.9% own ▼ ▲
- Attained High School Diploma: 88.9% ▲
- Attained Bachelor’s Degree: 20.2% ▼
- Unemployment rate: 9.4% ▲
- Housing Density: 4.63 dwelling units / acre ▼
- Population Density: 8,155 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Balance rural preservation with increased services and access to transportation options

SERVICES AND FACILITIES

- Consider locating additional facilities in this area

PARKS AND OPEN SPACE

- Develop more accessible parks and open space

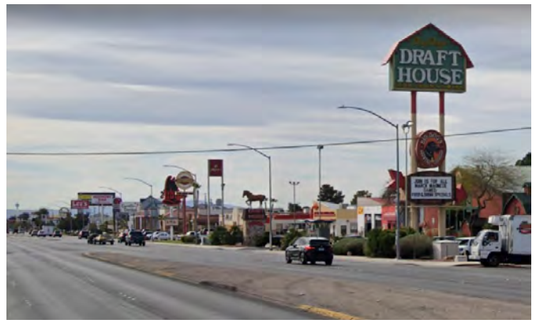
WORKFORCE AND EDUCATION

- Redevelop strip centers with more diverse employment opportunities
- Consider middle and high schools in this area to alleviate overcrowding elsewhere

TRANSPORTATION

- Emphasize complete streets to support transit
- Upgrade infrastructure, particularly in annexed areas
- Develop high capacity transit along Decatur Blvd and Craig Rd corridors, as well as rapid bus along Rancho Dr and North Rainbow Blvd

Click each strategy to read more. Metrics for each topic are highlighted on the following pages







LAND USE AND DEVELOPMENT

TODAY

While this district is predominantly residential in character, several major commercial corridors extend north-south or east-west, providing a major node along Rancho Dr. A variety of rural preservation areas are intermixed throughout the area.

IN THE FUTURE

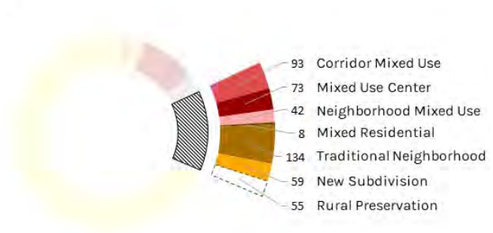
Along Rancho Dr, the Rancho area will see directed medium- to higher-density, suburban-oriented transit-oriented development to support existing well-established, yet older, shopping centers at key nodes that have potential to become neighborhood mixed-use centers. Existing large-lot "rancho" estates and older master planned communities, such as Los Prados and Rancho Alta Mira are stable.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Rancho area: 3,481.7 acres

2050 PROJECTIONS

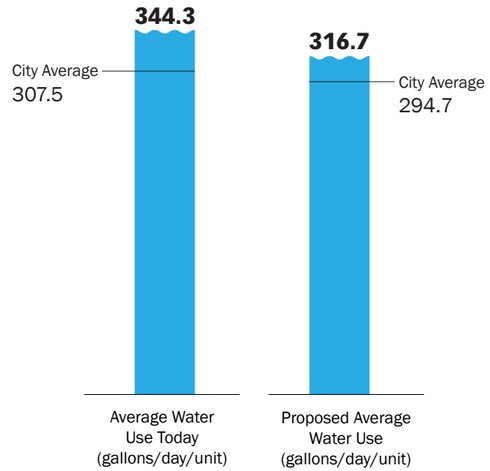
- Population: 56,468
- Total New Housing Units: 4,248 (376 Single family / 3,872 Multi family
- New Commercial (1,000 GSF): 2,103,429
- Housing Density: 5.85 dwelling units / acre
- Population Density: 10,380 residents / square mile

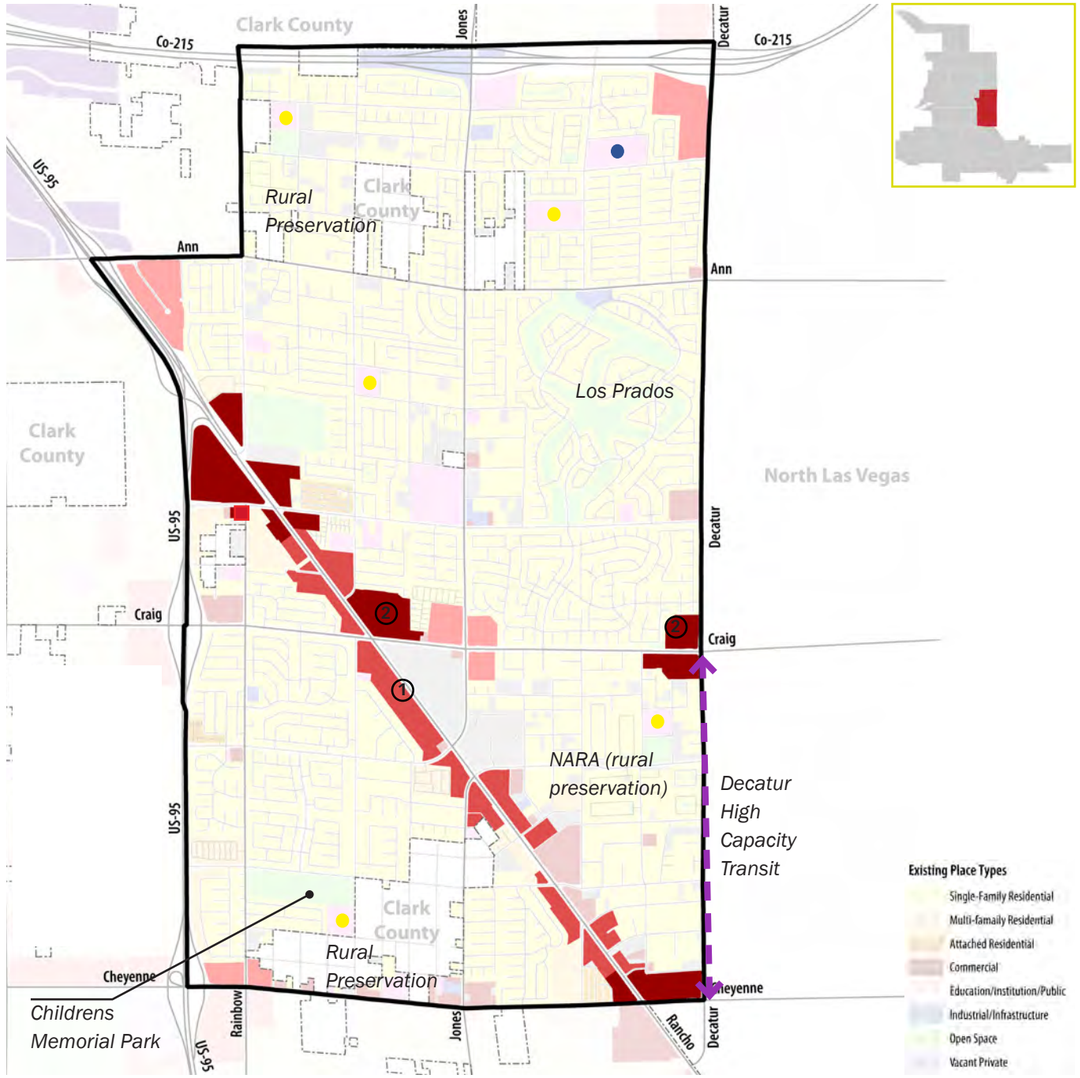
KEY IMPLEMENTATION STRATEGIES & TOOLS

- Diverse Housing Options
- Infill housing
- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Transit-oriented Development
- Placemaking through arts and culture

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





RANCHO PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Rancho Dr corridor improvements and upgrades from linear suburban strip malls to mixed-use corridor scaled for rapid bus
2. Redevelopment opportunities

Planned High Capacity Rapid Transit

COMMUNITY FACILITIES

F *CLV Fire Station*

CCSD School (elementary/middle/high/alternative or special)

Overall lack of schools, LVMPD, community centers

SERVICES

Aside from the need for more parks and open spaces, Rancho similarly lacks major city and regional facilities. No City or community facilities exist, The low-density environment of the district highlights a need for a greater presence of city services and community resources.

PARKS AND OPEN SPACE

The Rancho area lacks significant amounts of parks and open space; while some neighborhood parks, such as Children's Memorial Park and a few smaller parks can be found, there are noticeable voids and parks that are not easily accessible. Los Prados Golf Course can also be found within the northern edge of the district.

WORKFORCE

Economic centers consist predominantly of auto-oriented commercial corridors. Santa Fe Station Hotel-Casino is one of the few major or significant employers in the area. Most jobs and commercial activity consist of both small and large general retail; several shopping centers can actively be redeveloped now or in the near-term, with a number of other opportunities to improve their character and make them more walkable could exist long-term. Rancho also lacks public middle and high schools. While school overcrowding is not a major issue in this area, home-to-school distance and the ability to alleviate school overcrowding at other locations could benefit the area overall.

TRANSPORTATION

Rancho is bounded by Cheyenne Avenue the 215 Beltway and US-95 (possible future I-11) freeways, while the City of North Las Vegas is bordered on the east at Decatur Blvd. Rancho Dr itself serves as main street through the area; each of the corridors will continue to transition from suburban auto-oriented arterials toward transit-based complete streets, while rapid bus service and BRT will eventually serve Rancho Dr and Decatur Blvd respectively. While a few bicycle-friendly corridors exist, improvements are needed to help connect to areas to the north and northwest and with North Las Vegas. Because many areas were annexed, sewer improvements may be needed, and while the northern half of the district has relatively new infrastructure of all types, upgrades will eventually be needed long-term.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

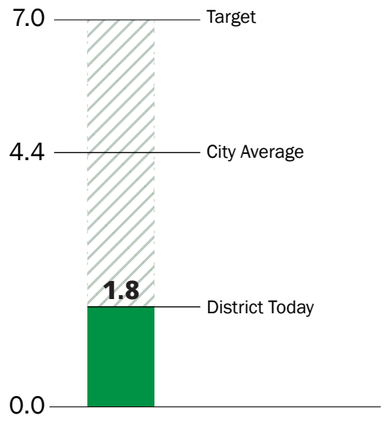
		City
Parks	48%	56%
Schools	17%	31%
Grocery and retail services	20%	19%

Percentage of total units within 2 mile drive:

Community Centers	3%	45%

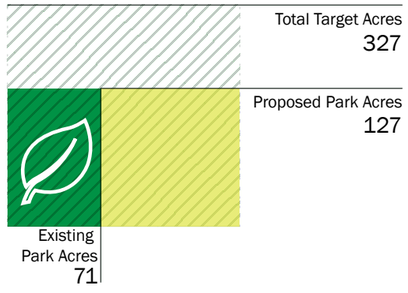
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



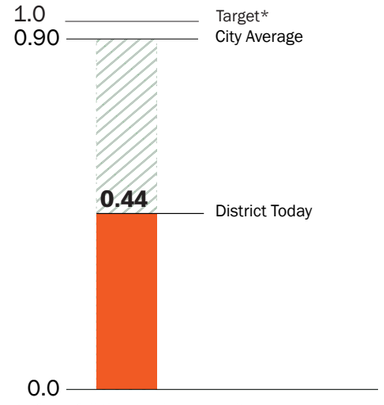
PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, Rancho still falls short of the target.



JOB SUPPLY IN DISTRICT

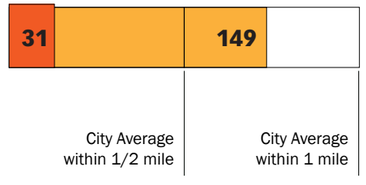
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

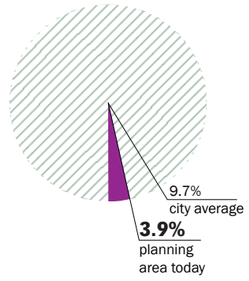
JOB PROXIMITY

Average job opportunity in proximity to the planning district



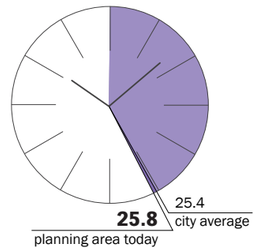
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

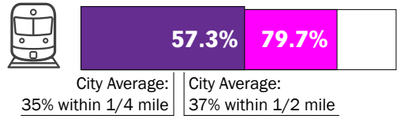


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.L CENTENNIAL HILLS

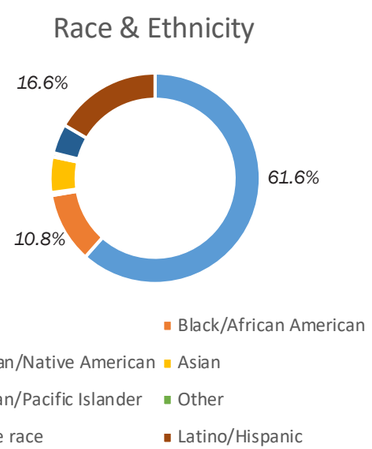


Centennial Hills is the major regional center for northwest Las Vegas. Centered at the Centennial Spaghetti Bowl (the intersection of the US-95 (future I-11) and I-215 Beltway), brings together northwestern neighborhoods. Previously envisioned as a northwestern "Town Center," it has developed a commercial core, but largely as conventional suburban-style development, with some unique higher density neighborhoods and urban form. Because Centennial Hills has previously been identified as a location for more intense uses, this planning area will re-establish itself as a true regional center that's adapted to existing development, while transforming key areas around its core.

DEMOGRAPHICS

- Current population: 62,126 ▼
- Largest Age Group: 25 - 34 years (9,246) ▲
- Persons per household: 2.77 ▼
- Single Family Dwellings: 18,903 ▲
- Multi-Family Dwellings: 4,783 ▼
- Median Household income: $71,074 ▲
- Median rent / mortgage: $1,257 / $1,528 ▲ ▲
- Housing tenure: 36.6% rent / 63.4% own ▼ ▲
- Attained High School Diploma: 93.0% ▲
- Attained Bachelor's Degree: 27.9% ▲
- Unemployment rate: 7.6% ▼
- Housing Density: 6.21 dwelling units / acre ▲
- Population Density: 10,422 residents / square mile ▲

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Embrace original vision to be a suburban town center

SERVICES AND FACILITIES

- Consider new LVMPD command station at town center

PARKS AND OPEN SPACE

- Celebrate natural settings of the area and access to places like Mount Charleston

WORKFORCE AND EDUCATION

- Additional schools to alleviate overcrowding

TRANSPORTATION

- Strengthen multi-modal and microtransit opportunities at the Centennial Hills Transit Center and rapid bus connection from Rancho Dr
- Complete Centennial Bowl system-to-system interchange and I-11 improvements

Click each strategy to read more. Metrics for each topic are highlighted on the following pages

SEE ALSO:
Centennial Hills Town Center Special Area Plan







LAND USE AND DEVELOPMENT

TODAY

Centennial Hills, and Town Center itself, is comprised of a large mix of higher density new subdivisions; however, major land uses are still auto-oriented, with several large surface parking lots and few major multi-story buildings. Peripheral areas also contain large-lot residential ranch estates surrounded by unincorporated county pockets that may eventually be annexed.

IN THE FUTURE

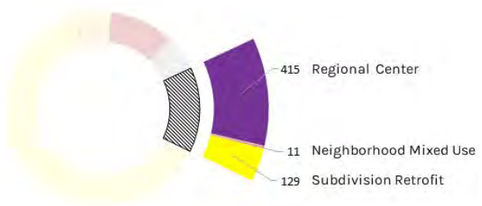
Centennial Hills will maintain its mix of traditional and suburban single-family development combined with large-lot residential estates. Unincorporated county pockets may eventually be annexed. Over time, the core part of the regional center will become more dense and intense as a suburban "Town Center."

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Centennial Hills area: 3,815.2 acres

2050 PROJECTIONS

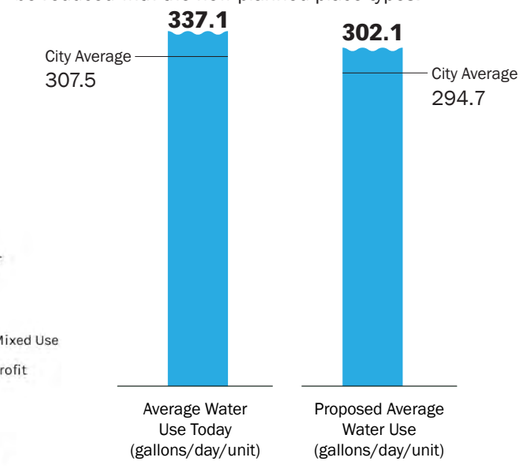
- Population: 82,915
- Total New Housing Units: 7,505 (438 Single family / 7,067 Multi family
- New Commercial (1,000 GSF): 5,240,455
- Housing Density: 8.18 dwelling units / acre
- Population Density: 13,909 residents / square mile

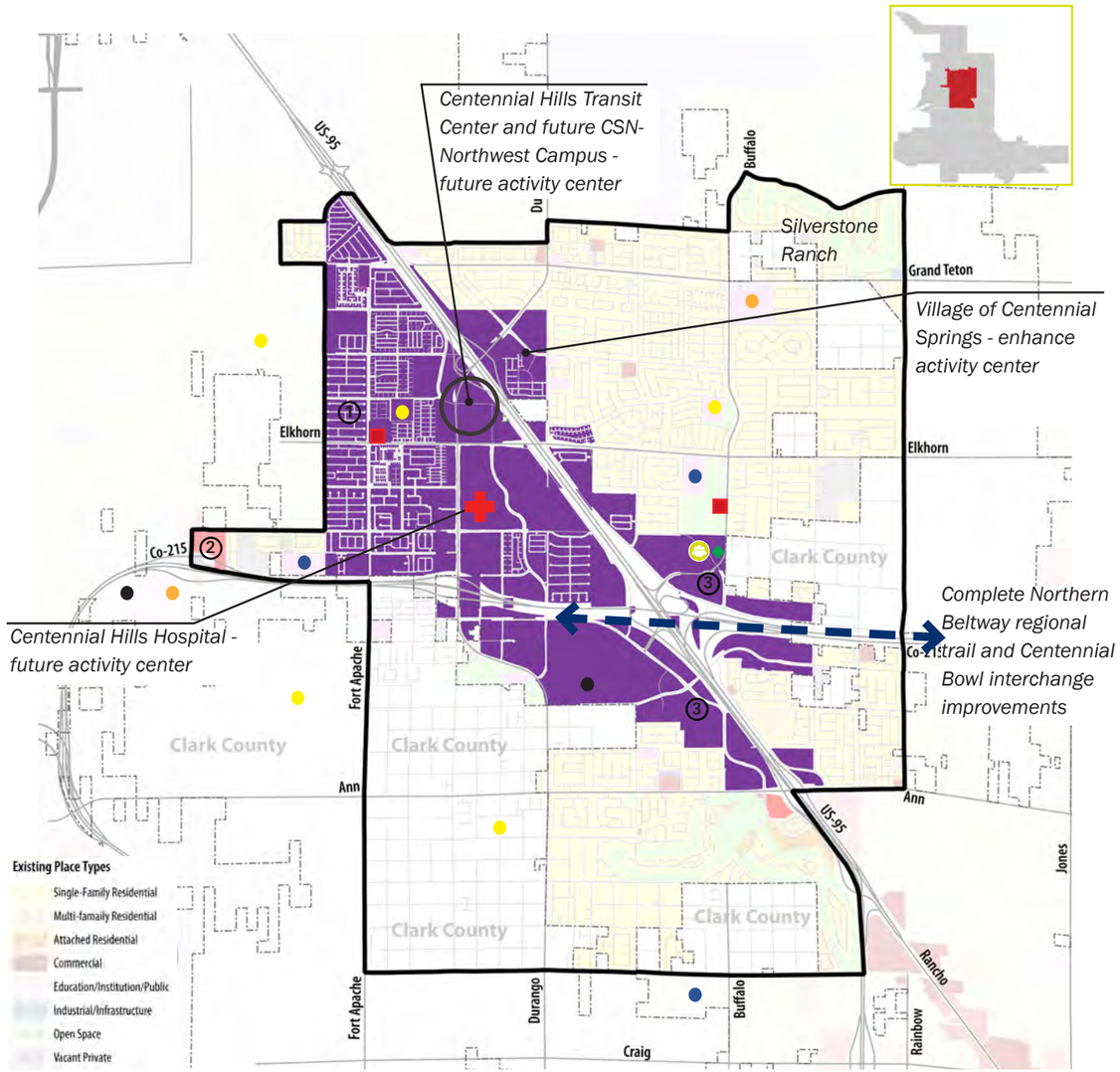
LAND USE TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture
- Diverse housing options

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





CENTENNIAL HILLS PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

1. Retrofit existing subdivisions to improve connectivity, ensure future subdivisions follow Centenial Hills Town Center design standards for better Traditional Neighborhood Design
2. New mixed-use node
3. Long-term transformation of suburban-style commercial to mixed-use activity center

COMMUNITY FACILITIES

- *CLV Fire Station*
- *Hospital*
- *CCSD School (elementary/middle/high/alternative or special)*
- *City or other public facility*
- *Centennial Hills Community Center, Library, Senior Center*
- *Transportation improvement*

SERVICES

Centennial Hills is the major regional hub for northwestern districts and contains several city and regional facilities. Centennial Hills Park complex provides a number of community services and the area is anchored by Centennial Hills hospital. Although the area has low crime, it would be an ideal location for a new LVMPD area command. New fire stations may also be needed near the edges of the district, especially near low-density annexed areas.

PARKS AND OPEN SPACE

Centennial Hills has a wide variety of new parks, equestrian space, and other open spaces, much in the form of private or HOA pocket and neighborhood parks. Several major parks are located within the district including Thunderbird Park and the Centennial Hills Park complex, which also has a YMCA community center, senior center, pools, and library; a smaller community center, Cimmaron Rose, provides some recreational space. Painted Desert Golf course is located at the southern edge of the district

WORKFORCE

As a regional center, Town Center has a vast amount of new suburban commercial located around the major freeway interchanges between Ann Rd and Durango Dr. Major retail centers, auto-oriented uses, car dealerships, professional offices, and commercial activities located here. Centennial Hills has several public schools in close proximity to the new subdivisions; however, more new schools are needed to alleviate school overcrowding, specifically Arbor View and Shadow Ridge high schools. Centennial Hills will also be home to a branch campus of the College of Southern Nevada.

TRANSPORTATION

Town Center makes up most of the area, but several other small master planned communities are located throughout the district. Over time, the Centennial Spaghetti Bowl and the surrounding road network will be completed, as well as full-build out of the beltway. Centennial Hills Transit Center and park 'n' ride at the Elkhorn HOV interchange allows for express transit service to Downtown Las Vegas and the Strip, while it can be a base for local routes, circulators, carpoolers, microtransit or demand response service for the district. The 215 trail parallels the beltway and several other trails and bicycle-friendly complete streets can be found within the district. Most other infrastructure within Centennial Hills is relatively new.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

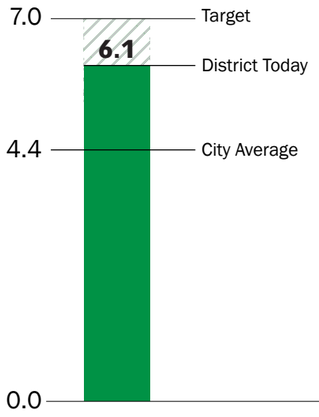
		City
Parks	69%	56%
Schools	21%	31%
Grocery and retail services	11%	19%

Percentage of total units within 2 mile drive:

Community Centers	54%	45%

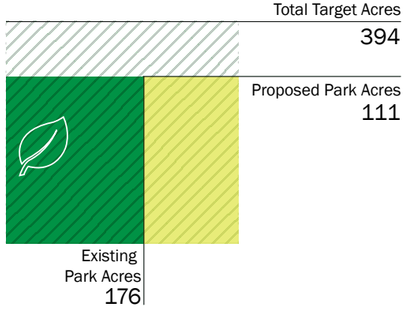
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



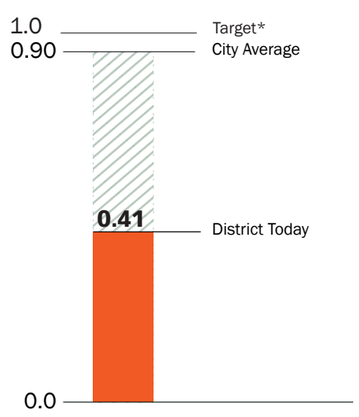
PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, Centennial Hills still falls short of the target.



JOB SUPPLY IN DISTRICT

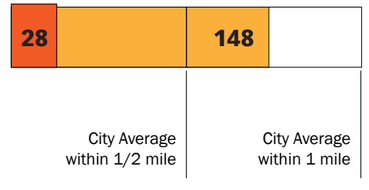
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

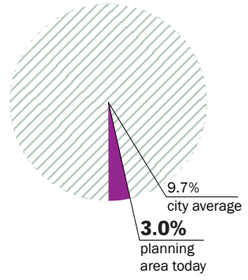
JOB PROXIMITY

Average job opportunity in proximity to the planning district



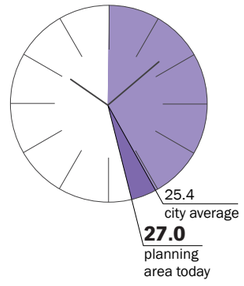
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

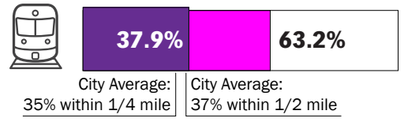


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.M LA MADRE FOOTHILLS



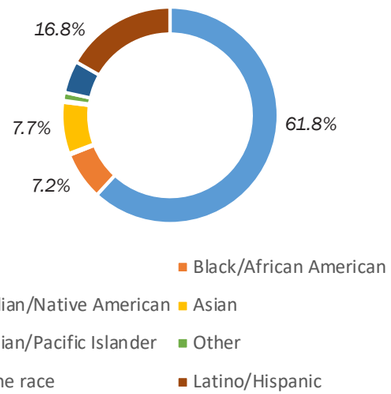
Along the northwestern edge of the valley is La Madre Foothills, an area comprised of a unique mix of master-planned communities, large-lot residential estates, and traditional suburban single-family development. Potential opportunities exist to develop further along the foothills and create new recreational opportunities along Box Canyon. Given its adjacency to Centennial Hills Town Center, rapid growth, and opportunity for future development, by 2050, La Madre Foothills will emerge as a cohesive suburban community.

DEMOGRAPHICS

- Current population: 25,401 ▼
- Largest Age Group: 25 - 34 years (4,901) ▲
- Persons per household: 2.77 ▼
- Single Family Dwellings: 8,967 ▼
- Multi-Family Dwellings: 1,484 ▼
- Median Household income: $78,359 ▲
- Median rent / mortgage: $1,259 / $1,646 ▲ ▲
- Housing tenure: 37.8% rent / 62.2% own ▼ ▲
- Attained High School Diploma: 94.6% ▲
- Attained Bachelor's Degree: 33.9% ▲
- Unemployment rate: 4.7% ▼
- Housing Density: 3.96 dwelling units / acre ▼
- Population Density: 6,541 residents / square mile ▼

▲ ▼ *Above / Below citywide average*

Race & Ethnicity



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Need for planned mixed-use/commercial centers

SERVICES AND FACILITIES

- Many additional services needed in this area

PARKS AND OPEN SPACE

- Develop more park space west of the beltway to connect to natural features

WORKFORCE AND EDUCATION

- Increase employment opportunities
- Consider new schools to alleviate overcrowding nearby

TRANSPORTATION

- Complete area-wide complete streets network
- Construct Nah Gah Kaiv (Sheep Mountain) Pkwy
- Implement microtransit and develop park and ride facilities to facilitate express transit.

Click each strategy to read more. Metrics for each topic are highlighted on the following pages

SEE ALSO:
La Madre Foothills Special Area Plan
Skye Hills Development Agreement
Skye Summit Development Agreement







LAND USE AND DEVELOPMENT

TODAY

Linked together by the northwestern leg of the I-215 beltway, La Madre Foothills contains several new subdivisions developed over the last fifteen years, the largest being the Cliff Shadows and Providence master planned communities. Peripheral areas also contain large-lot residential ranch estates surrounded by county pockets that may eventually be annexed.

IN THE FUTURE

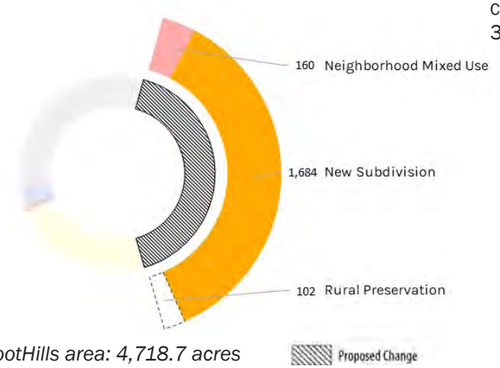
For areas west of the beltway, new subdivisions can be developed, but as there are few major neighborhood centers and an overall lack of a commercial areas, an opportunity exists for the development of a new suburban neighborhood center for the entire district.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



La madre footHills area: 4,718.7 acres

2050 PROJECTIONS

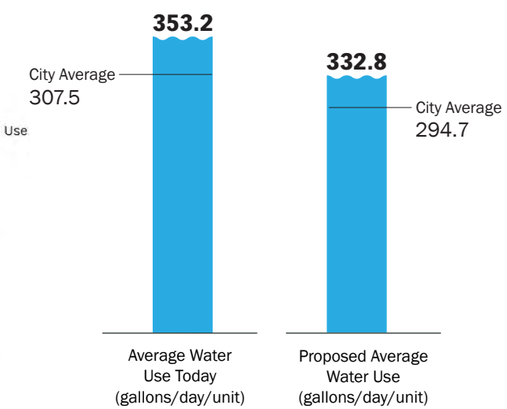
- Population: 48,227
- Total New Housing Units: 8,240 (5,995 Single family / 2,246 Multi family
- New Commercial (1,000 GSF): 1,970,803
- Housing Density: 3.96 dwelling units / acre
- Population Density: 6,541 residents / square mile

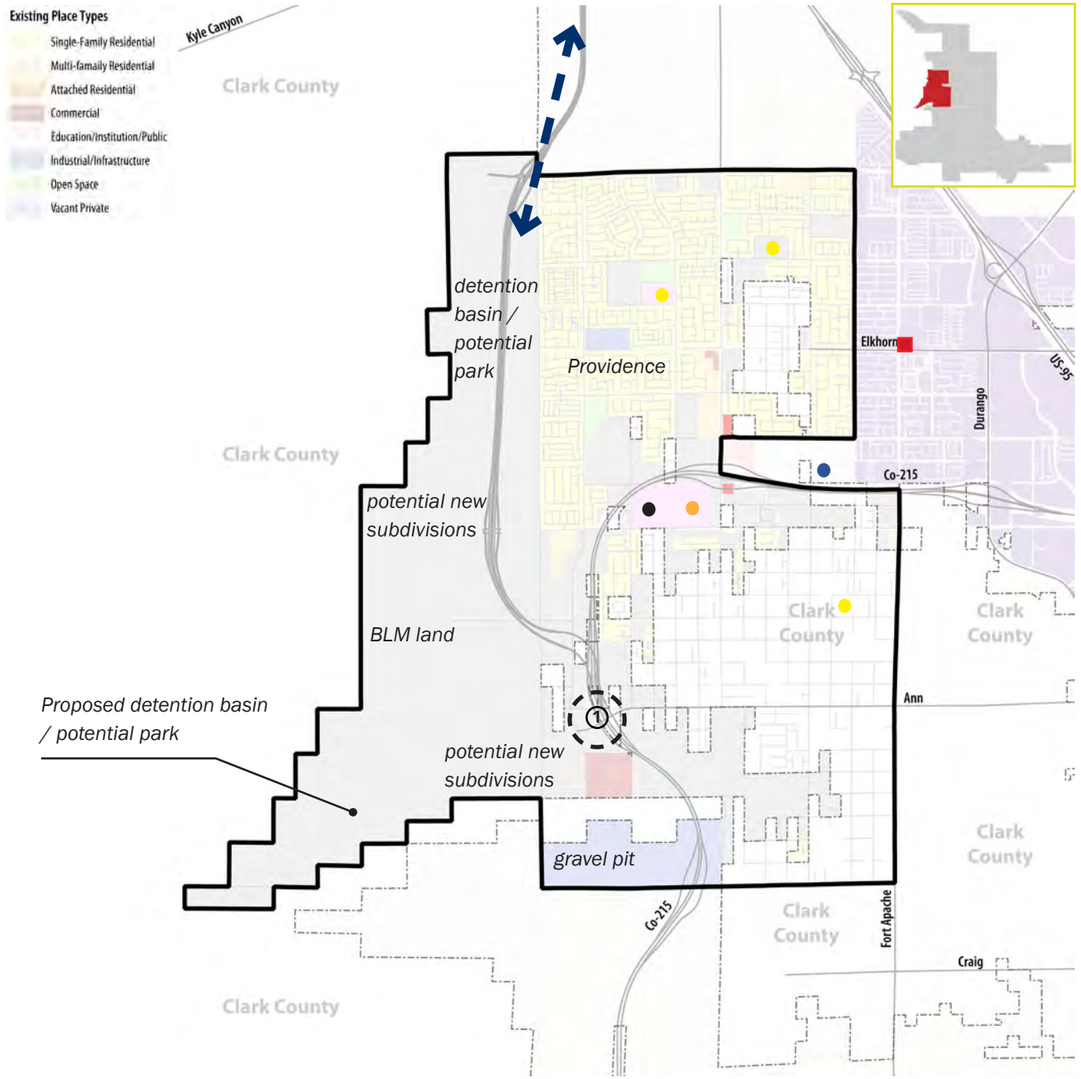
LAND USE TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture
- Diverse housing options

WATER USAGE

Water consumption of residents in the planning area will be reduced with the new planned place types.





LA MADRE FOOTHILLS PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

① Future Neighborhood Mixed-Use Opportunity

COMMUNITY FACILITIES

F *CLV Fire Station*

CCSD School (elementary/middle/ high/alternative or special)

Overall lack of schools, LVMPD, community centers

Transportation improvement

SERVICES

La Madre Foothills lacks major city and regional facilities, including community centers and other civic services. With respect to public safety, at least one new fire station will be needed, and while crime is low in this area, a new LVMPD substations may be needed to serve much of the growing northwest.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

		City
Parks	75%	56%
Schools	18%	31%
Grocery and retail services	2%	19%

Percentage of total units within 2 mile drive:

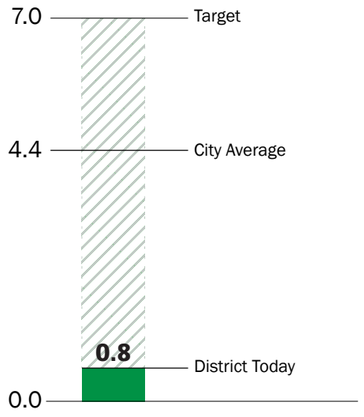
Community Centers	0%	45%

PARKS AND OPEN SPACE

Several turnkey parks have been constructed in conjunction with the development of Providence, including the Promenade and Huckleberry, Knickerbocker, and Gilcrease Brothers parks. A wide variety of new parks, equestrian space, and other open space could be developed in new subdivisions west of the beltway, with connections to Lone Mountain Regional Park and other parks along foothills.

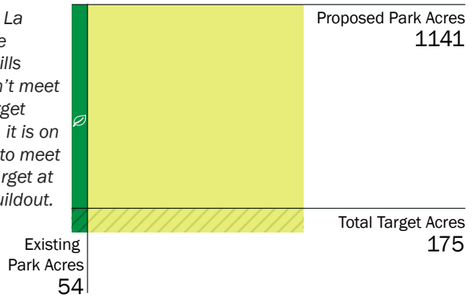
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



PARK ACRES NEEDED TO ACHIEVE TARGET

While La Madre Foothills doesn't meet its target today, it is on track to meet the target at full buildout.

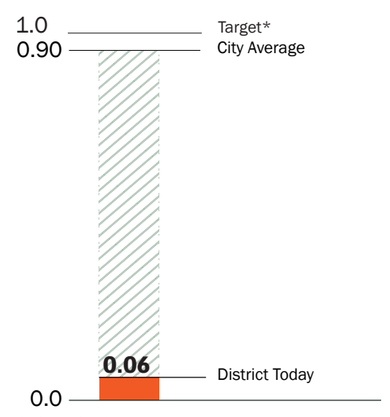


WORKFORCE

La Madre Foothills currently lacks commercial activity and job centers. Residents rely on businesses located in Centennial Hills Town Center. Several new public schools have been constructed near the new subdivisions; however, more new schools are needed to alleviate school overcrowding, especially for Centennial and Arbor View High Schools. A major gravel pit and mining operation exists at the southern edge of the district, and a new regional public safety facility has been planned for the area.

JOB SUPPLY IN DISTRICT

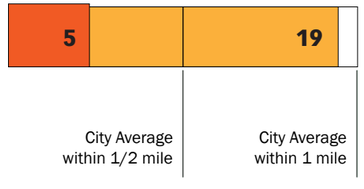
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

JOB PROXIMITY

Average job opportunity in proximity to the planning district

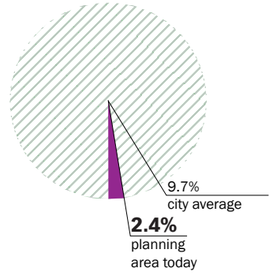


TRANSPORTATION

While most infrastructure is relatively new, development been somewhat haphazard, leaving some areas lacking from complete streets, flood control, and trails. A major regional flood control facility helps prevent flooding from stormwater coming from Kyle Canyon and Mount Charleston; other facilities have been constructed for Box Canyon. While Centennial Hills Transit Center and park and ride allows for express transit service to Downtown Las Vegas and the Strip, no transit service is available for local routes, circulators, carpoolers, micro transit or demand response service. Several equestrian trails link the foothills and mountains with parks, while the 215 trail parallels the beltway providing a major connection between the northern and western valley. Eventually, Nah Gah Kaiv Pkwy will be constructed to link the Beltway with future I-11 to the north.

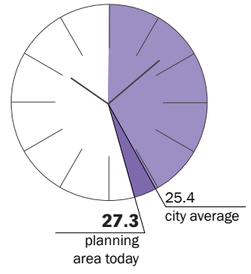
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

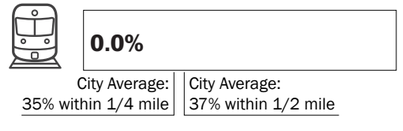


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.N KYLE CANYON

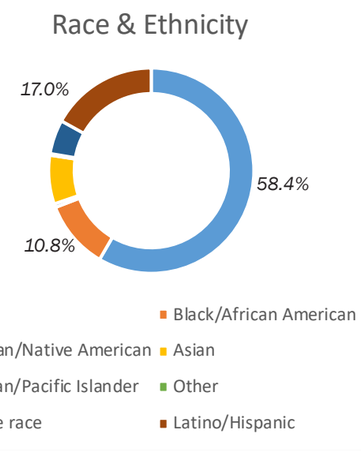


US-95 (future I-11) and Kyle Canyon Rd (NV-157) create major rural-urban transition point within the Kyle Canyon district. This is an area that is both the current northwestern gateway to the Las Vegas Valley from Northern Nevada and the Spring Mountains and is the home the city's newest subdivisions. The district character is predominantly detached single-family residential and has several areas under development agreements, open desert, and large-lot estates.

DEMOGRAPHICS

- Current population: 13,291 ▼
- Largest Age Group: 35 - 44 years (2,420) ▲
- Persons per household: 3.33 ▲
- Single Family Dwellings: 3,894 ▼
- Multi-Family Dwellings: 380 ▼
- Median Household income: $82,137 ▲
- Median rent / mortgage: $1,368 ▲ / $1,648 ▲
- Housing tenure: 29.3% rent ▼ / 70.7% own ▲
- Attained High School Diploma: 95.7% ▲
- Attained Bachelor's Degree: 29.1% ▲
- Unemployment rate: 7.5% ▼
- Housing Density: 1.24 dwelling units / acre ▼
- Population Density: 2,471 residents / square mile ▼

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Build out subdivisions as traditional neighborhood development
- Create mixed-use nodes at interchanges

SERVICES AND FACILITIES

- Provide array of city services and facilities as population increases

PARKS AND OPEN SPACE

- Continue to connect parks and open space as new development occurs

WORKFORCE AND EDUCATION

- Create employment centers
- Build new schools

TRANSPORTATION

- Strengthen multi-modal transportation options at park and rides to support future express bus service to Downtown and the Strip
- Construct Nah Gah Kaiv (Sheep Mountain) Pkwy

Click each strategy to read more. Metrics for each topic are highlighted on the following pages

SEE ALSO:
Kyle Canyon Special Area Plan
Skye Canyon Development Agreement
Sunstone Development Agreement







LAND USE AND DEVELOPMENT

TODAY

Kyle Canyon is a rapidly developing area. Existing large-lot estates that are rural preservation areas and new subdivisions in the Skye Canyon and Sunstone master planned communities dot the area's eastern and northwestern edges, as well as along Kyle Canyon Rd extending west toward Mt Charleston.

IN THE FUTURE

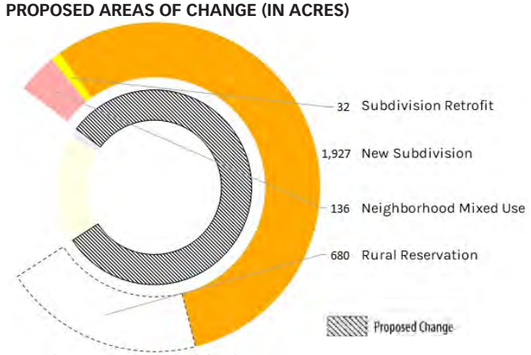
Much of Kyle Canyon will see the eventual build-out of medium-low density suburbs currently under development agreements utilizing traditional neighborhood development. New shopping centers will continue to be constructed at major interchanges and have potential to become neighborhood mixed-use centers, especially at the Kyle Canyon and Skye Canyon Park interchanges.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Kyle Canyon area: 3,442.9 acres

2050 PROJECTIONS

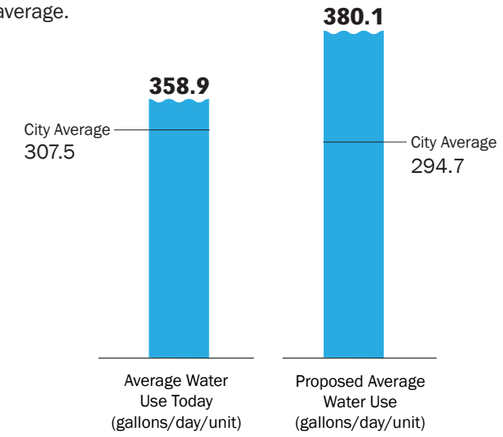
- Population: 47,063
- Total New Housing Units: 10,142 (8,238 Single family / 1,904 Multi family
- New Commercial (1,000 GSF): 639,992
- Housing Density: 4.19 dwelling units / acre
- Population Density: 8,748 residents / square mile

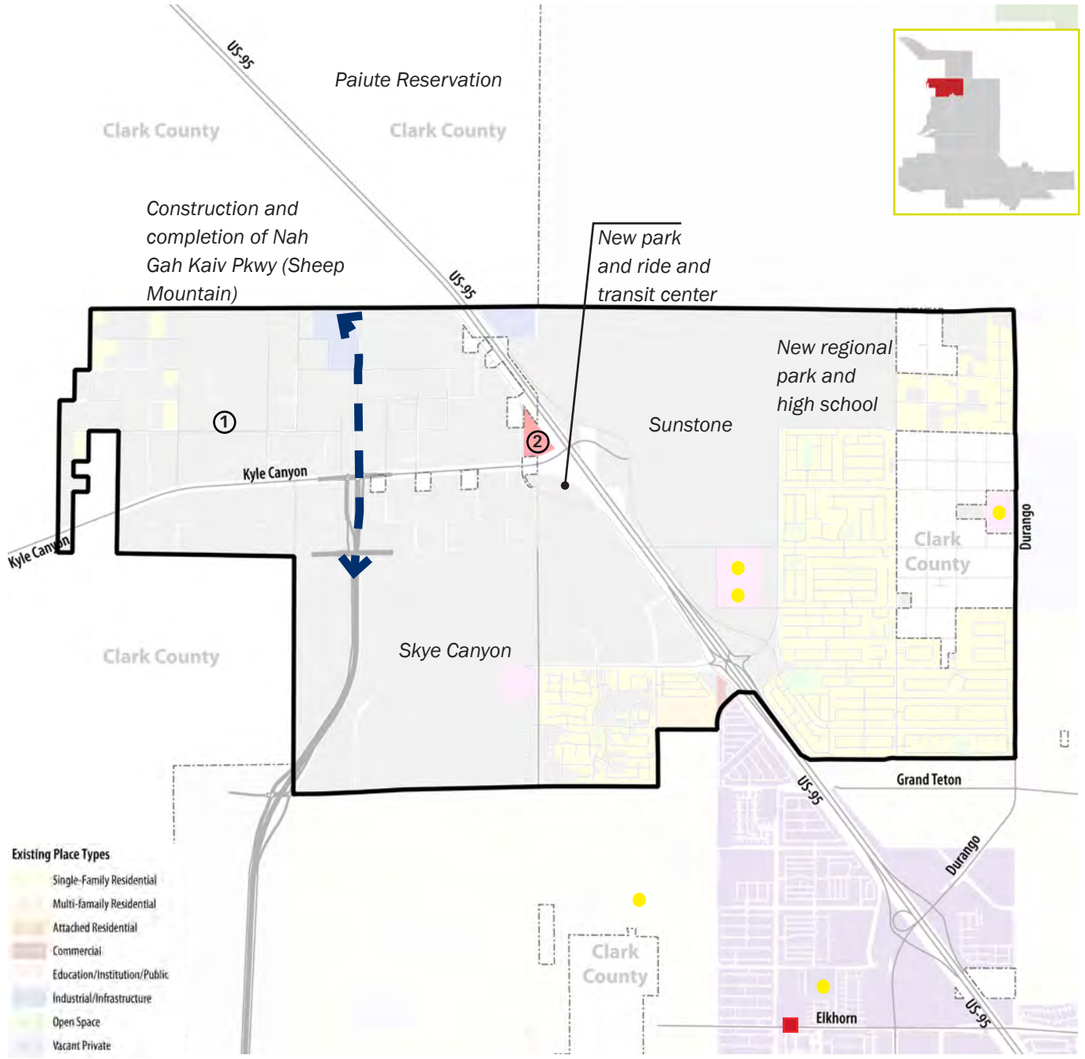
LAND USE TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture
- Diverse housing options

WATER USAGE

The average water consumption of residents in the planning area will increase with the currently approved developments. If the area develops with denser, more traditional neighborhood design, that will help lower the average.





KYLE CANYON PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

① Future subdivisions

② New Mixed-Use node

Transportation improvement

COMMUNITY FACILITIES

F *CLV Fire Station*

CCSD School (elementary/middle/high/alternative or special)

Overall lack of schools, LVMPD, community centers

SERVICES

Kyle Canyon lacks major city and regional facilities; those may be required as the development agreements are executed, and population thresholds are met. While some private services are currently or will be provided, the low-density environment of the district highlights a need for a greater presence of city services and community resources.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

		City
Parks	99%	56%
Schools	5%	31%
Grocery and retail services	6%	19%

Percentage of total units within 2 mile drive:

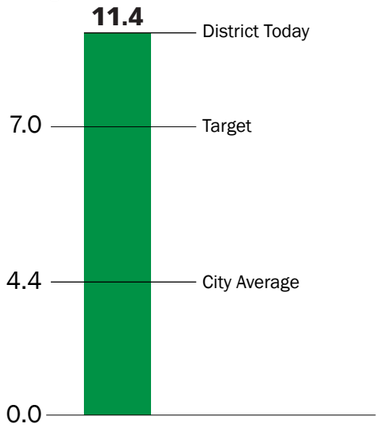
Community Centers	0%	45%

PARKS AND OPEN SPACE

Despite being still mostly undeveloped, Kyle Canyon has a variety of mostly new parks and open spaces, including Skye Canyon Park; much of the park space is in the form of private or HOA pocket and neighborhood parks, but new parks, including Igor Soldo Park and a new regional park will be constructed near-term. As Skye Canyon and Sunstone develop, new parks, arroyo trails, and linear open spaces will be constructed as required by the respective agreements.

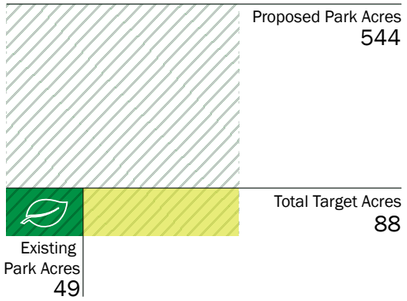
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



PARK ACRES NEEDED TO ACHIEVE TARGET

Even with the place type model assumption of additional potential park acres, Kyle Canyon still falls short of the target.

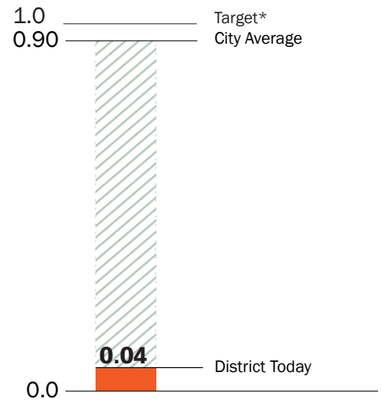


WORKFORCE

Few major or significant employers or commercial centers exist within Kyle Canyon. Limited new suburban commercial will be constructed at the Kyle Canyon and Skye Canyon Park interchanges, but major jobs and commercial activity are needed. At least one new major resort-casino will be constructed as part of Skye Canyon's Gaming Enterprise District. Kyle Canyon severely lacks public schools of all forms; new schools will be constructed over time and several will be under construction near-term to alleviate school overcrowding.

JOB SUPPLY IN DISTRICT

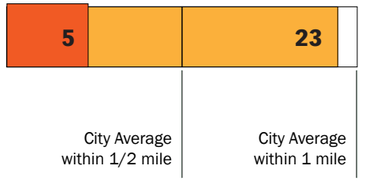
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

JOB PROXIMITY

Average job opportunity in proximity to the planning district

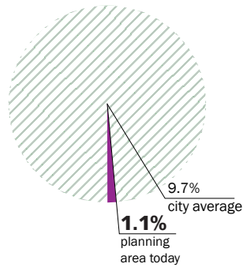


TRANSPORTATION

With the existing US-95 (future I-11) freeway and Kyle Canyon Rd (NV-157) as major corridors, as well as future development of the new Sheep Mountain Pkwy, Kyle Canyon is configured for suburban auto-oriented development. Bicycle friendly-layered complete streets and separate non-motorized trails line most arterials. No transit service is available to Kyle Canyon, but a park and ride at each major interchange may allow for future express transit service to Downtown Las Vegas and the Strip, while microtransit or demand response service could be made available to other low-density portions of the district or feed rural preservation areas along Kyle Canyon Rd. Nearly all of Kyle Canyon has new infrastructure of all types, but the extension infrastructure is dependent upon future new subdivisions being planned and existing ones being completed.

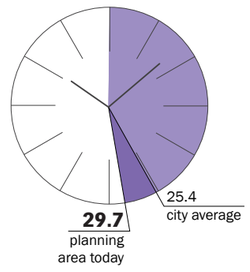
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

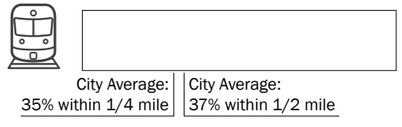


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.O TULE SPRINGS

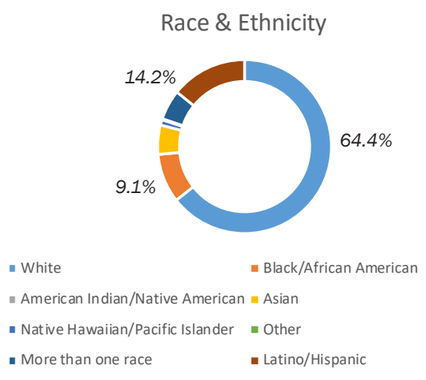


Tule Springs is bounded by the National Monument to the north and the I-215 beltway to the south, while county islands and scattered parcels make up the remaining edges. The City of North Las Vegas on the east at Decatur Blvd is the eastern boundary. North of the 215 Beltway is Tule Springs, an area bordering the Monument and with a mix of traditional and suburban single-family development and large-lot residential estates, many containing ranch or small agricultural functions. Tule Springs continues to develop, but it lacks major commercial and retail services, despite the accessibility to impressive open space and recreational amenities.

DEMOGRAPHICS

- Current population: 27,672 ▼
- Largest Age Group: 35 - 44 years (3,587) ▲
- Persons per household: 3.03 ▲
- Single Family Dwellings: 8,908 ▼
- Multi-Family Dwellings: 492 ▼
- Median Household income: $95,954 ▲
- Median rent / mortgage: $1,565 / $1,858 ▲ ▲
- Housing tenure: 20.9% rent / 79.1% own ▼ ▲
- Attained High School Diploma: 94.2% ▲
- Attained Bachelor's Degree: 32.1% ▲
- Unemployment rate: 6.4%: ▼
- Housing density: 3.24 dwelling units / acre ▼
- Population density: 6,110 residents / sq. mile ▼

▲ ▼ *Above / Below citywide average*



KEY IMPLEMENTATION STRATEGIES

LAND USE AND DEVELOPMENT

- Opportunities for large-lot estates and rural preservation
- Create more local-serving business and employment opportunities

SERVICES AND FACILITIES

- New Fire / LVMPD area command; new CLV facilities, community centers, and infrastructure needed in the area

PARKS AND OPEN SPACE

- Increase park space in areas near county islands
- Convert Silverstone Ranch to accesible open space

WORKFORCE AND EDUCATION

- Create employment centers
- Build new schools

TRANSPORTATION

- Upgrade aging infrastructure
- Strengthen the trail network to improve access to significant natural resources
- Implement microtransit and develop park'n'ride facilities.

Click each strategy to read more. Metrics for each topic are highlighted on the following pages







LAND USE AND DEVELOPMENT

TODAY

Tule Springs is comprised of a mix of new subdivisions and large-lot residential ranch estates surrounded by unincorporated county pockets that may eventually be annexed.

IN THE FUTURE

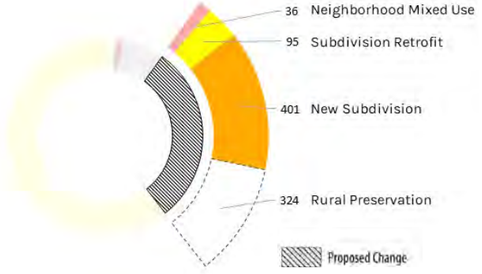
Significant land is available for medium-low density suburban development, while certain rural preservation areas should remain protected. Existing large-lot estates and newly master planned communities line Decatur Blvd on the district's eastern edge, as well as northwestern edges.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Tule Springs area: 2,898.7 acres

2050 PROJECTIONS

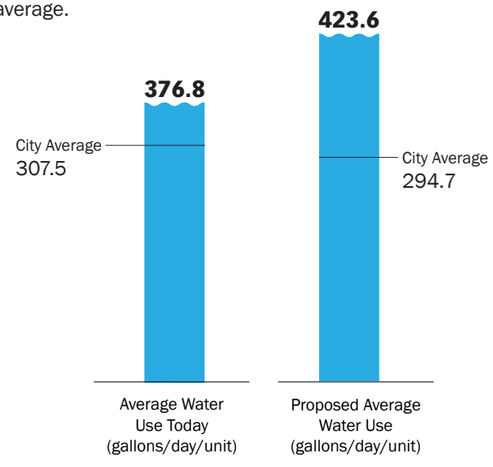
- Population: 36,097
- Total New Housing Units: 2,797 (2,290 Single family / 507 Multi family
- New Commercial (1,000 GSF): 581,630
- Housing Density: 4.21 dwelling units / acre
- Population Density: 7,981 residents / square mile

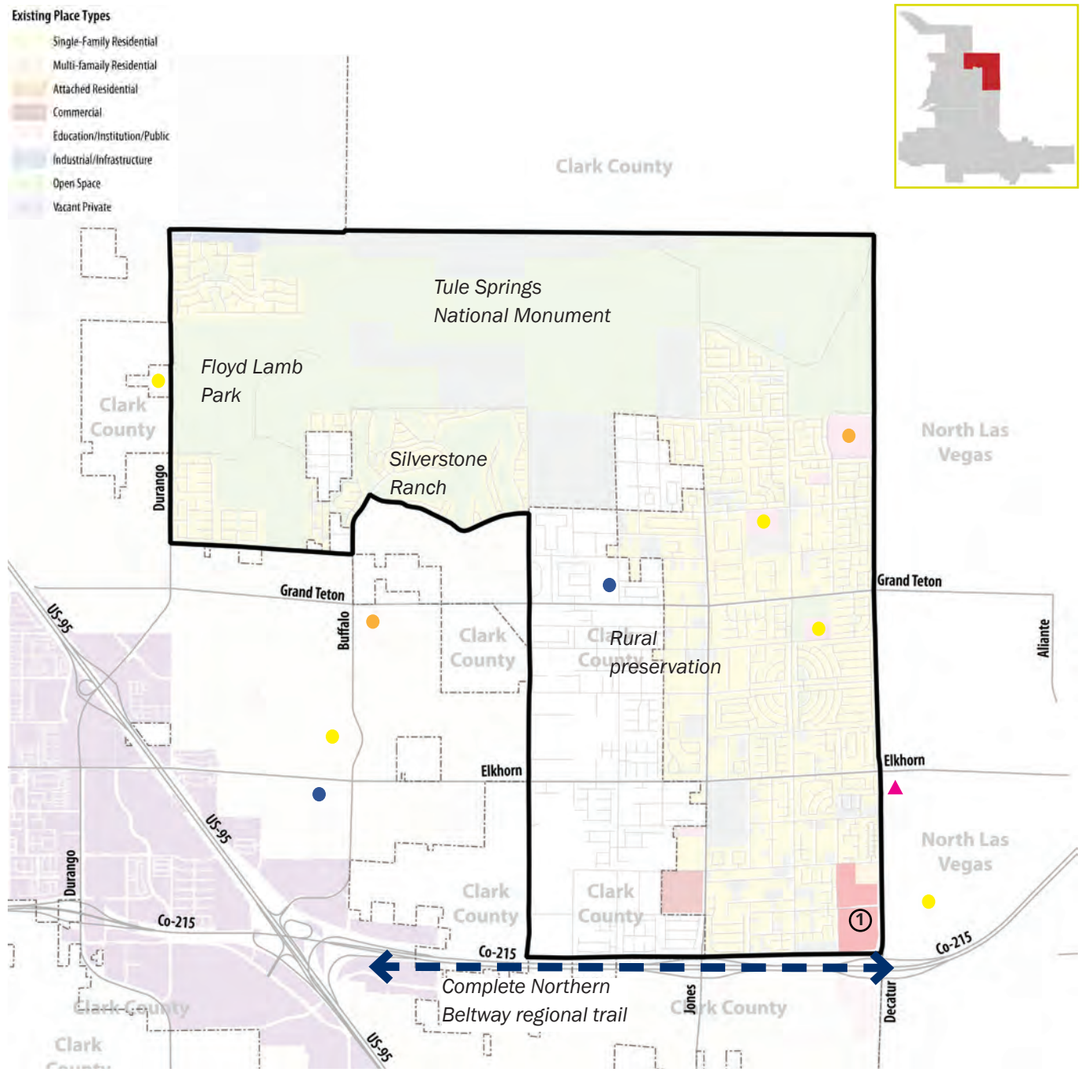
LAND USE TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture
- Diverse housing options

WATER USAGE

The average water consumption of residents in the planning area will increase with the currently approved developments. If the area develops with denser, more traditional neighborhood design, that will help lower the average.





TULE SPRINGS AREA PLACE TYPE FRAMEWORK

KEY REDEVELOPMENT OPPORTUNITIES

① Neighborhood mixed-Use node

Transportation improvement

COMMUNITY FACILITIES

CCSD School (elementary/middle/ high/alternative or special)

Overall lack of schools, city services

SERVICES

Tule Springs lacks major city and regional facilities, although some do exist along Decatur Blvd and within the City of North Las Vegas as part of the Aliante Master Planned Community. The low-density environment and annexed territory within the district highlight a need for a greater presence of city services and community resources of all types.

PARKS AND OPEN SPACE

Tule Springs encompasses the historic Floyd Lamb Park at Tule Springs and the Tule Springs National Monument, which provide large expanses of open space and recreational opportunities. This area also has a wide variety of new parks, equestrian space, and other open spaces, including Teton Trails and Bradley Bridle Parks; much of the other park space is in the form of private or HOA pocket and neighborhood parks. Still, areas around unincorporated county islands lack parks and open space where noticeable voids exist and parks that are not easily accessible. The Silverstone Ranch development, a defunct golf course, may also be an opportunity for new open space.

WORKFORCE

Few major or significant employers or commercial centers exist within Tule Springs. Limited new suburban commercial is located along Decatur Blvd, especially at its interchange with the beltway, but major jobs and commercial activity are needed. Tule Springs lack public schools near the new subdivisions; new schools will be constructed over time and several will be under construction near-term to alleviate school overcrowding, especially to alleviate the overcapacity at Arbor View and Shadow Ridge high schools.

TRANSPORTATION

No transit service is provided in the area but a park and ride at the Decatur-215 interchange may allow for future express transit service to Downtown Las Vegas and the Strip, while microtransit or demand response service could be made available to other low-density portions of the district. A few bicycle-friendly corridors and trails do exist but could be greatly improved to help connect to the national monument and Floyd Lamb Park, as well as with North Las Vegas. Because many areas were annexed, some capital improvements may be needed over time, and while the northern and eastern half of the district has relatively new infrastructure of all types, upgrades may eventually be needed long-term.

PROXIMITY OF DWELLING UNITS TO SERVICES

Percentage of total units within 1/2 mile walk:

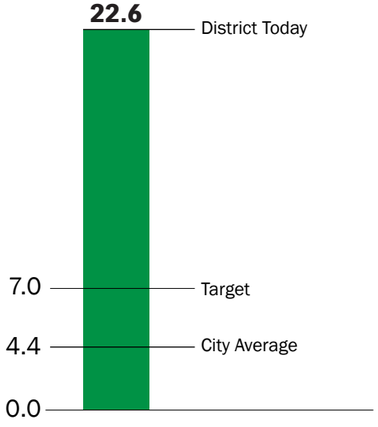
		City
Parks	73%	56%
Schools	17%	31%
Grocery and retail services	3%	19%

Percentage of total units within 2 mile drive:

Community Centers	0%	45%

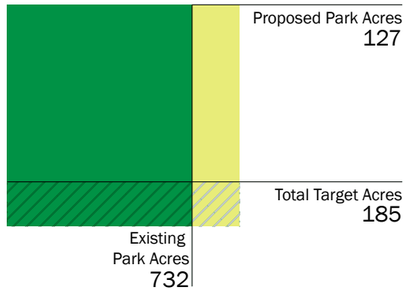
PARK ACCESS

Acres of accessible park space per 1,000 residents within 1/4 mile of the planning district



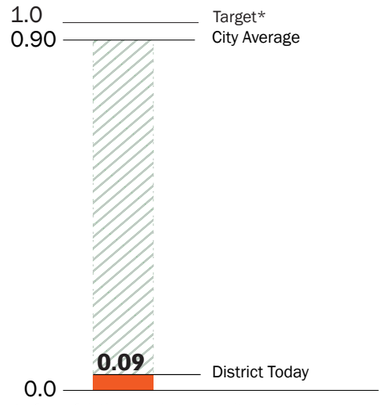
PARK ACRES NEEDED TO ACHIEVE TARGET

Tule Springs exceeds its target park areas, thanks to Floyd Lamb Park and the National Monument



JOB SUPPLY IN DISTRICT

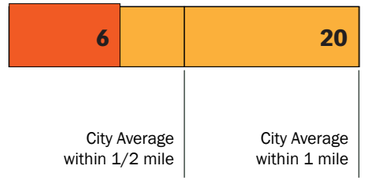
Average job opportunity per residential unit in the planning district



**equivalent of one full-time worker per unit*

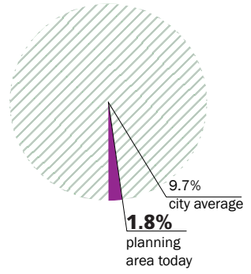
JOB PROXIMITY

Average job opportunity in proximity to the planning district



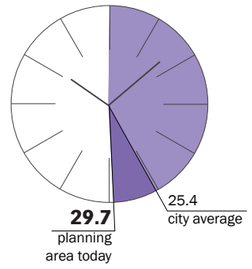
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

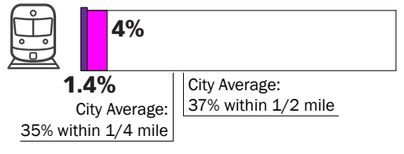


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



II.P SNOW MOUNTAIN - NU WAV KAIV



The northern gateway to the City of Las Vegas spanning the future I-11 corridor is *Nu Wav Kaiv*, ("New Way a Ky"), a Southern Paiute name meaning "Snow Mountain" and reference to the snowcapped Mount Charleston in the Spring Mountains to the west. This area is currently undeveloped and characterized by several major features: the Upper Las Vegas Wash, which flows through this portion of the Upper Las Vegas Valley; the Tule Springs National Monument a vast linear open space extending 15 miles northwest-southeast from Corn Creek; mountains, foothills, and alluvial fans of the Spring Mountains, Sheep Range, Gass Peak, Kyle Canyon, Lee Canyon and Mount Charleston; and finally, the Snow Mountain Reservation of the Las Vegas Paiute Tribe. The City and the Paiute Tribe have committed to protecting and developing the Paiute Tribal lands jointly and have entered into an Interlocal Agreement that conveys land to the Tribe, leases a portion of the area for economic development, develops new infrastructure, and ensure sensitive development near the Upper Las Vegas Wash.

SEE ALSO:
Monument Hills Development Agreement

SERVICES

As no existing community resources or services exist, facilities and services will eventually be required and developed to serve this area; the closest such services are located to the southeast in the Kyle Canyon and Centennial Hills districts.

PARKS AND OPEN SPACE

Much of the open space in this area surrounds the Monument along the wash; other arroyos and washes will be protected from development and appropriate connections will be extended to the surrounding Federal lands and into the City, including along the former historic Las Vegas-Tonopah Railroad railbed. The Las Vegas Paiute Golf Resort is also located on the adjacent tribal land.

WORKFORCE

No current commercial or economic activities exists in Nu Wav Kaiv; however, the Tule Springs National Monument Act designates a job creation zone exclusive for commercial and light-industrial development. This area could develop as research and supportive business space for defense activities located at Creech Air Force Base and the Nevada National Security Site. The City of Las Vegas has entered into an Interlocal Agreement with the Las Vegas Paiute Tribe to convey the land north of the Snow Mountain Reservation into the Snow Mountain Reservation, as well as lease a portion of approximately one-thousand (1,000) acres of the southern portion of the Snow Mountain Reservation for an economic development and job creation zone. The Nu Wav Kaiv area will need new schools as it develops.

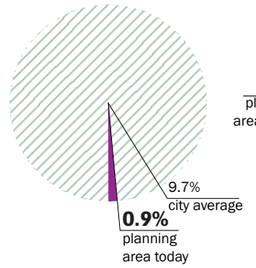


TRANSPORTATION

US-95 (future I-11) travels through Nu Wav Kaiv and extends northwest to Tonopah, Reno, and Carson City. While mostly upgraded for service to the Air Force bases and Nevada Test Site, it will eventually need to be upgraded to full interstate standards. A new north-south corridor, Sheep Mountain Pkwy will connect the area with the 215 Beltway. For any development to occur, new infrastructure, especially new roads, water, sewer and utility service, must be extended into the area, and only along appropriate corridors or easements, at a time for which service can be extended cost-effectively.

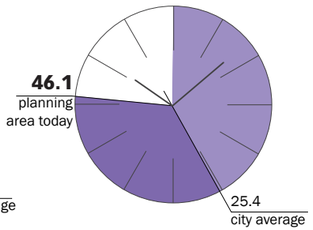
VEHICLE OWNERSHIP

Percentage of households without cars within the district



COMMUTE TIME TO WORK

Average commute time (in minutes) within the City

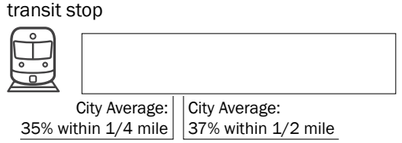


TRANSPORTATION ACCESS & EQUITY

% of residents in planning area within 1/2 mile of bike facility



% of residents in planning area within 1/4 or 1/2 mile of transit stop



LAND USE AND DEVELOPMENT

TODAY

This area is currently undeveloped and characterized by several major natural features, including desert alluvial fans and the Upper Las Vegas Wash.

IN THE FUTURE

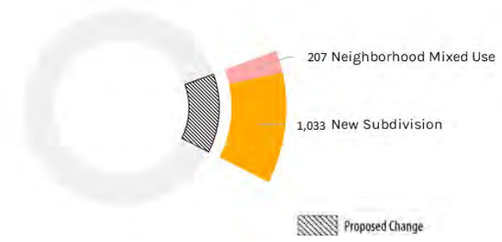
Large portions of Nu Wav Kaiv will remain protected, leaving only a few areas of focused development: The Upper Las Vegas Wash Plan area on the southeastern portion of the district,and the anticipated leasing of a portion of approximately one-thousand (1,000) acres of the Snow Mountain Reservation for an economic development and job creation zone.

PLANNED PLACE TYPES
Regional Center
Mixed-Use Center
Corridor Mixed-Use
Neighborhood Center Mixed-Use
Mixed Residential
Traditional Neighborhoods
New Subdivision
Subdivision Retrofit

Click each Place Type to read more.

In order to capture the above projected land uses and densities, the following place types are planned for future change:

PROPOSED AREAS OF CHANGE (IN ACRES)



Nu Wav Kaiv area: 9,485.5 acres

2050 PROJECTIONS

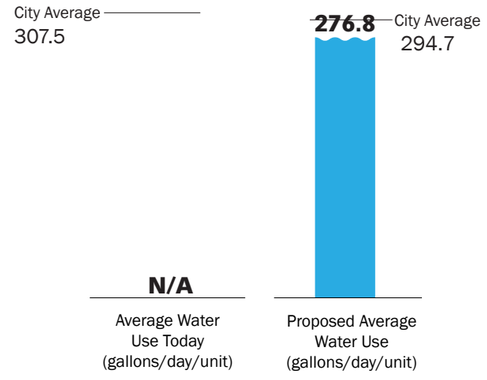
- Population: 18,032
- Total New Housing Units: 6,510 (3,616 Single family / 2,893 Multi family
- New Commercial (1,000 GSF): 15,323,164
- Housing Density: 0.69 dwelling units / acre
- Population Density: 1,217 residents / square mile

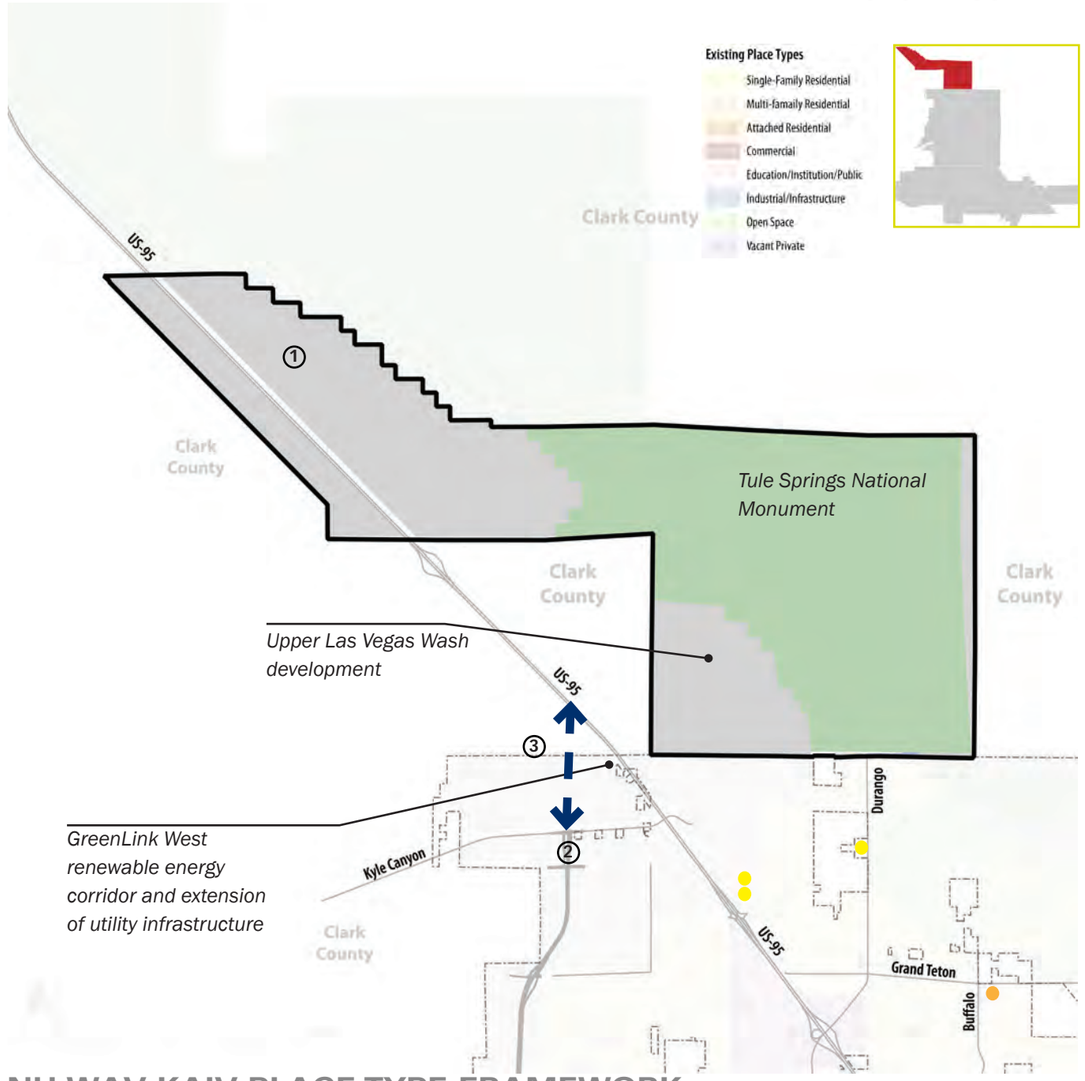
LAND USE TOOLS

- Traditional Neighborhood Design
- Neighborhood Character
- Mixed-use
- Walkable site design
- Placemaking through arts and culture
- Diverse housing options

WATER USAGE

Projected water consumption of residents in the planning area with the new planned place types.





NU WAV KAIV PLACE TYPE FRAMEWORK

KEY OPPORTUNITIES

1. Conveyance area - Las Vegas Paiute Tribe Snow Mountain reservation expansion
2. Planned Sheep Mountain Pkwy connection to future I-11
3. Future coordinated lease and planning with Las Vegas Paiute Tribe to develop Job Creation Zone (see Chapter 3: Workforce + Economic Development section)

COMMUNITY FACILITIES

CCSD School (elementary/middle/ high/alternative or special)

Transportation improvement

Overall lack of schools, city services, and infrastructure

III ENVIRONMENT

NRS 278.160.1(a)

GOALS

A. Protect, enhance, and restore natural features and resources of the Mojave Desert.

B. Improve access and connectivity of open spaces for ecological, social, health, and quality of life benefits.

C. Prioritize increasing tree canopy across all areas of the City for multiple public health and environmental benefits.

D. Strengthen recreation and cultural opportunities for residents and visitors across the City.



III.A INTRODUCTION

This section highlights a vision and actionable strategies for the natural environment within the City of Las Vegas. This section includes recommendations for: natural features, urban forestry, parks, connectivity, urban agriculture and environmental justice.

This section focuses on the opportunities, challenges outcomes, objectives and connection with guiding principles for each of the sections. This section is connected to previous, ongoing and future city and regional planning efforts, and specifically linked to a concurrent Parks and Open Space Plan. Specifically, the park goals of this section focuses on the quantitative aspects of park space in Las Vegas in relation to projected growth, infill, redevelopment, and land use changes at city-wide and neighborhood-planning area scales for the next 30 years in the City. It also satisfies various requirements outlined in the Recreation Plan of NRS 278.160. This plan is supported by the concurrent CAPRA-accredited Parks and Open Space Plan that addresses specific park standards, guidelines, objectives, policies and priorities.

Recommendations in this section specifically align with 2050 Master Plan guiding principles, including:

- Protect, enhance, and restore natural features and resources of the Mojave Desert.
- Improve access and connectivity of open spaces for ecological, social, health, and quality of life benefits.
- Prioritize increasing tree canopy across all areas of the City for multiple public health and environmental benefits.
- Strengthen recreation and cultural opportunities for residents and visitors across the City.

Specific opportunities for the environmental component and embedded in recommendations for each of the sub-category and guiding principles include:

- Preserve and maintain open space as a balance to man-made development.
- Reclaim areas of environmental/ecological deterioration using available resources from the public, quasi-public and private sectors
- Plant 60,000 “Bulletproof” native and adaptive trees on public and private property that are heat, cold, and wind tolerant; water efficient; low maintenance; non-invasive, and pest and disease resistant
- Continue to maintain high-quality park space across the City
- Develop new park spaces to increase the total acreage of park space per resident
- Increase access to park spaces and connectivity between park spaces
- Decrease food deserts and increase community gardens across the City
- Improve air quality and reduce urban heat island impacts across the City

SEE ALSO:
CAPRA and Parks and Open Space Plan



OPPORTUNITIES	CHALLENGES
• Environment is one of the factors residents identify as a reason to move to and stay in Las Vegas • Many gaps in the open space framework currently exist,allowing for key connectivity strategies • Thanks to the leadership of SNWA, LVVWD, and the City, Las Vegas is a leader in water conservation and has proven to have the political will to reduce consumptive water use (primarily via reductions in outdoor water use) • There are good examples of adding tree canopy and reinforcing water-tolerant and native plant species in recent projects in Las Vegas • Residents identify quality of parks as a key asset - continue to build on this perception	• SNPLMA-funded parks and open space improvements will eventually decrease as BLM sales conclude at the periphery of the valley - alternative funding strategy should be developed • Endangered local species • There is currently not enough open space per capita and open spaces are not always located in best areas • Federal encumbrances on SNPLMA land limit the city’s ability to regulate and manage open space • The urban heat island effect, coupled with increased frequency and intensity of heat waves and extreme heat may impact residents and visitors to Las Vegas, especially vulnerable populations

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Improved environment conditions provides cleaner air, water and health outcomes for all, especially when prioritized for those with the most needs	Protecting, restoring and adapting places in the context of the unique natural resources in Las Vegas will allow for reduced water use and improved environmental and health outcomes	Improved environment, connectivity and recreation opportunities will allow for healthier choice options including physical, mental and safety	Las Vegas residents take pride in the unique environmental and parks aspects of the City. These elements are part of the DNA of what makes Las Vegas a great place to live	Proactively addressing environmental opportunities and challenges in the context of extreme climate change will require innovative solutions that can become global models

III.B NATURAL FEATURES

NRS 278.160.1(a)(1)

PROTECT, ENHANCE, AND RESTORE NATURAL FEATURES AND RESOURCES OF THE MOJAVE DESERT



The Mojave Desert is a unique region covering more than 50,000 square miles of Southern California, Southern Nevada, Northeastern Arizona, and Southwestern Utah. It is a rain shadow desert created by the Sierra Nevada and coastal mountain ranges of Southern California, bound by the Great Basin Desert to the north and Sonoran Desert to the south. At its eastern edge is the Las Vegas Valley, covering six hundred square miles. Surrounded by mountains, to the west are the Spring Mountains that extend north-south and include Red Rock Canyon, the La Madre Mountains, and the range's highest peak, Mount Charleston. At an elevation of 11,916 feet, it contains alpine tundra and thick pine forests. The Mojave Desert region is home to a diverse array of animal and plant species, contains unique topography, hydrology, and geology, and has a wide range of characteristics that require careful attention for its preservation, enhancement, and restoration.

The features of the Mojave Desert interconnect with the city's urban areas in a variety of ways as the city has sprawled outward for decades. The 2050 Master Plan emphasizes an intentional path toward infill, redevelopment and adaptive re-use of currently underutilized spaces as the City grows "up and not out." Las Vegas is also the fastest warming city in the U.S., causing extreme heat island effects often in the City's core urban neighborhoods. Strategies are required to restore natural features and processes to combat negative effects of climate change in Las Vegas. This plan for enhanced natural features that blur the boundaries between natural and built environments is developed in the context of a hotter and drier future.





OUTCOMES

- The number of threatened species identified by the Clark County MSHCP is reduced
- The number of endangered species identified by the Clark County MSHCP is reduced
- No net loss of identified habitat areas of threatened or endangered species
- No net loss of identified wetlands or desert areas
- Identified natural areas and arroyos have been restored
- Existing and new identified invasive species have been eradicated or contained to prevent population growth and expansion

SEE ALSO CHAPTER 4:

II. Conservation (Water)
III. Public Facilities
IV. Safety (Hazard Mitigation and Flooding)

KEY ACTIONS

- SNPLMA must continue to be supported as it has proven to be an effective tool for concentrating urban growth, while providing funding for open space.
- Utilize Tule Springs National Monument to its potential as a valuable open space asset for the City.
- Preserve and maintain open space as a balance to man-made development.
- Preserve and protect areas of important environmental/ecological consideration, and incorporate such areas into the park and recreation system.
- Use native and adaptive plants to meet environmental objectives and reduce maintenance requirements.
- Continue to partner with agencies, organizations, and businesses to enhance natural resource access and management.
- Reclaim areas of environmental/ecological deterioration using available resources from the public, quasi-public and private sectors.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Improved natural features that blur boundaries provides cleaner air, water and health outcomes for all, especially when prioritized for those with the most needs	Environmental protections for Mojave plant and animal species ensure continued resilience for the sensitive ecosystem.	Access and provision of open space areas allow for additional opportunities for recreation.	Protecting and enhancing the Mojave Desert helps conserve and preserve natural amenities for current and new residents.	SNPLMA continues to be an innovative tool of protecting open spaces and providing funding for parks and trails.

NATURAL FEATURES INVENTORY AND ASSESSMENT

The unique natural features of climate, weather and the Mojave Desert within the City of Las Vegas provides unique opportunities for new models of adaptive reuse. In order to achieve successful outcomes, it is important to have a detailed understanding of current and future conditions in Las Vegas.

ECOSYSTEMS

Vegetation. Widely spaced, low-lying shrubs compose most of the Mojave Desert flora. There are 250 ephemeral plants, approximately 90 of which are endemic. Dominant species, some of which are protected under the Endangered Species Act, include Joshua trees, creosote, white bursage blackbrush, and Mojave yucca. The Las Vegas Bearpoppy and Las Vegas buckwheat are protected, yet only grow along the Upper Las Vegas Wash in areas that could potentially be developed.



Wildlife. The area is also home to a wide range of mammals (including bats, bobcats, cougars, coyotes, bighorn sheep, pronghorn, muledeer, jackrabbit, and kit fox), birds (including burrowing owls, hummingbirds, hawks, falcons, eagles, and a number of migratory birds), reptiles (including the threatened desert tortoise, a number of species of rattlesnakes and lizards, Gila monsters, and chuckwallas), fish (chubs and dace), amphibians (such as the Red-spotted toad), and insect and arachnid species. The Mojave Desert Tortoise, Mount Charleston Blue Butterfly, and other species in the Mojave Desert ecosystem each face long-term anthropogenic pressures which may lead to further decline. The desert tortoise in particular was listed by the Federal government as threatened in 1990, however, the yellow-billed cuckoo is listed as threatened and the Southwestern Willow Flycatcher is listed as endangered. Off-road vehicles, urban development, transportation infrastructure, low nutritional nonnative grasses and other diminished food sources, and increased fires have all lead to increased habitat fragmentation and loss for these species.



Invasive Species. As with many areas, the introduction of invasive species, such as invasive grasses like red brome and cheatgrass, can challenge native vegetation and wildlife. Along the Las Vegas Wash and Colorado River, tamarisk is resilient and chokes out other species. The quagga mussel is by far the largest threat to the Colorado River and Southern Nevada' water supply, as well as the aquatic food chain. The bivalve rapidly reproduces, encrusts SNWA's pipes and water intakes, and fouls water quality.

CLIMATE

Precipitation. Prevailing Pacific coastal winds traveling inland are forced upwards by mountain ranges; winds that do make it through have potential to release available precipitation, but only averages four inches of rainfall annually, most falling during winter months. The Mojave Desert also receives summer monsoonal moisture that is pushed into the region from the Gulf of California.

Climate. Temperatures vary from extremes of below freezing in the mountains in the winter to 120 degrees on the valley floor during the summer. They can consistently exceed one hundred degrees for summer highs with mild average winter temperatures averaging sixty degrees.

Potential Impact of Climate Change. The Mojave Desert is threatened by changing climatic conditions, which contribute to extreme heat, wildfire, drought, extreme storm events, and associated plant and animal species loss. The capacity of the ecosystem to be resilient and ecologically stable without rapidly losing native vegetation and wildlife during periods of change can be altered with increased rates or intensity of disturbance. Increased heat and less water from drought will mean less resources available to plant and animal communities. Due to the emergence of invasive grasses that can destroy native desert shrubs and form new fuel, desert wildfires are more likely to occur. After fires occur, nonnative species out-compete the slower-to-establish native vegetation.





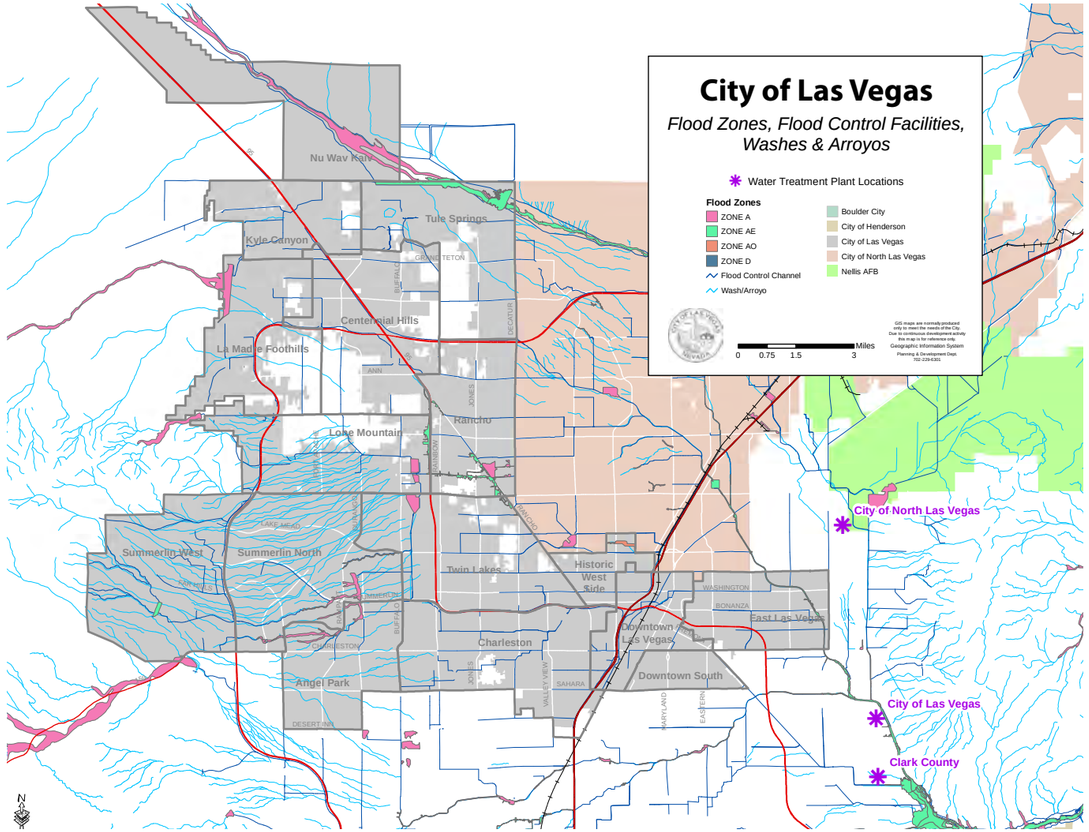
NATURAL SYSTEMS

Topography. The western part of the city are within or abut the foothills of the Spring Mountains and Red Rock Canyon; to the north are the alluvial fans of Gass Peak that towers over the City at the southern end of the Sheep Range. The valley floor gradually slopes from west to east and from north to south, with an elevation of approximately 2,000 feet near Downtown Las Vegas. While slope stability risks are relatively low and confined, foothill areas and areas containing steep slopes constrain development, runoff and erosion are difficult to control or prevent, and if hillsides are improperly developed, they can become unsightly. To protect them, the City adopted a Hillside Development Overlay; Development standards are designated within the overlay to promote orderly development, protect sensitive lands and habitat, mitigate erosion, and avoid visual blight.

Hydrology. The City is within the Las Vegas Valley Hydrographic Basin. Rain and snow in the Spring Mountains and Sheep Range infiltrate bedrock through faults and fractures and rests naturally to recharge the aquifer system in the Las Vegas Valley. Prior to wells tapping the aquifer's groundwater, a number of springs, including those at the Las Vegas Springs Preserve, Lorenzi Park, and Tule Springs, were present. Rainstorms wash sediment from surrounding mountains into enormous alluvial fans and into arroyos that are tributaries of the Las Vegas Wash. The Las Vegas Wash and its tributaries, historically an ephemeral stream, carry water and precipitation to the Colorado River and is the sole outlet of the valley. As the City grew over time, flows into the wash became permanent as both highly treated wastewater and discharged stormwater are released; these have created ponds and wetlands that also serve to further clean the stream flow before entering Lake Mead. Much of the watershed within the City has been developed through funded projects and facilities of the Clark County Regional Flood Control District. Concrete open flow channels, detention basins, and culverts have helped control stormwater during flooding events, but many of the tributaries are no longer in a natural state that could serve as a quality recreational area, green infrastructure, or open space. There have been notable exceptions, including preserved arroyos within Summerlin North, Summerlin West, and Kyle Canyon.







MINERALS, SOILS, AND GEOLOGY

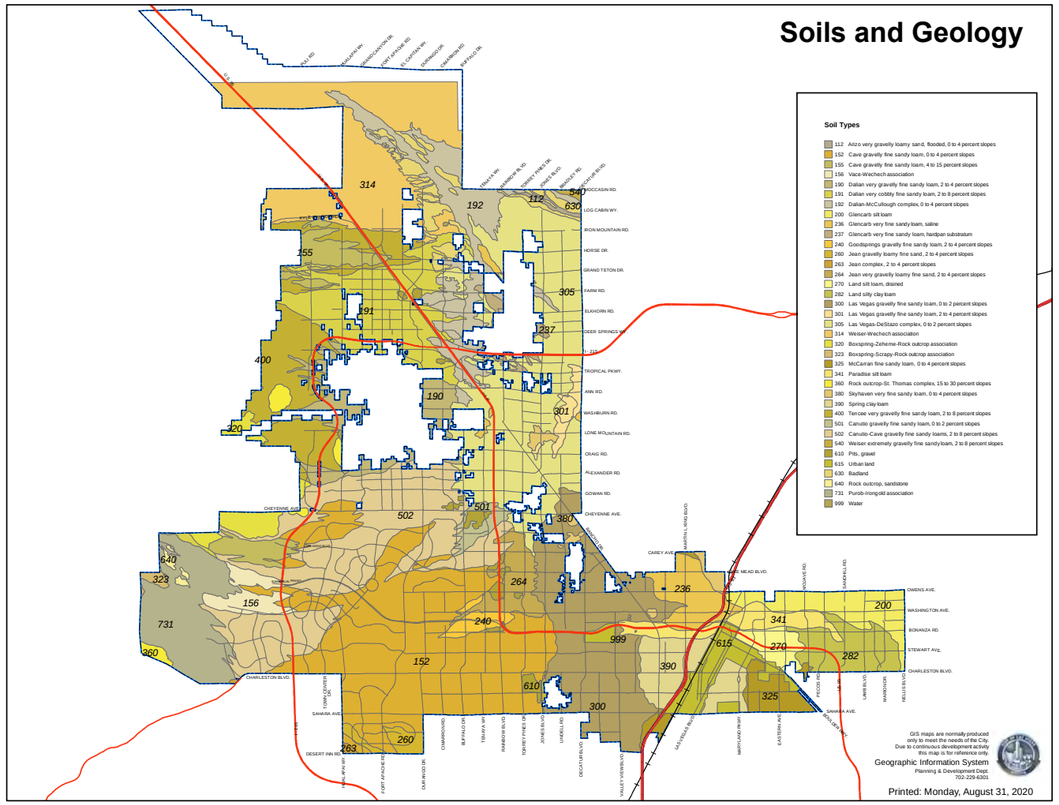
The mineral composition of the surrounding mountains and hills is a mixture of limestone, shale, sandstone, and dolomite with gypsum and quartzite deposits. Although mining is a major state industry, NDEP's Bureau of Mining Regulation and Reclamation indicates no other active mining operations immediately near the city aside the Lone Mountain Gravel Pit, which contains limestone and dolomite, sand and gravel used for concrete aggregate, construction, and landscaping. Sitting on BLM land between the Lone Mountain and La Madre Foothills planning areas, this mining operation provides a necessary resource for the growth of Las Vegas.

Knowledge of soil conditions is a key component of building construction and maintenance. According to soil data from the Natural Resources Conservation Service, the floor of the Las Vegas Valley is comprised of sand and gravels with silt, loam, and clay from thousands of years of erosion from the mountains surrounding the valley. Deposits of sedimentary caliche (a natural cement of calcium carbonate that binds clay, silt, gravel, and sand) are common throughout the valley. Local soils contain expansive clays that can exert force on a building or other structure to cause damage, including foundation cracks. Similarly, soil fissuring occuring around areas with seismic/tectonic faulting and horizontal aquifer movement can cause building damage. Soil and aquifer conditions in some parts of the valley are conducive to subsidence; historically, groundwater extracted from the valley's aquifers has resulted in local subsidence.

Some soils can also contribute to contamination of groundwater and permit leaching of potentially hazardous chemicals. As a result, brownfields around Downtown Las Vegas are present and have required remediation. Finally, due to less than ideal soil conditions and composition, farming and agricultural activity have been somewhat limited, although it has been possible to grow crops, orchards, and feed grasses.







NATURAL FEATURES COLLABORATION

Protecting, enhancing, and restoring the Mojave Desert environment within and around the Las Vegas Valley requires substantial collaboration between Federal, State, and local agencies, especially for public lands that have helped contain urban growth:

- Most of these lands are managed by the *Bureau of Land Management* (BLM) and also include designated wilderness areas, national conservation areas (NCA), and Areas of Critical Environmental Concern (ACEC). BLM's Southern Nevada District's Las Vegas Field Office oversee the resources and protection of public lands, conduct Resource Management Plans, and implement the Southern Nevada Public Lands Management Act (SNPLMA). BLM oversees and permits ranching and grazing, outdoor recreation, off-highway vehicle usage, and hunting.
- *Fish and Wildlife Services.* This includes the Desert National Wildlife Refuge, located directly north of the City, covering Corn Creek, Gass Peak and the Sheep Mountains this de-facto wilderness area helps protect a wide range of animal species, including desert bighorn sheep.
- *National Forest Service* and wilderness areas, including the Spring Mountain National Recreation Area to the west of the city. As a part of Humboldt-Toiyabe National Forest, the Spring Mountains contain Mount Charleston, Kyle Canyon, and Lee Canyon, and offer outdoor recreation opportunities.
- *National Park Service.* Tule Springs National Monument, spanning 15 miles of the Upper Las Vegas Wash between Corn Creek and the 215 Northern Beltway in North Las Vegas and through city territory, is among the newest national parks; also nearby is Lake Mead National Recreation Area – the first and largest recreation area, as well as one of the busiest, averaging more than 8 million visitors annually.
- *Tribal territory.* The Las Vegas Paiute Tribe occupied the reservation around the Nu Wav Kaiv planning area, in addition to a colony located north of Downtown Las Vegas. This reservation contains a major golf resort and smoke shop.
- *Military installations.* Nellis Air Force Base and Creech Air Force Base are among the largest fighter and training bases in the country. North of the City is the Nevada Test and Training Range, a 4,700 square mile complex for which the air force conducts combat training with live ordnance, aircraft testing, and exercises. Creech Air Force Base, near Indian Springs, which has undergone significant investment and expansion conducts military drone testing and global drone operations. Developing the northern part of the Las Vegas Valley has met some resistance, in part to ensure the protection of the military installations and their respective operations.
- Because the Federal government owns so much of Nevada's public lands, the State of Nevada does not have significantly large land holdings around the City of Las Vegas. Several state departments do have jurisdiction over areas that help protect the desert environment.
  - *Nevada Department of Conservation and Natural Resources (DCNR)* oversees the protection of Nevada's environment, including environmental cleanups and remediation. It includes protection of water resources, state lands and state parks, forestry, historic preservation, conservation districts, and off-highway vehicles programs.
  - *Nevada Department of Wildlife* (NDOW) ensures conservation and oversight of wildlife diversity and conservation, and permits hunting, fishing, and boating activities
  - *Nevada Department of Agriculture* (NDA) operates a noxious weed program and regulates the use of fertilizers and pesticides.
  - *Clark County's Department of Environment and Sustainability* is the region's air pollution control agency, implements the Desert Conservation Program, and administers the Multiple Species Habitat Conservation Plan.

The City's Planning Department and Office of Sustainability play a lead role in land use planning and environmental protection. NRS 278.250 prescribes that zoning regulations be in accordance with this master plan and be designed to preserve air and water quality, conserve and protect open space and natural resources, provide for recreational needs. By setting land use controls and zoning through the LVMC Title 19 Unified Development Code, the City can further protect, enhance, and restore the Mojave Desert

THE SOUTHERN NEVADA PUBLIC LANDS MANAGEMENT ACT (SNPLMA) IS A VALUABLE TOOL FOR FUNDING PARKS AND OPEN SPACE

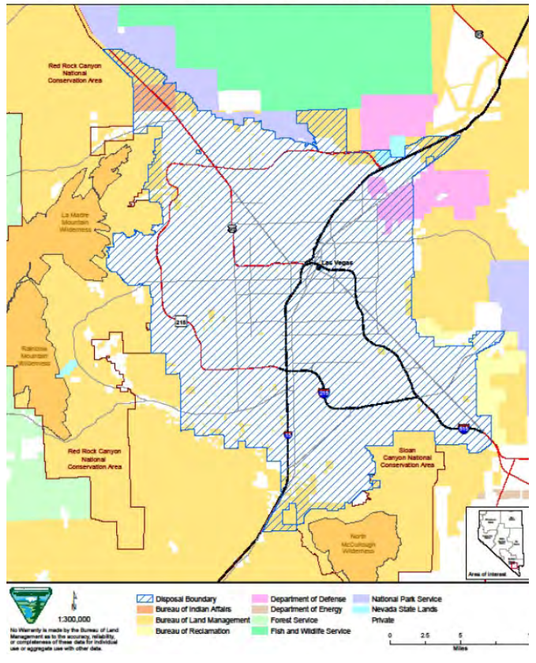
Adopted in 1998, SNPLMA allows the BLM to sell public land within a specific boundary around Las Vegas. The revenue from auctioned land sales, totaling $4.1 billion as of 2019, is split between the State Education Fund (5%), the Southern Nevada Water Authority (10%), and an account for specified purposes, including:

- Development of parks, trails, natural areas, and other recreational and public purposes in cooperation with local governments or regional entities
- Capital Improvements at Federal facilities or on Federal lands
- Conservation Initiatives on Federal lands
- Multi-Species Habitat Conservation Plan (MSHCP)
- Environmentally Sensitive Land Acquisitions
- Hazardous Fuels Reduction and Wildfire Prevention
- Eastern Nevada Landscape Restoration Projects
- Lake Tahoe Restoration Projects

Other provisions in SNPLMA direct certain land sale and acquisition procedures and provide for the sale of land for affordable housing and public purposes, such as municipal facilities and schools. Of the 68,000 acres within the SNPLMA boundary, 38,700 acres have been sold at auction, leased, exchanged, or reserved for public purposes, with approximately 29,000 acres remaining for disposal; much of the City's BLM parcels are within the northwestern areas of the city. The City has previously been able to leverage SNPLMA for a wide range of parks and trails projects and renovations. Several recent proposals have been made to increase SNPLMA's territory as a part of a public lands bill package, but Congressional approval is required to amend SNPLMA and expand the boundary.



Southern Nevada Public Land Management Act Disposal Boundary



TULE SPRINGS NATIONAL MONUMENT IS A VALUABLE OPEN SPACE ASSET TO THE CITY

Established in 2014 by an act of Congress, the Tule Springs Fossil Beds National Monument spans 22,650 acres of the Upper Las Vegas Wash and protects key paleontological and archaeological resources. Fossils of mammoths, camels, and American lions, dating between 10,000 to 250,000 years in age have been found within the wash's arroyos, as have traces of the "Nuwu," the ancestors of the Southern Paiute. Encroachment had been taking place over the last thirty years; some areas of the Wash have been developed or contain housing developments immediately against the Monument's boundaries. The Monument is now protected and contains approximately 5,350 acres within the Nu Wav Kaiv planning area. Because Tule Springs is so new, it lacks basic boundary protections, has no major facilities or visitor's center, and still faces threats of encroachment, as well as vandalism, misuse, and degradation. The City, in partnership with the NPS, must work together to ensure the Monument is secured, buffered, and protected.

HABITAT AND ENDANGERED SPECIES

The Clark County Desert Conservation Program (DCP) manages Endangered Species Act compliance on behalf of Clark County (the agency lead and implementing entity), NDOT, and local municipalities through implementation of the Clark County Multiple Species Habitat Conservation Plan (MSHCP) and an associated incidental take permit due to concerns over habitat loss and mortality of the desert tortoise. Formed thirty years ago and approved for nearly 80 reptile, amphibian, mammal, insect, crustacean, and plant species in 2001 covering 145,000 disturbed acres, the MSHCP allows landowners to develop land without the need for an Endangered Species Act review or environmental study. In addition to funding and implementing conservation measures for the desert tortoise, the plan made funding available to research other species of concern.

The MSHCP directs measures to proactively conserve species and ecosystems. Doing so reduces the likelihood that future species will become endangered and protects the region against further requirements if current species become threatened or endangered in the future.

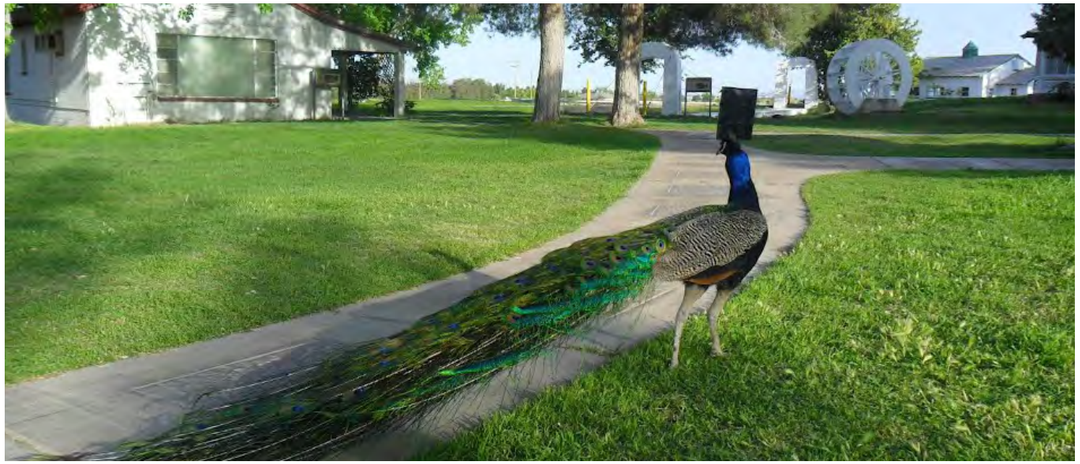
The MSHCP:

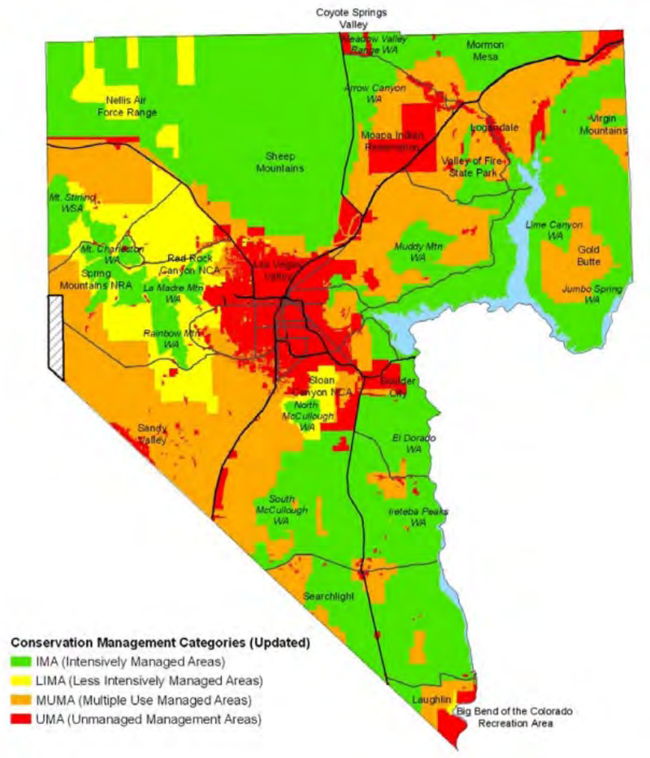
- Helps increase populations of covered species.
- Works to balance conservation with recovery of habitats and ecosystems for native plants and wildlife.
- Protects a broad range of activities under the permit, including development.
- Reduces economic burdens on individual landowners and all levels of government.
- Reduces uncoordinated decision making, which can result in incremental habitat loss.

The MSHCP reserves Federal public land areas defined by their kinds and levels of management as it affects the covered species:

- Intensively Managed Areas (IMAs): Includes the DNWR and areas north of the city
- Less Intensively Managed Areas (LIMAs): Areas immediately surrounding the Spring Mountains and its foothills
- Multiple Use Managed Areas (MUMAs): Areas in the northwestern and western planning areas of the City
- Unmanaged Areas (UMAs): Much of the Las Vegas Valley

IMA and LIMA areas are part of the "reserve system." No net unmitigated loss or fragmentation of habitat is intended within these areas, or within MUMA areas where a substantial proportion of the species habitat exists. Prior to development on private property anywhere within the City or County, the developer must obtain a grading or building permit and pay a one-time $550 per acre disturbance fee for each acre (up to 130,000 acres). These fees are collected by the City and other permittees, and collectively administered by the County to implement the MSHCP.





IMPLEMENTATION STRATEGIES

- SNPLMA must continue be supported as it has proven to be an effective tool for concentrating urban growth while providing funding for open space
  - Develop a long-term, citywide SNPLMA parcel and property nomination plan, consistent with SNPLMA's Strategic Plan, for future land development purchases, parks, trails and recreation projects, and reserving locations for additional public facilities
  - Carefully collaborate with other jurisdictions and Nevada's Congressional delegation on changes or amendments to SNPLMA or other public lands bills to ensure the intent and purpose of this plan is not undermined
- Utilize Tule Springs National Monument to its potential as a valuable open space asset for the City
  - Leverage SNPLMA or City funding to partner with the NPS to construct a Visitors Center and other facilities and amenities at the Tule Springs National Monument
  - Provide or require connections and accessibility along boundaries with the Tule Springs National Monument and Red Rock Canyon NCA
- Preserve and maintain open space as a balance to man-made development.
  - Protect adjacent lands from urban encroachment through zoning buffers along boundaries with the Tule Springs National Monument and Red Rock Canyon NCA
- Preserve and protect areas of important environmental/ ecological consideration, and incorporate such areas into the park and recreation system.
  - Within the Summerlin West, Lone Mountain, La Madre Foothills, Tule Springs, Centennial Hills, Kyle Canyon, and Nu Wav Kaiv planning areas (especially those within identified LIMA and MUMA areas pursuant to the MSHCP), assess each area to identify plant and wildlife species and habitat areas (including those that are threatened or endangered), connections between habitats, and invasive species
  - Adopt additional resource conservation and preservation measures as may be needed or required
  - Fund targeted habitat restoration efforts
  - Preserve slopes and hillsides, as defined under the Hillside Overlay ordinance, especially for identified sensitive slopes and ridgelines
  - Adopt a policy to further enable the use of conservation easements and the transfer of development rights program pursuant to NRS 111 for open space and sensitive lands that warrant protection
- Use native and adaptive plants to meet environmental objectives and reduce maintenance requirements.
  - Enact additional policies to identify, contain, and eradicate invasive species, noxious weeds, diseased or infected trees, insects, rodents, pursuant to the Las Vegas City Charter, LVMC Title 9, and Title 13.48, utilizing best-management practices
  - Coordinate with Clark County on additional measures or policies that implement the MSHCP
  - Update design standards for municipal buildings and the LVMC Title 19 Unified Development Code to ensure native and adaptive plants are utilized and non-invasive species are prohibited
- Continue to partner with agencies, organizations, and businesses to enhance natural resource access and management.
  - Work with Clark County Regional Flood Control District to selectively restore and enhance the Las Vegas Wash and its tributaries
  - Work with Clark County Regional Flood Control District to identify, conserve, and protect other arroyos and washes as recreational amenities, while ensuring the ability to protect the public and property from flash flooding
  - Develop public education campaigns and coordinate with volunteer organizations to inform residents about endangered, threatened, and invasive species



III.C URBAN FORESTRY

NRS 278.160.1(a)(2)

SEE ALSO
Urban Forestry Management Plan

PRIORITIZE INCREASING TREE CANOPY ACROSS ALL AREAS OF THE CITY FOR MULTIPLE PUBLIC HEALTH AND ENVIRONMENTAL BENEFITS



As one of the fastest warming cities in the country, extreme heat is one of three current and long-term hazard vulnerabilities to the city that must be mitigated. Among the top methods to reduce the urban heat island effect, mitigate extreme heat, and reduce overall temperatures is through the City's urban forest and other forms of green infrastructure. Trees help cool cities by providing shade, reducing direct sunlight, lowering the need to cool buildings and associated energy costs, decreasing the amount of heat absorbed by asphalt areas like streets or parking lots, and creating overall cooler environment through which people can walk and bike. Urban forests, the collection of urban trees throughout the urban environment, are a capital asset, much like a public building. Trees and urban forests also have the benefit of providing the City with a wide range of physiologic, economic, sociologic, and aesthetic benefits, including:

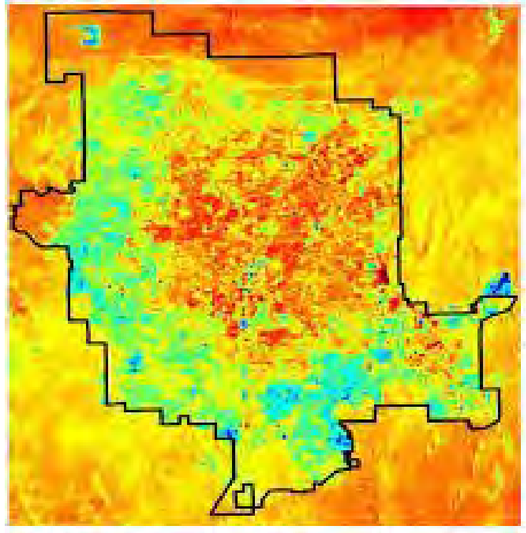
- Provide shade that help cool and mitigate the urban heat island
- Increase property values and property marketability.
- Help reduce air pollution and sequester greenhouse gas emissions by providing health benefits and environmental justice to urban neighborhoods
- Provide wildlife habitat
- Help treat stormwater runoff

KEY ACTIONS

- In keeping with Tree City USA and urban forestry commitments, plant 60,000 high quality trees composed of a diverse list of native and adaptive species on public and private property that are tolerant of heat, cold, and wind; water efficient; low maintenance; non-invasive, and pest and disease resistant.
- Within each area of the city, especially those with vulnerable populations, and when temperatures exceed 100 degrees, prepare an adequate extreme heat response.
- Institute resilient best management urban design practices to ensure high quality landscape architecture for public facilities and private developments.
- Increase outreach and education on trees and landscaping

URBAN HEAT ISLAND CONTEXT

Average annual high and low temperatures have continued to increase over time. Between 2006 and 2019, average temperatures increased nearly three to four degrees in Las Vegas. July monthly daytime average temperatures have exceeded 105° in ten of the past 14 years. The Las Vegas office of the National Weather Service determines extreme heat events; heat advisories are issued when daytimes highs are expected to be 100° or higher for at least two days and nighttime temperatures do not drop below 75°. An excessive heat warning is similarly issued when temperatures reach above 105°. Over the next 30 years, barring no major reversal of global climatic temperature trends, it is anticipated that the average annual number of days when temperatures exceed 100°will increase to 70 days. Extreme heat is further exacerbated by the urban heat island effect, the phenomenon of urban areas being hotter than rural areas, which can be mitigated by reducing asphalt and concrete surfaces while weaving in green infrastructure and shade. The urban heat island effect can cause the following:

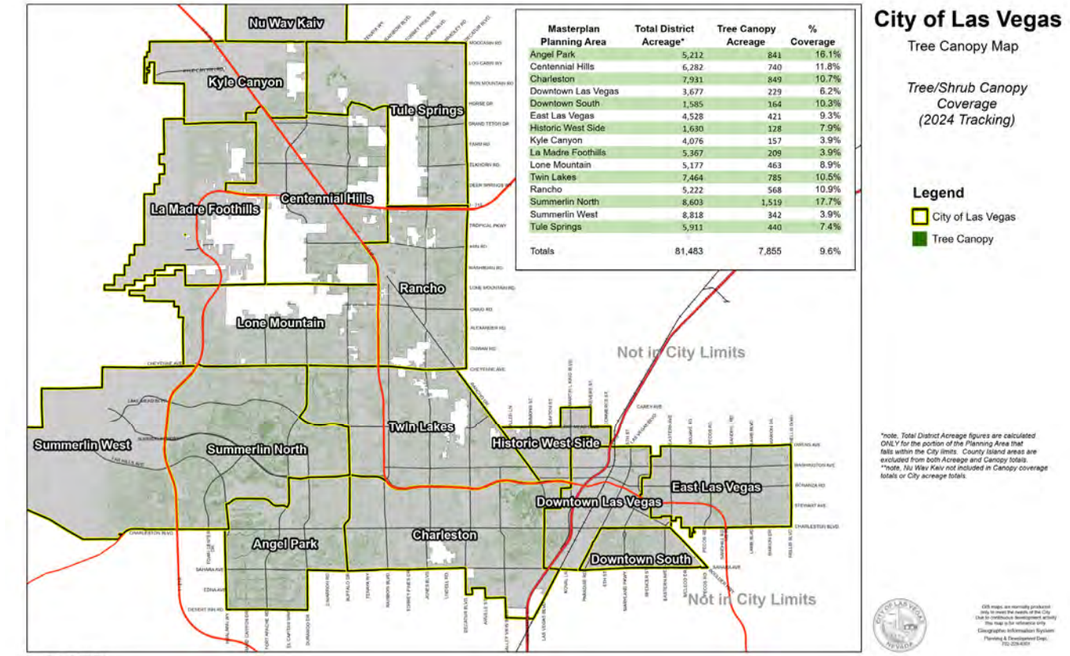


- Health issues, especially for heat-susceptible populations like children, the elderly, homeless individuals, and low-income and minority populations.
- Delays, business risks, and heath concerns for employees that work outside, especially at the City's resorts, construction and development labor.
- Increased energy and water demand for air conditioning and cooling, as well as increased building operational costs, employee needs, and goods requiring refrigeration.
- Poorer air quality through the greater incidences of inversion layers

OUTCOMES

- Plant and maintain 60,000 diverse and high quality native and adaptive trees on public and private property by 2050.
- The City's tree canopy increases to 20% by 2035 and 25% by 2050 utilizing native and adaptive drought tolerant tree species.
- 85% of the City's population lives within a 1/3 mile from green infrastructure features that provide localized cooling through park space, tree canopy cover, or vegetative surfaces.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Tree canopy coverage must be distributed throughout the City to ensure all residents, as well as members of vulnerable populations, have access to the benefits of trees	Utilizing water-efficient, drought tolerant adaptive tree and plant species help the City further mitigate and adapt against the hazard of extreme heat.	Trees help reduce the urban heat island effect and overall temperatures, improve the quality of stormwater and air, and provide visual aesthetics that improve personal wellness.	Parks, trees, and green infrastructure enhance the sense of place in the community and provide areas that are enjoyable to walk, bike, and recreate by all.	Designing structures and architectural features that provide shade as well as green space



Masterplan Planning Area	Total District Acreage*	Tree Canopy Acreage	% Coverage
Angel Park	5,212	841	16.1%
Centennial Hills	6,282	740	11.8%
Charleston	7,931	849	10.7%
Downtown Las Vegas	3,677	229	6.2%
Downtown South	1,585	164	10.3%
East Las Vegas	4,528	421	9.3%
Historic West Side	1,630	128	7.9%
Kyle Canyon	4,076	157	3.9%
La Madre Foothills	5,367	209	3.9%
Lone Mountain	5,177	463	8.9%
Twin Lakes	7,464	785	10.5%
Rancho	5,222	568	10.9%
Summerlin North	8,603	1,519	17.7%
Summerlin West	8,818	342	3.9%
Tule Springs	5,911	440	7.4%
Totals	81,483	7,855	9.6%



THE MULTIPLE BENEFITS OF TREES

A healthy urban forest provides an opportunity to reduce the effects of the urban heat island effect by providing shade and improve air and stormwater quality. Effective urban forests make neighborhoods livable and create a positive aesthetic impact in addition to the benefits of mitigating urban heat islands. Not only are trees used to help provide green space for residents, they are commonly used to provide an aesthetic buffer between uses. Done well, planted trees can help mitigate unwanted or undesirable views.

Ultimately, through public and private tree planting efforts and the provision of green space, the overwhelming majority of the City's population should live within a short walk from a concentration of green infrastructure features that provide localized cooling, including park space, tree canopy cover, or vegetative surfaces.

Green infrastructure efforts must be balanced with the ambitious water reduction and conservation targets identified in this plan. Trees for buffering and green space provision are necessary, and species that offer shade, biodiversity, and other benefits should be prioritized for public and private use. These factors will help ensure a diverse plant palette that is not only heat tolerant and water efficient, but also meets a range of other criteria, including:

- Water consumption requirements
- A range of tree sizes, heights, and widths
- Maintenance and aesthetic concerns
- Tree size; the average canopy diameter for the recommended species is approximately 355 square feet
- Resistance to pests and disease
- Species diversity and stock quality
- Appropriateness for planting within property perimeters as buffers, along the street as shade trees, and within parking areas.

SNWA's Water Smart landscaping incentive program has helped reinforce appropriate tree and species selection while reducing turf and cool season grasses, non-functional turf, and application at sports and recreational fields at City parks. Codifying the recommended palette will send a clear message that appropriate species selection is vital. Opportunities for further exploration may include the development of joint tree and landscaping programs that incentivizes the replacement of sick, dying, or non-adaptive tree and plant species with xeriscaping, water efficient, drought tolerant species that provide community benefits and increase the City's tree canopy.

URBAN FORESTS HISTORY IN LAS VEGAS

Urban forests and urban trees are performance landscape elements that serve as a valuable physical capital asset for the City. The City has been a long-time supporter of urban forestry; the first Arbor Day activities were carried out by the women of the Mesquite Club in 1912 who planted 2,000 trees. Ever since, the City:

- Has been recognized as a Tree City USA by the Arbor Day Foundation since 1989.
- Has supported urban forestry through its sustainability efforts. The City adopted an urban forestry resolution (R-26-2008) that committed the city to double the City's urban tree canopy to 20% by 2035.
- Regulates the planting of trees and shrubs pursuant to LVMC Title 13.48 and LVMC Title 19; the City's Urban Forester and Parks and Recreation Department are responsible for the City's urban forest, while the Planning Department establishes landscaping standards for residential and commercial development.

The City of Las Vegas maintains approximately 40,000 trees in public rights-of-way and at public facilities and parks. Not only do these trees help provide benefits to public property, help improve air and stormwater quality, they also help mitigate local greenhouse gas emissions.

EQUITY, URBAN HEAT ISLAND AND URBAN FORESTS

Las Vegas has the most intense urban heat islands of any city in the country, measurably higher daytime and nighttime temperatures and intensities in the urban core than in suburban areas and in the peripheral desert areas. In terms of urban heat island intensity, the City is approximately 20-25 degrees hotter than in surrounding desert areas.

Using remote sensing imagery, daytime and nighttime land surface temperatures were mapped across Southern Nevada using LANDSAT and Census data. Green infrastructure and the proximity of resident population were analyzed, including the amount of the population near

protected vegetated surfaces performing localized cooling, including the tree canopy cover, artificially created water features and other permeable surfaces, and recreational areas including parks, golf courses, and greenways. Several extreme heat factors were assessed including:

- The normalized difference vegetation index, which assesses the abundance of vegetation that help mitigate the urban heat island effect through evapotranspiration by releasing absorbed heat easily, which keeps nighttime temperatures down.
- Impervious surfaces that retain heat and raise urban temperatures, especially at night.
- Vulnerability factors within each planning area. Among the key indicators are:
  - The age of the population, particularly of the elderly and children who are more susceptible to extreme heat and the associated health affects
  - Health data, including how many residents are disabled or have chronic diseases
  - Income data as a measure of the ability to afford utilities
  - Access to cooling infrastructure and other information on the building stock

These factors contribute to a community's overall vulnerability to extreme heat caused by the urban heat island. The results reveal:

- Vegetated surfaces only account for 30% of the City's total area, while the tree canopy accounts for approximately 13%, much of it coming from trees in residential areas.
- Tree canopy coverage is typically highest in suburban planning areas like Summerlin and Centennial Hills. Conversely, canopy coverage is lowest in the inner ring suburbs around Downtown Las Vegas. Some notable exceptions include the neighborhoods immediately around the Springs Preserve, golf courses, Lorenzi Park, and Freedom Park. Much of East Las Vegas, the Historic Westside, and Downtown have older tree canopies with large trees that are slowly being lost to disease, replacement, or stress.
- In all parts of the City, areas with large concentrations of impervious surfaces, especially parking lots, have higher temperatures and lower amounts of tree canopy.
- The hottest areas are located in the desert areas around the city followed by the urbanized areas of the valley. Concrete, asphalt, soils, and rock heat faster during the day. Because built surfaces like concrete hold heat in and release it slowly, the city doesn't cool down as fast at night
- Other forms of urban cooling and providing shade are not in wide practice in Southern Nevada. The abundance of low albedo surfaces leads to greater heat absorption. Low albedo locations with low sunlight reflectivity are found throughout all areas of the city, especially as a result of the abundance of asphalt parking lots. While green infrastructure provides the highest amount of benefits, other efforts, including the proper utilization of building materials, use of shade structures, active and passive shading, and green roofs must be further incorporated into community design.
- The impacts of extreme heat are felt disproportionately across the City. Vulnerable planning areas include those that have higher rates of poverty or homelessness, the elderly and young, and those who have preexisting medical conditions. The impacts of extreme heat are concentrated in areas with lower incomes and have higher rates of African American and Latino neighborhoods, especially those located within West Las Vegas, Charleston, and East Las Vegas. These areas are underserved by green infrastructure and community centers and facilities that serve as cooling stations that serve as a respite from extreme heat.

THE CITY MUST REVERSE THE TREND OF WAIVING TREE AND LANDSCAPING REQUIREMENTS

The City must evaluate other proactive measures including a regulatory approach to reduce the amount of impervious surfaces and parking lots. Designing places to mitigate extreme heat impacts will require more innovative approaches.

Based on Planning Department data beginning in 2002, a significant amount of development projects have requested waivers, and exceptions from LVMC Title 19 tree and landscaping standards. During the site development review process, requests may be necessitated for a specific project. While a single project may eliminate a handful of required trees, the cumulative sum of all trees has led to a substantial loss of the urban forest; between 2006-2015, more than 2400 waivers and exceptions were requested leading to the loss of 6,750 trees and more than 27,000 shrubs. During this period, both Planning Commission and City Council approved these requests to deviate from standards at a rate of more than 74% of the time despite staff recommendation of denial.

The difference between urban and suburban community design and green space availability is age, for which newer standards may apply; Parking areas are especially prevalent in suburban planning areas of Las Vegas, LVMC Title 19 provides requirements for shading that are intended to provide both a perimeter buffer as well as aesthetic enhancement. Some areas, including Downtown Las Vegas, have higher rates of impervious surfaces that serve as a heat sink that raises ambient air temperatures. Likewise, suburban planning areas also tend to have higher, albeit less concentrated heat sinks, with asphalt and dark rooftops concentrations as high as 70% of total area. Addressing heat islands must also recognize that asphalt parking lots are "placeholders" for future mixed-use infill development. Eliminating these existing asphalt and concrete areas, by retrofitting commercial corridors will begin to change the mix of surfaces. New tree canopy and landscaping associated with each mixed-use infill site coupled with changes to landscaping, paving, and building shade standards will also ensure a reversal in the trend of lost landscaping. The loss of trees and landscaping as a result of waiver requests can be addressed in the following ways:

- Applicant education on the importance of trees and their necessity in every project as a means of reducing the urban heat island effect
- Staff education to identify vegetation, building materials, and other methods to increase shade
- City Council and Planning Commission education to ensure high quality projects meeting standards are approved and those that are not are better scrutinized.
- An evaluation of standards for exceptions and waivers, including the development of policies to ensure that if landscaping is not planted as a part of a project, landscaping will be contributed to another portion of the area of the city.







MOJAVE NATIVE AND ADAPTIVE SPECIES

The following list, adapted from previous versions of SNWA's and Southern Nevada Regional Planning Coalition's Regional Plant Lists of Mojave desert native and adaptive species by common name, is rated on environmental and temperature tolerance, water efficiency, canopy coverage, diversity, maintenance needs, and disease resistance. These are appropriate for public and private street trees and landscaping. The Planning Department shall maintain a complete list of approved tree, shrubs, groundcover, grasses, and perennials.

Preferred High Quality Trees

- Arizona ash
- Bay Laurel
- Blue Elderberry
- Blue Palo Verde
- Cat Claw Acacia
- Chaste Tree
- Chilean Mesquite
- Chinese Pistache
- Coolibah tree
- Cork Oak
- Desert Museum Palo Verde
- Desert Willow
- Escarpment Oak
- Fan-Tex/Rio Grande Ash
- Foothills Palo Verde
- Goldenrain
- Holley Oak
- Honey Locust
- Japanese Pagoda
- Kidneywood
- Lacebark Elm
- Modesto Ash
- Mulga Acacia
- Netleaf hackberry
- Pomegranate
- Raywood ash
- Sawleaf Zelkova
- Screwbean Mesquite
- Shoestring Acacia
- Singleleaf Ash
- Sonoran Emerald Palo Verde
- Southern Live Oak
- Sweet Acacia
- Texas Ebony
- Texas Mountain Laurel
- Texas Olive
- Thornless Chilean Mesquite
- Twisted Acacia
- Valley Oak
- Velvet Mesquite
- Western Honey Mesquite
- White Thorn Acacia
- Wilson Olive
- Xylosma

Additional Approved Trees

- Aleppo pine
- Almond
- American elm
- Amur maple
- Argentine mesquite
- Arizona cypress
- Australian pine
- Blackbrush acacia
- Blue atlas cedar
- Blue leaf wattle
- Blue oak
- Brazilian bluewood
- Buckley oak
- Bur oak
- Burford holly
- Camperdown wych elm
- Canby oak
- Carob
- Cathedral live oak
- Cedar elm
- Chihuahuan orchid tree
- Chilean palo verde
- Chinquapin oak
- Chir pine
- Cider gum
- Common hackberry
- Coonavitra wattle
- Desert gum
- Desert ironwood
- Desert oak
- Desert scrub oak
- Fern of the desert
- Fig
- Foothill pine
- Fruiting, Contorted mulberry
- Fruitless olive
- Gambel oak
- Golden leadball tree
- Gooddings willow
- Heritage live oak
- High Rise live oak
- Indian rosewood
- Ironwood
- Italian buckthorn
- Jujube
- Leather leaf acacia
- Mastic tree
- Medierranean hackberry
- Mexican buckeye
- Mexican ebony
- Mexican plum
- Mexican redbud
- Monterrey oak
- Mt. Atlas mastic tree
- Nellie R. Stevens holly
- One seed juniper
- Orchid tree
- Osage orange
- Palo brea
- Pecan
- Pistachio
- Prairie flameleaf sumac
- Red ironbark
- Red push pistache
- Red river gum
- Red thorn
- River she oak
- Seedless hybrid mesquite
- Shumad oak
- Silver dollar gum
- Single leaf ash
- Sonoran hybrid palo verde
- Stone pine
- Strawberry tree
- Swamp mallee
- Tenaza
- Texas honey mesquite
- Texas redbud
- Thornless honey mesquite
- Thornless hybrid mesquite

MOJAVE NATIVE AND ADAPTIVE SPECIES



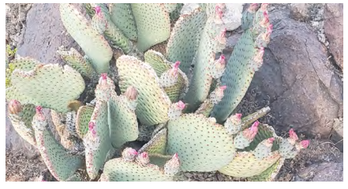


- Thornless hybrid palo verde
- Turkish pine
- Utah juniper
- Wavy leaf oak
- Weeping acacia
- Weeping bottlebrush
- Western redbud
- Western soapberry
- White poplar
- Whitehord acacia
- Willow acacia
- Willow leaf peppermint gum
- Willow pittosporum
- Wilson holly
- Yaupon holly

Shrubs, Groundcover and Vines

- Apache plume
- Arizona mescal bean
- Arizona rosewood
- Baja fairy duster
- Big sage brush
- Black Dalea
- Blackbrush
- Bladdersage
- Cimarron Ranger
- Quail Bush
- Brittlebush
- Buckwheat
- Chuparosa
- Chaparral sage
- Chihuahuan sage
- Cliff goldenbush
- Cliff rose
- Compact jojoba
- Compact Texas Ranger
- Cooper's wolfberry
- Creeping Acacia
- Creosote
- Damianta
- Desert Almond
- Desert Milkweed
- Desert Olive
- Desert Ruellia
- Desert Saltbrush
- Emu bush
- Evergreen sumac
- Feathery senna
- Four wing saltbush
- Fremont's Barberry
- Green cloud Texas Ranger
- Greythorn
- Indigo bush
- Jojoba
- Las Vegas Valley Buckwheat
- Little Leaf Ash
- Little Leaf Cordia
- Littleleaf Sumac
- Lynn's Legacy Texas Ranger
- Mexican Bird of Paradise
- Mexican Blue Sage
- Mexican Cliffrose
- Mexican Elderberry
- Mexican Honeysuckle
- Mojave sage







MOJAVE NATIVE AND ADAPTIVE SPECIES

- Mormon tea
- Narrowleaf rosewood
- Nevada Mormon Tea
- Nevada Smokbush
- Pale Wolfberry
- Pink Fairy Duster
- Pink Indigo Bush
- Purple Sage
- Quailbush
- Raincloud Texas Ranger
- Red Bird of Paradise
- Red Justicia
- Rio Bravo Texas Ranger
- Saltbush
- Sand Sage
- Scrub Live Oak
- Shadscale
- Sierra Bouqet Texas Ranger
- Silver Cloud Texas Ranger
- Silver Dalea
- Snakeweed
- Spiny Senna
- Skunk bush
- Sugar Bush
- Sweet Bush
- Texas Ranger
- Thundercloud Texas Ranger
- Turpentine Broom
- Turpentine Bush
- Utah Butterfly Bush
- Velvet Leaf Senna
- Virgin River Brittlebush
- White Bursage
- White Cloud Texas Ranger
- Wild Buckwheat
- Winterfat
- Wolf Berry
- Wooly Bursage
- Wooly Butterfly Bush
- Yellow Rabbit Brush
- Yellow Snapdragon
- Yerba Santa
- Desert Carpet Creeping Acacia
- Desert Sand Verbena
- Dwarf Coyote Brush
- Four O'Clock
- Goodding Verbena
- Goosefoot Mallow
- Indigo Bush
- Sierra Gold Dalea
- Spurge
- California grape
- Canyon grape
- Rogers red grape
- Western Virgin's bower

Agave, Cacti, Succulents, Yucca

- Banana Yucca
- Beaked Yucca
- Bear Grass
- Beavertail cactus
- Beehive cactus
- Bigelow's Nolina
- Black Spine Prickly Pear
- Blue Nolina
- Blue Yucca
- Bristly Prickly Pear
- Buckhorn cholla
- Bunny ears
- Claret Cup
- Common Pincushion
- Compass Barrel Cactus
- Cottontop cactus
- Cow's Tongue
- Desert Spoon
- Diamond Cholla
- Englemann's Prickly Pear
- Fishook Barrell cactus
- Giant Sword Flower
- Green Desert Spoon
- Harriman's yucca
- Indian fig cactus
- Joshua tree
- Mojave Prickly Pear
- Mojave yucca
- Nevada agave
- Night bloom yucca
- Ocotillo
- Old Man Prickly Pear
- Orange Tuna Cactus
- Our Lord's Candle
- Palm Yucca
- Pancake Prickly Pear
- Pencil Cholla
- Pincushion
- Pine Cone Prickly Pear
- Queen Victoria Agave
- Red Yucca
- Silver Cholla
- Silver Dollar Cactus
- Soaptree Yucca
- Staghorn Cholla
- Stick Palm
- Strawberry Hedgehog
- Teddy Bear Cholla
- Texas Bear Grass
- Treebear Grass
- Twisted Yucca
- Yellow Yucca

Grasses

- Alkali Sacaton Grass
- Autumn Glow
- Big Galleta Grass
- Blue Grama Grass
- Blue Oat Grass
- Bull Grass
- Deer Grass
- Desert Needlegrass
- Dwarf Pampas Grass
- Feather Reed Grass
- Indian Ricegrass
- Nashville
- Pampas Grass
- Purple Threeawn
- Regal Mist Muhly Grass
- Side Oats Grama



IMPLEMENTATION STRATEGIES

- In keeping with Tree City USA and urban forestry commitments, plant 60,000 high quality trees composed of a diverse list of native and adaptive species on public and private property that are tolerant of heat, cold, and wind; water efficient; low maintenance; non-invasive, and pest and disease resistant.
  - To further reduce extreme heat and the urban heat island effect, support and accent trees with heat and water efficient native and adaptive plants, including shrubs, groundcover, vines, agaves, cacti, succulents, yuccas, ornamental grasses, and perennials
  - Amend relevant Chapters of LVMC, including Titles 13 and 19, to provide specific measures on urban forestry that will increase the amount of shade and vegetative surfaces to provide urban cooling
  - Strengthen landscaping requirements within LVMC Title 19 to ensure trees and landscaping are not lost due to exceptions or waivers of codified standards
  - Re-evaluate standards for exceptions and waivers to landscaping requirements, especially for residential and commercial perimeter buffer areas and parking lot landscaping
  - Create a tree board to review and approve urban forestry issues
  - Should a variance, exception, or waiver be requested within a development application to the City, or require approval by the Planning Commission or City Council, the City should develop a fee-in-lieu of requirement to fund the planting of new trees
  - Work with SNWA to create a tree and landscaping program that incentivizes the replacement of sick, dying, non-native, or non-adaptive tree and plant species with xeriscaping, water efficient, drought tolerant species that provide community benefits and increase the City's tree canopy
  - Ensure the City's urban forester has access to resources in order to spend a minimum of $2 per capita on the City's trees and urban forests, plant new trees and remove unsafe, damaged or diseased trees, and maintain and contract public trees.
  - Ensure that developers and applicants meet city landscaping efforts and require substantial evidence that landscaping plans or lack of landscaping will not compromise City objectives.
  - Require planning staff to properly evaluate trees and landscaping plans during site development reviews and properly administer standards contained within the zoning ordinances.
  - Adopt a tree protection ordinance that requires or incentivizes protection of trees on private land
- Within each area of the city, especially those with vulnerable populations, and when temperatures exceed 100 degrees, prepare an adequate extreme heat response.
  - Ensure cooling centers are prepared to open at each City of Las Vegas senior center and community cooling center, especially those in vulnerable communities
  - Leverage social media resources to communicate extreme heat conditions to outdoor workers, seniors, children, and cooling center locations
  - Budget additional resources toward extreme heat response
- Institute resilient best management urban design practices to ensure high quality landscape architecture and energy efficiency for public facilities and private developments.
  - Allow and incentivize green roofs, especially to meet open space requirements and for infill and mixed-use developments
  - Install physical shade structures at parks, along heavily traveled complete streets, or at key mobility hubs.
  - Amend requirements for building surfaces and materials to reflect sunlight and absorb heat
- Increase outreach and education on trees and landscaping
  - Annually celebrate Arbor Day by issuing official proclamations each Arbor Day, planting new trees at city parks, facilities, and CCSD schools within the public right of way
  - Educate members of the public about the importance of trees and their necessity as a means of reducing the urban heat island effect

SEE ALSO
Imagine LV Parks System Plan

STRENGTHEN RECREATION AND CULTURAL OPPORTUNITIES FOR RESIDENTS AND VISITORS ACROSS THE CITY

Parks and recreation assets are one of the greatest contributers to environment and quality of life in the City of Las Vegas. As part of the The Las Vegas 2050 Master Plan, residents ranked parks and recreation as the most affordable and highest quality amenity across all wards. The Las Vegas Parks and Recreation Department provides access to facilities, connections to nature and preservation of the Mojave Desert while offering beautiful parks, sports fields, reservable areas, pools, sports leagues, classes and activities for all ages and skill levels for the benefit of the city's residents. Key to the department's mission and success are:

- Maintaining and programming over 100 parks and facilities within the City limits, offering amenities for all individual and all levels
- Programming classes, sports, activities, campus, aquatics, events and rental facilities
- Providing pop-up parks to connect underserved areas with free activities, crafts, games, sports and fun

The use of these resources is reinforced by the statistically significant ward-based resident survey where 67% of residents find parks above average quality, 73% of residents feel at least moderately safe in City parks, and over 60% of residents use amenities like open spaces and walking trails at parks.

73% of residents also noted that there are park amenities that are missing or could be improved, thus, embedded in the Master Plan recommendations is a desire to increase the quantity of parks and access to parks in the City as growth continues. This plan sets targets and strategies to increase the quantity of open spaces and recreation elements in the city to 7 acres per 1,000 residents within a ¼ mile walk. This represents a significant increase over the current quantity of parks per resident. This element emphasizes constant updating and measuring success as decisions are made,

SEE ALSO SECTION III.E:
Connectivity



visualizing city-wide and neighborhood planning-area scale opportunities for as low as 5 acres per 1,000 residents and up to 10 acres per 1,000 residents. The Master Plan allows for flexibility in future planning and design of specific elements that meet the unique demographic demands of each community in conjunction with infill and redevelopment opportunities. The 2050 Master Plan generally emphasizes infill and adaptive reuse as the City grows "up and not out". The Parks and recreation component similarly focuses on infill strategies as part of the best practices and tools. This section is specifically supplemented by a more in-depth CAPRA-accredited study. Specific recommendations regarding open space programming and character shall be included in future studies.

- Mini-park/ Pocket park
- Urban plaza /Pocket plaza
- Square
- Neighborhood park/Urban park
- School park
- Community park
- Special use

OUTCOMES

- The City will provide 7 acres of parkland / 1,000 (by 2050)
- Attain CAPRA (Commission for the Accreditation of Park and Recreation Agencies) certification

INFILL PARK STRATEGIES

- Leverage SNPLMA funds to build infill and adaptive re-use park spaces in key locations (i.e. new downtown infill park at Washington, Lamb and the Las Vegas Wash)
- Utilize left over and underutilized right-of-way spaces for mini-parks, urban plazas and/or linear parks (i.e. 3rd and Coolidge in downtown Las Vegas)
- Utilize roof spaces for plazas and mini-parks
- Utilize space above parking lots and parking structures for park spaces
- Emphasize placemaking through arts and culture
- Prioritize adaptive reuse



PARKS AND RECREATION BEST PRACTICES

- Connect to nature and unique local environment characteristics
- Meet the community where they are and engage a variety of age groups via design, elements, access and programming
- Utilize performance landscapes that not only meet the needs of the community but also meet environmental targets, goals and metrics
- Measure outcomes and adjust accordingly to achieve objectives
- Create a culture of innovation to improve quality and functionality in the parks and recreation system
- Emphasize a park management system and culture that emphasizes community and employee engagement and accountability
- Ensure use of native plant materials and low water use
- Prioritize shade creation through structures and plant materials
- Minimize use of lawn spaces
- Prioritize safety through Crime Prevention Through Environmental Design Principles (CPTED)
- Minimize use of fencing
- Prioritize multi-modal connectivity between parks spaces and between living, working and other active spaces in the City
- Program amenities and furnishings with input from the community and in the context of demographics and the larger park system





THE CITY PROVIDES NEW, HIGH QUALITY PARKS AND RECREATIONAL FACILITIES, YET MORE WILL BE NEEDED AS THE CITY GROWS

As described for each Area of the City in Chapter 2, the City of Las Vegas owns and operates 1,700 acres of park space. Given the City's population of approximtely 675,000, this yields a service level of approximately 4.4 acres per 1,000 persons, which falls short of national benchmarks of 5.0 to 10.0 acres per 1,000 residents.

Overall, the City has been steadily increasing its service level over the course of the last Master Plan, largely due to SNPLMA funding. However, new funding, in addition to city capital funding, such as a bond, will likely be required for future needs. Although standards and service levels are intended to measure the city's progress in serving the recreational needs of its citizens, in order to create a complete picture of the city's park system, other types of park space that add to and complement the city's system should also be addressed, including linear parks (trails and greenways) and quasi-public open spaces like public golf courses

Throughout public outreach, residents ranked parks and recreation as the most affordable and highest quality amenity. Most that visit use them for exercise activities or places to take children with walking trails, open spaces, and picnic areas being the most commonly used amenity. Use of other amenities varied depending on location and availability; aside from use of sport fields, residents also make use of dog parks, playgrounds and splash pads; use of sport courts vary by demographics - basketball courts and skate parks have higher rates of use in urban areas of the City by younger residents, while tennis, volleyball, horseshoe, bocce, and shuffleboard are used more in suburban areas, often by families and seniors. Approximately three quarters of residents also reported that the quality of parks were excellent or good. About one-third of residents felt amenities were missing from parks, while forty percent believed parks could be generally improved with bathrooms, improved cleanliness, shade, and playgrounds. While most residents reported feeling safe while visiting parks, they also desired more security.

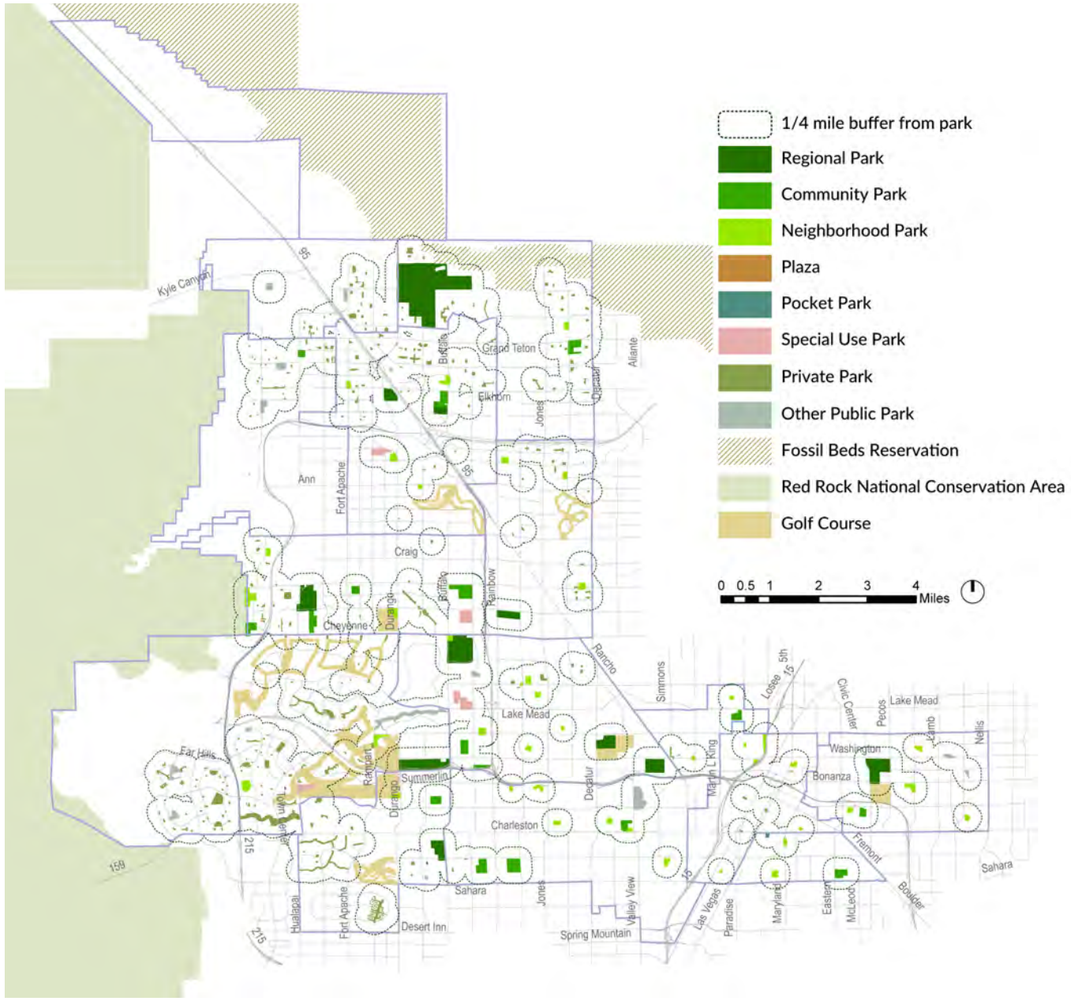
Beyond city-focused and recreation efforts, other federal (F), state (S), and local (L) efforts have contributed to conserving, creating, and maintaining local area parks that should influence City parks and recreation strategies, despite not all facilities being located within City limits.

- (F) The Red Rock Canyon National Conservation Area Establishment Act and Red Rock Canyon National Conservation Area Resource Plan ensure the provision of unique recreational opportunities to residents and visitors and greatly enhances the portfolio of parks and leisure facilities provided by the city.
- (F) The Southern Nevada Public Lands Management Act (SNPLMA) allows the Bureau of Land Management (BLM) to dispose of public land, with a portion of land sales proceeds that may be used for conservation and the development of parks, trails and natural areas by local and federal agencies. The City accesses these funds through a competitive application process.
- (S) The Nevada Division of State Parks (NDSP) serves as a liaison to the National Parks Service and is responsible for creating a Statewide Comprehensive Outdoor Recreation Plan (SCORP).

KEY ACTIONS

- Adopt a Parks System Master Plan
- Increase the amount of park and open space acreage and develop innovative park typologies as part of redevelopment
- Continue to integrate education, arts, and culture into community centers
- Ensure safe, accessible park design





PARK TYPE	NUMBER	ACREAGE
Community	16	249.1
Neighborhood	42	197.4
Plaza	2	1.1
Pocket park	3	0.5
Regional	11	1,120.5
Special use	6	133.4

Building upon the parks classifications established as part of the previous Master Plan, this section aligns park typologies with current zoning transects and includes character descriptions, size, amenities, use and place type applicability for all park types. The classification system utilized by the city of Las Vegas is based on the guidelines established by the National Recreation and Park Association (NRPA) and local factors and will be expanded upon as part of subsequent studies. Park typologies for the 2050 Master Plan include:

MINI-PARK/POCKET PARK	
DESCRIPTION/ CHARACTER	A compact green space for a wide range of informal or formal activities in close proximity to neighborhood residences, featuring trees and vegetation.
SIZE	Max. 0.50 acres
AMENITIES/USES	Passive/active (unstructured) open space, civic uses, including picnic shelters, casual seating, trails and paths, community gardens and public art.
APPLICABLE PLACE TYPES	Regional Center, Mixed-Use Center, Neighborhood Center Mixed-Use, Mixed Residential, Traditional Neighborhood, New Subdivision, Subdivision Retrofit

URBAN PLAZA/POCKET PLAZA	
DESCRIPTION/ CHARACTER	A formal space for commercial and civic activities, surrounded on three sides by buildings, located at the intersection important streets. While primarily hardscape, urban plazas and pocket plazas feature trees, vegetation, and greenery that contrast with the surrounding built environment.
SIZE	0.25-2 acres (pocket plazas are smaller)
AMENITIES/USES	Seating, play equipment, sport courts, passive/active (unstructured) open space, civic uses, including outdoor pavilions, open-air shelters, outdoor assembly, outdoor seating, public restrooms, commercial uses, including a farmer's market and outdoor dining, playgrounds, public art.
APPLICABLE PLACE TYPES	Regional Center, Mixed-Use Center, Neighborhood Center Mixed-Use

SQUARE	
DESCRIPTION/ CHARACTER	A formal space for unstructured recreation and civic purposes, spatially defined by buildings, tree-lined streets, walkways and planting at all edges. Squares are frequently located at the intersection of important thoroughfares, featuring abundant seating opportunities in the midst of hardscape or landscaped surroundings.
SIZE	0.50 -5 acres
AMENITIES/USES	Passive (unstructured) recreation, no organized sports, civic uses including outdoor pavilions, open-air shelters, community gathering, outdoor seating, commercial uses, including the farmer's market and outdoor dining, paths, community gardens, playgrounds, public art/creative space.
APPLICABLE PLACE TYPES	Regional Center, Mixed-Use Center, Neighborhood Center Mixed-Use

GREENWAY
Greenways are linear parks most applicable along corridors and through neighborhoods. Read more about these connectors in section E.

SEE ALSO CHAPTER 4, SECTION III:
Public Facilities and Services

SEE ALSO TITLE 19.09.080:
Civic Space Standards

URBAN PARK/NEIGHBORHOOD PARK	
DESCRIPTION/ CHARACTER	A formal and/or natural park that serves as the recreational and social focus of a neighborhood and serves those residents within one-half mile. Paths, lawns, planted walkways, and formally arranged trees are present, occasionally around a civic element located at a prominent location.
SIZE	Min. 0.50 acres
AMENITIES/USES	Passive/active (unstructured) open space, civic uses, including outdoor pavilions, open-air shelters, community gathering, outdoor seating and public restrooms. Trails for bicycles and pedestrians, community gardens, playgrounds, and public art.
APPLICABLE PLACE TYPES	Regional Center, Mixed-Use Center, Neighborhood Center Mixed-Use, Corridor Mixed-Use, Mixed Residential, Traditional Neighborhood, New Subdivision, Subdivision Retrofit

COMMUNITY PARK	
DESCRIPTION/ CHARACTER	A park that serves a broader purpose than neighborhood parks and serves those residents within three miles.
SIZE	10-50 acres
AMENITIES/USES	The same uses as neighborhood parks, as well as sports fields, sports courts, skateboarding areas
APPLICABLE PLACE TYPES	Subdivision Retrofit, New Subdivision, Rural Preservation

SCHOOL PARK	
DESCRIPTION/ CHARACTER	A school playground and sports field that may be open for public use during times that the school is closed. For purposes of this plan, the service area for School Parks will be the same as that for Neighborhood Parks, or one-half mile. Requires CCSD joint use of facilities agreements
SIZE	Varies based on the type of school; ES: 3-4 acres; MS: 5-6 acres; HS: 10-15 acres
AMENITIES/USES	Play equipment, sport courts, sport fields
APPLICABLE PLACE TYPES	Mixed-Use Center, Neighborhood Center Mixed-Use, Mixed Residential, Traditional Neighborhood, New Subdivision, Subdivision Retrofit

REGIONAL PARK	
DESCRIPTION/ CHARACTER	A large park containing a diverse array of uses and facility types including playgrounds, sport courts and fields, dog parks, places of historic interest, preserved open space, or other unique and defining characteristics. They may be utilized for special events, large gatherings, games and tournaments, and other significant purposes. These facilities typically serve the entire community, including City residents and residents from the across the region.
SIZE	Typically greater than 50 acres
AMENITIES/USES	Regionally significant park and recreational destinations that includes a diverse array of amenities, including but not limited to open space, sport fields, sport courts, and other uses found in neighborhood and community parks.
APPLICABLE PLACE TYPES	Traditional Neighborhood, New Subdivision, Subdivision Retrofit, Rural Preservation

SPECIAL USE
A park or facility with a very specific use which is generally oriented for a specific purpose. Examples include, but are not limited to: equestrian parks, extreme sports parks, dog parks, motocross tracks, and competitive tennis facilities. The standard amenities vary depending upon the specific type of park/facility. Recreation trends identified by ongoing public needs assessments may also indicate demand for new special use parks/facilities. These facilities serve the entire community and do not have size or service area requirements of their own.



COMMUNITY AND SENIOR CENTERS CAN BE LEVERAGED TO BE ANCHORS FOR NEIGHBORHOODS AND AREAS OF THE CITY

The City's community and senior centers are the flagship locations for the public to gather for recreation, group and leisure activities, social support, public information, and other purposes.. As described in Section II of this Chapter, the City has relatively few of these facilities, which serve a wider population. Still, less than half of the City's residents are within a two-mile drive of a community center, and even fewer are within a short walk or bike ride. The lack of these places indicates a need for more of them, especially because they are publicly facing and provide the opportunity for residents to directly interact with the City.

Large community centers and other regional facilities are designed to serve a broad cross-section of the community. Each offer a wide variety of recreational, social, performing and visual arts and educational needs for adults, seniors, and youth. These centers are typically co-located or are adjacent to a community park, and feature indoor or outdoor swimming pools, gyms and athletic rooms, classrooms, and game rooms. Two of these facilities, Durango Hills and Centennial Hills Community Centers, are operated through a public-private partnership with the YMCA.

Smaller neighborhood community and senior centers offer smaller scale programming space that can be used for a variety of general recreational, social, performing and visual arts activities. Because there are fewer of these types of facilities, such as Cimarron Rose Community Center, these would be an ideal model to add more facility space that not only increases community accessibility to a center, but also helps expand the City's recreational programming it already offers.

Given that these locations are important places for residents to interact and serve as anchors for neighborhoods and entire areas of the City, they should be thought of and leveraged in different ways. While many of these community centers already offer a wide range of recreational and leisure programming, these places should be thought of in the context of other goals in this plan, specifically for education and workforce development, as discussed in Chapter 3. Offering these spaces for rent, for specific special purpose classes, continuing education, or for partnerships with UNLV, CSN, or other workforce development programs. Such multi-use, multi-purpose community centers are not a new concept; specific centers could be piloted for this type of use to determine how they would work beyond just a place for the community to recreate.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Increase the overall quantity and connectivity of parks and open space throughout the City to ensure all residents have access to parks nearby their homes	Utilize drought tolerant, water efficient parks and open space landscapes that address other environmental outcomes while also meeting the needs of the community.	Provide aesthetically pleasing, comfortable, and safe opportunities for residents of all ages to connect with nature.	Provide high quality, enjoyable recreation and leisure spaces of all types that emphasize placemaking space, arts, and culture.	Develop unique greenways, right-of-way spaces, rooftops, and spaces above parking structures for plazas, mini-parks, or park spaces if a traditional park cannot be built..

PARKS AND RECREATION OFFERS A WIDE RANGE OF PROGRAMMING AND LEISURE ACTIVITIES

In addition to the facilities it provides, the Parks and Recreation Department offers a wide range of programming and classes. City staff organize and provide a number of classes for community participation, enrichment, and recreation at its parks and community centers, including:

- Active adult classes
- Adaptive and therapeutic recreation
- Swmming and aquatics
- Gym and fitness classes
- Arts, crafts, cooking, and performing arts
- Sport leagues and an annual Corporate Challenge

These activities are a hallmark of any world-class parks and recreation department's programming. Continued funding and expansion of these options for residents will further improve the livability and health of residents.

Finally, the City should set itself apart in the region by constructing additional facilities or developing special programming that is unique to Las Vegas and may not be found in great supply anywhere else in the region. The City has previously constructed and expanded unique leisure amenities, such as bocce, pickleball, and roller hockey; offering other unique, one-of-a kinda facilities such as a velodrome, a model railroad park, fields for rugby, field hockey, lacrosse, or cricket. The City should also consider making an investment in an open-air or partially enclosed outdoor amphitheater venue for year-round large-scale ticketed performing arts events.

IMPLEMENTATION STRATEGIES

- Adopt a Parks System Master Plan
  - Quantify and inventory existing park amenities and determine exact locations of new facilities.
  - Determine community needs and preferences for different park types and amenities.
- Increase the amount of park and open space acreage and develop innovative park typologies as part of redevelopment
  - Prioritize use of SNPLMA, a new parks bond, and other applicable funding for new targeted parks, trails, and community centers, or for the upgrade, maintenance, or renovation of existing ones
  - Develop a large scale, regional open-air or partially enclosed outdoor amphitheater
  - When new City parks cannot be built in areas of the City lacking sufficient space, require open space provisions for private development
- Continue to integrate education, arts, and culture into community centers
  - Offer a variety of new classes and uses for community centers.
  - Pilot different multi-use, multi-purpose activities at community centers to attract new users.
  - Develop additional smaller, neighborhood oriented community and senior centers for each area of the City
- Ensure safe, accessible park design
  - Construct new parks and facilities that offer unique and specialized designs and amenities not typically found in the region
    - » Velodrome
    - » A children's "exploration park"
    - » Demonstration or botanical gardens
    - » Miniature railroad park
    - » Mini golf or pitch-and-putt
    - » Mazes
    - » Archery range
    - » Fields for rugby, field hockey, and lacrosse
    - » Cricket oval
  - Require community gardens as part of zoning
  - Design parks with CPTED principles
  - Provide sports fields that use both natural and artificial turf as a means to save and conserve water
  - Provide shade and trees, while also limiting non-functional turf and using drought tolerant landscaping

III.E PARK CONNECTIVITY

NRS 278.160.1(f)

IMPROVE ACCESS AND CONNECTIVITY OF OPEN SPACES FOR ECOLOGICAL, SOCIAL, HEALTH, AND QUALITY OF LIFE BENEFITS

Access to parks and open space was repeatedly identified as a top priority throughout the 2050 Master Plan planning process. Residents highlighted the region's natural features and recreation opportunities as key amenities. As the City of Las Vegas has grown rapidly, some parts of the city lack sufficient walkable and bikable access to parks and open space. As the City prioritizes locations for new parks, safe, convenient access to those parks is paramount to help motivate residents to choose a healthier alternative to driving. Walkable and bikeable access is especially important in areas where personal automobile ownership is lower.

While the Transportation section (Chapter 4) and the City's Layered Complete Street Network addresses non-motorized connections more explicitly, this section recommends design improvements to consider these connectors as an extension of the park system. Improving access to parks and open space meets the guiding principles to improve equitable neighborhood vitality and health.





SEE ALSO CHAPTER 4 (I.A):
Connect and enhance accessible bike and pedestrian facilities as part of a safe, efficient road network that supports all transportation modes throughout the City.

OUTCOMES

- 85% of housing units are within ½ mile of public parks by 2050
- 90% of housing units are within 3 miles of trail by 2050

KEY ACTIONS

- Work with appropriate agencies and stakeholders to implement the Vegas Valley Rim Trail.
- Continue to improve bicycle and pedestrian access along major roads and increase safety of alternative transportation.
- Revise residential zoning to require a greenway along corridors and limit the use of walls.
- Explore public-private partnerships to formalize public access to privately-held open spaces

NEIGHBORHOODS NEED BETTER CONNECTIONS AND MORE BUFFERS

To improve walkable access between sites and the street network, buffers such as walls and fences should be de-emphasized as the buffer treatment of choice. More permeable buffer solutions involving vegetation and more frequent access points will help contribute to walkable access. Traditional subdivision design has limited points of vehicular entry that typically dissuades pedestrians and bicyclists from accessing nearby amenities. As the bird flies, access to open space or neighborhood commercial may be walkable but the perimeter wall typical of subdivisions makes the walk out of reach.

Future subdivisions should be planned with friendlier buffers along corridors to make it more appealing for pedestrians and bicyclists to utilize greenway and trail amenities.

One of residents' primary concerns was the lack of public access to private open space amenities. In areas lacking public parks, these private open spaces should be prioritized for public-private partnerships to encourage walks from neighbors.



BARRIERS TO SAFE, CONVENIENT ACCESS:

- Insufficient separation between the bike/pedestrian facility and vehicular traffic
- Physical barriers between neighborhoods and corridors
- Uninviting, hot, long expanses lacking sufficient shade

BENEFITS OF GREENWAYS AND TRAILS

As a tool for improving mobility and the environment, greenways and urban trails can provide a wide range of benefits - particularly when designed for all ages and abilities. Benefits include:

- Increased mobility and transportation options. Connects residents to jobs, commercial areas, institutions, and other destinations.
- Improved community health through active living. Creates attractive, safe and accessible places to walk, bicycle, hike, run, and more.
- Generates economic activity. Adds to property value, attracts businesses and residents, and contributes to tourism.
- Provides environmental benefits. Manages stormwater, protects and restores habitat, and improves air and water quality.
- Enhanced cultural awareness and community identity. Connects to local heritage, interpretive opportunities, and community recreation.

"I love being able to take a morning walk from my house through the desert areas near my neighborhood"

- Participant at Cetennial Hills Community Center

CONNECTOR/TRAIL TYPES

Chapter 4's Layered Complete Streets Network

- **Greenways.** Greenways, as either Regional or Shared Use Trails effectively connect park system components together to form a continuous park environment. Long, linear, dedicated open spaces that include a mixture of natural land areas, open spaces and typically include trails. Trails can take a number of forms, from paved shared-use or all-purpose trails for use by pedestrians and cyclists, to dirt trails or bridle trails. Typically, greenways are separated from streets and other public rights-of-way.

- **Park Trail.** Multi-purpose trails located within greenways, parks and natural resource areas. Focus is on recreational value and harmony with natural environment.

  Type I: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters. Type II: Multipurpose hard-surfaced trails for pedestrians and bicyclists/in-line skaters. Type III: nature trails for pedestrians. May be hard- or soft-surfaced.

- **Shared Use Paths.** Multipurpose trails, as Shared Use Trails that emphasize safe travel for pedestrians to and from parks and around the community. Focus is as much on transportation as it is on recreation. Connector Trails are typically paved, all-purpose trails situated within more built up and developed areas and may have less greenspace or natural area associated with the trail. Connector Trails can take on several forms, from off street paths (i.e. wide sidewalks next to roadways) to separated and/or protected bicycle lanes, or to off-street pathways that connect through public or private property.

  Type I: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters located in independent row (i.e., old railroad right-of way). Type II: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters located in road right-of-way.

While the preference is always for separated trails and off-street greenways, where there is not sufficient right-of-way space or property access more conventional "Bike Streets" may be required in a limited context to provide important network connections:

- **Separated Bike Lanes and Cycletracks**. Paved segments of roadways that serve as a means to safely separate bicyclists from vehicular traffic.

- **Buffered Bike Lanes:** Designated portions of the roadway for the preferential or exclusive use of bicyclists.

- **Bike Lane:** Shared portions of the roadways that provide separation between motor vehicles and bicyclists, such as paved shoulders.

Different greenway and trail types are appropriate for different locations throughout the city. Increasing the safety and usability of greenways will encourage more users who are less comfortable with riding or walking in close proximity to vehicles.




Connectivity Framework
USGS Washes
100-year Flood Plain
Basin
Existing Shared Use Path
Proposed Shared Use Path
Park
Fossil Beds Reservation
Red Rock National Conservation Area
Golf Course
0 0.5 1 2 3 4 Miles
Kyle Canyon
Cheyenne
Craig
Rancho
Lake Mead
Washington
Bonanza
Charleston
Sahara
Spring Mountain
Desert Inn
Summerlin
Far Hills
Fort Apache
Hualapai
Durango
Buffalo
Decatur
Jones
Valley View
Las Vegas
Paradise
Maryland
Eastern
McLeod
Fremont
Nellis
Lamb
Civic Center
Losee
Simmons
Pecos
Torrey Pines
Alante
Oquendo
Rainbow
Grand Teton
Belmont
Jones
Buffalo
Fort Apache
Rainbow
Cheyenne
Rancho
Simmons
Losee
5th
Civic Center
Pecos
Lake Mead
Lamb
Nellis
Washington
Bonanza
Fremont
Sahara
Decatur
Durango
Summerlin
Far Hills
Hualapai
Fort Apache
Valley View
Las Vegas
Paradise
Maryland
Eastern
McLeod
Jones
Desert Inn
Spring Mountain
Sahara
Charleston
Craig
Cheyenne
Rancho
Lake Mead
Washington
Bonanza
Fremont
Sahara
Nellis
Lamb
Civic Center
Losee
Simmons
Pecos
Rainbow
Alante
Oquendo

III.F FOOD + URBAN AGRICULTURE

NRS 278.160.1(i)

ENSURE ACCESS TO FRESH, HEALTHY FOOD

Food systems consist of the resources, capital, and activies of food for the health and wellbeing of the City's residents, whether from agricultural production, distribution, accessibility, to waste. Historically, farm and ranch based agriculture have been limited by water availability, quality soil, and the size of Southern Nevada's small towns – only a handful of agricultural operations have been successful in Southern Nevada's modern history. Today, there are approximately fifty certified food producers in the region. The majority of these producers use traditional growing techniques and are either small scale or family-owned operations, such as Gilcrease Orchard in the Tule Springs planning area, community gardens, or community supported agriculture (CSA). A number of stakeholders help oversee the food system:

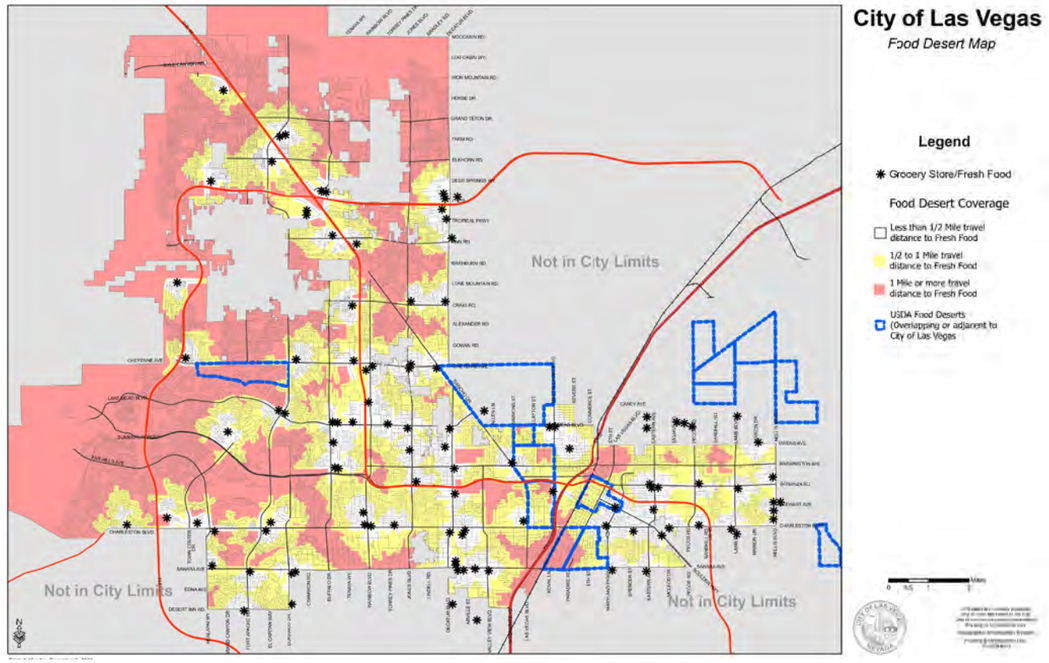
- The Nevada Department of Agriculture, which regulates all aspects of agricultural production, livestock, consumer equity, and food systems.
- The State Division of Welfare and Social Services, which oversees federal nutrition and assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP).
- The City regulates animals and agricultural land use activities pursuant to LVMC Title 7 and LVMC Title 19. The City has taken a measured approach as a community stakeholder to food access and agricultural production, but will take a more active role in implementing this plan.
- The Southern Nevada Food Council convenes stakeholders representing Southern Nevada's food system to promote equitable access to healthy food, sustainable food production and consumption, and reduction of food waste.
- As a part of the University of Nevada's land grant mission and pursuant to NRS 549, the University of Nevada Extension provides outreach and extended education to Las Vegas residents, specifically as it relates to food safety, healthy living, horticulture, and urban agriculture. The Extension also works closely with the Conservation District of Southern Nevada to promote and develop community gardens and urban agriculture.
- The Southern Nevada Health Distrcit oversees and regulates food operations and preparation.

KEY ACTIONS

- Decrease food deserts and reduce food swamps in low-income, food insecure planning areas, further incentivize the establishment of grocery stores and healthy food retail outlets.
- Provide at least one accessible community garden for urban agriculture activity in each planning area.
- Work closely with the Southern Nevada Food Council, CCSD, the University of Nevada Cooperation Extension, Three Square Food Bank, and other stakeholders to address food insecurity, hunger, and access issues for city residents.
- Further expand allowable agricultural uses and activities within the community.

OUTCOMES

- At least one City-owned, operated, or leased community garden or urban agricultural site within each area of the city by 2030.
- No food deserts exist in the City by 2050.
- The percentage of residents within ¼ mile of a food hub, healthy food retail outlet, or grocery store increases over time
- The percentage of residents that are food insecure and utilizing SNAP decreases over time
- The percentage of children, seniors, and other identified vulnerable population that are food insecure decreases over time





EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Increased neighborhood food access and the elimination of food deserts must be prioritized to reduce hunger and food insecurity.	A number of adaptable plants can be grown in home and community gardens, providing a supplemental source of food.	Ensuring access to healthy foods by decreasing the area of food swamps and increasing the amount of healthy food businesses.	Accessible healthy food outlets, community gardens, and farmers markets are necessary and desirable amenities for City residents.	Repurposing and diverting food from the hospitality industry has reduced the total volume of food waste.

FOOD IMPORTATION PRESENTS A SUPPLY-CHAIN DEPENDENCY CHALLENGE AND POTENTIAL VULNERABILITY

According to the Bureau of Economic Analysis, 92% of all the food in Las Vegas is shipped by truck and only 8% of the foods purchased in grocery stores and markets are grown locally or within the region. This high rate of both domestic and global food importation by way of truck leaves Southern Nevada vulnerable to disturbances in the transportation system. Shipping and supply chain disruptions across the country or the world, the closure of Interstate 15, or spikes in fuel prices have the potential to impact the Southern Nevada food system for residents, businesses, and visitors in the following ways:

- Large distances between producers and consumers increases transportation costs which can be reflected in higher food prices.
- Many foods, such as fresh fruits and vegetables, lose a bulk of their nutrients after four days. While canning, drying and freezing can minimize the loss of nutrients, food trip length can affect nutritional quality and create challenges for healthy food to be in supply and affordable.
- Food production is energy and water intensive to feed millions of Americans and meet demand for products.

FOOD SYSTEMS MAY FUNDAMENTALLY BE ALTERED IN THE FUTURE

Climate change may result in further drought, altered precipitation patterns, and increased water stress in key farming regions, both domestically and abroad. Because plants are sensitive to high temperatures during the flowering and seed development stages, changing climatic conditions may reduce yields, and therefore impact food quality and cost. Temperature increases and drought may have an impact on food production, especially in prime agricultural areas, which not only affects Las Vegas, but the rest of the country:

- California, one of the world's largest and most diverse agricultural economies, and Southern Nevada's most important market for food. The state is already showing ill effects from loss of farmland, the chronic overuse of its water supply, and the impact of wildlifes.
- Increased temperatures in the Great Plains, where wheat and corn are among the most important crops and are staples for breads and starches, could stress overall plant growth and production.
- The southeast, home to fruit and nut orchards, is projected to pass the threshold of ninety-four degrees, a point that impacts plant photosynthesis.
- Drought conditions and disease have reduced output of the citrus crop in Florida, corn and soybean crops in the Midwest and the vegetable and dairy production in California.

Should climate change increase temperatures to these levels, prices could increase for major staple crops used in a variety of products, including wheat, rice, and corn by 2050. Higher temperatures and less easily available water have resulted in a three percent price increase in most fruits and vegetables. Due to lower corn production, animal feed costs have also been rising; this is reflected back in the prices consumers pay.

FOOD ACCESS CAN BE ASSESSED FOR EACH AREA OF THE CITY

Urban food deserts refer to low-income, low-food access areas. They have high concentrations of poverty at or below 80 percent AMI, in which either 500 people or one-third of the population live more than one mile from a grocery store or healthy food retail outlet that contains all major food departments. Food swamps represent areas with a high abundance of fast-food and takeout restaurants in low-income areas. Within the City of Las Vegas, both food deserts and swamps exist around the Downtown Las Vegas and West Las Vegas areas, where approximately 12,000 residents reside.

Food access considers location of food from one of the City's grocery stores or healthy food outlets and its overall affordability. In terms of transportation accessibility, access is determined by vehicle ownership or public transportation access. Economic and land use forces, including land value, lease rates, and population density determine grocery store location decisions. Even if transportation is adequate in some areas, grocery stores may not be close enough to neighborhoods. These factors, alone and in tandem, can mean major grocery stores will have difficulty being profitable in low-income neighborhoods. Within the City's food deserts, residents are at a higher risk of hunger, poor nutrition, and poor health.

The average American household spends approximately 9.5 percent of its disposable budget on groceries. Nationally, food costs have been rising for many basic staples. This can affect disposable income as well as create challenges for people to pay for other necessities, ultimately leading to hunger and poor nutrition as people choose less nutritious options for their meals.

FOOD INSECURITY AND HUNGER ARE DISCRETE ISSUES THAT MUST BE ADDRESSED TO ENSURE RESIDENTS ARE HEALTHY

Hunger is the physical sensation of discomfort from lack of food intake; the USDA defines food insecurity as a lack of consistent access to enough food needed for an active, healthy life. The Supplemental Nutrition Assistance Program (SNAP), provides nutrition assistance to people with low incomes, helping families to purchase healthy foods. Participation rates can be a benchmark measure for community health and wellbeing. More than 106,000 households, equal to one out of every ten people in Southern Nevada, receive an average SNAP benefit of $260/month. For many households, this is most, if not all, the monthly food budget. Nearly 50 percent of these SNAP recipients are children 18 years of age and younger. Approximately 180,000 students enrolled at CCSD schools



A DAY IN THE LIFE

SPACE FOR CONNECTING

Carla Delisle, Former Las Vegas Historic Preservation Commission Member

In a city of big roads, high speed limits, and limited transportation alternatives, Carla depends on her car more than she'd prefer. She tends to avoid using public transportation because the travel times are too long and bus routes to the busier parts of town are rarely straightforward. For sure, Carla loves her downtown historic neighborhood. She just wishes it included more walking and biking options. She wishes the entire city did.

When she considers the city as a whole, Carla sees vast amounts of open space that feel underused. She'd love to see more areas designated for adult recreation, dog parks, BBQs and picnics, and sports. Even simple public benches would be welcome. Considering Las Vegas's sometimes harsh, high-desert climate, she'd also welcome more shade.

Carla's grocery shopping options are limited to a few large chain stores. She'd love for a few smaller, more health-conscious markets to open up nearby. "Maybe the city could offer temporary public uses, or pop-ups, as experiments to see what people will do when they have more lifestyle options," she considers.

"And if we had one or two more expressways together with more direct routes to the main areas of town, people would go and stay outside more," she says. "This would encourage more connectivity among residents."

participate in the Free and Reduced Lunch Program, which is approximately 60% of all students and significantly higher than the national rate of 40%.

Other means of distributing food include:

- Three Square, Southern Nevada's only major food bank, whose mission is to help reduce hunger in Southern Nevada. Three Square combines food banking (warehousing donated canned and boxed goods), food rescue (obtaining surplus or unused meats, bread, dairy and produce from hospitality and grocery outlets), and pre-cooked meals. Three Square served more than 41 million meals across Southern Nevada in 2019.
- Food pantries distribute non-perishable grocery products to families struggling with hunger. Some within the City are aligned with the Three Square food bank.
- The Summer Food Service Program (SFSP), funded by the USDA and administered by the Nevada Department of Agriculture, provides meals to children 18 years of age and younger in low-income areas during the summer. The program ensures that children have access to nutritious meals during their school breaks when free and reduced meals are not available to them.
- Community meal sites provide hot meals to the homeless and those in need.
- Food hubs are businesses or organizations that actively manage the aggregation, distribution and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand. A food hub can expand capacity for urban agriculture and regional growing and often have teaching and meal-prep facilities where consumers can learn about food and nutrition, where their food comes from, and how to grow food in their own communities. Entrepreneurs can learn to build small food enterprises in shared commercial kitchen spaces. While Southern Nevada does not currently have a food hub, introduction of one may help expand and sustain local capacity for urban agriculture.

INNOVATIVE EFFORTS IN SOUTHERN NEVADA REDUCE FOOD WASTE

Food waste presents a major challenge to both the region's food system and environment and is an issue that must be addressed in depth. A relatively small amount of the region's waste is organic.Thanks to the efforts by resorts on the Las Vegas Strip and Downtown Las Vegas, which generate a large share of organic material, and the Three Square Food Bank, increased attention has been paid to diverting food from the landfill, thus decreasing food waste. Efforts have also been made to repurpose and compost food waste. For many decades, Las Vegas Livestock (formerly known as RC Farms), a local pig farm, has successfully diverted food waste and has repurposed it for animal feed. Although these efforts have yielded success, more study on this issue must be done to ensure food waste is reduced.

DESERT URBAN AGRICULTURE CAN SUPPLEMENT FOOD SUPPLIES

Despite limited rainfall, aridity, and extreme temperatures, a wide variety of food can be produced and livestock raised within Las Vegas. Crops suitable for Las Vegas's climatic conditions can be produced for urban agriculture applications, as evidenced by the University of Nevada Reno Extension's demonstration gardens and Master Gardener Orchard near the Tule Springs area. However, Las Vegas clearly cannot invest in agricultural development at levels that will sustain the City's current and future population. Strategies and methods that can make urban agriculture a community amenity should continue to be pursued, such as:

- Rural preservation areas within the City permit crop production and animal husbandry.
- The City has previously enacted ordinances that permit community gardens in all zoning districts with limited conditions. Not only are community gardens an amenity that allow residents to grow, new placetypes will encourage the incorporation of such gardens as an allowable use. After successfully permitting poultry ("backyard chickens") in residential zoning districts, the allowable uses at each type should also be further researched and increased, including allowing apiaries and additional small-animal husbandry.
- A limiting factor to urban agriculture, however, may be water and its costs; all urban agricultural activities would be required to use metered water from the Las Vegas Valley Water District (LVVWD), which is progressively more expensive based on consumption and meter size.
- Farmers markets are excellent amenities that can increase access to healthy food. Due to the lack of major agricultural production in Southern Nevada, most farmers markets are small, specialized, typically do not offer a fixed stock of supplies, and are not typically used by the average consumer for food staples. Most farmers markets import food from growing regions in California, Northern Nevada, or Utah; because most are small, their presence does not necessarily mitigate food deserts; however, their presence provides supplemental food access.
- Some alternative farming operations have been established in Southern Nevada, including hydroponic and aquaponic systems and are permitted in commercial and industrial areas. While both systems are water-based, both use 5-10% of the water used in traditional farming and a fraction of the land. As a result, while these systems may have high initial costs, they can be operated in a climate controlled settings and provide an efficient alternative to traditional farming.



IMPLEMENTATION STRATEGIES

- Decrease food deserts and reduce food swamps in low-income, food insecure planning areas, further incentivize the establishment of grocery stores and healthy food retail outlets.
  - Further permit and incentivize food hubs, healthy food retail outlets, or grocery stores
  - Utilize City funding, redevelopment tools, New Market Tax Credits and other forms of innovative financing to attract businesses
- Provide at least one accessible community garden for urban agriculture activity in each planning area.
  - Conduct regular inventories of vacant land owned by the city to determine whether these lands are suitable for urban farming and gardening.
  - Ensure access for urban agricultural activities by acquiring, leasing or purchasing vacant land for use as community gardens
  - Reserve space at City parks and community centers for community gardens
- Work closely with the Southern Nevada Food Council, CCSD, the University of Nevada Cooperation Extension, Three Square Food Bank, and other stakeholders to address food insecurity, hunger, and access issues for city residents.
  - Consider making food access requirements as part of development within TOD place types
  - Explore reducing food swamps with fast-food distance separation requirements
  - Incentivize and develop food hubs
  - Develop educational programs for City residents
  - Develop community gardens
  - Study, discuss and take action on food issues, access, and security and food waste for the benefit of residents, business, and visitors
- Further expand allowable agricultural uses and activities within the community.
  - Require community gardens as part of zoning regulations and requirements
  - Amend LVMC Title 7 and LVMC Title 19 to expand allowable agricultural uses and activities, and the zoning districts they are allowed in, especially in rural preservation areas, including crop production, apiaries, and small-animal husbandry.

III.G ENVIRONMENTAL JUSTICE

NRS 278.160.1(a)(1))

REDUCE LEVELS OF POLLUTION THAT IMPACT AIR, LAND AND WATER, AND AFFECT SENSITIVE POPULATIONS

Environmental justice is the concept that all people have equal right to a clean and healthy environment with respect to spatial relationships to environmental concerns, equal protection from negative environmental impacts and equal access to decisions made by the Planning Commission or City Council. No population bears a disproportionate share of negative environmental consequences resulting from industrial, municipal, and commercial operations or from laws, regulations, or policies. Meaningful involvement requires effective access to decision makers for all, and the ability in all communities to make informed decisions and take positive actions to produce environmental justice for themselves.

Today, pollution from stationary and mobile sources can impact the City's water, ground, and air that can affect the health, especially sensitive populations like children and the elderly, as well as disproportionately affected low income and minority populations. Because pollution is a regional issue, the 2050 Master Plan takes a regional approach to mitigate land, water, and air pollution concerns in the context of the environmental element.

Because this plan emphasizes infill development and redevelopment, especially on sites and locations that may be considered brownfields or have forms of soil contamination, Not only does infill and redevelopment help reduce commute times for drivers and minimize air pollution, it also helps conserve land by alleviating development pressure, and clean up existing brownfields, it also helps support economic development by increasing property values through new development, promoting affordable housing, returning tax value to greyfield sites, and reducing blight. Two key sources of water pollution are from stormwater and wastewater treatment discharge. Wherever the source of contamination, ultimately, pollutants make their way back to Lake Mead through the Las Vegas Wash. The National Pollutant Discharge Elimination System (NPDES) permit program regulates water pollution from for both stormwater and non-stormwater sources and discharges and requires the implementation of best management practices to

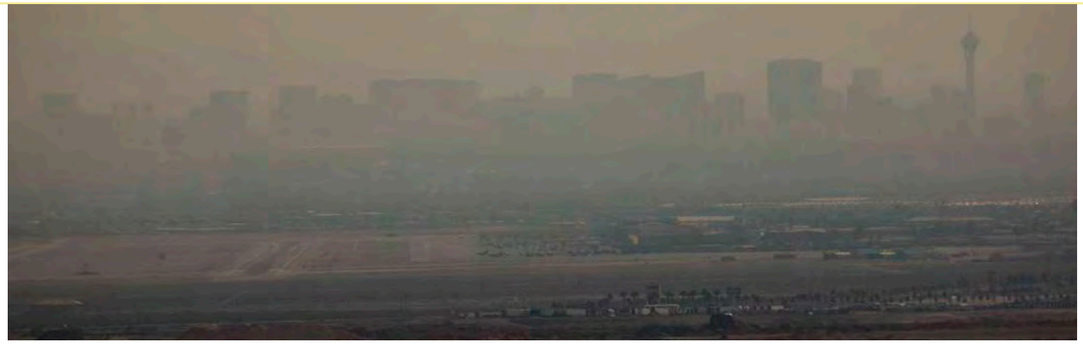


KEY ACTIONS

- Hire a staff member within the City that has experience with environmental justice.
- Implement the actions from the Land Use Chapter that reduce or eliminate brownfield and greyfield locations.
- Implement projects and actions from other parts of this plan that improve air and water quality:
- Incorporate environmental justice criteria and priorities into LVMC and continue to enforce environmental regulations and permitting to ensure clean air and water.

OUTCOMES

- Achieve attainment or maintenance status for all measured criteria pollutant
- For any non-attainment pollutants, a decrease in the annual concentration
- By 2050, no brownfields are found within the City.
- The annual number of days in which the Air Quality Index (AQI) exceeds 100 decreases over time
- For each identified planning area, priority environmental justice conditions, risks, and exposure are reduced



reduce pollutants to the maximum extent practicable. Furthermore, given possible future drought conditions, water must be withdrawn from lower elevations, which may require increased treatment of the drinking water supply given the higher load of pollutants entering the lake.

Air pollution primary comes from two sources: mobile sources, primarily from combustion from single-occupant automobiles, and stationary sources, including those from power generation. Additionally, the Valley's natural topography and desert environment contributes to unhealthy air by trapping pollution and creating haze. The region's lack of rain and increasing temperatures can contribute to higher levels of pollutants. Exposure to air pollutants causes a range of respiratory ailments and cardiovascular risks. Health impacts cause thousands of hospitalizations annually and increase the financial burden of chronic diseases. Outdoor air quality is related to many other goal areas and outcomes in this plan.

The 2050 Master Plan works to ensure City planning areas and neighborhoods are not overburdened by pollution and that low-income people and minority groups have equitable access to the City's services and facilities without experiencing disproportionate health, environmental, or economic impacts.

A number of other regionally-based functions are delegated to different organizations to control the various forms of pollution:

- The Clark County Department Environment and Sustainability (DES, fromerly known as the Department of Air Quality) is the region's designated air pollution control board that implements and enforces air pollution control and operates pursuant to NRS 445B.500. It is also responsible for:
  - Air quality permitting.
  - Regulation and enforcement of air pollutants.
  - Preparation of studies and plans to comply Federal air quality standards.
  - Monitoring air quality conditions and informing the public about current air conditions.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Environmental justice ensures specific groups are not overburdened by the effects of air, land, and water pollution.	A resilient environment adapts to pollution while mitigating efforts help prevent it and its effects on the population	Avoiding and mitigating air quality concerns, improving water quality, and eliminating brownfield sites ensure healthy outcomes	Developing TOD and implementing this plan's infill and redevelopment strategy at brownfield locations ensures the creation of a livable community.	Transportation electrification and renewable energy play an important role in reducing stationary and mobile emissions.

- NV Energy, a private, investor owned utility that generates both renewable and non-renewable electricity, generates some emissions from power generation.
- Several City of Las Vegas departments oversee different aspects of pollution prevention:
  - The City's Department of Public Works oversees capital project and infrastructure planning and project development. Its Environmental Division is responsible for the City's wastewater treatment plant, as well as stormwater and wastewater treatment discharges pursuant to the NPEDs and MS4 permits.
  - The Planning Department oversees the entitlement of land and implementation of the City's zoning ordinances to protect the health, safety, and general welfare of City residents. The City's Code Enforcement division also ensures property upkeep and ensure noise policies are not violated.
  - The Economic and Urban Development Department and the City's Redevelopment Agency, which works to eliminate blighting conditions and remediate brownfields, most notably, the former Union Pacific Railroad brownfield now known as Symphony Park in Downtown Las Vegas.
- With respect to air quality from mobile sources, the Regional Transportation Commission of Southern Nevada (RTC), is responsible for the administration of:
  - Streets and Highways funding, engineering, and capital project construction, for which air quality impacts are closely modeled and monitored. Federal funding from transportation projects could be lost if the region fails to comply
  - RTC public transportation and paratransit services, which is further covered under TI-5
  - Transportation Demand Management Programs and incentives through "Club Ride."

Ultimately, a variety of Federal and state laws help control pollution, but the implementation of those laws take place at the State, county, and city level.

- The City, County, LVVWD, RTC are required to report to the U.S. Environmental Protection Agency or the Nevada Division of Environmental Protection (NDEP) on a number of laws and programs, including:
  - Safe Drinking Water Act
  - Clean Air Act
  - Clean Water Act
  - Underground Storage Tanks

Noise is a similar form of pollution; at sustained high levels, ambient noise can be harmful to people's health. Ambient noise varies widely throughout the City, whether for residential areas that ensure noise levels are safe for people to live in or for vibrant and active commercial areas. The City does play a role in determining where and how noise is mitigated.

Not only do both the public and private sector entities play important roles in regulating and ensuring the control of pollution, it can be prevented by individuals.

Southern Nevada's desert environment, topography, and pollution from stationary and mobile sources pose a challenge for being in attainment with Federal air quality standards. The annual maximum tolerable level of air pollution is an Air Quality Index less than 100.

Southern Nevada's air quality is monitored and measured within the boundary of Nevada Hydrographic Area 212, covering the Las Vegas Valley. Through the Clean Air Act, the EPA established National Ambient Air Quality Standards (NAAQS) for six regulated criteria air pollutants as well as baseline "healthy" levels air:

- **Carbon monoxide (CO): In attainment**
  - During winter months, CO levels tend to rise. CO can block oxygen from the brain, heart, and vital organs, with fetuses, babies, and people with chronic illnesses being especially susceptible to its effects. Long-term exposure to low levels may lead to increased respiratory illness and heart conditions. Individuals already having respiratory ailments or heart problems are at the greatest risk for further negative health impacts from breathing high concentrations of carbon monoxide. The Las Vegas Valley was designated as a 'serious' non-attainment area in 1993. Conditions improved after implementing and maintaining a State Implementation Plan. The Las Vegas Valley has maintained attainment levels for carbon monoxide (CO) since 1999, due to regulations on gasoline that help to control CO emitted into the atmosphere. Programs targeted to the repair of gross emitting and smoking vehicles also had a positive impact on air quality due to the large proportion of air pollution coming from older vehicles.
- **Nitrogen dioxide (NOx): In attainment**
  - NOx may cause lung irritation and potentially make people more prone to respiratory infections such as pneumonia and influenza. According to EPA data, it is responsible for 80 percent of the total NOx emissions in Clark County. Since the closure of the coal-fired Reid Gardner Generating Station in Moapa NOx emissions in Clark County have significantly decreased.
- **Ozone (O3): EPA designated Clark County as an O3 nonattainment area in 2014**
  - Ozone is the only pollutant not directly emitted; it forms through the reaction of nitrogen oxides (NOx), volatile organic compounds (VOCs), and sunlight. The EPA and the American Lung Association determined that long term exposure to ozone may cause harm to the central nervous system and cause damage to the reproductive system. Ozone can also cause developmental harm in young children. DAQ issues advisories when ozone and particulate matter levels become unhealthy and recommends those with sensitive respiratory systems stay indoors. Concentrations of ozone are not uniform and vary from day to day and from place to place. Other environmental impacts from long term ozone pollution include damage to ecosystems and landscaping and the degradation of building materials. As part of the nonattainment designation, DES established a transportation rule with motor vehicle emission budgets to show progress consistent with adopted control measures and projected emissions.
- **Particulate matter (PM): In attainment**
  - Measured at 2.5 and 10 parts per million, PM is the mixture of airborne solid particles and liquid droplets. PM can settle in the lower portion of the lungs and can cause asthma and respiratory issues. Fine particulates also create haze and reduced visibility. It can come directly from construction



sites, unpaved roads, and fires. Airborne particulate matter in Southern Nevada is dominated by dust. Secondary particles come from atmospheric chemical reactions emitted from power plants and automobiles. Soils, including those with high silt content in the western and northwestern planning areas of the City that are disturbed through recreational uses or construction, can become airborne during strong wind events. As a result of not being in attainment during the 1990's, dust control permitting was a required management practice; as a result, levels of PM10 have shown a continued decline since the early 2000s despite rapid growth in the Valley.

- **Sulfur dioxide (SOx): In attainment**
  - Burning sulfur-containing fuels (such as coal), distillation of sulfur from fuels can cause airborne sulfur dioxide.
- **Lead (Pb): In attainment**
  - Lead monitoring is not continuous, so no real time measurements can be made. Once taken exposed, lead makes its way though the bloodstream and is accumulated in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidneys, the immune system, and the cardiovascular system. Lead exposure also affects the oxygen levels within blood. Aside from burning

of fuel, no major sources of lead are present in the City of Las Vegas.

Because prevailing wind flows from California's converge in the Mojave Desert, poor air, dust, and PM are typically transported pollutants into Nevada. More than three quarters of air pollution generated within Las Vegas comes from engine or machine exhaust, transportation generated emissions, and construction. Topography and local weather serve to trap pollution in parts of the Las Vegas Valley; surrounding mountains reduce the wind speeds that would carry pollution away, increasing pollutant concentrations in the valley itself. During cold weather, thermal inversions can develop. If winds are calm, the eastern part of the Valley has higher pollutant levels, usually for CO, due to its lower elevation. Ten official air pollution monitoring stations record meteorological data and measure pollutants in real time.

The EPA uses the Air Quality Index (AQI) to rate air quality based on the National Ambient Air Quality Standards (NAAQS). The scale includes categories of good, moderate, unhealthy for sensitive groups, unhealthy, and hazardous. Over the past three years, the AQI has generally improved, but must continuously be monitored:

Cities that violate the NAAQS for one or more of the criteria pollutants are in nonattainment of the standard based severity. After the Clean Air Act was amended in 1990, the region was classified as a "moderate" non-attainment area for both PM10 and CO, requiring the submission of a state implementation plan containing local regulations and plans to be in attainment of standards. Long-term plan were put in place to demonstrate how the region will meet and continue to maintain compliance with standards. They address:

- **Mobile sources -** The greatest source of the City's (and the Southern Nevada region's) pollution is transportation related emissions. Non-compliance with Federal air quality standards can also affect transportation funding.
- **Stationary sources –** site-specific locations that generate emissions. Permits are issued to facilities that emit pollution to ensure they control emissions and do not harm public health or degrade regional air quality. Permits may include limits on both construction and operation activities and are required before activity or pollution emissions begin. New sources must also be reviewed and permitted to ensure pollution is controlled. Stationary sources are regulated as major, minor, or exempt sources, based on the tons of any regulated pollutant, and each have different permitting requirements.

To mitigate air pollution from mobile and stationary sources, a combination of actions can be taken from a number of other goals that will ultimately decrease the number of poor air quality days, improve the annual AQI to levels less than 100, and ensure attainment of NAAQS:

- The transition to cleaner energy sources through energy efficiency and renewable energy projects will yield numerous benefits, including cleaner air and reduced emissions.
- Ensure balance between economic development goals while scrutinizing development applications through the LVMC Title 19 Special Use Permit process for any major industrial-oriented emitters and for environmental justice concerns.
- Decreasing overall VMT and increasing transit use through implementation of RTC's On Board Mobility Plan and the infill and redevelopment strategy detailed in the Land Use and Environment Chapter.
- Transportation electrification will ultimately reduce mobile emissions and demand for fuel.
- Planting trees to increase the overall tree canopy and decrease the urban heat island effect, which will also help reduce air pollution.

THE CITY MUST ASSESS, MITIGATE, AND REDUCE THE NUMBER OF BROWNFIELDS AND GREYFIELDS THROUGH THE CITY'S TOD, INFILL AND REDEVELOPMENT STRATEGY

Brownfields include previously developed land that has been contaminated, while greyfields include obsolete, underused, or failing land or buildings. The presence of hazardous materials in brownfields with contaminated soil and groundwater, can increase the risk of adverse health effects to exposed populations. Short term dangers include acute health effects such as poisoning and injuries, while long-term effects include poisoning, cancers, birth defects, and other chronic non-carcinogenic effects. Pollution can negatively impact minority and low-income communities, as well as sensitive sub-populations like children, pregnant women, and the elderly, all of whom can be disproportionately affected.

The City of Las Vegas is fortunate to have few brownfield locations requiring major long-term hazardous material clean-up or environmental remediation, and no properties subject to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The City does, however, have legacy locations, especially within Downtown Las Vegas, Downtown South, East Las Vegas, West Las Vegas, Charleston, and Twin Lakes planning areas. Other locations and areas of concern may also exist throughout the community, including current and former gas stations, dry cleaners, medical facilities, and buildings that may contain toxic materials like lead or asbestos.

Far more prevalent within the same planning areas are greyfield locations, containing abandoned, idle, underutilized or vacant buildings and property. Empty and unused asphalt typifies these locations. While brownfields have actual contamination that requires cleanup, many greyfields may remain neglected due to the real or perceived complication and expense of redevelopment. These locations commonly include strip malls and neighborhood shopping centers.

Both brownfield and greyfield property cleanup and environmental remediation can reduce liabilities associated with reusing contaminated sites, converting vacant, underutilized land into productive resources that reduce blight, improve aesthetics, and improve community health and well-being. Within each planning area, these must be assessed in close coordination with this plan's Economic Development and Land Use goals for TOD.

CONTINUE ENSURING HIGH STANDARDS FOR WASTEWATER TREATMENT AND STORMWATER POLLUTION PREVENTION

Pollution could threaten Southern Nevada's groundwater, soils, and drainage through the Las Vegas Wash to Lake Mead through both natural contamination and spills, leaking pipes and underground storage tanks, urban runoff, industrial operations, and forms of agriculture. Water percolating through soil picks up naturally-occurring minerals, salts and

AIR QUALITY INDEX (AQI) REPORT-LAS VEGAS	2019	2018	2017
Days "Good" (AQI 0-50)	154	122	136
Days "Moderate" (AQI 51-100)	206	194	200
Days "Unhealthy for Sensitive Groups" (AQI 101-150)	5	48	28
Days "Unhealthy" (AQI 151-200)	0	1	1
Days "Very Unhealthy" (AQI 201-300)	0	0	0
AQI Max	122	154	154
AQI Median	54	61	58
Days of CO	1	0	0
Days of NO2	18	45	37
Days of O3	252	227	234
Days of Sox	0	0	0
Days of PM 2.5	86	79	84
Days of PM 10	8	14	10

organic compounds causing mineralization. If levels are high enough, groundwater can no longer can be used in the water supply without higher levels of treatment.

- Non-point source water pollution occurs when stormwater and irrigation water flows over developed or disturbed land, carrying contaminants and entering waterways directly through storm drains or percolating into groundwater. It is much more difficult to control than point-source discharge from wastewater treatment plants.
- Point-source water pollution threatens water quality from specific permitted and non-permitted sites. Well-managed groundwater basins are monitored to detect leaks so that any harmful intrusions can be addressed quickly by local agencies. Dry cleaners and gas station with underground storage tanks have been prominent polluters in the past with most soil and groundwater contamination occurring from these leaking or spilling sources

Keeping contaminated sites from further polluting soils, aquifers, and watersheds has been a major City focus. Runoff from construction activities can similarly have an impact on water quality. NDEP's Stormwater Program requires developers and contractors of construction sites to obtain a permit prior to discharging water. All construction sites over one acre must develop a Stormwater Pollution Prevention Plan to keep sediment, turbidity, and other pollutants from impacting water quality.

The National Pollutant Discharge Elimination System (NPDES) permit program regulates water pollution from point sources that discharge pollutants. In accordance with the Clean Water Act and NRS Chapter 445A, the Regional Flood Control District is part of the NPDES stormwater discharge permit that authorizes both stormwater and non-stormwater discharges from the municipal separate storm sewer system (MS4) to the Las Vegas Wash. In return, the permit specifies monitoring requirements, best management practices (BMPs), and conditions designed to promote the reduction of pollutants in both stormwater and permitted discharges to the "maximum extent practicable." The City's Public Works Department – Environmental Division, discharges treated wastewater into the Las Vegas Wash and monitors groundwater discharge permits pursuant to LVMC Title 14; it must continue to responsibly abide by regulations to comply with Federal environmental laws.

The City also participates on the Stormwater Quality Management Committee with the Regional Flood Control District, which informs the general public of measures necessary to protect water quality and other NPDES compliance activities. The RFCD monitors stormwater quality and promotes the construction of facilities that will help reduce the concentration of pollutants in stormwater runoff.

THE CITY MUST BE AWARE OF ENVIRONMENTAL JUSTICE AND WORK WITH COMMUNITY GROUPS

Different parts of the City may have different risks with respect to the impact of environmental pollution on the community. Conditions may be site-specific, such as brownfields in West Las Vegas or Downtown Las Vegas, or may be broader such as the construction of the Downtown Access Project that will replace the I-515/Future I-11 viaduct through Downtown and East Las Vegas. While necessary for transporting people and goods, such a facility may also contribute to respiratory health concerns for the residents that live nearby.

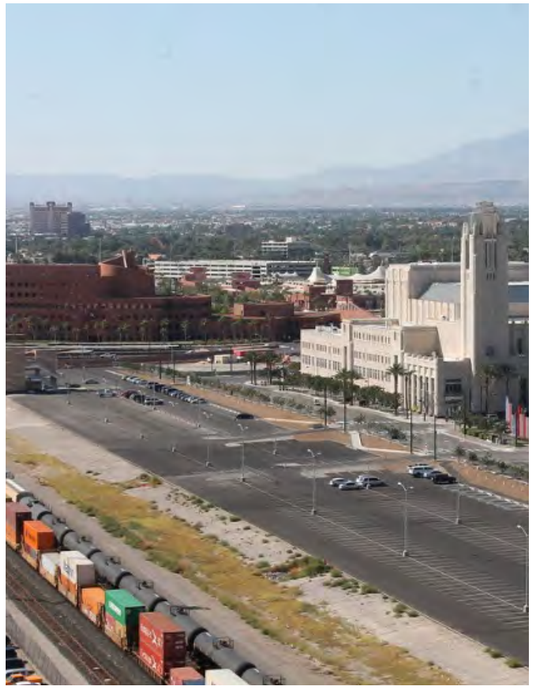
Environmental justice includes not only the impacts of pollution, but also the impacts to the neighborhoods people live and work in. The City's low-income or minority population must be experiencing a disproportionate health or environmental effect, such as increased illnesses or death, direct pollution; disruption of the availability of public and private facilities and services; displacement of people and businesses, and/or the isolation, exclusion, or separation of people within a given community or from the broader community.

The initial city-wide assessment includes consideration of the following factors:

- Proximity to roadways for noise and pollution.
- Exposure to lead based on age of home construction.
- Proximity to air and water point source polluters, such as industrial emitters of noxious odors.
- Proximity to commercially or industrially zoned land

Additional aspects focused on accessibility to certain community assets, such as the presence of food deserts, parks, transit availability, and proximity of City facilities.





NDEP BROWNFIELDS	PLANNING AREA/ LOCATION	DESCRIPTION
UPRR	Downtown Las Vegas (Symphony Park)	Soil contamination from diesel spills
Cleveland Clinic	Downtown Las Vegas (Symphony Park)	Other contamination from parking lot surface staining
1122 D St	Downtown Las Vegas (Historic Westside)	CLV ownership-asbestos
1100 D St	Downtown Las Vegas (Historic Westside)	CLV ownership-asbestos
308 Jefferson	Downtown Las Vegas (Historic Westside)	CLV ownership-asbestos

RECENT SUCCESS

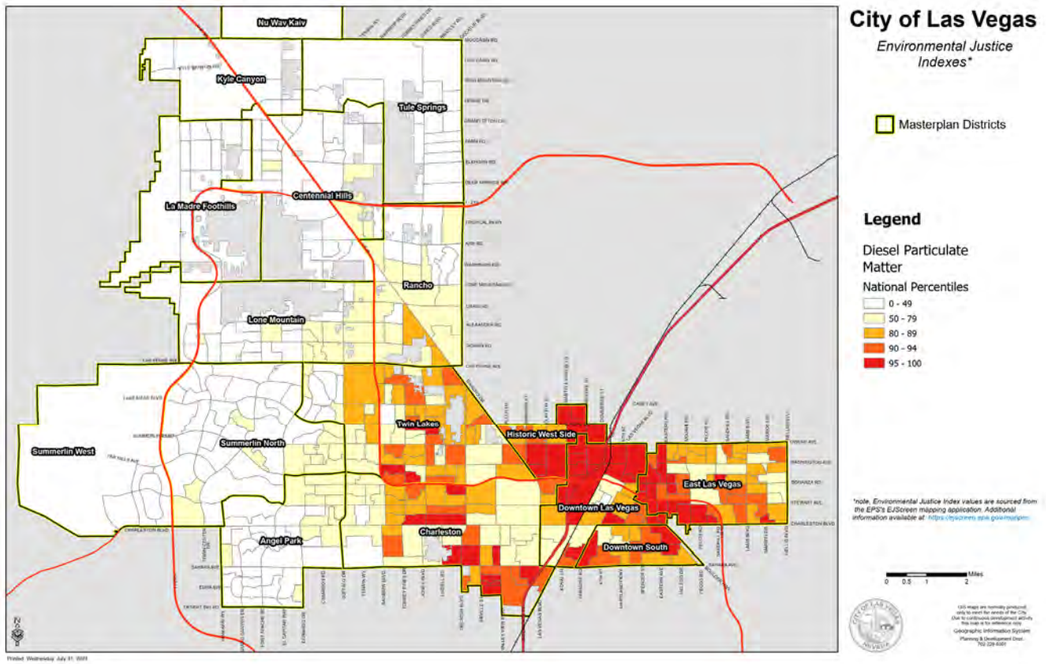
The City's most successful brownfield cleanup and remediation is Symphony Park in Downtown Las Vegas. Since the founding of Las Vegas, the 61-acre site was contaminated by petroleum spills, solvents, and metals from railroad operations. During the 1990's, Union Pacific Railroad began the process of cleaning up the brownfield and moving railyard operations through a soil remediation and groundwater management program approved by NDEP. As part of its redevelopment efforts, the City purchased "Union Park" in 2000 to develop for a mixed-use development. In 2010, NDEP awarded additional funds for continued implementation of the Soil and Groundwater Management Plan (SMP) through the Nevada Brownfield Program. Since then, the area was renamed "Symphony Park" after the Smith Center for the Performing Arts was constructed, the Discovery Museum and Lou Ruvo building housing the Cleveland Clinic opened, and parking facilities were completed. In 2020 and 2021, two mixed-use housing developments will open with further redevelopment planned in the future.

Priority planning areas include those with neighborhoods containing high populations of low-income residents, racial and ethnic groups, combined with higher concentrations of environmental risks and pollution using EPA's EJSCREEN tool. It reveals that the urban planning areas immediately around Downtown Las Vegas have the higher levels of risk and vulnerability.

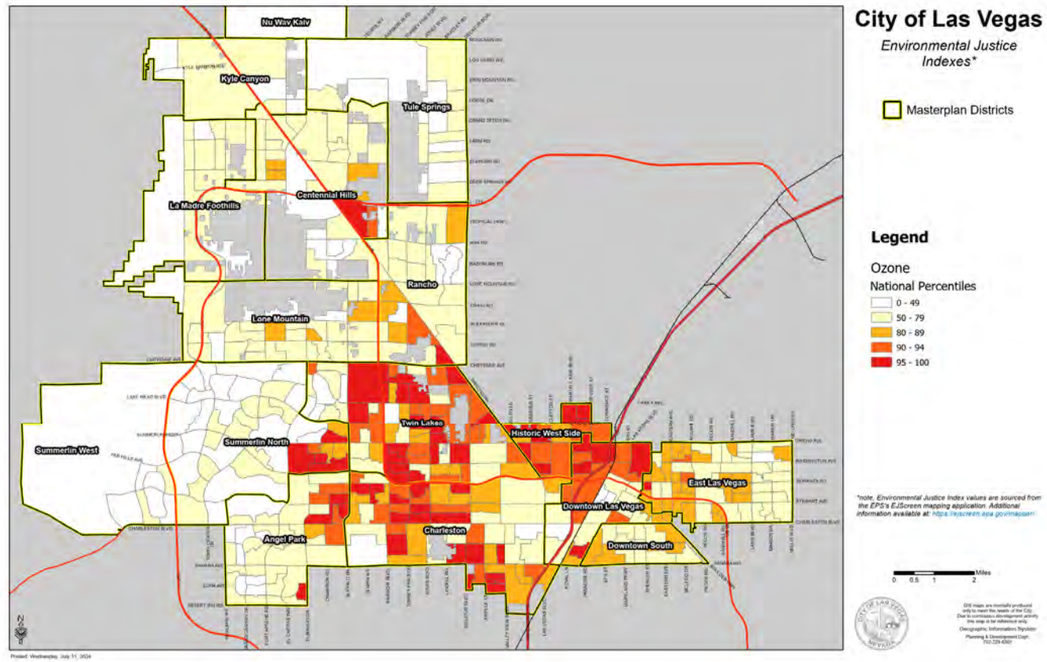
Over the next thirty years, the City must begin taking steps to make measurable reductions in risk and vulnerability. Conditions can be changed to reduce the threat or occurrence of the impact itself, for example, through site remediation efforts or brownfield cleanups. Relocating impacted populations can similarly reduce the risk associated with the condition. However, when vulnerable populations do not have resources to relocate, the City must work to find way to ensure even greater disproportionate impacts never occur.

To reduce environmental justice risks, specific stationary and mobile sources of pollution must either be eliminated, the vulnerability must be significantly reduced, and/or health indicators dramatically improve. The City can also address environmental justice through policy making and specific amendments to LVMC made by the Planning Commission or City Council. Reducing the impact of environmental justice burdens will require a series of significant, coordinated investments and projects that demonstrate a reduction in vulnerability that is being systematically monitored over time.

AIR TOXINS FROM DIESEL PARTICULATE

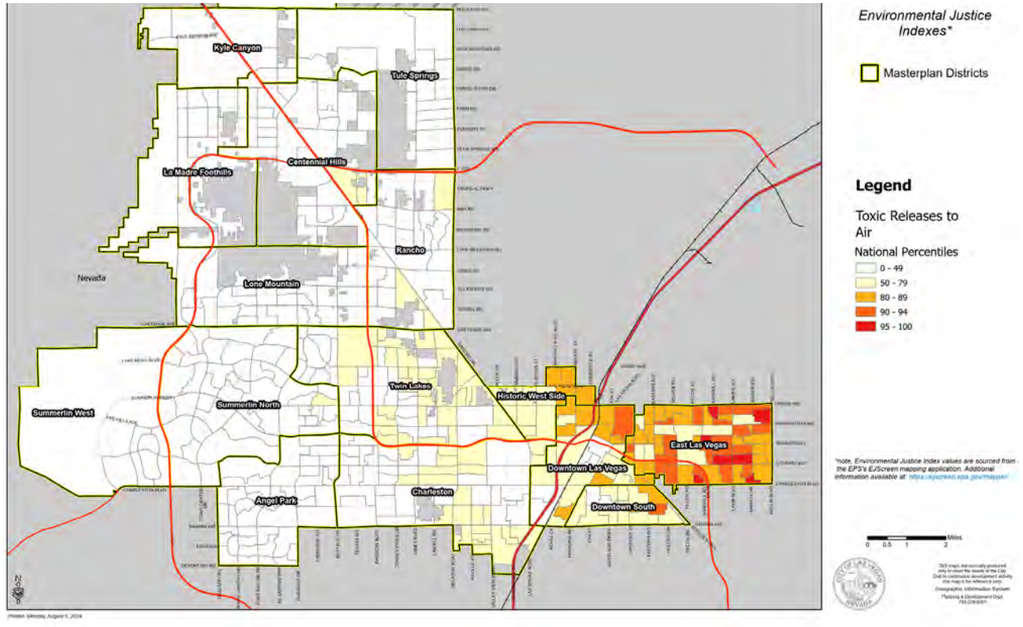


OZONE

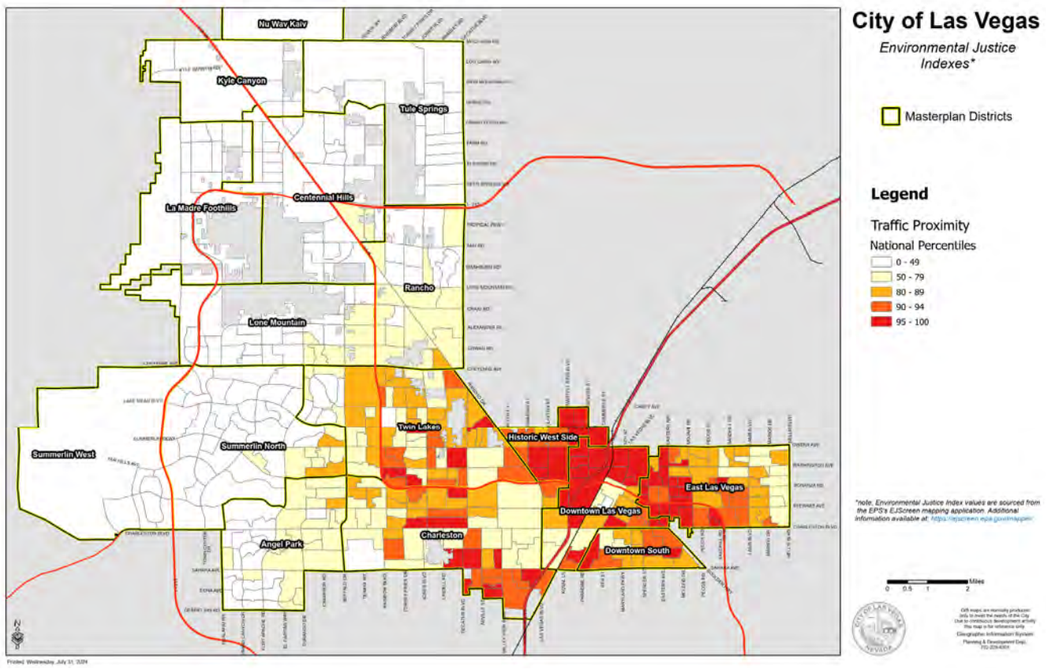


ENVIRONMENTAL JUSTICE RISK	AREA/LOCATION	DESCRIPTION
Ozone	East Las Vegas, West Las Vegas	High concentrations of ozone in low income Latino and black neighborhoods
Traffic	East Las Vegas, Downtown Las Vegas, Charleston, West Las Vegas, Twin Lakes	Widespread noise, air pollution, and emissions concerns for neighborhoods along US 95, I-15, and I-515
Lead Paint	East Las Vegas, Downtown Las Vegas, Downtown South, West Las Vegas, Twin Lakes	Older homes containing lead-based paints
Brownfields	Downtown Las Vegas	Concentration of several brownfields in Downtown's Historic Westside district

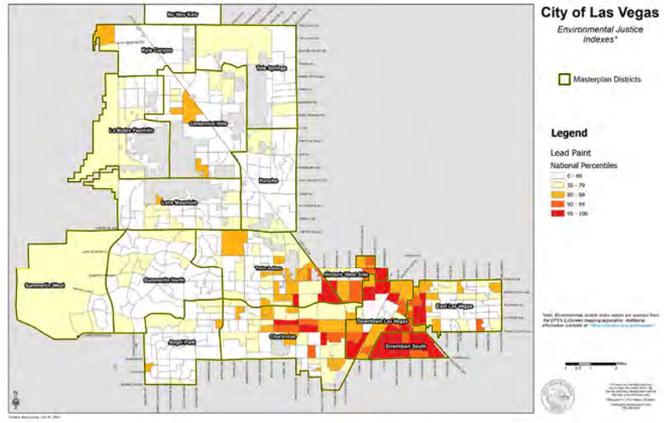
AIR TOXINS RELEASED TO THE AIR



TRAFFIC



LEAD PAINT



IMPLEMENTATION STRATEGIES

- Hire a staff member within the City that has experience with environmental justice and assign to an appropriate department.
- Implement projects and actions from other parts of this plan that improve air and water quality, including from:
  - Urban Forestry
  - Complete Streets and Highways
  - Transit
  - Energy
  - Waste
  - GHG Emissions
  - Heat Mitigation
- Implement the actions from the Land Use Chapter that reduce or eliminate brownfield and greyfield locations:
  - Implement recommended RC, TOD, TOC, and NMXU placetypes
  - Develop an inventory of infill, brownfield, and greyfield sites of greatest priority and potential for development or redevelopment
  - Collaborate with NDEP to advance current or any future brownfields cleanup, should they develop
  - Establish a program to provide information and assistance to owners, potential buyers, and development regarding brownfield assessments, cleanups, redevelopment strategies, and available resources
  - Support temporary, creative neighborhood uses for vacant properties and greyfields
  - Ensure the Planning Department's Code Enforcement division enforces greyfield and vacant lot cleanup to improve chances of site redevelopment and to deter crime
  - Make local infrastructure improvements identified in the CIP, including street, water, sewer, storm drain, and energy, to revitalize redevelopment or blighted areas and catalyze private reinvestment
- Incorporate environmental justice criteria and priorities into LVMC and continue to enforce environmental regulations and permitting to ensure clean air and water.
  - Create and enforce anti-idling regulations, especially around schools and within specific areas of the city with sensitive populations
  - Continue enforcement of dust control permits from construction activity
  - Incorporate environmental justice criteria and priorities into LVMC Title 19 zoning, and site development reviews of new projects
  - Create an interdepartmental working committee to discuss environmental justice concerns and mitigation strategies
  - Monitor and enforce environmental regulations and permits pursuant to LVMC Title 14
  - Implement projects to reduce pollution exposure in prioritized planning areas with environmental justice risks and vulnerabilities
  - Strengthen the City's noise ordinance based upon results from a local assessment of commercial and residential areas



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II. ECONOMIC + WORKFORCE DEVELOPMENT	**3-26**
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03. ECONOMY & WORKFORCE

INTRODUCTION

As a city focused on growth, Las Vegas has committed to creating cutting-edge “smart city” priorities and initiatives. While smart strategies have typically referred to using technology as a means of improving urban performance, Las Vegas’s smart strategy also refers to its people. A city’s economic growth is closely related to the education of its residents. Although education is not a sole indicator of future salary potential for a person, it is generally an important one. Generally, for each level of education a person gains, a percentage of growth is gained. Therefore, for Las Vegas to grow economically, it not only needs to attract new residents- it needs improve educational outcomes of its existing ones.

School quality is often linked to overall quality of life, yet those in the City face disproportionate impacts, especially between urban and suburban schools. Future collaboration with Clark County School District’s (CCSD) will be key to ensure the city’s schools are supportive of the City’s goals to provide equitable, innovative opportunities across its neighborhoods.

Growing a smart population requires more than just good schools; it requires a holistic economic strategy that attracts the brightest and the best. Schools provide the groundwork for educating children and are a key part of a growth strategy. Like other cities who largely suffered from ‘boom and bust economies’ of the post 2008-recession, Las Vegas also must compete against other cities of similar size who are looking to pull in talent. Denver, Pittsburgh, Salt Lake City, Phoenix and Austin are doing the same, so Las Vegas must ensure that it has a robust pipeline for talent that includes housing, education, and workforce. Doing so will ensure Las Vegas is developing its own people while recruiting new residents.

While education and an economic development strategy are not required by NRS for inclusion in a master plan, the City recognizes its inextricable relationship to physical planning. Improving education, diversifying the economy, and developing a resilient workforce were repeatedly brought up by participants throughout the planning process. Las Vegas is at a unique turning point in its history as a city where its future economy will be driven less by new subdivision growth at its periphery and more by redeveloping within existing areas. As the local economy shifts to knowledge-driven, tech-based industries, the City will be able to help prioritize workforce training to respond to the “smart” innovation in the entertainment, military, and health sectors.

GOALS

I. EDUCATION

A. Achieve equitable attainment of quality education - Pre-K through higher education - to support a strong workforce and quality of life.

B. Support school siting and learning environments for all ages through thoughtful land use and transportation planning

II. ECONOMY

A. Support diverse employment and entrepreneurship for the existing and future workforce that capitalizes on skills, especially in emerging sectors

B. Prioritize key redevelopment opportunities, incentivize, and actively promote their reuse

C. Uphold sound fiscal policies and transparency that increases efficiency in order to provide higher quality of services

III. HOUSING

A. Increase affordable housing types and choices for all income levels near existing and new employment centers.

B. Develop services that help the homeless and prioritize the needs of the most vulnerable members of the community

RELATION TO SOUTHERN NEVADA STRONG
IMPROVE ECONOMIC COMPETITIVENESS AND EDUCATION

Goals work to align future development styles or “place types” with the needs of small businesses and workers in the region’s target sectors.

1. Aligning land use and transportation plans with regional economic development plans.

2. Ensuring that Southern Nevada offers a range of place types to attract and retain future workers, visitors, businesses and entrepreneurs.

3. Enhancing the role of small businesses and entrepreneurs as leaders in economic diversification and revitalization.

4. Increasing collaboration between the state government, local governments, and the region’s higher education institutions to align economic development and education efforts.

5. Supporting the educational system and learning environments through thoughtful land-use and transportation planning.

SUMMARY OF ECONOMY & WORKFORCE STRATEGIES BY GUIDING PRINCIPLE

EQUITABLE

- Improve access to jobs
- Improve workforce training
- Improve access for all communities + language barriers
- Emphasize education (access and quality)
- Emphasize early childhood programs
- Utilize development practices support & prioritize education
- Create affordable social services for an aging population
- Create more affordable healthcare options
- Encourage accessible healthcare beyond urgent care and hospitals
- Create affordable childcare services
- Transition training for digitalization

RESILIENT

- Emphasize economic diversity
- Develop a more diverse talent pool
- Diversify business types
- Cultivate fully-formed philanthropic centers
- Emphasize education (access and quality)
- Improve access to food (global leaders in resilient food access in a desert climate)
- Prepare workers for digitalization transition
- Prepare for an aging population Prepare for disasters
- Expand efforts to include mothers and single-parents in the economy
- Develop a “beyond resorts” mentality that diversifies jobs and economy

HEALTHY

- Improve healthcare access
- Improve mental health
- Improve health literacy
- Develop a more healthy workforce
- Increase living wages
- Create a more effective healthcare system
- Improve access to social services (aging, disability, etc)
- Emphasize healthcare industry education & jobs
- Prioritize healthcare district development
- Increase access to healthy food/ latchkey and summer
- Improve job stability

LIVEABLE

- Increase access to amenities, services
- Emphasize cultural tourism
- Prioritize historic preservation
- Complement gaming and entertainment industry
- Prioritize technology / “cutting edge” gaming
- Emphasize a Las Vegas for all ages
- Create inclusive economic practices
- Prioritize housing and utilities as an affordable percentage of income

INNOVATIVE

- Engage medical tourism
- Increase healthcare education & jobs
- Focus on niche R&D
- Lead innovative technology creation including UAV + AV
- Capitalize on air force bases synergy
- Foster entrepreneurship
- Prioritize economic diversity
- Capitalize on financial, real E\estate, and other professional services
- Increase maker space and flexible workspace
- Capitalize on proximity to Los Angeles
- Create more smart jobs (robotics, AV, and digitalization)

EDUCATION



GOALS

A. Achieve equitable attainment of quality education - Pre-K through higher education - to support a strong workforce and quality of life.

B. Support school siting and learning environments for all ages through thoughtful land use and transportation planning

I.A EQUITABLE EDUCATION

☑ NRS 278.160.2

ACHIEVE EQUITABLE ATTAINMENT OF QUALITY EDUCATION — PRE-K THROUGH HIGHER EDUCATION — TO SUPPORT A STRONG WORKFORCE AND QUALITY OF LIFE

The quality of the City's educational system is among the top rated public concerns and leading priority areas for residents. When surveyed, residents consistently raised concerns about the quality of the educational system and cited education being the one thing that they would want changed about the city. During public outreach, residents ranked education as the highest priority issue that the City faces over the next thirty years and spoke frequently about improving schools. The importance of educating the community's students, whether primary, secondary, or higher education, has historically not been a direct charge or function of the City. Given that Nevada has often ranked last or toward the bottom of recent national education metrics, it is not hard to understand why it is such a great public concern. There are definite bright spots throughout the City and community, with many academic success stories, good schools, and dedicated teachers. Educational advocacy organizations, including Opportunity 180, parent-teacher associations, and other non-profits highlight the need for good schools that are accountable, and that translate to college and career-ready young adults. The City simply cannot ignore education as an issue – poor academic performance and weak educational trends must end.

While the City doesn't provide traditional direct educational support, it does have a vested interest in educational outcomes and offers a number of supportive programs. The Department of Youth Development and Social Innovation was formed in 2015 to focus on educational outcomes, supplementing education provided by CCSD and community partnerships through Strong Start, Strong Schools, and Strong Future initiatives. Since its foray into education, the City provides:

- Safekey before and after school programs, offered at about 70 of the City's CCSD schools.
- ReInvent Community Schools focuses on expanded learning at underperforming schools around Downtown, and the after school Ignite STEM program for middle school students.
- Pre-K education through Strong Start Academies
- College prep and career path programs, including Batteries Included, and My Brother's Keeper.

Because residents demand improvements to education, it is important to examine educational factors, roles, and relationships between the City and institutions of learning within Southern Nevada:

- The educational system is a highly regarded quality of life measure. Parents of children want their children to attend high quality schools. This is true also of the ability to attract new residents to the City; educational options, quality of schools, and overall educational outcomes are often leading factors on locations to live when weighing places to live from a potential resident from out of state. Similarly, businesses looking to start or relocate to the City often consider the quality of the educational system, as it is just as important a factor for recruiting from the workforce as it is to have employees satisfied with the schools they send their children to.
- There is stark contrast in quality between schools; the performance of schools may be dependent upon a variety of factors, but noticeable trends indicate that geography, demographics, and socio-economics play a role in educational outcomes for the City's students.

> We need to create a system that actually cares about the students
>
> – Transit user at Bonneville Transit Center



- Multiple pathways must be open to students when they graduate; for many, entering the workforce with a good paying job is an important attainable aspect, provided that the quality of education doesn't require extensive retraining or remedial work. Similarly, graduating students must be prepared to enter college without reliance on remedial classwork.
- Successful educational outcomes have greater potential to yield direct and indirect benefits to the City and community. Students that graduate high school, receive vocational or workforce development training, or attain degrees from Nevada's institutions of higher learning have a greater potential to remain within the City and state, thereby contributing to overall positive community development.

Public schools are the predominant method of educating the students of Southern Nevada, with relatively few private school options available. Over time, efforts have been made to increase options and school choices that have led to the growth of additional charter, private, and parochial school options. Development of these choices are important steps that should be made to increase educational quality and outcomes for students of all backgrounds, and must be done without compromising the public education system.

At the state level, the state Department of Education (NDOE), led by the Superintendent of Public Instruction and Board of Education, sets educational policy, curricula, and academic and achievement standards consistent with state statutes. It also oversees teacher licensure for all public and private school educators and measures student accountability. Since 1956, the Nevada Legislature consolidated unified

KEY ACTIONS

- Expand the role and scope of the Department of Youth Development and Social Innovation as a partner to educate City youth.
- Continue offering and expand supplemental before and after school programs to achieve better K-12 educational outcomes
- Develop an educational support program with underperforming CCSD schools to provide additional resources for students and parents.
- Resolve to support continuing education, workforce development, and collegiate program to improve post high school educational outcomes.
- Partner with NSHE to expand UNLV and CSN campuses and siting and development of a new state college campus tailored to City of Las Vegas residents with a dedicated focus on granting targeted and specialized 2 and 4 year degrees to further add teacher capacity.

OUTCOMES

- 95% of adult population has attained a high school diploma by 2050
- 33% of adult population has attained at least a Bachelor's degree by 2030 and 40% by 2050.
- CCSD graduation rates increase to 95% by 2050.
- Literacy and subject matter proficiency rates improve over time for elementary, middle and high school students.
- The 4-year cohort high school graduation rate for all public schools in the City from each race/ethnicity, special education, ELL students, and low-income subgroup of students is 90% by 2050.
- All schools within the City will be rated three stars or higher on the Nevada School Performance Framework
- Per pupil funding rates are greater than the national average

public school districts into countywide school districts. From that point, the City has been served by the Clark County School District (CCSD), which has grown to become the fifth largest school district in the country with an enrollment exceeding 325,000 students:

- CCSD is overseen by a seven member elected Board of Trustees. Overseeing the organization is the district's Superintendent of schools and supported by a wide range of administrative and academic functions. Approximately 23,000 full-time and substitute teachers and 19,000 support staff educate and serve students.

- In general, education, school districts, and the system of public instruction is governed under Title 34 of NRS, in addition to chapters on taxes to financially support schools and education. More than half of the funding for K-12 education is through locally derived sources, with approximately a third distributed from the state, primarily from local sales taxes, property taxes and the Local School Support Tax. Federal funding, in the form of grants distributed from the U.S. Department of Education, provides the remainder. Funding for public schools, known as "the Nevada Plan," has historically been complex and controversial, with per-pupil instructional spending wavering between $5,000 - $6,000. Much of these revenues are expended for teachers and personnel, but a sizable share is also spent on instruction, school capital projects, transportation, and other administrative expenses.

- The Nevada System of Higher Education (NSHE) oversees community colleges and universities throughout the state. Governed by the Nevada Board of Regents, NSHE institutions provide an important pathway for people to attain Associates, Bachelors, and advanced degrees. The University of Nevada, Las Vegas (UNLV) and College of Southern Nevada (CSN) are the City's most important local post-secondary pathways for people to earn degrees. They are also vital for workforce and economic development because they train students new skills and trades, provide innovative research and development opportunities, promote internationally recognized scholarship, help increase employment and worker wages, and provide public health services in a teaching setting.

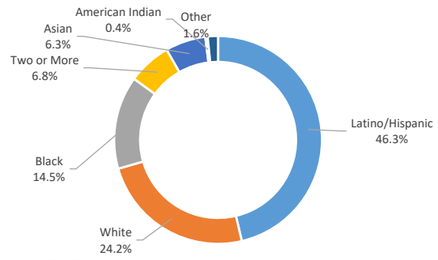


THE CITY'S EDUCATIONAL OUTCOMES VARY WIDELY, ESPECIALLY BETWEEN DIFFERENT COHORTS

Maintaining and growing a healthy community and competitive economy begins with early childhood education. As a student progresses, education should be accessible to everyone, regardless of demographic or socio-economic status. But for decades, the City and community's poor educational outcomes have varied widely between geography, subgroups, and populations, indicating strongly correlated and widening gaps for local outcomes. Furthermore, the link between educational attainment and earnings potential is well documented. Research by the Institute for Social Research at the University of Michigan shows that, on average, households headed by a high school graduate accumulate 10 times more wealth than households headed by an individual who dropped out of high school and even more with the attainment of Bachelor's or advanced degrees.

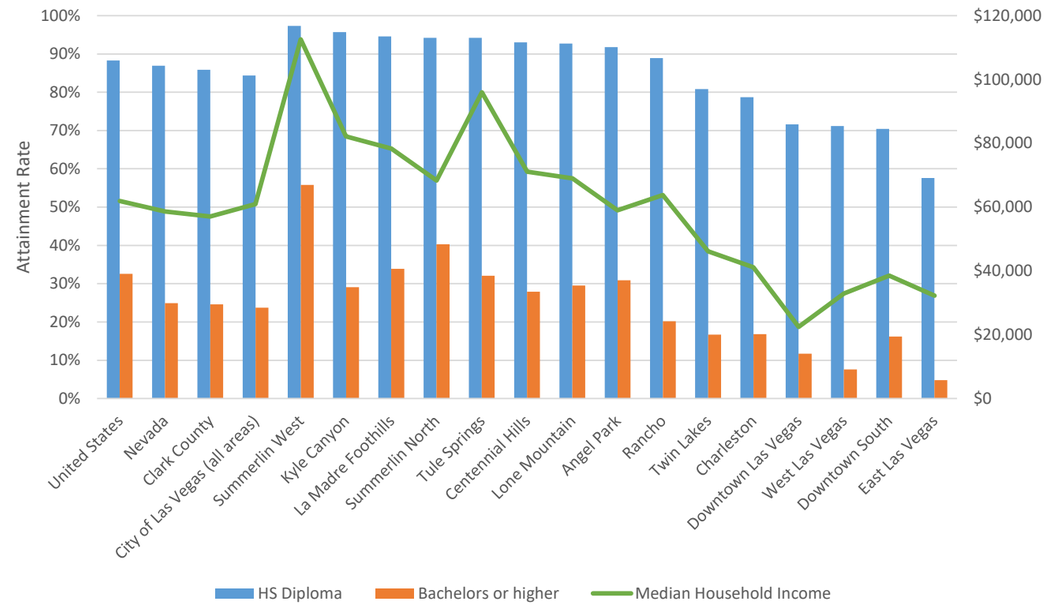
Educational attainment rates for the City are below the national and statewide rates. Citywide, approximately 84%

STUDENT RACE AND ETHNICITY



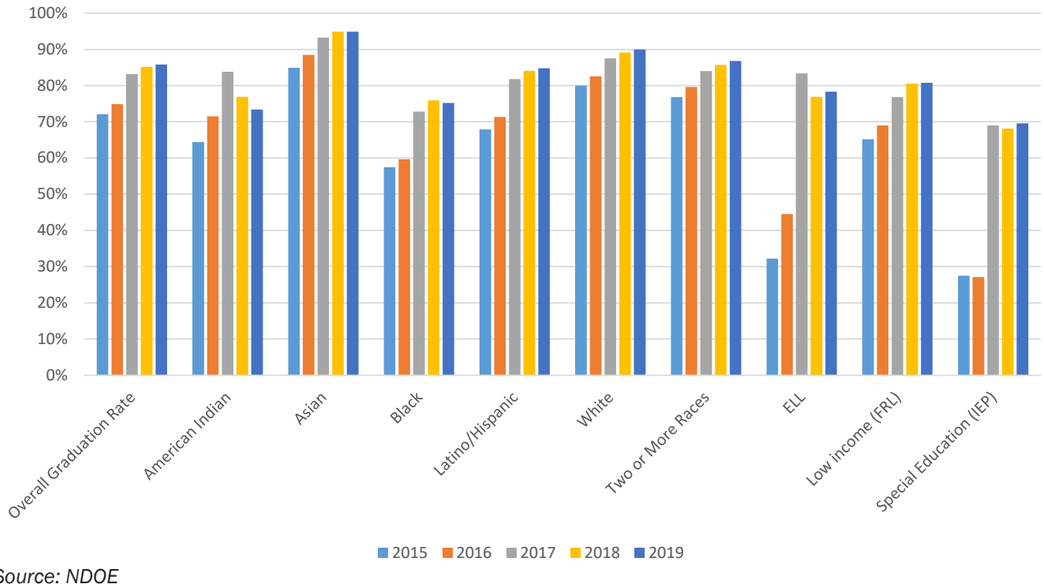
Source: NDOE

EDUCATIONAL ATTAINMENT AND INCOME - ADULT 25 AND OLDER



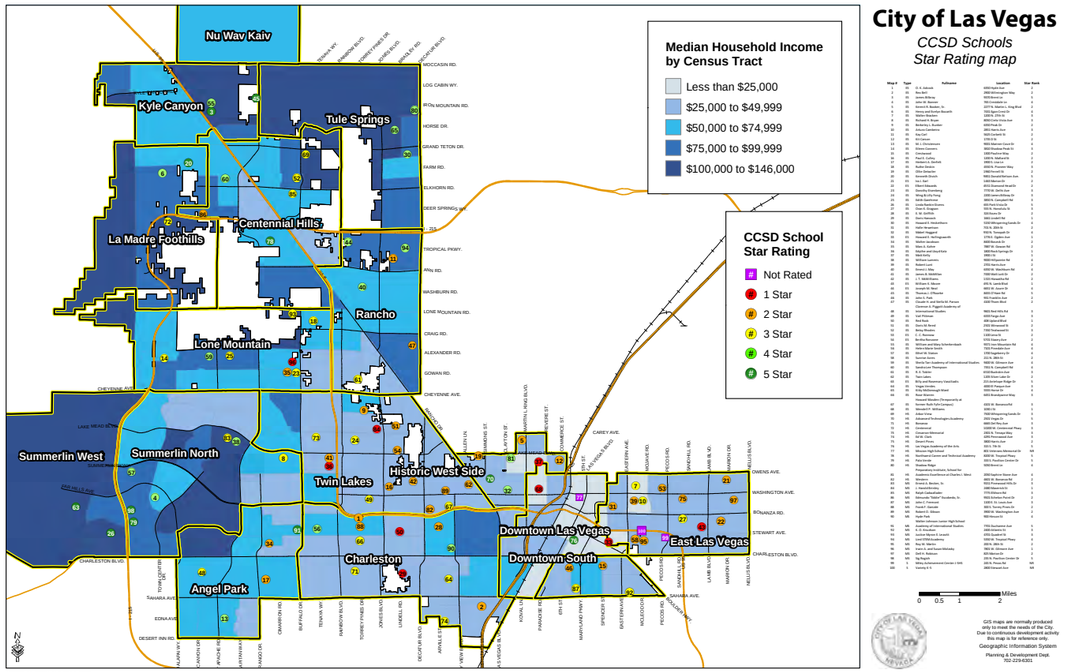
Source: City of Las Vegas / ACS 5 year estimate

GRADUATION RATES - FOUR-YEAR COHORT



Source: NDOE

SCHOOL ACHIEVEMENT



NDOE 1 and 2 star schools with Census blocks indicating school size and poverty rates. The majority of underperforming schools are mostly located around the areas surrounding Downtown Las Vegas.
Source: NDOE

of residents at least age 25 have a high school diploma, while just under a quarter have a Bachelor's degree or higher. Nationally, the rate of attaining a high school diploma has increased over the past decade to 88%, while the rate of attaining a Bachelor's degree or higher is nearly one-third. While many of the areas around Downtown Las Vegas have lower educational attainment rates compared to suburban areas, particularly concerning is an especially low rate in East Las Vegas, which has high populations of Spanish speakers, low-income households, and Latinos; less than 60% of residents have obtained a diploma and fewer than 5% have a college degree.

Clark County School District has been consistently ranked as one of the worst performing school districts nationally. The results of the 2017 National Assessment of Education Progress showed Nevada ranked no higher than 43rd (out of 52) in any of the study's categories on student metrics and performance in various subject areas. CCSD fared only slightly better when compared to 26 other large, urban school districts, but still below the national average. However, CCSD has had success in improving the four-year adjusted cohort high school graduation rate overall throughout the district. Over the past five school years, the overall graduation rates have increased and strong gains have been made for each respective subgroups, especially Latinos, which make up almost half of the CCSD student population. Specific areas of improvement must be made for CCSD's American Indian and black student populations as well as English Language Learners and special education students, which have all made overall gains and improvements, but still fall below an 80% graduation rate.

Despite those successes, there is a stark contrast between urban and suburban school performance, which is specifically linked with student achievement outcomes or graduation rates. Almost half of the CCSD schools within or serving the City are underperforming, receiving a performance rating of 1 or 2 stars on the NDOE's school achievement rating scale. Geographically, the core planning areas surrounding Downtown Las Vegas, including East Las Vegas, Downtown South, West Las Vegas, Charleston, and Twin Lakes have the highest concentration of schools rated as underperforming.

When a school becomes listed as underperforming, NDOE can designate it as a "Comprehensive Support and Improvement school," making it eligible for support and intervention, as well as for additional funding support. A school may also be designated as a "Targeted Support and Improvement" or "Additional Targeted Support and Improvement" school if it has consistently underperforming student subpopulations within certain academic performance indicators. Within the City, there are 25 schools meeting CSI criteria and 37 schools meeting TSI/ATSI criteria. Overall improvement in student performance over a multi-year period pursuant to a school improvement plan removes the designation.

Among the state and national programs have been deployed and implemented through the NDOE and CCSD to help boost academic achievement are:

- Title I of the Elementary and Secondary Education Act: this federally funded program provides additional finance assistance to schools with high percentages of children from low-income families. More than three quarters of the CCSD schools within the City have Title I status.
- Victory Schools: Additional funding dedicated by the Legislature allocated to underperforming schools in the twenty poorest zip codes, in which additional services are provided to families of students. Ten schools within or serving Las Vegas are Victory schools.
- Zoom Schools: 19 City schools receive additional funding provided from the Nevada Legislature to support English Language Learners (ELL).
- Additional funding and grants from other state or local sources.

All City of Las Vegas students deserve to learn and graduate from quality schools and have the opportunity to enter a career-path that advances their social mobility. The City of Las Vegas must continue monitoring student and school achievement data. After each academic year, as a partner to CCSD and individual schools, it should work with them to offer additional supplemental interventions through YDSI, particularly within planning areas with concerning educational attainment and school performance rates.

CCSD MUST CONTINUE TO HIRE AND RETAIN WELL TRAINED TEACHERS AND REDUCE THE OVERALL STUDENT-TEACHER RATIO

Class sizes do not only pose an issue from a school facilities standpoint; a wide body of academic research affirms that smaller class sizes results in more individualized learning, increased student engagement, and fewer disciplinary problems. Class size also correlates well with improved student outcomes and achievements, including greater subject proficiency and higher test scores. However, as CCSD has grown, so have student-teacher ratios. According to the US Department of Education, the national average public school student to teacher ratio is approximately 16:1. CCSD schools frequently exceed statutory minimum leading to school overcrowding and requiring class size reduction variances from NDOE. As a result, virtually all 1 and 2 star rated schools required such variances, meaning students attending lower performing schools are much more likely to experience overcrowding and larger class sizes.

Related to class size is the District's ability to hire and retain teachers. Nevada is not alone to the national shortage of teachers and has a turnover rate of nearly 20%. As teachers continue to retire at an increasing rate and despite hiring bonuses and incentives that have been employed, it has not been enough to fill position needs. At the beginning of





the 2019 school year, CCSD was still short a staggering 750 teaching positions and has had to rely on a substitute pool. Nevada's higher education teaching programs reported a 19% decrease from 2010 to 2015 of candidates completing programs. Even if CCSD was able to resolve its teacher shortage, sufficient funding has not been available to cover the cost of hiring additional teachers nor the related costs to supply additional classrooms.

While the City does not have direct control of this issue, it can contribute indirectly by:

- Improving and marketing the City's overall livability and quality of life to make the region attractive for potential teachers
- Collaborating with CCSD to advocate for higher teacher pay and, if necessary, dedicated teacher incentives
- Pursuing additional NSHE teacher programs and capacity to increase the overall graduation rate of teacher candidates

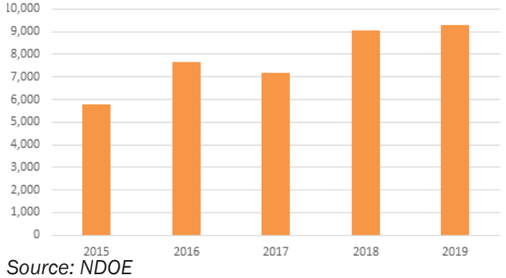
HIGH QUALITY SCHOOLS MUST BE HEALTHY, VIOLENCE-FREE, POSITIVE LEARNING ENVIRONMENTS WITH DIVERSE ELECTIVE, ATHLETIC, AND ARTISTIC OPPORTUNITIES

Nutrition is an important part of learning, as is the opportunity for before, during, and after school enrichment activities including elective classes, music and fine arts, athletics and other extra-curricular activities. With such a focus on educational achievement, it is important to remember that students need school environments with physical activities and constructive diversion offerings in addition to academics. Unfortunately, over time, opportunities have shrunk as the share of funding towards these programs have been reallocated toward academics, especially for low-income schools that cannot afford additional programs like the arts and athletics that can carry considerable expenses. From an equity standpoint, offerings must be just as accessible at schools in low-income urban areas as well as high-income suburban ones. Both YDSI and the Parks and Recreation departments could have an opportunity to expand and direct targeted recreational and extracurricular offerings to CCSD students, especially in areas where program funding threatens their existence or reduces participation rates.

Like many school districts in America, many students rely on school for meals. These programs are often necessities, especially within low-income areas where families of students may be struggling with food insecurity or hunger. CCSD has high rates of students qualifying for income-based reduced price or free school breakfast and lunch; approximately 70% of students are eligible for free or reduced price breakfast or lunch. Both eligibility and participation rates have been increasing over time. While these programs are provided with assistance from the USDA, the City can work to improve local efforts that improve healthy food access for families with children.

High quality schools must be safe environments conducive to learning. Parents of CCSD students do not tolerate bullying or school violence, nor does the District. In addition to endangering students' personal safety, incidents of violence on school campuses or on the way to or from school threaten students' ability to learn and succeed. Nationally, school violence rates average about 19 incidents per 1,000 students from middle to high school age kids. Unfortunately, CCSD school violence rates, including incidents between students, toward staff, and weapons, have been increasing, with a rate of 28.6 incidents per 1,000 students. To the extent that it can, the provision of YDSI programs and City resources could be used to mitigate school safety concerns.

INCIDENTS OF SCHOOL VIOLENCE



Source: NDOE

THE CITY RECOGNIZES THAT EDUCATION IS AN IMPORTANT QUALITY OF LIFE ISSUE AND IS BUILDING UPON THE SUCCESS FOSTERED BY THE CITY'S DEPARTMENT OF YOUTH DEVELOPMENT AND SOCIAL INNOVATION

When the City took the bold step of creating the Department of Youth Development and Social Innovation (YDSI), it was done because of the long-standing recognition of education as a quality of life issue. The programs offered by YDSI are largely focused on improving educational outcomes, especially for younger students and schools that are underperforming.

While graduation rates are an important educational metric, subject matter proficiency and mastery of concepts at an elementary, middle, and high school level are more of an indicator of student success. English, language arts, reading and math proficiency standards are a key indicator of whether students have acquired the knowledge necessary to succeed in more advanced classwork in higher-grade levels. According to the National Assessment of Educational Progress (NAEP), average scores for elementary school students across the country have remained below proficient, while Nevada schools score significantly lower on average than the country. CCSD schools, whether elementary, middle, or high schools, have historically had lower test scores and proficiency rates than state and national rates. However, between 2017 and 2019, there have been demonstrated improvements in elementary reading proficiency, and marginal improvements for math or for middle schools or high school. Compared to other large school districts, CCSD indicators are close to other overall average.

Unfortunately, there are also demonstrated variations in subject matter proficiency levels for different racial, ethnic, and income student subpopulations. If not addressed early, learning and proficiency issues could compound themselves, having an impact on graduation, college attendance, and securing a job with a good wage. Given these factors, addressing disparities among student subgroups early could lead to fewer equity issues in the future. YDSI programs that supplement traditional student instruction are designed to improve student performance.

For three decades, the City has offered the low-cost Safekey and Ignite programs. Offered at the City's elementary schools, Safekey provides before and after-bell opportunities for learning in a safe environment. The program provides scheduled literacy programs, , time to complete homework, and extra-curricular activities. Not only does Safekey extend

A DAY IN THE LIFE

MORE PLACES TO CALL HOME

Tiffany Jenkins, Youth Development Manager

Living, working and raising children in Las Vegas, Tiffany has a lot invested in seeing her city thrive. Both of her children attend magnet schools: She regards the public school options in her Westside neighborhood, as in most of the rest of the city, to be weak. She'd love to see more places nearby for her children to play, too. She appreciates the fact that her city job helps to empower young people. That said, she believes the city could do even more for them.

What if the city developed a resource-pooling program that provided more affordable housing options? That'd certainly help her friend Donna and her three children, who sometimes live with Tiffany temporarily when Donna can't afford a rental. "The city is building new homes, but only for those who can afford them," Tiffany says, "not for the people who already live here." She'd like to see housing developed outside of lower income areas. Also, could the casinos contribute to an education tax? she wonders. Tourism money seems to go right back into tourism.

On a smaller scale, Tiffany sees an opportunity to develop more marketing and resources aimed a providing drug program information and awareness to children and parents alike. Together with easier-to-find information about the housing programs that do exist, she believes, these modest efforts would represent a real step towards enriching her and her neighbors' quality of life.



the school day, it also assists parents who are required to work during the day to provide a supervised child care option. Similarly, Ignite is the middle school after-school program. It also provides recreational activities and study time, but also provides STEAM learning, social and civic activities, and teaches responsibility and leadership. Each of these programs has high participation rates during the academic year. Each of these programs have proven to be effective, well-developed, and fill an important need for residents with young children. In the future, the City must look at additional targeted enhancements that are unique to each program, for each school, in each area of the City. With additional research, the City may be able to tailor additional approaches and targeted offerings that are directly related to improving school performance, done before or after school hours. The City could look into the provision of an innovative career pathway program for high school kids, such as a school-to-career initiative, linked-learning approaches, and career academies. Such approaches that integrate academics with skills and exposure to occupations can help for career preparation. The City should also consider its community centers as spaces for holding educational classes and YDSI programming.

In addition to K-12 school programs, families deserve high-quality and affordable early childhood development and education options. The National Institute for Early Education Research showed only 1% of 3-year-olds and 5% of 4-year-olds enrolled in Nevada's Pre-Kindergarten Programs in 2018. Fortunately, the City is working to address child-care and pre-K with the development of the Strong Start initative, a campaign that advocates for and brings awareness to the importance of early childhood education, school readiness and literacy. The City has funded several Strong Start Academies in areas that have demonstrated need, including around Downtown Las Vegas and Twin Lakes. The City also initiated a mobile Pre-K academy intended to be offered within low-income and affordable neighborhoods; this option brings pre-k to parents and kids instead.

CHANGES TO THE NEVADA PLAN AND EDUCATIONAL FUNDING HAVE HELPED, BUT ADEQUATE FUNDING AT OR ABOVE NATIONAL PER-PUPIL FUNDING RATES IS NEEDED

Approximately half of Nevada's state budget is dedicated toward education, including roughly a third toward K-12 education with the remainder toward NSHE. Applying more funding toward education and schools alone simply will not address overarching issues with improving student performance. Educational funding does, however, need to be closely scrutinized and compared with important national metrics, especially the national per pupil funding rates. Recent improvements in student performance are encouraging, as well as the growth and development of NSHE institutions which should be seen as investments for the future.

Since the 1950's, the State Distributive School Account provided direct state financial funding to school districts and charter schools for K-12 public education in Nevada. Known as the "Nevada Plan," school funding provides school districts a guaranteed dollar amount of basic state support per student. The Nevada Plan is funded each biennium through state General Fund appropriations derived from sales taxes, mining land leases, interest from the Permanent School Fund, marijuana taxes and fees, and a portion of the gaming tax. School districts also receive revenue from the local school support sales tax, property taxes, governmental services taxes, franchise taxes, and various other local and federal revenues.

School districts and charter schools receive their apportionments from the account on the basis of student enrollment. Each school district is guaranteed a specific amount per student, which is developed through a formula that considers the demographic, economic, and wealth characteristics of the district. Allotments of licensed employees and related costs are determined based on the differences in costs between different types and sizes of county school districts.

The Nevada Plan has been criticized in the past for being woefully outdated, inefficient, and not meeting the standard for the state's educational needs. Efforts to reform education funding are a regular topic during each legislative session, including diversifying education funding streams, weighting criteria, consideration of student subpopulations, and increasing the overall per-pupil expenditure – recent changes to the Plan have yielded some improvements. Debates over policy and funding will not end anytime soon. Nevertheless, metrics for spending and student performance must be closely monitored. At the same time, efficient use of resources on the largest portion of Nevada's budget that every City resident contributes to must continue to be made. To the extent that it can contribute, the City must be supportive of the overall efforts to invest in schools, teachers, instruction, whether for CCSD or NSHE.

THE CITY MUST LEVERAGE ITS RELATIONSHIP WITH NSHE INSTITUTIONS FOR THE BENEFIT OF THE COMMUNITY AND REGION

In 2018, two of Nevada's higher education institutions achieved the distinction of R1 "Very High Research Activity" status by the Carnegie Classification system: University of Nevada, Reno, the state's land-grant flagship institution, and the University of Nevada, Las Vegas. This accomplishment has been heralded as it has demonstrated the standing of the institution at the same level as more 130 other prestigious doctoral universities nationwide. UNLV's hard-fought standing has proven its successful ascent at an elevated tier that recognizes:

- High expenditures in research and development, especially in science and engineering
- The number of doctoral degrees awarded,
- The number of research focused faculty

UNLV and CSN both play important, albeit differing, roles to the City and region as a whole by providing post-secondary education that trains the workforce and contributes to the overall state and local economy. As a major research institution, UNLV's focus has been educating students, developing new innovations, promoting and providing public health care, and stimulating economic development and diversification. With a student population exceeding 30,000 undergraduate, graduate, professional and postdoctoral students and faculty and staff exceeding 1,000, UNLV offers more than 350 Bachelor's, Master's, and Doctoral degrees in a wide range of academic and professional schools and colleges. It is also one of the most diverse universities in the nation, with nearly two-thirds of students identifying as a racial or ethnic minority.



UNLV and its colleges and schools have been a consistent partner with the City. Despite its main campus not being physically located in the City, UNLV's expansion of a satellite campus within the Las Vegas Medical District is noted throughout this plan as essential for teaching and training in health care, as well as the provision of health care services. As recommended in the Vision 2045 Downtown Masterplan, the City must proactively engage in the full development of the UNLV School of Medicine. The City must also work to develop and cultivate a branch campus and incubator within the core of Downtown itself. Because UNLV has proven that it can provide important research and services directly to the City, including studies, partnerships, studio classes, and policy recommendations, having close accessibility to City Hall would help Downtown growth, redevelopment, and new student life.

CSN, the largest institution in the NSHE system, has three main campuses, including the Charleston campus, and eight learning centers, three of which are located at CCSD schools within the City. CSN primarily provides affordable, 2-year workforce development and training programs and Associate's, with some Bachelor degree offerings. 750 CSN faculty members instruct more than 30,000 students at all of its campuses, of which about a quarter are full-time. Nearly two-thirds of the student body are Latinos. During an average academic year, CSN will confer approximately 4,000 degrees and certificates to its graduates. The City has been a partner with CSN and included them as a tenant at City Hall to teach classes and make higher education accessible. That partnership also extends to a cooperative development agreement with the City to eventually develop a long awaited northwestern campus in Centennial Hills. This development will fill a gap in one of the City's fastest growing areas. And because CSN continues to grow in students demand, the City must work with it to facilitate future growth, classroom space, and expansion at its Charleston campus, which has considerable space to do so, and is directly accessible along the future high capacity transit line proposed for Charleston Blvd.

However, a final missing component must be developed. As described throughout this chapter, a future aspirational need that should be closely studied is the development of City-oriented, mid-tier state college granting 2- and 4-year degrees with specific, targeted programs that will fill workforce development gaps. Such a proposal is not without precedent; in the early 2000's, the Nevada Legislature and NSHE studied and eventually established Nevada State College in Henderson. Nevada State has a dedicated campus that was developed in partnership with the City of Henderson; its mission, while similar to that of UNLV and CSN as provide of post-secondary education, is slightly different in focus. As a public state college, its primary degrees serve the local community and workforce, with colleges and programs dedicated toward nursing, teaching, and liberal arts with an emphasis in making the school affordable and accessible to the community's minority and low-income communities. Given the educational attainment and workforce metrics, the City arguably makes the case for the need, especially if the proposed institution is oriented toward the City's populations. UNLV and CSN will both continue to play a vital role to Las Vegas; a new NSHE institution, however, would be a potential game-changer for equitable higher education in the future.

Finally, continuing education opportunities must continue to play a role for the residents of Las Vegas. Many private colleges, institutes, and education programs offer classes, certificates, and learning opportunities for those interested in learning a new subject or skill. As part of its land grant mission of teaching, research, and service, the University of Nevada's Cooperative Extension service is an example of a community partnership in which the City has previously co-promoted its life-long learning opportunities, including 4-H youth development, nutrition, agriculture and horticulture, and STEM programs. Funded in part by the USDA and local property taxes, the City has also collaborated with the University of Nevada to provide space at city parks and facilities for community gardens and urban agriculture; the extension has also opened a knowledge center in the Historic Westside of Downtown Las Vegas. Where possible, the City must continue this and other partnerships and joint use of City facilities for extension and continuing education programs and activities that are of value to the community.

IMPLEMENTATION STRATEGIES

- Expand the role and scope of the Department of Youth Development and Social Innovation as a partner to educate City youth.
  - Continue to advocate for equitable school funding for CCSD's schools.
- Continue offering and expand supplemental before and after school programs to achieve better K-12 educational outcomes
  - Strengthen opportunities for parental and community involvement in schools
  - Increase funding and resources to support Strong Start early childhood development programs in the community
  - Increase programming and support for Safekey and other after-school activities, tutoring, and extended day programs, especially for students who need additional academic assistance outside of the school day
- Develop an educational support program with underperforming CCSD schools to provide additional resources for students and parents.
  - Support programs and initiatives that narrow the digital divide among households.
  - Increase the number of children served through YDSI programs.
  - Increase social service provisions at schools and community centers to help students and families succeed.
  - Reduce licensing and zoning barriers and provide incentives to increase quality and options available for childcare early childhood education providers.
  - Implement educational policies and programs that reduce income inequality and increase income mobility.
- Resolve to support continuing education, workforce development, and collegiate program to improve post high school educational outcomes.
  - Partner with CCSD and employers to ensure youth are introduced to opportunities, internships, and apprenticeships in target industries.
  - Empower community centers to offer quality education and workforce development programs and initiatives
- Partner with NSHE to expand UNLV and CSN campuses and siting and development of a new state college campus tailored to City of Las Vegas residents with a dedicated focus on granting targeted and specialized 2 and 4 year degrees to further add teacher capacity.
  - Work with NSHE to expand the CSN Charleston campus
  - Work with UNLV to develop a campus in Downtown Las Vegas.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Every child, regardless of gender, race, socio-economic background, or ability, must be afforded the right to a high quality education.	The City can be a partner with CCSD and NSHE in the provision of supplemental educational programs for students of all ages.	Provision of healthy meals and physical education promotes improved educational outcomes.	The hallmark of every community is having a high quality educational system with high performance student outcomes.	Boosting higher education opportunities will allow for increased contributions to the local workforce and economy.

I.B LINK SCHOOL FACILITIES TO LAND USE

☑ NRS 278.160.1(e)(6) and NRS 278.180

SUPPORT SCHOOL SITING AND LEARNING ENVIRONMENTS FOR ALL AGES THROUGH THOUGHTFUL LAND USE AND TRANSPORTATION PLANNING

Clark County School District (CCSD) operates and maintains all public schools within the region. Based on the designed capacities, including portable classrooms, there are approximately 100 CCSD schools within the City of Las Vegas:

- 10 high schools (plus 5 others that draw City residents)
- 17 middle schools (plus 5 others that draw City residents)
- 70 elementary schools (plus 8 others that draw City residents)
- 6 additional magnet schools, career and technical academies, and alternative schools

These schools include some of the oldest in the Las Vegas Valley, and over time, some have been rebuilt or replaced with a new school. Historically, the School District has conducted its own capacity and enrollment studies and projections and works with local jurisdictions on school facility siting.

According to CCSD's estimates, CCSD enrolled 105,000 students districtwide during the 1988-89 school year; thirty years later, district enrollment grew 200% to more than 324,000 students enrolled in all CCSD schools. With that growth, however, there is only enough designed program capacity for 314,000 students, meaning that some schools are overcrowded.

> Education must be better because kids have to attend the school you are zoned for. Charter schools are difficult to get into.
>
> – Mother at East Las Vegas Community Center

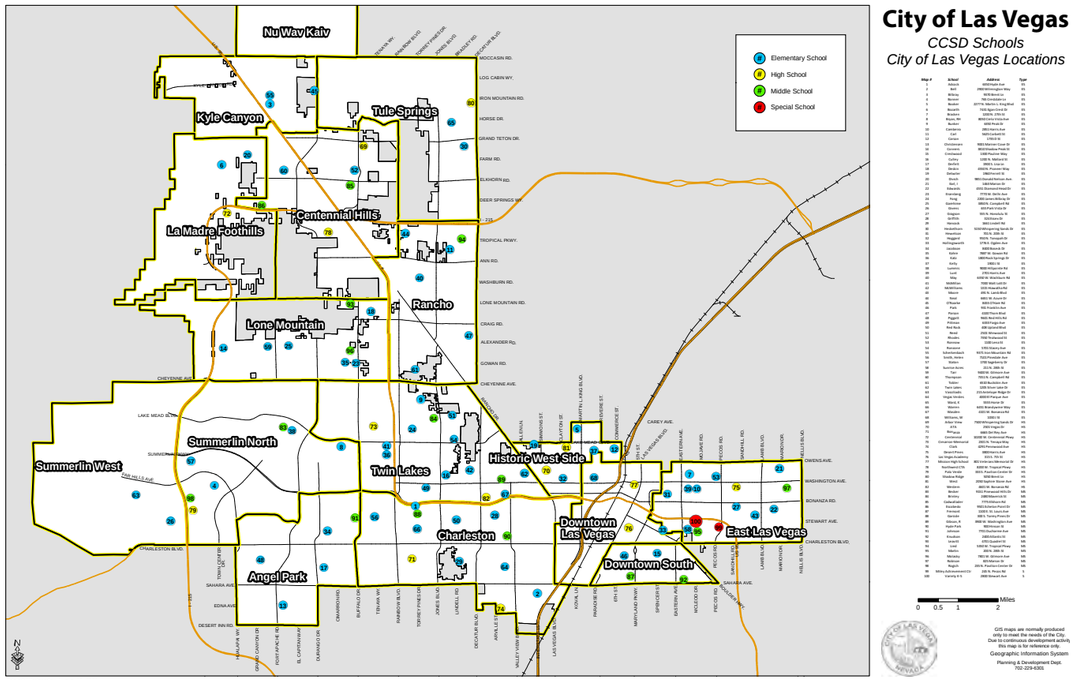




OUTCOMES

- No school within the City of Las Vegas will be greater than 125% of its designed capacity by 2025, and no school will be greater than 110% of its designed capacity by 2030.
- The City will work with CCSD to site, permit, and/or construct at least 18 new elementary schools, 3 new middle schools, and 3 new high schools as population increases and space by 2050.
- Percentage of schools within City of Las Vegas meeting the State of Nevada class-size requirements will increase by 50%.

CCSD SCHOOL FACILITIES



KEY ACTIONS

- Coordinate with CCSD on future school and facility needs to better integrate school siting, future student growth, and facility needs in city capital improvement programming
- Resolve to support future bond measures for capital improvement plans that alleviate overcrowding, add classrooms, and eliminate portables
- For future CCSD school facilities, additions, and expansions, partner with CCSD to acquire land or property for schools where overcrowding exists, expedite permitting and construction and ensure optimal locations of schools within master planned communities
- Continue working with CCSD on Safe Routes to School for existing and future schools
- As part of a larger legislative request, coordinate with CCSD to enable additional development funding for school construction
- Work with CCSD to ensure dedicated magnet schools and academies and special and alternative schools are built and equitably distributed so additional seats are available
- Better assess new charter and private school development, while accommodating their construction

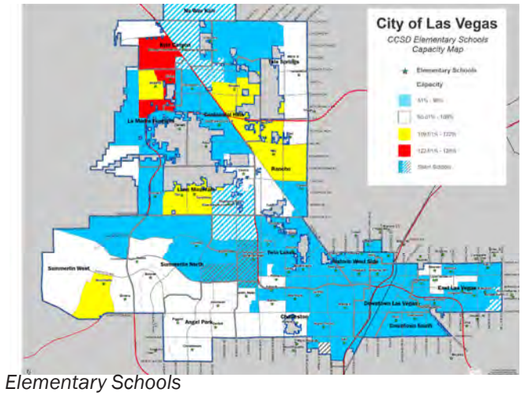
MANY CCSD SCHOOLS COMMONLY FACE OVERCROWDING ISSUES, ESPECIALLY IN GROWING AREAS

School overcrowding has been a common and unfortunate issue that Clark County School District (CCSD) confronts annually. The most recent National Education Association report ranked Nevada as the number 1 state for the most pupils-to-teacher ratio, with 25.86 students enrolled per teacher. In 2019, the Nevada Department of Education (NDE) showed CCSD reporting all three categories for justifying Class Size Reduction (CSR) variances: facility limitations, hiring difficulty, and funding limitations. Each quarter, schools that cannot meet the state's legally prescribed pupil-to-teacher ratio requirements (16:1 for Kindergarten, 17:1 grades 1 and 2, and 20:1 grade 3) must submit a variance request to the state Department of Education.

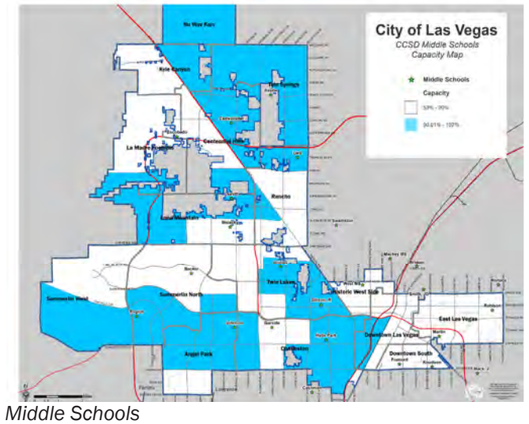
Current overcrowding trends are most apparent in elementary schools and high schools; within developed areas, students zoned for elementary schools in East Las Vegas, Charleston, and Downtown Las Vegas are the most impacted by severe overcrowding; similarly, middle schools that draw students in Charleston are also experiencing overcrowding. Three high schools within the central valley (Clark, Rancho, and Desert Pines, each of which have magnet programs) face major overcrowding. Given the sizes, capacities, and locations of existing schools, as well as the CCSD 2015 CIP, even the addition of more classroom space, facility replacements, alone may not be enough in the short-term. While some school rezoning may help to rebalance student populations, a long-term school construction solution will be needed for these areas.

In developing areas there is the dual challenge of building schools for new development and anticipation of future growth. While new middle schools are not yet needed in these areas, one new high school is slated to be constructed in Kyle Canyon to alleviate overcrowding conditions at Centennial, Shadow Ridge, and Arbor View high schools. Because the City anticipates 300,000 more people living within its boundaries and increased housing density in older neighborhoods to accommodate these additional residents, the City must accurately track the need for additional schools throughout the City and work with CCSD to build new schools or increase capacity at existing schools to improve service and further reduce overcrowding.

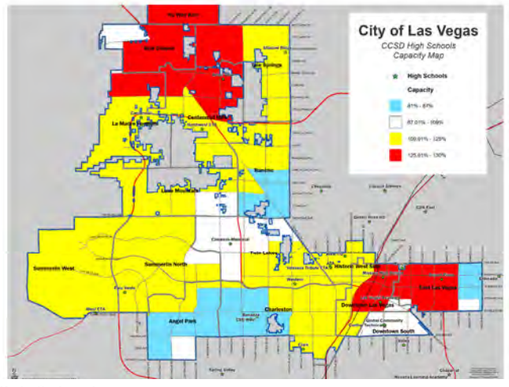
CCSD SCHOOL ENROLLMENT AND PERCENTAGE OF CAPACITY



Elementary Schools

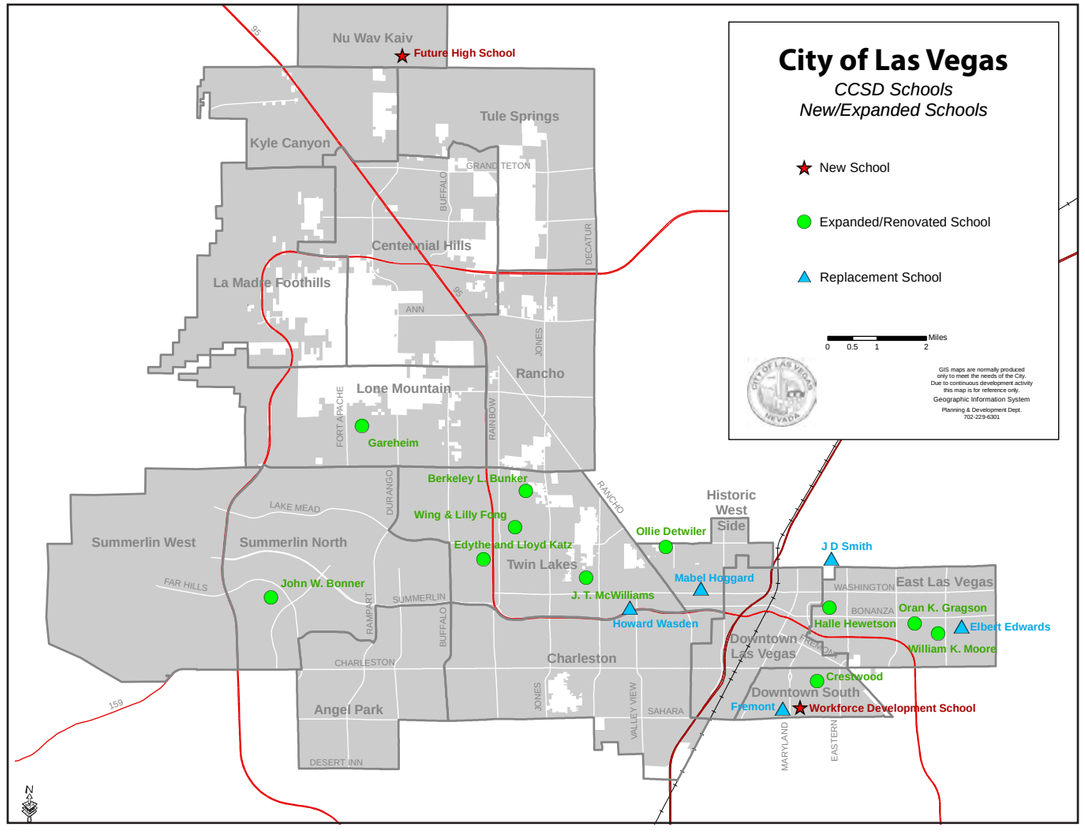


Middle Schools



High Schools

CCSD CAPITAL IMPROVEMENT PLAN (2015): NEW SCHOOLS, REPLACEMENTS, AND CLASSROOM ADDITIONS



Additional Schools listed in the updated 2015 CCSD Capital Improvement Plan:

- Replace Red Rock ES (2024)
- Replace Bracken ES (2025)
- Upgrade Las Vegas Academy (2025)
- Replace H. Smith ES (2026)
- Replace Kelly ES (2027)
- Replace Diskin ES (2030)
- Replace Brinley MS (2025)
- Replace Garside MS (2025)
- Replace Robison MS with new choice HS (2027) - NW
- Replace Cashman MS (2027)
- Construct new HS (2028)
- Replace Knudsen MS (2028)
- Replace Gibson MS (2028)
- Repalce Hyde Park MS (2030)
- Construct new choice HS (2030) - West
- Construct 10 new ES districtwide beginning in 2026

THE CITY IS PREPARED TO WORK WITH CCSD ON RECOMMENDED SCHOOL CONSTRUCTION AT LOCATIONS THAT ARE SAFE, ACCESSIBLE, AND EQUITABLE

Given current data and projected student population growth in the future, new schools and classrooms will be required. Because of the projected population growth, not only do new schools need to be constructed, existing zoning must be rebalanced in certain areas. Based on population needs and housing enrollment variables, CCSD will need to fund, construct, and maintain at minimum:

- 4 new high schools
- 5 new middle schools
- 20 new elementary schools

School location is largely dependent upon land availability. While this presents an issue for "infill schools" in developed urban areas, one tool that has allowed for the construction of schools is the Southern Nevada Public Lands Management Act (SNPLMA). Through SNPLMA, the City works with BLM and CCSD to jointly identify parcels for sale through provisions of the Recreation and Public Purposes Act. At that point, government entities can obtain those lands through lease or at a rate below market value. However, some areas require additional attention, especially within master planned communities, where CCSD may be in competition with developers for parcels for schools.

Infill school locations, which may be needed in the future to further alleviate overcrowding, present a greater challenge. Site constraints, challenges with existing infrastructure, and building requirements may impose additional costs. While the addition of new classrooms and wholesale school replacements have been done in a manner that has avoided additional constraints, the City must further assist CCSD in fast-tracking school construction in these areas, avoiding barriers, and assisting CCSD to get schools built where they will be needed most. Schools themselves can vary widely in terms of size, design, and features. Depending on the type of school, the programs it offers, and the student enrollment. School sizes have typically ranged from 40 acres for a standard high school to a compact 4-acre elementary school site in Downtown Las Vegas. The City must work with CCSD to explore the construction of multi-grade facilities, non-traditional school designs at locations smaller in acreage, require multi-story school buildings, or be located in existing buildings that must be reconfigured and renovated to comply with applicable standards, regulations, or statutes. An opportunity to attempt or pilot this concept may exist in Downtown Las Vegas.

The challenge in either case is to ensure any new school, whether urban or suburban, is equitable in terms of the facility's offerings. This issue has a considerable degree of complexity, including the ultimate composition of neighborhoods that feed into a school. The goals contained within the Land Use chapter seek to mitigate neighborhood homogeneity by providing increased housing options, diversity of uses, a range of transportation types and choices, and balanced neighborhood amenities. If, however, individual schools have certain demographic trends, now or in the future, the City and CCSD must work together to ensure neighborhood school zoning does not result in racial or socioeconomic segregation and develop strategies that may address the issues on a case-by-case basis.

Consideration must be made to as to how students safely access schools. The Federally funded Safe Routes to School program ensures safe transport for school children and has thus far helped address challenges and barriers for CCSD students to walk and bike to school. Safe Routes to School works between schools and community partners to identify improvements, programs, and policies through a coordinated action plan. Since Safe Routes to School's inception, additional laws have been put into place by the Nevada Legislature to address school zone safety, as well as by providing additional enforcement tools and penalties that can be imposed on violators by CCSD police and LVMPD. The City's Public Works Department works with CCSD to ensure school zones are clearly marked, constructs school flashers, crosswalks, sidewalks, bike lanes and other recommended safety improvements. The closer the proximity of a school to neighborhoods increases the likelihood of students of all ages to walk, bike, or take transit, thus reducing CCSD school bus transportation needs, additional VMT, congestion and unsafe conditions immediately around or near schools. As such, the City must continue to be a partner to implement school action plans and provide necessary infrastructure to ensure existing and future schools all have safe routes.

RECOMMENDED FUTURE SCHOOLS - LONG TERM NEED

Area	Elementary	Middle	High
Angel Park	1 new school	Rebalance zoning with share of new Charleston MS	
Centennial Hills	2 new schools with large capacities		
Charleston	2 new scools with large capacities; rebalanced zoning	1 new school	A new school serving Charleston, Downtown Las Vegas, West Las Vegas, and Downtown South
Downtown Las Vegas	New K-12 concept school located in Arts District	Share of Fremont MS replacement (2015 CIP)	1 new school serving multiple areas
Downtown South	1 new school (2015 CIP: Workforce Development Swing School at Gorman site)	Reutilization of Fremont MS (2015 CIP)	A new school serving Charleston, Downtown Las Vegas, West Las Vegas, and Downtown South
East Las Vegas	Rebalance zoning	Rebalance zoning	Rebalance zoning
Twin Lakes	Rebalance zoning	Rebalance zoning with share of new Charleston MS	
La Madre Foothills	2 new schools with large capacities	Share of new Kyle Canyon MS	Share of new Kyle Canyon, Lone Mountain HS
Lone Mountain	2 new schools with large capacities	Share of new Rancho MS	1 new school
Kyle Canyon	1 new school (built as part of Skye Canyon)	1 new school (built as part of Skye Canyon)	1 new school
Nu Wav Kaiv	2 new schools	Zone for exising middle school, share of new Kyle Canyon MS	Share of new Kyle Canyon school
Rancho	1 new school	1 new school	
Summerlin North	Rebalance zoning	Rebalance zoning with share of new Summerlin West MS	Rebalance zoning
Summerlin West	3 new schools	1 new school	1 new school
Tule Springs	1 new school; rebalance zoning at others	Share of new Rancho MS	
West Las Vegas	1 new school		A new school serving Charleston, Downtown Las Vegas, West Las Vegas, and Downtown South

	2019-20 ENROLLMENT	DESIGNED CAPACITY	NUMBER OF SCHOOLS	CCSD SCHOOLS WITHIN CLV
Elementary (K-5)	148,004	142,804	229	70
Middle (6-8)	74,920	80,249	59	17
High (9-12)	98,822	88,815	49	10
Special & Alternative	1,250	2,119	19	-
TOTAL	323,777	313,987		

Source: CCSD

ADDITIONAL CAPITAL FUNDING FOR NEW SCHOOLS, RENOVATIONS AND MODERNIZATIONS WILL BE REQUIRED

CCSD's Capital Improvement Program (CIP) uses voter approved bond funds backed by several funding sources, including property taxes, real estate taxes, and hotel room taxes, that allow the district to address growth. School bond funding can only be used toward CIP projects that construct, replace, or renovate schools. Clark County voters have previously approved bonds allowing for the construction of more than 100 new schools. In 2015 and 2017, the Nevada Legislature authorized a $4.1 billion extension of the CIP for an additional 10 years to keep pace with population growth. The 2015 CIP was approved by CCSD's Board of School Trustees to address school overcrowding, replacements, classroom additions, and modernization projects. While the CCSD 2015 CIP is intended to be adaptable, it is clear that new schools and classroom space will be needed in the future beyond what the current bond fund can provide. Additionally, school maintenance for the district's existing and growing facility footprint will be required into the future; older schools in particular may need routine repairs to critical systems for school operations outside of a major modernization or full-facility replacement and life cycle replacements. The City must be prepared to work with CCSD and legislators to ensure future bonds and school funding is made available.

WORK WITH CCSD TO ENSURE ACCESS TO MAGNET, SPECIAL, AND ALTERNATIVE SCHOOLS

CCSD has a number of special and alternative schools that are provided for gifted and talented education, alternative instruction, or to fulfill a requirement to educate students in atypical situations. A number of these programs and schools are located within the City of Las Vegas. Among them are:

- Magnet and career and technical academies housed in a dedicated "whole school." In addition to traditional instruction, these schools have their own specialized curricula that fulfils a special education capstone for gifted students or a career pathway. These schools provide the benefit of improving teaching and learning outcomes, school integration, school choice, and expanding career and post-secondary education opportunities.
- Magnet programs and select schools also exist as a "school within a school" at traditional schools, in which neighborhood zoned students share the school with students accepted districtwide.
- Special and alternative schools provide education to students with behavioral or disciplinary problems, special education to qualifying students, and adults that have dropped out of school.

To ensure continued access and to provide a degree of school choice, the City must work with CCSD to ensure dedicated schools are built and equitably distributed and additional seats are available for gifted students

MORE SCHOOL AND EDUCATIONAL CHOICES CAN HELP BALANCE THE NEED FOR NEW SCHOOLS

A wide range of other school choices must be made available to help balance CCSD's needs to fund and build new schools. Schools granted a charter from the State Public Charter School Authority can provide traditional school education or virtual or distance education using public funding, but must meet the regulations of the charter and other state and Federal regulations and requirements. Since charter schools were authorized by the Nevada Legislature in 1997, these schools have seen their enrollment slowly grow over time while still ensuring student performance meets state standards. Enrollment at Nevada's charter schools during the 2019-2020 school year has increased to more than 40,000 students. Most of the 22 charter campuses within the City of Las Vegas are physical campuses with smaller class sizes, student-teacher ratios, and enrollments, and combined grades. Private non-sectarian, college preparatory, and religious schools provide another alternative for parents. As with charter schools, acceptance though an application process is required, and tuition can vary widely. Throughout Clark County, there are 115 private schools serving more than 22,000 students. Demand for these schools is high and often leads to lottery admission and waiting lists; charter school access can also lead to longer commutes by students and parents to drop off their kids at a school. When proposed, the City must work with charter and private school applicants to determine transportation logistics, school siting and design issues.

IMPLEMENTATION STRATEGIES

- Coordinate with CCSD on future school and facility needs pursuant to NRS 278.180 and NRS 278.185:
  - Track density as it increases in neighborhoods and predict when increased population requires the additional identified schools within each respective planning area (TABLE)
  - Work with CCSD to zone City of Las Vegas students with schools geographically located within the City, where possible (TABLE)
  - Better integrate school siting, future student growth, and facility needs in city capital improvement programming
- Resolve to support future bond measures for capital improvement plans that:
  - Construct new schools to alleviate overcrowding
  - Add classrooms to existing schools to increase their capacity
  - Reduce or eliminate portable classrooms in favor of permanent classroom facilities
  - Support adjustments to school bond or construction bond to provide additional classrooms where most needed
- For future CCSD school facilities, additions, and expansions:
  - Partner with CCSD to acquire land or property for schools where overcrowding exists
  - Permit and approve smaller school building designs to provide access to neighborhoods where overcrowding exists
  - Recommend school site locations models for urban areas
  - Support CCSD's direction to build multiple-story schools where appropriate
  - Work with CCSD to ensure sustainable and resilient green school design strategies are employed
  - Ensure CCSD is positioned to negotiate optimal location of schools within master planned communities
- Continue working with CCSD on Safe Routes to School to ensure individual school plans can be implemented and provide necessary infrastructure to ensure existing and future schools all have Safe Routes
- As part of a larger legislative request with respect to capital improvement funding, coordinate with CCSD to propose a bill draft request at a future session of the Nevada Legislature:
  - To enable a development impact fee or voter approved question for school construction; or,
  - To amend NRS 278B to allow impact fees for new development to be imposed for the purposes of land acquisition or school construction; and,
  - In either case, later authorization of such an impact fee by City Council pursuant to the chapter.
- Work with CCSD to ensure dedicated magnet schools and academies and special and alternative schools are built and equitably distributed so additional seats are available
- Better assess new charter and private school development, while accommodating their construction
  - As development applications or agreements are received, coordinate with CCSD and determine number of students served within zone or area, whether CCSD, charter, or private schools

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
As new schools are constructed or as existing schools are rezoned, the City and CCSD must pledge to ensure fair access and school amenities, no matter the location	New schools and existing school campuses must embrace designs and upgrades with sustainable features	An appropriate geographic balance of schools in neighborhoods that reduces distances and encourages students to walk or bike to school safely	Schools, whether new or existing, are sited in a manner that's accessible and safe for students to access	Development of new types of schools can help ease overcrowding in neighborhoods with high growth and demand

II ECONOMY

GOALS

A. Support diverse employment and entrepreneurship for the existing and future workforce that capitalizes on skills, especially in emerging sectors

B. Prioritize key redevelopment opportunities, incentivize, and actively promote their reuse

C. Uphold sound fiscal policies and transparency that increases efficiency in order to provide higher quality of services



II.A ECONOMIC + WORKFORCE DEVELOPMENT

☑ NRS 278.160.2

SUPPORT DIVERSE EMPLOYMENT AND ENTREPRENEURSHIP FOR THE EXISTING AND FUTURE WORKFORCE THAT CAPITALIZES ON SKILLS, ESPECIALLY IN EMERGING SECTORS

Las Vegas has been one of the great economic success stories of the United States. Its rapid growth, particularly in the gaming and tourism industries, has fostered the development of thousands of local jobs and developed a thriving support economy. However, the great recession of 2008 was especially hard on Las Vegas. Fortunately, its recovery has been, in large part, a success, based on a number of economic indicators: unemployment has remained less than 5% in 2019, overall employment and job growth has been increasing, visitation is strong, and in terms of overall GDP in 2017, the region is at $112,288 (millions of current dollars). One of the top priorities that emerged from the economic downturn was the need to diversify the region's economy, loweing its reliance on gaming, tourism, services and construction.

The City's Department of Economic and Urban Development (EUD) serves as the lead department to support business development, attract new employment opportunities, and focus on overall economic development initiatives for the City. EUD helps to foster new development, infill, and redevelopment through business incentives, coordination between city departments, and specifically targeted projects. Finally, the City's Planning Department licenses and regulates businesses within its jurisdiction, pursuant to Title 6 of Las Vegas Municipal Code. Ultimately, one yield of economic and business development are business licensing fees and taxes, a comparatively small, yet important, source of revenue.

From a state and regional perspective, Nevada's advantage is that it is a business friendly state that has comparatively lower regulations, is geographically well-situated from a transportation and distribution perspective, and has a favorable tax environment, with no personal or corporate income taxes, franchise taxes, or unitary taxes. A number of state and regional organizations and boards play a key role in ensuring successful business and economic development:

- At the state level, the Governor's Office of Economic Development (GOED) leads economic diversification and business attraction efforts through incentive programs , and venture funds for targeted business growth and expansion purposes. The State's Department of Business and Industry and its divisions similarly oversee business development functions.
- The Las Vegas Global Economic Alliance (LVGEA) is the region's economic development authority dedicated to attracting businesses, growing the region's economy, and coordinating strategies. Most importantly, it has led efforts to develop a Comprehensive Economic Development Strategy for Southern Nevada.
- The state's Department of Employment, Training, and Tehabilitation (DETR) runs job placement and training programs (Nevada JobConnect) and offers services for people with disabilities. It works closely with Workforce Connections, the regional Local Workforce Development Board for Southern Nevada.

WHAT DO YOU THINK IS THE BIGGEST BARRIER TO OPENING A BUSINESS?

Foundational banking knowledge

- Latin Chamber of Commerce, 4/26/2019

The city can implement a support toolkit for new/ future business owners

-City Hall 3/20/2019

Financial aid/assistance for startups

- Latin Chamber of Commerce, 4/26/2019



OUTCOMES

- The number of businesses and the total employment related to each targeted industry sectors as identified in the Comprehensive Economic Development Strategy increases over time:
  - Number of trained workers in each demanded sector
  - Percentages of creative industries as a share of all businesses
- Local and regional econonmic and business indicators improve, maintain positive trends or increases over time:
  - At least 20 small businesses per 1,000 residents by 2035
  - More than half of the region's location quotients
  - Visitation rates to Las Vegas
  - Gross domestic product
  - Number of new business establishments
  - Number of jobs created by small businesses
  - Percentage of new startup businesses still active after one year
  - Percentage of businesses that are minority, female, or veteran owned increases over time
  - Percentage of new startup businesses still active after one year
  - Percentage of businesses that are minority, female, or veteran owned
  - Worker productivity index
- The City's unemployment rate maintains a negative trend over time and is less than or equal to the national unemployment rate
- Equity indicators improve over time:
  - By 2050, 80% of City residents are paid or exceed a living wage rate
  - The Gini Coefficient remains low and decreases over time (0 representing perfect equality and 1 representing perfect inequality)
  - Percentage of people employed or unemployed are proportional to the City's demographic groups
- Wages and personal econonmic indicators improve, maintain positive trends, or increase over time
  - The local average wage is greater than the national average wage
  - Area Median Income
  - Debt to income ratio



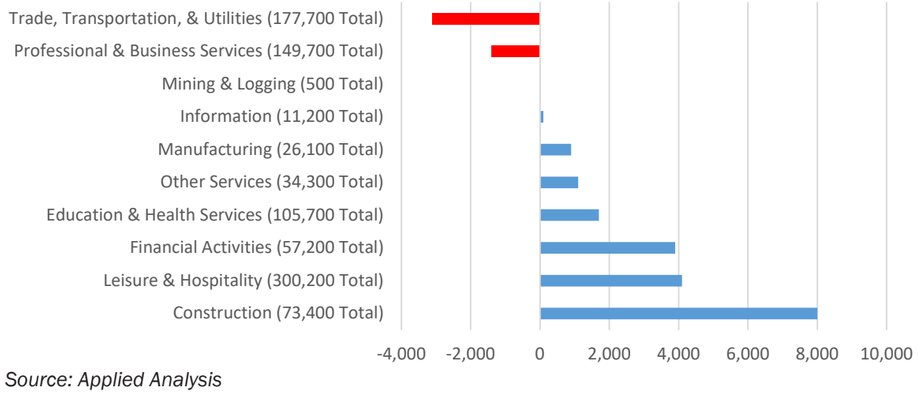
GAMING AND TOURISM MUST CONTINUE TO REMAIN AN IMPORTANT FOCUS

Since its founding, Las Vegas has built a global brand around gaming and tourism which continues to dominate the economy. In 2018 resorts and casinos in Nevada brought in nearly $12 billion in revenue – the third largest total in the state's history. The city is well positioned to take advantage of Downtown's Gaming Districts comparative advantage regionally. Due in part to redevelopment investments, downtown casinos have led growth in this sector and reports from Nevada Gaming Control Board showed that Downtown Las Vegas casinos showed considerably stronger growth than gaming establishments anywhere else in Nevada, with a 7% growth rate in 2018. Regionally, nearly 150,000 hotel rooms are available, many of which are located on the Las Vegas Strip, and are typically occupied 88% of the time on average.

Another key factor is the marketing and branding of Las Vegas. The Las Vegas Visitors and Convention Authority (LVCVA), of which the City is a member of, helps promote and attract visitors and conventions to the CIty. It is also the operator of the Las Vegas Convention Center and the expanding Convention Center District, located just south of Downtown Las Vegas. Through the efforts of LVCVA, 42.1 million people visited Las Vegas in 2018, including 6.5 million convention attendees. Most visitors arrive at McCarran International Airport, which saw 50 million enplanements. Between 15-20 million arrive by car, the majority of which are from California along I-15. Because Las Vegas is such a globally connected city, visitation is projected to continue to grow to more than 50 million within the next decade. Even as the visitor profile evolves over time, LVCVA and the City must continue to market Las Vegas as a major resort destination to not only recreate, but to do business.

Recent reports from UNLV and the gaming industry have focused on the future of gaming. Their research has found that millennials tend to play traditional casino games less and are preferring experience-based activities. What is promising is LVGEA's target industries all appear in the American Gaming Association's nation-wide study on top industries and small business categories supported by casinos. An example of one of these potential growth areas is the video game industry, which a 2017 report from the Entertainment Software Association showed that the video game industry grew in Nevada. The Center for Gaming Innovation at UNLV also sees the potential of the video game industry growing in Las Vegas. The City's EUD can facilitate regional goals by encouraging innovation related to its most successful industry and supporting local talent like UNLV's International Gaming Institute, launched in 2013, which since then has filed 40 patent applications –seven of which have resulted in commercialized products and games.

ANNUAL JOBS ADDED/LOST BY SECTOR (2019)



Source: Applied Analysis

THE CITY MUST CONTINUE TO DIVERSIFY THE ECONOMY IN EMERGING SECTORS TO REMAIN COMPETITIVE AND "RECESSION"-PROOF

According to LVGEA's Comprehensive Economic Development Strategy, Las Vegas has prepared to target a handful of appropriate industries for Southern Nevada through a process that must be addressed on a frequent basis. While economic growth and workforce development of the metro area must continue to be coordinated regionally, maintaining future growth, diversification and skill development must be the focus of the City's efforts over the near and long-term to insulate the region and aid in economic recovery when economic decline cycles change. To compete globally, especially with tourism destinations in the Pacific Rim, gaming and tourism must continue to be Las Vegas' greatest economic strength. The City must therefore work with LVGEA, GOED, and LVCVA to employ complimentary tourism-based economic strategies to retain and expand our market share in gaming, especially with new innovations in gaming software and technology.

McCarran International Airport, the fifth busiest airport in the US, offers direct non-stop flights nationwide to cities and countries across the world, making Las Vegas a well-connected global city. Both Interstate 15 and the Union Pacific Railroad corridor connect Las Vegas directly to Southern California, its largest market of 24 million residents, as well as to massive ports of Los Angeles and Long Beach. Similarly, the completion of Interstate 11 to full interstate standards will improve speed and connections to both Northern Nevada and Arizona. For these reasons, the City can continue to benefit as a logistics and distribution hub for the regional and global supply chain. To the extent

SEE ALSO CHAPTER 4:
Smart Systems



KEY ACTIONS

- Participate in the drafting of future iterations of the Comprehensive Economic Development Strategy (CEDs) and develop a strategic plan that specifically aligns and implements the strategy
- Partner with regional organizations to incentivize and attract new businesses with well-paying jobs to targeted sectors
- Foster a low cost and responsibly regulated business environment where small businesses can grow and thrive
- Collaborate, expand, and contribute to regional workforce development efforts with key education stakeholders and providers

"Diversify economy with technology and manufacturing"

- Kick-Off Event at City Hall

"Small business, entrepreneurship friendly. Need network!"

-City Hall 3/20/2019

the City can play a role regionally, it must continue to support transportation investments that ensure the flow of freight to other parts of the region, state, and country.

According to a study by the University of Nevada, healthcare jobs account for 10 percent of Nevada's workforce, and will only continue to grow as the population ages, retirees move to Las Vegas, and new residents relocate to Southern Nevada. The City stands to benefit immensely from the full development of the UNLV School of Medicine and substantial investment in the Medical District in Downtown Las Vegas. While Southern Nevada has a wide range of specialty medical services, it continues to lack general practitioner doctors and registered nurses. The City must incentivize and invest in medical workforce training entities, both public and private, that graduate new professionals and aid in the realization of a comprehensive regional health care system. Finally, due to its proximity, future opportunities also exist to make medical tourism a focus, especially for Downtown Las Vegas.

Since the 1940's, Nevada has played an important role in national defense, both for testing and training for the US Air Force and US Department of Energy. While Cold War-era nuclear testing activities have ceased, the Nevada National Security Site is still a test site for defense and energy technologies. Southern Nevada employs more than 12,500 active-duty and civilian personnel at Nellis and Creech Air Force Bases and an opportunity to commercialize technology like drones, unmanned aerial vehicles, autonomous systems, and robotics has the greatest potential. It will be equally important for Nevada System of Higher Education institutions and workforce development programs to train workers for this future commercial technology. The City can also benefit through the full development of the "Job Creation Zone" in the northwestern Nu Wav Kaiv area along the I-11, where opportunities to leverage light manufacturing and aerospace, UAV, autonomous technologies, and supportive military or defense activities can exist, in partnership with the Las Vegas Paiute Tribe.

Target Industries and Sectors	Top Associated Occupations
Gaming & Tourism	Accountants, auditors, chefs, front line supervisors
Health Care	Registered nurses, general practitioners (MD/DO), pharmacists
Logistics & Light Manufacturing	Civil and electrical engineers and technicians
Clean Energy	Solar installers
Defense & Unmanned Aerial Systems	Software developers, IT security, computer systems analysts, aerospace engineers
Global Finance	Financial managers, accountants, auditors

In 2016, the Las Vegas City Council formed an Innovation District within Downtown Las Vegas and created a comprehensive "Smart Vegas" innovation initiative built around public safety, economic growth, mobility, education, social benefit, and health care to become a "Smart City." Smart Vegas establishes a framework for developing new innovations and emerging technologies to position the City to attract and grow many of the target industries identified by LVGEA.

Among the additional recommendations within Las Vegas, Smart Vegas includes a number of notable recommendations that should be further developed throughout the City:

- Serve as a test-bed and incubator for smart technology, innovations, and the "Internet of Things."
- Continued development of a fiber network and connected corridors to allow for the deployment and implementation of autonomous and connected vehicle

Southern Nevada has great potential to leverage further development of clean energy. Given Nevada's expanded renewable portfolio standard and other outcomes listed in this plan, the expertise at UNLV and DRI, Las Vegas has an accessible market for renewable energy development, not only for NV Energy, but to transmit and export to other grids within the region. Given the City's long-standing commitment to sustainability and resilience, it will continue to be an ideal place to develop and implement this technology in the future.

Finally, it should be noted that other industries and sectors that are not listed as targeted, as well as indirect and supportive occupations that are still important to overall community health and quality of life, may have high need and must be addressed. Notably, public school teachers, construction labor, and medical staffing are among the top skilled occupations that are consistently in high demand. While the rates of demand, pay, and availability based on local and national conditions may vary, these must still be addressed.

Another factor underscoring the need to diversify the economy is the challenge of automation. Predictions on how many jobs will be affected by automation vary, but one report from Ball State University estimates "38% to 65% of jobs in Southern Nevada are at risk of being automated – either part or in full – during the next 10 to 15 years." This transition is already underway in a number of resort properties on the Las Vegas Strip. Because Las Vegas' service sector economy shows considerable risk and exposure to job loss, the City must:

- Develop an economic development plan that is consistent and supportive of regional efforts and specifically addresses target industries, sectors, and occupations.
- Invest significant resources to increase employment opportunities in target industries and work with its regional partners to replace those jobs and better prepare the workforce and business community to thrive during economic shifts and downturns.
- Make significant efforts to increase economic activity related in key sectors, including health care and life sciences; business and IT ecosystems; clean technology; defense and unmanned aerial systems; and global finance, banking, and business services.

By further balancing economic sectors, the City and region as a whole will likely suffer fewer economic losses, will be more resilient during periods of economic volatility, and will create and retain good paying jobs in sectors that are needed.



WORKFORCE DEVELOPMENT IS CRUCIAL FOR FUTURE SUCCESS IN EMERGING SECTORS AND MUST CONTINUE TO DIVERSIFY

According to research from Georgetown University's Center on Education and the Workforce, nationwide demand for good jobs requiring more than a high school diploma, but less than a bachelor's degree, is rapidly accelerating to meet changing industry dynamics and the skilled workforce that must accompany this evolution. For example, historically, two out of three entry-level jobs required a high school diploma or less. The City's workforce has been ranked as one of the most diverse in the U.S., especially in the following categories: racial and ethnic diversity, linguistic diversity, and birthplace diversity, making Las Vegas a truly international city. Las Vegas has a rapidly growing workforce that is well-versed in customer service and also one of the nation's most diverse. Each major Chamber of Commerce, including the Las Vegas Metro Chamber of Commerce, the Urban Chamber, the Latino Chamber, and the Asian Chamber, reported workforce development as a top priority and key to diversifying the region's workforce.

Unfortunately, according to DETR, the occupations in each identified sector face annual workforce gaps in the foreseeable future. If not addressed, job capacity issues will pose a challenge to attract and sustain economic growth in the identified target industries. Furthermore, to remain competitive with other cities, trained workers that learn skills act as a force in driving employee wage growth. According

> "Increase access to education, lower eligibility requirements for licensing by increasing financial options, incorporate debt consolidation/rehabilitation programs for entrepreneurs."
>
> – Kick-Off Event at City Hall

A DAY IN THE LIFE

NURTURING NEW COMMUNITY LEADERS

Jessica Boudreau, Founder and Executive Director of a Leadership Non-Profit for Local Youth

A Las Vegas resident for more than a decade, Jessica feels a deep attachment to her community. She also has the pleasure of seeing how her work is making a difference in young people's lives. That said, she knows far too many Las Vegas residents who are struggling simply to get by. And she rarely meets individuals who have risen to positions of leadership within their communities.

Breaking the cycle of generational poverty is a big obstacle to overcome, she observes. A predominance of tourism-generated, low-growth potential jobs contributes to this long-term challenge. How does someone learn to work their way up the leadership ladder when so few role models exist?

Jessica envisions a Las Vegas in which residents' basic, everyday needs are met more efficiently. In turn, this will allow them to focus on longer-term goals. More micro-grants and pooling of government finances, along with educational opportunities for business and leadership, could do a lot to help residents move forward.

"When you don't have people in leadership who come from the community, the residents tend to be poorly represented, " Jessica points out. "People are pretty committed to living here once they decide they like it. They're self-motivated to make it a better place. They often just need a little guidance."

to LVGEA's Workforce Blueprint, which identifies projected growth across target industries to workforce demands, actual job growth outpaced national averages and exceeded forecasts. As such, the identified high-demand occupations are currently the educational and training areas of focus at NSHE institutions, CCSD, Workforce Connections, and other workforce development programs. The programs these entities provide are essential to feeding workforce supply into the local economy and ensuring gaps are filled:

- CCSD provides workforce pathway opportunities for students that provide job training to help them become career-ready and require minimal training before moving into the workforce.
- The College of Southern Nevada, the largest institution of NSHE, has a major branch campus in the Charleston planning area that offers two and four year degrees, workforce training certificate programs, and apprenticeships for occupations in identified and high-demand sectors. The City must also work with NSHE on the siting and development of a new state college campus tailored to City of Las Vegas residents. This college would have a dedicated focus on granting targeted and specialized 2 and 4 year degrees to further add to the regional workforce supply and enhance the region's workforce development capacity.
- As Southern Nevada's major research university, UNLV plays a specialized role in workforce development by serving as the primary degree-granting institution for those occupations and jobs that require the highest levels of skill development and training, backed by research and support from the university's tenured facility. UNLV's role is also one of business incubator, and can help direct both graduates of Bachelor's degrees and advanced degrees to businesses that have located in the region to attract graduates. Most notably, UNLV's William F. Harrah College of Hotel Administration offers degrees for hospitality, gaming, and entertainment, while the Howard Hughes College of Engineering offers a range of majors and minors that serve a variety of the targeted sectors. Several schools, including the Schools of Nursing, Medicine, and Dental Medicine, the Lee Business School, and the Boyd School of Law provide fulfill the need of providing a pathway to fully licensed occupations in critical areas.
- Aside from the Schools of Medicine and Dental Medicine, UNLV lacks a major physical presence within the City of Las Vegas itself. It is therefore important for the City establish a satellite branch campus of UNLV to focus on business development, innovation, and technology within Downtown Las Vegas. The City must also partner with statewide research programs and unique course offerings from the University of Nevada and University of Nevada Cooperative Extension to further their land-grant mission of teaching, research, and outreach.
- A wide number of private workforce training and education providers exist throughout the region, each catering to specific fields and occupational areas. As the region's Local Workforce Development Board, Workforce Connections and its partners have focused on growing opportunities and partnerships between these training providers (as well as with CCSD and NSHE institutions) and employers for students. Where it can aid Workforce Connections to match students to jobs, either through local planning efforts, providing training space, or through other economic development efforts, the City must be prepared to take steps now to sustain positive and promising developments in cultivating a skilled workforce that aligns with the needs of industry—particularly for the occupations in greatest demand and those with known labor supply challenges. Because the City is represented on its Local Elected Official consortium board, the City's elected representative can help guide Workforce Connections policy efforts.

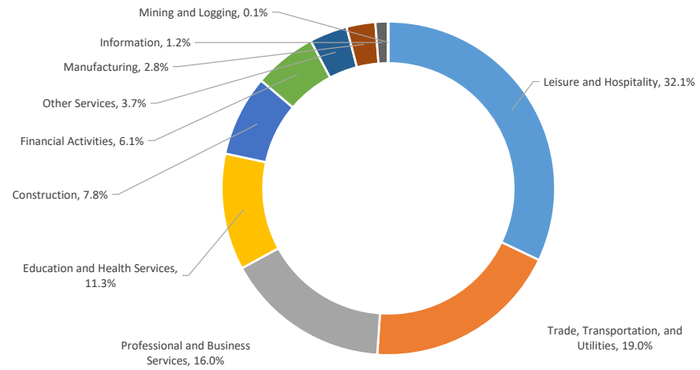
SEE ALSO:

LVGEA Workforce Blueprint 2.0

LVGEA Comprehensive Economic Development Strategy

Workforce Connections Local Plan

EMPLOYMENT BY SECTOR (2019)



Source: Applied Analysis

Finally, to provide additional opportunities to facilitate the advancement of high-school, continuing education, and workforce development efforts, the City must determine additional strategies to bring opportunities closer to residents, especially for targeted racial and socio-economic groups, sensitive populations, such as seniors, ex-convicts, or homeless individuals. It can do so by designating space within each district as a job training and workforce development zone and partner with CCSD, Workforce Development organizations, and NSHE to offer classes in those spaces.

AS EMPLOYMENT RATES GROW, SO WILL WAGE GROWTH

Total employment has steadily grown within the City and region since the Great Recession; nearly 61,000 non-farm payroll jobs were added in the City of Las Vegas since 2010, increasing the total to 305,000 jobs today at approximately 20,000 businesses. The top non-public agency employers employing more than 1,000 people within the City of Las Vegas are predominantly gaming-tourism and health care companies.

The income distribution and median income of Las Vegas has declined sharply, from about $73,000 to $60,000 for a household of three. Median income was actually slightly greater in Las Vegas than in the U.S. as a whole in 1999, but fell below the national median during the Great Recession. Incomes have subsequently shifted back in a more positive



direction, but have not yet returned to pre-recession levels. In 2019, the Brookings Institution, in collaboration with UNLV, highlighted the need for colleges and cities to contribute towards building the middle class, especially in cities like Las Vegas who was "among the ten metros hit hardest by the Great Recession," and where middle income earners were "hit hardest of all." Their findings highlight that in Las Vegas "middle wages (especially the second and third quintiles)... experienced a persistent gap in wage growth through 2016, even as those at the top and bottom kept pace with" areas less-affected by the Recession. In order to build a strong middle class, economic development initiatives must create employment opportunities for various abilities and skill levels ensuring that wages grow for all income levels, including for individuals with barriers to entering workforce. Additionally, successful workforce development initiatives must respond quickly and effectively to the shifting needs of private industry and should use the strategic vision and goals found in the Workforce and Opportunity Act's Nevada State Plan for guidance.

SMALL BUSINESS DEVELOPMENT AND ENTREPRENEURSHIP WILL BE KEY FOR SUSTAINABLE ECONOMIC GROWTH

Small businesses help contribute to positive increases in the economic health and sustainability of a city. An increase in small business starts, the creation and retention of jobs, and the increased circulation of local capital are all hallmarks of desirable outcomes the City should strive for. Growing the City's local talent and businesses should include support and resources for entrepreneurs and small businesses. Research consistently shows the critical role that small businesses and entrepreneurs play in local economies by creating jobs and their resiliency during economic downturns. In Nevada, small businesses employed 42% of the private workforce, and firms with fewer than 100 employees had the largest share of small business employment. In addition, the number of proprietors increased in Nevada by 2.5% year-over-year. A 2018 analysis by Business.org listed Las Vegas as one of the "top 40 start-up cities" factoring criteria like young adult residents, educational attainment of young adults, employment rates, affordability, and start-up surges.

The City must invest and market its local talent and small business community to encourage long-term sustainable economic growth. It must also partner with each Chamber of Commerce and their respective initiatives to foster small-business growth, diversity, and equity goals. The City can support small business development and entrepreneurs directly by offering targeted incentive and financing programs, offering places for new start-ups or live-work areas, such as the Las Vegas Arts District within Downtown Las Vegas, and work on reasonable business-friendly licensing efforts that help ease up-front start-up costs.



SEE ALSO CHAPTER 2:
Land Use Tools: Redevelopment Toolkit
Catalytic Redevelopment Sites

INFILL AND ECONOMIC DEVELOPMENT OPPORTUNITIES



The Las Vegas Enterprise Park is a 75 acre mixed-use business park developed by the City in the heart of West Las Vegas near Lake Mead and Martin Luther King boulevards. The park is unique in that it features inner city infill and mixed-use development under the city's zoning standards allowing for modern administrative facilities, research institutions and specialized manufacturing operations. The park has been able to generate new economic development for the area with businesses that include Cox Communications, the Urban Chamber of Commerce, Fresenius Dialysis Medical Center, the FBI, and the US Postal Service. Approximately 10 acres of land remains for development and will soon be accompanied by the Historic Westside Legacy Park, which will exhibit individuals that made significant contributions to the area.



The Cashman Complex represents another large City-owned infill and economic development opportunity. The 50 acres on the northern end of Downtown Las Vegas includes Cashman Center, a multi-use facility, home to the Las Vegas Lights Football Club of the United Soccer League and currently being used for COVID-19 testing. While the Cashman District is envisioned by the Vision 2045: Downtown Las Vegas Masterplan to be a new mixed-use sports and economic development project, it currently features the 10,000 seat stadium, nearly 100,000 square feet of exhibition space and meeting rooms, and a 1,900 seat theater. Because the City's innovation efforts are ramping up throughout this corridor as part of the Smart Vegas and Innovation District efforts, potential industries could be targeted to locate within this area.

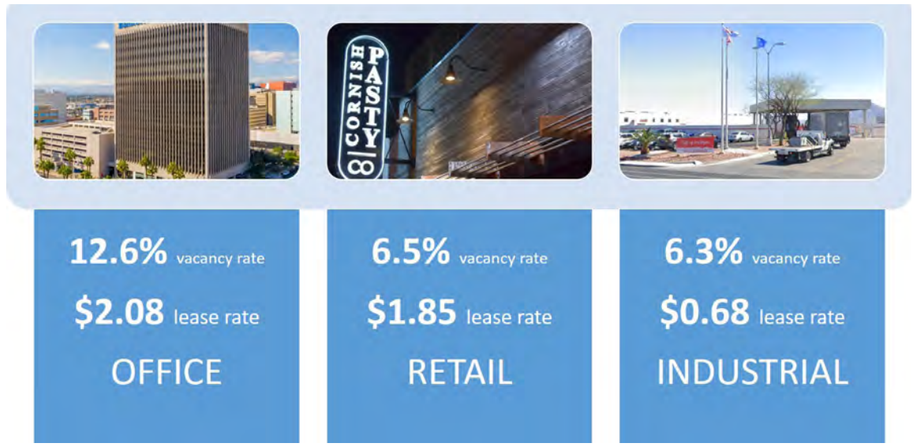
2018-19 LOCAL INDICATORS

- Gini Index: 0.461
- Average Annual Wage: $34,101
- Median Household Income: $54,694
- Las Vegas-Henderson-Paradise GDP (2018): $122,424

(Millions of current dollars, MSA)

- Small businesses per 1,000 residents:
- Visitor volume: 45,699,300
- Las Vegas Strip gross gaming revenue: $6.59 billion
- Total business establishments: 20,232

Source: Applied Analysis, UNLV Center for Business and Economic Research, City of Las Vegas, LVCVA



EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Ensure that the labor force is diversified and that access to good paying job opportunities are available to all.	Diversification in the local economy will allow for Las Vegas to respond faster during economic downturns and reduce their overall severity by being less dependent on a handful of economic sectors.	Fully investing and supporting economic diversification and workforce development efforts on health care, medical education, and supportive occupations is necessary to attract new residents and for the existing population.	Developing both targeted and non-targeted economic development sectors and occupations provide wages, means to do business, and help improve overall quality of life.	Development and implementation of "Smart Vegas" innovation efforts and technology-based sectors will allow Las Vegas to lead the way in the 21st Century.

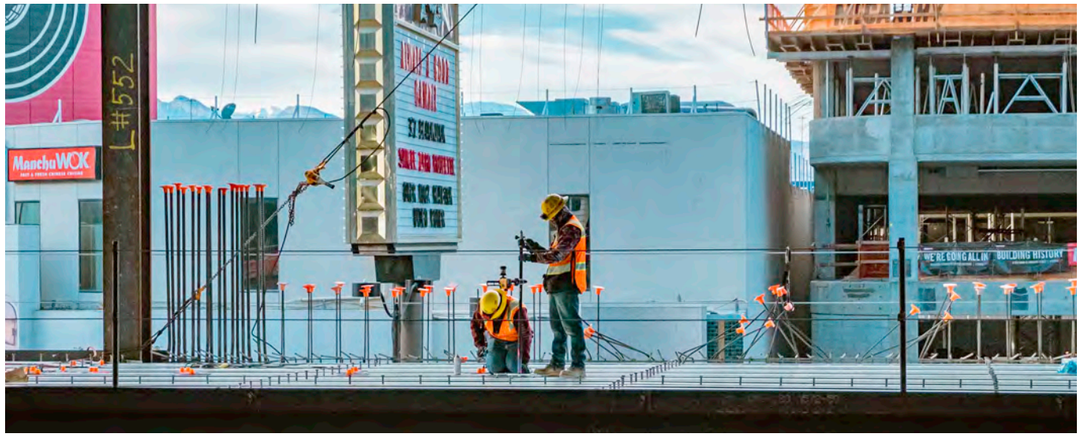
IMPLEMENTATION STRATEGIES

- Participate in the drafting of future iterations of the Comprehensive Economic Development Strategy (CEDs) and develop a strategic plan that specifically aligns and implements the strategy
  - Actively collaborate with GOED, LVGEA, and all local Chambers of Commerce on coordinated economic development initiatives
  - Continuously assess target sectors and top occupations to determine job and economic development trends, workforce and training needs
- Partner with regional organizations to incentivize and attract new businesses with well-paying jobs to targeted sectors
  - Leverage state incentives and tax credits provided through GOED, state agencies, or authorized by Legislative action.
  - Partner with the US Air Force and US Department of Defense to increase economic development around military-related business activity derived from Nellis and Creech Air Force Bases.
  - Develop the Nu Wav Kaiv Job Creation Zone with the Las Vegas Paiute Tribe
  - Actively market Las Vegas and its economic development advantages and geographic and locational attributes to businesses and customers locally, regionally, and globally.
  - Create effective local business marketing campaigns that celebrate local talent, companies, inventions, or products
  - Support and partner with trade and professional associations relevant to target industries.
- Foster a low cost and responsibly regulated business environment where small businesses can grow and thrive
  - Continuously assess business licensing regulations, permitting, and fees, as provided for in Title 6 of Las Vegas Municipal Code.
  - Partner with local chamber groups to create strategies that help grow local small business community and support entrepreneurship.
  - Provide for and support incubator spaces for small businesses.
  - Develop a business support toolkit for new or future City of Las Vegas small business owners and entrepreneurs that guides them through the business formation and regulation process
  - Permit and encourage cottage industry and home-occupied businesses.
  - Facilitate the formation of small business and "locally owned" associations
  - Aid in the organization and formation of industry specific business associations
  - Provide micro-loans, technical assistance, and incentives for small businesses, especially those owned by minorities or businesses serving distressed neighborhoods.
- Collaborate, expand, and contribute to regional workforce development efforts with key education stakeholders and providers
  - Work with the Nevada Legislature and NSHE on the siting and development of a new state college campus tailored to City of Las Vegas residents.
  - As contemplated by the Vision 2045 Downtown Las Vegas Masterplan:
    - » Establish a satellite branch campus of UNLV
    - » Fully develop the UNLV School of Medicine in Downtown's Medical District
  - Develop opportunities for targeted programming provided by the University of Nevada and the University of Nevada Cooperative Extension
  - Support expansion of workforce development programs at CCSD schools and NSHE institutions
  - Permit expansion and further development of CSN's Charleston campus
  - Work with NSHE on the development and build-out of CSN's planned Centennial Hills campus.
  - Evaluate and designate space within each area, at each community center or other appropriate City facility as a job training and workforce development zone and partner with CCSD, Workforce Development organizations, and NSHE to offer classes in those spaces.
  - Develop an employment rehabilitation and workforce development program for targeted City populations, including the homeless, ex-convicts, and seniors.

II.B REDEVELOPMENT

NRS 279

PRIORITIZE KEY REDEVELOPMENT OPPORTUNITIES, INCENTIVIZE, AND ACTIVELY PROMOTE THEIR REUSE



Successful redevelopment efforts require dedicated ingredients for success, including a market, proper locations, good urban design, financing, entrepreneurship, and time. The City's Redevelopment Agency (RDA) was created in 1986, and expanded to three areas in 2026 covering nearly 6,300 acres within the central areas of Las Vegas. As a separate entity governed by the City Council, its purpose is to reduce blight, generate new business and economic development opportunities, and revitalize downtown Las Vegas and commercial corridors immediately surrounding Downtown. Under the authority of NRS 279 and the City's Charter, the RDA derives its revenue from property tax increment revenue and is enabled with additional tools and incentives that allow it to invest in business development within its designated geographies. Through the aid of the City's RDA, the City can align investment, regulations, and incentives to ensure successful project development.

REDEVELOPMENT AND INFILL MUST BE COORDINATED WITH LAND USE GOALS

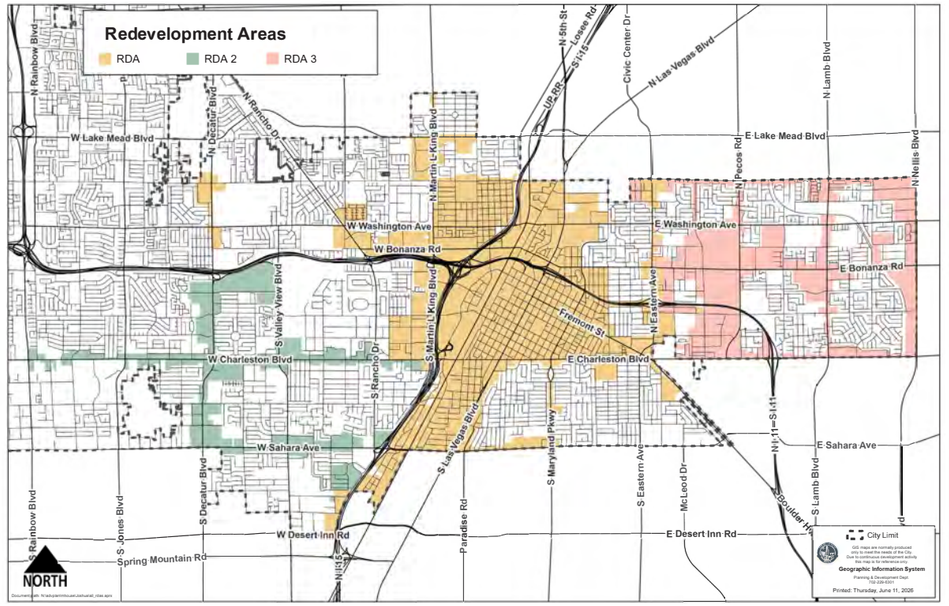
The City currently has a total inventory: 93.3 million GSF; approximately 40% of this total is office, 3% is industrial, and 57% is retail.

The impact of e-commerce over the past decade has been phenomenal, transformative, and disruptive; unfortunately, this has led to consequences that have left a dramatic imprint on the physical landscape of urban areas. As large national retailers, corporate chains, and businesses have felt pressure from consumers and have made decisions to close "brick and mortar" locations as they adapt to rapidly changing economic conditions, commercial properties, shopping centers, and retailers have left a wide range of vacant spaces available. The City's average office, retail, and industrial vacancy rate in 2026 is about 9%; these rate has been stable since the Great Recession, and different submarkets within Las Vegas fluctuate. Similarly, average asking rents have been steadily increasing in each sector. If these spaces are not otherwise reused, repurposed, or redeveloped, blighting conditions will emerge.

Less than 3% of the City's land is zoned for industrial uses, primarily around Downtown Las Vegas, in which it is redeveloping as a Regional Center with form-based zoning; similarly, only a handful of office/business parks are within the City, including Spectrum, Las Vegas Technology Center, and Las Vegas Enterprise Park. As the 2050 land use strategy and general plan amendments are deployed citywide, it is anticipated that 72 million square feet of new non-residential space may be produced across the recommended range of place types. In coordination with the Community Development Department, EUD must:

- Ensure redevelopment and infill development are directed to appropriate locations within those place types once evaluated for compatibility and suitability to job creation.
- Assist new startups, small businesses, or other general commercial and retail find space in locations with new transit-oriented development, mixed-use corridors, and neighborhood centers, especially any jobs or companies with targeted occupations.
- When and where needed, and as any blighting conditions exist, consider creation of new redevelopment areas or expansion of the existing RDA-1 and RDA-2 and further incentivize new business development within those areas.

SEE ALSO CHAPTER 2:
Land Use Tools: Redevelopment Toolkit
Catalytic Redevelopment Sites



- Further leverage City, State, and Federal incentives and programs as a tool to attract target economic sectors and companies with desired occupations.
- Direct appropriate defense, UAV, automation, and technology businesses requiring large footprints to the Congressionally designated job creation zone within the Nu Wav Kaiv area in northwestern Las Vegas as infrastructure is developed and extended to the area.

THE RDA MUST REFINE REDEVELOPMENT CRITERIA TO ATTRACT APPROPRIATE DEVELOPMENT

As redevelopment is planned and occurs in the City, it will be critical to evaluate their potential for further redevelopment in the future. The City must continuously identify redevelopment sites (in addition to those highlighted in Chapter 2: Land Use) and package them for marketing and solicitation of developers. In order to prioritize and evaluate the likelihood of redevelopment, the following criteria should be used:

- Size (if there are a number of parcels, the ability to easily assemble)

- Vacant/building (amount of rehabilitation or demolition needed)
- Rebuild/rehab
- Public/private ownership (if private, willing owner)
- Contamination (remediation could be a challenge to redevelopment)
- Potential to spur further redevelopment
- Obstacles to redevelopment
- Parking availability

Developers typically look for project locations where the potential for success is fairly certain and risks limited. This means that they are attracted to communities with strong markets where the infrastructure is in place, reasonably priced, quality development sites are available, and the development review process is quick. They also look for opportunities to enter a market right before it "takes off" and capture the heavy demand and associated real estate price or rent increases.

There is specific information they look for that will minimize the amount of time it takes to make a go- /no-go decision. For example, is there a market for the type of development being sought by the community? What is the role of the community within the region (i.e. bedroom community, employment destination, transportation hub, etc.)? Are reasonably priced sites available for development of redevelopment? Is necessary infrastructure in place or will this be needed and add to the cost of the project? How accessible is the development location and how large a market area can they draw from?

These are all vital questions that can be partly answered by the community, making it easier to pique the interest of a developer. Time is money and the less time developers have to commit to looking at a project/community, the more likely they are to dig deeper and hopefully show interest in moving forward. Some of this information might already be available while additional work is needed to gather the remaining data. It is up to the City, RDA, business leaders, and civic associations to work together to assemble developer information and then actively recruit developers and businesses that match the redevelopment vision. Shifting the development model from greenfield subdivisions to infill redevelopment poses extra challenges for developers, so having a unified vision and incentive toolbox is paramount to making redevelopment happen.

IMPLEMENTATION STRATEGIES

- Update and adopt a Redevelopment Plan for all RDA's in alignment with this plan and the Vision 2045 Downtown Las Vegas Masterplan
- Modify the RDA's TIF program for specific identified purposes and to capture added value.
- Consider selective expansion of redevelopment areas consistent with Land Use goals and the 2050 General Plan to ensure redevelopment, small business development, and the ability to attract major large employers that are aligned with the Comprehensive Economic Development Strategy (CEDs)
  - Expand and prioritize job creation zones, including in the Nu Wav Kaiv Area with the Paiute Tribe.
  - Direct appropriate and qualifying businesses with space needs, especially those in targeted industries, to specific sites within the City, provided they are compatible with development standards.
  - Incentivize and subsidize shared housing options that provide quality live-work options for start-ups in target industries.



OUTCOMES

- By 2050, all assessed blighted and deteriorating areas within RDA-1, RDA-2, and other designated infill or redevelopment areas will have been successfully ameliorated
- Over time, an increase of the percentage of all new commercial, residential, mixed-use that occur within RDA-1, RDA-2, and other designated infill or redevelopment areas.
- The RDA's tax increment increases over time

SUCCESSFUL REDEVELOPMENT: SYMPHONY PARK



Over time, the Parkway Center and 61 acre Symphony Park redevelopment projects have successfully transformed the former Union Pacific Railroad yard into a successful repurposing of industrial brownfield land into new assets. Projects have included the Clark County Government Center, Las Vegas Premium Outlets North, World Market Center, Lou Ruvo Center for Brain Health, Discovery Children's Museum, and Smith Center for Performing Arts. New additions include two new parking facilities with ground-floor retail, a 315,000 square foot Expo Center adjacent to World Market Center, and the 320 unit Auric luxury apartments and 290 unit Aspen Heights mixed-use complex. Several additional developments have been approved that will eventually complete the buildout of the remaining parcels on site

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
New mixed-use housing projects at infill sites can incorporate affordable housing while respecting existing neighborhoods	Redeveloping land within the City reduces the need to extending infrastructure and expanding the urban footprint into sensitive desert lands	Redevelopment can transform blighted areas into walkable neighborhoods	Repurposing brownfield and greyfield space into livable, communities can add life to repurposed land	The RDA can help attract targeted businesses and sectors into the areas that allow innovation to thirve.

II.C PUBLIC FINANCE

NRS 278.160.1(e)(1)

UPHOLD SOUND FISCAL POLICIES AND TRANSPARENCY THAT INCREASES EFFICIENCY IN ORDER TO PROVIDE HIGHER QUALITY OF SERVICES

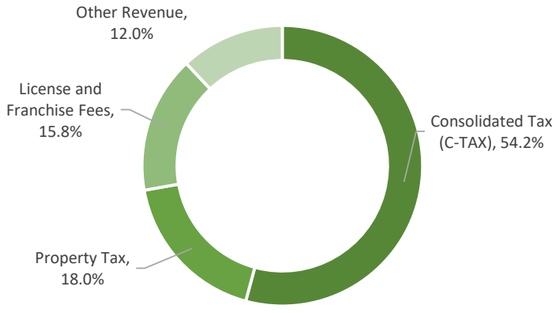
The City places a high priority on sound fiscal stewardship and organizational efficiency. While revenues and expenditures fluctuate over time, sound public finance requires adherence to several general principles. Each fiscal year as the City submits its annual budget to Department of Taxation in Carson City, the City strives to ensure that its budget is structurally balanced, that service levels are maintained through economic cycles, and that the priorities and areas of focus of the City Council and City Manager can be enhanced in a way that ensures the budget is balanced and cuts aren't made that impact services in other areas. With these principles, and as described in Chapter 5, this plan can serve as a guide to prioritizing budgets to accomplish the plan's goals, achieve outcomes, and meet the expectations of the public and City leadership.

The Department of Finance guides the budget making process. Finance must carefully account for, monitor, and balance ongoing expenditures and ensure that they do not grow faster than ongoing revenues. In addition, if enhancements are to be made to a City Council priority area, it must find ways to reallocate funding or cut service levels in other areas.

The general fund is the City's main operating fund and accounts for the majority of the City's revenue and expenditures. The general fund pays for all services not required to be paid for or funded separately and includes the City's most basic services and covers internal services, such as employee salaries and benefits and building and facility operations. The fund also pays for debt service on general obligation (property tax-backed) or revenue bonds that have been issued, typically for capital expenditures. The City is also enabled to create local improvements like roads, drainage, and for which a Special Improvement District is created; bonds issued for the project are repaid by assessments placed on the properties within the district and repaid by the owners. The City maintains a healthy AA bond rating and has issued. Rounding out the budget are special revenue funds created by the City Council for expressed purposes. The Capital Projects Fund includes a dedicated budget that is aligned with the City's Capital Improvement Plan, covering buildings, roads, The city also maintains four enterprise funds that collect user fees and provide services for sewer, parking, building and safety, and golf course activities. Finally, in the event of emergencies, the City maintains a fiscal stabilization fund, targeted at 20 percent of the total budget.

Like many U.S. cities and local governments in Nevada, the City has restrictions that make it difficult to raise revenue, to make expenditures according to community priorities, and to respond to economic fluctuations. These factors make it difficult from making impactful investments during economic growth periods and make them less resilient during downturns. To the extent that it must, the City will continue its responsible fiscal stewardship in its expenditures, seek stable and equitable revenue streams, and work to attain greater control over its fiscal affairs.

TYPICAL GENERAL FUND REVENUES



Source: CLV Finance Department (FY18-20)

ECONOMIC DIVERSIFICATION IS ESSENTIAL TO STABILIZING REVENUE STREAMS

The City's budget is reliant upon a mix of different revenue sources, most of which are collected and distributed by the Nevada Department of Taxation.

- **Consolidated Tax (C-TAX):** Comprised of sales (accounting for more than 80% of the C-TAX), liquor and cigarette excise, real property transfer, and vehicle taxes distributed to Nevada's local governments and special districts by formula. With locally approved options, sales taxes components are split for specific purposes, including for the Regional Flood Control District, RTC and RTC Transit, LVMPD, SNWA, and state education. The cyclical economy of Southern Nevada and its historic dependence on tourism and consumer spending has meant revenue is dependent upon the C-TAX, which accounts for more than half of general fund revenue in any fiscal year. Sales tax is highly sensitive and elastic in that it is more responsive to economic changes than other sources, and may erode over time.
- **Property taxes:** Enabled through the City Charter and account for approximately a fifth of the City's revenue. As determined by jurisdiction, the City's overall 2020 rate of 3.2782 is among the higher rates within Southern Nevada. As with the sales tax, portions of the property tax rate are also dedicated toward the City (0.6765) and LVFR (0.0950), while other components are dedicated toward specific purposes, including to the State, Clark County, CCSD, LVMPD, LVCC Library District, indigent persons assistance, and to the University of Nevada Cooperative Extension. Due to the Great Recession, property taxes were capped by the Nevada Legislature and allow little room for growth. Residential property taxes, accounting for 80% of the City, are capped at 3% and commercial property taxes



KEY ACTIONS

- Work to attain reasonable legislative changes that permit flexibility in revenue generation.
- Adopt budget savings and government efficiency measures.
- Maintain accessible and transparent budgets, audits, and reviews of City expenditures.
- Resolve to align the annual budget and capital improvement projects to achieve outcomes of the master plan.

OUTCOMES

- Maintain a fiscal reserve of at least 20% of operating costs with sufficient ending cash balances of 10% or prior year's expenditures for operations, 20% for benefits, and 25% for capital projects
- Develop at least one new consensus-based revenue stream
- The per capita amount of competitive Federal grant awards to the City increase over time

are capped at 8%, with additional secondary caps that slow growth of revenue further; most non-residential growth that has largely been occurring within the City's RDA. While these caps were effective at providing relief to property owners during the economic downturn, the unintended consequence has been that property tax revenues have not been allowed to reasonably recover and has constrained the revenue source. Furthermore, if the City reaches its limit in new subdivision growth over the next thirty years, few new properties will be added to the City's assessment rolls.

- **Licensing and Franchise fees:** The City is enabled to impose fees for the operation of business and provision of different types of services.
  - The City is enabled to create utilities for which it is authorized to make usage charges. City residents are charged for sewer connections and service.
  - The City is may grant franchises for the provision of utilities and services. Fees are collected from each franchisee for the provision of the service and utilization of the City's right of way.
  - Other specific user fees may be charged, including for the issuance of building permits, for the use of City parks or for City programs, or for parking. A small amount of revenue may also be derived from tickets, fines, liens, and other civil penalties that violate LVMC.
- **Other statutorily enabled revenue or fees for specific purposes:** Other sources of revenue may include fuel revenue indexing taxes for streets and highways, a residential construction tax for the construction of parks and recreational facilities, traffic signals and transportation improvements per housing unit, and a development fee applied toward the Clark County Desert Conservation Program.
- **Grants:** The City receives revenue in other forms from the Federal or State government, non-profits, or foundations, including through formula grants like the Community Development Block Grant, the proceeds of nominated land sales through SNPLMA, or through one-time competitive grants. To buoy City revenues, the City must also work to increase the overall share of competitively awarded grant funding, especially from Federal funding sources. Nevada especially has had a historically poor rate of capturing Federal grant money, receiving an average of $1,475 per capita, one of the lowest rates in the nation. The City must improve upon this and hire specific staff to apply for – and manage – state and Federal grants.

It is important to remember that a number of other taxes may be imposed for state, regional or local services in which the City has no direct control. During each biennium, the Nevada Legislature considers and approves a budget recommended by the Governor. In addition to state sales (slightly less than one third of the state budget), the state's general fund receives revenue from:

- Gaming taxes
- Mineral proceeds (mining) taxes
- Room taxes
- Live entertainment taxes
- Commerce tax
- Fuel taxes
- Marijuana taxes

These funds collected by the state may then be spent on programs and infrastructure as part of the state general fund, or distributed back to other agencies that provide services, construct capital projects, and administer programs. Of the typical biennial budget, the state general fund and Federal fund represent roughly two thirds of the budget, with the state highway fund, transfers and balances, and other funds accounting for the remainder. Nearly half of the state budget is dedicated toward K-12 and higher education, followed by Health and Human Services, much of which is dedicated toward Nevada's expanded Medicaid program authorized under the Affordable Care Act. Aside from the state Department of Corrections, all other state departments usually only represent a tenth of total spending.

However, more tax burdens have been shifting from residents to tourists. While this approach has been successful and have helped pay for tourism improvements such as road improvements, Allegiant Stadium, and the Las Vegas Convention Center, it could potentially have adverse affects over time. When coupled with other tourism-based fees and costs, new tourism based taxes may have the potential of warding away potential visitors or customers, or at the very least, make them less inclined to spend as much as they would, especially if other gaming and tourism destinations are closer, don't require travel, and have less discretionary expense.

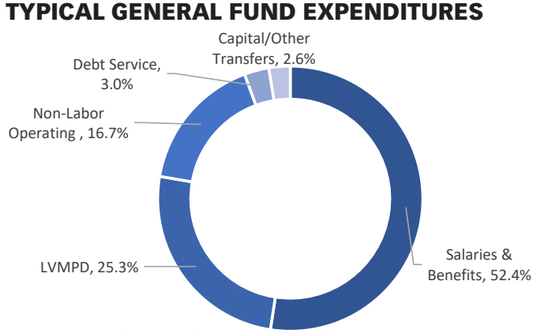
EFFICIENT CITY GOVERNMENT REQUIRES CLOSE ATTENTION TO EXPENDITURES

During each budget cycle, the Finance Department provides City Departments baseline labor and non-labor budgets and guidelines for both discretionary and non-discretionary expenditures. The general fund's largest budget component is salaries and benefits. Funding must also be dedicated to the LVMPD, whose overall share has been growing faster than other expenditures and is comprised mostly of salaries and benefits. Together with LVMPD, labor costs can total approximately three quarters of a general fund budget during a typical fiscal year. These costs have tended to increase over time, but changes in the labor force, retirements, and collective bargaining agreements with each of the City's bargaining units have evolved over time. The result has sometimes meant that positions must remain unfilled or frozen. For the first time, a ten-year forecast for the general fund revealed staffing levels may remain flat. Because structural deficits can become a concern during periods of economic uncertainty, and given the revenue constraints on the City, unfunded mandates and dependence on one-time revenues or unanticipated expenditures are often attempted to be avoided, deferred, or mitigated. Additionally, if more money is applied or reallocated to a priority area, reductions must be made to other areas, absent any new revenue.

Nevertheless, the City has put an emphasis on savings and has developed innovative solutions to reducing its operational costs, eliminating wasteful or duplicative expenditures. In previous years, the City has completed reviews in which employees were encouraged to participate in the process of improving efficiencies and cutting expenditures. The City's Sustainability Initiative have reduced its utility costs by investing in renewable energy and energy efficiency projects.

As a best practice, the City has devoted considerable efforts to ensure transparency. Its online open data portal, open checkbook, and open budget allow the public considerable access to how the City spends taxpayer money. In addition, the City Auditor provides an additional level of independent scrutiny on city expenditures. These efforts must be continued into the future and refined in ways that make information even more accessible.

TYPICAL GENERAL FUND EXPENDITURES



Source: CLV Finance Department (FY18-20)

THE CITY WILL NEED TO BALANCE BUSINESS FRIENDLINESS WITH THE RESTRICTED POWERS OF TAXATION CONSTRAIN THE CITY'S REVENUE ALTERNATIVES

Nevada often markets its business friendliness and low tax rates as an economic development tool; Nevada has no personal or corporate income, franchise, inventory, inheritance, unitary, or estate taxes. These have had a positive effect in attracting new businesses and companies into the City and state. However, for more than fifty years, state and local leaders have raised concerns about revenue alternatives. At 6.85%, Nevada has a higher state sales tax rate than many others across the country. When local sales tax options are included, Las Vegas has a rate that is pushing close to 9%. At some point in the future, these issues may come to a head as the City (and state) determine how to generate revenue for increasing governmental service demands and costs.

A number of limitations are placed on taxation and revenue, including restrictions within the Nevada Constitution, and those within NRS. Voter approved constitutional amendments have exempted food, other than prepared food for immediate consumption, and medical equipment from the sales tax and total tax levies cannot exceed five cents per dollar of assessed valuation. Nevada is a "Dillon's Rule" state, meaning a municipality is granted only those powers expressly authorized by the Nevada Legislature. Furthermore, this means that the City cannot create or increase any taxes that are not otherwise enabled

or authorized pursuant to Nevada Revised Statutes or the City Charter. Any changes to Nevada's structure have been the cause of much debate or discussion. The subject contains a high degree of sensitivity because of its direct impact to businesses and residents. Supermajority approval is required of both the Assembly and Senate for legislative measures, while approval through the initiative process requires a majority vote of the public. If a change is made to the Nevada Constitution supermajority approval at two legislative sessions and voter approval, or through a Constitutional initiative with approval at two general elections. While these issues have been debated over the decades, the City must examine new revenue alternatives in partnership with other local governments, the business community, and the public.

Some new and revenue enhancement options, either as standalone measures or in combination, may include:

- Modification of the fixed property tax caps to allow the City more flexibility and reliability in annual revenue streams.
- Funding the State Infrastructure Bank and Clean Energy Fund for state-backed project loans to the City.
- Requesting more enabling powers for local governments, specifically, for general law and chartered cities to ensure the revenue stream can be controlled at the municipal level. Because the City Charter acts as a form of self-governance, these could require voter approval for authorization in an effort to ensure proper justification. Similarly, enabling the use of overrides for specific purposes for different taxes and revenue streams could provide exceptions on use, length of terms for a tax, or an increase in the statutory ceiling of the tax rate.
- Expand the use of enabled revenue alternatives and working with legislators and other leaders to develop and reform tax and revenue alternatives that are more progressive and equitable, including some that haven't previously been attempted, including:
    - Land value taxes – these taxes split the property tax into two components – land and buildings. The value of the land, which is taxed at a higher rate, is then assessed in addition to the improvements. The benefit is that land value taxes are more equitable and economically sustainable, as well as a tool to encourage investment and development and discourage speculation.
    - Service based taxes – applying discretionary taxes based on a broad base of services that may be statutorily exempt or otherwise not addressed. This approach is distinguished from direct sales and oriented toward the provision or rendering of services themselves.
    - Utilization of special improvement districts (SID) – through its charter and NRS 271, the City can form SIDs for a wide range of infrastructure projects. A special assessment is levied on properties within the district, which back bonds issued by the City. Proceeds from the assessments repay the bonds over time. Thus far, SIDs within the City have typically been limited to a limited number of project types; however, the Legislature has expanded allowable uses to include new types, including tourism and entertainment projects, art, and neighborhood improvements.
    - Increased utilization of developer-based contributions, such as impact fees and exactions – The City is currently enabled to create impact fees for new development through NRS 278B and already makes services and infrastructure requirements for new development under development agreements. Additional broad based development fees could be applied so that growth pays for growth.
    - Fuel taxes – While Nevada has been progressive with implementing fuel revenue indexing, increasing the state's motor fuel tax rate, and removing the Constitutional prohibitions of spending revenue. In addition, other transportation revenues should be further developed as fuel efficiency and technology improves and mobility trends shift, such as vehicle miles traveled taxes, congestion pricing and high occupancy tolling user fees, and
    - Reductions in sales tax rates – As sales taxes and options have risen, there may be opportunities to make specific reductions as new forms of revenue that are more equitable take place
    - Reforms to mining, mineral net-proceeds and gaming taxes – Prior efforts have been made to modify the rates for mining and gaming taxes, some of which have included increasing the overall rates, and removing established caps. As the value of minerals fluctuates, especially during different economic cycles, modestly higher rates may capture ; similarly, gaming tax rates have been proposed specifically to provide
    - Approval and creation of a lottery. Nevada's Constitution prohibits lotteries, making it one of five states with no state or multi-state lottery and often loses millions in ticket sales. Should a constitutional amendment be approved, a reasonable system could be established to allows both restricted and non-restricted gaming to share in ticket sales, with revenues distributed to state and local general funds.

TO ENHANCE THE BUDGET PREPARATION PROCESS, THE MASTER PLAN CAN BE A TOOL TO ALIGN ANNUAL BUDGETS WITH CITYWIDE PRIORITIES

Planning and budgeting are important to the future of the City, but neither should exist in a vacuum. Both must be closely aligned and reviewed both separately and together for the City to succeed in providing services to its citizens, fulfilling the priorities of the City Council and achieving the goals of this plan. Because the City has finite and constrained resources, the annual budget is a critical part of making sure it allocates funds appropriately for growth and the processes are intertwined. During each budget cycle for both the general fund and the capital improvements plan, this plan recommends conducting a thorough assessment of annual priorities with a direct focus on how a plan outcome can be achieved as a mean to spend both discretionary or non-discretionary resources. Three elements, described further in Chapter 5, are important to ensure the plan and budget are aligned: ensuring budgetary alignment with the plan's outcomes, transparency within the City and with the public during the budget making process, and ongoing measurement and evaluation.

IMPLEMENTATION STRATEGIES

- Work to attain reasonable legislative changes that permit flexibility in revenue generation.
    - Coordinate with other local governments, the business community, and the public to propose new or enhanced revenue options to the Legislature
    - Lobby to fund the State Infrastructure Bank and Clean Energy Fund
- Adopt budget savings and government efficiency measures.
    - Hire grant writers and reconstitute an interdeparmental grant management team
    - Implement operational cost savings measures
    - Develop an internal efficiency committee
- Maintain accessible and transparent budgets, audits, and reviews of City expenditures.
    - Hold open budget forums and public review of the budget and CIP
- Resolve to align the annual budget and capital improvement projects to achieve outcomes of the master plan.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
The City must explore the development of progressive, broad based revenue streams that are equitable for all residents and fair for business.	Dedicating a healthy reserve will ensure the City can manage emergencies that require unforeseen expenditures	During each budget cycle, the financial health of the City will be assessed, with needs of the city and community prioritized	A disciplined municipal public finance system will ensure adequate services and infrastructure can be provided	New techniques and tools can help generate new streams of revenue while efficiencies in government can streamline service delivery.

III HOUSING



GOALS

A. Increase affordable housing types and choices for all income levels near existing and new employment centers.

B. Develop services that help the homeless and prioritize the needs of the most vulnerable members of the community

III.A HOUSING CHOICES

NRS 278.160.1(c) and NRS 278.235

INCREASE AFFORDABLE HOUSING TYPES AND CHOICES FOR ALL INCOME LEVELS NEAR EXISTING AND NEW EMPLOYMENT CENTERS

Housing is a human right and fundamental requirement for residents and our City to thrive. Over the coming decades, housing affordability and availability was ranked as the one of the top issues during the 2050 Master Plan outreach period, as was homelessness. With an estimated 310,000 new residents joining the City's population by 2050 and existing challenges facing current city residents seeking housing, the City of Las Vegas is developing innovative solutions to ensure housing for all residents. Most importantly, new housing that is constructed will be done by focusing development into identified and targeted infill and redevelopment areas, taking advantage of the place types described in the Land Use and Environment Chapter.

Historically, housing in Las Vegas developed first in the downtown area, followed by western and northwestern expansion. As the City developed and faced the financial crisis during the 2008 recession, housing prices dipped substantially, increased, and continue to increase today. Concurrently, wages in Las Vegas have remained low for the majority of the population, widening the income gap between low income and mid-to-high wage earners. With a shrinking middle class, economic mobility seems out of reach for many residents as middle class incomes have not caught up to national averages since the 2008 recession.

By focusing on availability, affordability, and access, the City of Las Vegas supports the assumption that upper class residents who can afford market rate housing will have little need for housing assistance while those who are a part of the "missing middle" and lower income levels would benefit from thoughtful, equitable, city-led initiatives.

Today, residents experiencing homelessness, low-income housed residents, and middle and higher income households face extremely diverse opportunities and challenges to obtain and keep a roof over their heads, in addition to meeting the costs associated with education, transportation, employment, healthcare, open space, and well-being. With an increasingly shrinking middle class since the 2008 recession, the stratification between income levels is dramatically shifting; as median household incomes have decreased, the City is at risk of continuing to not have enough affordable housing leading to 2050. As population grows and current trends in household income change, the City must create more diverse housing options, with leadership and assistance from:

- The private sector, comprised of a sizable economic sector of lenders, builders, and developers that provides market-rate housing for sale.
- Non-profit affordable housing service providers, such as Nevada HAND, that are dedicated to developing high quality, affordable housing for seniors and working families.
- The City, pursuant to its Charter, is authorized to develop and provide affordable housing consistent with state law; however, it is prohibited from imposing taxes unless otherwise authorized. Notwithstanding, several departments play a direct role in the creation of housing opportunities and the administration of housing policy:
  - The City's Department of Community Services oversees services for neighborhoods, affordable housing, seniors, and for the homeless population. It is also responsible for:
    - » Development of the City's Five-Year Consolidated Plan that is submitted to the U.S. Department of Housing and Urban Development (HUD). The Consolidated Plan and Analysis of Impediments provide a detailed strategic plan for addressing the affordable housing needs. A Strategic Plan includes building or rehabilitating renter units and includes more than 4,000 "Section 8" vouchers for rental housing provided by the Southern Nevada Regional Housing Authority, opportunities for home ownership through the development or rehabilitation of approximately 300 owner occupied units, and down-payment



KEY ACTIONS

- Diversify and improve housing stock to include a range of building types and "missing middle" housing appropriate for transit-oriented developments.
- Integrate affordable housing into the place types identified in the Land Use Chapter through the use of zoning regulations and other enabled policies.
- Amend LVMC Title 19 to remove affordability barriers and to allow more mixed residential dwelling unit types in areas of transformation and enhancement, including accessory dwelling units, garage conversions, casitas, or granny flats, with selective applications in areas of preservation.
- Accommodate a population increase of approximately 309,000 new residents by constructing approximately 110,000 new dwelling units, of which 121,000 of the City's total 366,535 projected units must be affordable or meet HUD's affordability criteria.

OUTCOMES

- The percentage of new residential development that occurs within this plan's Regional Centers, Mixed-Use Centers, Corridor Mixed-Use, or Neighborhood Center Mixed-Use place types increases over time.
- 80% of City residents spend less than 45% of AMI on housing and transportation costs combined by 2050.
- Beginning in 2021, the City and SNRHA develop affordable housing at a rate of at least 1,000 units annually.
- Beginning in 2023, and annually thereafter,
  - There is no net loss of subsidized affordable units
  - Any loss of subsidized affordable units are replaced with new affordable units
- 33% of total housing available is affordable housing, divided into affordability rates at 80% AMI, 50% AMI, and 30% and below AMI

	PRESERVE & SUPPORT	INCREASE ACCESS
HOMEOWNERSHIP	Support existing homeowners	Support first time buyers
RENTAL	Support existing renters	Create new affordable housing

SEE ALSO CHAPTER 2:
Neighborhood Toolkit

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Housing is a human right; the provision of which must be available for all, regardless of age, race, ethnicity, family status, or income type.	New and existing housing must be built or upgraded as energy and water efficient dwelling units to ensure the conservation of resource.	Development of a diverse array of quality housing, including those within transit-oriented developments can help create healthy walkable neighborhoods	A wide range of affordable housing choices provide options to residents of all-income levels at different locations with close access to amenities	New affordable housing development techniques can help incentivize the development of new dwelling units.



assistance. The Consolidated Plan is designed with objectives intended to be achieved over a five year period, with funding allocated to specific projects that implement it.

  - » Implementation of Federal formula programs, including the Community Development Block Grant (CDBG), HOME Investment Partnership (HOME), the Housing Opportunities for Persons with AIDS (HOPWA), and the Emergency Solutions Grant (ESG) programs
  - » Addressing the challenge of homelessness and operation of the City's Courtyard Homeless Resources Center.
- The Planning Department regulates land use and entitlement, pursuant to LVMC Title 19. Through this plan and its implementation, Planning permits the development and construction of new housing types at a wide range of densities and for certain conditions. The Planning Department also contains the Code Enforcement Division, which has the authority to cite and condemn buildings and houses that are deemed to have blighting conditions or are structurally unsafe.
- The Department of Building and Safety oversees the safe construction and alteration of all types of dwellings for occupancy. As a function of the development process, the Building Department reviews and adopts new codes, checks and reviews structural drawings, and inspects the construction of the building to ensure the building is safely built.

- The Southern Nevada Regional Housing Authority (SNRHA) serves as the primary authority for affordable housing within the region after combining the housing agencies from Las Vegas, Clark County and North Las Vegas in 2010. Organized under Chapter 315 of Nevada Revised Statues, the SNRHA:
  - Maintains and manages conventional public housing units for applicants who are income qualified.
  - Manages and maintains properties that do not receive Federal aid.
  - Administers the housing choice voucher ("Section 8") program.
  - Constructs and manages public housing
- The Nevada Housing Division, the state department that oversees the construction and development of affordable housing, including for and placement of manufactured homes, mobile homes and parks.

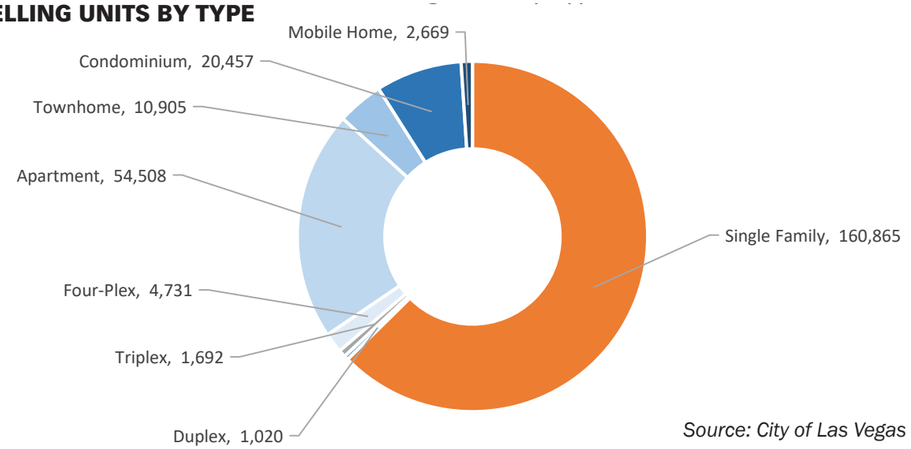
THE CITY LACKS DIVERSITY IN HOUSING TYPES AND CHOICES, BUT FORTUNATELY, MUCH OF THE CITY'S HOUSING STOCK IS NEW AND IN RELATIVELY GOOD CONDITION

The city of Las Vegas is home to approximately 670,000 people living within 257,000 dwelling units. The City's housing is predominantly low-density single-family residential construction – approximately two-thirds of all dwelling units and City zoned land. A typical Las Vegas home is 1 story, 2,000 square feet, and constructed in 1990's. Multi-family dwelling unit types are also not diverse; approximately 90% of all multi-family dwelling units are apartments, condominiums, or townhomes, with little diversity of any other type. Of these, approximately 15% were vacant, with the majority being rental properties.

Fortunately, most of the housing stock within the City of Las Vegas is in relatively good condition; because more than 80% of all construction has taken place after the 1980's, newer building codes have applied, making them code-compliant.

City wide, to ensure good standards and quality housing types, the City's Building and Safety Department must continue to regularly adopt and update its uniform codes to ensure high quality, structurally safe, and energy and water efficient buildings are built.

DWELLING UNITS BY TYPE



Source: City of Las Vegas

The deterioration of housing, however, can create blighting conditions. A similar geographic pattern can be seen, as well as from Code Enforcement actions taken by the City, and include a high share of planning areas in and around Downtown Las Vegas. The City estimates that about 1,800 housing units were inadequate or substandard. This is due primarily to the age of the housing. The majority of the housing units within the City are considered adequate for the same reason. Approximately 75 percent of the housing in Las Vegas has been built since 1980, making them more likely to be code compliant.

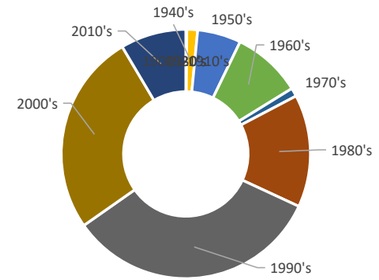
New housing units must be built to be resource efficient. While building new units to a green building standard should be strived for, a number of builders construct above code or resource efficient options; some take advantage of local existing programs, including NV Energy's solar incentive program or SNWA's WaterSmart new homes program. For existing building stock, rehabilitations and retrofits, weatherization it required to ensure houses are cost efficient and comfortable for occupants. However, outside of the City utilizing its broad redevelopment powers,

HOUSING TENURE



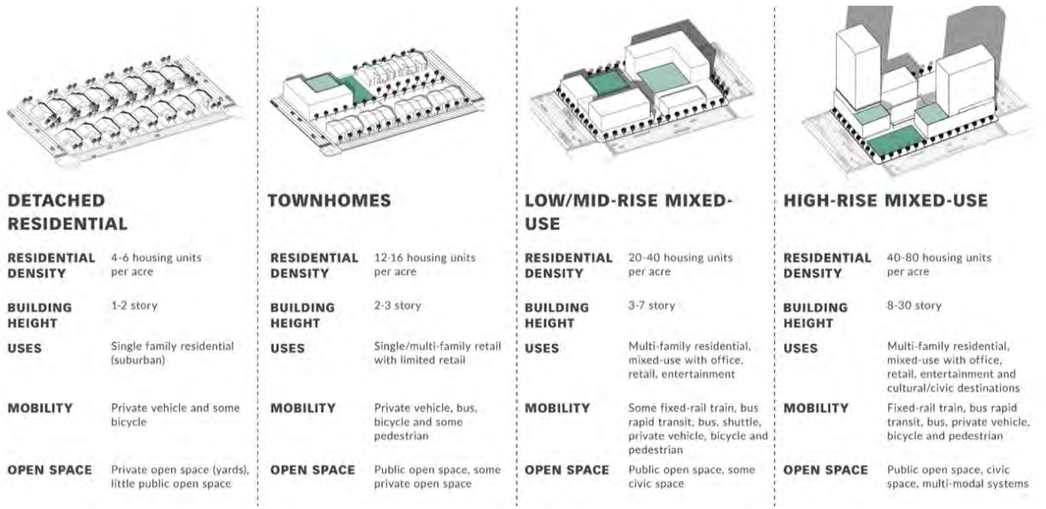
Source: City of Las Vegas / ACS 5 year estimate

YEAR OF CONSRUCTION



Source: City of Las Vegas





Townhomes, Duplex, Triplex, Multiplex, Courtyard, and Live/Work constitute needed forms of missing middle housing, which can be developed within the three right functional typologies

TOTAL DEVELOPED AND PROJECTED HOUSING UNITS

Area	Existing Single-Family	Existing Multi-Family	Future Single-Family	Future Multi-Family	Total New Units	Total Units (2050)
Angel Park	12,772	10,185	531	3,290	3,821	26,778
Centennial Hills	18,903	4,783	438	7,067	7,505	31,191
Charleston	14,693	14,422	877	9,429	10,306	39,421
Downtown Las Vegas	1,755	12,226	83	10,191	10,276	24,255
Downtown South	4,083	1,814	136	3,312	3,448	9,345
East Las Vegas	9,248	12,938	326	3,848	4,173	26,360
Twin Lakes	19,932	17,343	266	8,241	8,506	45,782
La Madre Foothills	8,967	1,484	5,995	2,246	8,240	18,692
Lone Mountain	15,924	4,851	2,875	2,121	4,996	25,771
Kyle Canyon	3,894	380	8,238	1,904	10,142	14,416
Nu Wav Kaiv	0	0	3,616	2,893	6,509	6,509
Rancho	12,868	3,235	376	3,872	4,248	20,351
Summerlin North	18,873	8,737	0	1,390	1,390	29,000
Summerlin West	6,167	538	13,255	6,976	20,231	26,936
Tule Springs	8,908	492	2,290	507	2,797	12,197
West Las Vegas	3,698	2,846	229	2,758	2,987	9,531
TOTAL	**160,685**	**96,274**	**39,531**	**70,045**	**109,576**	**366,535**

Source: Placebuild Analysis

TOTAL DEVELOPED AND DEVELOPABLE ACRES OF LAND BY RESIDENTIAL LAND USE TYPE

Area		Single-Family	Attached Residential	Multi-Family Residential	Vacant Private Land
Angel Park	Existing	2,243.7	72.6	480.4	80.3
	Future	2,131.5	69.3	266.7	57.8
Centennial Hills	Existing	2,584.3	32.4	213.7	558.3
	Future	2,455.1	32.4	213.7	229.3
Charleston	Existing	2,981.0	111.6	563.8	141.5
	Future	2,829.2	110.2	495.5	97.1
Downtown Las Vegas	Existing	379.3	108.2	246.7	278.4
	Future	360.8	150.0	223.7	241.4
Downtown South	Existing	679.0	48.4	29.8	59.7
	Future	645.0	46.0	28.5	26.1
East Las Vegas	Existing	1,750.3	139.6	378.5	129.0
	Future	1,656.3	110.7	249.6	86.9
Twin Lakes	Existing	2,876.7	185.2	763.1	169.1
	Future	2,725.3	154.4	653.9	102.4
La Madre Foothills	Existing	1,043.4	0.0	55.3	3,368.5
	Future	1,043.4	0.0	55.3	1,478.4
Lone Mountain	Existing	1,901.6	60.9	228.2	981.4
	Future	1,806.5	57.9	206.1	0
Kyle Canyon	Existing	639.3	0.0	19.1	2,766.0
	Future	607.4	0.0	19.1	0
Nu Wav Kaiv	Existing	0.0	0.0	0.0	9,485.5
	Future	0.0	0.0	0.0	7,212.2
Rancho	Existing	2,598.1	25.4	109.0	284.5
	Future	2,463.9	22.6	103.7	93.8
Summerlin North	Existing	3,677.9	185.3	363.6	33.7
	Future	3,677.9	185.3	363.6	16.6
Summerlin West	Existing	1,167.0	0.0	28.5	6,843.9
	Future	1,167.0	0.0	28.5	1,919.6
Tule Springs	Existing	1,902.9	0.0	0.0	923.5
	Future	1,807.7	0.0	0.0	198.8
West Las Vegas	Existing	600.0	45.3	117.3	138.6
	Future	536.8	30.1	103.9	40.0
TOTAL	**Existing**	**27,024**	**1,015**	**3,597**	**26,242**
	Future	**25,914**	**969**	**3,012**	**10,410**

Source: Placebuild Analysis

efforts should be taken to further address the rehabilitation and improvement of existing housing, both exterior and on the interior of the structure.

MAINTAINING EXISTING AND DEVELOPING NEW AFFORDABLE HOUSING TO MEET THE NEEDS OF THE COMMUNITY MUST BE MET THROUGH A VARIETY OF STRATEGIES

The City of Las Vegas aims to have a diversity of housing options available so that no residents have to pay more than 30% of their household income on housing itself. From 2010-2017, the City's percentage of low income households, defined as households earning 80% of less of the Area Median Income (AMI) as household income, remained relatively static while population increased. The same is true for very low income (50% or below AMI) and extremely low income (30% of below of AMI). As a result, more than 82,000 City households qualified for assistance, while 64,000 experienced a household burden like overcrowding or substandard housing conditions.

From a geographic standpoint, most low-income households are located in the core urban districts around Downtown Las Vegas. Notably, these areas also have the highest concentrations of minority households, single heads of household, persons per household, and people with a disability. In 2018, the:

- Median mortgage payment is $1,295 and 21% of household income; and the
- Average monthly median monthly rent payments are $1,023 and 25% of household income.

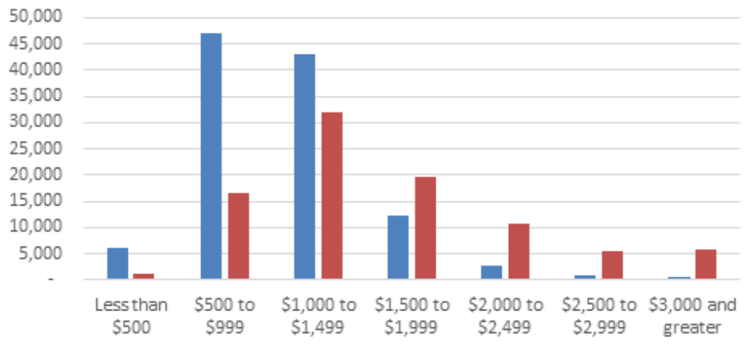
HOUSING AFFORDABILITY		
	PRESENT	2050 OUTCOME
City Households	256,959	366,535
% Households 80% below AMI	40.2%	33%
% Households 50% below AMI	23.8%	20%
% Households 30% below AMI	12.8%	5%

Source: City of Las Vegas / ACS 5 year estimate

Demographically, as the Baby Boomer generation retires, the percentage of residents over the age of 60 is projected to increase, potentially driving demand for "active adult" and senior housing. The Millennial generation, the largest generational cohort, is primarily made up of renters; however, should their household sizes and incomes increase over time, their preferences will drive changes in housing demand away from renting multi-family types to more single-family. Finally, Latinos and Hispanics are projected to account for more than 40% of Las Vegas's population by 2050. With that increase, national studies have indicated more more of a preference for homeownership, but affordability is a factor. Regardless, growth within this demographic will drive demand for a range of housing types and sizes.

While housing availability is limited in the City of Las Vegas, affordability across household incomes is a challenge. Home ownership rates, which had been increasing steadily since 1990, declined after peaking at 62 percent in 2006

MONTHLY RENT VS. MORTGAGE



Source: City of Las Vegas / ACS 5 year estimate



and falling to 57 percent in 2010. Half of the homes sold in Las Vegas a decade ago, during the aftermath of the recession, were affordable to low income households, with nearly all homes sold affordable to households making AMI. The key issue at this point was not so much housing affordability, but the credit worthiness or the ability to make a down payment. However, over time, home values have increased, with median home values across Southern Nevada predicted to reach just below $300,000 in 2020.

While housing prices are on the rise, so are rental prices. Single family homes have experienced a 6% rent increase in the last year while median apartments rents have increased more than 5% in 2019 alone. As housing prices increase, wages in Las Vegas remain low for the majority of the population. Hourly wages in Las Vegas are 12% below the national average with the majority of occupations paying well below industry national averages. Employees of the tourism and service industries all earn less than 30% of area median income, qualifying those individuals for affordable housing. Because housing and rental prices are increasing and wages are not following in proportion for the majority of occupations in Las Vegas, the income gap between low income and mid-to-high wage earners is predicted to increase dramatically, affecting housing affordability.

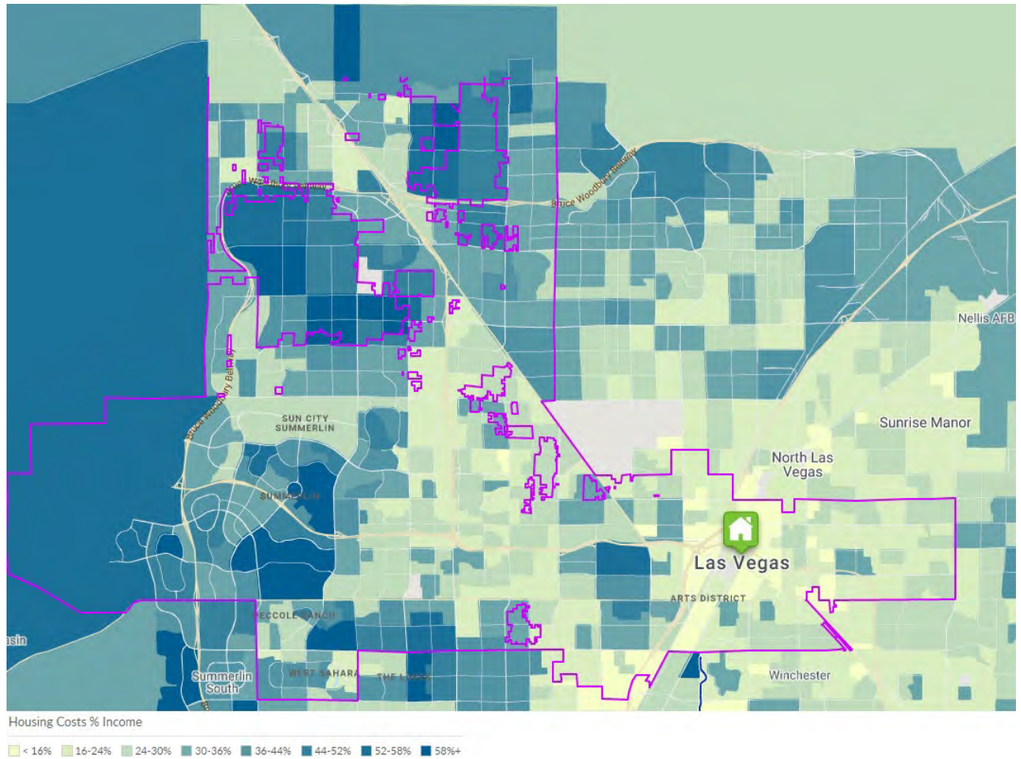
Nevada has the largest shortage of affordable housing in the country. For every 100 households earning 30% or less of AMI, only 19 affordable units are available and affordable. Las Vegas fares even worse than the state of Nevada with only 10 available and affordable units for every 100 households earning 30% or less of AMI. With no current requirements for developers to build affordable housing alongside market-rate housing, affordable housing is facing a major crisis in the City of Las Vegas.

In 2018, 60% of the City of Las Vegas' population is "housing insecure," or spending more than 30% of household income on housing costs . With median household incomes ranging from $37,000 - $60,000 , the majority of the City's population lives in the "missing middle," earning too much to qualify for Federal housing assistance but too little to purchase or rent in a city where cost of living is rising rapidly. In 2019, Las Vegas was identified as having the largest rent increases of any city in the country with housing prices steadily increasing on an annual basis . Rent in the state of NV has increased faster than renter household income over the past 16 years, and home ownership rates have been slow to recover since the Great Recession . For residents who do not earn enough household income to rent or own available housing in the City, increasing wages and/or increasing housing options at diverse price points will ensure housing. Given the City's geographic, land-locked constraints to building, housing development built in a denser community would allow more people to be housed across the City.

TOTAL ACRES OF LAND USE PLACE TYPES DESIGNATED FOR NEW HOUSING, PRESERVATION, OR RETROFIT					
Area	Mixed Residential	Traditional Neighborhood	Subdivision Retrofit	New Subdivision	Rural Preservation
Angel Park	3.4	0.0	112.2	8.0	0.0
Centennial Hills	0.0	0.0	129.2	0.0	0.0
Charleston	146.9	3.9	0.0	0.0	0.0
Downtown Las Vegas	0.0	18.5	0.0	0.0	0.0
Downtown South	37.6	0.0	0.0	0.0	0.0
East Las Vegas	41.6	87.1	0.0	0.0	0.0
Twin Lakes	22.6	60.1	0.0	0.0	0.0
La Madre Foothills	0.0	1,400.8	31.9	1,927.0	680.0
Lone Mountain	0.0	0.0	0.0	1,684.3	101.6
Kyle Canyon	0.0	197.6	120.2	411.1	347.7
Nu Wav Kaiv	140.0	151.4	0.0	3.9	0.0
Rancho	0.0	0.0	0.0	1,033.3	0.0
Summerlin North	8.1	134.2	0.0	58.9	54.7
Summerlin West	0.0	0.0	0.0	32.2	0.0
Tule Springs	0.0	0.0	0.0	4,596.0	0.0
West Las Vegas	0.0	0.0	95.1	400.5	324.2
TOTAL	**400.2**	**2,053.6**	**488.6**	**10,155.3**	**1,508.3**

TOTAL ACRES OF RE-DESIGNATED TRANSIT-ORIENTED PLACE TYPES				
Area	Regional Centers (RC)	Transit-Oriented Development (TOD)	Corridor Mixed Use (TOC)	Neighborhood Mixed Use Center (NMXU)
Angel Park	0.0	56.4	68.5	231.7
Centennial Hills	414.7	0.0	0.0	10.6
Charleston	0.0	175.6	161.2	57.9
Downtown Las Vegas	184.5	0.0	0.0	0.0
Downtown South	0.0	43.6	33.8	26.7
East Las Vegas	0.0	156.8	86.4	20.9
Twin Lakes	0.0	58.8	58.1	24.9
La Madre Foothills	0.0	0.0	0.0	136.0
Lone Mountain	0.0	0.0	0.0	160.4
Kyle Canyon	0.0	0.0	0.0	153.0
Nu Wav Kaiv	0.0	175.9	148.4	68.5
Rancho	0.0	0.0	0.0	206.7
Summerlin North	0.0	72.6	92.6	42.5
Summerlin West	99.3	0.0	0.0	0.0
Tule Springs	0.0	0.0	0.0	328.3
West Las Vegas	0.0	0.0	0.0	36.2
TOTAL	**698.4**	**739.7**	**649.0**	**1,504.2**

HOUSING COSTS AS A PERCENTAGE OF INCOME



Source: CNT - Housing + Transportation Index



Further constraining residents with variable household incomes, state tenant laws are among the most restrictive in the country. Landlords are able to rent on an annual basis, and if a tenant chooses to break a lease, they would be responsible for paying out the remainder of the lease until a new tenant takes over the unit. Additionally, landlords can evict tenants four days after a rent payment is due. These policies can create major financial and housing hardships for residents who are laid off, lose a job, or experience a healthcare challenge.

While current barriers to housing include availability and affordability, the ultimate goal of the City of Las Vegas 2050 Master Plan is to provide recommendations so that every resident is able to thrive. While housing is one very important component of a healthful, successful life, access to other services, such as quality education, gainful employment, legal assistance, reliable public transportation, compassionate healthcare, nutritious food, affordable utilities, open space, and culturally-appropriate financial services all provide opportunities for a resident to live life to the fullest. Working alongside existing service providers and encouraging new businesses with locally-focused corporate philanthropy and social responsibility programs could prove a helpful source of wraparound services for all residents.

To be proactive, the City must invest in shelter space, transitional, and permanent supportive housing to create alternatives to renting and buying a traditional home for diverse populations. Housing options must reflect the diversity of the City's community. Without initiatives to create different models of housing ownership for all income levels, the City will not be able to house its residents in a helpful, affordable way.

AFFORDABLE HOUSING OPTIONS ARE LACKING AND IMPEDIMENTS REMAIN, DEMONSTRATING AN OVERALL PROSPECTIVE NEED FOR THE COMMUNITY

There are approximately 10,000 project and tenant based housing vouchers currently in use, while another 2,700 units are available in select sectors. While housing is a multi-dimensional issue, income and availability are amongst the most significant resources determining whether a population is able to access and afford housing options in the area. The City of Las Vegas currently owns 903 affordable housing units for low income and very low income individuals. As a result, the City faces the daunting challenge of creating at least 5,000 affordable housing units in a five year period in order to address the existing lack of affordable housing. While the City can take advantage of the Southern Nevada Public Lands Management Act (SNPLMA) to reserve locations for affordable housing, many locations may not be appropriate for its development, especially when combining housing and transportation costs. As originally determined for the Southern Nevada Strong Regional Plan, the Regional Analysis of Impediments suggested the jurisdictions increase affordable housing by amending zoning standards

Name	Low income units maintained	Very low income units maintained	Low income units funded or developed	Very low income units funded or developed
Single Family Rehabs			66	20
City Impact				65
Tenaya Senior Apartments			269	3
Baltimore and Cleveland Gardens	199	2		
Wardell Street Townhomes			7	54
Ruby Duncan Manor		30		
City TBRA			3	45
HOPWA Transitional and permanent housing			9	131
TOTAL: 903	199	32	354	318

Source: City of Las Vegas Office of Community Services

ZONING BARRIERS TO AFFORDABILITY

- Lot-size requirements
- Parking requirements
- Height and density limitations
- Accessory dwelling unit limitations
- Allowing pre-fabricated housing and other non-traditional development models

SEE ALSO CHAPTER 2: LAND USE
Neighborhood Toolkit

Impediments to the development of affordable housing include, but are not limited to the following:

- Community Support: NIMBYism from the community due to perceptions on affordable housing
- Financing for Home Ownership:
- Permit and Plans Review Time
- Costs of construction
- Water connection fees: while these have been steadily increasing for all development types, these fees are especially impactful.

NEW HOUSING TYPES AND LOCATIONS MUST ALIGN WITH THE PLAN'S OVERALL STRATEGY FOR TOD, INFILL, AND REDEVELOPMENT

Infill development in areas with lower infrastructure and service costs must be supported by the City to maximize tax revenue and minimize the provision of service costs. Given current land uses, vacant land within the City could enable the construction of 111,000 conventional new housing units within new subdivisions. However, because there is a lack of higher density "Missing Middle" housing potential that can help fill the gap for workforce and lower-income households, an opportunity exists to develop this type of housing, utilizing this plan's approach and strategy of transit-oriented development (TOD), infill, and redevelopment. The use of regulatory and design strategies contained within the Land Use Chapter will enable the development of compatible infill and redevelopment with a mix of housing types in neighborhoods close to employment centers, commercial areas, and where transit or transportation alternatives exist.

- For areas of transformation and enhancement, the RC, TOD, TOC, and NMXU place types enable the zoning types that will permit and allow the provision of a wide assortment of housing types.
- Some areas of enhancement and transformation may include existing traditional neighborhoods with mixed types of residential or could undergo subdivision retrofits. Zoning provisions within LVMC Title 19 must be amended to allow more mixed residential dwelling unit types in these areas, including accessory dwelling units, garage conversions, casitas, or granny flats, with selective applications in areas of preservation. The development and implementation of programs to preserve and maintain existing subsidized and unsubsidized affordable housing in transit-served areas, compact and mixed-use areas, and areas with rapidly-rising housing costs may be required.
- There are more than 26,000 acres of vacant land within Las Vegas, much of which are in developing western and northwestern planning areas; there are no impediments to the developing of new subdivisions to currently undeveloped areas within the City other than the cost of the infrastructure itself and the release of land over time.
- Finally, for areas dedicated for preservation, historic neighborhoods will likely be preserved and see limited or carefully reviewed additional alternations or additions; some areas of rural preservation permit (or will continue to permit) low-density, single-family housing types.



FINANCIAL TOOLS AND STRATEGIES		
	Financing Strategies	**Policy Changes**
Developer Assistance Programs	• Tax-credit initiatives to help offset the cost of development for affordable housing, including developer education for the Low Income Housing Tax Credit. • Joint Venture Development • TIF • Fannie Mae's Healthy Housing Rewards Program • Affordable Housing Trust Funds • Private equity vehicles. Real estate investment entities use private capital to acquire and rehabilitate multifamily workforce and affordable housing properties, delivering a range of returns to equity investors. • Below-market debt funds. public/private/NGO provides affordable housing developers with low-cost loans • State and local bond initiatives	• Expand incentives for developers • Partnership between City and private sector in making underused government-owned sites available for affordable housing, such as repurposed rights-of-way, surplus properties, or land- entitlement-swaps • Affordable Housing Bonus Program • Zoning Changes to allow smaller housing types
Homeowner Assistance Programs	• Housing Rehab Grant Programs • Federal Home Loan Bank of San Francisco Affordable Housing Grant Program (plus homeowner education & assistance) • Offer tax abatement to small-rental building owners to offset rehabilitation expenses • Develop mortgage assistance programs	• Incorporate transit-oriented development by locating housing near public transportation and other amenities • Use rent control as a tool to make older rental properties more affordable for long-term residents, especially the elderly
Investor Financing & Assistance Programs	• Real estate investment trusts (REITs), through which a longstanding mechanism for raising real estate capital for other product types is used expressly to develop and preserve affordable rental units, generating a range of returns • Private equity vehicles, through which real estate investment entities use private capital to acquire and rehabilitate multifamily workforce and affordable housing properties, delivering a range of returns to equity investors • Opportunity zones	

IMPLEMENTATION STRATEGIES

- Diversify and improve housing stock to include a range of building types and "missing middle housing" appropriate for transit-oriented developments that accommodate population and dwelling unit projections
  - Routinely update and adopt the HUD Consolidated Housing Plan and provide annual assessments to the Nevada Division of Housing, pursuant to NRS 278.235, determining how many housing units are needed, how many are constructed, how many are affordable, and how many affordable units are lost.
  - Progressively adopt new building codes that ensure the construction of quality housing.
  - Develop and offer a housing rehabilitation and upgrade program to improve the quality of neighborhood building stock.

- Amend LVMC Title 19 to remove affordability barriers and to allow more mixed residential dwelling unit types in areas of transformation and enhancement, including accessory dwelling units, garage conversions, casitas, or granny flats, with selective applications in areas of preservation:
  - Through the Site Development Review process, analyze transit access, housing, and transportation costs.
  - Provide analysis on the impact of new development and capacity of infrastructure and proximity of services, especially for neighborhoods with housing affordable to low and moderate income households.
  - Review additions or accessory dwelling unit applications in neighborhood preservation areas and historic districts to ensure appropriate use and maintaining neighborhood integrity.

- Incentivize and actively assist with the construction, development, and financing of affordable housing:
  - Implement recommended financial tools and strategies for developers, homeowners, and investors.
  - Reduce or subsidize building permits for affordable housing projects.
  - Expedite planning entitlement approval and plans checks for affordable housing projects.
  - Lease or sell City land to developers exclusively for the development of affordable housing.
  - Directly utilize CDBG or other Federal funding.
  - Purchase or reserve SNPLMA land at a reduced price, provided that the land is within ¼ mile walking distance of an established RTC Transit route.
  - Establish a trust fund and land bank for the acquisition, construction or rehabilitation of affordable housing.
  - Provide in-kind support for affordable housing developments that are financed, wholly or in part, with low-income housing tax credits, private activity bonds or money from a governmental entity.
  - Authorize density bonuses or other incentives to encourage an affordable housing component and TOD.
  - Authorize an inclusionary zoning provision for qualified projects, including for TOD place types.
  - Seek authorization for tax abatements and other buyer incentives to incentivize demand in target development areas.
  - Create and utilize gap financing mechanisms, such as tax credits, grants, low interest loans, and other subsidies, to enable development of mixed-income developments and build market strength.
  - Leverage major employers and anchor institutions to create residential market demand incentives in target development areas.
  - Partner with nonprofit or faith-based organization(s) to provide, education, counseling, and financial assistance to homebuyers or renters, particularly minorities, the elderly, and the disabled.

- Integrate affordable housing into the place types identified in the Land Use Chapter through the use of zoning regulations and other enabled policies
  - Develop an inventory of infill, previously developed, brownfield, or greyfield sites of greatest priority and potential for development or redevelopment.
  - As part of a larger legislative package, amend the Las Vegas City Charter to enable the ability of the City to raise revenue for the construction or provision of affordable housing.

III.B HOMELESSNESS

NRS 278.160.2

DEVELOP SERVICES THAT HELP THE HOMELESS AND PRIORITIZE THE NEEDS OF THE MOST VULNERABLE MEMBERS OF THE COMMUNITY

Homelessness occurs when a combination of an individual's personal health, economic, or social systems and networks break down, ultimately leading to the loss of their home. Coupled with a variety of economic and social factors, homelessness represents an evolving challenge that has grown over time and has required the City to rise to the challenge in response. Bold action and leadership is required to break the cycle of homelessness within Las Vegas.

During the 2019 Housing and Urban Development (HUD) Point-in-Time Count, Southern Nevada recorded 5,530 unsheltered homeless individuals. The City estimates that more than 60% of this population is concentrated in the districts of Downtown Las Vegas, particularly within Symphony Park, Historic Westside, Cashman, and the Medical District, equaling 2,330 unsheltered homeless individuals. This has a pronounced effect on the health, safety and economic vitality of our community.

OUTCOMES

- The total unsheltered homeless population is reduced 50% by 2035, with functional-zero homelessness by 2050
- The percentage of total residents and household living below the poverty line decreases by 25% by 2030 and those extremely low income households living at 30% of AMI decreases 50% by 2030
- The number and percentage of families, women, youth, LGBTQ, and additional homeless subpopulations that are homeless or living below the poverty line decreases over time
- The total unit count of bridge, transitional, and rapid-rehousing unit types increases to meet or exceed demand

For many years, the City has borne the brunt of homelessness, a troubling issue that has been brought to the forefront by previous City administrations. Nevada has the third highest rate of total unsheltered homeless individuals in the U.S. Recent estimates from the homeless Census point-in-time count approximate 15,000 individuals experiencing some form of homelessness in Clark County during the year. More than two-thirds of the individuals experiencing severe, chronic homelessness in Southern Nevada are within the City of Las Vegas, making up nearly 2,500 unsheltered individuals within the City with the majority concentrated around Downtown Las Vegas.

Confronting homelessness has been rated as a top issue by City residents during public outreach for the Master Plan, and it has been a strategic priority of the Mayor and City Council. Despite repeated attempts to quell and address the roots of the issue, homelessness is a multi-faceted challenge layered with complexity. At its heart, homelessness is not a matter the City confronts alone; it must take a renewed approach that pools resources.

Considerable effort, funding, and resources have been placed toward combatting homelessness with the City's Office of Community Services leading direct efforts. This Master Plan builds upon the existing efforts developed by the City and its Strategic Plan to End Homelessness and includes specific recommendations and comprehensive steps that must be taken that are evidence-based and "Housing First."

SEE ALSO

Help Hope Home Plan to end Homelessness

City of Las Vegas Strategic Plan to End Homelessness

Southern Nevada Plan to End Youth Homelessness



- Homeless individual outreach with the provision of triage and basic services. This must be a coordinated entry and assessment process that provides rapid, efficient engagement
- Emergency and traditional shelters; construction of the Courtyard Homeless Resource Center, a location north of Downtown Las Vegas within the "Corridor of Hope," is one example where homeless individuals can access direct services and resources. Other shelters and resources within the area are concentrated around this area.
- A range of specialized housing types, including bridge and transitional housing, permanent supportive housing and non-subsidized affordable housing.

Regional partners have made strides to address homelessness, but as an emerging practice community, the City must be dedicated to disruptive, innovative change with assistance from public, private, non-profit, and faith-based regional partners, including:

- Help Hope Home, the HUD backed Continuum of Care for Southern Nevada, the entity that provides services to individuals and families who are experiencing homelessness and promotes a community-wide commitment to end homelessness. The City

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Providing resources to the most vulnerable members of society is essential, especially for families, youth, the elderly, LGBTQ, veterans and victims of domestic violence.	Bridge, transitional and rapid rehousing can reduce the region's overall chronic homelessness rates, allowing residents to quickly recover.	Treating homelessness requires efforts to ensure individuals are not suffering from acute of chronic physical or mental conditions.	Addressing homelessness head-on will not only improve quality of life for homeless individuals, but also for people that live and work throughout the City.	Development and complete build-out of the Courtyard homeless resources center has been an innovative in homeless services provision.

KEY ACTIONS

- Adopt and annually evaluate the City's Homeless Strategic Plan designed to guarantee that basic needs are met in the community and ensure it is in alignment with Help Hope Home, the Southern Nevada Continuum of Care and other regional efforts
- Employ direct homelessness prevention measures and a "Housing First" strategy to quickly and efficiently serve at-risk or homeless individuals
- Provide intervention services, to serve as a basic temporary resource and provide a pathway out of homelessness
- Develop sustainable funding streams and resources that can be leveraged and applied to combatting homelessness
- Educate the community and homeless individuals and families on homelessness issues while thoughtfully mitigating impacts of homelessness on the community

collaborates with this regional board and with local non-profits to provide housing and supportive services. It also maintains and updates the regional plan

- Stakeholders within the Corridor of Hope that provide direct assistance, emergency shelter, food, showers, clothing and other basic needs
- County resources, including from the Department of Social Services
- The City's Homeless Advisory Committee and its subcommittees.
- Public Safety, departments, including Law enforcement, including LVMPD, Las Vegas City Marshals, and paramedics from Las Vegas Fire and Rescue
- The Multi-Agency Outreach and Resource Engagement (MORE) Team, a multidisciplinary group including law enforcement support in addition to key social service providers. The MORE focus is to engage rather than enforce laws to help homeless persons connect to services needed to break the cycle of homelessness
- State resources and legislative committees that can provide direct funding and support for housing and emergency services.

THE CITY SEES FLUCTUATIONS IN THE NUMBER OF INDIVIDUALS EXPERIENCING HOMELESSNESS, BUT WITH A COORDINATED ENTRY AND ASSESSMENT APPROACH, THE CITY CAN BETTER UNDERSTAND WHO'S HOMELESS AND WHY

Each homeless or at-risk individual has a story with unique circumstances; homeless women, children, youth, seniors, and veterans each present different issues or challenges that may require differed targeted interventions. It is important to recognize that each individual and family has rights and that a concerted effort must be made to improve their quality of life, even for those individuals or families that are service resistant.

Understanding the makeup and characteristics of the homeless population helps describe how homelessness occurs and explains some of the trends. Of the 5,530 people found to be experiencing homelessness during the 2019 Point in Time Count:

- more than 70% were men,
- 54% white, 37% black
- 91% were adults over age 18

In addition, more than 550 were veterans, 340 were families with children, and nearly 1,200 were unaccompanied youth or young adults.

40% of those counted were sheltered, with the majority in emergency shelter. Of the remaining 60%, more than half were found on the street, in vehicles, or in encampments. Another 280 were found living in storm drains and 230 were located at the City's Courtyard Resource Center. Fortunately, this total represents an overall decrease in the number of individuals counted during a given Census, down from a five year count of 7,500 in 2015.

In 2018, Nevada had the highest rate of unaccompanied homeless youth in the nation. The City has been supportive of youth-based initiatives, including the Southern Nevada Plan to End Youth Homelessness. The City must continue align with this vision ensure that homelessness among unaccompanied youth is rare, brief, one-time and equitably addressed. For those that do experience homelessness, many report the reason linked to being kicked out of their parent's house, suffered emotional abuse, experienced family dysfunction, have status as LGBTQ, endured domestic violence, aged out of the foster care system, or were displaced from unstable, crowded, living conditions. The Corridor of Hope currently has limited youth services and data representing the experiences of homeless youth, but reports indicate it is a growing problem.

Families also endure homelessness, and the City remains committed to keeping homeless families together, no matter how they are structured. During difficult situations like homelessness, families are separated while experiencing homelessness with members split between men's only, women's only, children's only shelters. The City will strive to ensure families remain together.

The City has seen dramatic decreases in homeless veterans. This was the result of previous national and local efforts to specifically target veteran homelessness to get this group to "functional zero." The lessons learned for decreasing veteran homeless rates must also be applied to other vulnerable subsets of the homeless population.

Case management efforts are currently in place, however, to the extent that the assessment system can be refined, a uniform and centralized coordinated entry and assessment process must be delivered that provides rapid, efficient engagement with individuals. While different service providers may be involved or play roles in the process, the case management system must include a shared master list



of all individuals, regular conferences to collectively review and plan interventions, and match available resources with demand.

THE ROOT OF MOST HOMELESSNESS STEMS FROM LOSS OF EMPLOYMENT AND INABILITY TO AFFORD BASIC COST OF LIVING EXPENSES

Overall, the reported causes for homelessness vary by subpopulation; however, one of the most important common themes is the loss of a job or source of income. Compounded by a secondary factor, such as substance abuse, loss of familial support, or physical or mental health issue can be a determinant that pushes an individual into homelessness.

REPORTED CAUSES OF HOMELESSNESS

2019 HELP-HOPE-HOME SURVEY RESPONSES

- Top reported factors causing homelessness:
  - Lost job and unemployment
  - Alcohol or drug abuse
  - Mental health issues
- Top reported housing stability factors
  - Lack of employment or income
  - Inability to afford rent
  - Inability to afford up-front "move in" costs
  - Housing not available
- Top causes of homelessness for families with children
  - Lost job and unemployment
  - Divorce or separation
  - Landlord stops renting (loss of home)
- Top causes of homelessness for youth – Nevada has highest incidence rate of youth homelessness in the nation (1/2 black, 1/3 white); 90% male, 16% LGBTQ
  - Kicked out of house by family (or friends)
  - Lost a job
  - Family / domestic violence

A DAY IN THE LIFE

BRIGHTER PROSPECTS

Kai Grayson, Homeless Services Technician

When helping the homeless, she encounters big obstacles, starting with the many restrictions placed on who may qualify for housing and health benefits. If someone has multiple criminal convictions, for example, she notes, certain agencies will disqualify them outright. For others, a bad rental or credit history can be grounds for disqualification. Some people don't make enough money, others too much. Kai believes that loosening restrictions would do a great deal to get more people into stable housing situations more quickly. For that matter, strong financial education programs could help may from becoming homeless in the first place.

Kai would love to see employers use non-traditional means of assessing candidates with spottier pasts. Wouldn't it be great if, in certain situations, employers required only a year's worth of previous work experience? Or if one's job prospects could be based on commitment to a recent training program, or on work ethic more than job or salary history?

Kai envisions a city that feels like it's focused on its residents as much as its tourists. A proposed monorail system represents a good start. Additional transportation systems would help even further. So, too, would more grocery stores, healthier food choices and nutritional education that could help to lower healthcare costs. They're all part of a positive change that, to Kai, feels well within reach.

A variety of barriers face the homeless population, whether chronically homeless, or those that are at-risk.

- For individuals that have lost employment, regaining employment may require an address, the ability to be reached through phone or email, an individual record of stable work history, transportation access to a job, and having no criminal convictions.

- Access to basic health care, including for common medical conditions and prescription drugs, as well as more complex issues, including mental and behavioral health, domestic abuse, trauma assistance, and substance abuse treatment may be another barrier for people experiencing homelessness. Two-thirds of respondents reported at least one disability, while about 40% have or had a physical disability and 20% needing medical care but are unable to acquire it.

- Special populations, especially women, victims of domestic violence, homeless youth, veterans, LGBTQ, and individuals with HIV/AIDS all confront additional barriers requiring specialized interventions, counseling, or treatment

- Personal safety is a major issue confronted by the homeless population. Not only must individuals confront risks for higher rates of property and violent crime, they may also be vulnerable to risks identified under the Hazard goal of this plan, specifically extreme heat events and, for those keeping shelter in flood control facilities, flash flooding.

- The lack of consistent information for the homeless individuals can also be a challenge in making them aware of the availability of services. To address this, the City and other service providers developed and deployed Multi-agency Outreach Resources Engagement (MORE), and HELP of Southern Nevada's Mobile Crisis Intervention teams, on-street outreach that communicates services, gathers information, and connects individuals to emergency shelters, housing programs and other services.

EARLY AND DIRECT PREVENTION AND DIVERSION MEASURES ARE THE FIRST MEANS OF ENSURING INDIVIDUALS DON'T BECOME HOMELESSNESS

Many individuals at risk of homelessness, or are currently experiencing it often are not directly aware of the resources and supportive services available to prevent it. However, it is an important early step that help is given or obtained, otherwise, the overall long term costs of services will increase. Diversion strategies are temporary measures that assists individuals identify alternative arrangements for housing or employment through committed diversion, conversations with individuals, and creative and innovative approaches that are uniquely tailored to each individual. Ultimately, the City determines a better understanding of who may be at the edge of becoming homeless and why.

Therefore, the City and community stakeholders will continue to make concerted efforts to keep the cost of housing affordable and ensure that existing and future "prevention first" efforts are made available and communicated to



individuals in an accessible manner for individuals to obtain help. Several basic funded and targeted strategies, some of which are described by other goals within this Chapter of the plan, can help prevent housing loss; through the developed and enhanced case management system, the City and its stakeholders must develop and enhance individual prevention with a focus on:

- **Job placement and income –** Because loss of employment is the leading cause of homelessness, employment and re-establishment of income is the most important means of paying for a mortgage or rent. Job history and skill sets must be identified and determined. However, this must be offset through barrier mitigation, especially with respect to work history, the expense or lack of transportation, the need for proper clothing, lack of communication, or criminal convictions. In addition, the City and its stakeholders must work directly with DETR, private employers, and local businesses to hire individuals, and increase the number of those who are willing to become "second chance employers."

- **Workforce Development -** While timing may be an important factor for individuals with situations that are dire, where possible and most applicable, placement in workforce development programs, such as through Workforce Connections and other programs can enable an individual to develop new skills, provided that they translate into a job that provides adequate income.

- **Basic Temporary Financial Support -** As a last resort or supplemental means, direct financial support is proven to avoid, defer, or delay housing loss. Increasing the accessibility to federal and state public assistance and benefits programs can reduce individual household budgetary stress for other cost of living expenses, most directly through:

  - Short or medium term housing support, including subsidizedm bridge, transitional, or rapid-rehousing
  - Supplemental Security Income and Social Security Disability Insurance
  - SNAP, TANF, and Medicaid
  - RTC Transit passes for basic transportation needs

Through income replacement and enhancement, housing stability can be attained and homelessness prevented. These efforts must often be delivered quickly and efficiently. To the extent possible, as an individual or family is evaluated, applying preventative assistance rapidly will help avoid further disruptions to their life.

FOR THOSE EXPERIENCING HOMELESSNESS, THE CITY AND OTHER CORRIDOR OF HOPE STAKEHOLDERS AND SERVICE PROVIDERS MUST CONTINUE TO PLAY AN INTERVENTION ROLE, SERVE AS A BASIC TEMPORARY RESOURCE, AND PROVIDE A PATHWAY OUT OF HOMELESSNESS

Prevention and diversion measures may not always be successful for some individuals and circumstances. For other cases, transience and other untracked or new circumstances may result; whatever these cases may be, the provision of a short-term shelter option represents the City's most direct effort to intervene in homelessness in which the City and service have been assisting in getting homeless off the streets and into housing.

The Courtyard Homeless Resources Center is an innovative one-stop shop with access to medical, housing and employment services through a variety partners. As an emergency resource center, it has low-barrier, 24-hour access with few or no access requirements. Its services have helped connect individuals experiencing homelessness with intervention services including:

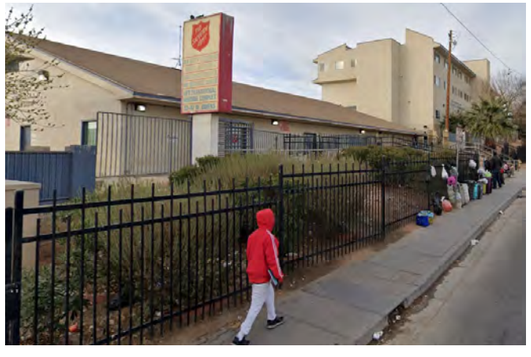
- Availability for clean, sanitary temporary shelter, including bathroom and shower access
- Laundry facilities
- A clinic with health services that provides basic medical care, screenings and service, including options to intervene and treat substance abuse and mental health
- Short-term storage of small items

- Housing, legal, income and benefit assistance
- Connecting families with child care.
- Employment information and workforce development opportunities.

Modeled after other successfully implemented short-term shelters, the initial phase of the Courtyard opened in 2017 with several expansions anticipated to be completed in 2021. Upon completion, the Courtyard will contain an intake center, new buildings with classrooms, shower and restroom facilities, and case management areas for service providers to assist homeless individuals. The Courtyard also will feature a kitchen, mailboxes and a pet kennel. Other emergency shelters are also located within the Corridor of Hope. Approximately 2,000 beds are available for men, women, and families within this area, some of which may have minimum conditions, such as sobriety. Other non-profit and faith-based service agencies also provide a similar array of supportive services, some of which may be specialized or adapted to a specific mission, need, or focus.

The Courtyard has helped fill an existing service gap for homeless individuals around Downtown Las Vegas. By offering a place for consolidated service delivery, it serves as a "safe zone" where homeless individuals and families can seek respite during the day, and rely on a safe, location to spend the night. While these improvements have been incremental and may be too soon to tell their efficacy, the general framework for providing basic temporary resources, and provide a pathway out of homelessness must be to:

- Increase access to basic need, food, clothing, and shelter, including the overall utilization of the Courtyard Homeless Resource Center
- Continue providing and increase basic medical and mental health care services, as well create, develop, and expand a medical respite and recuperation program
- Coordinate the daytime use of overnight emergency shelters, monitor emergency shelter capacity and look for any emerging trends on the rate of homelessness, especially during periods of extreme heat or cold.
- Over time, reduce dependency on temporary services by decreasing the amount and frequency of users of these services.



The chronically homeless, individuals that have experienced homelessness for at least a year, repeatedly, or have a disabling condition, may present an additional dimension to the overall challenge homelessness. Recent counts have indicated the number of chronically homeless individuals has been increasing over time, with more than 600 chronically homeless on City streets and a quarter living unsheltered. More than half of the chronically homeless have some form of mental illness, while forty percent suffer from a physical or medical condition. Five percent are found to suffer substance abuse.

While the City's MORE team has provided effective intervention efforts, but a share of the total population may not be willing or able to undergo any form of rehabilitation or desire assistance. However, it is important for the City and community stakeholders and service providers to make reasonable attempts are those individuals. For the chronically homeless and individuals that present more complex problems, treat and address each unique case with measured approaches.

FOR THOSE THAT HAVE LOST A HOME, OR ARE AT RISK OF LOSING A HOME, THE CITY MUST EMPLOY A "HOUSING FIRST" APPROACH TO QUICKLY AND EFFICIENTLY RE-HOUSE INDIVIDUALS

"Housing First" is a strategy to be used for those that have been assessed to be ready for a form of housing immediately, often with few or no preconditions or barriers. Using a robust case management system, Housing First prioritizes individuals and families with the greatest needs and vulnerabilities, and does to in a way that engages the owners of affordable housing. Unfortunately, there is an urgent need for these housing types, especially because of its short supply in Southern Nevada, and because of the number of "extremely low income" households below 30% of AMI.

There are several types of this special subset of affordable housing specifically dedicated and aligned for these populations, with only xxx of these housing types existing within the City from a handful of landlords and service providers:

- **Bridge housing:** provides immediate safe, temporary housing for those awaiting placement, typically no longer than 90 days.
- **Transitional housing:** is temporary supportive housing that bridges the gap from homelessness to permanent housing by offering structure, supervision, support for those with substance abuse, addictions or and mental health issues, life skills, education, job training, and/or workforce development. An important component is to ensure self-sufficiency is maintained while appropriate support and oversight is provided
- **Rapid re-housing:** is a form of housing designed to help individuals and families exit homelessness and return to permanent housing in the form of short or medium term rental assistance to achive and maintain housing stability
- **Permanent Supportive housing:** housing that combines independent living and non-time-limited affordable housing assistance with supportive services. This represents the largest type used to re-house individuals in Las Vegas.

Because of the high demand for permanent supportive housing and rapid re-housing coupled with low supply, a dynamic shortage of these housing types exists. Coupled with the overall lack of affordable and low-income housing in Las Vegas, this remains one of the top challenges in finding places for people to live. While the overall quantity of these types are needed to assist individuals acclimate and transition, these housing types must be dispersed throughout the community at locations that have access to the On Board High Capacity Transit System, substantially subsidized, but close enough for an individual or family to easily access employment, basic services and assistance, and medical care, as needed. Where possible, these dedicated affordable units must be integrated with other dwelling units to provide a mix of incomes.

The City must also continue to work on regional efforts that preserve existing affordable housing inventory and ensure new developments include affordable housing units, as described in both the Housing goal and the Land Use Chapter of this plan. As authorized by the City Charter, it must also make direct investments in these types of affordable housing, contract for the provision of housing, and as necessary, integrate dispersed affordable housing into new developments through zoning requirements, and request and make specific legislative and policy changes to enable Housing First development intended for homeless individuals and families.

THE CITY MUST WORK TO EDUCATE THE COMMUNITY ON HOMELESSNESS ISSUES WHILE ALSO MITIGATING THE NEGATIVE EFFECT OF HOMELESSNESS ON THE BUILT ENVIRONMENT

While homelessness can be both visible and invisible, the visible effects are what are most noticed. The MORE Team has noted that over time, a wider spread of homelessness and more calls for service to areas outside of the urban core, including suburban planning areas. Unfortunately, the effects, no matter there location have also had the effect of creating blighting conditions and safety concerns. Nowhere is this more pronounced than Downtown Las Vegas and throughout the Corridor of Hope, where the concentrating services, which are predictable and accessible by the population, has also meant a disproportionate share of homelessness conditions, services, and costs fall to the City.

These public concerns are those that cannot simply be ignored, as the ill effects of homelessness, whether loitering, panhandling, or encampments, can infringe

THE MORE TEAM

Calls for service involving the homeless often go to law enforcement for services. However, unless an actual emergency exists or a serious crime has been committed, law enforcement should not be utilized. The MORE Team is an alternative structure established so that homeless calls for service can be accepted, contact made, and transport of individuals offered. Attempts to avoid and reduce incarceration – and instead rely upon the dedicated services for the homeless, provided at the Courtyard and by other Corridor of Hope service providers – must be a best practice communicated to the public. While the MORE team does incorporate public safety officers, this unit frees up resources so LVMPD, Fire and Rescue, paramedics, or other first responders don't need to.

upon the rights of others, create nuisances, and lead to additional costs borne on the City. The City's Department of Operations and Maintenance have had to apply additional resources within Downtown Las Vegas and the Corridor of Hope to ensure waste was cleaned up and unsanitary and unhealthy conditions within City streets are properly removed. Should no action be taken by the City, problem areas could be exacerbated, leading to additional blighting conditions, increased waste from food, and the creation of spillover effects into surrounding neighborhoods.

Ultimately, proactive work to address these issues will help keep places clean and safe and positively influence property values. While some encampment clearance and right of way maintenance may be warranted and necessary, it must be done in a responsible, well-coordinated manner, with the MORE Team and other Corridor of Hope stakeholders and done so individuals can access services at the Courtyard Homeless Resources center and other service providers. It is necessary to carefully balance a reasonable concentration of services and affordable housing in Downtown Las Vegas, but at the same time, the City must continue to investigate dispersing resources and affordable housing to other areas of potential need, without creating ill effects in new areas. The City must in turn continue to work with the County, North Las Vegas, and Henderson on their respective solutions, which must incorporate an effort at geographic dispersal, especially so the City doesn't become a sole receiving source for all other regional homeless issues.

Finally, a key to ending homelessness in the City must include a component that educates and engages the community that provides general information on how the public can provide direct help. A structured program can help place donations, volunteers, and funding where they are needed most. The City has previously provided numerous features through the Office of Community Services and Communications. In the future, it must also implement a recognized and unified initiative to raise awareness and build support for people experiencing homelessness, so the unique problems facing these individuals and families are better understood.

THE CITY LACKS RESOURCES TO ADDRESS HOMELESSNESS ALONE

Because homelessness is widely recognized as a problem that must be addressed and the need for resources so great, fundraising, donations, and charitable contributions are a typical stream and source of revenue for basic service provision. These sources must continue to be developed and emphasized, especially amongst philanthropic giving. However, because giving has its limits, may be cyclical, and may have restrictions on use, other resources and funding must be relied upon and leveraged. Efforts to implement additional elements of are constrained by financial resources. Housing First strategies require significant capital and operational investments and current resources have not been sufficient to meet the all demanded needs.

Like many municipalities, the City has worked to expand homelessness programs to address growing demands for services. Over time, the City has increased dedicated resources to increase the capacity of its Office of Community Services to address homelessness head on. The Courtyard project itself represents a more than $20 million investment in new infrastructure and operating costs. However, it is clear that current Federal, state, and local funding sources are inadequate.

Although several funding streams contribute to homeless assistance programs in the city, more are required beyond the City's General Fund Budget and Capital Improvement Budget. Finding sources of sustainable funding will continue to be a major barrier. The city will expand on its current funding resources and collaborate with stakeholders to leverage resources and sources of funding by:

- Applying for state, pass-through, and Federal funding and grants from HUD, VA, Community Development Block Grant, VA, and other supportive grant funding sources that can be leveraged with privately funded monies, and city resources. This should be done in a coordinated manner or jointly through the Help Hope Home as the region's Continuum of Care, but where programs include local government involvement, the City can play a role in obtaining these funds

- Request from the Legislature general statutory laws or new enabling power to commit a dedicated source of funds to address homelessness. Because many funding sources may have constraints, flexibility is necessary to allow funding sources to be transferred, prioritized, and better used to meet needs. The ability to apply CDBG, RDA funding, and toward a newly created "End Homelessness" fund that could accomplish those strategies would provided latitude toward aligning money were it is needed and best spent.

- Pursue alternative or initiate new innovative funding sources to support the development of affordable/ homeless housing. The Mayor's Fund for LAS Vegas LIFE is an example of an effort to apply philanthropic funding toward dedicated projects or issues, such as the Courtyard.

IMPLEMENTATION STRATEGIES

- Adopt and annually evaluate the City's Homeless Strategic Plan designed to guarantee that basic needs are met in the community and ensure it is in alignment with Help Hope Home, the Southern Nevada Continuum of Care and other regional efforts
    - Formally lead, centralize, and brand the City's coordinated response to homelessness
    - Monitor and evaluate the quality, comprehensiveness, and effectiveness of homeless services
    - Empower the Homelessness Advisory Committee and subcommittee as a working group to provide ongoing consultation with City departments and agencies responsible for providing services
    - Equip the MORE team and human services personnel with additional resources, skills, and training to effectively improve the well-being of vulnerable populations and communicate resources to the homeless population in coordination with non-governmental service providers
    - Deploy a coordinated entry and assessment program to better understand who's homeless and why
    - Implement case management to improve client support services and management
    - Share data and meet regularly with service providers
- Employ direct homelessness prevention measures and a "Housing First" strategy to quickly and efficiently serve at-risk or homeless individuals
    - Build, construct, contract for, incentivize or require bridge, transitional and rapid re-housing units
    - Implement the recommended affordable housing strategies enumerated within the Housing goal and the Land Use Chapter of this plan
    - Disperse new affordable housing units in or near new TOD place types to provide access to employment, basic services and assistance, and medical care,
    - Preserve existing affordable housing inventory and ensure no net loss of affordable or very affordable subsidized units
- Provide intervention services, to serve as a basic temporary resource and provide a pathway out of homelessness
    - Continue to monitor and coordinate daytime and overnight use of the Courtyard and other regional emergency shelters
    - Complete construction and build out of the Courtyard Homeless Resources Center
    - Provide dedicated temporary homeless services, including Job and income replacement programs, connections to workforce development, and connections to basic temporary financial support
    - Increase the number of volunteers and donation of resources of basic needs
    - Hire and provide basic medical and mental health care services,
    - Develop and expand a medical respite and recuperation program
- Develop sustainable funding streams and resources that can be leveraged and applied to combatting homelessness
    - Dedicate a grant writer or coordinator to apply for state, pass-through, and Federal funding and grants coordinated manner or jointly through the the Continuum of Care
    - As part of a larger Legislative package, request general laws or new enabling powers within the City Charter governing homelessness, with the ability to dedicate funding streams and the provision of additional dedicated incentives and tax credits for affordable housing
    - Create a flexible "End Homelessness" fund
    - Pursue alternative or initiate new innovative funding sources
- Educate the community and homeless individuals and families on homelessness issues while thoughtfully mitigating impacts of homelessness on the community
    - Establish and support programming and events that inform residents of available human services and connect vulnerable community members to available programs or services
    - Review and amend LVMC and city policies that directly affect the homeless population
    - Ensure waste, unsanitary, and unhealthy conditions within City streets and City property are properly abated
    - When warranted, clear encampments and remove unsafe conditions using a transparent, well-coordinated approach using the MORE Team and other Corridor of Hope stakeholders



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A. Complete Streets

B. Transit

C. Smart Systems

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B. Energy

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III. PUBLIC FACILITIES AND SERVICES 4-80

A. Public Facilities

B. Public Health and Social Services

IV. SAFETY 4-104

A. Public Safety

B. Hazards

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D. Heat Mitigation

04. SYSTEMS & SERVICES

INTRODUCTION

Physical infrastructure and public service systems are essential for the sustainability and resilience of Las Vegas. Considering the increase in population that is projected to come into Las Vegas by 2050, it is important to ensure that the physical and social networks that act as the foundation of the built environment are as flexible and innovative as possible. It is important to Las Vegas residents that infrastructure not only provide consistent and reliable services to citizens, but that it also be responsive to changing conditions like extreme weather events. As such, this plan recommends that the City move towards more localized, flexible infrastructure development.

Las Vegas has a good start, but more intentionally connecting the City's smart aspirations with conservation goals could help to better decouple development from resource-intensive growth, and also create jobs.

Considering renewable energy options in Las Vegas for new construction will be important, but so is addressing how current buildings and places consume energy.

Reconceptualizing the very definition of what constitutes infrastructure will also help position Las Vegas as a leader in resilience. For instance, streets can (and will) be ideal intersections of where mobility and ecological integration happens. Las Vegas must diversify its mobility offerings for 2050. At the same time, Las Vegas residents want to be able to make smaller, easier trips across their neighborhoods.

Not only must Las Vegas focus on resource conservation for 2050, it must focus on providing superior public facilities and services to make it a healthy, livable, and safe city. Mitigating natural hazards that impact the entire Southern Nevada region with high quality public safety and health services by leveraging existing institutions will elevate Las Vegas in the future.

GOALS

I. TRANSPORTATION

A. Connect and enhance accessible bike and pedestrian facilities as part of a safe, efficient complete street and road network that moves people and goods.

B. Make seamless transit options more convenient and better integrated with vibrant neighborhood and employment centers, better connecting people to their destinations.

C. Strengthen smart transportation systems and infrastructure to foster economic development efforts.

II. RESOURCE CONSERVATION

A. Support efficient water management, reduce water consumption, and enact stronger water conservation strategies to minimize consumptive use

B. Prioritize the use of renewable energy sources and improve energy efficiency.

C. Reduce waste consumption and target net-zero municipal solid waste produced in the community.

D. Mitigate and reduce municipal and community greenhouse gas emissions.

III. PUBLIC FACILITIES AND SERVICES

A. Provide equitable access to facilities and services that help meet residents' social needs, maximize their potential for development and enhance community wellbeing.

B. Ensure healthy outcomes for all members of the community.

IV. SAFETY

A. Provide high quality emergency services, reduce crime and create safe, friendly communities that elevate social equity.

B. Strengthen resilience to climate change risks, natural and man-made hazards, and extreme events.

C. Minimize flooding risks to prevent damage to property and infrastructure

D. Provide access to public drinking water and cooling spaces and ensure adequate standards for building cooling and shading across all areas of the city

RELATION TO SOUTHERN NEVADA STRONG
INCREASE TRANSPORTATION CHOICE

Goals focus on developing a world-class transportation system and coordinating future transit investments with urban development

1. Developing a modern transit system that is integrated with vibrant neighborhood and employment centers, better connecting people to their destinations.

2. Connecting and enhancing bike and pedestrian facilities throughout the region.

3. Developing a safe, efficient road network that supports all transportation modes.

SUMMARY OF STRATEGIES BY GUIDING PRINCIPLE

EQUITABLE

- Emphasize seamless multi-modal transportation choice
- Prioritize capital improvements across planning areas
- Create Internet access for all
- Emphasize access/proximity to work, social services and transportation options
- Prioritize fair pricing of utilities and infrastructure as portion of income
- Train for smart jobs
- Integrate recycling for low-income areas
- Keep energy affordable even during growth

RESILIENT

- Reduce emissions
- Develop emergency evacuation plans
- Diversify energy sources
- Prioritize infrastructure maintenance
- Plan for future transportation technology
- Prioritize flood management
- Improve emergency services
- Create smart grids to ensure flexible and responsive infrastructure
- Reduce stress on landfills
- Integrate building control technologies
- Expand public cooling spaces

HEALTHY

- Incentivize walking and biking
- Utilize preventative Public Safety
- Prioritize mental health and wellness
- Improve air quality
- Develop reliable power, heating, and transport
- Empower smart decision-making
- Utilize electric vehicles reduce emissions
- Keep the desert deserted
- Transition to a low-carbon future
- Monitor and track energy and waste programs
- Increase access to public drinking water and cooling spaces

LIVEABLE

- Provide seamless transportation choices
- Increase parking strategies
- Strengthen connections to cultural destinations
- Provide public WiFi in the downtown/ public areas
- Ensure affordable utilities with competitive rates, when possible
- Track and monitor consumption choices
- Increase access
- Ensure reliable utilies for economic development
- Improve recycling and reduce waste stress
- Improve everyday public spaces with shade

INNOVATIVE

- Emphasize innovation and deployment of advanced technologies
- Continue to develop connected, autonomous vehicle infrastructure and unmanned aerial vehicles
- Improve Internet access speeds and capacity for business and industry
- Increase partnerships with private sector tech and transportation
- Create new innovation centers and districts
- Convert ethane to biogas
- Reuse waste-water to reduce water stress
- Embrace ecodistricts

TRANSPORTATION

GOALS

A. Connect and enhance accessible bike and pedestrian facilities as part of a safe, efficient complete street and highway network that moves people and goods.

B. Make transit options more convenient and better integrated with vibrant neighborhood and employment centers, better connecting people to their destinations.

C. Strengthen smart transportation systems and infrastructure to foster economic development efforts.



I.A TRANSPORTATION: COMPLETE STREETS

☑ NRS 278.160.1(h)(1) and (3)

CONNECT AND ENHANCE ACCESSIBLE BIKE AND PEDESTRIAN FACILITIES AS PART OF A SAFE, EFFICIENT COMPLETE STREET AND HIGHWAY NETWORK THAT MOVES PEOPLE AND GOODS

Over the coming decades, transportation will continue to be a driving force for how Las Vegas grows as a region. Transportation impacts land use decisions, community air quality, and has significant implications for the environment as it accounts for approximately thirty percent of the total U.S. emissions. This includes the movements of goods through and within the city, residents to employment, education, health care, and daily needs, and visitors to resorts and attractions.

Southern Nevada's transportation network shifted away from being a rail stop to the automobile throughout the 20th Century. With nationwide construction of the US Highway System and later the Interstate Highway System, the Interstate 15 corridor helped fuel the City's growth and cemented its linkage to Southern California and to points further north and east. From Southern California, interstates and cross-country rail transportation routes connect ports on the Pacific Coast, including the intermodal Port of Los Angeles and Port of Long Beach with the interior of the country. Southern Nevada is approximately 300 miles from the ports, which receive freight shipped from across the Pacific Rim. Because Southern Nevada lacks major agriculture and heavy industry, it relies on product importation; 90% of all goods are imported globally to the region's residents and visitors. As such, disruptions to I-15, either through traffic congestion, collisions, or natural disasters, could interrupt or slow the supply chain.

The City lacks diversified transportation infrastructure that realizes all ages and abilities because of a century of policies and growth patterns focused on expanding outwards. More than 90% of commuters drive to work alone, while less than 5% bike, walk, or take public transportation. With three work shifts in the resort industry, some commutes occur during off-peak hours, but Southern Nevada retains a heavy morning and afternoon peak rush hour. Today many areas of the Valley experience traffic congestion, which in turn bears its own transportation impacts. A large portion of Las Vegas residents experience long commutes and the amount of time spent driving continues to rise. Public transit options are at the will of traffic congestion, and do not always provide enhanced travel times. Growing traffic is linked with a higher number of traffic incidents, which account for recurring traffic delays. Freight movement is burdened by congestion. The City is improving pedestrian and bicycle access, comfort, and safety on roadways that were originally built with car-centric features, but there are still many roadways lacking this balance. The 42 million tourists that visited Las Vegas rely heavily on our transportation system, with 6 out of 10 visitors arriving by car, bus, or other form of ground transportation.

LAYERED COMPLETE STREETS NETWORK

The costs of traffic congestion, including wasted time, fuel, and emissions will continue to take a toll on the community unless a layered multi-modal, complete street network is developed. Therefore, complete streets within the City of Las Vegas are streets that safely and comfortably accommodate all users, regardless of mode, age, or ability. This includes pedestrians, bicyclists, mobility devices, public transportation, carpoolers, motorcyclists, single-occupant vehicles, trucks, public safety officials, and other users of the City's streets and highways.

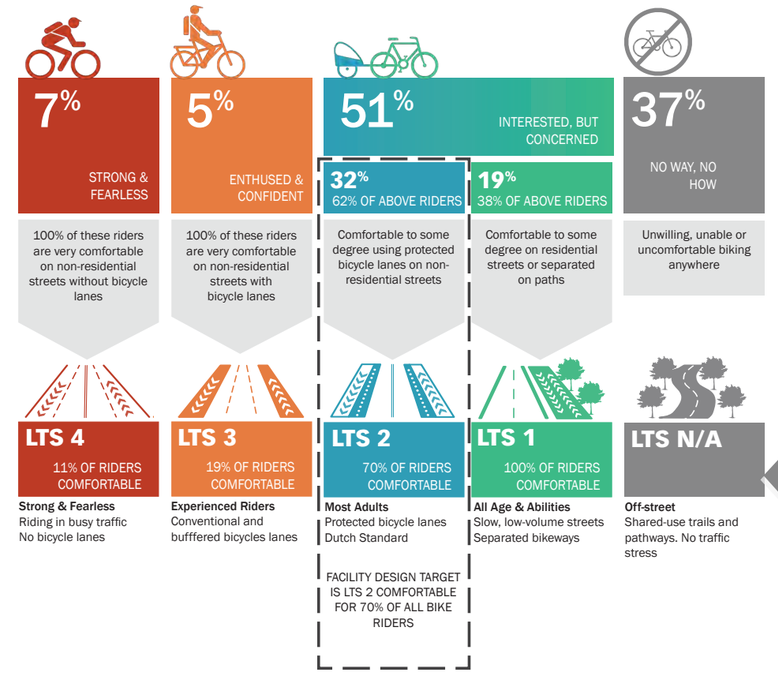
The layered complete street network will be incorporated into the City's Master Plan for Streets and Highways. With respect to design, all such streets shall be designed pursuant to Titles 11 and 19 of the Las Vegas Municipal Code and will take into account PROWAG and ADA standards to equitably accommodate disabled persons and non-motorized users of streets. At a minimum, complete streets shall includes sidewalks with amenity zones, transit stops with shelters and other passenger amenities, and bicycle facilities.

SEE ALSO

- RTC Regional Transportation Plan (RTP)
- CLV Mobility Master Plan
- Master Plan of Streets and Highways
- Chapter 2: Park Connectivity
- Regional Bicycle and Pedestrian Plan

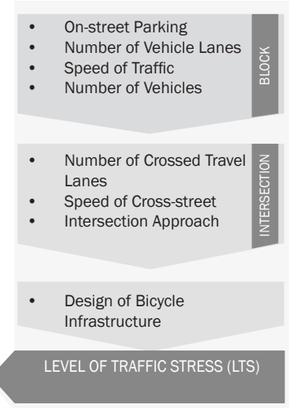
REALIZING ALL AGES & ABILITIES

Linking types of bicycle riders to level of traffic stress and facility design



BIKE RIDER TYPES AND TRAFFIC STRESS

This diagram shows the relationship between the types of bicycle riders and how their stress tolerance relates to Level of Traffic Stress (LTS) and the types of bicycle infrastructure that feels comfortable for those riders.



Source: (2016) Dill J. and McNeil N., Revisiting the Four Types of Cyclists: Findings from a National Survey, Journal of the Transportation Research Board.

OUTCOMES

- Beginning in 2025, vehicle miles traveled (VMT) within the City is reduced 0.5% annually.
- By 2050, the mode split for Drive Alone is 40%, 20% for transit, and 5% for Walking and Biking.
- By 2050, the citywide Jobs-Housing balance index is 1 - 1.25.
- By 2050, the number of pedestrian, bicyclist, and vehicular fatalities caused by road crashes is zero.
- By 2050, 100% of identified sidewalks are PROWAG compliant, 70% of identified crosswalks are marked and if on street parking is present, have curb extensions.
- Maintain a minimum "Silver" level Bicycle Friendly Community designation from the League of American Bicyclists.

KEY ACTIONS

- To reduce VMT and diversify the City's modal split, adopt the "Layered Complete Street Network" as part of the Master Plan for Streets and Highways, and construct the recommended improvements essential for traffic management, safety, and regional economic development.
- Achieve a jobs-housing balance through the adoption of TOD place types
- Infrastructure must be well maintained by properly allocating funding and resources
- Further reduce VMT, congestion, wasted time, and emissions by working with regional partners to embrace transit, TDM, TSM, carpooling, ridesharing, and other transportation solutions.

To facilitate the Layered Complete Street Network as part of its Master Plan for Streets and Highways, the city must work closely with the following entities:

- The Nevada Department of Transportation (NDOT) is responsible for planning, constructing and maintaining interstate and state highways and bridges. Among NDOT's important functions is obtaining Federal funding from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for significant transportation capital improvements through the Statewide Transportation Improvement Program (STIP). The STIP is prepared in cooperation with the state's four Metropolitan Planning Organizations (MPO) and includes the projects identified in their respective Transportation Improvement Programs (TIP).
- The Regional Transportation Commission of Southern Nevada (RTC) serves as the region's MPO and oversees public transportation, traffic management, road design, and funding. In this capacity, RTC is uniquely responsible for the administration of:
  - The Regional Transportation Plan (RTP), in which this Master Plan is intended to align with.
  - Streets and Highways funding, engineering, and capital project construction.
  - The provision of public transportation and paratransit services,
  - Transportation System Management (TSM) and Intelligent Transportation Systems (ITS), overseen by RTC's Freeway and Arterial System of Transportation (FAST). FAST monitors and manages traffic on Southern Nevada's freeways and arterials on behalf of Clark County and the cities.
  - Transportation Demand Management (TDM) Programs and incentives through "Club Ride."
- The Union Pacific Railroad (UPRR) owns and operates the sole Class I freight rail lines directly through the City of Las Vegas. Passenger rail service has yet to resume service into Las Vegas since it was discontinued in 1997.
- A variety of intracity bus services and motorcoaches operate to destinations across the region; as a low cost alternative, these services provide an important service, especially to those who may have no other means of travel available.
- The Clark County Department of Aviation operates McCarran International Airport and four other general aviation airports within Southern Nevada, including North Las Vegas Airport adjacent to the Rancho planning area. McCarran connects 150 national and international direct destinations and served 50 million passengers in 2019, making it consistently among the top ten busiest airports in the country.

Other state and local agencies are responsible for regulating transportation and ensuring public safety. They include:

- The Nevada Department of Motor Vehicles (DMV) which licenses drivers and registers vehicles
- A variety of police and traffic enforcement entities that are responsible for motorist, pedestrian and bicyclist safety, including the Nevada Highway Patrol (NHP), Las Vegas Metropolitan Police Department (LVMPD), and the Las Vegas City Marshals. Each enforce and state and local traffic laws codified through NRS 484 and Las Vegas Municipal Code Title 11 (Vehicles and Traffic).



- The Nevada Transportation Authority administers and enforces Federal and state laws on passengers, motor carriers, autonomous vehicles, freight transportation, and transportation network companies (TNC's). In Clark County, the Nevada Taxicab Authority licenses and regulates taxis.

Finally, City of Las Vegas departments also oversee different aspects of transportation:

- The Public Works Department oversees capital project and infrastructure planning, construction management, and transportation engineering and operations services. The City regulates Streets and Highways pursuant to LVMC Title 11 (Vehicles and Traffic) and Title 13 (Streets, Sidewalks, and Public Places), including a wide range of local laws like speed limits, crosswalks, speed control devices, bicycles and other mobility devices, and the City's Master Plan of Streets and Highways.
- The Department of Operations and Maintenance is responsible for the maintenance of more than 1,300 miles of city roadways, sidewalks, paths, and trails. This includes the management of pavement, street rehabilitations, street sweeping, streetlights, and traffic signals.
- The Economic and Urban Development Department's Parking Services Division is charged with operating City-owned parking facilities, parking enforcement, and permitting for the City, with direct oversight of parking management within Downtown Las Vegas.
- The Planning Department has established complete street cross-sections, right of way design, and parking standards enacted throughout Las Vegas Municipal Code Title 19. The procedure by which street names and numbered addresses are assigned has been previously

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
By developing a layered complete street network, users of all ages and abilities can move quickly and safely with choices of a variety of modes and the ability to move goods.	A layered complete street network allows for efficiency and reduced energy and fuel consumption with multi-modal transportation choices that help reduce VMT and congestion.	Active transportation modes like biking and walking and the provision of wide sidewalks, trails and bike lanes, promote healthy lifestyles and reduces vehicular emissions.	A diversity of modal choices, paired with livable urban place types that balance housing and jobs will enhance the livability of the City.	New, rapidly evolving transportation innovations play a role in developing a transportation system that provide travelers information.

A DAY IN THE LIFE

PROVIDING MORE FOR PEDESTRIANS

Abigail Irving

A native of LA, Abigail moved to Las Vegas in 2012 when she lost her vision. While she made the move for economic reasons, she hasn't regretted it. She loves the retirement complex where she lives and makes good use of the city's free, door-to-door paratransit services. The city's Blind Center of Nevada has also proven to be an excellent social and cultural hub for her. And at the time of her move the city provided mobility trainers to come to her home and work with her.

A good thing they did: "The city is extremely pedestrian-unfriendly," she says. Often, Abigail can feel the traffic whizzing by right next to her. She encounters telephone poles and even bus stops situated in the middle of already-narrow sidewalks. The sense of a lack of safety prevents her from feeling comfortable enough to use public transit.

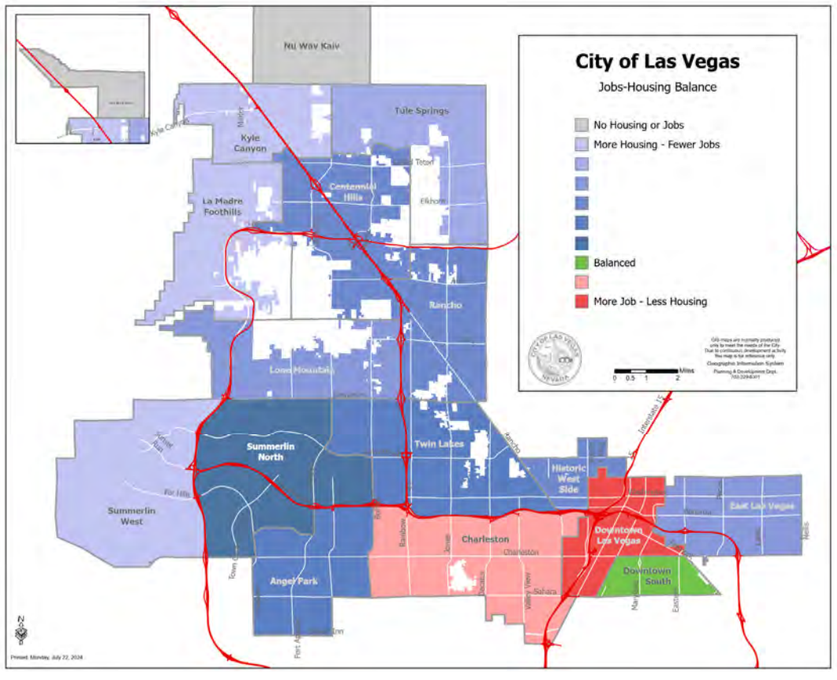
Personally, Abigail doesn't feel challenged to live a healthy life in Las Vegas. But she can imagine how others with more limited accessibility might be. And, yes, she can envision how her own lifestyle might be better.

"I'd take my dog and go walking in my neighborhood without the risk of a car jumping the sidewalk," she says.

established and is detailed in Title 19.04.050 of the Las Vegas Municipal Code as well as in the City of Las Vegas Street Naming and Address Assignment Regulations, 2009 Edition. This system utilizes the intersection of Main Street and Fremont Street as its initial point, and it has been developed through the combined effort with all other jurisdictions in the Las Vegas Valley. A procedure to change the name of any street is detailed in Title 19.16.230 of the Las Vegas Municipal Code. The City Council may approve a name change if the change is in the best interest of the public and no person will be materially injured. At the request of the property owner or developer, the City may grant the approval of an address change. However, the proposed address change must not conflict with the addressing system, unless a waiver is approved by the City Council. Property owners do not have vested rights to street names and numbers, even if the address has been used for many years. When the City finds inconsistencies, and the Director of Planning or designee determines a correction is needed, the property owner will be notified that a change may occur.

In addition to this Master Plan, the City's Mobility Master Plan serves as a detailed blueprint for mobility infrastructure within the city boundary. It is the result of a planning process led by the Department of Public Works, and lays out a total of $3.2 billion of transportation investments.

SEE ALSO CHAPTER 2
Areas of the City
Park Connectivity



LAYERED COMPLETE STREET NETWORK

TRAILS

- **Regional Trails:** Major regional trailways and greenways for pedestrians and bicyclists that have minimal street crossings, grade-separated overcrossing or undercrossings, and dedicated rights of way, sometimes sharing space with a major freeway, highway, utility corridor, or regional flood control facility
- **Shared-use Trails:** Varied wide and improved sidewalks that accommodate major pedestrian (or bicycle) movement and feature diverse public amenities, especially trees, bike racks and bike infrastructure:
  - Pedestrian Malls and Plazas: Exclusive pedestrian zones (such as Fremont Street Experience)
  - Urban Paths: Marked and designated routes, especially within Downtown Las Vegas
  - Shared Use Paths: Paved paths and trails shared by bicyclists and pedestrians
  - Equestrian Trails: specifically dedicated for horse-use using different materials, but can also be utilized by hikers and pedestrians

BIKE STREETS

- **Separated Bike Lanes and cycletracks**: Bicycle facilities that provide physical barriers, two-way configurations or dedicated space separated from roadways
- **Buffered Bike Lanes**: Higher priority marked on-street bike facilities providing three-feet of dedicated space for bicyclists to ensure safe movement
- **Bike Lanes**: Marked on-street facilities providing minimum dedicated space for bicyclists

STREETS, TRANSIT, AND FREEWAYS

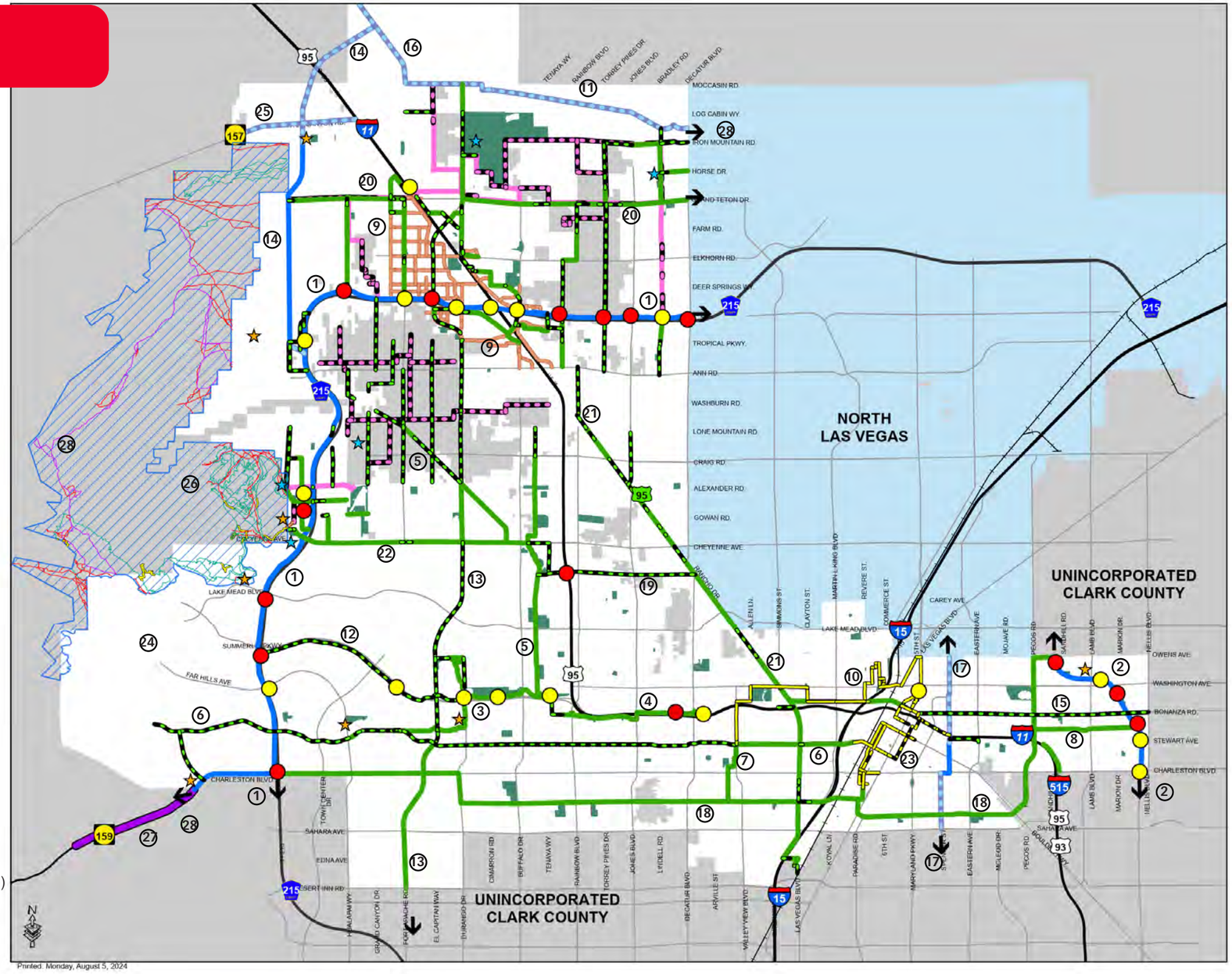
- **Local Streets**: Low speed bike and pedestrian friendly neighborhood streets that allow residents different alternatives
- **Collector Streets** (As Identified in the Master Plan for Streets and Highways): Lower speed streets that distribute cars, bikes, and pedestrians between arterials and neighborhoods. Access to adjacent land uses has lower levels of management and intersections between collectors have passive controls such as roundabouts. Some of these facilities may have overlaps with the network of Bike Streets.
- **Transit Streets** (as identified in the On Board Mobility Plan): Major and Minor arterial corridors that include mixed-use corridors that connect Regional Centers with other transit-oriented development and neighborhood mixed-use centers, each repurposed to move high volumes of people in-lieu of cars. LRT and BRT corridors feature center-running transitways in dedicated lanes, while Rapid Bus corridors allow for limited-stop service at key intersections. Intersections prioritize transit service.
- **Major and Minor Arterials** (As Identified in the Master Plan for Streets and Highways): Higher speed boulevards and roadways whose purpose is to move large volumes of traffic, local or rapid bus transit. Designated arterials also serve as truck routes to facilitate the distribution of freight. Special protections are included for bicyclists and pedestrians to ensure their safety and ability to cross streets at major intersections. Intersections between arterials feature signal protected turning movements, as warranted. Access to adjacent land uses has higher levels of management.
- **Freeways and Highways**: Limited access facilities or major state highways whose purpose is to move interstate, intrastate, and regional traffic, freight, and express transit over longer distances; can accommodate ridesharing and carpooling with an integrated HOV network that incorporates direct access interchanges.

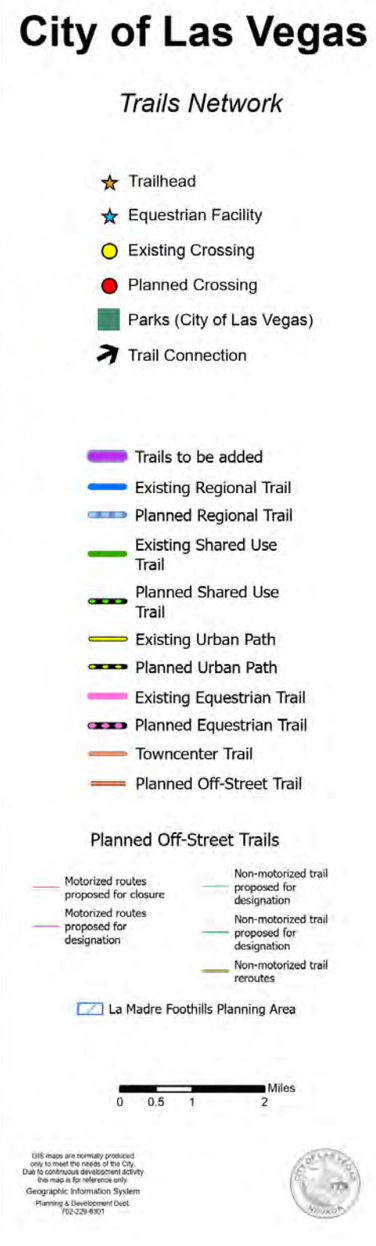
EXISTING & PLANNED TRAILS

SEE ALSO
Chapter 2: Park Connectivity
Chapter 5: Action Plan

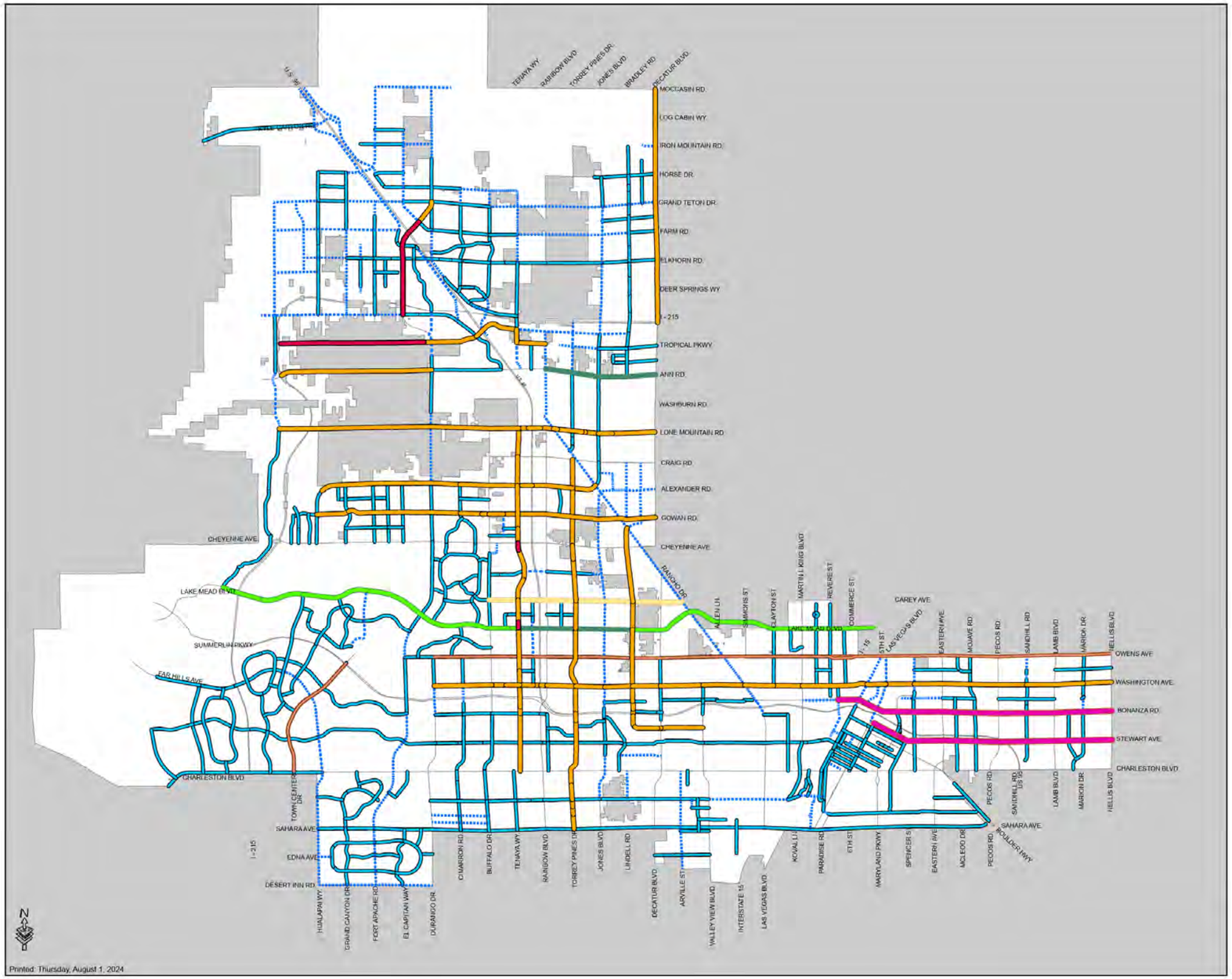
1. Beltway Regional Trail
2. Las Vegas Wash Regional Trail
3. Angel Park Trail
4. Bonanza Trail
5. Lone Mountain Trail (Area trails)
6. Downtown-Red Rock (Alta) Trail
7. Springs Preserve Connector
8. Cedar Trail
9. Centennial Hills-Town Center Trails
10. Pioneer Trail
11. Upper Las Vegas Wash Trail
12. Summerlin Pkwy Trail
13. Durango-Fort Apache Trail
14. La Madre Foothills Trail
15. Bonanza Rd "Grand Paseo"
16. Las Vegas-Tonopah Railroad Trail
17. Bruce-Spencer Greenway
18. Oakey-St Louis Trail
19. Peak Trail
20. Grand Teton Trail
21. Rancho Trail
22. Cheyenne Trail
23. Downtown Trails
24. Summerlin Trails
25. Yucca to Bristlecone Trail
26. La Madre Foothills Trail system
27. Red Rock Legacy Trail
28. Las Vegas Valley Rim Trail

Trail bridges and crossings (citywide)





EXISTING & PLANNED BIKE STREETS



City of Las Vegas

Planned Bike Streets Map

Legend

Current Bike Streets

Classification

- EXISTING
- PROPOSED

2050 Master Plan Bike Street Updates

Classification

- Bike Lane
- Planned Bike Lane
- NEW Planned Bike Lane
- Existing Buffered Bike Lane
- Planned Buffered Bike Lane
- NEW Planned Buffered Bike Lane
- NEW Planned Cycletrack

Miles
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GIS maps are normally produced only to meet the needs of the City. Due to continuous development activity this map is for reference only.

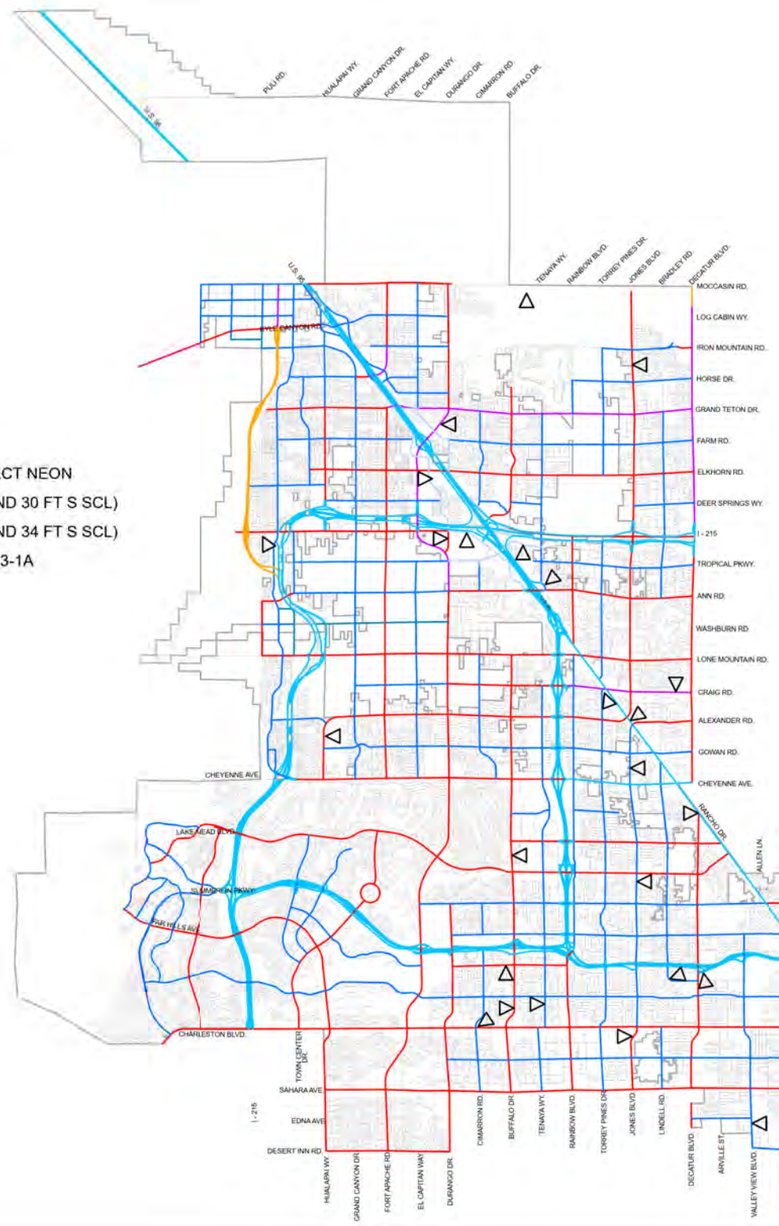
Geographic Information System
Planning & Development Dept.
702-229-6301

CITY OF LAS VEGAS PLANNED STREETS & HIGHWAYS

City of Las Vegas
Planned Streets and Highways

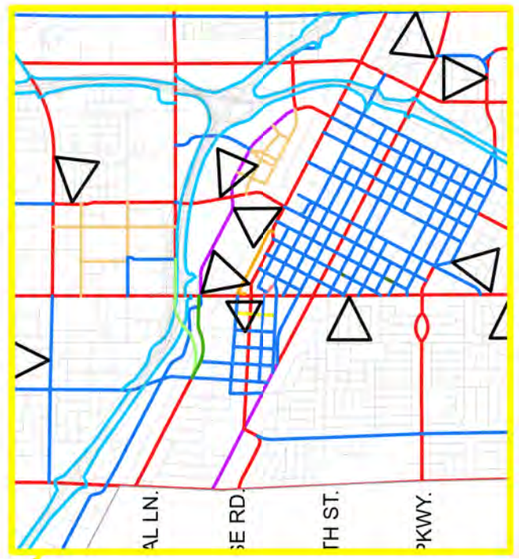
Street Classification

- Primary Arterial (120 ft)
- Primary Arterial (100 ft)
- Collector (40 ft)
- Collector (45 ft)
- Collector (60 ft)
- Collector (80 ft)
- Frontage Streets (70 ft)
- Freeway - Proposed
- Freeway / Expressway (150 ft. +)
- Special Design Road - NDOT's PROJECT NEON
- Special Design Road (40 FT N SCL AND 30 FT S SCL)
- Special Design Road (40 FT N SCL AND 34 FT S SCL)
- Special Design Road - See Schedule 13-1A



Las Vegas Blvd. ROW Widths

	ROW	W/E
Bonanza Rd. to Owens Ave.	100'	50'/50'
Mesquite Ave. to Bonanza Rd.	100'	55'/45'
Stewart Ave. to Mesquite Ave.	Transition	45' to 55' / 45'
Charleston Blvd. to Stewart Ave.	90'	45'/45'
4th Street to Charleston Blvd.	100'	50'/50'
Sahara to 4th Street	120'	60'/60'



Right-of-way widths shown are minimums
Additional rights-of-way at major intersections
shall also be required in accordance with
Standard Drawings # 201.1 and # 234.1-2.

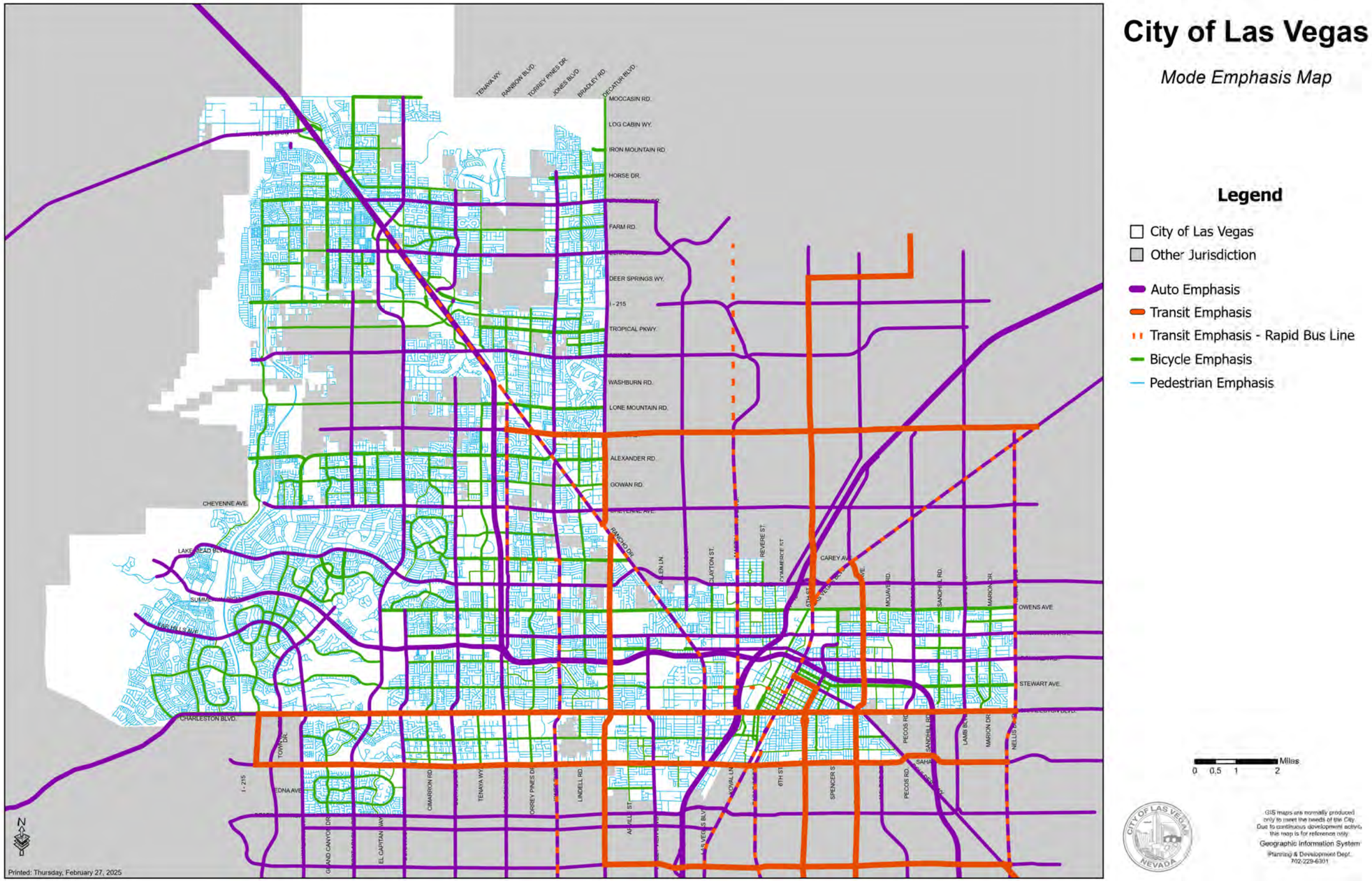
SOURCE: City of Las Vegas, Department of Planning

GIS maps are normally produced
only to meet the needs of the City.
Due to continuous development activity
this map is for reference only.

Geographic Information System
Department of Planning
702-229-6301

Printed: Wednesday, March 5, 2025

LAYERED COMPLETE STREET MODE EMPHASIS



City of Las Vegas

Mode Emphasis Map

Legend

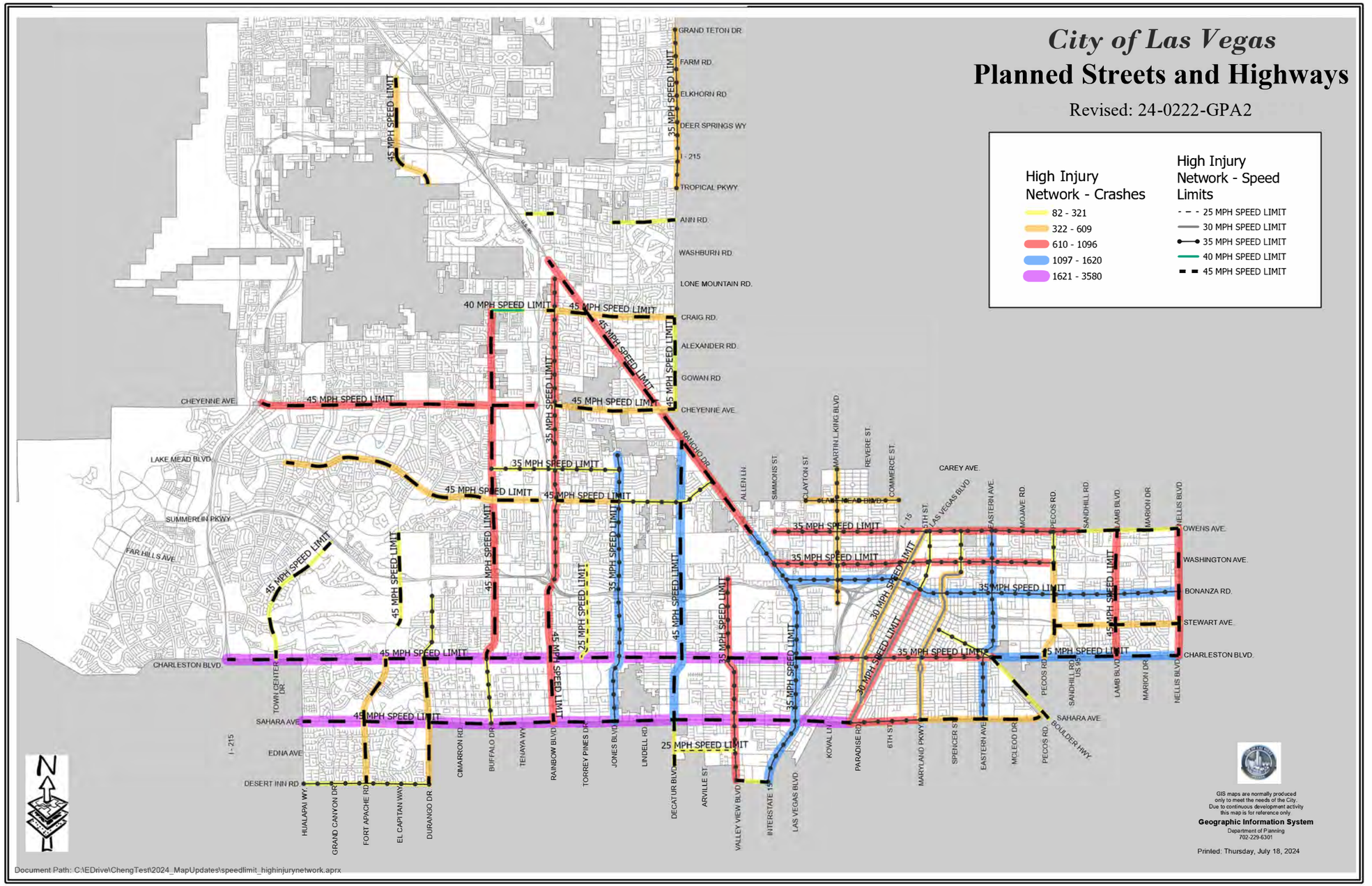
- City of Las Vegas
- Other Jurisdiction
- Auto Emphasis
- Transit Emphasis
- Transit Emphasis - Rapid Bus Line
- Bicycle Emphasis
- Pedestrian Emphasis

0 0.5 1 2 Miles

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Geographic Information System
Planning & Development Dept.
702-229-6301

SPEED LIMIT & HIGH INJURY NETWORK MAP

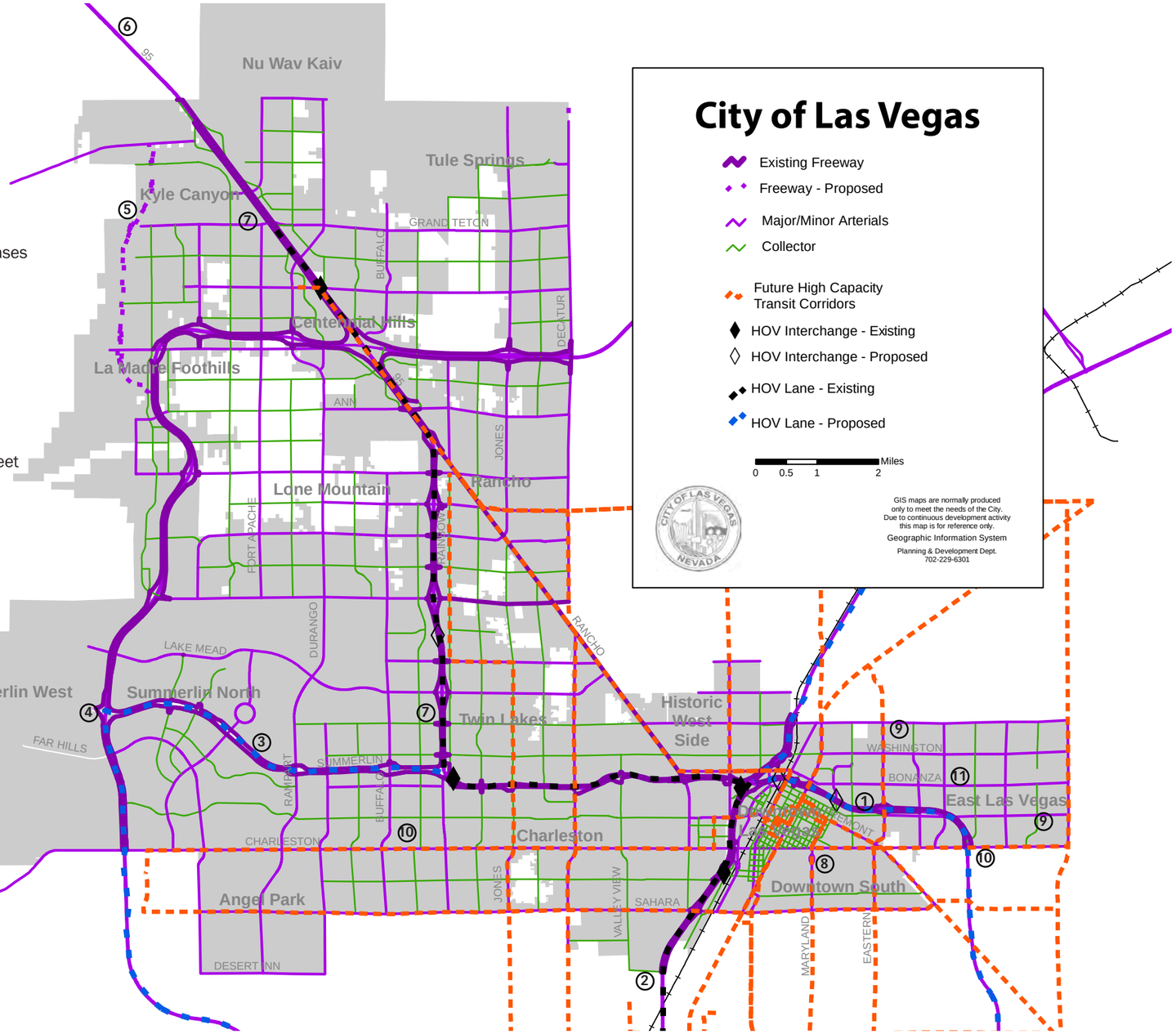


STREETS, TRANSIT, AND FREEWAYS MAP

SEE ALSO

Chapter 5: Action Plan - complete table of street, transit freeway projects

1. I-11 improvement project
2. I-15 - Flamingo / Future Project Neon phases
3. Summerlin Pkwy improvements
4. Summerlin-215 interchange
5. La Madre Foothills Pkwy
6. Interstate 11 completion
7. I-11 overpass completions
8. Maryland Pkwy high capacity transit
9. East Las Vegas complete streets
10. Charleston high capacity transit
11. Bonanza Rd “Grand Paseo” complete street



Printed: Thursday, September 10, 2020

THE CITY'S MODAL SPLIT MUST CHANGE DRAMATICALLY OVER THE NEXT THIRTY YEARS TO REDUCE CONGESTION, IMPROVE AIR QUALITY, AND REDUCE EMISSIONS

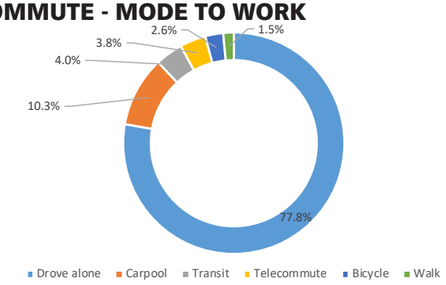
Like most cities in the United States, Southern Nevada residents use solo personal vehicles as the primary mode of choice to commute and for smaller trips. Two-thirds of Las Vegas residents commute into the center of the Valley to Downtown Las Vegas and the Resort Corridor for work each day.

Within Clark County, there are approximately 7,300 miles of streets and highways; together with the resident population and tourists, more than 18.77 billion miles were travelled in 2018. Of that street and highway system, the City of Las Vegas is responsible for 1,370 miles. This abundance of road supply, coupled with historic usage factors and fueled by rapid population growth have been the perfect recipe for all of the negative effects of automobile use. Simply put, street and highway transportation by private automobile alone is not sustainable in terms of economics, the environment, or in terms of equity.

Several factors explain why the car is Las Vegas's mode of choice:

- As Southern Nevada rapidly grew over time, its arterial roadway network followed the north-south and east-west grid system that follows the township and range lines of the Public Land Survey System. The car was the only mode of transportation, and as such, influenced development patterns outside of Downtown Las Vegas throughout the latter half of the 20th century.
- Vehicle ownership data reflects the necessity of a car in Las Vegas, for which a typical resident owns approximately 2 per household.

COMMUTE - MODE TO WORK



Source: City of Las Vegas, ACS Estimates

- Approximately 6% of residents use some form of alternative transportation. For the decades prior to RTC forming and taking ownership of public transit, the provision of bus service in Las Vegas was poor, even with a small, relatively compact service area. Choice ridership, therefore, is considerably low. Lower income residents (that are less likely to own a vehicle) and those living within the urban core are more likely to take public transportation, bike, or walk. For example, within Downtown Las Vegas, 16.8% of people take public transportation and 12.2% use it in West Las Vegas.

Southern Nevada does have higher residential densities and is a well connected city in terms of roadway infrastructure; 16% of people live within a 15 minute travel time of their place of employment (compared to 25% nationally), while nearly half of the City's residents live within a 30-minute travel window, compared to only 36% of people nationwide. However, the largest and most noticeable effect felt by commuters is traffic congestion. Most major street and highway routes experience some form of congestion, but the median Las Vegas commute to work is 25 minutes. Still, the number of trips by car on city roadways has continued to steadily increase, with many streets and highways reaching Level of Service (LOS) "D" "E" and "F" during peak commuting times. This represents thousands of hours wasted, lost economic output, and reduced productivity. Even as vehicle fuel efficiency has increased, the impact on vehicle based emissions and air quality has been detrimental.

To accommodate new residents, some improvements to the freeway system and street network may be necessary to move people conveniently and safely. While there is a need to increase transportation infrastructure capacity to serve future growth, the focus must be on increasing transportation choices. As noted in this goal and the City's Mobility Master Plan, streets and highways cannot be the only solution to shifting modes, when considering:

- The cost of streets and highways are expensive, in excess of $10 million per mile for an urban freeway and more than $50 million for an interchange.
- The cost of right of way.
- The indirect costs of congestion, lost time, safety, and economic output.

TRANSIT-ORIENTED DEVELOPMENT (TOD) PLACE TYPES (AS DESCRIBED IN THE LAND USE CHAPTER) ARE CRITICAL TO ACHIEVING A BALANCE BETWEEN JOBS AND HOUSING AND CAN AID IN MODAL SHIFTS

The relationship between jobs and housing is critical to planning because it influences where people live, where businesses locate, and how people travel. The "jobs-housing balance" is an indicator for where people live relative to work, measuring the number of jobs per resident employee and is key when considering movement, land use, and environmental impact. Low values indicates a housing-rich area while a high value indicates a job-rich area.

The City of Las Vegas has relatively few concentrated areas with a jobs-housing balance. Implementing the City's place types described in Chapter 2 will help facilitate a new balance of jobs and housing by providing affordable housing options near identified transit corridors described in the goals on Housing and Transit. Each recommended place type plays a role in redevelopment and infill opportunities given a mixture of complementary uses suitable for certain types of targeted employment. In some instances, there will be an increased probability residents may take jobs there.

VMT MUST SIMILARLY BE REDUCED BY EMBRACING COMPLETE STREETS, TRANSIT, ACTIVE TRANSPORTATION PRINCIPLES, AND TRANSPORTATION DEMAND MANAGEMENTS

Walking and bicycling are necessary active modes of transportation, and getting around without the need for using vehicles is something that offers a great degree of freedom as well as an affordable way of communing. Together with transit, they offer a reasonable alternative to driving by car that can reduce VMT. As reflected in this goal's Complete Streets statement, they are roadways designed to maximize public right-of-ways to accommodate all users and modes of transportation including pedestrians, public transportation, bicycles, and automobiles. Currently, there are no protected bike lanes within the City, but there are 23 centerline miles of buffered bike lanes, 240 miles of conventional bike lanes, 2 miles of sharrows, and 32 miles of off-street trails.

The transit-oriented built environment envisioned in this plan is intended to be designed as walkable and human scaled. The City has worked with RTC and other regional partners to create communities that are conducive to walking and biking, resulting in hundreds of miles of new paths, trails, and pedestrian oriented areas. The City's premier pedestrian area is the Fremont Street Experience in Downtown Las Vegas, the canopied five-block pedestrian mall, operated as a public-private partnership between the City and a consortium of neighboring casinos. Other notable examples include the Las Vegas Wash Trail, the Beltway Trail, and Summerlin's trail network. Design and construction should be coordinated with Chapter 2's Park Connectivity goal.

The City, RTC, and community stakeholders have worked hard to improve conditions for bicyclists. One of the primary ways has been through engagement with the League of American Bicyclists, a nonprofit organization that works to create bicycle friendly communities by advocating and promoting best practices. These are centered upon five core areas (the 5 E's):

- Equity, Diversity, and Inclusion: A bicycle friendly America for everyone
- Engineering: Creating safe and convenient places to ride
- Education: Giving people of all ages and abilities the skills and confidence to ride
- Encouragement: Creating a strong bike culture that welcomes and celebrates bicycling
- Evaluation and Planning: Planning for bicycling as a safe and viable transportation option.

The League's Bicycle Friendly Community program provides the City a tiered rating to improve conditions for bicycling, for which the City is currently rated as a Silver Bicycle Friendly Community.

Funded by the RTC, the Regional Bicycle and Pedestrian Plan established a guiding vision and goals related to the provision of a "safe, connected, and convenient walking and bicycling system" through the entire Valley. That plan's recommendations are incorporated as a part of the Layered Complete Street Network, and are intended to be designed utilizing NACTO Urban Street Design Guide for best practices



for bike facilities, with the specific projects to be included in the City's Capital Improvement Plan.

Finally, RTC's Club Ride program, carpooling, and other TDM strategies, facilitated with dedicated managed facilities that reserve exclusive space and capacity for their proper functioning is a necessary tool for communities to effectively manage traffic congestion, make modal shifts, and increase public transportation ridership.

MAJOR STREET AND FREEWAY IMPROVEMENTS, ESPECIALLY THE DOWNTOWN ACCESS PROJECT AND THE COMPLETION OF INTERSTATE 11, ARE ESSENTIAL FOR TRAFFIC MANAGEMENT, SAFETY, AND REGIONAL ECONOMIC DEVELOPMENT

While it is true that a dramatic mode shift must be made, the street and highway network for 2050 must include a number of major capital projects that are currently included in RTC's Access 2040 RTP, NDOT's STIP, the Mobility Master Plan or are under development and will be included in the City's Capital Improvement Plan. Instead of solely making street and highway expansions based on adding additional highway capacity or access, new street and highway projects must be further assessed for their ability to better improve a facility's mobility and operations, improve motorist, bicyclist, or pedestrian safety, or enhance transit operations. Ultimately, this 2050 network's focus is on moving people or freight by providing a variety of modal choices that reduce VMT. Major city and state projects, some of which are listed in the Mobility Master Plan, include:

- Replacement and upgrade of the I-515 viaduct as part of the Downtown Access Project.
- Safety improvements through future Project Neon phases around the "Spaghetti Bowl" interchange and along I-15.
- Completion of the Centennial Bowl (US-95 / I-215) interchange and associated local access roads around Centennial Hills .
- Expansion of Summerlin Pkwy from I-215 to US-95 from 4 to 8 lanes, including extension of existing HOV lanes and completion of a system-to-system interchange at I-215.
- Construction of I-11 north.
- Construction of Sheep Mountain Pkwy.

Improvements to streets that calm traffic, reduce speeds, improve pedestrian or bicycle movements, or enhance transit operations, must be given greater priority for capital improvement project funding. These may include street and intersection recommendations and design elements from the NACTO Urban Street Guidelines (as incorporated into LVMC Title 19.04, - Complete Streets or Title 19.09 Form-Based Code), including, but not limited to:

- Reduced lane widths
- Wider sidewalks with amenity zones
- Curb extensions, pinchpoints, chicanes or bus bulbs
- Midblock crosswalks, scramble intersections, safety islands
- Roundabouts

LAS VEGAS IS OPTIMALLY LOCATED TO CONTINUE GROWING AS A HUB FOR LOGISTICS, DISTRIBUTION, AND INTERMODAL FREIGHT

The City is strategically situated geographically to have rapid access to major domestic and international markets with the presence of relatively new highway, rail, and airport infrastructure. Because the region is dependent upon freight movement for economic competitiveness, the City must ensure the safe movement of freight, whether by truck, air, or rail, work to ensure major infrastructure corridors are well-maintained and preserved, and that the overall transportation network is focused on efficient and reliable multimodal movement for both shippers and receivers, whether within the City or as a stopping point to another destination.

The Union Pacific Railroad (UPRR), whose tracks parallel Interstate 15, accommodates rail traffic that connects large coastal ports with the major cities to the east. Nevada is a "pass through" state with more than 95 percent of mainline freight rail traffic traveling to and from Southern California's ports. I-15 is also important because it connects the West to the rest of the country. Goods traveling east must travel north along I-15 to connect east via I-70 in Central Utah or I-80 in Salt Lake City.

Trucks move more than half of the freight tonnage in the United States and can be used for both short (less than 750 miles) and long haul (more than 2,000 miles) distances; rail, conversely, is used to move goods traveling intermediate distances between 750-2,000 miles, but moves less than 40 percent of freight tonnage. Due to heavy truck use on Interstate highways, road maintenance and repair are frequently needed. Trucking is also a heavy contributor to emissions and air quality issues, with almost eighty percent of greenhouse gas emissions coming from trucks, but only eight percent from rail.

Southern Nevada's economy relies heavily upon trucking for necessary imports and its tourism, highway infrastructure changes, and fuel price volatility could have the potential of leaving Las Vegas vulnerable. Each could disproportionately affect tourism, lower-income residents, and other populations. Interstate 15 has historically been identified through Federal transportation and trade acts as a major trading route part of the CANAMEX (NAFTA) transportation corridor connecting Mexican, Canadian, and American trade. As a vital trade route, the U.S. Department of Transportation similarly designated US 93 in Arizona (slated to be upgraded to interstate standards as the new Interstate 11) as an emerging transportation corridor.

Overwhelmingly, the most important factor in freight logistics and route selection is free-flow movement with minimal congestion and impedance. However, the Spaghetti Bowl interchange where I-15 and I-515 converge currently has over 270,000 vehicles daily in central Las Vegas. Unless VMT is greatly reduced, the Spaghetti Bowl represents a major choke point on a essential trucking corridors. Additionally, I-515 includes the Downtown Viaduct, but is in dire need of replacement. Despite calls for an eastern leg of the Las Vegas beltway, (a corridor that presents too many logistical challenges from a land use, routing, and cost standpoint to make it worthwhile) and rerouting trucks along the Southern and Western beltway, it is vital that this transportation corridor be upgraded through the Downtown Access Project.

Goods exported from Las Vegas are mostly distributed regionally around the Southwest. Trucks haul 83 percent of this volume. Within Southern Nevada, more than 90 percent of the tonnage moved was handled by trucks. This amount of importation requires warehousing, logistics, and distribution centers to store goods before further shipment to retailers or customers. Because more than 50 million people live within one day's drive of Las Vegas and due to Nevada's inexpensive operational costs and favorable tax climate, Las Vegas can capitalize as a hub for logistics, distribution, and intermodal freight, provided that other transportation and logistic factors are mitigated.

Because the I-15 corridor is the region's major freight corridor, many regional trucking and intermodal facilities have been constructed in major industrial zones and business parks. Relatively few major logistics hubs exist within the City of Las Vegas; Spectrum in East Las Vegas, the Las Vegas Tech Center in Twin Lakes, and the Las Vegas Business Park in West Las Vegas, as well as historic Downtown Las Vegas industrial uses around the Spaghetti Bowl, are among the major locations. Clustering has helped common infrastructure to be shared and used efficiently; however, this results in increased air and noise pollution for residents in adjacent areas, roadway wear and tear, and truck traffic. The City regulates freight distribution, and truck routes pursuant to Title 11.48 and the appended Master Plan of Streets and Highways, which permit truck routes on primary and secondary arterials. The development of a job creation zone in Nu Wav Kaiv, serving as a northwestern gateway and economic development hub, has the potential to create a new logistics point along the I-11 corridor.



Over the past decade, rail traffic on UPRR tracks has declined due to rerouting trains with Midwestern and Eastern destinations; there has not, however, been a decrease in demand for services to, from, or through Las Vegas. Extending track sidings, upgrading rails and railyard facilities could increase the routing potential along the rail corridor and could present an opportunity to reroute freight onto rails and off of trucks on I-15. Finally, McCarran International Airport is the 36th busiest cargo airport in the world, handling more than 370 million tons of freight through the Marnell Air Cargo Center. This freight distribution facility houses large cargo haulers and sits on a designated foreign trade zone and is designed to handle future air cargo demand. Given the increased speed of global commerce and the need to remain economically competitive with other major metro areas and to further support economic development efforts, the City must resolve to support capacity and efficiency upgrades at McCarran, and if necessary, a new airport in Ivanpah Valley. With growth in trucking projected to rise 150 percent by 2050, the largest growth level of all transportation modes, it is clear that it will remain an important transport component in the future. The City must further work with NDOT, RTC, and other trucking stakeholder to study and plan for interstate and inter-city freight movement, electrify any future truck-stops to reduce truck emissions and prepare for the possible innovations in delivery methods, such as unmanned aerial vehicles (UAVs) and autonomous trucks.

THROUGH FUEL REVENUE INDEXING, ROADWAY IMPROVEMENTS HAVE BEEN MADE, BUT OVERALL STREET AND HIGHWAY FUNDING MECHANISMS MUST BE ADDRESSED AT ALL LEVELS OF GOVERNMENT

For nearly thirty years, the Federal motor fuel (gas) tax has remained unchanged at 18.4 cents per gallon for gasoline and 24.4 cents per gallon for diesel; similarly, Nevada's gas tax, has remained at a rate of 33.8 cents per gallon for gasoline and 28.6 cents per gallon for diesel. Fuel taxes can only be used for the construction, maintenance, and repair of roadways, pursuant to Article 9 of Nevada's Constitution. Because of this, the economic means of internalizing the externality by using fuel taxes on alternative modes of transportation to reduce VMT cannot be done. Meanwhile, as vehicles become more technologically advanced and fuel efficient, state fuel tax revenues have declined.

To address this as funding gaps grew, Fuel Revenue Indexing (FRI) was authorized in 2013 in which the gas tax in Clark County is annually indexed against inflation to keep pace with material and labor costs. FRI funds generated from every gallon of gas sold are used to repay bonds. Projects funded by FRI have been included the initial three year period between 2014-2016 and raised approximately $750 million in funding. A ballot question in 2016 was approved to continue to index fuel taxes through 2026; this extension is projected to generate an additional $2-3 billion. As of 2020, 518 street and highway projects have been approved, of which 260 have been completed. The overall funding gap will likely be further exacerbated during and at the conclusion of FRI; long term, funding for needed improvements will continue to be needed especially as efforts to electrify vehicular transportation increase, more alternative fueled vehicles are on the road, and traditional vehicles increase in efficiency.

THE AIRPORT WILL CONTINUE TO BE AN IMPORTANT GLOBAL HUB, BUT OPPORTUNITIES TO PROVIDE ALTERNATIVES TO INTERSTATE 15 MUST BE EXPLORED AND TAKEN ADVANTAGE OF

Aviation is the economic lifeblood for the City and the Southern Nevada region as a whole. With six civilian airports for general commercial aviation and passenger traffic and two air force bases, Nellis and Creech, preservation of air space and careful limitations on building heights and design in airport overlay zones, especially for flight paths and air traffic for McCarran International Airport and North Las Vegas Airport, shall be enforced by the City by regulation under the Title 19 Unified Development Code. This may also apply to helicopter traffic and future development of other aviation-oriented technologies as they evolve and develop, including UAV's and other aircraft. Since defense and military facilities are tied to an important economic diversification sector, coordination with the Air Force and US Department of Defense must take place for any new subdivisions and suburban development in the City's northwestern planning areas; the Nu Wav Kaiv area is particularly important to coordinate on given the potential for economic development efforts that may include defense and unmanned aerial vehicle research, testing, and development.



Usage trends and passenger volumes indicate that the airport may eventually reach a carrying capacity within the next decade. Because it is crucial as an airline hub, for air cargo, and for bringing millions of passengers to Las Vegas, the City must resolve to support regional efforts to bring funding for aviation infrastructure, maximize flight efficiency, and ensure no additional delays or flight cancellations occur for passengers. The introduction of a "metroplex" strategy by the Federal Aviation Administration will likely maximize air traffic in commercial airports while minimizing noise and disruption for city residents both short and long term. Short-haul flights between Southern California and Southern Nevada represent an increasing share of passenger traffic and serve as an alternative to driving along the I-15 corridor, but a few other alternatives must be addressed to alleviate pressure on the region's airports:

- The City must continue its regional call for action for Caltrans to add additional capacity along Interstate 15 in California between Primm, NV and Barstow. Weekend and holiday traffic from California that results in hours-long delays represents a major threat to the tourism economy and freight movement. NDOT serves as a major partner to interface with California officials while efforts to support corridor improvements can take place with the state's Congressional delegation.
- Intercity bus service has helped provide low-cost options for residents between cities throughout the West; these private efforts from motor carriers represent an additional option to shift modes, but they are still reliant on I-15 for trips to and from California.
- Construction and completion of high-speed rail between Las Vegas and Southern California, with an intermodal connection to Downtown Las Vegas. The provision of an additional mode may help alleviate pressure on both passenger air service and I-15. Efforts to re-establish passenger rail service since Amtrak's Desert Wind service was discontinued in 1997 have been ongoing through a variety of public and private commissions, authorities, and efforts from bi-state and regional levels. Financing, public money, Federally backed loans and bonds, however, have fallen through on previous proposals. Usage of Union Pacific tracks have also posed issues. The most recent high-speed rail efforts appears promising; largely paralleling the I-15 alignment with a station located near Warm Springs Road and I-15, the construction of high-speed rail could both shorten travel times, be competitive with private autos, and reduce emissions by using overhead electric. While ultimately such a connection must tie into California's future high-speed rail network or major passenger stations like Union Station in Downtown Los Angeles, any form of rail service would provide a new alternative for more than 25 million Southern Californians to get to Las Vegas.
- When passenger and flight volume warrant, the City should resolve to support the construction of the proposed "Ivanpah Airport," a commercial reliever airport located south of Las Vegas near Primm at the I-15 and Nevada-California state line, which may be necessary to increase regional passenger and freight capacity and may receive approval to be constructed within the next thirty years.

STREETS, HIGHWAYS, AND BRIDGES WITHIN THE CITY MUST CONTINUE TO BE IN GOOD CONDITION AND WELL-MAINTAINED

Nevada, and Las Vegas in particular, has among the best and well-maintained streets, highways, and bridges in the country. According to the American Society of Civil Engineer's 2018 Infrastructure Report Card, most of Nevada's roads and bridges, especially those in Southern Nevada, are in excellent condition since street and roadway infrastructure is so new and because FRI has helped raise funding for roadway repaving and street rehabilitation projects. Overall, less than 2% of Nevada's bridges are estimated at being structurally deficient, none of which are located in Southern Nevada. However, as noted, the I-515 viaduct in Downtown Las Vegas, is perhaps the single best example of the need to proactively rehabilitate or replace bridge structures, particularly because of the risk of seismic activity described

under Hazards. Other structures throughout the City must also be similarly be assessed, especially for any bridge reaching a design age of 50 years given that the design life will continue to increase over time as more are added.

Additionally, as new bridges and new miles of streets, highways, sidewalks, and trails get added, the cost to maintain that infrastructure will similarly increase over time. The City's Public Works and Operations and Maintenance Departments will continue to proactively assess the condition of these facilities and structures to make sure they are not a threat to public safety, damage property, or create additional liabilities for the City. The City will continue to maintain a five-year street arterial and asphalt reconstruction plan and the ten-year street rehabilitation and slurry seal program for local neighborhood streets. To help municipalities address this, the City must lobby the state to fund the recently created Nevada State Infrastructure Bank to assist in paying for critical infrastructure that could not otherwise be easily paid for by the City.

RIDESHARING, CARPOOLING, VANPOOLING, AND CAR SHARING ARE VIABLE ALTERNATIVES TO SINGLE OCCUPANT TRAVEL

Carpooling, vanpooling, and other high occupancy modes account for the next largest portion of modal share, albeit still less than 15% of trips by mode. Carpooling can be facilitated by having dedicated managed facilities that reserve exclusive space and capacity. It is also a necessary tool to effectively manage traffic congestion, make modal shifts, increase public transportation ridership, and reduce VMT. A freeway or surface street lane operating at capacity will handle approximately 2,000 vehicles per hour. However, when demand exceeds that capacity and heavy congestion ensues, a lane handles as few as 900 vehicles per hour. The greater number of people in each vehicle in an exclusive managed lane simply moves more people.

Since 2005, both NDOT and RTC have invested in a combination of HOV lanes and bus only lanes as a part of new BRT projects. Southern Nevada now has 22 miles of HOV lanes and 23 miles of exclusive bus-only lanes for RTC's BRT routes. Construction of these lanes has provided dedicated space for transit and has corresponded to increased ridership along these new routes. HOV lanes and direct-connection facilities not only facilitate carpooling, but also the use and deployment of freeway express transit routes that connect RTC's suburban park and rides and transit centers to major employment centers in Downtown Las Vegas, the Las Vegas Strip, UNLV, and McCarran Airport.

One major form of carpooling is ridersharing. Prior to the development of app-based ridesharing programs and the authorization of "Transportation Network Companies" (TNC's), taxicab and taxicab companies represented substantial modal and market share, particularly for the visitors to Las Vegas. Widely popular since their introduction, TNC's have offered convenience, better quality door-to-door service, and competitive pricing with taxis. However, their popularity, combined with the degree of regulation and oversight, has contributed to issues for the entire transportation system, including increased traffic congestion and emissions, as well as personal safety concerns. In addition, in many cases, they have made themselves easier to supplant taxis, rather than be used as a chained carpool or vanpool trip.

The biggest impact has been ridership and revenue, which have been down consecutive years since the approval of TNC's by the Nevada Legislature. According to the Nevada Taxicab Authority, there were 27.5 million taxi rides and $425 million in revenue in 2015. Taxi rides from the region's 16 approved taxicab companies dropped to about 20 million taxi trips and a combined $323 million in revenue, more than a 13 percent decline from the prior year. Ride share use has continued to rise in the ensuing years, while taxicab usage has dropped considerably. A similar upheaval has occurred in public transportation ridership. Because TNC's are not required to share data, it is difficult to determine how many trips are actually being taken by TNC. Finally, as a new driver-based economy has emerged from the advent of TNC's, issues may eventually emerge with innovations like autonomous vehicles. Autonomous vehicles, whether driver





assisted or driverless, may further provide mobility options, but could present new challenges for existing TNC drivers and taxi drivers. Regardless of what happens with these innovations, TNC's represent a continuous and rapidly evolving challenge and opportunity.

For many visitors, car rentals are a key way to allow for personal mobility without having to rely on taxis, TNC's, or public transportation. The majority of visitors arriving by air rent from a consolidated car rental facility south of McCarran Airport that opened in 2007 and houses eleven rental car companies; many hotels and casinos also have on-site car rental locations. Car rentals can also be a necessity for resident use in the event no other transportation options are available. However, one option that has seen only limited deployment in Las Vegas are car share programs. Like rentals, they provide a short term car-based mobility option for short, in-city trips. By joining a car-share program, a user can share in the use of a fleet of cars for trips positioned within a defined geographic area, charged on a mileage or hourly rate. They can reduce transportation costs for residents by avoiding ownership, insurance, and maintenance costs. Car sharing's deployment has been limited to Downtown Las Vegas and hasn't seen continuous operation or success, partly because of the lack of permanent residents in Downtown and destinations nearby, despite higher densities. However, as development and redevelopment progresses and as other place types are developed, car sharing may emerge as another viable option for private companies to pursue or for the City to partner on.

For all forms of transportation, whether for drop-offs, taxis, TNC's, or car-share programs, the City has the authority to regulate and enforce curb space by designating loading zones, taxi-stands, and parking areas, pursuant to LVMC Title 11. As with parking, City must continually assess both the supply of these dedicated locations for these modes and balance and regulate them with actual demand.

ZERO FATALITIES IS POSSIBLE, BUT ACTION MUST BE TAKEN TO ADDRESS CRASHES THAT CAUSE INJURIES AND DEATHS

Sharing the road must be a continued focus as part of this plan, especially with respect to safety. Across Nevada, especially within Las Vegas, fatalities and injuries for motorists, motorcyclists, bicyclists, and pedestrians have reached epidemic proportions; streets in Southern Nevada have proven to be especially hazardous to vulnerable street users given the dramatic increase of pedestrian and bicyclist fatalities and injuries over the past decade. While that number of pedestrian fatalities fell to 60 in 2018 and 50 in 2019, there are still far too many people that have been killed or injured, especially for low-income populations that are more likely to be transit users, bicyclists, or pedestrians and must walk or bike along busy, high-speed arterial streets.

Due to a combination of distracted driving, high speeds, impairment, roadway and intersection design, and failure to obey lane markings or traffic control devices, Las Vegas has seen a steady rise of vehicular collisions resulting in deaths and serious injuries, especially on weekends and

in the evening. As a result, the number of collisions, and fatalities have also contributed to Southern Nevada having among the top ten highest auto insurance premium rates in the country.

To reinforce the message of sharing the road, the City's Vision Zero program encourages motorists to always buckle up, never drive impaired, focus on the road, stop on red, be pedestrian and bicyclist safe, and to ride motorcycles safely. By employing a variety of strategies with respect to education, enforcement, and engineering, the City of Las Vegas will contribute efforts to reducing deaths and injuries on roadways from all modes to achieve "Zero Fatalities."

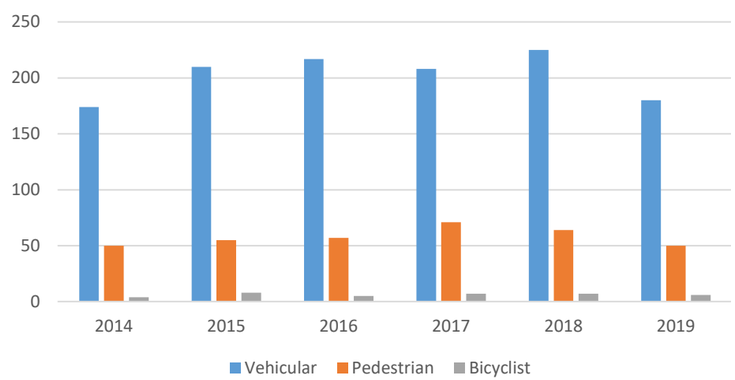
- From an enforcement perspective, reinforcement of traffic safety laws, including aggressive driving, distracted driving, DUI, motorcyclist use of helmets, the three-foot law for bicyclists, seat belts, speed limits, and obeying traffic control devices and lane markings.
- The provision of alternative modes of transportation like taxis, TNC's, public transportation provides alternatives to impaired driving. This is a message that must continue to be reinforced.
- Continue to make complete street engineering improvements that reduce speeds, increase visibility for drivers, pedestrians, and bicyclists, provide
- Educate all roadway users, whether motorists, motorcyclists, pedestrians, or bicyclists, basic safety information. This is especially important for "Safe Routes to Schools" to ensure the City's school children can walk or bike to school from their neighborhood safely.
- Ultimately, the completion of RTC's On Board Mobility Plan, designation of TOD and other walkable place types and development of the layered complete street network with dedicated locations and facilities for bicyclists and pedestrians will contribute to an increased number of transit users, pedestrians, and bicyclists.

PARKING HAS HIGH COSTS, TAKES UP CONSIDERABLE SPACE, IS EXPENSIVE TO PROVIDE, AND IS PLENTIFUL

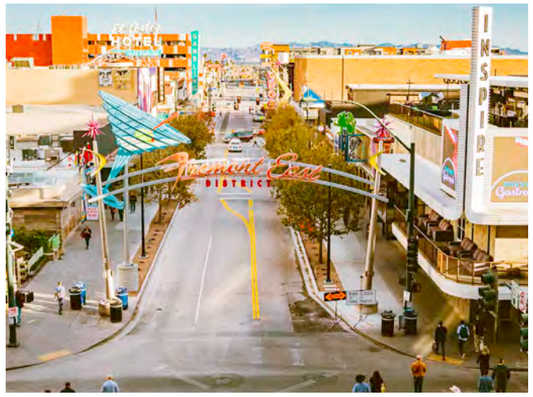
Among the considerations that must be made for auto-oriented transportation is mitigating the effects of vehicle storage and parking. The sheer amount of parking at many commercial locations distorts urban form; additionally the amount of pavement required for parking and the lack of adequate tree canopy has helped contribute to the urban heat island effect. The City Council is enabled to operate and regulate on-street and publically owned parking lots and parking areas throughout the City and establish the rates associated with it. Similarly, the Title 19 zoning code establishes minimum required parking standards for a wide range of use types. Over time, this has permitted the car to dominate the Las Vegas landscape.

Because of the overabundance of existing parking, there are prime opportunities to reutilize parking areas as a part of this plan's broader strategy of infill and redevelopment.

FATALITIES - CLARK COUNTY



Source: Nevada Department of Public Safety



As a Regional Center, Downtown Las Vegas is currently the best environment to continue effectively enforcing parking standards and balancing parking supply (whether publicly or privately provided) with demand through pricing. As new high-density, transit-rich environments emerge, including at any of the recommended place types in the Land Use chapter, a parking management program must be carefully considered from the City or developers to ensure an adequate maximum supply of parking while encouraging the use of alternative modes for transport for others. The City, in turn, must study and re-examine its parking policies to determine additional means of solving parking issues and its impact on the built environment.

AS PART OF COMPLETE STREET BEST PRACTICES, THE RELATIONSHIP BETWEEN BUILDING AND STREET MUST CONTINUE TO BE EXPLORED

As applicants propose projects, it is important for the building or property owner have a clear understanding of the physical details of the structures they are proposing, the frontage to the street, and the components between building and street. The proper design of eye-level physical space is critical, and emphasis should be placed on urban design quality, including:

- Mental and Physical health: encourage walking and exploring neighborhoods by providing a comfortable and interesting place to walk through and carry on activities.
- Diversity of culture and places: there is no one size that fits all for neighborhoods and streets. These places are made out of our residents that live there, and Las Vegas aims towards maximizing living options that are diverse and need different types of infrastructure and development to be fulfilling and cater everyone's needs.
- Safety. Residents reported that crime in Las Vegas is a top concern. Although investments are directed toward enforcement and institutionalized policing, many studies show that the proper design of neighborhoods and streets can substantially reduce crime.
- Generation of value and revenue
- Cost-effectiveness
- Good design is design that can last and promotes the preservation of a good environment for our residents and the other species, plants or animals.
- Less pollution and less heat.

These attributes, discussed for each of the place types described in the Land Use Chapter, must ultimately be further addressed through amendments in the Title 19 Unified Development Code.



IMPLEMENTATION STRATEGIES

- To reduce VMT and diversify the City's modal split, adopt the "LAYERED COMPLETE STREET NETWORK" as part of the 2050 Master Plan for Streets and Highways, and construct or support the recommended improvements essential for traffic management, safety, and regional economic development
  - Complete (or support NDOT or RTC) the major identified street and freeway improvements, especially the Downtown Access Project and the completion of Interstate 11, that are essential for safety and regional economic development.
  - Complete the major identified transit, bicycle, and pedestrian improvements to ensure active transportation and alternatives for all users.
  - Adopt a Vision Zero resolution, continue implementing safety design improvements, prioritize Vision Zero over vehicular traffic flow, and work to ensure motorists, motorcyclists, bicyclists, and pedestrians are aware of their rights and responsibilities on the road.
- Ensure law enforcement enforces traffic laws that apply to vulnerable users, especially pedestrians, bicyclists, and motorcyclists, and continue to expand public education efforts to share the road
- To effectively manage parking and reduce parking oversupply:
- Support carpooling and ridesharing efforts:
  - » Prioritize walking and biking improvements in areas with low auto ownership and lower incomes
  - » Revise access requirements for all developments to include all transportation modes
  - » Improve Title 19.04.40 connectivity standards to increase the overall connectedness of the layered complete street network
- Resolve to support regional efforts to:
  - » Construct capacity improvements along Interstate 15 in Southern California
  - » Construct a reliever airport in the Ivanpah Valley as an air-freight and distribution hub when conditions warrant
  - » Complete high-speed rail connections to Southern Calfornia, provided construction of an intermodal station or connection in Downtown Las Vegas
- Work with NDOT, RTC, LVGEA and other public entities to develop a regional freight plan that addresses:
  - » Reduction and elimination of congestion on the City's interstates and along major trucking routes that hinder the movement and distribution of goods.
  - » Electrification of freight infrastructure
  - » Create a northwestern transportation gateway in the Nu Wav Kaiv planning area
  - » Incentives for intermodal or multimodal freight,
  - » Development of urban freight distribution and consolidation centers
  - » Truck loading plans, multimodal infrastructure requirements, last-mile delivery solutions, and off-hour delivery programs.
- Infrastructure must be well maintained by properly allocating funding and resources:
  - Dedicate adequate funding to ensure public streets, trails, and rights of way in good condition and well-maintained
  - As road and bridge structures age, assess their structural integrity and prioritize the reconstruction of any that fail to meet standards
  - Ensure all City-maintained roads, pavements, and bridges are in fair or good condition

IMPLEMENTATION STRATEGIES

  - Enable local governments to impose a limited fuel tax for local street and highway construction projects (NRS 373 - part of a larger Legislative package)
  - Resolve to support an increase in state motor fuel tax for transportation funding
- Ensure well designed, high quality urban design, street and parking standards and incorporate street designs for street and bicycle facilities into Titles 13 and 19.
  - As part of complete street best practices to ensure high quality urban design, prioritize walking and biking improvements in areas with low auto ownership and lower incomes
  - Reduce speed limits on specific corridors and streets
  - Improve Title 19.04.40 connectivity standards to increase the overall connectedness of the layered complete street network and include appropriate cross sections for streets and trails
  - Revise access requirements for all developments to include all transportation modes
  - Adopt parking maximum requirements and reduce and eliminate minimum parking standards
  - Include bike parking requirements for specified uses
  - During future general plan amendments, identify underutilized parking lots to designate as TOD, TOC, NMXU land uses
  - Price public on-street and off-street parking at economical rates to help balance demand
  - Allow or permit paid parking as part of application proposals, traffic or parking management plans
  - Require bicycle parking or credits toward parking requirements based on proximity to transit lines
  - Return additional parking revenue to other services provided by the City of Las Vegas
  - Strengthen parking lot perimeter and interior landscaping requirements to reduce urban heat, improve stormwater quality, and improve aesthetics.
- Further reduce VMT, congestion, wasted time, and emissions by working with regional partners to embrace transit, TDM, TSM, carpooling, ridesharing, and other transportation solutions.
  - Implement or deploy TDM strategies, including partnering with RTC to provide additional funds and incentives through RTC's Club Ride program.
  - Provide and support HOV and bus-only facilities to ensure the movement of people
  - Pilot a car-sharing program within Regional Centers, TOD's, TOC's, or NMXU's
  - Require TNC's to share summary level transportation data to better assess mobility by ridersharing and impacts to the transportation network
  - Routinely assess curb-space and on-street and off-street parking for carshare vehicles, taxis, and TNC's.
  - Collaborate with bicycle and pedestrian non-profits, large employers (gaming/resort properties) in providing additional safe, accessible routes and facilities for the large population of service workers who often rely on a bike for their commute to work.
  - Expand RTC Bike Share to other planning areas along identified corridors in the On Board mobility plan to facilitate first-last mile trips and work with RTC to expand its fleet of bikes and electric bikes.

I.B TRANSPORTATION: TRANSIT

NRS 278.160.1(h)(2)

MAKE TRANSIT OPTIONS MORE CONVENIENT AND BETTER INTEGRATED WITH VIBRANT NEIGHBORHOODS AND EMPLOYMENT CENTERS, BETTER CONNECTING PEOPLE TO THEIR DESTINATIONS



Public transportation is essential to the overall transportation fabric. Not only does transit have the potential to move the largest number of people with the smallest physical footprint, but it also serves as the lifeblood for many Las Vegas residents as a reliable, accessible, and low-cost option to connect them to jobs and critical community resources. Furthermore, transit provides benefits to people who do not use it. For example, if ten people choose to ride a bus or train during rush hour, this results in an average of nine fewer cars on the road. This in turn leads to a more efficient transportation network, less traffic congestion, decreased emissions, and a safer community for all.

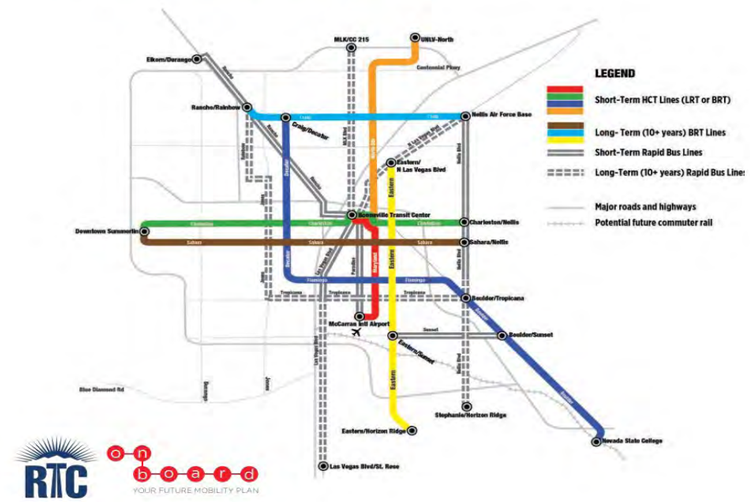
Nonetheless, only 4% of residents in Las Vegas use transit for their journey to work. While the list of proposed improvements to the transit system is substantial, there is also a social stigma and public perception that transit is only for those riders who have no other choice that must be overcome. In order to dispel this misconception, the City and its partners must incentivize "choice riders" or potential riders who have other means of transportation, to leave their vehicles at home in favor of making a commute using transit. Ideally in many cases, the user experience of a trip taken by a choice rider is one that is relatively comparable to using their own personal vehicle. It is convenient, accessible, and doesn't involve a transfer. Furthermore, it does not require additional time to find parking while positively impacting the City's carbon footprint. Unfortunately, while the supply bus-based transit in Southern Nevada is high, the demand of choice riders is relatively small.

For public transportation to be successful, it must be reliable, fast, accessible, and convenient to use. Transportation choice, and therefore multiple mode options, are critical and essential to reinforcing our urban neighborhoods and districts. Unlike some cities in the United States who have robust legacy transit infrastructure, Las Vegas has a more vehicle-centric foundation due to its development in the automobile era. With rapid construction of single-family detached housing during much of the 20th century, arterial streets and freeways served as the Valley's infrastructure backbone. As a result, Las Vegas' urban form and transportation infrastructure grew without much relationship to pedestrian or transit-oriented design and standards. In order to grow transit ridership, the City must coordinate with its partner, the Regional Transportation Commission of Southern Nevada (RTC) to implement existing recommendations to plan, fund, develop, incentivize, and implement community-friendly transit projects and programs.

The RTC, City, and community organizations work closely on the provision of public transportation and planning for transit service and facilities:

- RTC Transit is a fixed-route bus-based system comprised of more than 39 routes.
- RTC owns and operates a number of transit facilities including Bonneville Transit Center (BTC) which is RTC's central transit terminal and hub in Downtown Las Vegas. A number of other transit centers and park 'n' rides are located throughout the RTC service area.
- RTC also offers on-demand, door-to-door, reservation-based paratransit service to passengers who are functionally unable to independently use the RTC's fixed-route bus system.

Proposed Southern Nevada High Capacity Transit System



KEY ACTIONS

- Working with RTC, resolve to build and implement the key recommendations of the On Board Mobility Plan, including:
  - Building the high capacity transit system;
  - Expanding transit service to maximize access to jobs and housing;
  - Making all travel options safer and more secure;
  - Making short trips easier;
  - Expanding service for seniors, veterans, and people with disabilities;
  - Connecting major regional destinations including McCarran International Airport, the Strip, and Downtown Las Vegas;
  - Providing reliable transit for Downtown Las Vegas and resort corridor employees;
  - Leveraging new technology to improve mobility.
- Implement the place types recommended in the Land Use chapter to facilitate mixed-use TOD, infill, and redevelopment within proximity of quality public transportation.
- Work with RTC to ensure equitable transit funding.

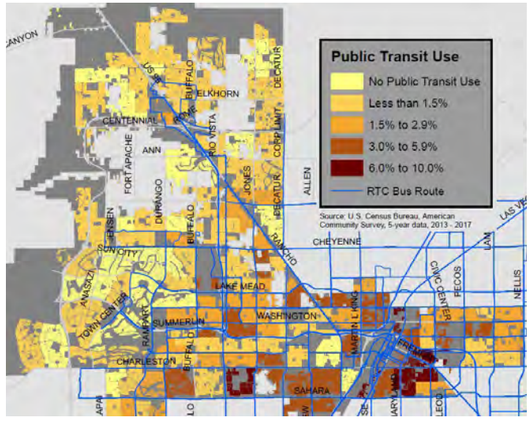
OUTCOMES

- By 2050, the mode split is 20% for transit.
- 75% of the region's residents are within a 1/2 mile of bus service, and 100% of the region will have access to some type of public transportation service by 2050.
- The number of dwelling units within ¼ mile of a public transit route increases over time.
- The number of dwelling units within ½ mile of a station of a high capacity transit route, transit center, park 'n' ride, or mobility hub increases over time.
- By 2050, 50% of homes are within ½ mile of a public transit route or are served by a call 'n' ride or microtransit service areas.
- By 2050, the population density along high capacity transit routes is at least 30 dwelling units per acre for BRT routes and 40 dwelling units per acre for LRT routes.

SEE ALSO:
RTC On Board Future Mobility Plan

- The City has also funded and provided its own transit services, and is currently coordinating with RTC on several circulator services:
  - Downtown Loop circulator provides free rides in Downtown Las Vegas.
  - An autonomous circulator pilot shuttle through the Fremont East district in 2018.
  - Future GoMED autonomous circulator service between the Bonneville Transit Center and the Las Vegas Medical District.
- The Las Vegas Monorail does not enter the City, however previous plans called for its extension into Downtown Las Vegas from its current northern terminus at Sahara Avenue; future extensions of the privately funded system, including to Allegiant Stadium or McCarran Airport, and may present an opportunity to explore that northern extension in the future.
- The City is also authorized, through its charter, to construct, regulate, franchise, and license rail-based public transportation.

Currently, more than 400 transit vehicles and 300 paratransit vehicles convey passengers throughout the city and carry more than 64 million locals and tourists per year, with an average weekday ridership rate of more than 178,000. However, in order to meet our overall goals, the City and RTC must do more to grow ridership. The City's Mobility Master Plan detailed a transit vision reflecting interconnected high capacity transit service that links Regional Centers with mixed-use transit oriented development corridors. These corridors already have strong RTC Transit ridership, have transit-supportive densities, and have a variety of destinations.



This vision is thoroughly reflected in RTC's On Board Mobility Plan, a plan recommending a crucial investment in nearly 200 miles of high capacity transit which includes:

- Building a high capacity transit system;
- Expanding transit service to maximize access to jobs and housing;
- Making all travel options safer and more secure;
- Making short trips without a personal automobile easier;
- Expanding service for seniors, veterans, and people with disabilities;
- Connecting public transit options to major regional destinations including McCarran International Airport, the Strip, and Downtown Las Vegas;
- Providing reliable transit for Downtown Las Vegas and resort corridor employees;
- Leveraging new technology to improve mobility.

MULTIPLE MODAL OPTIONS AND TRANSPORTATION CHOICE ARE CRITICAL AND ESSENTIAL TO THE URBAN FABRIC

For public transportation to be successful, it must be accessible to passengers and convenient to use. Las Vegas, however, was one of the few major U.S. cities to have missed a critical developmental milestone: the creation of a public transit system because of its urban growth and development in the automobile era. With rapid construction of single-family detached housing during much of the 20th Century, arterial streets and freeways served as the Valley's infrastructure backbone. As a result, Las Vegas' urban form and transportation infrastructure grew without much relationship to pedestrian or transit oriented design and standards. Traditional single-family development over the next 30 years will continue to occur on the outskirts of the City as it did during the previous 30, particularly in large master planned communities in the Summerlin West and Kyle Canyon planning areas, as described in the Land Use Chapter. These developments will generate a substantial number of trips, such as work, shopping, and school, and will impact congestion levels within the Valley as a whole. But as described, these communities are relatively low density and auto-oriented. Because of these land use patterns:

- Transit-dependent riders and households with no vehicle ownership (23,766 within the City) are thus limited as to where they can live, typically around Downtown Las Vegas, West Las Vegas, Charleston, East Las Vegas, and Downtown South. These areas also tend to have lower household incomes and higher rates of rental housing;
- Residents of suburban communities have no public transportation option because it is not easily accessible. Currently, there are approximately 160,000 of the City's housing units within ¼ mile of an RTC Transit route – two-thirds of the City's total. 27,000 units (nearly all of which are single-family residential) are greater than a mile from service, making an easy walk to a bus stop relatively unlikely; and
- Lower densities make the likelihood of providing fixed-route transit service unlikely because of the high cost to serve those locations.

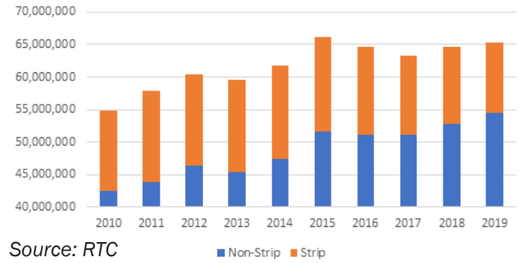
RTC TRANSIT IS A WELL-RUN, EFFICIENT BUS-BASED TRANSIT SYSTEM, BUT RIDERSHIP ON SOME ROUTES HAS BEEN DECLINING

Throughout public outreach to develop this master plan, City of Las Vegas residents have indicated broad support for more transportation options, provided that they are reliable, fast, accessible, and convenient. RTC Transit's system characteristics are typical of other bus-based transit systems around the country, with some exceptions related to the "24-7-365" nature of the city.

RTC Transit's service is provided on a grid system, with most major local routes traveling crosstown on major arterials. Among these are 9 "frequent service" routes that operate every 15 minutes (or better) during weekday daytime hours and 20 minutes or better during evenings and weekends. Service types provided include:

- Local routes, most of which provide service at 20 or 30 minute headways, with a few at hourly headways.

TOTAL RIDERSHIP - RTC TRANSIT

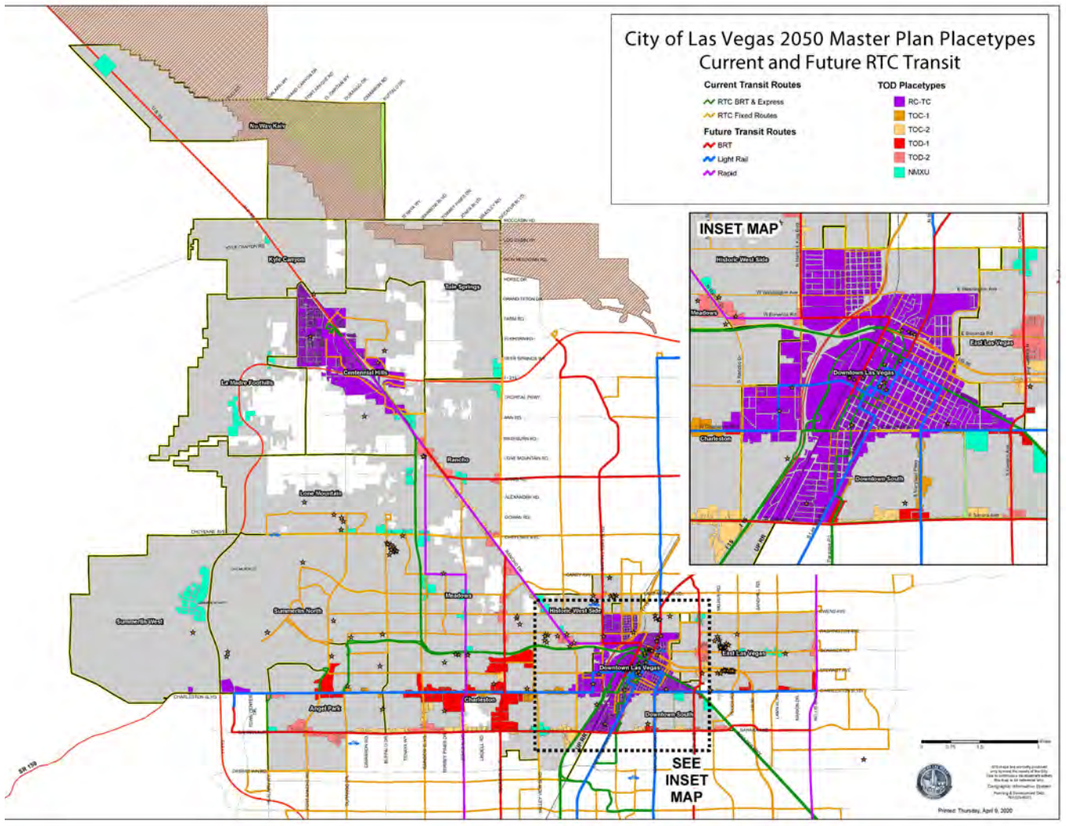


Source: RTC

- Las Vegas Strip service:
  - The Deuce on the Strip: operates double decker vehicles with frequent service
  - SDX: Strip-Downtown Express provides limited stop BRT service between the Las Vegas Premium Outlets North, Downtown Las Vegas, Las Vegas Convention Center, the Strip, and Las Vegas Premium Outlets South
- Bus Rapid Transit (BRT) – Including the SDX, four BRT routes offer frequent service, operate in dedicated lanes and have improved stops; many of these were originally built as a more robust type of service
- Express routes – RTC operates four freeway-based express routes on hourly headways that link suburban transit centers and park 'n' rides with Downtown Las Vegas and/or the Las Vegas Strip and McCarran Airport. These have higher amounts of choice riders, but also are the most-expensive to operate.
  - RTC Transit functions efficiently because it provides service and frequency based on the availability of destinations, population, and employment density. For any transit system, coverage of the transit network (and the extent of the paratransit service), can only be done if cost effective to do so. As a result, much of the high density urban core is well-served with high frequency transit, but lower density suburban areas like Kyle Canyon, La Madre Foothills, Tule Springs, many parts of Lone Mountain, Summerlin North, and Summerlin West have lower frequency transit or no transit service at all.

RTC TRANSIT SYSTEM RIDERSHIP				
ROUTE / SERVICE	Type	2023 Ridership	Average weekday ridership	PRVH
109 - Maryland Pkwy	Local	3,108,271	9,223	49.3
Deuce - Las Vegas Strip	Premium	6,106,928	16,704	46.3
113 - Las Vegas Blvd North	Local	2,337,321	6,651	46.0
202 - Flamingo Rd	Local	3,441,920	9,958	41.1
SX - Sahara Express	BRT	2,603,170	7,738	38.2
BHX - Boulder Highway Express	BRT	3,121,420	9,159	37.9
201 - Tropicana Ave	Local	2,716,157	7,867	35.1
203 - Spring Mtn / Desert Inn / Lamb	Local	2,560,533	7,628	34.5
206 - Charleston Blvd	Local	3,167,638	9,572	34.5
215 - Bonanza Rd	Local	657,471	1,984	34.0
110 - Eastern Ave	Local	2,079,781	6,347	33.9
115 - Nellis Blvd / Stephanie St	Local	1,938,284	5,776	33.7
108 - Paradise / University Ctr	Local	686,861	1,964	33.5
103 - Decatur Blvd	Local	1,780,847	5,353	32.9
117 - LV Blvd South / Silverado Ranch	Local	622,108	1,793	31.7
210 - Lake Mead Blvd	Local	1,903,651	5,787	31.5
105 - Martin L King Blvd	Local	884,642	2,684	31.3
104 - Valley View Blvd / Arville St	Local	908,480	2,761	28.9
219 - Craig Rd	Local	679,808	2,107	28.5
111 - Pecos Rd / Green Valley Pkwy	Local	1,002,092	3,071	26.4
101 - Rainbow Blvd	Local	929,567	2,783	25.4
208 - Washington Ave	Local	824,257	2,567	24.7
214 - H St / D St	Local	335,996	991	24.0
102 - Jones Blvd	Local	657,662	1,995	23.5
209 - Vegas Dr / Owens Ave	Local	272,244	839	22.6
106 - Rancho Dr / Centennial Hills	Local	788,301	2,311	21.6
401 - Symphony Park	Circ.	119,052	345	21.1
212 - Sunset Rd	Local	767,891	2,353	20.9
218 - Cheyenne Ave	Local	596,463	1,863	20.4
DVX - Downtown-Veterans Express	Express	238,692	908	18.5
119 - Simmons St / Koval Ln	Local	605,928	1,875	18.3
217 - Warm Springs / Lake Mead Pkwy	Local	543,231	1,713	17.5
120 - Fort Apache Dr / Rampart Blvd	Local	436,553	1,314	17.0
207 - Alta Dr / Stewart Ave	Local	210,481	632	15.6
121 - Durango Dr / Buffalo Rd	Local	348,725	1,098	15.4
CX - Centennial Express	Express	326,677	939	15.2
122 - South Maryland / West Henderson	Local	172,736	518	13.8
220 - Ann Rd / Tropical Pkwy	Local	262,062	779	21.1
221 - Cactus / Horizon Ridge / Boulder City	Local	270,334	802	8.0
TOTAL / AVERAGE		**51,242,945**	**3,865**	**32.0**

Source: RTC



- There are more than 3,300 bus stops in the RTC system, 1,700 of which have shelters. 97% of transit trips begin and end by walking to and from an RTC Transit stop. In addition, RTC Transit vehicles are equipped with on-board bicycle racks; RTC transported more than 628,000 bikes in 2018. To improve the experience of all transit riders, it is critical to invest in making sidewalks and pathways that lead to a stop accessible to all people, safe, and comfortable to use.

Unlike some transit systems in other metro areas, RTC provides a fairly robust 24-7 span of service that accommodates employees of the tourism industry that may work overnight, graveyard, or swing shifts. 13 routes provide this service, often at hourly headways, which allows for direct connections to the Las Vegas Strip.

RTC also provides additional specialty services:

- Special event services, including dedicated express routes to T-Mobile Arena, Allegiant Stadium, and the Las Vegas Motor Speedway.
- Senior citizen services, including 12 “Silver Star” routes that provide loop circulator service to neighborhood destinations during certain days of the week, and flexible demand response (FDR), a call ‘n’ ride service for Sun City Summerlin and Centennial Hills.
- Transit services for senior and disabled veterans

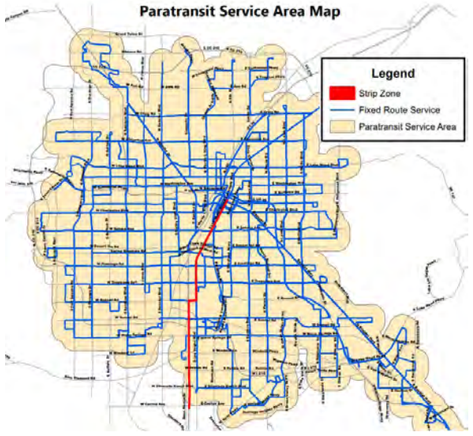
RTC operates a cost effectively, with a farebox recovery ratio higher than most other comparable transit systems. RTC Transit fares are nominal, beginning at $2 for a standard single ride in 2020, with options for daily, weekly, and monthly passes. Premium service routes that serve the

Las Vegas Strip begin at $6 for two hours. Over the last twenty years, ridership has generally increased on most routes, with periodic fluctuations across the entire system necessitating adjustments to route frequency, timing, and routing. One noted historic constant has been service on Strip routes being the most productive per passenger revenue vehicle hour (PRVH) at more than 60 passengers per vehicle per revenue-service hour – nearly twice the system-wide average of 33. These routes generate 17% of ridership within the system and are among the most profitable in the entire country for any mode. Other routes, including all of the commuter express routes offered to "choice riders," have much lower PRVH rates, are expensive to operate, and not as efficient to provide. They are important with respect to the need to provide coverage and accessibility to other parts of the community. Notably, nearly all of the routes with low PRVH rates provide service to lower density suburban areas within the City of Las Vegas.

PARATRANSIT SERVICE IS AN IMPORTANT COMPONENT TO PROVIDING EQUITABLE TRANSPORTATION

RTC's paratransit service area covers a wide area and provides a necessary (and required) service for disabled and mobility impaired people:

- In 2019, 1.35 million paratransit trips were taken with a 95% on-time performance, serving 63,000 seniors.
- Despite its reservation based, door-to-door service, it has a much higher cost to serve and therefore a greater subsidy at more than $33 per trip. Furthermore, any expansion to the fixed route system that covers new areas must also expand the paratransit service area boundary.
- The reservation-based system could lead to long waits and delays for some passengers. While trips are programmed and coordinated, trips still must pick-up and drop-off other passengers, an inconvenience for those passengers making medical appointments or short trips. Trip optimization and a passenger notification system does attempt to mitigate these issues. As a result, RTC's functional rider assessments are necessary to show that a passenger is eligible for service, for which RTC has 20,600 certified wheelchair uses; otherwise, RTC works with passengers on mobility



training to utilize the fixed-route bus service. RTC Transit has served 400,000 users with wheelchairs.

THE TRANSIT EXPERIENCE MUST BE IMPROVED TO ENHANCE ITS QUALITY AND ATTRACT NEW RIDERS

One of the greatest challenges to increasing the City's overall modal split is to improve the overall quality and experience of transit. Many City of Las Vegas residents that were surveyed during Master Plan outreach supported and valued RTC Transit services, but opinions were mixed on its reliability – only half felt public transportation could get them to their destination reliably and on time. Suburban residents were typically more likely to find transit service unreliable, whereas residents around Downtown Las Vegas found it to be both reliable and reasonably fast; those residents also valued access to public transportation from where they lived.

RTC's surveys on service also reveal important experiential oriented issues for existing passengers, choice riders, and tourists, including:

- Expanding coverage to more neighborhoods and more destinations. As such, service must ultimately be provided to every area throughout the City;
- Service during peak hours must be convenient and frequent; and
- Service must be safe; 75% of all passengers believe RTC Transit is safe; most surveyed believe lack of security, poor lighting or other people at bus stops were the most unsafe factors

TO ADDRESS A SHIFT IN MODES TO REDUCE CONGESTION, IMPROVE AIR QUALITY, AND EMISSIONS, THE CITY EMBRACES RTC'S ON BOARD MOBILITY PLAN FOR FUTURE HIGH CAPACITY TRANSIT AND WILL ADVOCATE FOR FUNDING IT

Anticipated to be adopted by the RTC Board of Commissioners in 2020, RTC's On Board Mobility Plan has been a two-year planning effort with considerable public stakeholder involvement. The On Board Mobility Plan includes eight "Big Mobility Moves" that would dramatically transform not only public transportation, but the region's entire transportation network as a whole by 2050. As described in the plan, these moves will have a dramatic impact on the City and will build the backbone for transit-oriented development by providing the "Transit" in TOD, which is why its ultimate build-out and construction will be critical to achieving many of the goals of this Master Plan:

Build the high capacity transit system - On Board describes high capacity transit as high quality, fast, and frequent transit services that operates in dedicated lanes and/or with high level of transit priority and includes the modes of LRT, BRT, and Rapid Bus. Each will help improve overall transit system performance and passenger experience.

Expand transit service to maximize access to jobs and housing - Not only would On Board provide high capacity transit, traditional transit service would increase to incorporate new coverage and expanded service to new areas, but also demand responsive service, such as call 'n' rides, microtransit or other similar service types. In 2019, RTC offered a pilot app-based ride-sharing service dubbed "Trip to Strip" that allowed passengers to hail and be picked up in a 12-passenger van, similar to transportation network company ridesharing apps. The City's development of loop and circulator service concepts such as the free Downtown Loop and the GoMED autonomous shuttle pilot in partnership with RTC has been an important step that demonstrates how the City and RTC can pilot, fund, and provide transit service when and where needs are identified. In addition to the RTC's and On Board recommendations, among the recommended areas for expanded transit service are below and are specifically stated under "Actions":

- Route extensions from existing service or new routes servicing NMXU within Summerlin West, Lone Mountain, Tule Springs, La Madre Foothills, Kyle Canyon, Centennial Hills, and Nu Wav Kaiv
- Microtransit serving identified planning areas:
  - Westcliff Transit Center, serving Summerlin North and Angel Park
  - Centennial Hills Transit Center and other identified transit centers in the northwestern planning areas, serving Centennial Hills, Nu Wa
  - Summerlin West

Make all travel options safer and more secure- As reflected in both City of Las Vegas and RTC passenger surveys, On Board recommends strengthening personal security and physical safety while riders walk to, wait for, and ride the bus. This includes more transit security and use of CPTED strategies at bus stops and transit centers. Safety has also been especially important due to the number of bus stops within the valley that have been struck by vehicles by careless or impaired drivers, killing and injuring those waiting. During the 2009 and 2011 Legislative sessions, RTC and local governments were directed to create a bus stop advisory committee and determine locations for stop relocations and bus turnouts, resulting in more than 400 stops being relocated. Since 2006, RTC no longer installs bus stops or shelters on a 5 foot sidewalk, but a 2009 study by RTC estimated nearly 1,000 stops did not meet this criteria. Of the bus stops that have been struck, many may have been placed in these locations because of the need for a stop near a busy transfer location or intersection but face right of way constraints. As such, the city must ensure that updates to Layered Complete Street Network cross sections in the Title 19 zoning code include transit stop design standards that ensure bus stops include bus turnouts or are protected from higher speed arterials and include designed space that will ultimately avoid injuries and fatalities of passengers by vehicles.

Make short trips easier- On Board shares the City's goals of making it easier and safer to walk and bike along the Layered Complete Street Network. Reflecting the 2050 general plan, On Board recommends the creation of regional and neighborhood mobility hubs at key TOD, TOC, and NMXU locations that have residential densities

exceeding 30 dwelling units per acre for BRT and more than 40 dwelling units per acre for LRT. Currently, few areas have dwelling units greater than 40 dwelling units per acre, but some emerge in close proximity to proposed near-term and long-term high capacity transit lines, especially within the Charleston, Downtown Las Vegas, and East Las Vegas planning areas. Each could also feature a range of transit and commercial amenities kiss 'n' ride drop off locations for transportation network companies and microtransit, provide convenient adjacent retail options, bike racks and infrastructure for first and last-mile connections, and secure, sheltered waiting areas featuring real-time transit information.

Expand service - Adding service for seniors, veterans, and people with disabilities, including the Flexible Demand Response, Silver Star routes, and Veterans services, as well as offering RTC's Paratransit service to new areas.

Improve regional connections - On Board will improve connections to major regional destinations including McCarran International Airport, the Strip, and Downtown Las Vegas.

Provide reliable transit for resort corridor employees - Because more than 30% of the region's jobs are in Downtown Las Vegas or along the Las Vegas Strip, many employees can only access employee only entrances leading to the "Back of House" located at the rear of most major properties. These areas are currently not well served by RTC Transit, but On Board recommends shuttles and pedestrian connections throughout the Las Vegas Strip corridor with direct links to Bonneville Transit Center in Downtown Las Vegas.

Leverage new technology to improve mobility - The On Board Mobility Plan recommends continued investment in technology to improve service. Simple programs, like providing smart-phone accessible apps and information to pay fares and get real-time schedule and wait times provide customer information and reinforce convenience and reliability. Furthermore, in an effort to reduce bus-based emissions and improve air quality, On Board would also invest in clean fuel technologies, transition existing buses to an all-electric fleet, and eventually incorporate autonomous technology into the fleet.

HIGH CAPACITY TRANSIT, PARTICULARLY LIGHT RAIL TRANSIT, DESCRIBED IN THE ON BOARD MOBILITY PLAN, MUST BE CLOSELY COORDINATED WITH RTC AS IT HAS THE BEST OPPORTUNITY TO MAKE MIXED-USE TRANSIT ORIENTED DEVELOPMENT (TOD) A REALITY

Of the place types described within the Land Use chapter and the 2050 general plan, Regional Centers (RC), Transit-oriented development (TOD), Transit-oriented corridors (TOC), and Neighborhood Mixed-Use Center (NMUC) each include a mixture of housing, office, retail, and/or other amenities integrated into a walkable neighborhood located near quality public transportation. TOD will result in:

- Increased transit ridership and fare revenue;
- Potential for added value created through increased and/or sustained property values where transit investments occur;
- Improved access to jobs, housing, and economic opportunity for people and working families of all ages and incomes; and
- Expanded mobility choices that reduce dependence on the automobile, reduce transportation costs, and free up household income for other purposes.

TOD opportunities are present along each identified On Board corridor based on the mode and ability to truly affect desirable change to land use. These corridors have the ability to foster new growth around transit because of the diverse and complementary high-activity uses along the corridor. Many of the parcels along these corridors are ideal for TOD, containing vacant, underutilized, or large contiguous lots.

TOD and redevelopment are also dependent on the underlying mode, transit service type, and ability to have an active pedestrian realm. While light rail transit (LRT) does represent a significant capital investment, it has produced hundreds of tangible results nationwide with economic value that can be captured in ways far greater than highway expansion and capacity investments can. It is therefore important to work closely with RTC's engineering and planning staff to carefully design transit utilizing Layered Complete Street Network principles.



In Southern Nevada, bus rapid transit (BRT) has thus far failed to generate any form of TOD. Many of the general features described for BRT that the On Board Mobility Plan recommends were simply not present in the operational characteristics of previous efforts; furthermore, perception issues of bus-based transit and a bus' lack of permanence don't typically translate to true TOD. It is imperative that with any bus-based high capacity transit lines that they be designed for permanence and with operational features that demonstrate a commitment to investments in the corridor including center-running dedicated lanes, larger stations, and branded rail-like vehicles. This will provide greater assurance that the route will remain in place.

To generate and produce TOD, access to fast, reliable transit service is critical to achieve its full potential. Light rail and more convenient transit options have regularly garnered widespread support during public outreach for the Master Plan process as well as a number of other studies, planning efforts, and projects:

- During Southern Nevada Strong outreach, 83% of residents surveyed wanted the region to pursue a high speed mass transit system such as light rail;
- The City of Las Vegas Mobility Master Plan's survey reported 94% of residents would use light rail or higher order mass transit if available;
- Maryland Parkway High Capacity Transit project surveys indicated more than 70% of respondents favoring light rail; and
- The RTC OnBoard 2018 Vision Survey indicated 83% of respondents having a positive impression of light rail and that 60% would be encouraged to try high capacity transit as a new mode of travel.

TRANSIT FUNDING MUST BE DRAMATICALLY INCREASED TO PROPORTIONATE AND MORE EQUITABLE LEVELS

Funding for RTC Transit comes from a combination of sources, the primary ones being:

- Federal Transit Administration funding
- Other Federal grants, including Congestion Mitigation Air Quality (CMAQ) and the Surface Transportation Program (STP)
- Voter approved sales tax measures (1/4 and 1/8 percent Q10 funds)
- Transit fares
- Advertising revenue on RTC Transit vehicles, bus stops, and facilities.

In addition to the need of funding reflected in the RTC On Board Mobility Plans, ridership trends in the existing system are placing an additional revenue burden on the day-to-day operations of the transit system. The farebox recovery ratio, the amount of money the RTC collects from riders that offsets the total subsidy for transit operations, is approximately 40%, which according to the American Public Transportation Association (APTA) is twice the national average. Historically, the RTC's Strip routes have had a recovery ratio in excess of 150%, which has allowed the RTC to subsidize local service provided to the remainder of the system. Unfortunately, both ridership and revenue from RTC's Strip routes have continued to decline with an approximate 30% decline in ridership since 2014. This decline coincides with the authorization of transportation network companies (ie - Uber, Lyft etc) within the State of Nevada. Strip farebox revenue has subsequently fallen over the last five years from $24 million to $17 million. Despite this, the trend seems isolated to the Strip as ridership on all other local routes in the system experienced a 1% increase in 2019.

Should these trends continue, with ridership falling, farebox revenue declining, and overall operating losses increasing, RTC has estimated the gap could lead to less funding for service, bus replacements, and other transit infrastructure needs. Furthermore, if forecasted transit operating costs surpass revenue within the next five years, service may need to be cut, eliminated, or altered, despite the demand

for transit, growth of the community, and the projected need for service. In the coming years, strategies must be developed to increase revenues by balancing the load on the system to be less reliant on tourism trends and provide the service necessary to grow and sustain ridership of residents. One such strategy, transit oriented development, would enact a funding mechanism to raise revenue and dedicate a portion of the proceeds back into the system for its costs and operations. This would be a critical method to finance the overall system.

EXISTING, FUTURE, AND RECOMMENDED MOBILITY HUBS

PLANNING AREA	Name / Location	RTC Routes Served (2019-20)	Future On Board High Capacity Transit Routes /notes
Downtown Las Vegas	Bonneville Transit Center	Deuce, SDX, WAX, CX, HDX, DVX, BHX, 105, 106, 108, 109, 113, 206, 207, 208, 214, 215	Bike Service Center & Parking, Paratransit, Future On Board HCT
Angel Park	Westcliff Transit Center	WAX, 121, 208	Park & Ride (137 + 9 ADA spaces), Bike Parking, Paratransit
Centennial Hills	Centennial Hills Transit Center	CX, 106A, 106B	Park & Ride (872 + 27 ADA spaces), Bike Parking, Paratransit, Future Rancho Rapid, microtransit
Summerlin North / Clark County	Summerlin Transit Center	SX, 206	Future Charleston HCT, Sahara HCT
Charleston	West Charleston	206, 103	Future Charleston, Decatur HCT
East Las Vegas	East Charleston	115, 206, SX-A	Future Charleston, Nellis Rapid
Downtown South	Sahara/Maryland	SX, 109	Future Maryland HCT
East Las Vegas	Eastern/Bonanza	110, 215	Future Eastern HCT
East Las Vegas	Eastern/Fremont	BHX, 110, 206	Future Eastern HCT
West Las Vegas	Martin L King/Lake Mead	105, 210, 214	Future Martin L King Rapid
Rancho	Santa Fe	101, 106, 219	Future Craig HCT/Rancho Rapid
Rancho	Craig/Decatur	103, 219	Future Craig / Decatur HCT, possible connections to 102
Charleston	Sahara/Decatur	103, SX	Sahara HCT, Future Decatur HCT, possible connections to Route 102
Twin Lakes	Rancho/Decatur	103, 106	Future Rancho Rapid
Tule Springs	215/Decatur	103	Future express service, microtransit
Summerlin West	215/Summerlin		Future express service, microtransit
La Madre Foothills	215/Ann		Future express service, microtransit
Lone Mountain	215/Cheyenne		Extension of Route 218, Future express service, microtransit
Lone Mountain	95/Cheyenne	101, 104, 218	Future express service, microtransit
Kyle Canyon	95/Kyle Canyon		Future express service, microtransit; Required park 'n' ride pursuant to Kyle Canyon Development Agreement
Nu Wav Kaiv			Future express service, microtransit

IMPLEMENTATION STRATEGIES

- Resolve to support, fund, and help RTC implement the eight "big moves" identified in RTC's On Board Mobility Plan:
  - Build the high capacity transit system
  - Expand transit service to maximize access to jobs and housing;
  - In conjunction with RTC, work to fund and develop new local and express routes that provide additional coverage and paratransit service to areas that currently lack service, including:
    - » Extension of crosstown Routes 103, 120, 121, 210, 218, and CX to existing or future mobility hubs
    - » A new Ann Road/Centennial Hills/Kyle Canyon crosstown route
    - » Provision of service within La Madre Foothills
    - » New express routes between the City's Regional Centers and mobility hubs to those outside city limits.
    - » As it has done previously with the Downtown Loop and GoMED transit circulator services, work with RTC to develop circulator, loop, and microtransit service from identified transit centers
  - Make all travel options safer and more secure
    - » Work with RTC on specific aspects that improve the transit-user experience for riders
    - » Standardize the Layered Complete Street Network standards within Title 19 and streets and highways specifications for transit
    - » Work with RTC to install transit supportive infrastructure that ensures fast, high quality service including major transit amenities, center running transit lanes, limited applications of mixed flow operations, bus turnouts, bus-only lanes, transit signal priority, and queue jump lanes to bypass traffic at major intersections
  - Make short trips easier by constructing mobility hubs and transit centers or park 'n' ride facilities within each planning area at locations identified as part of the On Board Mobility Plan
  - Provide reliable transit for resort corridor employees;
  - Expand service for seniors, veterans, and people with disabilities;
  - Leverage new technology to improve mobility;
  - Improve connections to major destinations.
- Work with the RTC to ensure that transit funding be increased to levels comparable to the amounts provided to street and highways and advocate for legislative changes that ensure value capture from TOD.
  - Dedicate in-kind money for City-specific transit service, routes, and infrastructure.
  - Support measures for funding alternative modes of transportation at the Nevada Legislature, as well as value capture mechanisms that can apply toward transit infrastructure or operations.
  - Partner with the RTC on FTA applications.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
The provision of transportation for all, regardless of income or location, ensures residents the ability to access neighborhoods, employment, and the daily needs of life	Public transportation, especially electrified modes, can reduce overall costs, reduce emissions, and be more efficient.	Transit helps support active transportation modes that result in improved health outcomes.	A well invested multi-modal transportation system is essential for a livable community for residents and businesses.	Investment in high capacity transportation and innovative associated technology like autonomous transit can help improve the efficiency of movement throughout the city.

I.C TRANSPORTATION: SMART SYSTEMS

NRS 278.160.1(h)(1) and (3)

STRENGTHEN SMART TRANSPORTATION SYSTEMS AND INFRASTRUCTURE TO FOSTER ECONOMIC DEVELOPMENT EFFORTS



The City of Las Vegas has been a leading Smart City, partly because so much of its infrastructure and development has taken place rapidly and over the last thirty years, which has seen a massive technological revolution. Since the 2000s, new sets of tools and "smart" products have become mainstream and are in widespread use in our daily lives. These systems have made their way into infrastructure, and use a digital technology to communicate information and data for beneficial and practical uses. Smart technologies also have the capacity to help citizens monitor their use and impact of resources.

As described in the Economic Development goal, the City has led this transition with the creation of an Innovation District within Downtown Las Vegas and creating a comprehensive "Smart Vegas" innovation initiative built around public safety, economic growth, mobility, education, social benefit, and health care – all under the guise of becoming a "Smart City." It has great potential to leverage further development of smart infrastructure, especially with knowledge and resources at UNLV. Ongoing efforts can be seen in two realms:

- Smart networks:
  - The City franchises telecommunications companies for use of the City's right of way and the provision of service to its residents and visitors. A number of franchises are granted for service in this space, including for Cox Communications and CenturyLink, two of the largest internet, television, and telephone communications providers.
  - The Public Utilities Commission of Nevada (PUCN) also regulates local telephone service but in a limited capacity. Wireless providers are permitted and regulated by the City with respect to infrastructure siting, design, and typical operations.
  - NV Energy developed one of the nation's first "smart grids." Through the use of smart metering, a wide range of data is collected for each customer and informs NV Energy's transmission and distribution networks.
- Smart mobility:
  - The Regional Transportation Commission of Southern Nevada (RTC), together with the Nevada Department of Transportation (NDOT) and local public entities, is responsible for the Freeway and Arterial System of Transportation (FAST), one of the first integrated transportation system management entities in the United States. FAST oversees both freeways and arterials and is responsible for regional intelligent transportation system (ITS) infrastructure.

Several City of Las Vegas departments oversee different aspects of smart infrastructure; the Department of Information Technology, led by the City's Chief Innovation Officer, and the Department of Public Works, which oversees capital project and infrastructure planning.

SEE ALSO:
Smarter Vegas Plan

KEY ACTIONS

- Construct a citywide fiber network to support the development of IoT, mobility, public safety, and other applications
- Fully leverage Downtown Las Vegas and Nu Wav Kaiv as innovation centers for future smart infrastructure where opportunities to leverage light manufacturing and aerospace, UAV, autonomous technologies, and supportive military or defense activities can exist.
- Further enable the electrification of transportation by continuing to develop vehicle charging infrastructure

OUTCOMES

- Implementation and support of identified "Smart Cities" demonstration projects occurring within the City's Innovation District pursuant to the framework identified in the Smart Plan
- Debut annual "Emerging Technology" deployments.
- Ongoing deployment of coordinated FAST smart mobility TSM/ITS and V2I technologies for use and application by connected and autonomous vehicles
- Citywide implementation of a fiber-optic network for IoT devices by 2050
- Number of public EV charging stations increases to 1.07 per 10,000 residents
- EV registrations increases over time
- Creation of "Smart City" analytic dashboard



The City 's IIC@V offers configurable modular working spaces with both private and open offices and meeting rooms. The facility includes high-speed secured Wi-Fi and network.

AS THE INTERNET OF THINGS CONTINUES ITS DEVELOPMENT, THE CITY OF LAS VEGAS HAS THE OPPORTUNITY TO BECOME THE LEADING SMART CITY; THE DEVELOPMENT OF A CITYWIDE FIBER NETWORK CAN SERVE AS THE BACKBONE FOR A RANGE OF APPLICATIONS

Access to high speed internet may be taken for granted within urban areas, especially those with advanced and well-developed telecommunications networks already in place. However, secure internet access is critical for improving quality of life and ensuring access to an equitable future; online education, health care, personal safety, and even training applications online all can help an individual improve their lives. However, digitialization can also be equally dangerous if the skills and understanding of these technologies are not rolled out in conjunction with their infrastructure. To truly ensure "smart cities" help a city to grow better, Las Vegas will need to take a thoughtful approach to transitioning the skill-set of its citizens to the digital age. Doing so will ensure that becoming a "smart city" can become the guiding means of development for future Las Vegas generations.

The City of Las Vegas current smart efforts are centered within a test bed in its existing Innovation District. The Innovation District acts as a test bed for introducing advanced technologies and new transportation infrastructure that can promote sustained economic development and an improved quality of life. Projects and solutions have been developed through collaborative efforts between the city and new technology partners. The City has leveraged its global location with international trade shows such as the Consumer Electronics Show to help companies showcase new and innovative technologies. The Innovation District Resolution also enables city staff to create partnerships to establish demonstration sites throughout the Innovation District. Once new technologies are tested and vetted, those with the greatest community impact, easiest citywide scalability, and potential for return on investment will be considered for deployment across the City and ultimately with other partner agencies. Within the District is the International Innovation Center @ Vegas (IIC@V), which began in 2019 as an incubator for the development of new and emerging technologies, including but not limited to IoT (Internet of Things), Artificial Intelligence (AI), virtual and augmented reality, cybersecurity, water science, and advanced mobile data. IIC@V houses both start-up and established companies.

At the heart of the Innovation District is robust connected vehicle infrastructure designed to support the operation of Connected Autonomous Vehicles (CAVS). The city's significant investment in a high-speed fiber optic network supports the safe operation and assessment of CAVs, making the area a hotbed of testing of technologies. To support the development of connected and autonomous vehicle technologies and building on the success of the International Innovation Center @ Vegas, the city of Las Vegas has allocated additional space for mobility technology startups as a new Advanced Mobility Center.

Since its inception, the District has already resulted in a multitude of projects including the automated vehicle technology companies Navya and Aptiv. Both have tested and deployed their Vehicle-to-Infrastructure (V2I) technology, with the former deploying an autonomous shuttle within the Fremont East District of Downtown Las Vegas. This template may be a model for other pilot microtransit projects, including GoMed between the City's Downtown core and the Las Vegas Medical District and others described in the Transit goal.

The ultimate vision from the Smart Vegas plan is to continue testing and piloting new innovations that connect citizens and technology for an enhanced quality of life, improved economy, and future-focused environment. Future innovative Smart City projects and programs, in addition to mobility and connected or autonomous vehicles may include:

- Public Safety: Innovative technology that better informs first responders and decrease response times.
- Economic Growth: New technologies and infrastructure from increased private sector investment that promotes new business models, encourage operational efficiencies, and lead to new job opportunities
- Health Care: New technology advancements that connected and intelligent medical devices will encourage a broader view of health and well-being

AS A LEADING EARLY ADOPTER IN INTELLIGENT TRANSPORTATION SYSTEMS AND TRANSPORTATION SYSTEM MANAGEMENT, THE CITY MUST FURTHER CONNECT SMART CITY EFFORTS WITH MOBILITY PLANNING

FAST was one of the early TSM/ITS systems that rapidly deployed smart infrastructure along Southern Nevada's roads. Traffic is monitored and managed through each city's intelligent transportation system (ITS) devices including radar detection flow meters, closed circuit television cameras (CCTV), dynamic message signs (DMS), ramp meters, lane use control signals, and traffic signals. Its newest feature includes Active Traffic Management (ATM) and is employed throughout the I-15 corridor. All ITS devices report to a central system through software and communications systems including the fiber optic and microwave network.

The next frontier of TSM and ITS innovation will likely be closely developed in close consultation with entities like NDOT and RTC/FAST. As the City develops connected corridors and prepares for the advent of connected autonomous transportation, more applications for Vehicle to Vehicle and Vehicle to Infrastructure may require investment. Other systems within the universe of the Internet of Things (IoT) may also require technology development; because of the unknown costs, rapid advancement, and evolution of these and other TSM/ITS systems, a short-term wait-and-see approach may initially be required until stakeholders, and other jurisdictions determine the correct measures necessary on a regional basis.

TO FURTHER MITIGATE AIR QUALITY AND GREENHOUSE GAS EMISSIONS, TRANSPORTATION ELECTRIFICATION MUST BECOME EMBEDDED INTO DEVELOPMENT

Over the past decade, transportation electrification has seen tremendous advancements for personal electric vehicles, freight, and vehicle fleets. Direct benefits of electric vehicles for consumers include reductions of emissions and reduced cost and demand for fuel. However, a critical link to the development of the electric vehicle and plug-in hybrid electric vehicle market is the development of the infrastructure necessary to sustain these vehicles. While market share is still slowly growing, industry estimates the electric and plug-in hybrid electric vehicle adoption rate to increase to approximately 33% market share by 2035.

The City has been at the forefront for electric vehicles and infrastructure. In 2009, it was awarded funding through a Congressional appropriation for a Plug-in Hybrid Electric Vehicle Demonstration Program, allowing the City to be the first Nevada municipality to purchase and test electric and plug-in hybrid electric fleet vehicles and make an initial deployment of associated electric vehicle charging infrastructure.

While the City required its own charging station infrastructure for its vehicles, widespread electric vehicle adoption has necessitated the rollout of new infrastructure for charging access in the community as well. As a result, the City chose to make its procured charging station infrastructure publically available. Due to the installation of more than 2 megawatts of solar covered parking, additional conduit was made available to add electric vehicle infrastructure. Community centers were selected as they had the most public traffic and had the greatest chance for use.

Since the completion of the Demonstration Program, Nevada's electric vehicle market has continued to flourish. There is now a network of more than 200 publically accessible electric vehicle charging station locations throughout Southern Nevada, of all types, including Levels I, II, and DC-fast charge. There has also been continued support by both the public and private sector:

- Nearly all resorts within Downtown Las Vegas and on the Las Vegas Strip have EV charging infrastructure at their properties.
- Deployment of charging as a part of the State's Nevada Electric Highway (I-11) linking Las Vegas to Reno with EV charging stations; and the I-15 Alternative Fuel Corridors between the California stateline at Primm and the Arizona stateline at Mesquite;
- NV Energy, the state's investor owned utility, proactively deployed a time of use electric vehicle retail rate allowing customers to pay a discounted rate if they charge the vehicle during the utility's off-peak hours.

Further development of electric vehicle charging infrastructure and network refinement will provide a critical link supporting broader adoption of electric vehicles that improves recognition and support for these vehicles, reduces mobile emissions, and enables and fosters additional car-sharing programs. Additional public investment for electric vehicle infrastructure must be a future focus for both new residents and visitors. Electrification can be expanded further by incentivizing in-home charging in new developments, developing incentives for purchasing electric vehicles, expanding charging infrastructure beyond the urban core, and exploring electric fleets for government and private sector transportation services.

QUICKLY CHANGING AND NEWLY EMERGING TECHNOLOGIES WILL REQUIRE THE MONITORING AND GOVERNANCE OF SOCIETAL, CYBER, AND NETWORK SECURITY

Rolling out new technologies are only useful if citizens are prepared to interact with them, and the city of Las Vegas is prepared to govern these technologies. The City of Las Vegas will need to ensure that its digitalization efforts are deployed in line with training initiatives, information campaigns, and the governance of new technologies, especially as electrification efforts transition to autonomous and robotics-based operations. The City will need to ensure that coordination is maintained between its Technology Office, NV Energy, and the City's Department of Transportation; considering the depth of coordination needed, the city should consider implementing a Department of Innovation or a Department of Mobility to ensure its economic development is coordinated inline with smart city development.

Cities are already seeing an eruption of technologies coming online, and with various impacts on their economic development. Electric vehicles, for instance, have been noted for their potential to decrease transportation emissions, but also have been noted as potentially having a negative impact on the grid if the utility grid below charging stations are not prepared for their roll-out. The coordination between NV Energy, UNLV, and the City of Las Vegas it its initial Innovation District pilot points to the importance of coordination between digital aims, particularly as autonomous vehicles and drones come online. Both of these technologies have equally been noted for their potential in reducing traffic congestion, but in increasing free-time individuals. Imagine a future where one does not need to drive to get to work, but instead, can simply use a car that is able to drive itself to work; similarly to trains, autonomous vehicles can be used to transport groups of individuals, especially in areas where access to buses and/or trains is difficult. Drones have also been noted as equally exciting for the potential to deliver goods and services in difficult to access areas. Both types of technologies may have the opportunity to really disrupt Las Vegas residents in a positive way.

However, these technologies may be equally devastating as beneficial if deep attention to skill-set and understanding of the function of these systems are not coordinated neatly. Both types of technologies require a deep understanding of technical systems, and need to be directly developed in line with security measures that ensure they function appropriately. As exciting it is to imagine a future where one does not need to drive themselves to work, it is equally frightening to image a future when the car you are traveling in becomes operated by a malicious individual.

Technical training, security monitoring, and grid coordination are core to making sure that these systems result in positive lifestyle changes for Las Vegas residents.

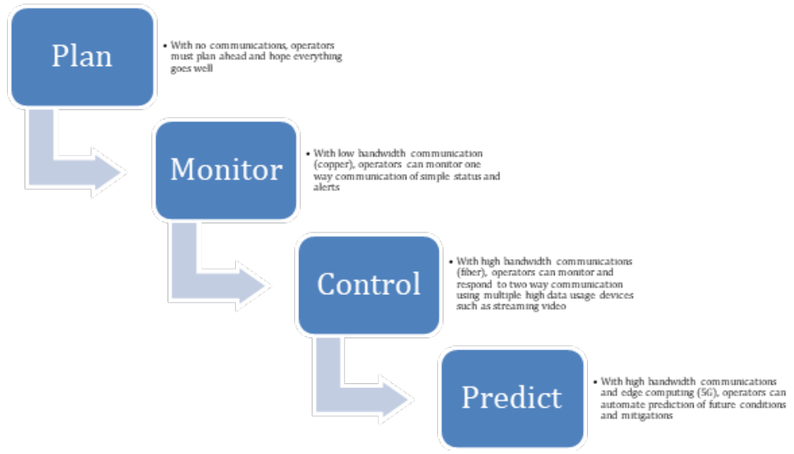


MAJOR PROJECT

WHY DO WE NEED A CITYWIDE FIBER NETWORK?

Smart Cities believe in supporting its residents and improving quality of life by using data and connectivity. It is estimated that the number of connected devices in the world has grown by over five times in just over 10 years. This trend is expected to continue to grow exponentially over the next 30 years. There is value in the intentional collection of data to better understand trends and behaviors that promote adaptation. However, to implement these smart systems, real-world infrastructure is needed to collect and transmit this data.

The ability to monitor, control and predict operations of IoT, mobility and public safety devices in realtime is directly connected to the data infrastructure, such as fiber and 5G, which is available at the location of the device.



EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Develop training programs and continue partnering with CCSD and UNLV to ensure Las Vegas students and residents have access to the skills and resources needed for digitalized jobs.	The advancement of smart networks will share data and information to increase efficient use of resources.	Smart infrastructure roll-out can be used with smart platforms and information systems to inform healthy lifestyle choices for Las Vegas residents.	Investment in smart infrastructure will enable the development of practical applications that can be used to improve life for residents.	New, rapidly evolving innovations have the potential to transform land uses, means of transportation, and enhance economic development efforts.

IMPLEMENTATION STRATEGIES

- Construct a citywide fiber-optic network and infrastructure network
- Offer franchise agreements for franchisees to utilize City infrastructure for the purposes of “Smart City”
- Continue to invest in smart infrastructure and specific IoT projects that improve City operations and service delivery, including:
  - Arterial and intersection-based ITS, including traffic signals, fiber optics, and Dedicated Short Range Communications (DSRC)
  - IoT sensors to provide historical and near-real time information for informed planning and decision making
  - WiFi and broadband applications at all municipal buildings and facilities
  - Building controls and management systems
  - Smart metering for wastewater treatment and sewer operations
  - V2x (Vehicle to anything) infrastructure
- Complete and formally launch the Advanced Mobility Center and other innovation areas, including in the Nu Wav Kaiv planning area along the I-11, where opportunities to leverage light manufacturing and aerospace, UAV, autonomous technologies, and supportive military or defense activities can exist.
- Support the deployment of Connected and Autonomous Vehicles.
  - Conduct a study or specific plan on the opportunities, challenges, benefits, and threats of Connected and Autonomous Vehicles.
  - Evaluate emerging mobility models such as microtransit and on-demand services to identify options that would best serve the city in the future.
- To further enable the development of electric vehicle charging infrastructure:
  - Invest in publicly accessible EV-charging infrastructure, including DC-fast charge, as part of the Nevada Electric Highway (including within in the northwestern Nu Wav Kaiv district along the I-11) and as part of the Interstate 15 Alternative Fueled Vehicles corridor.
  - Develop (or collaborate to develop) incentives for in-home charging, EV purchasing, and fleet electrification
  - Adopt amendments to the LVMC Title 19, Unified Development Code, to create an incentive program for electric vehicle parking and charging stations where off-street parking is required that reduces required parking
  - Explicitly permit charging stations as an allowable accessory use.
  - Incorporate electric vehicle charging capability (station ready) for a determined capacity of total vehicle parking capacity at all newly constructed City buildings and facilities.
  - Work with NV Energy to assess the expansion of existing electric vehicle infrastructure to ensure facilities have capability to handle charging load, be able to meet the demand for increased accessibility of electric vehicles.
  - Adopt Design Standards and Minimum Requirements for municipal and private installations:
    - » Approve general design standards for electric vehicle charging
    - » Instructions, regulations, and warnings
    - » Signage and striping
    - » Additional requirements and standards shall be developed for handicapped/ADA accessible EV charging station spaces and loading.
    - » Charging station specifications and procurement standards for City charging units should consider products that are capable of charging users for power or other pay-per-use features, national network connections and RFID cards.

II RESOURCE CONSERVATION



GOALS

A. Support efficient water management, reduce water consumption, and enact stronger water conservation strategies to minimize consumptive use

B. Prioritize the use of renewable energy sources and improve energy efficiency.

C. Reduce waste consumption and target net-zero municipal solid waste produced in the community.

D. Mitigate and reduce municipal and community greenhouse gas emissions.

II.A CONSERVATION: WATER

NRS 278.160.1(a)(1)

SEE ALSO:
SNWA Water Resources Plan

SNWA Conservation Plan

SUPPORT EFFICIENT WATER MANAGEMENT, REDUCE WATER CONSUMPTION, AND ENACT STRONGER WATER CONSERVATION STRATEGIES TO MINIMIZE CONSUMPTIVE WATER USE

Water is critical to the City's ability to serve existing and future residents and for economic development opportunities through 2050. Southern Nevada is recognized as an industry leader in water resources management with connections to many stakeholders, both in Southern Nevada and among the states and nations that share the Colorado River. Although Southern Nevada has been successful in managing its resources to date, expanded effort, collaboration and innovation are necessary to meet community conservation and water use goals. Currently, residents, businesses, and visitors consume approximately 110 gallons per person, per day.

Since 1991, the Southern Nevada Water Authority (SNWA) has served as the region's water wholesaler. SNWA manages regional water resources through the Water Resource Plan and a regional Conservation Plan, protects Lake Mead's water quality, and provides regional water treatment, infrastructure, and conservation programs for Las Vegas residents and businesses. Water drawn from Lake Mead through three intake structures is pumped to two water treatment facilities and distributed to four public water purveyors in the region. The system is capable of treating and transmitting at least 900 million gallons per day, ensuring uninterrupted service to the growing community. The City of Las Vegas is primarily served by the Las Vegas Valley Water District (LVVWD), a member agency of SNWA. LVVWD treats and delivers water to city residents and businesses through the Southern Nevada Water System.

The SNWA maintains and updates a Water Resource Plan for the community, which reflects a diverse approach for meeting projected demands, including achieving the SNWA's water conservation goal. Achieving this goal will necessitate changes from past development patterns and additional water conservation measures to meet projected water demands, including the City's projected population increase of approximately 308,000 residents.

Beyond the SNWA, there are many state and federal partners responsible for oversight of Southern Nevada's water resources and water quality.



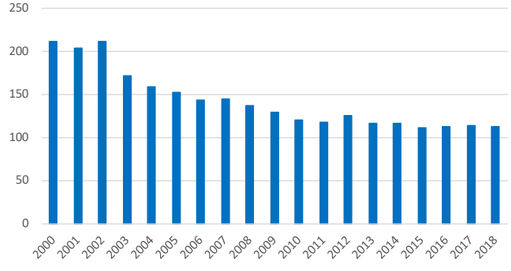
- The U.S. Bureau of Reclamation manages water resources and facilities in the Western United States, including Lake Mead, Hoover Dam, and other reservoirs and infrastructure on the Colorado River.
- The Colorado River Commission of Nevada (CRC) is the State agency responsible for acquiring and managing Nevada's share of water resources from the Colorado River.
- Nevada Division of Water Resources (DWR) and the State Engineer help permit, conserve, protect, and manage in-state surface and groundwater resources, water rights, and monitor well use.
- The Nevada Department of Environmental Protection (NDEP) oversees water quality for drinking water, discharges into the sanitary sewer system, and water pollution prevention and control through state-level permitting, enforcement and compliance with the National Pollutant Discharge Elimination System NPDES) permit for the Municipal Separate Storm Sewer System (known as MS4).

Water uses in the region are characterized as "consumptive" and "non-consumptive." Consumptive uses, such as landscape irrigation, water-based cooling systems, and evaportation, are lost to the atmosphere and comprise 60 percent of all water demand. Conversely, non-consumptive use occurs indoors. Both wastewater and stormwater leave the Las Vegas Valley through the Las Vegas Wash. Through both direct and indirect reuse, Southern Nevada recycles 99 percent of its wastewater and receives "Return-Flow Credits" that account for roughly 40 percent of the water used in Southern Nevada, making it the second largest resource of the region's water resource portfolio. On average, 44 million gallons of wastewater are collected every day through the City's 1,800 mile-long sanitary sewer system. This water is treated at plants operated by the City's Public Works Department. A small fraction of the highly-treated effluent is directly reused as recycled water for secondary consumptive uses, but most is indirectly reused by returning Colorado River water to Lake Mead, allowing the community to reuse every gallon it returns. Through direct and indirect reuse, Southern Nevada recycles nearly all water used indoors, making water reuse the second largest resource in the region's portfolio.

The City of Las Vegas has long been a vital partner in Southern Nevada's water conservation efforts by supporting SNWA's regional management efforts through the adoption of policies, drought restrictions and development standards. The City, itself, has reduced its annual municipal water demand 2.25 billion gallons over the past decade. The City also plays a vital role in the regulation of utilities, wastewater collection and treatment, stormwater management, and implementation of the regional conservation plan.

As a continuation of its previous efforts, the City must continue to lead by example, advancing water efficiency measures to reduce water consumption, lower costs, and ensure a safe, and reliable water supply for the future.

GALLONS PER PERSON, PER DAY (GPCD)



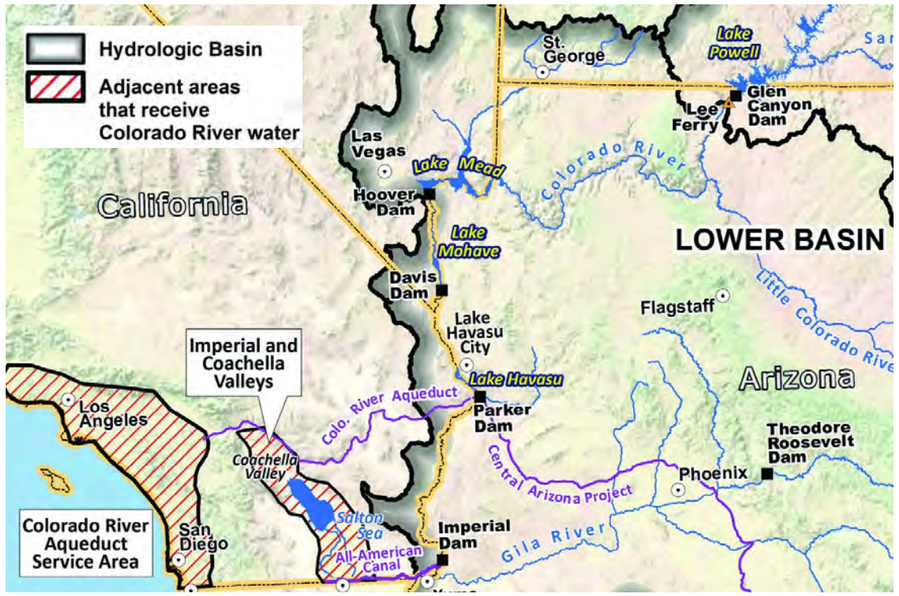
Source: SNWA

OUTCOMES

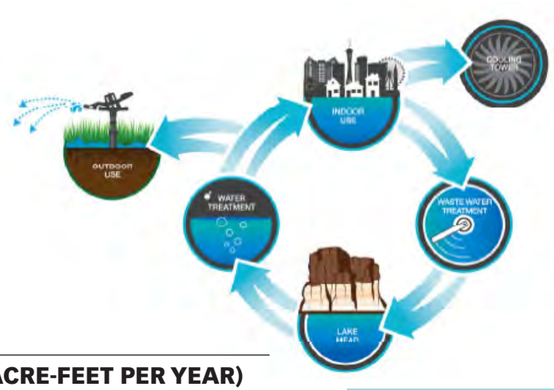
- Community water consumption will be reduced to 105 GPCD by 2035 and 90 GPCD by 2050, consistent with SNWA's Water Resource Plan
- CLV municipal operations shall reduce total water consumption 2% annually, covering the sectors of buildings and facilities, park and landscaping, and wastewater treatment
- LVVWD incurs no violation of Safe Drinking Water Act/EPA drinking water rules for chemical and microbial contaminants and turbidity
- The City remains in compliance with its NPDES permit with no violations of Clean Water Act effluent and reporting guidelines for all treated wastewater
- The City incurs no major NPDES violations on its MS4 permit for stormwater quality

KEY ACTIONS

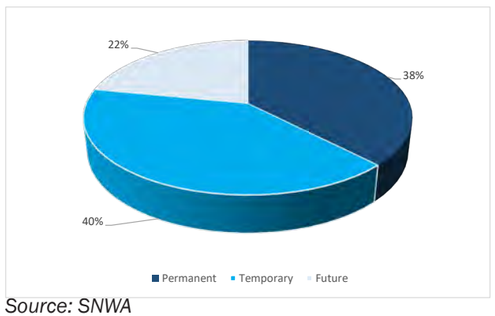
- Collaborate with SNWA on updates to the Water Resources and Conservation Plans , specifically as it relates to development trends and projections, land use, and conservation best-practices.
- Engage LVVWD and/or SNWA to develop programs and participate in the development design review processes to ensure projects meet or exceed minimum expectations for water efficiency.
- Ensure a continued commitment to water efficiency and water reduction for municipal operations.
- Collaborate to clean up sensitive areas that flow to Lake Mead to prevent stormwater pollution, and comply with the NPDES MS4 permit.
- Manage, maintain, and upgrade water and wastewater treatment infrastructure to reduce leaks in the system and eliminate contamination, ensuring clean water returns to Lake Mead for return-flow credits.



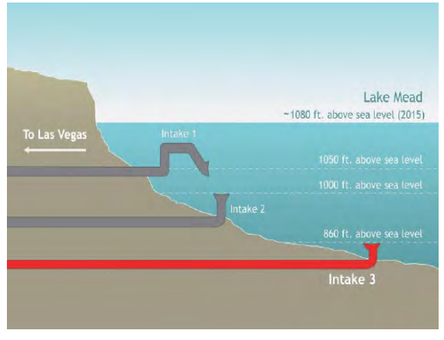
Southern Nevada Water System



WATER PORTFOLIO (ACRE-FEET PER YEAR)



Source: SNWA



NINETY PERCENT OF ALL WATER DELIVERED IN SOUTHERN NEVADA COMES FROM THE COLORADO RIVER

The "Law of the River" – a collection of agreements among the seven Colorado River Basin states and Mexico governs the allocation of water rights. Nevada is allocated 300,000 acre-feet per year (AFY), or about 98 billion gallons of consumptive use from the river - less than 2% of the total 16.5 million acre-feet allocated. Despite this small slice of the Colorado River, being adopted at a time when Southern Nevada was sparsely populated and when water flows were not representative of drought conditions, Southern Nevada has continuously innovated and thrived. Since 2002, aggressive conservation efforts have allowed the region to serve more than 730,000 additional residents while using 35 billion gallons less Colorado River water.

Although the SNWA Water Resource Plan contains a range of demand and supply scenarios, the plan relies on additional water efficiency gains across all scenarios. New development in Southern Nevada must be significantly more water efficient than existing development. Through negotiations with other Basin States, other rules, laws, and interim guidelines have been adopted that address water allocations during periods of shortage. As a region, Southern Nevada used 244,000 AFY in 2018. After each update, SNWA's Water Resource Plans ensure water demand throughout the region is met by managing supplies and accounting for changing climatic conditions within the Colorado River Basin.

- Permanent: As of 2020, approximately 365,000 AFY
  - Colorado River – 300,000 AFY: Nevada's allocation of Colorado River water flows representing 90 percent of Southern Nevada's water supply used almost entirely for municipal and industrial purposes.
  - Groundwater – 46,961 AFY: LVVWD has more than 40,000 acre feet of senior rights, stored as a "banked" future reserve through artificially injected recharge.
- Temporary: As of 2020, approximately 1.97 million acre-feet / 390,000 AFY: These resources, including water banking and intentionally created surpluses, are flexible arrangements with other states that can be used to meet potential short-term gaps in supply or demand, including as a bridge resource as other future resources are developed.
- Future: Includes desalination, transfers and exchanges. Each of these resources would only be utilized in the event water demand and climatic conditions warrant their development. Each have their own economic costs and legal constraints.

SNWA AND THE LAS VEGAS VALLEY WATER DISTRICT PROVIDE CUSTOMERS WITH HIGH QUALITY WATER IN COMPLIANCE WITH SAFE DRINKING WATER STANDARDS

Water drawn from Lake Mead is treated at SNWA's world-class water treatment facilities, which include multiple stages of filtration and disinfection. Each year, SNWA scientists collect more than 50,000 water samples and conduct more than 300,000 analyses to ensure Southern Nevada's drinking water meets or surpasses state and federal standards. As Lake Mead's water level declines due to drought the cost and complexity of drinking water treatment increases. The City must be proactive in its stormwater pollution prevention and wastewater treatment efforts by enforcing the MS4 permit to ensure protection of water quality within the reservoir.

THE COLORADO RIVER BASIN IS SUBJECT TO DROUGHT, AMONG THE TOP ENVIRONMENTAL THREATS LAS VEGAS MUST CONFRONT AND ADAPT TO

Since 2000, the Colorado River Basin has experienced diminished flows and shrinking reservoir storage. This is a result of drought and changing climatic conditions that result in higher temperatures, changing continental weather patterns, and more variable precipitation that has impacted water elevations at lakes Powell and Mead, the river system's two largest storage reservoirs.

Climate change projections show reduced Colorado River flows and greater water demands for outdoor irrigation and cooling. Southern Nevada must continue to proactively plan for drought conditions and climate change. The SNWA Water Resource Plan anticipates the potential of continued and even worsening drought and climate, but demonstrates sufficient water supplies to meet projected demands through 2050, provided the community achieves water

efficiency targets and continues to maintain and develop a diverse water resource portfolio.

This plan considered SNWA's Water Resource Plan, which includes a range of future water demand and supply scenarios with impacts from drought and climate change. Under all the scenarios, achieving the water conservation goal is necessary to meet future demands, and as a result, this plan includes a commitment to aggressive water conservation. The climate change with conservation scenario assumes future water use at about 100 GPCD by 2035 and about 90 GPCD by 2050.

CONTINUED DROUGHT ON THE COLORADO RIVER MAY REDUCE THE REGION'S ALLOCATION

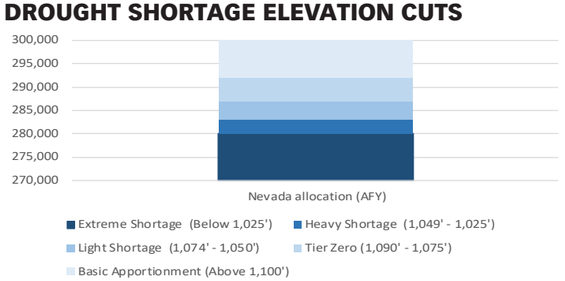
Lake Mead is the nation's largest reservoir, at 247 square miles when full, having a total capacity of 29.7 million acre-feet, and having a maximum designed water surface elevation at Hoover Dam of 1,220 feet, capable of storing 8.5 trillion gallons of water. As elevations fall, water levels will be below SNWA's three intakes. At elevation 895, Lake Mead would reach deadpool, with Colorado River Water no longer being able to pass Hoover Dam.

Sustaining operational water levels in Lake Mead is essential to the system's ability to continue to supply Colorado River water to California, Arizona and Mexico. As such, agreements have been forged among the Bureau of Reclamation, Colorado River basin states, water users and Mexico to reduce their allocations under certain lake level conditions and ensure continued operations. These "shortage" agreements have the potential to further shrink Southern Nevada's available supplies.

As of 2020, Lake Mead's elevation was filling and stood at elevation 1,090 at Hoover Dam, representing a decline of 130 feet and standing at 40% of total capacity. While water left in Lake Mead by the Tier Zero cutbacks, which were initiated in 2019, can only be recovered once the lake's elevation increases to 1,100 feet.

Climate Change Hydrology, with additional conservation; while this model will change annually, this represents SNWA's current snapshot

DROUGHT SHORTAGE ELEVATION CUTS



Source: SNWA

In addition to the mandatory reductions, the SNWA signed with other basin states entered into the Lower Basin Drought Contingency Plan, an agreement requiring the Lower Basin states to make additional efforts to reduce Lake Mead's projected decline and further risks of allocation cuts.

SOUTHERN NEVADA'S WATER USE STRATEGIES OF REGULATION, PRICING, INCENTIVES, AND EDUCATION HAVE MADE IT A RECOGNIZED LEADER

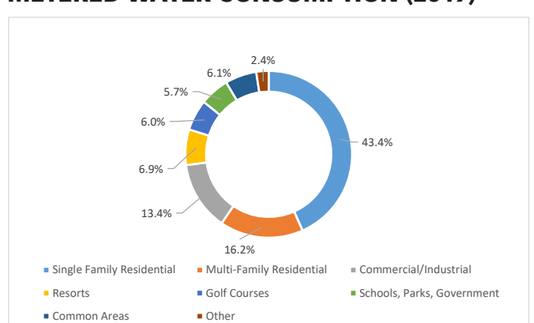
Of all metered water consumption, the residential sector accounts for approximately 60% of all consumptive use. Single-family residential accounts for the vast majority of this consumption; at a typical home, 80% of use is for outdoor irrigation. Because of this, the majority of conservation efforts have been directed at this sector. Since 1991, SNWA has managed one of the most progressive and comprehensive water programs and is detailed in its 2019 Conservation Plan:

- **Regulation:** The City, along with its neighboring jurisdictions, maintains development standards limiting the use of turf restrictions, to reduce irrigated turf. This was the most productive conservation, cutting the consumptive water demand of new homes and businesses by more than half. LVMC also includes regulations to eliminate and reduce excess water use, as well as establish landscaping standards. They also establish standards for irrigating times of day, days of week, and seasonal watering restrictions.
- **Water Pricing:** SNWA's member agencies utilize increasing-block tiered rate structures that charge higher rates as consumption increases, creating financial incentive for property owners and encourage water conservation.
- **Incentive Programs:** SNWA has invested more than $250 million to incentivize the conversion of ornamental lawns with drip irrigated plantings. As of 2020, this program has replaced more than 196 million square feet of lawn grass, saving an estimated 11 billion gallons annually and more than 140 billion gallons cumulatively. Other programs subsidize adoption of new water efficiency technologies for homes and businesses.
- **Education:** SNWA and the City partner to provide information to water users, including educational classes, online resources, school programs, advertising campaigns, and numerous other avenues to engage the community and help residents understand efficient use of water in the desert.

TO MEET SNWA'S PROJECTED CLIMATE AND DEMAND SCENARIOS, THIS PLAN'S LAND USE STRATEGY CAN LEAD TO GREATER WATER EFFICIENCY

Given current gallons per person, per day (GPCD), housing composition, and population, the average per housing water consumption is approximately 307 gallons per unit per day. Under this plan's new TOD place types, a wider range of housing, especially multi-family type units would be created. The key feature with these units is that they are within buildings and structures that are not so tall to require evaporative cooling or a cooling tower and can capitalize on highly-accessible outdoor spaces, rather than each unit having its own dedicated outdoor space. SNWA data show multi-family units in buildings four stories or less have the greatest per capita water efficiency. Applied citywide with existing housing stock, SNWA's overall water conservation objectives and targets are attainable, especially if employed within other jurisdictions. Additionally, the City must also similarly strengthen and reform LVMC Title 14 and Title 19 Unified Development Code to ensure overall regional conservation goals are met and water demand reduced.

METERED WATER CONSUMPTION (2019)



Source: SNWA

CURRENT WATER CONSUMPTION (gallons per day by total acreage)					
PLANNING AREA	Attached Residential	Commercial	Industrial	Multi-Family Residential	Single-Family Residential
Angel Park	271,172	808,374	0	1,674,142	4,285,457
Centennial Hills	120,999	891,591	5,538	744,755	4,936,060
Charleston	416,836	2,008,287	203,083	1,964,821	5,693,627
Downtown	404,024	901	251,923	859,842	724,415
Downtown South	180,648	370,256	331	104,020	1,296,883
East Las Vegas	521,319	559,555	101,912	1,319,032	3,343,097
West Las Vegas	169,060	109,591	30,644	408,857	1,145,916
Kyle Canyon	0	5,023	17,914	66,633	1,221,080
La Madre Foothills	0	76,326	238,235	192,722	1,992,873
Lone Mountain	227,430	389,381	7,036	795,321	3,632,092
Twin Lakes	691,437	1,528,394	25,909	2,659,558	5,494,486
Nu Wav Kaiv	0	0	0	0	0
Rancho	94,868	757,117	25,005	379,770	4,962,440
Summerlin North	691,884	866,073	4,547	1,267,266	7,024,876
Summerlin West	691,884	19,150	0	99,173	2,228,950
Tule Springs	0	123,678	0	0	3,634,503
Total consumption:	**4,481,562**	**8,513,697**	**912,077**	**12,535,913**	**51,616,755**

RESIDENTIAL BUILDING TYPE	HOUSING UNITS	LAND ACRES	YEARLY USE (1,000 GALLONS)	GPCD
Multi-Family, 1-floor	5,599	326	441,710	93.0
Multi-Family, 2-floor	76,594	3,214	6,015,886	88.1
Multi-Family, 3-floor	11,472	387	763,516	86.0
Multi-Family, 4-floor	2,743	53	165,243	76.6
Multi-Family, 5+ floor	5,531	79	422,825	175.4
SFR (aggregate)	294,413	43,808	40,488,848	143.4
SFR Units/Acre: 0.5	125	492	120,287	1,152.3
SFR Units/Acre: 2	12,006	5,786	4,317,771	372.7
SFR Units/Acre: 5	18,571	3,764	3,322,578	191.1
SFR Units/Acre: 8	31,149	3,893	3,706,575	122.8
SFR Units/Acre: 10	27,905	2,791	2,778,274	102.4
SFR Units/Acre: 12	19,702	1,576	1,768,082	92.5
SFR Units/Acre: 14+	28,217	1,378	2,195,610	82.7

Historically, single family homes are the most water-intensive dwelling units due to their low density and expansive irrigated landscaping. Furthermore, low density development increases the amount of infrastructure required to serve each resident. With each additional mile of distribution pipe comes greater potential for system losses due to leaks. An analysis conducted by LVVWD found ten single family detached homes could be supported on an acre of land with just 13 percent more water than if five such homes were built on the same parcel, while supporting more than twice as many residents. Higher density in multi-family housing has similarly beneficial effects. The Placebuild tool uses historic data associated with specific residential housing types and land uses to assess average daily gallons of water used per housing unit, per day, based on the specific mix of use types.

Source: Placebuild tool, SNWA, LVVWD

IMPLEMENTATION STRATEGIES

- Collaborate with SNWA on updates to the Water Resources and Conservation Plans , specifically as it relates to development trends and projections, land use, and conservation best-practices.
- Engage LVVWD and/or SNWA to develop programs and participate in the development design review processes to ensure projects meet or exceed minimum expectations for water efficiency, which may include but is not limited to:
  - Offer comprehensive programs for low-income or multifamily households.
  - Partner to design, advertise, and/or implement a low-income program that goes beyond direct-install indoor or outdoor drip systems
  - A tree and landscaping incentive program to replace sick, dying, non-native, or non-adaptive trees with xeriscaping, water efficient, drought tolerant species
  - Required community benchmarking, rating, and water use, either for all buildings.
  - Make applicable corresponding water conservation code changes to LVMC Title 14 and LVMC Title 19 Unified Development Code that go beyond those currently adopted and provide additional requirements and scrutiny during the approval process
    - » Include LVVWD staff on development application to assess water use
    - » Reduction or elimination of variances, waivers, or exceptions governing landscaping, use of turf
    - » Adoption of specific low-impact development standards
    - » Additional scrutiny on water features
    - » Mandatory prohibitions and stricter standards for approval for any turf
    - » Approvals for limited use and application of rainwater harvesting and cisterns, to be used to supplement water needs for personal gardens or existing landscaping
  - Required water actions to improve building efficiency, including:
    - » Point of sale water audit requirement
    - » Energy efficiency provisions in rental properties
  - Enable the City's Code Enforcement division to provide additional fines for water waste
- Ensure a continued commitment to water efficiency and water reduction for municipal operations:
  - Installing and maintaining artificial turf for the majority of new athletic and sports fields
  - Revising design standards for public buildings and facilities to ensure xeriscaping and proper use of species
  - Non-functional turf at City parks or private parks, or schools
  - Further eliminating or reducing non-functional turf
  - Conducting water audits and leak detection to determine any system losses
- Work with public agencies, non-profits, and members of the public to clean up sensitive areas that flow to Lake Mead, including the Las Vegas Wash and its tributaries, to prevent stormwater pollution, and comply with the NPDES MS4 permit.
- Manage, maintain, and upgrade water and wastewater treatment infrastructure to reduce leaks in the system and eliminate contamination, ensuring clean water returns to Lake Mead for return-flow credits.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Higher density housing will optimize water resource and infrastructure use, reducing long-term costs for both new and existing residents.	Proactive planning will ensure water scarcity will not impact the quality of life, environment or economy.	Water is essential to human health and a healthy, living environment, and resources should be used wisely.	Focusing on enhancing parks rather than individual "yards" will prevent excessive water consumption, and increase quality of life.	Smart metering will enable both customers and water agencies provide feedback on usage patterns and swiftly identifying leaks.

II.B CONSERVATION: ENERGY

☑ NRS 278.160.1(a)(1)

PRIORITIZE THE USE OF RENEWABLE ENERGY SOURCES AND IMPROVE ENERGY EFFICIENCY

The City of Las Vegas is a leader in clean energy, investing more than $70 million in renewable energy and energy efficiency upgrades over the past decade. The City has also been equally invested in constructing, LEED certified green buildings as well as sustainable transportation by committing to utilizing clean fuels and electrifying its vehicle fleet. As technology changes quickly, it is important for Las Vegas to continuously monitor and update its infrastructure coordination plans directly alongside the utility to ensure a reliable grid.



Both the public and private sector entities play important roles in ensuring the reliable and sustainable delivery of energy, such as:

- The City of Las Vegas (and the Southern Nevada region as a whole) are largely served by the state's two primary investor owned utilities: NV Energy for electricity and Southwest Gas for natural gas. Both generate, procure, transmit, and safely distribute energy for the City's consumers; The City Council is empowered to provide utilities by franchise and has done so for both
- The City regulates the placement of power plants, energy systems, substations, and utility infrastructure across the City through zoning regulations.
- Both gas and electric utilities are subject to oversight and regulation by the Public Utilities Commission of Nevada (PUCN) to ensure compliance with state laws, analyses of utility rates, safety checks of utility operations, and resolution of consumer complaints.
- The Nevada Governor's Office of Energy (NGOE) oversees statewide energy policy and energy programs.

The transition to cleaner energy sources will yield numerous benefits, including potential for economic development, cleaner air, reduced costs, and reduced greenhouse gas emissions, yet the transition to a low-carbon future requires coordination in utility planning.

OUTCOMES

- 80% of region's energy consumption at residential and commercial buildings is reduced through energy efficiency measures by 2050
- 50% of both municipal and community energy supply is from renewable sources by 2030, consistent with the Nevada RPS; and 100% by 2050
- Municipal operations shall reduce total energy consumption 2% annually, covering the sectors of buildings and facilities, streetlighting, and wastewater treatment

KEY ACTIONS

- Continue leading municipal clean energy efforts
- Expand community renewable energy, energy conservation, storage, and green building efforts
- Study, determine the feasibility, and/or implement City energy programs in partnership with the region's utilities
- Electrify transportation by developing a robust EV charging network



The City has constructed more than 6 megawatts of solar covered parking at forty City facilities, parks, fire stations, and community centers. The Water Pollution Control Facility's solar plant provides clean power for energy intensive wastewater treatment operations, in addition to methane from anaerobic digestion and a 4 megawatt allocation of hydropower from Hoover Dam. Since 2017, 100 percent of municipal operations have been powered by clean energy through Renewable Energy Agreements with NV Energy.

NEVADA'S ENERGY PORTFOLIO MUST CONTINUE TO DIVERSIFY AND TRANSITION TO CLEANER ENERGY SOURCES

In order for buildings and homes to become more sustainable, Nevada's energy portfolio must continue to diversify and transition to cleaner energy sources at an increased pace. The state's Renewable Portfolio Standard currently require 50% of NV Energy's retail sales to come from renewables by 2030, yet there are currently 12 gigawatts of installed electric capacity in Nevada's portfolio. The majority of electricity supplies (4,600 megawatts) come from natural gas fired power plants. In order for buildings and homes to decarbonize, the City of Las Vegas and NV Energy must incentivize residents, commercial buildings, and industry members to utilize solar where possible; power-purchase agreements and public-private partnerships will be made to ensure equitable roll-out of resources.

Conventional hydropower is one of Nevada's largest renewable resources, stemming from the Hoover Dam. More than half of the power produced there goes to the state of California and Southern California cities; about a quarter goes to Arizona; the remainder goes to Nevada, (237 MW) for customers in Las Vegas. While hydropower is a clean source of energy and is mostly reliable, hydropower generation is susceptible to changing climatic conditions; lower lake elevations can have a dramatic effect on power production which is likely to cause a problem in the future.

With the shutdown of both Reid Gardner in Moapa and Navajo Generating Station near Page, AZ, coal-fired electricity has been completely phased out of NV Energy's southern Nevada portfolio in accordance with Senate Bill 123 (2013) Legislative Session, which required the reduction of 800 MW of coal-generated electricity in Nevada. Natural gas is primary resource for Nevada used for power generation and heating, with more than 4,300 MW of capacity in Southern Nevada for generation, including for "peak" cooling load conditions during the summer.

Southern Nevada has some of the highest solar potential in the country that can be taken advantage of by solar photovoltaic (PV) panels, solar thermal power plants, solar cooling, or solar thermal collectors, yet the renewable portfolio of the area is still below the levels it needs to be for Las Vegas to achieve its goals.

Large-scale solar PV and concentrated solar thermal projects are among the largest in the world in terms of capacity and footprints; further installations by NV energy are required to ensure buildings are able to decarbonize. NV Energy's SolarGenerations rebate program and net-

energy metering policies have resulted in more than 46,300 rooftop systems being installed in Southern Nevada, with more than 110 megawatts installed in Las Vegas. The falling cost of solar makes it an attractive electricity supply over business as usual; utility-scale plants and rooftop solar businesses and homeowners must be built to ensure a sustainable transition.

The vast majority of the State's RPS requirements are being fulfilled from geothermal power plants located in Northern and Central Nevada. An estimated sixty percent of Nevada's geothermal potential remains untapped. With proper maintenance, geothermal power plants may have operating capacities of up to fifty years. New geothermal energy exploration, however, contains higher risks due to drilling production wells in optimal locations.

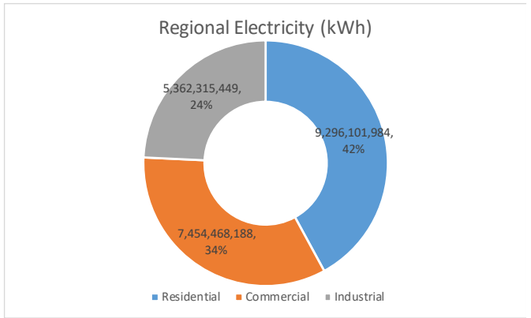
Wind power can supply renewable energy in areas considered to have "Outstanding" resource potential, where sustained annual average wind speeds are approximately 18 miles per hour at a height of about 160 feet. While wind is somewhat predictable in these areas, like solar, it suffers from intermittency issues. While City zoning does permit small wind systems, there are few areas where turbines are viable and cost effective.

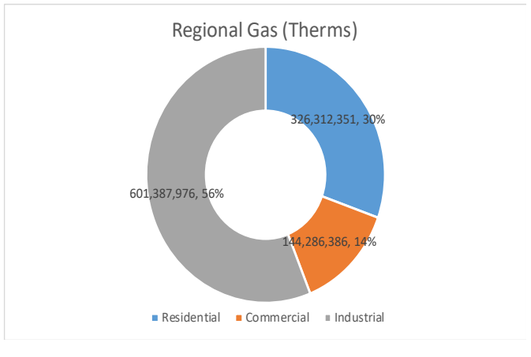
Biomass, consisting of food, plant and wood waste, and organic material are the most common feedstocks for energy. Similarly, iit produced biogas that can be captured and burned for electricity production. Nevada has four biomass/landfill gas projects, one of which is located at Apex Regional Landfill.

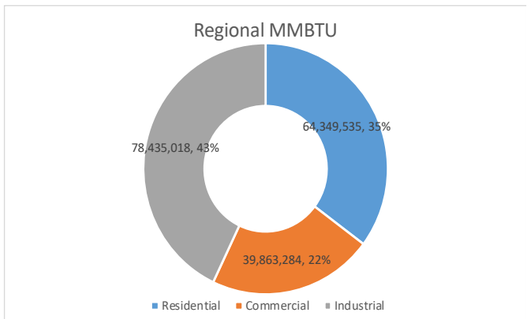
Based on current and future energy demand noted in triennial resource plans submitted to the PUCN, NV Energy estimates approximately 5,850-6,800 MW of peak demand in Southern Nevada by 2038. Furthermore, with an anticipated addition of 308,000 new City residents in 119,000 new dwelling units, it remains imperative to address overall consumption, even if the sources continue to become cleaner, and to support efforts for expanded transmission to resource areas in Northern Nevada.

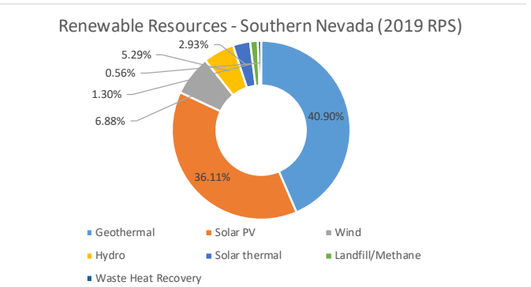
COMMIT TO GREEN BUILDING AND ENERGY EFFICIENCY IMRPOVEMENTS

The cheapest kilowatt is the one that is not produced. This will require the improvement in operational efficiencies, code development, provision of programs and incentives,









Source: NV Energy, Southwest Gas, PUCN

and monitoring the consumption of energy for each of the region's major sectors.

Almost two in three Nevada homes use natural gas as their primary heating fuel. Southwest Gas relies on out of state supply piped from resource areas in Wyoming. When heat is available as a by-product of other processes, waste heat energy recovery can be utilized to collect waste heat that would typically be wasted and use it to generate power.

Overall, in-home energy usage has increased dramatically over time. In 2019, the Southern Nevada residential sector consumed 8.9 billion kWh of electricity and 231 million therms of natural gas. The Residential Energy Consumption Survey conducted by the U.S. EIA shows that space heating is no longer the majority of energy used at home. In 1993, appliances, electronics, and lighting consumed twenty-four percent of a home's energy. By 2009, that number increased to almost thirty-five percent due to the increase rechargeable personal electronics and in-home entertainment systems. Personal electronics may have boosted the share of energy consumed within the home, but overall average home energy consumption is actually decreasing and has been over the past thirty years. Newer homes, although typically larger, have energy efficient air conditioning, space heating, and appliances. New Federal, state, and local energy codes have addressed energy consumption through conservation.

Over the past decade, Southern Nevada's building officials adopted more efficient energy codes to ensure that new buildings are built as efficiently as possible, and currently require buildings to be constructed to 2018 International Energy Conservation Code (IECC) standards.

Southern Nevada's commercial sector, consisting of hotels, casinos, retail stores, offices (business and government), restaurants, schools and other similar buildings, consumed 11.3 billion kWh of electricity and 108 million therms of natural gas in 2019. The industrial sector consumed 8.9 billion kWh of electricity and 540 million therms of natural gas during the same period. While total energy use in these sectors has increased in the last decade, the share of energy use in the industrial sector has substantially decreased due in part to efforts to increase building efficiency.

Green certified commercial and industrial building stock surged in Nevada after the 2005 Legislature authorized a 50% abatement of property taxes for green LEED certified buildings for ten years; while the standard has since been modified, LEED certified buildings in Nevada continue to receive property tax abatements through this program. Considerable resource savings can be achieved under LEED, which also contributes to reduced operating costs over the life of the building.

However, not all market segments, income levels, or building types may be addressed, especially for some low-income and multi-family building types. Existing buildings programs can be utilized to improve lighting insulation, weatherization, and air sealing. Both utilities offer demand side management, energy efficiency, and renewable energy assessment, rebates, and demand side management programs for some homeowners and businesses. The City has offered Commercial Property Assessed Clean Energy (C-PACE) as a strategy to help finance energy efficiency and renewable energy improvements, but is not enabled for residential property.

As energy storage technology improves, new opportunities will develop to pair solar generation with energy demand management, allowing buildings to generate and store solar throughout the day and use stored energy during peak cooling periods and at night. Where possible, the City must address building energy efficiency as technologies and building types continue to evolve, either through direct programs or through partnerships with the utilities.

Although these upgrades have resulted in efficiency gains, true decarbonization will require a more aggressive approach to the energy supplies of these buildings and commit to conservation.

ENSURE ACCESS TO SAFE, SECURE, RELIABLE AND RESILIENT POWER THAT'S EQUITABLY PRICED

Both utility companies have maintained good records of safety and monitoring. The electrical grid is particularly notable due to the deployment use of smart meters, which allows the utilities continuous monitoring and to record interruptions within the grid. If and when disruptions do occur, the "smart grid" allows for a faster response to address the outage and restore service. The diversification of the portfolio has also made the electricity much more resilient, and the advent of energy storage, building load management, and other energy innovations when paired with renewables will only further help grid reliability. As the

respective gas and electrical grids age, both the City and PUCN must continue to regulate the utilities to ensure they are resilient and reliable.

Energy providers must balance supply with demand. While this happens on a daily basis throughout the year, the summer "peak" months pose the most challenging balancing times of the year because of high energy consumption when air conditioning use is at its maximum. During these times of peak demand, energy prices are typically higher. Power plant operators can increase or decrease production to accommodate different load types and profiles. "Peaking" power plants can be started quickly and can respond to fluctuations in demand to meet this power need.

Equally important is the cost of energy, as they can impact residents of all income levels; low-income, minority, and senior households may be particularly susceptible to cost fluctuations. The average rate in Southern Nevada has remained low at 10.68 cents/kWh, lower than the national average of 12.52 cents/kWh; average monthly electric bills statewide are $116, $2 more than the national average. consumers are faced with whatever rates are proposed by the utilities, subject to the review and approval of the PUCN. The CIty must monitor rate cases for City residents and businesses to ensure the cost of living and cost of doing business is not adversely impacted by utility costs. It must also work with the utilities or offer programs that can be taken advantage of by the full spectrum of customer and building types.

ELECTRIFY TRANSPORTATION TO REDUCE FUEL CONSUMPTION AND EMISSIONS

Finally, transportation energy consumption and the resultant mobile source emissions has been steadily climbing for the past decade. Because the number of trips taken are by cars and annual vehicle miles (AVMT) traveled, have continued to rise, transportation energy consumption must be balanced and electrified. The City was the first public entity in the state to purchase electric (EV) and plug-in hybrid electric (PHEV) fleet vehicles and has invested in EV charging infrastructure at its facilities and garages.

As technology evolves, it is important for Las Vegas to continuously monitor and update it infrastructure alongside the utility to ensure a reliable grid. Parking, freight management, TOD, complete streets, the use of alternative modes and active transportation, carsharing and carpooling, demand side management and transportation electrification will all be important complimentary implementation strategies that have a range of other added benefits.



IMPLEMENTATION STRATEGIES

- Continue leading municipal clean energy efforts:
  - Construct new facilities to a minimum LEED Silver standards with solar
  - Integrate interior and exterior energy conservation measures and efficient lighting into Operations and Maintenance management strategies
  - Upgrade City facilities energy efficiency retrofit strategies
  - Benchmark energy and water consumption
  - Install EV charging infrastructure for fleet and/or public use
  - Establish a fuel efficiency requirement for non-electric fleet vehicles and adopt a fleet electrification policy
  - Assess and improve energy efficiency for wastewater treatment operations
- Expand community renewable energy, energy conservation, storage, and green building efforts
  - Monitor gas and electric rates for all customers
  - Amend Title 19 to permit planned or intended district energy or microgrids (allowable islands)
  - Adoption of the latest IECC and ensure Building and Safety staff is dedicated to energy code compliance and enforcement
  - Up-front support for developers and builders for energy code compliance, which may include education prior to permit issuance or application review.
- Study, determine the feasibility, and/or implement City energy conservation programs in partnership with the utilities:
  - Monitor gas and electric rates for all customers
  - Amend Title 19 to permit district energy or microgrids
  - Community solar programs
  - Voluntary PACE program for residential properties
  - Solar, energy storage, and EV ready requirements for residential and/or commercial buildings
  - Required community benchmarking, rating, and energy use, either for all buildings or buildings of certain sizes
  - Required energy actions to improve building performance, including:
    - » Point of sale energy audit requirement
    - » Energy efficiency provisions in rental properties
    - » Retrocomissioning requirements
  - Comprehensive energy savings programs for low-income or multifamily households.
  - Offer comprehensive energy efficiency programs for multifamily customers.
  - Incentivize increased distributed renewable sources and access to clean transportation and EV charging infrastructure among their customers.
  - Support transmission efforts, including Greenlink Nevada, to resource areas in Northern Nevada

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Ensure utility prices are a fair portion of income.	Diversify the energy portfolio to mitigate and adapt to climate change by installing localized microgrids and other distributed energy resources	Increased renewable integration in the grid and reduced transportation emissions will lead to healthier air.	Low utility costs help keep Las Vegas competitive; improving housing stock can help keep energy affordable	Transportation electrification, energy storage, and green building will help decouple energy from growth.

II.C CONSERVATION: WASTE

☑ NRS 278.160.1(a)(3)

REDUCE WASTE CONSUMPTION AND TARGET NET-ZERO MUNICIPAL SOLID WASTE PRODUCED IN THE COMMUNITY

Safe, long-term storage and management of municipal solid waste (MSW) is a critical component of a resilient city. Las Vegas has the opportunity to emerge as a net-zero waste city given its current recycling infrastructure and small, but active market, to address specialty recycling and other special waste streams. Given the projected population increases and number of new households, current waste disposal efforts and trends will only yield an increase in the total diversion rate to 30% by 2050 with current recycling trends and practices. Southern Nevadans must not only dispose of less waste per person per day, it must recycle a greater share of what is disposed of, yielding total average daily disposal rates less than 7.5 lbs.

Apex Regional Landfill, is the largest Class I municipal solid waste landfill by volume in the United States and has an expected lifespan of 200 years, with 300 of 2,200 available acres developed. Apex Landfill currently holds 60 million tons of waste and accepts an average of 6,900 tons of waste per day.

Republic Services of Southern Nevada serves the City of Las Vegas (and much of the region as a whole) under a franchise granted by City Council to provide solid waste and recycling service to City residents, businesses, and for government operations. Waste and recycling is further regulated several important ways:



- The Nevada Division of Environmental Protection (NDEP) oversees solid waste programs throughout Nevada.
- The Southern Nevada Health District (SNHD) serves as the region's Solid Waste Management Authority
- The City regulates Public Health and Safety pursuant to Title 9 of Las Vegas Municipal Code, including nuisances, solid waste, litter, and hazardous materials.

Aside from the City's authority to regulate solid waste and recycling, it has made waste reduction and recycling a priority in its municipal operations through its Sustainability initiative and through the City Council's (R-32-2017). 30,000 cubic yards (yd^3) from 68,000 yd^3, and increased its diversion rate to 55%.

KEY ACTIONS

- Educate the public on proper recycling, determine additional opportunities to increase waste diversion rates, and address special waste streams while ensuring waste costs are kept low.
- Require the provision of single-stream recycling service at multi-family and commercial properties
- Conduct neighborhood clean-ups, ensure public spaces and right-of-way are clean and graffiti free, and sensitive areas of the Mojave Desert are trash-free.
- Continue waste reduction and recycling efforts for municipal operations.

OUTCOMES

- 80% of the region's waste disposed of by landfill is reduced by 2050 and a recycling rate of at least 40% is achieved
- Eliminate landfill-based emissions by 2050
- CLV municipal operations shall reduce waste stream 2% annually

SOUTHERN NEVADA HAS HISTORICALLY HAD LOW RATES OF RECYCLING AND WASTE DIVERSION. A NEED FOR STRONGER PROGRAMMING TO REACH ZERO WASTE BY 2050 IS NEEDED

Southern Nevadans (including City of Las Vegas residents) currently dispose of approximately 6 lbs of waste per person per day (1.19 tons per capita), and recycle 1.5 lbs of waste for a total disposal rate of 7.5 lbs. On average, 2.3 million tons of MSW and 1.4 million tons of industrial and special waste are disposed of; 586,000 tons of MSW and 915,000 tons of construction and demolition debris are recycled.

Single-family residences are required to have one pickup per week for trash pickup and single-stream recycling, with bulk items collected every other week. For the City of Las Vegas, it is estimated that approximately 170,000 tons of MSW is collected annually, with a 2019 recycling rate of 19.5%, on par with the regional recycling rate of 19.3%.

THE CITY AND ITS FRANCHISEE CURRENTLY PROVIDES EFFECTIVE AND EFFICIENT WASTE SERVICES FOR MUNICIPAL WASTE STREAMS AT REASONABLE RATES

Waste disposal rates are nominal – for single family residences, waste collection costs approximately $16 per month. Tipping fees at Apex are approximately $32 per ton (2019), well below the national average of $45 per ton.

PREVENTING LITTER AND ILLEGAL DUMPING ARE ALSO CRITICAL TO PROTECTING THE NATURAL ENVIRONMENT AROUND LAS VEGAS AND THE CITY'S TOURISM INDUSTRY.

The physical appearance of a community plays an important role on the perception and image of it being livable. Not only are clean streets important for neighborhoods and the residents that live in them, it is important for commercial areas to do business and important for current and future visitors to have a positive impression of public places that are well-kept, clean and safe. Stormwater pollution prevention is also important to prevent waste from entering Lake Mead.

SEE ALSO:
Nevada Solid Waste Management Plan

RECYCLABLES MUST BE COLLECTED FROM MULTI-FAMILY AND COMMERCIAL PROPERTIES.

Many multi-family apartment and condominium complexes in Southern Nevada do not have recycling and those that do have low recycling rates; similarly, the provision of commercial recycling is available, but varies based on the types of businesses, tenants, and operations.

ORGANIC WASTES AND COMPOSTING HAVE POTENTIAL TO INCREASE WASTE DIVERSION RATES.

The lack of regional agriculture limits local market demand for composting. Southern Nevada Water Authority's efforts to limit and reduce turf and other water-intensive landscaping over the past decade have also limited the amount of available yard waste for composting. While the lack of regional agriculture limits local market demand for compost, organics nevertheless represents a sizable share of the total waste stream, which may create a new market for composting and waste byproducts, and various waste-to-energy efforts.

The effects of food waste go beyond reducing pressure on global food supplies and food security issues; uneaten food goes to landfills where it decomposes and produces methane gas. Resorts have been active participants in food waste recovery and diversion and have been nationally recognized for efforts in reducing food waste. Locally, resort diversion efforts have made their way to the local food bank, which has a combined effort of food diversion, rescue, and preparation to food-insecure populations within the region. Additionally, at many resorts, inedible food waste and scraps are diverted for compost and used as animal feed.

Other positive innovative trends in the waste system include the installation of landfill gas capture and energy production at the Apex Landfill and landfill gas flaring at the closed Sunrise Landfill.

SMALLER SPECIAL WASTE STREAMS SUCH AS MEDICAL AND ELECTRONIC WASTE POSE SPECIFIC CHALLENGES TO ACHIEVING ZERO WASTE AND MUST BE MANAGED.

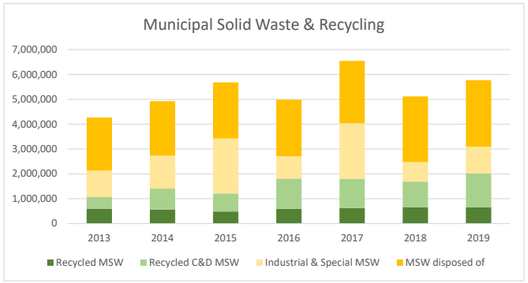
The City, in conjunction with the franchisee and Southern Nevada Health District, must continue to provide special waste stream services, ensure dissemination of information to the general public on the proper disposal of these special waste streams, and work with stakeholders through the development of a regional waste management plan that addresses ways to recycle, repurpose or reduce them. These waste streams may require additional recommendations and further treatment in future updates to the franchise agreement

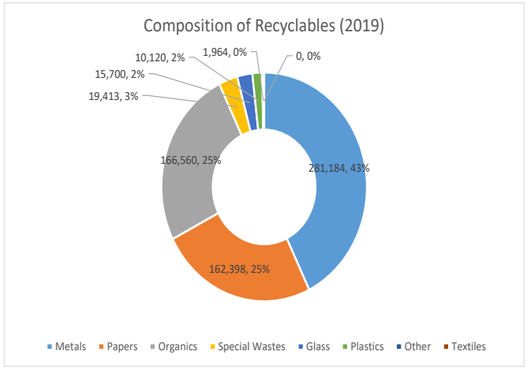
GLOBAL COMMODITY AND RECYCLING MARKET CHALLENGES COMPOUND DIFFICULTIES IN DIVERTING WASTE, AND MUST BE MONITORED AND MANAGED.

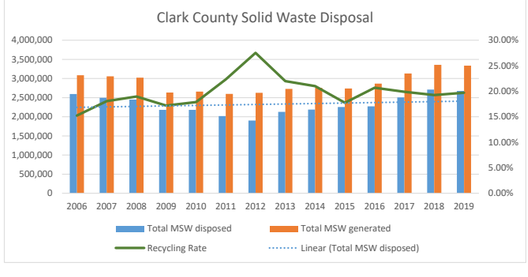
Among the greatest is the current challenges of the global and national recycling and commodities market, in which most American recyclables are exported to China and other Pacific Rim countries. These countries have recently stopped accepting recyclables due to high rates of contamination – simply put, cleaner recyclable materials have greater value. It is important to note that market trends and structural changes will continue to occur by 2050 and these trends, as well as both demand and supply-side strategies, must be monitored.

PUBLIC EDUCATION EFFORTS ARE NEEDED TO ENSURE PROPER WASTE DIVERSION

According to a report from International City Manager Association, most Americans do not know what to dispose of and what to recycle. Many often dispose of recyclables in large plastic bags that cannot be processed by recycling facilities and do not keep recyclables empty, clean and dry. To help increase rates of recycling and emerge as a net-zero waste city, the City and franchisee must keep the provision of single-stream recycling services for all residents and businesses, and conduct a strong public education campaign on what to recycle and how to recycle.







Source: NDEP, SNHD

IMPLEMENTATION STRATEGIES

- Educate the public on proper recycling, determine additional opportunities to increase waste diversion rates, and address special waste streams while ensuring waste costs are kept low.
  - Reconstitute Keep Las Vegas Beautiful program as a part of Keep America Beautiful
  - Establish public education campaigns or focused otreach efforts to inform residents and businesses in achieving waste reduction targets
  - Create incentive programs to reduce waste
  - Establish a targeted waste management program
  - Assess the Republic Services Franchise Agreement for waste collection and provisions of recycling and determine additional opportunities
  - Adopt a specific regional waste management plan to address waste reduction targets that conducts an economic analysis of waste management operations and overall waste streams that ensure tipping fees, rates, and other charges reflect current costs
  - In conjunction with the waste franchisee, develop, implement, and advertise additional special and critical waste stream programs based on market conditions including a compositing program, and additional programs for special waste streams
- Require the provision of single-stream recycling service at multi-family and commercial properties
  - Make applicable corresponding code changes to LVMC TItle 9.08- Collection of Solid Waste and Recyclables and LVMC Title 19.12- Litter, considering reduction of specific material types, product bans, enforcement mechamisms, and fines that address litter, illegal dumping, graffiti, and harm to the natural and built environment
- Conduct neighborhood clean-ups, ensure public spaces and right-of-way are clean and graffiti free, and sensitive areas of the Mojave Desert are trash-free.
  - Conduct neighborhood and park clean-ups to keep them clean
  - Ensure public spaces and right-of-way are clean, free of graffiti
  - Clean up sensitive areas, such as the Las Vegas Wash and desert areas
- Continue waste reduction and recycling efforts for municipal operations.
  - Provide recycling at all City facilities, parks, and targeted public places for use by City employees and members of the general public
  - Conduct waste stream audits to determine the rate and composition of recyclables
  - Collect and divert special waste streams that arise from unique City operations, including general operations and maintenance, street sweeping, wastewater treatment, public safety and detention
  - Provide general information to all city departments and employees on proper waste and recycling disposal

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Make recycling programs available to all while keeping rates low for residents and businesses.	Increase diversion rate from landfill through recycling and waste reduction efforts.	Reduced litter and pollution to private property, the desert and to the Las Vegas Wash keeps both natural and built environment healthy.	Ensuring the City is physically clean provides for a more inviting and livable community for residents.	Invest in landfill / biogas renewable energy production to reduce methane gas emissions

GREENHOUSE GAS EMISSIONS

NRS 278.160.2

SEE ALSO:
CLV 2019 GHG Emissions Inventory

MITIGATE AND REDUCE MUNICIPAL AND COMMUNITY GREENHOUSE GAS EMISSIONS

Recognizing the global impact of climate change caused by greenhous gas emissions, the Kyoto Protocol established a target of 80% greenhouse gas emissions reductions of all industrialized countries by 2050. Although the United States was not a participant in the Protocol, over 1,000 mayors, including former City of Las Vegas Mayor Oscar Goodman, were signatory to the U.S. Conference of Mayors' Climate Protection Agreement in 2006, committing to meet or exceed the Kyoto targets. Similarly, world leaders formed an agreement at the 2015 Paris Climate Conference to limit the rise in average global temperature to below 2°C. At the time, the U.S. committed to reducing its greenhouse gas emissions by 28% below 2005 levels by 2025.

Carbon dioxide (CO2), sulfur hexafluoride (SF6), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs) are the six gases contributing to climate change. These gases are measured in carbon dioxide equivalent (CO2e), the equivalent impact of each different gas in terms of the amount of carbon dioxide that would create the same amount of warming. for different sources:

- Scope 1: Stationary and mobile emissions from direct combustion, including vehicles, utility power generation, and wastewater treatment operations
- Scope 2: Emissions resulting from the purchase of generated electricity or heating
- Scope 3: Indirect emissions from sources related to associated activities, such as air travel, employee commuting, and contracted solid waste.

The City has been a leader in reducing and mitigating its environmental impact and annually discloses its municipal and community greenhouse gas emissions. With substantial investment in clean energy, energy efficiency, and recycling over the past fifteen years, the City's emissions plummeted. Additionally, the City has fulfilled its electrical load requirements through Renewable Energy Agreements with NV Energy beginning in 2017, dramatically reducing emissions from municipal operations. The City is not alone in greenhouse gas emissions inventory and mitigation efforts for each major sector. The Nevada Division of Environmental Protection (NDEP) has conducted statewide inventories and future projections, including one in 2019, while Clark County has initiated new efforts to mitigate regional emissions. The major emitters and sources within the City and Southern Nevada include:

- Energy generation: Scope 1 and Scope 2 emissions from the generation of electricity from NV Energy power plants, with energy measured in million BTU's (MMBTU) and emissions using regional grid coefficients
- Residential, commercial, and industrial sectors: Scope 2 emissions resulting from the purchase of NV Energy's electricity and natural gas purchased from Southwest Gas for each sector. At a regional scale, municipal and civic energy consumption and emissions is also captured in these totals
- Transportation and mobile emissions: these are a function of vehicle miles traveled (VMT) as reported from NDOT and RTC; also included are total estimated enplanements from McCarran International Airport and daily trains running along Union Pacific tracks
- Waste: landfill based emissions, primarily methane, generated from the decomposition of municipal solid waste at Apex Regional Landfill and the closed Sunrise Landfill

Southern Nevada has negligible emissions from agriculture and land use; because these and other fugitive and Scope 3 sources cannot be easily be tracked, these were excluded.However, through this plan, the City will strive to meet targets through municipal, community, and regional mitigation and reduction actions.

OUTCOMES

- Achieve carbon neutrality for City of Las Vegas municipal operations by 2050
- 28% of community greenhouse gas emissions are reduced by 2025 and 80% of community greenhouse gas emissions are reduced by 2050 from all major sectors

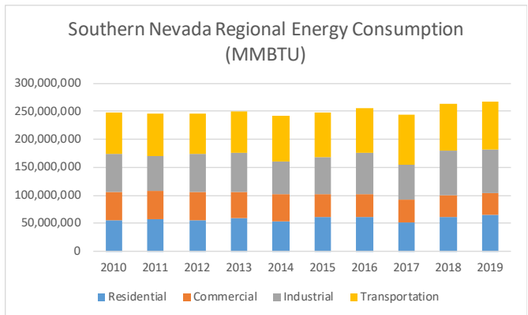


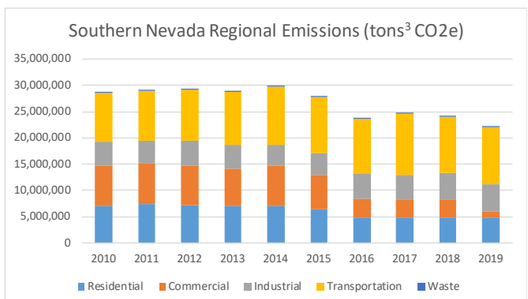
NV Energy has closed, demolished and divested ifrom coal-fired electricity generation, including Fort Mohave in Laughlin (2005), Reid-Gardner in Moapa (2019), and the Navajo Generation Station in Page, AZ (2019). Through legislatively apporoved emissions reduction and capacity replacement programs, combined with an increasingly stringent renewable portfolio standard, emissions from power generation have been reduced dramatically.

2006 Municipal Emissions: *309,000 tons CO2e*
2019 Municipal Emissions: *20,760 tons CO2e*

2019 City of Las Vegas Emissions: *6.1 million tons CO2e*
2019 City Emissions per capita: *9.21 lbs. per capita*

2005 Regional Emissions: *28.0 million tons CO2e*
2019 Regional Emissions: *22.3 million tons CO2e*

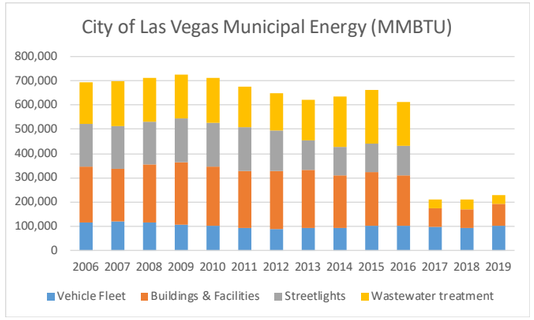


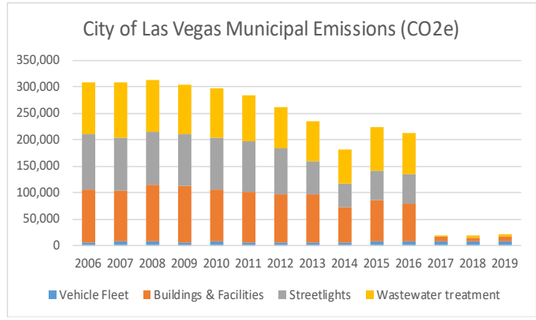


Source: City of Las Vegas 2019 GHG Emissions Inventory

KEY ACTIONS

- Emerge as a carbon neutral municipality
- Continue implementing community-wide energy efficiency and renewable energy programs for power generation and residential, commercial, and industrial sectors, while increasing waste diversion rates
- Focus efforts to improve transportation-based emissions through vehicle miles traveled (VMT) reduction and modal shifts, transit-oriented develoment (TOD), infill, and redevelopment, and transportation electrification





Emissions from CIty operations decreased due to the implementation of Renewable Energy Agreements with NV Energy, replacing the City's retail load with renewable energy from Boulder Solar (Source: CLV 2019-2020 Inventory, CIRIS v2.3, GPC protocol using 4AR GWP factors of IPCC guidelines, BASIC boundary, disclosed to Carbon Disclosure Project).

THE CITY HAS BEEN SUCCESSFUL AT MITIGATING ITS MUNICIPAL EMISSIONS

The primary sources of municipal operational emissions are from building and facility energy consumption, streetlighting, and wastewater treatment operations. Because renewable energy has been so heavily invested and because the City has entered into Renewable Energy Agreements with NV Energy to power the entire City's electric load, the City's only major source of stationary emissions are from natural gas consumption for building heating and wastewater treatment. Mobile emissions from the City's vehicle fleet are small, but could be further reduced.

CLEAN ENERGY EFFORTS HAVE ALREADY RESULTED IN DRAMATIC EMISSIONS REDUCTIONS IN MANY SECTORS

Over time, the residential, commercial, and industrial buildings sectors have seen dramatically reduced emissions as a result of cleaner power supplied by NV Energy. This is largely attributable to the state's renewable portfolio standard (RPS) and expanded renewable energy use at both the utility scale and for small distributed generation systems. As the RPS increases in stringency, a corresponding reduction in emissions will continue to occur. Concurrently, the retirement of coal fired power plants in Southern Nevada have dramatically altered the energy portfolio, leading to fewer emissions. Overall, future emissions are projected to remain stable, as will emissions from decomposing waste from both landfills, provided this plan's waste diversion and recycling strategies are also employed.

TRANSPORTATION BASED EMISSIONS CAN BE REDUCED THROUGH TRANSPORTATION ELECTRIFICATION, PUBLIC TRANSIT INVESTMENT, AND LOCATION EFFICIENCY

Because transportation is the next largest share of emissions, mobile emission mitigation efforts must be the primary focus in the future. Overall, future emissions are projected to remain stable, but making progressive reductions are dependent upon several factors:

- Federal fuel economy standards for passenger vehicles and trucks may change over time. Provided these standards are not relaxed, fuel-economy will likely continue to improve over time.
- Efforts to electrify personal transportation is a function of more electric vehicles being sold in the market as well as the provision and availability of electric vehicle charging infrastructure. Equally important is the need to electrify public transportation, either through electric buses or light rail transit.
- By implementing this plan's strategies for redevelopment, infill, and transit-oriented development and aligning with the RTC's On Board Mobility Plan that includes high capacity transit recommendations, the potential for reducing VMT, traffic congestion, and overall emissions increases. In addition, opportunities for balancing jobs and housing will also increase as more mixed-use place types are located and developed.

IMPLEMENTATION STRATEGIES

Many of the following implementation strategies overlap those discussed in other chapters and goals within this plan. Each will yield different levels of emissions reductions from stationary or mobile sources. As new infrastructure is constructed or programs are instituted, the City must collaborate with internal departments, investor-owned utilities, and regional agencies to track and measure reductions resulting from each respective strategy.

- Emerge as a carbon neutral municipality:
  - Conduct annual municipal greenhouse gas emission inventories and address other emission types
  - Continue energy efficiency and solar investments at City buildings and facilities
  - Require public infrastructure consider energy and emissions factors for new or upgraded infrastructure
  - Upgrade remaining streetlights to LED
  - Improve vehicle fleet fuel economy
  - Address additional sustainable purchasing and supply chain opportunities
- Continue implementing community-wide energy efficiency and renewable energy programs for power generation and residential, commercial, and industrial sectors, while increasing waste diversion rates
  - Conduct annual regional and communitywide greenhouse gas emissions inventories
  - Make additional investments in the urban tree canopy
  - Make progressive improvements to building energy codes and standards
  - Institute building performance rating and reporting programs
  - Incentivize and install energy efficiency and renewable energy measures in partnership with investor owned utilities
  - Improve the efficiency of waste collection
  - Increase the community recycling and waste diversion rates
  - Landfill waste to energy initiatives
- Focus efforts to improve transportation-based emissions through vehicle miles traveled (VMT) reduction and modal shifts, transit-oriented develoment (TOD), infill, and redevelopment, and transportation electrification
  - Implement the 2050 Place types Map as described in the General Plan
  - Identify and institute brownfield and greyfield redevelopment projects
  - Increase funding and construct the layered complete street network as part of the City's Master Plan for Streets and Highways
  - Fund the high capacity transit program identified within RTC's On Board Mobility Plan
  - Invest in transportation electrification initiatives including electric vehicle charging infrastructure
  - Fund transportation demand management programs

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Ensure specific groups are not overburdened by the effects of stationary or mobile emissions.	Coupled with adaptation strategies, current climate mitigation efforts prove the City's resilience to climate challenges	Improvements to increase location efficiency will result in more active transportation choices	Ensuring the City is a leader in mitigating emissions through a variety of community strategies improves the image and perception of the City's sustainability.	New methods and technologies to mitigate mobile and stationary emissions must be explored and pursued

III PUBLIC FACILITIES + SERVICES

GOALS

A. Provide equitable access to facilities and services that help meet residents' social needs, maximize their potential for development and enhance community wellbeing.

B. Ensure healthy outcomes for all members of the community.



III.A PUBLIC FACILITIES

NRS 278.160.1(e) and NRS 278.165

PROVIDE EQUITABLE ACCESS TO FACILITIES AND SERVICES THAT HELP MEET RESIDENTS' SOCIAL NEEDS, MAXIMIZE THEIR POTENTIAL FOR DEVELOPMENT, AND ENHANCE COMMUNITY WELL-BEING.



It is critically important that the expenditure of public funds on local infrastructure improvements and public buildings and facilities be closely coordinated to meet the continuing demands of anticipated growth and development throughout the City. Providing high quality municipal services in one of the country's most rapidly growing cities is challenging, especially with limited revenue and unpredictable funding sources. As new communities emerge on the edges of the City, while older mature neighborhoods redevelop and revitalize, balance is needed to plan for public buildings and public infrastructure that provide a broad range of services throughout the City.

One of the primary implementation tools for the 2050 Master Plan is the Capital Improvement Plan (CIP). The CIP is a fiscal and management tool the City uses to prioritize capital projects and allocate resources to fund public buildings and facilities projects to permit the City to govern, transact and conduct official business or operate essential services. NRS 278.0226 requires that the CIP decision making process be linked to the policies outlined within this plan. Each department in the City must coordinate capital improvements and operating and maintenance forecasts and expenditures within their individual budgets with the overall long range planning policies as contained in the 2050 Master Plan.

KEY ACTIONS

- During future CIP planning, strategically identify priority facility and service needs and resources, whether provided by City, County, regional, state, or Federal providers, including the needs of priority populations and priority planning areas for evaluation to ensure adequate and equitable access to public resources.
- Implement the City's Sewer Facilities Plan to ensure wastewater treatment needs are met, especially in areas anticipated for infill and redevelopment.
- Continue proactive coordination with above ground and underground wet and dry utilities to ensure infrastructure is in place, the development process is smooth, and disturbances to pedestrian, bicycle, and vehicular rights of way are minimized.
- Collaborate with the Las Vegas-Clark County Library District to site and locate additional facilities in underserved and future growth areas.
- Dedicate more places and spaces for the arts.

OUTCOMES

- To provide equitable access to all public buildings, facilities, and services, ensure that by 2050, 75% of residents live within 2 miles of a recreation or community center, library, or cultural center.
- Maintain a facility service standard of 3.6 City employees (non-public safety) per 1,000 residents and 321 square feet per employee



The City of Las Vegas is a limited services government; while some functions are the responsibility of the City of Las Vegas, a number of other regionally-based functions are delegated by other public agencies.

- Many Federal, state, county, and regional services are located within the core planning areas of Las Vegas, most of which are in or around Downtown Las Vegas
  - Federal government: Federal facilities are located in Downtown's Civic and Business District, however, post offices, Social Security, and Veteran's Affairs offices are scattered throughout Southern Nevada.
  - State of Nevada: includes a wide range of state agencies. Many are located within the Grant Sawyer State Building; other satellite offices, including the DMV, job training, and social welfare offices are located throughout the community.
  - The Regional Justice Center and other Federal and State courthouses: a number of courts are located within Downtown Las Vegas' Civic and Business district Las Vegas Municipal Court will relocate after its new building is completed adjacent to City Hall in 2021.
  - Las Vegas Metropolitan Police Department has a number of areas commands and community police substations located throughout the City.
  - The Southern Nevada Health District maintains offices at its headquarters in the Charleston planning area, as well as community clinics
  - Many of Clark County's services are provided and accessible at the Clark County Government Center.
  - The Las Vegas-Clark County Library District is a consolidated library district overseen by a ten-member Board of Trustees, including five appointed by the Las Vegas City Council. Funded by property tax levies and governed pursuant to NRS 379, the District serves 25 countywide libraries, including nine within the City.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Access to all types of public services and facilities brings residents closer to their government.	Green public buildings and facilities show a commitment to sustainability and reduce the City's energy and operational costs.	The provision of recreational facilities promote community access to mind and body wellness.	Ensuring the adequate provision of utilities, infrastructure, and services are essential to daily life	Co-locate city services within municipal centers in each planning area



- The City of Las Vegas provides services, operating 21 departments, providing internal services, public safety, provision of infrastructure, and cultural and recreational amenities.
  - The City's Public Works and the Operations and Maintenance departments are directly responsible for constructing and maintaining the City's public buildings and facilities. They also set standards for the space needs of employees. The City's existing building stock is currently maintained by the Operations and Maintenance Department. Operations and Maintenance is responsible for upkeep of public buildings. In addition, Operations and Maintenance handles custodial services, remodeling, and real estate. The construction of new public buildings within the City is overseen by the Department of Public Works Capital Project Management division, which manages the design and construction of public buildings from pre-planning conceptual design, to project management and construction support.
  - The Public Works Department's Environmental Division and Operations and Maintenance Departments operates and maintains the City's sanitary sewer, wastewater collection and treatment operation.
- Public and Private utility providers, including:
  - The City of Las Vegas is served by two primary investor owned utilities: NV Energy for electricity and Southwest Gas for natural gas, described further in Conservation: Energy.
  - The City of Las Vegas is served by the Las Vegas Valley Water District (LVVWD), which treats and delivers water to city residents and businesses.
  - Stormwater and the region's storm drain and flood control network is planned, funded, and managed by the Clark County Regional Flood Control District (RFCD).
  - Republic Services of Southern Nevada serves the City of Las Vegas (and much of the region as a whole) under a franchise granted by City Council to provide solid waste and recycling service to City residents, businesses, and for government operations.
  - The City franchises telecommunications companies for use of the City's right of way and the provision of service to its residents and visitors. A number of franchises are granted for service in this space, including for Cox Communications and CenturyLink, two of the largest internet, television, and telephone communications providers. Wireless providers are permitted and regulated by the City with respect to infrastructure siting, design, and typical operations.

THE CITY OF LAS VEGAS IS MEETING ITS CURRENT DEMAND FOR BUILDINGS AND FACILITIES, BUT OTHER SPACE TYPES MAY BE REQUIRED AS THE CITY'S POPULATION GROWS

The City currently operates more than 100 public buildings, and facilities. These include administrative buildings, cultural facilities, community centers and recreational facilities, public safety, wastewater treatment, warehouses, and other types of buildings. Some of the largest include:

- Las Vegas City Hall, the administrative flagship building and headquarters of the City, housing internal service, development services, and administrative functions, as well as meeting space and offices for the Las Vegas City Council and city management. A new civic center plaza and building would centralize staff and free more space for community use.
- The City has completed a new 138,000 square-foot Municipal Court next to City Hall, vacating current space at the Regional Justice Center.
- One of the hallmarks of a world-class city is the extent of its opportunities for cultural expression. Cultural buildings and facilities, such as art centers, museums, community centers, performing arts spaces, and libraries, play an important role in community life. While the City has made great strides in recent years regarding cultural facilities, the City must continue to expand its cultural role. Each must be available to all citizens of Las Vegas, are designed to bring cultural awareness and pride to the City, and serve as assets so they can be effectively programmed and marketed.
- Nearly 30 different community centers, pools, and recreational facilities are distributed throughout the City.

CITY FACILITIES		
	NUMBER OF FACILITIES	SQUARE FOOTAGE
Administrative	18	611,340
Cultural	9	164,643
Public Safety	28	458,040
Recreational	29	596,587
Warehouses	17	151,419
WPCF	1	679,938
Other	11	163,769
TOTAL	**113**	**2,825,736**

- Two service yards (East and West) house many of the City's vehicles, equipment, and repair facilities and contain maintenance, warehousing, and storage facilities.
- The City's wastewater treatment plant.

In order to predict the future needs of administrative and warehousing facilities, it is important to identify the current conditions regarding space needs within the City. To maintain a service standard of 3.6 non-public safety city workers per every 1,000 residents to maintain the level of customer service that the City currently provides, an increase of staff and building space of 300 square feet per employee will be required. As of 2019, there are 1,526 full-time non-public safety employees, and 866 part-time employees located at various facilities throughout the City within 611,340 square feet of administrative building space. (Cultural and Recreational space are considered public use; Public Safety employees accounted for under that respective goal). Based on future population projections, design metrics, and public service standards, the City will need nearly 3,550 full and part time non-public safety employees. However, with the

CITY EMPLOYEES AND FACILITY SPACE			
	2019	2050	DIFFERENCE
Population	675,971	984,738	
# Non P/S Employees (Actual)	2,392		
# Non P/S Employees (Required)	2,433	3,545	1,112
Actual square feet (Administrative)	611,340		
Required square feet (Administrative)	729,900	1,063,500	333,600

recent construction of multiple new public facilities over the past decade, the City should be able to provide enough facility space for its core city services functions, based on employee space needs alone. Public access to city services may warrant construction of additional or future facilities, based on specific need requirements.

When considering the design of new public buildings, the City must demonstrate equitable site selection and environmentally conscientious design. Site selection for new facilities should prioritize access to underserved and vulnerable populations, while also incorporating innovative design and sustainability principals. The City will ensure that any new public buildings built by and for the City are built to a minimum of the United States Green Building Council's (USGBC) LEED-Silver level. Public facilities should have direct access to alternative modes of transportation.

Based on geographic proximities and the lack of facilities in general, the Nu Wav Kaiv, Tule Springs, Lone Mountain, La Madre Foothills and Kyle Canyon, and are the most underserved locations due to lack of facilities. The Southern Nevada Public Lands Management Act, however, can be used to reserve land for future public facility construction in those areas. However, other areas near the urban core may be underserved due to the proximity of a public facility or service.



ENSURE THAT THE SANITARY SEWER SYSTEM HAS THE CAPACITY TO ACCOMMODATE THE PROJECTED DENSITIES AND POPULATIONS FORECASTED THOUGH 2050

The City constructs, operates, and maintains the sewer collection system, as well as treating and discharging water back into the Las Vegas Wash for return flow credit. The City's existing service area is approximately 154 square miles. Based on a 2002 interlocal agreement between the City and County, the City provides wastewater collection service to northwestern areas around Lone Mountain outside of existing city limits. With inclusion of future growth areas, service could expand to approximately 173 square miles.

The existing City wastewater collection system is comprised of approximately 1,827 miles of pipeline ranging in diameter from 6-inches to 10 feet. Collected wastewater is directed to the Water Pollution Control Facility located in the east valley. The 140-acre treatment facility has a capacity to treat up to 91 million gallons per day (MGD) and provides for the collection, treatment, and disinfection of wastewater for discharge into the Las Vegas Wash, as well as the collection and disposal of residual solid material. The WPCF utilizes both solar and digester gas from its anaerobic digestion process to power two large combustion engines that power aeration air blowers.

Sewer capacity can be easily calculated for development of vacant land in the suburbs; however, because this plan anticipates higher density infill development within more mature areas of the City, it is difficult to estimate the potential impact on capacity. Redevelopment can overwhelm the sewer system due to aging infrastructure or pipe diameters that were never intended to handle high intensity uses. Higher density and mixed-use infill development often requires upgrades of the existing sewer system at significant cost to the developer or the City. Should a developer be required to upgrade sewer lines, the additional cost could serve as a disincentive. In order to attract viable development into the City's designated TOD place types, it is imperative that the wastewater plan be closely coordinated. The Department of Public Works maintains an up-to-date Wastewater Collection System Master Plan to anticipate future changes in capacity requirements and is proactive in meeting those needs based on metrics such as population forecasts and future land use.



THE AVAILABILITY OF LIBRARIES ENSURES PUBLIC ACCESS TO INFORMATION AND RESOURCES

The Las Vegas-Clark County Library District ensures access to reading and information at each of its libraries. They are also an educational and cultural resource for many of the City's children and residents, some of which include theaters, lecture, and concert halls. The District's Library Facilities Master Plan Decision Framework Document was approved in 2019 to assist with capital decision making for the next 20 years. The document is a tool to assess and execute capital investment strategies during a rapidly evolving environment for public libraries. It allows the District to stay abreast of changes in the economy, demographics, consumer behavior, information distribution, technology, physical buildings, and other factors though 2040. The framework found that individual library branches will see population shifts, but their facilities are well distributed in the near and mid-term. Based on these trends and an analysis of the District's footprint, the District has identified several potential future site locations to serve residents.

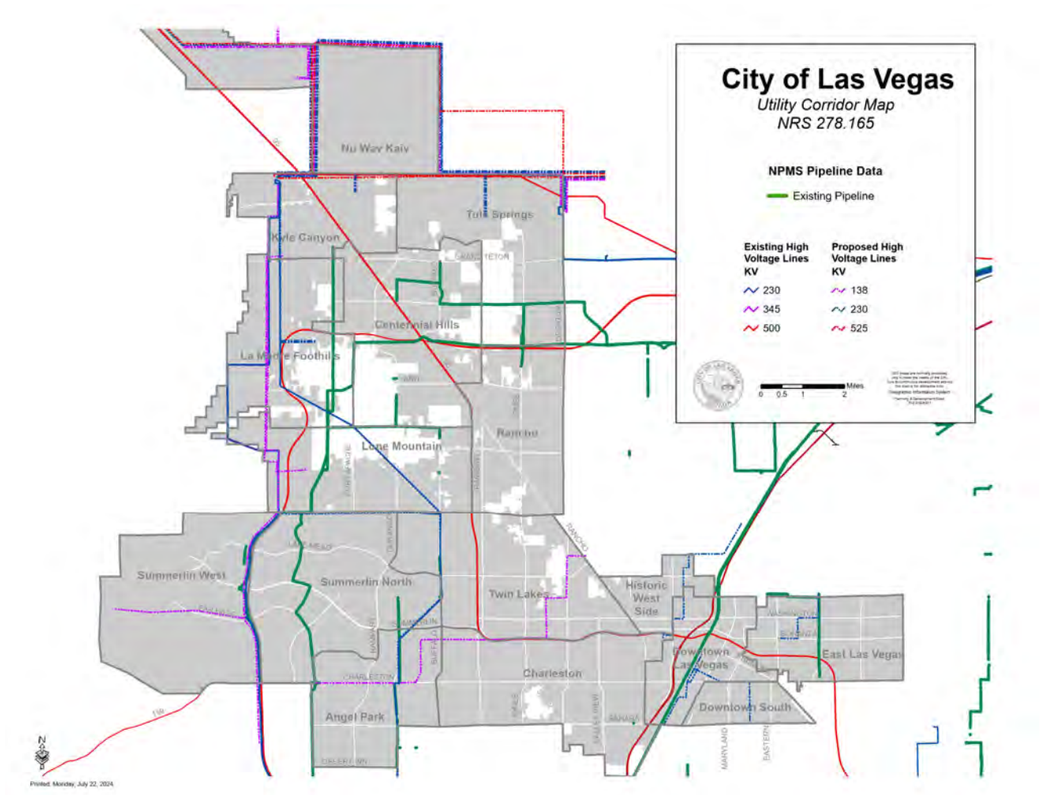
- Kyle Canyon: within the Skye Canyon master planned community on a City of Las Vegas BLM site (NV-157 Kyle Canyon Road near Nah Gah Kiev Pkwy)
- La Madre Foothills
- Lone Mountain: along the I-215 Beltway.
- East Las Vegas: while a new library opened in 2019 within this area, the District's eastern area still has potential service gaps

EFFORTS TO COORDINATE WITH A RANGE OF "WET" AND "DRY" UTILITIES HAVE BEEN IMPROVING TO ENSURE ADEQUATE PROVISION OF SERVICE TO RESIDENTS AND BUSINESSES

The City coordinates with private utility companies to ensure the adequate provision of electricity, natural gas, water, and telecommunication infrastructure to existing and new development. Through franchise agreements for use of city rights-of way, utilities are typically located underground, in sidewalk or curbside utility boxes, or overhead transmission lines. With the exception of utility transmission line requests of 15,000 volts (15 kV) or larger outside of an established overhead utility corridor, utilities are not required to have a public hearing for approval.

Development coordination is one of the biggest challenges the City faces, as each utility company has specific requirements for the installation of required appurtenances. While many types of utility installations can be located underground, some, such as electric transformers or water backflow preventers, are required by to be located above ground. Aesthetically, these appurtenances are large, unsightly, and conflict with the zoning code provisions that are intended to minimize their impacts. Required equipment clearances often make it impractical to house them within the footprint of a building, which typically results in encroachments into the pedestrian realm. Overhead utilities, especially in core planning areas, pose another challenge. Since the early 2000's, Title 19 has required undergrounding overhead utility lines for safety and aesthetics, but it has proven challenging to implement due to cost and the ability of the requirement to be waived at a public hearing.

While efforts to coordinate utility installations have improve, moving forward, the City must continue to engage in discussions with "wet" and "dry" utility companies to minimize the impacts of their installations. The feasibility of utility consolidation or banking multiple properties from a designated location equipment reduces the current installation clearances must be examined. Discussions should also be had with the development community to emphasize the importance of a site design that takes above ground utilities into consideration prior to the submittal of off-site improvement plans. The zoning code must also be revised to include development standards that take into account the locational provisions of above ground utilities to minimize their impacts.

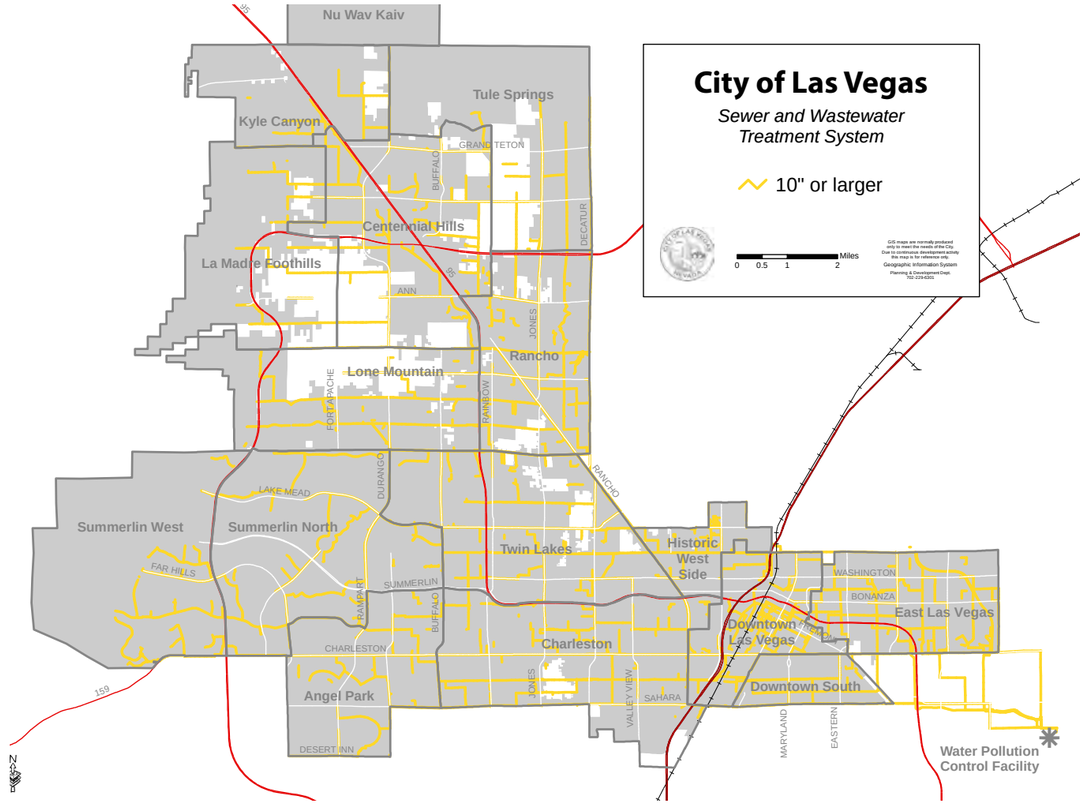


UTILITY CORRIDORS AND TRANSMISSION PLAN

Most electric, gas, sewer, and telecommunications infrastructure are located underground within the public right-of-way as buried pipelines and conduit, or are overhead transmission lines. The City has limited oversight on the location of utility transmission lines. It is directed to approve lines located within an established utility corridor administratively, and all others through the approval of a Special Use Permit by the Planning Commission. A utility applicant may appeal the Planning Commission's decision to the Public Utilities Commission of Nevada if the applicant believes that the Commission did not act in a timely manner, or if they feel aggrieved by conditions imposed with the special use permit.

In addition to this statutory requirement, this Master Plan includes the following additional provisions:

- *The City will continue to work with investor-owned utilities to eliminate aerial lines by relocating them underground within the city of Las Vegas, especially within Downtown Las Vegas.*
- *Utility installations within the public right-of-way shall be coordinated during new or street rehabilitation projects.*
- *Sidewalks, alleys, building entrances, and other public spaces shall be kept clear of electrical, water, and natural gas boxes and infrastructure. Utility boxes and infrastructure shall be located in appropriate areas as depicted in LVMC Title 19 and shall not be placed in a manner that interferes with pedestrian or bicyclist movement.*



WASTEWATER COLLECTION SYSTEM MASTER PLAN

The Wastewater Collection System Master Plan is separate plan document that identifies capital improvement projects for capacity in the existing sewer system and expansion of sewerage facilities to serve new development. The plan uses an updated model and includes specific projects, estimated costs, and a schedule for implementation. Most programmed CIP projects are upgrades to the Water Pollution Control Facility and for major sewer interceptor lines to accommodate future growth. All costs associated with the sanitation operation, including debt service on bonds, are paid for through service fees and a portion of a sales tax.

This subplan is consistent with this Master Plan, which also support the following additional provisions:

- *Abandon septic tanks (Individual Sewage Disposal Systems) and connect property owners to the sewer network, pursuant to SNHD regulations.*
- *Coordinate and time improvements in conjunction with new large-scale infill and redevelopment projects that are supportive of the land use placetypes contained in Chapter 2.*
- *Implement improvements to the sanitary sewer system as identified in the Wastewater Collection System Master Plan Update which will increase the capacity to deliver treated wastewater for reclamation (for greywater irrigation uses) or to return it to Lake Mead for return flow credits.*

CULTURAL FACILITIES HELP IMPROVE COMMUNITY WELL-BEING

Arts and culture are vital for every city. A broad range of arts and cultural resources and activities develop community cohesion, civic participation, self-expression and creativity and revitalization

Southern Nevada has a wealth of cultural opportunities and is home to world class entertainment and performing arts. As the City has grown, cultural offerings have evolved from casino lounge acts to full-scale entertainment productions, fine-art productions to dedicated programs and schools for the arts. The City's cultural scene has blossomed with many new cultural additions within the heart of Las Vegas, including

- The Smith Center for the Performing Arts
- The DISCOVERY Children's Museum
- National Museum of Organized Crime and Law Enforcement
- The Neon Museum
- The Nevada State Museum and Origen Experience at the Las Vegas Springs Preserve
- Community city art and cultural centers offering community galleries, cultural facilities, and theater space.

The City's Office of Cultural Affairs coordinates performances and events, a youth theater, classes and workshops, and dedicates "a Percent for the Arts," a dedicated funding formula from its capital budget for artistic works on public works projects at city facilities and within City rights-of-way. Through these efforts, the City also approves the creation of both permanent and temporary art installations throughout the City. Assisting the office is the Las Vegas Arts Commission, an appointed volunteer advisory board that helps determine projects and overall awareness of the arts.

After the Arts District was formed in Downtown Las Vegas, the City found a new home for artists to collaborate in live-work environments. Intended as an evolving cultural center, the Arts District is an example of a Downtown district that is successfully redeveloping and reinventing the built environment through public investment and entrepreneurship as envisioned by the Vision 2045 Downtown Las Vegas Masterplan. Further urban design efforts and targeted incentives to develop artistic and cultural endeavors will cement the Arts District as the City's live-work-play destination for creative industry.

To sustain momentum and to secure Las Vegas reputation as a unique hub for cultural activity, the City must continue to invest in its cultural facilities and places. As part of its annual efforts, the City must invest in a robust Municipal Arts Plan that makes further examination into the needs of new cultural facilities and use of right of way space to improve their aesthetics. Ultimately, this sub-plan can help protect, enhance, and further develop Las Vegas' cultural resources and serve to strengthen the region's creative industries.

Among the identified needs and new cultural facilities are:

- The development of a new vision for the City's "Cultural Corridor" within the Cashman District of Downtown Las Vegas. Because this area has a range of existing cultural resources, including the Neon Museum, Natural History Museum, and Las Vegas Mormon Fort state park, it has been historically situated for such uses. However, it also competes with other surrounding uses including state government, economic development efforts at both the former Las Vegas Library and Cashman Center, and contends with high levels of poverty and homelessness. A specific community planning effort must take place to reimagine this district to yield tangible results
- Construction of dedicated fine arts museums, a natural science museum, botanical gardens, and a zoo
- Relocation of the National Atomic History Museum to Downtown Las Vegas
- Relocation and expansion of the Natural History Museum
- Commission and dedicate public art, monuments, and statues
- Municipally operated professional and community-scaled galleries and performing arts centers under the purview of Cultural Affairs to generate revenue
- A League of Resident Theatres recognized theatre
- An open-air or partially enclosed outdoor amphitheater venue for year-round large-scale ticketed performing arts events







Finally, the Office of Cultural Affairs must continue to track participation and attendance at community art fairs, cultural events, festivals, performances and programs to demonstrate community need and communicate financial or logistical support for local arts. Collaboration with private and non-profit groups, as well as programs at UNLV and CCSD, especially the Las Vegas Academy for the Performing Arts in Downtown Las Vegas, will further help develop community pride and the next generation of artists.

A DAY IN THE LIFE

FINDING AN ANSWER TO TRANSIENCE

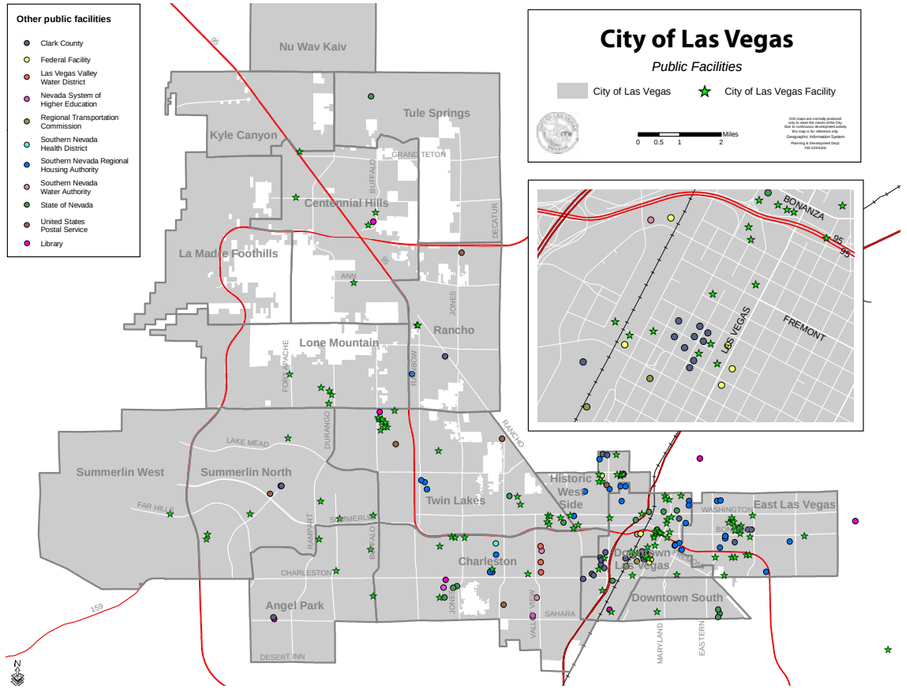
Aubrey McCall, YMCA Director

Calling herself "the moving type", Aubrey and her husband had already lived in several other cities by the time they decided to settle and raise their young family in Las Vegas. From the very beginning, they loved the city's "24-hour-town" activities and choices. Today, Aubrey, who runs a Y in one of the city's north-central communities, also appreciates the ready availability of free and low-cost services the city provides. For she and her husband Tom, Las Vegas has always been a city of opportunity. "Here there are a million different directions you can go," she says.

Even so, she adds, Las Vegas struggles with being a transient town. She knows many transplants but comes across few people who were born and raised here. She also knows many who have decided to sell their homes and move on. She sees the city as filled with "pockets of really nice" and "pockets of not nice anymore" and wonders what can be done to keep neighborhoods from going downhill.

When it comes to the public education system, she notes that transiency contributes to a low high school graduation rate, an unwelcome statistic for a system—the state's largest—that must already contend with complex challenges such as continued rapid growth.

Aubrey notes that her own two children have done well in the city's public schools—in part thanks to her own deep involvement. It's in the area of early childhood education that she sees the greatest unmet need. She'd like to see more funding, from the state as well as the city (since kinder care, after all, is a statewide issue) so the city's earliest residences can have the resources they need to make the best possible start.



PLANNING AREA	FACILITY NEEDS BASED ON 2050 POPULATION
Angel Park	Moderate need, due to proximity
Centennial Hills	Adequately served
Charleston	High need, due to lack of proximity, area demographics
Downtown	Adequately served; new Municipal Courthouse to open 2021; new Civic Center needed
Downtown South	Low need due to existing service provision, but warranted based on area demographics
East Las Vegas	Moderate need due to existing service provision, but warranted based on area demographics and proximity
Kyle Canyon	Moderate need, due to long term development build-out and master planned community service provision
La Madre Foothills	Moderate need, due to proximity, long term development build-out, and master planned community service provision
Lone Mountain	Moderate need, due to proximity
Meadows	High need, due to lack of proximity, area demographics
Nu Wav Kaiv	Low need, due to long term development build-out
Rancho	Moderate need, due to proximity
Summerlin North	Adequately served
Summerlin West	Low need, due to long term development build-out and master planned community service provision
Tule Springs	Moderate need, due to proximity
West Las Vegas	Low need due to existing service provision, but warranted based on area demographics

IMPLEMENTATION STRATEGIES

- All future public buildings and facilities capital improvements identified in the annual CIP will be assessed for its conformance with the pursuant to NRS 278.0226.
- For each planning area, conduct a community needs assessment to identify priority facility and service needs and resources, whether for City, County, regional, State, or Federal resources, including the needs of priority populations and priority planning areas for evaluation.
  - Plan for future public building needs, including renovation and expansion of existing facilities, land acquisition, and new construction, including a new Civic Center and plaza in Downtown.
  - Evaluate administrative and warehousing space needs to help establish priorities in the annual capital improvement budgeting process.
  - Consider development of satellite administrative offices in areas that provide accessibility to underserved populations.
  - Construct all new City buildings and facilities to meet LEED Silver standards
  - Justify expansion and renovation of public buildings using the City's Office of Architectural Services standards
  - Research and consider land acquisition opportunities, including those through SNPLMA, in advance of programming capital improvements to take advantage of potential opportunities to expand future service delivery.
- Ensure that both newly developed and mature areas of the City contain appropriate public arts and cultural facilities, museums, libraries and other supportive uses:
  - Expand the number and quality of cultural opportunities within the community though capital funding, grants and private-public partnerships.
  - Locate and develop family-oriented arts, cultural, and entertainment facilities and venues in each planning area at locations accessible to all citizens.
  - Actively work with public, non-profit organizations and private interests to develop art galleries, museums, performing arts centers, sports and entertainment arenas, and other cultural facilities.
- Collaborate with the Las Vegas-Clark County Library District and assist with the future construction of libraries within the 2019 Library Facilities Master Plan Decision Framework document.
- Adopt coordinated strategies addressing key issues and concerns pertaining to water reclamation, treatment facilities, sanitary and storm drain systems by implementing the City's Wastewater Collection System Master Plan.
  - Rebuild and replace old and outdated sewer and wastewater treatment infrastructure through capital improvement programs
  - Ensure sewer infrastructure is right-sized in redevelopment areas
  - Develop a program to mitigate sewer construction and connection fees in infill areas
- Continue coordinating with above ground and underground wet and dry utilities:
  - Ensure development standards utilize minimize the visual impacts of required above ground appurtenances.
  - Ensure utility installations within the public right-of-way are made during pavement and utility rehabilitation projects and when new rights-of-way are developed to minimize the impact to motorists, bicyclists, and pedestrians.
  - Develop methods in coordination with utilities to screen or locate utility appurtenances outside of the pedestrian realm, including utility rooms, utilization of alleys, or undergrounding.
  - Codify development standards that take required utility company clearances into account and that require the consideration of above ground utilities prior to entitlement approval
- Dedicate more places and spaces for the arts
  - Construction of partially enclosed or open-air amphitheater for large-scale performing arts
  - Adopt a public arts and cultural facilities plan
  - Incentivize and fund development of new cultural facilities
  - Commission statues, artwork, murals, at City facilities and within public rights of way

III.B PUBLIC HEALTH + SOCIAL SERVICES

NRS 278.160.1(e)

ENSURE HEALTHY OUTCOMES FOR ALL MEMBERS OF THE COMMUNITY



Health is a foundational guiding principle of this plan. Throughout public outreach, health care and access to medical services were among the most important priorities and concerns for residents; city residents ranked health care as the second highest priority issue that the City should address over the next 30 years.

These issues may have scored as high as they did because of alarmingly poor public health indicators at the City, community-wide, and state levels, contributing to the designations of Health Profession Shortage Area, a Medically Underserved Area, and Medically Underserved Populations by the US Department of Health and Human Services. A 2019 regional Community Health Needs Assessment commissioned for the Southern Nevada Health District by Dignity Health identified a number of indicators and areas recommended for improvement, including:

- **Poor personal care indicators:** These indicators, which include behavioral, environmental, and genetic factors, are determinants of personal health. Las Vegas residents typically exhibit concerning conditions, especially for children, women, and seniors.
- **Environmental conditions:** Some environmental conditions contribute to the region's chronic health concerns, especially with respect to pollution, geography, and socio-economics.
- **Motor vehicle and pedestrian safety:** Preventable deaths and injuries resulting from distracted and impaired driving are far greater than national averages.
- **Violence:** Public safety efforts have led to incremental drops in the violent crime rate. Unfortunately, many residents continue to have had to cope with dangerous situations that may lead to child abuse and different forms of domestic violence.
- **Mental health:** Mental health care is a necessary, but lacking necessity for a region that has ranked near last for both prevalence of mental illness and access to mental health services.
- **Substance abuse:** Las Vegas ranks high for certain types of drug and substance abuse.

OUTCOMES

- By 2030, the City increases the number of hospital beds to 25 beds per 10,000 residents and maintains the number of ICU beds above 4 per 10,000 residents
- By 2030, the region increases the number of physicians to above 400 per 100,000 residents
- Personal health indicator trends improve over time
- The number of adults and children with insurance increase to above 95%
- Designated Health Professional Shortage Area designations are removed within the City

KEY ACTIONS

- Adopt a Health-in-all-Policies statement and commit to increased partnerships with the Southern Nevada Health District and health care providers to improve key personal health care indicators
- Complete the build-out of the UNLV School of Medicine and leverage the Las Vegas Medical District to ensure training, recruitment, and retention of doctors and nurses to overcome shortages
- Develop a City-specific Community Health Needs and Public Health System Assessment addressing population health Indicators and health care facilities citywide and their accessibility.

- **Overall Access to Care:** Regionally, Southern Nevada has struggled with a low resident-to-doctor ratio as well as wide gaps in health care accessibility, especially for low-income and minority neighborhoods. Health care costs and insurance also inhibits health care access.

Protecting public health and safety are among the City Council's most important enumerated authorities. While the City hasn't traditionally been involved in the direct provision of health care, it plays an important role in preventative measures that could cause environmental harm. Specifically, provisions within the City Charter and several titles of LVMC contain preventative public health measures, including:

- The provision to enforce health regulations and the establishment of quarantines
- The ability to treat people suffering alcohol or substance abuse
- The regulation of land use to protect public health safety and welfare
- Nuisance abatement
- Noise and odor control
- Health card requirements for certain business operations
- Animal, pest, and rodent control

As discussed in the Parks goal, the City offers direct activities and amenities for public health and wellness through its Parks and Recreation Department, including community centers with gyms, classes, swimming pools. Park facilities located throughout the City provide open recreational space for activities, sports, and play. The Planning and Public Works Departments have also dedicated hundreds of miles of trails and bicycle facilities to enable active transportation.

Social services are primarily handled as a regional function. The Clark County Social Services Department provides assistance to individuals not otherwise covered by other Federal or State programs, often for seniors and adults without children. The County's Family Services Department handles foster care and adoptions, and child abuse and protective services.

Titles 38, 39, and 40 of Nevada Revised Statutes contain specific chapters and provisions relating to public welfare, mental health, and public health, respectively. State public health laws govern and mandate actions by individual state departments and agencies, as well as agencies like SNHD, and local government service provision. The State also typically handles service provision that's passed down from the Federal Government. Programs and services include:

- State boards of licensure and examination for a wide range of medical professions
- The Nevada Department of Health and Human Services, which provides:
  - » Aging and disability services
  - » Child and family services
  - » Health care finances, particularly for Medicare and Medicaid
  - » Public and Behavioral Health
  - » Welfare and support services
  - » Minority health
- The Silver State Health Insurance Exchange, which provides Nevada residents access to Nevada Health Link, the online insurance marketplace in compliance with the Affordable Care Act. Because Nevada elected to expand Medicaid under Governor Brian Sandoval, more Nevadans qualify and have access to coverage.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Improving health care access for low income and minority neighborhoods, regardless of location, is a vital need for members of the city who need access most.	As conditions change and the City continues to grow, adapting to new trends and population changes will keep the City at the forefront for health outcomes.	The City will work to improve physical and mental health outcomes, improve safety, and encourage healthy choices to sustain individuals and families.	Improved health measures, physical conditions, and access to care are essential for the City and region's quality of life.	Investments in public health systems and the UNLV School of Medicine align with economic development efforts.

POPULATION HEALTH INDICATORS

- Children – Obese: 13.7% (Regional - trending up)
- Children – Physical activity / Inactivity: 42.8% / 15.1% (Regional – trending up)
- Children – Tobacco 5.4% (trending down, but smokeless tobacco, vaping use increasing)
- Teen Birth Rate – 21.9 / 1,000 (Regional – Moderate, Above 20.5% US); highest in CLV
- Adults – Obese: 28.2% (CLV - Improved, but trending up – below 30.1% US)
- Adults – Sedentary: 29.9% (CLV - Poor, trending up – above 26.6% US)
- Adults – Diabetes: 11.2% (CLV – Poor, above 10.8% US)
- Adults – High Cholesterol: 32.2% (CLV – Moderate, below 34.1% US)
- Adults – High blood pressure: 31.8% (CLV – Moderate, below 32.4% US)
- Adults – Experienced heart disease: 6.1% (CLV - Moderate, below 6.4% US)
- Adults – Smoking: 20.5% (CLV – poor, trending up – above 16.4% US)
- Adults – Asthma – 10.1% (CLV – poor, trending up – above 9.0% US)
- Adults – Cancer: 6.0% (CLV Moderate, Below 6.8% US)
- Adults – With Disability: 12.2% (Regional – Below 12.6% US)
- Suicide – 19.4 / 100,000 (Regional – Moderate, trending up – Above 13.9% US)
- Adults - Binge drink: 17.9% (CLV - Moderate, trending up - Above 17.0% US)
- Seniors – Hearing difficulty: 14.9% (CLV - above 14.6% US)
- Seniors – disabilities: 36.9% (CLV - above 35.0% US)
- Seniors – Alzheimer's / Dementia: 10.2% (Regional – Moderate, trending up - Below 10.9% US)
- Life expectancy: 78.8 (Regional – below 79.1 US)
- Leading causes of death:
  - 26.0% other causes
  - 23.0% heart disease
  - 21.3% cancer
  - 5.7% lung

Source: SNHD / Community Health Dashboard

THE CITY'S OVERALL HEALTH METRICS AND INDICATORS NEED CONSIDERABLE IMPROVEMENT THROUGH INVESTMENTS IN THE HEALTH CARE SYSTEM, A HEALTH IN ALL POLICIES COLLABORATIVE APPROACH, AND THROUGH PROACTIVE PREVENTATIVE EFFORTS TO ADDRESS CURRENT AND FUTURE ACUTE AND CHRONIC CONDITIONS

Based on recent personal health indicators from the Southern Nevada Health District, residents within the City, and Southern Nevada as a whole, lag behind many state and national averages as determined by the most recent Community Health Needs Assessment. For some groups, overall trends and health metrics indicate the need for renewed action, city leadership, and a "Health in all Policies" collaborative approach. This concept is intended to incorporate health considerations into the decision making process, whether through this plan's implementation by the City's departments, or through policy making by the City Council. Public health will ultimately be influenced by individual behaviors, but for areas in which the City has direct control, such as how the physical environment and health care access can be shaped by the City and community stakeholders.

For some of the health indicators that are especially troubling, but controllable or preventable, the City can play a greater role in addressing concerns. Throughout this Master Plan, the chapters and goals covering transportation, contain implementation strategies that affect the built environment and can significantly impact public health. Despite opportunities for active recreation and transportation, or the availability and accessibility of parks, community centers, pools and gyms, obesity, and sedentary lifestyles are prevalent for both adults and children, as are those that report higher incidences of diabetes and asthma. Similarly, as described under the Food goal, the City continues to work to address food deserts and food swamps, fast food outlets are more accessible than healthy food options and full-service grocery stores. The Nevada Clean Indoor Air Act has prohibited smoking and vaping indoors, but committing to strengthen and enforcement of smoking policies that reduce or eliminate secondhand smoke exposure, including at standalone bars, multi-family housing or other common public areas, coupled other smoking prevention and cessation efforts, will help reduce incidences of respiratory disease and cancer. Ultimately, many of these indicators may come down to individual behavior change, sometimes at the direction of or treatment from medical professionals. If given the tools, resources, or messaging that promote healthy behaviors and residents are linked to existing programs and resources, incidences of increased physical activity levels, improved nutrition, and decreased empty calorie and fat intake will yield an overall Improvement in health outcomes and self-management for people with acute or chronic conditions.

Some environmental conditions contribute to the region's chronic health concerns, especially asthma and respiratory illnesses. These are borne out of mitigatable issues such as air pollution, land use, and neighborhood characteristics. The City must ultimately reduce the community's exposure to identified environmental hazards through the protection of environmental quality. To address environmental conditions that contribute to the region's chronic health concerns, mobile source air pollution must be minimized through the prioritization of higher occupancy vehicles, transit usage, and transportation electrification. Land use itself – where and how housing and transportation systems are located - also play roles in health indicators. A renewed focus on environmental justice is therefore an important approach to mitigate health concerns in planning areas with higher minority populations and rates of poverty. While preserving natural conditions from urbanization will help ensure access to open spaces, the adequate provision of different types of parks and recreational centers will ensure all areas of the city have green space, which is good for both body and mind. A renewed focus on environmental justice is therefore an important approach to mitigate health concerns in planning areas with higher minority populations and rates of poverty.

As discussed in the Transportation Goals, deaths and injuries of motorists and vulnerable road users are far greater than national averages. Bicyclist and pedestrian safety continues to be an ongoing concern, requiring more attention to transportation facility design. Through the construction of the City's layered complete street network, street design that reduces speeds, eliminates dangerous conditions and roadway movements, and increases visibility, will help improve safety for all road users. Coupled with enforcement of traffic laws and increased penalties for actions that pose a threat to lives, an opportunity exists to improve overall safety and reach the City's "Vision Zero" goal



Public safety efforts have led to incremental drops in the violent crime rate. Unfortunately, many residents continue to have to cope with dangerous situations that may lead to child abuse and different forms of domestic violence. Though deterrence efforts may be necessary in certain high crime areas, community-oriented policing and public safety efforts, as well as changes to built environment conditions are just as important to reduce violence. Additional work must be made to address mental health and substance abuse, two issues that often establish conditions for physical violence. Because Las Vegas has structured its economy on tourism and entertainment, there are intrinsically higher risks for smoking, alcohol abuse, and drug use abuse. Alcohol use, maternal substance use, and most recently, the epidemic of opioid abuse have each had higher rates among Las Vegas residents.

Unfortunately, funding and availability for mental health services and substance abuse treatment programs is low across Nevada; the state ranks last in the country for a range of mental health metrics, including youth and adult mental health conditions, mental health workforce availability, funding for treatment, and facility availability. To address these difficult challenges, there must be recognition of how each issue and system interacts with each other. Within its powers, the City Council can provide for appropriate policing, whether enforced by the LVMPD or City Marshals, treatment for alcohol and substance abuse, or franchise public health services. The City must also work with the County and other community resources to ensure stronger social service safety nets must to ensure people, especially women and children, do not become victims of violence. Further careful examination of facilities, such as group homes and treatment centers, must also take place to ensure compatability with the communities and neighborhoods they serve.



A DAY IN THE LIFE

SMALL CHANGES, BIG OPPORTUNITIES

Jenny Hazlitt, Employee of a Non-Profit Providing Resources to Low Income Individuals

Jenny Hazlitt can tell you stories. Stories about unemployed residents who can't afford the bus fare across town to get to job interviews. Stories about parents who can't apply for–or hold onto– much-needed jobs because they can't find or afford childcare, or because after an extremely time consuming trip across town they get home too late to pick up their child by closing time.

But Jenny is optimistic. She believes the city can make small changes that would open up big opportunities. To receive assistance services in this city, she says, one often must first pay for them–and many simply can't. "How can you end up getting city assistance when you don't even have the money to pay for a birth certificate for your child, or a social security card?"

She'd love to see licensed childcare in at least some low-income apartment complexes. Add to that a 30-day bus pass, say, and an opportunity to receive a voucher for a birth certificate for those for those receiving Medicaid or food stamps.

Jenny envisions a city that makes a bigger effort to reach out to its underserved residents. She points out that Las Vegas has many non-profit resources that most people don't even know about.

Simple marketing and advertising campaigns could make people aware of them—and of town halls where they could have a greater voice in their own quality of life as well as that of Las Vegas as a whole.

To guide areas in which the City plays roles in public health, the City must consider adoption of a health in all policies statement for key decisions and commit to conducting Health Impact Assessments on proposed CIP projects to increase positive health outcomes and minimize adverse impacts. To accomplish this approach, the City must continue working with SNHD and the medical community to monitor health indicators and develop recommendations to strengthen the delivery of health services to improve respective outcomes, especially for strategies that improve physical activity, smoking cessation, and reducing obesity. Development and ongoing update of a Community Health and Public Health System Assessment, specific to the City of Las Vegas that identifies health care competencies, and capacities of essential service providers. Southern Nevada Strong's collaborative approach at a regional level can help the City monitor and improve health services and programs that improve positive health outcomes and expand access to health care.

LAS VEGANS LACK SUFFICIENT ACCESS TO HEALTH CARE, AND THE NUMBER OF DOCTORS AND NURSES AVAILABLE IS LOW FOR THE CITY AND STATE. UNLV AND THE NEW SCHOOL OF MEDICINE IS ANTICIPATED TO HELP ALLEVIATE SHORTAGES OF HEALTH CARE PROVIDERS

Regular access to health care, including checkups, screenings, and exams can help find problems before they start or find problems early when treatment is often most effective. With fewer doctors, access is delayed or is done through the emergency room, instead of through a primary care physician, adding to costs not only for the patient, but for those that may truly need emergency care. For a variety of reasons, including the City's rapid population growth, Las Vegas has struggled with low resident-to-doctor and low resident-to-registered nurse ratios, which are well below national averages. Important specialty care populations, including those with physical or cognitive disabilities, maternity, pediatrics, and senior care have also had growing demands on the local health care system. The University of Nevada's 2018 Physician Workforce Report indicates that in Southern Nevada, the greatest need is for general practice doctors, especially for family medicine, internal medicine, pediatrics, and psychiatry. Similarly, the number of RN's and advanced practice registerd nurses, while increasing overall, still are desperately needed. To address these issues and reduce the gaps in access to health care due to the lack of health care jobs, three important steps must be taken by the City, which must assert a leadership role, in partnership with SNHD, UNLV, and the health care community:

Train and Retain Primary Care Doctors and Nurses - Until only recently, Las Vegas was the largest metropolitan area without a complete and dedicated medical school and academic program. The University of Nevada School of Medicine previously fulfilled the need for medical education and provided for residency programs, but the new University of Nevada, Las Vegas (UNLV) program has made tremendous strides since its first students graduated with MD degrees in 2017. Initial reports indicated that the new school would yield $1.2 billion annual economic impact and add 8,000 new jobs to the region by 2030. The addition of the UNLV School of Medicine complements UNLV's Schools of Dental Medicine, Nursing, Public Health, and Health Sciences. Anchored within the Las Vegas Medical District in Downtown Las Vegas, the School of Medicine will be instrumental to helping fulfilling many acute and chronic public health outcomes, as well as increasing overall health care capacity. While UNLV's School of Medicine has only just begun, the school itself needs additional funding, faculty, and resources for a complete build-out of the school within the Medical District. New facilities, classrooms, labs, and resources must be committed to ensure early success and future results.

The primary objective of UNLV's programs is to educate, train, and ultimately retain new health care workers – especially an increase in the overall number of new graduating doctors from the UNLV School of Medicine and nurses from the School of Nursing. As the school has started, 60 students will graduate a year, later increasing to between 120-180 per year. The city and UNLV can supplement these results with graduates from other programs, including Tuoro University Nevada, the College of Southern Nevada, Nevada State College, and other private and non-profit training programs and schools. In addition, as discussed in the Economy and Workforce Chapter, dedication of a new state college campus tailored to residents within the City will further buoy UNLV's work, especially if targeted and specialized two and four year degrees enhance nursing and medical workforce development capacity.

Continue Recruitment of Health Care Employees - Even though the public sector oversight of health care is essential, much of the health care system's backbone is through the private sector, which employs thousands of the City's health service providers, including hospitals and medical offices, technicians, and administrative professionals. Overall, health care accounts for more than 12% of the region's total jobs. As a targeted economic sector, health care occupations, including registered nurses, general practitioners, and pharmacists are the among the occupations in highest demand. While the health care sector has been a focus for the City, LVGEA, and GOED, a renewed recruitment and attraction effort must take place to not only fill created jobs, but to supplement the existing industry. The City must forge new partnerships with the private sectors to attract these health care workers, as well as attract graduating doctors and nurses from elsewhere. Because of the previously established relationship with the University of Nevada, this should be an important first step as efforts are made to attract people from other states and across the country.

Dedicate efforts on medical tourism and research– Leveraging the City's hospitality industry may be a key effort to attract new health care providers and be a stepping stone to attracting medical research. The City made great advances with the opening of the Cleveland Clinic and establishment of the Lou Ruvo Center for Brain Health in Downtown Las Vegas. As advances are made and the UNLV School of Medicine matures, opportunities for patients to travel, be treated, and recover in Las Vegas may

MEDICAL PROFESSIONALS

- Estimated active doctors (MD/DO): 3,845 (Region)
- Estimated active physician assistants: 618 (Region)
- Primary care physicians per 100,000: 108 (NV)
- Primary care physicians per 100,000: 150 (US)
- Doctors per 100,000: 228 (NV)
- Doctors per 100,000: 373 (US)
- Registered Nurses per 100,000: 674 (NV)
- Registered Nurses per 100,000: 854.3 (US)

Department of Health and Human Services; University of Nevada; Nevada Board of Medical Examiners; Nevada State Board of Nursing; Southern Nevada Health District

make the City more attractive, especially with institutions like the Cleveland Clinic. As newregion's share of doctors and nurses stabilize, the City must focus on recruiting dedicated medical research to Southern Nevada. While Las Vegas must make great advances in other areas just to be competitive, this long-term effort may ultimately yield dividends by attracting more high-paying jobs, increasing the quality of medical care, and improving other livability metrics enumerated throughout this master plan.

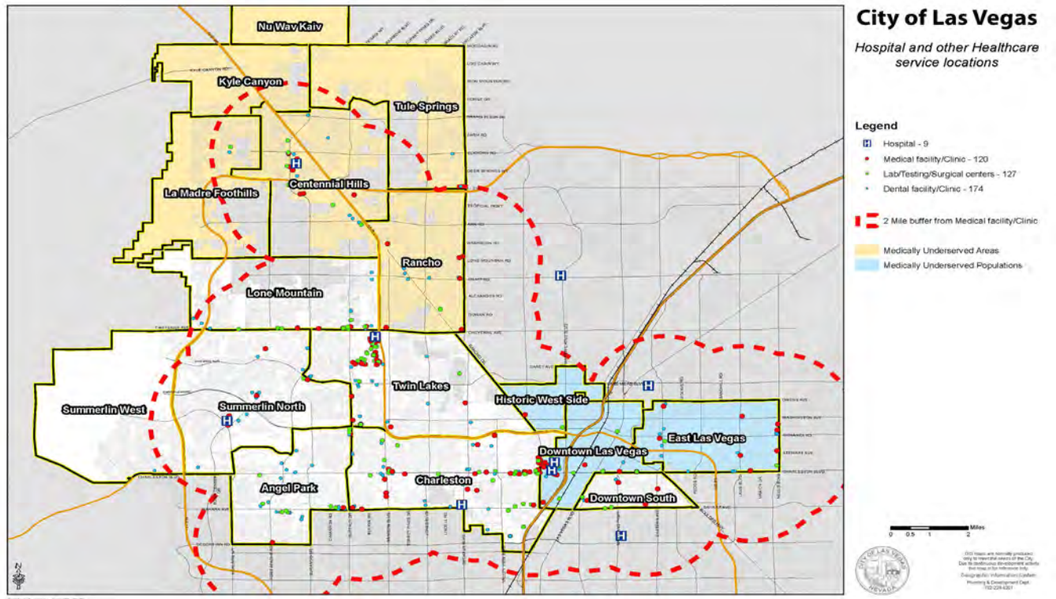
THE LAS VEGAS MEDICAL DISTRICT AND UNIVERSITY MEDICAL CENTER ARE IMPORTANT HEALTH CARE FACILITIES TO THE CITY AND REGION, BUT MORE HEALTH CARE CAPACITY IS NEEDED

Since 1931, University Medical Center (UMC) has served as the County Hospital and has served Las Vegas as its oldest care facility. Through expansive growth and several name changes, UMC has also changed roles, becoming a teaching institution of the University of Nevada in 1986 and providing dedicated burn care, pediatric emergency care, and trauma; it has Nevada's only Level I Trauma Center. In 2009, pediatric services were combined to form the Children's Hospital of Nevada. UMC has grown in importance with the addition of the UNLV School of Medicine and serves as a key partner to train academic medicine.

As the City has grown, so too have its health care facilities and providers, most of which are for-profit entities. Valley Health Systems and Sunrise Health, operate four hospitals within the City, and have constructed and expanded many of the newest hospitals and medical centers over the last two decades. Dignity Health, who runs Southern Nevada's St Rose Dominican faith-based hospitals and clinics, has also branched out to other parts of the valley. Because of Las Vegas' notably unique status of also serving a large non-resident population, the community does have above-average intensive care unit beds available, especially at centrally located hospitals near Downtown Las Vegas and the Strip; however, the region is below average for the total number of hospital beds available. Geographically, hospital location varies; a greater need for both hospital facilities and ICU capacity exists in the underserved northwestern planning areas. Overall, expansions to existing hospitals or the addition of smaller hospital facilities may help increase overall hospital capacity, but may not with access and proximity. The City should therefore ensure at least one major hospital within 4 miles for immediate urgent care, or a 10 minute drive, of every City resident. Additionally, the Joint Commission, a national independent, non-profit accredits and certifies health care organizations and programs based on accountability measures. The Joint Commission accredits and recognizes high-performing hospitals as "Top Performers." As a benchmark for hospital quality, the City must work with each health system and SNHD to ensure each can attain such status.

Geography, demographics, and socio-economics also play a major role in access to care within the City, especially for clinical care. Wide gaps in health care accessibility and laboratories continues to be a challenge, especially for low-income and minority neighborhoods. This has lead the US Department of Health and Human Services to formally designate Health Professional Shortage Areas (HPSA) as well as large portions of the county and North Las Vegas. Most of the planning areas surrounding Downtown Las Vegas are designated as an HPSA for primary care and dental health facilities, while western and northwestern planning areas, which tend to have higher household incomes and access to facilities, are not. West Las Vegas, Twin Lakes, Charleston, Downtown Las Vegas, and East Las Vegas have among the highest concentrations of medically underserved populations. This is especially important from an equity standpoint and the City's investment in new Health and Wellness Centers will address this need. Finally, northwestern planning areas are medically underserved due to an overall lack of facilities. Centennial Hills Hospital is the only major medical center for one of the fastest growing areas of the valley.

Not only is geographic access a challenge, but service navigation itself can be daunting, especially for populations in which cultural and linguistic sensitivities may exist. The disparity contributes to lower rates of visits to physicians and dentists. With recent advances in telemedicine, health care access may be somewhat mitigated for some populations, especially for those with good high-speed internet access and smart devices. This innovation does make it easy for doctors to treat and prescribe for the majority of minor conditions or injuries and may have potential for future job growth. Some health care concerns, however, cannot be otherwise treated this way, nor is telemedicine an option for low-income communities; therefore, the continued provision of essential medical, dental, and mental health services at physical locations is necessary, especially within HPSAs.



LOCAL HEALTH INFRASTRUCTURE
• Nevada – 2.1 hospital beds / 1,000 population • National average: 23.5 beds and 2.7 ICU beds / 10,000 population • Las Vegas Metro Area: 20.8 beds / 4.1 ICU beds

Source: SNHD

REGIONAL PROJECTIONS			
	2019	2050	DIFFERENCE
Population	675,971	984,738	
# Doctors	2,392	3,939	1,547
# Hospital beds	1,983	2,461	478

HEALTHCARE FACILITIES		
FACILITY	HOSPITAL BEDS	ICU BEDS
University Medical Center	541	81
Valley Hospital	242	63
Sunrise Hospital (Clark County)	668	84
North Vista Hospital (North Las Vegas)	177	20
Summerlin Hospital	485	74
Mountain View Hospital	408	47
Centennial Hills Hospital	262	20
Dignity Health – St Rose Sahara Campus	0	0
TOTAL	**1,938 CLV/ 2,783 shared**	**389**



HEALTH CARE COSTS MAY CONTINUE TO BE A BARRIER TO HEALTH OUTCOMES AND SERVICE DELIVERY

Health care accessibility is made much more difficult if additional factors are involved, including poverty and if a household is led by a single parent. Socio-economically, health care costs and access to affordable insurance, which has been an ongoing policy debate since the passage of the Affordable Care Act in 2010, can be a limiting factor to health care access. Within the City, adults with insurance fall below the overall national average. Health care costs are also driven higher by those experiencing poorer health. Those reporting good health and regular exercise report between eight to ten fewer visits to the doctor each year.

The City may have less control over national or state health care policy issues, such as Medicare or Medicaid, health care coverage and insurance, or state markets. However, because health care costs have a direct impact on livability, the City can become an advocate for reducing these expenses to its residents. The City does make some efforts to communicate medical and health events and works with SNHD and health care providers, an ongoing, concerted partnership approach must be made to make to address equity in service delivery, especially for vulnerable populations, women, children, and seniors. The provision of interpretation services, simplified public information about eligibility and enrollment for obtaining health insurance or reducing health care costs are all such methods.

INSURANCE COVERAGE

- Population uninsured: 12.5% (Region)
- Adults with insurance: 82.8% (Below 84.9% NV, Below 87.5% US)
- Children with insurance: 93.2% (Above 92.0% NV, Below 94.8% US)
- Private vs Public insurance: 48.8% vs 29.0%
- Medicaid recipients: 17.3% (Above 17.0% NV, Below 19.6% US)

The UNLV School of Medicine's graduates will help alleviate the community's shortage of doctors. With each new incoming class, the knowledge base will continue to grow, as well as the overall capacity of the school to the benefit of surrounding health care institutions. Continued development of residencies and fellowships at area hospitals and medical facilities is necessary for the retention of doctors and physicians within the City and Southern Nevada.



IMPLEMENTATION STRATEGIES

- Adopt a Health-in-all-Policies statement and commit to increased partnerships with the Southern Nevada Health District and health care providers to improve key population health care indicators
  - Utilize Health Impact Assessments for key policies and CIP decisions
  - Implement the recommended strategies throughout the plan with respect to food and urban agriculture, parks, park connectivity, active transportation, transportation safety, violence prevention and reduction, environmental justice as preventative health measures, especially for specific City areas where public health concerns are highest
  - Eliminate nuisances and public health concerns found in the built or natural environment through mitigation and code enforcement
  - As part of larger legislative package, amend the Las Vegas City Charter to enable City Council powers to treat and care for individuals with mental health
  - Sponsor and hold community health fairs
  - Engage the public, local businesses, and health care providers in developing strategies that improve health behaviors related to smoking and obesity
  - Partner to provide interpretation services and simplified public information about health care costs and insurance
  - Develop City Health and Wellness Centers
- Complete the build-out of the UNLV School of Medicine and leverage the Las Vegas Medical District to ensure training, recruitment, and retention of doctors and nurses to overcome shortages
  - Recruit medical professionals to the community and to identified HPSA's
  - Work with NSHE to dedicate a new state college campus tailored to residents within the City targeted granting two and four year degrees to enhance nursing and medical workforce development capacity.
  - Provide incentives for medical tourism and public, private, or non-profit research organizations
- Develop a City-specific Community Health Needs and Public Health System Assessment addressing personal health Indicators and health care facilities citywide and their accessibility.
  - Construct new full service hospitals and medical centers within the northwestern planning areas
  - Work with health care providers and incentivize private companies to construct clinics, medical offices, and, more hospital bed capacity as needed

IV SAFETY

GOALS

A. Provide high quality emergency services, reduce crime and create safe, friendly communities that elevate social equity.

B. Strengthen resilience to climate change risks, natural and man-made hazards, and extreme events.

C. Minimize flooding risks to prevent damage to property and infrastructure

D. Provide access to public drinking water and cooling spaces and ensure adequate standards for building cooling and shading across all areas of the city



IV.A SAFETY: PUBLIC SAFETY

NRS 278.160.1(g)

PROVIDE HIGH QUALITY EMERGENCY SERVICES, REDUCE CRIME, AND CREATE SAFE, FRIENDLY COMMUNITIES THAT ELEVATE SOCIAL EQUITY



In multiple surveys and public engagement efforts, public safety, with respect to crime and fire protection, was understandably a major concern for residents and was rated as the highest priority issue confronting Las Vegas for the future.

- Throughout the City, the vast majority of residents believed safety and crime was the top issue – so much so, that it would be a reason not to recommend the City as a place to reside
- Despite the concern, the majority of residents felt very or moderately safe in the City. Most residents felt safe within their neighborhoods, but less so in the City in general. The Charleston, Twin Lakes, Downtown Las Vegas and West Las Vegas planning areas received higher response rates of feeling unsafe and that those areas had relatively high rates of crime.
- A third of residents believed they witnessed crime within their neighborhood, with property crime or vandalism being the most-witnessed type
- The majority of residents felt confident in the police to respond quickly to an emergency or non-emergency call, but those levels of confidence dwindled in the same core planning areas surrounding Downtown Las Vegas. 70% of residents believe LVMPD does a good job of controlling crime in their neighborhood with more than half reporting seeing a police patrol at least once per week
- Respondents confidently believed in the fire department or EMS service being able to quickly respond to an emergency call. From a single-family home to Stratosphere Tower, LVFR must be able to answer any type of call, whether a person in need of aid or a complex structural fire; fortunately, as a top rated fire department, it has the tools it needs to handle all types of emergency response.

These responses are largely based on perceptions of emergency services, crime, and response within respondents point of. When contrasted with actual crime and public safety rates within the City itself, both violent crime and property crime rates have decreased substantially over the past decade, from. Remarkably, major fires and fire prevention efforts have yielded positive results despite receiving more than 100,000 annual calls for service.

As the City has grown, so too has the need for adequate police service and fire protection coverage, through efforts to fund more sworn police officer and marshal positions to adding new capital improvements. Over the past decade, the Nevada Legislature has authorized, with Clark County Commission approval, sales tax increases to fund more police officers in the midst of economic recovery from the Great Recession and record visitation. Another boost in police funding was authorized during a special legislative session that funded expansions of the Las Vegas Convention Center and construction of Allegiant Stadium. New additions to fire and police capacity will continue to be needed, not only within existing areas that will see population growth due to infill and redevelopment but growth in northwestern planning areas.

OUTCOMES

- Maintain Fire and Rescue Department's ISO Class 1 rating and CFAI accreditations.
- 90% of response times are in compliance with NFPA standards from dispatch to first response.
- LVMPD maintains a ratio of 2 officers per 1,000 residents or better.
- LVMPD and Las Vegas City Marshals achieve maintain CALEA accreditation.
- Overall violent crime rates improve to a minimum of 5.5 homicides, 400 aggrevated assaults, 70 forcible rapes, and 2,500 property crimes per 100,000 residents annually

The City Council has also consistently made public safety as its leading strategic priority. Protecting public safety is one of the leading enumerated authorities for which the City Charter and LVMC empower the Council to:

- Adopt police ordinances
- Organize the fire department
- Regulate or prohibit the storage and transportation of hazardous materials
- Adopt a fire code

The Planning Department's Code Enforcement division also assists with neighborhood issues and code compliance. Indirectly, code enforcement helps improve the upkeep and physical appearance of commercial properties and neighborhoods that improve overall conditions. To enforce its ordinances and zoning provisions, the City Council can authorize civil penalties and liens for failure to maintain properties.

Two key departments provide for the City's public safety services:

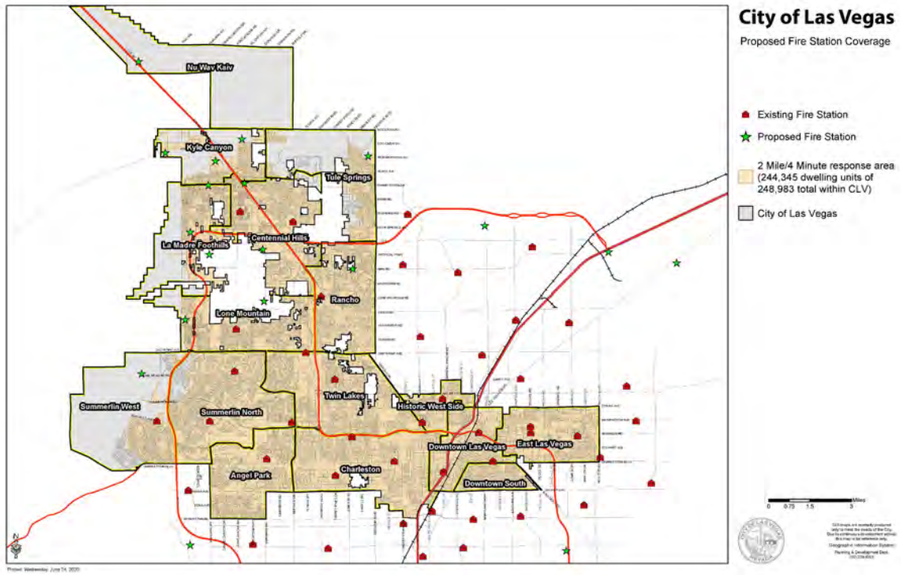
- The Department of Public Safety includes Las Vegas City Marshals that patrol city buildings, parks, and facilities, and operates the City's Detention Center. Public Safety also provides Animal Control.



KEY ACTIONS

- Continue to adequately train, equip, and fund public safety staff and officers to remain a trusted resource that will quickly respond to a call for service
- Construct the recommended public safety capital projects to provide adequate police and fire protection coverage when need is warranted
- Improve built environment safety and adopt a safe communities strategic plan with an approach that balances property and violent crime prevention with community needs
- Increase fire prevention and emergency response efforts
- Develop Safe Communities strategies for planning areas to facilitate an understanding of public safety concerns

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Well trained first responders respectfully police all parts of the city equitably and justly in a manner that protects and serves all members of the community	The availability of first responders to any emergency and to address community hazards is a necessity for community resilience	Quick response from City and regional Emergency Medical Services staff ensures members of the public can get help when they need it	Public safety is the bedrock of Las Vegas, ensuring residents, businesses, visitors, property, and infrastructure are secure and protected from violence	Forging unique partnerships between agencies and branches of government allows opportunities to avoid re-entering the criminal justice system



- Las Vegas Fire & Rescue (LVFR) is an ISO Class I-rated fire department and is a leader in providing superior fire protection. The department is comprised of multiple divisions to provide fire suppression, fire prevention, and medical services. Supporting LVFR paramedics are City authorized franchises for ambulances and emergency responders

The Las Vegas Metropolitan Police Department (LVMPD) provides regional law enforcement and policing for both the City and Clark County, covering more than 8,000 square miles of service territory. After years of deliberation about the cost and duplication of functions between city and county law enforcement, the Las Vegas Police Department and Clark County Sheriff's Department were consolidated and merged to form the Las Vegas Metropolitan Police Department in 1973. Governed by NRS 280, LMVPD is overseen by the Sheriff of Clark County and is jointly funded by the City and County, but neither have any direct organizational control of the agency, aside from fiscal management and affairs.

Supporting the City, LVFR, and LVMPD for public safety and hazard mitigation, prevention and response efforts are a number of other local, state, and Federal law enforcement agencies, including other municipal police and fire departments, Nevada Highway Patrol, and fire suppression from Nevada Division of Forestry and Bureau of Land Management.

The Las Vegas Municipal Court is the judicial branch of the City, in which the City's municipal judges have jurisdiction over all municipal legal affairs, as well as any offenses and misdemeanors committed within or against the City. In addition to overseeing the legal and civil aspects of the City, the City Attorney's Office prosecutes violations of municipal code and statutes taking place within City limits. Other Federal, district, and justice courts, as well as the Nevada Court of Appeals are located within Downtown Las Vegas' Civic and Business Distrct, many of which are within the Regional Justice Center.

PUBLIC SAFETY PROJECTIONS

	2019	2050	DIFFERENCE
Population	675,971	984,738	
# Public Safety Employees (Actual)	1,164		
# Public Safety Employees (Required)	1,014	1,477	463
Actual square feet	275,753		
Required square feet	152,093	221,566	-54,187

Source: City of Las Vegas

LAS VEGAS FIRE AND RESCUE PROVIDES SUPERIOR FIRE PREVENTION AND SUPPRESSION. IT MEETS ITS CURRENT DEMAND FOR BUILDINGS AND FACILITIES, BUT MORE CAPACITY WILL BE REQUIRED AS THE CITY'S POPULATION GROWS TO ENSURE STANDARDS ARE MET

Las Vegas Fire and Rescue has approximately 700 employees who work in a variety of capacities and locations, ranging from firefighter and emergency medical technicians to fire engineers and communication specialists. These divisions are responsible for planning and programming for fire prevention, enforcing fire safety standards, fighting fires, managing hazardous materials, and investigating major fires. LVFR also provides an emergency paramedic service, technical rescue team, hazardous materials unit, bomb squad, and the only Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) unit for all of Southern Nevada, serving all jurisdictions and several counties. New recruits and the City's firefighters train at the City's Fire Training Center in East Las Vegas. In addition to City response, LVFR responds to emergency incidents in areas of unincorporated Clark County surrounding the City, including around the Lone Mountain and Tule Springs planning areas. Through established automatic aid agreements with the County and City of North Las Vegas, LVFR may also respond based on capacity and incident need.

Fire department capabilities and response times are important indicators of the capacity to respond to an emergency. The National Fire Protection Association's (NFPA) standard to deploy fire suppression or paramedics are important benchmarks, for which the first apparatus must arrive within 4 minutes of dispatch, with other assigned units arriving within eight minutes, plus a minute for turnout. The City currently has 22 fire stations and can adequately meet this standard, providing coverage to 88% of all City dwelling units. Many of the newest stations were planned in conjunction with how residential and commercial areas are expected to develop over time. Population growth, density, and development each affect the department's ability to serve an area effectively. Higher density areas require more equipment and personnel to service a greater number of residents, tourists, and structures. Higher density areas also represent a greater risk for fire spreading due to the close proximity of units and buildings. The continued growth anticipated in western and northwestern areas of

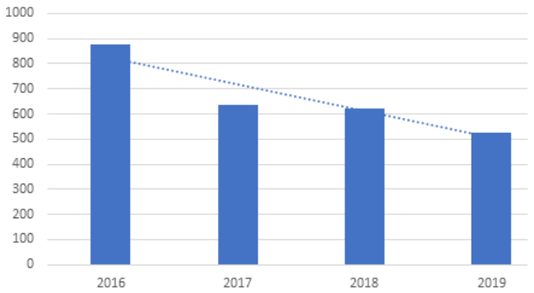


the City will require at least 15 new fire stations to maintain adequate coverage for NFPA standards and cover more than 98% of all existing and future dwelling units. While infill stations have not been planned, it is anticipated that the city core and surrounding mature areas will also see an increase in density through infill development, transit oriented development, and the addition of higher density residential units in the downtown core. This may require several replacement fire stations or expansions to handle new capacity or expanded capabilities.

In 2018, LVFR responded to more than 105,000 calls, including 4,800 fires, 12 multi-alarm fires, and 95,000 EMS responses, 28,000 of which resulted in a paramedic transport to a local facility. Unfortunately, $4.5 million worth of property was damaged, and five fatalities were reported. Regardless of the circumstances, Fire and Rescue must continue to be adequately trained, equipped, and funded to remain a trusted resource that will quickly and adequately respond to calls for service.

Overall calls for fires have decreased over time due in large part to improvements in technology and uniform standards for the Fire Code, such as the requirement for fire sprinklers and fire suppressions systems in new residential construction. This, however, is offset by LVFR's overall call for service rates, which have increased over time. Many of these calls, however, tend to be non-emergencies or lower severity calls that likely do not warrant a full dispatch of a unit. In order to enhance community safety and well-being and increase resource availability, LVFR must properly align the appropriate emergency response, with an overall focus of decreasing calls for service through call prioritization efforts. Where possible, LVFR must further develop mobile resources, community paramedics, and focus efforts on non-emergency (311) call lines to decrease unnecessary dispatches of units. The nursing triage program within

VIOLENT CRIME RATE (PER 100,000)



CRIME RATES WITHIN LVMPD JURISDICTION

	2016	2017	2018	2019
Violent Crime	876	638	621	524
Homicide	10.3	12.6	7.5	5.0
Forcible Rape	77.6	82.2	100.9	85.2
Aggravated Assault	466.1	325.4	344.8	308.5
Property Crimes	3,332.0	3,036.1	2,910.2	2,733.5

Source: LVMPD, FBI

the 911 communication center has been an example of an innovative effort to route suspected non-emergency or lower severity calls instead of dispatching a full EMS unit.

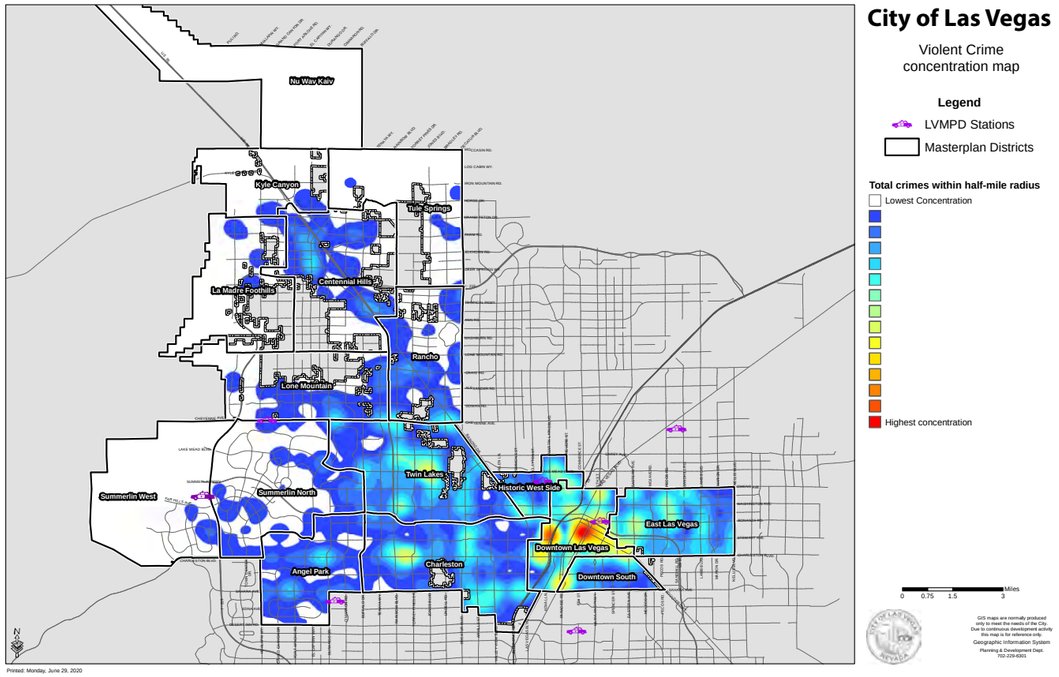
To increase the dependability of Fire and Rescue, while increasing its efficiency and effectiveness, LVFR must also focus on reducing personal and community risks, improving community knowledge, and upgrading the built environment. Many of these efforts have been effective and are well underway already, but only through increasing prevention resources toward prevention will the overall benefits be realized. Use of social media and public outreach have also been an effective tool to educate the public on a number of issues. These education campaigns provide the public with a better understanding of emergency situations. Such campaigns include fire and hazard mitigation - including when to dial 311 or 911, smoke detector and battery maintenance, CPR classes, in-school programs and demonstrations, and the availability of publicly accessible automated external defibrillator units.

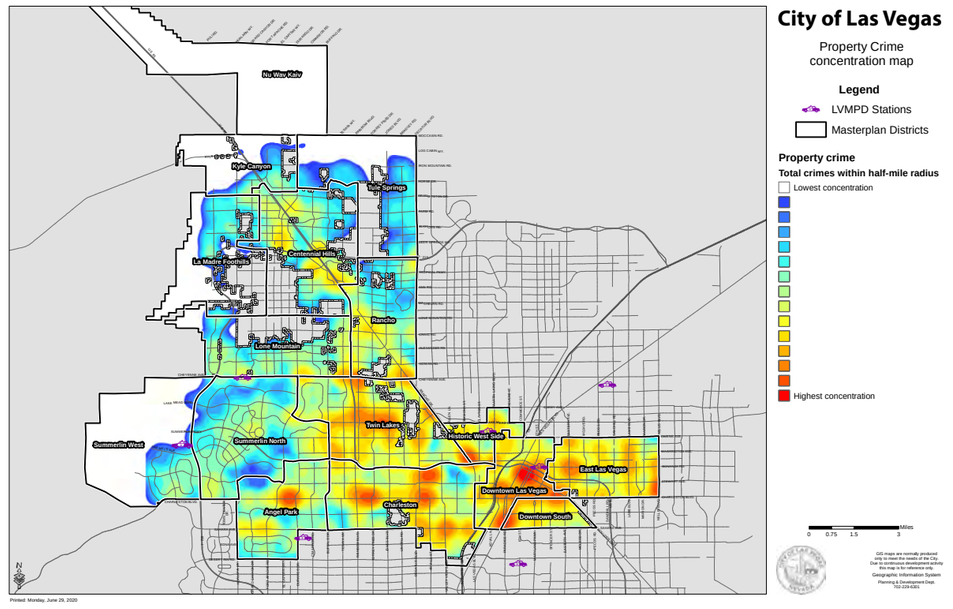
With respect to fire prevention and inspections, approximately 27,000 inspections were conducted in 2018. Because older buildings are more vulnerable and may have higher fire risks due to dated – or sometimes non-existent -- standards, assessments of older building stock and multi-family residential units of all types must be conducted to identify and mitigate hazardous conditions. While some of these buildings will ultimately be eliminated through renovations, upgrades, or redevelopment, increasing targeted inspections for the most vulnerable structures will ultimately lead to better enforcement and prevention of loss of life and loss of structures to fire.

Over time, prevention efforts will require the regular, periodic updates of the Fire Code to make sure standards are met. This requires ensuring standards are not overly restrictive and prohibitive of certain means or types of construction and architecture, building heights or sizes, or unreasonably costly. Because of fire prevention improvements, building engineering and wider use of fire sprinklers and suppression systems, the need for new fire stations in growth areas may not be immediately necessitated. This may mean in some cases deferring new station construction or scaling back design to focus each new station as a first responder station that is paramedic and community focused. While adequate coverage must still be maintained, new fire stations of the future, as well as any infill fire stations or expansions, must be reimagined and designed to maximize paramedic response and right-sized for firefighting needs. As a community facility and resource, these stations should be built as such and aligned with the overall identity of the planning areas for which they serve.

AS CRIME RATES CHANGE OVER TIME, LAW ENFORCEMENT MUST TAKE A PROACTIVE, COLLABORATIVE, AND COMMUNITY ORIENTED APPROACH THAT IS INCLUSIVE AND DELIBERATE

As has been nationally observed, tremendous pressure has been placed on law enforcement to solve community problems. Low graduation rates, mental illness, funding for drug rehabilitation, housing conditions, and a wide range of other issues are factors police encounter and with which they contend, however do not have the capacity, nor may it be appropriate, for them to address. Due to a wide range of factors, crime rates and locations can vary widely; some crimes are those of opportunity, while others can be attributable to socio-economic conditions, the built environment and urban design, the quality of housing and neighborhoods, the provision of social services, and issues





related to mental health. In 2010, as Las Vegas was feeling the greatest effects of the Great Recession, reported crime rates were somewhat elevated on a per person basis. During this year, per 100,000 residents, there were:

- 7.6 homicides
- 46.95 incidents of rape
- 567.88 aggravated assaults
- 3,112.28 incidents of property crime

By 2016, rates of both reported violent and property crimes dramatically improved, decreasing each year to present. A number of factors may have contributed to the overall decline in these rates, such as improving economic conditions, approval of the "More Cops" sales tax, or changes in policing standards and policies. Overall, the clear decline in crime rates over time is a remarkable accomplishment that can be further built upon. However, due to Las Vegas' high profile and unique attributes, the City faces additional concerns including domestic and foreign terrorism, human trafficking, sex trafficking, and illegal drugs.

Public outreach has indicated an expectation of equality, inclusion, and acceptance within the City; this extends to the law enforcement officers that patrol the City, whether under the City's Department of Public Safety or LVMPD. As a guiding principle of this plan, equity requires the City's departments and regional agencies work together to ensure the fairness of policies, programs, and services. The other goals throughout this plan and the provision of law enforcement for public safety, must coalesce. Housing should be inclusive of all incomes. The mix of businesses and community services in the immediate vicinity should be diverse. Urban space must be thoughtfully designed. Transportation must account for all modes (automobile, transit, bicycle, and pedestrian). The lack of any of these can contribute to underlying public safety risks. As indicated, geographic patterns persist. Indicated "hot spots" do show areas where calls for service occur with greater frequency, in which the simple presence of law enforcement can help reduce crime without displacing it to other neighborhoods and increasing positive presence from those that live within those areas. Additionally, when overlaid with other social factors discussed within this plan, there is a clear indication of the need for additional neighborhood interventions, public assistance, and investment to improve the overall quality of life in the areas as a whole.

This does not dismiss other concerns about the quality and methods of local law enforcement. Throughout the City's history, there have been past struggles and concerns over use of force, officer involved shootings, and treatment of people on the basis of race. To address these critical concerns, the Department of Justice investigated LVMPD's use of force and officer involved shootings after several high-profile incidents and issued 75 findings and recommendations for reform in 2012 that were implemented in ensuing years. The provision of body cameras, the uses of de-escalation, and rigorous ongoing training are all examples of measures that can, and continue to be used. To ensure ongoing quality, transparency, and accountability, the City Council must resolve to work with the Sheriff in an effort to train all officers and personnel and continually reform and improve policing. It is important that the City and LVMPD remain vigilant in protecting the community from crimes of all types.

Therefore, the City must sponsor "Safe Communities" strategies that can facilitate a better understanding of community safety and prioritize equitable actions that reduce violent and property crimes while building trust between LVMPD's officers and residents. Due to the City's unique attributes and structure of LVMPD, community public safety will require new attempts at interagency collaboration. The City, in partnership with LVMPD and the County, must meet with each planning area to assess and develop a strategy that includes:

- Engagement and participation from the City Council, heads of City departments and agencies, and officers from LVMPD area commands
- A uniting vision for a hopeful, violence free community
- An interdisciplinary structure for collaboration that includes public, private, and community stakeholders with appropriate staffing and resources for implementation.
- A specific assessment of planning area needs and current status, identification and prioritization of community risk factors and data.
- Community engagement throughout the process, including from youth, adults, faith-based organizations, the business sector, and victims of crime or violence
- Identification of programs, best practices, policies, and recommendations to prevent, intervene, and enforce.
- Funding for implementing recommendations.

To assist in this community-wide endeavor, the City's Department of Public Safety must be the community liaison to facilitate this approach and forge a closer bond with LVMPD. Currently, Las Vegas City Marshals are peace officers of limited jurisdiction. Despite this limitation, the marshals provide a valuable essential public safety service to support the City. A future opportunity may exist for the City to enable reasonable expansion of their scope to work alongside LVMPD and with members of the community. Furthermore, the City must join LVMPD, the County, and the State to examine how to make proper police reforms that carefully balance the community's desire for public safety, constitutional rights, and equity.

CODE ENFORCEMENT AND ENVIRONMENTAL DESIGN STANDARDS CAN IMPROVE NEIGHBORHOOD SAFETY AND PHYSICAL UPKEEP

Crime can have a debilitating effect on livability, especially when borne out of poor urban design and built environment conditions. While redevelopment and infill efforts may address blighting issues that occur over the course of time, common strategies to improve overall safety are to improve the physical appearance and attractiveness and upkeep of neighborhoods and by redesigning the built environment to have "eyes on the street."

The City's Code Enforcement division helps keep neighborhoods and buildings safe and clean through the enforcement of LVMC and the City's Title 19 Unified Development Code. Enforcement officers often encounter a number of neighborhoods, for which the City has authority to protect public health and safety and may assess fines, civil penalties, or in the most dangerous cases, enforce the abatement of chronic nusiances, including building closure or demolition. They also play an important role in responding to common complaints and nuisances that may be generated by residents or businesses, such as:



- Dangerous buildings
- Waste, junk, outside storage, inoperable vehicles, or illegally parked vehicles on property
- Substandard housing and minimum housing upkeep
- Walls, fences, and non-permitted structures that have been illegally constructed
- Vegetation overgrowth, including the growth of weeds and noxious plants
- Unsecured swimming pools, including those with stagnant water
- Non-permitted signage
- Complaints of illegal squatters

Through proactive and well funded code enforcement, the City can ensure dangerous houses and buildings are brought up to code or removed, neighborhoods appear clean, threats to public safety are minimized, and ultimately mitigate and avoid conditions that may invite property or violent crime.

The principle of crime prevention through environmental design (CPTED), is the process of designing the built environment to reduce the opportunity for, and fear of, stranger-to-stranger predatory crime. It is implemented electronically, using mechanical or technological products or techniques, through building layout and architecture, and organizationally with physical presence. CPTED's main concepts are:

- Defensible space: a range of mechanisms and design features that bring the environment under the control of its residents.
- Natural access control: decreasing opportunities for crime by denying access to crime targets and creating a perception of risk in offenders.
- Natural surveillance: features that maximize visibility of people, parking areas, and building entrances to make intruders easily observable.
- Territorial reinforcement: promoting features that define property lines and distinguish private spaces from public spaces.

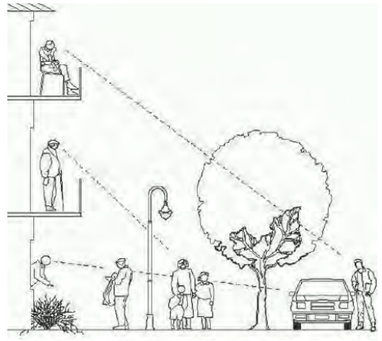


- Management and maintenance: operational and management concepts that maintain buildings and facilities in good working order.
- Legitimate activity support: use of natural surveillance, lighting, and design that clearly defines the purpose of the structure or space.

Site design that incorporates CPTED concepts and strategies can make a difference in community safety. Good design that is in place at the beginning can negate the need for other, potentially more expensive deterrents to crime that may need to be added later as deficiencies in design become problems. As such, as the Planning Department conducts site development reviews, it must consider CPTED principles as it reviews development proposals, especially for infill and redevelopment projects and those occurring in the City's new transit-oriented place types. Furthermore, the Departments of Building and Safety and Public Works must incorporate CPTED into their reviews and design standards for public buildings and facilities.

"CPTED" STRATEGIES

- Eyes on the street and natural surveillance
- Provide clear border definition of controlled space
- Provide clearly marked transitional zones
- Relocate gathering areas
- Place unsafe activities in safe locations
- Designate the use of space to provide natural barriers
- Improve scheduling of space



While CPTED principles are designed to help discourage crime, in practice this strategy can reinforce social, racial and cultural divides in our cities, in part by fostering behavior that anyone suspicious is made to feel uncomfortable. Consider reframing less about implementing defensible space and instead commit to asking critical questions and engaging diverse groups to understand safety concerns and design implications

IMPROVED SWORN OFFICER STRENGTH AND CAPACITY WILL PREPARE THE CITY FOR FUTURE GROWTH

There are more than 600 LVMPD officers assigned to the five LVMPD area commands serving the City. Overall, LVMPD meets its stated goal of funding and two police officers per 1,000 residents across the county, while also devoting officers to high visitation areas such as the Las Vegas Strip, the Convention Center, and Downtown Las Vegas. The number of uniformed police officer positions by area command within City boundaries do not necessarily align, but should meet the current funding formula. LVMPD does not necessarily align either personnel or area command boundaries with those of the City or on tax revenue generation but instead align resources based. In addition to sworn officers, LVMPD is also backed by investigative and support positions, administrative functions, and corrections officers.

Over time and as the City grows and sees increased visitation, LVMPD will require an increase in resources devoted to new growth areas, particularly within the northwestern planning areas. Because of this growth, at least one new area command and LVMPD substation is likely to be needed within the next thirty years, as well as at least 300 new sworn officers. While devotion of those officers will again likely be based on community needs, the City must work with LVMPD and the Sheriff on regular sharing of data to for Safe Communities strategies. Similarly, the number of City Marshals and will need to increase as new parks and facilities are added that are subject to their jurisdiction. If the scope of their service is expanded, Marshals will also play an instrumental role in working with the community. Consideration must be given to expanding or replacing the City's Detention Center, the 1,050-bed city jail which houses inmates arrested on misdemeanor charges. Because expansion space may be limited and the Downtown Access Project may warrant I-515's (possible future I-11) right of way widening, a new facility may be required in the future.

THE CITY'S SPECIALTY COURTS ARE INNOVATIVE EFFORTS TO HELP KEEP PEOPLE OUT OF THE CRIMINAL JUSTICE SYSTEM

Nevada has a total jail and prison incarceration rate of 763 per 100,000, considerably higher than the national rate of about 700 per 100,000 residents. According to the Nevada Department of Corrections, more than 42,000 Nevadans, many of whom are in Southern Nevada, are within the criminal justice system, including about 19,000 on parole or probation, 13,000 in state correctional facilities, and 7,000 in local detention centers. Generally mirroring national trends, the vast majority of these groups are men that are typically younger, less than age 40. A significant racial and ethnic disparity also exists, with African Americans being incarcerated or otherwise in the criminal justice system at nearly four times the rate as whites and Latinos. While overall crime rates have been falling, Nevada's inmate population has been increasing. These troubling trends and rates have been lingering for decades and are part of larger societal issues the nation is currently confronting and addressing at the state and Federal levels. Recent efforts to release non-violent offenders, decriminalizing offenses, and expunging prior felonies have been taking place nationally, including within Nevada.



At the City level, the City's Municipal Court, which will move from the Regional Justice Center to its new courthouse adjacent to City Hall, has jurisdiction over criminal misdemeanors and infractions against Las Vegas Municipal Code. The City's judges oversee specialty court programs that are problem-solving courts established and designed to address underlying causes of criminal activity. Ultimately, these courts are designed to promote individual responsibility and accountability that keep people out of jail or from being repeat offenders, provided they meet the conditions of the program and successfully complete the amended sentence. Closely coordinated between the law enforcement agencies, city attorneys, and other judicial administrators, specifically developed specialty courts have helped hundreds of people turn their lives around. Examples have include the City's "YO" Court, which focuses on young offenders, the Mental Health Court, designed for people with diagnosed mental health disorders, and the "HOPE" Court which focuses on habitual offenders.

Even as crime rates decline, the constitutional need for fair, speedy trials, appropriate sentences and punishments must remain a priority for the court system, whether at the City's Municipal Court, or at other district courts serving the City. To the extent that the City can create or encourage specialty courts or judicial reforms, it must to ensure equitable justice.

	2019	2050	NEED
Population	675,971	984,738	
# LVMPD Officers (Approximate CLV assigned area commands)	616		60
# LVMPD Officers (CLV area commands - required for 2 officers / 1,000 residents)	676	985	309



PLANNING AREA	PUBLIC SAFETY FACILITY AND SERVICE NEEDS BASED ON 2050 POPULATION
Angel Park	Adequately served, but may require additional community policing based on calls for service
Centennial Hills	Low need. Requires new fire stations (Station 148); police service and area command
Charleston	Adequately served, but may require additional community policing based on calls for service
Downtown Las Vegas	Adequately served, but may require additional community policing based on calls for service; new municipal court; relocation and upgrade of FS 1 based on Downtown Access Project
Downtown South	Adequately served, but may require additional community policing based on calls for service
East Las Vegas	Adequately served, but may require additional community policing based on calls for service; Possible replacement of Detention Center
Kyle Canyon	Low need, due to long term development buildout and master planned community service provision. Requires new fire stations (Stations "I," 49); police service and area command
La Madre Foothills	Low need, due to long term development buildout and master planned community service provision. Requires new fire stations (Stations "G," 142); police service and area command
Lone Mountain	Adequately served; new fire station (Station 145)
Nu Wav Kaiv	Low need, due to long term development buildout. Requires new fire station, police service and area command
Rancho	Moderate need, new fire station (Station 109, possibly one new in southern area)
Summerlin North	Adequately served
Summerlin West	Low need, due to long term development buildout and master planned community service provision. Requires new fire stations (Station 147, possibly one new in western growth area)
Tule Springs	Low need, due to long term development buildout. Requires new fire station (Station 149, possibly one new in southern area); police service and area command
Twin Lakes	Adequately served, but may require additional community policing based on calls for service
West Las Vegas	Adequately served, but may require additional community policing based on calls for service

IMPLEMENTATION STRATEGIES

- Continue to adequately hire, train, equip, and fund public safety staff and officers to remain a trusted resource that will quickly respond to a call for service.
  - Fund and hire new firefighters, Marshals, and LVMPD officers to ensure the City's ratio meets standards
  - Work with LVMPD's Fiscal Affairs Committee on dedication of resources based both on need and appropriate coverage
  - Work to maintain accreditations for public safety agencies and departments
- Increase fire prevention and emergency response efforts
  - Align to the appropriate emergency response, with an overall focus of decreasing calls for service through call prioritization efforts to decrease unnecessary dispatches of units.
  - Develop mobile resources, community paramedics.
  - Make periodic updates of the Fire Code that balance fire safety standards that protect occupant safety but do not impose additional unreasonable costs to development
  - Increase inspections of older building stock and multi-family residential units of all to identify hazardous conditions.
  - Continue targeted public education and social media campaigns for fire prevention and safety
  - Ensure AED access in public spaces
- Construct the recommended public safety capital projects to provide adequate police and fire protection coverage when need is warranted, including:
  - Recommended fire stations, especially in growth areas to meet the established response times
  - Monitor density and growth to anticipate station response needs
  - Retrofit existing stations and upgrade apparatus and equipment
  - Ensure new stations are designed to maximize paramedic response and right-sized for firefighting needs.
  - New area commands, including at least one serving northwestern planning areas
  - Assess the feasibility to expand, renovate, or construct new Detention Center space to accommodate current and forecasted staffing, as well as the current and future inmate populations and joint facility use, with consideration of freeway corridor expansion
- Improve built environment safety and adopt a safe communities strategic plan with an approach that balances property and violent crime prevention with community needs
  - Consider CPTED principles during site development reviews, especially for infill and redevelopment projects and those occurring in the City's new transit-oriented place types
  - Incorporate CPTED into their reviews and design standards for public buildings and facilities.
  - Increase proactive code enforcement efforts to enhance community aesthetics, reduce unsafe conditions, and abate nuisances
  - Exchange data between LVMPD and other public safety agencies to track trends and identify emerging community needs
  - Work with the Sheriff and LVMPD to incorporate community policing and procedural justice into police operations to build community trust
  - Implement violence prevention programs and strategies to address community-identified risk and protective factors
  - Educate community members about public safety and law enforcement programs and strategies
  - Develop partnerships with local agencies, nonprofit organizations, schools, and residents to implement public safety strategies
  - Develop programs to support at-risk families and youth that prevent violence
  - As part of a larger legislative package, request expanded scope for City Marshals
  - Review LVMC to reform misdemeanor violations and penalties, as necessary
  - If necessary, evaluate if additional City Council oversight is required for public safety needs
- Implement specialty judicial programs and alternative sentencing that ensures justice while reducing detention rates and provides new pathways for individuals to keep them out of the criminal justice system.

SAFETY: HAZARDS

NRS 278.160.1(g)

SEE ALSO:
Clark County All Hazards Mitigation Plan

STRENGTHEN RESILIENCE TO CLIMATE CHANGE RISKS, NATURAL AND MAN-MADE HAZARDS AND EXTREME EVENTS

Las Vegas is vulnerable and at risk from both natural and man-made hazards. As outlined in Resolution R-32-2017, the City of Las Vegas must incorporate "community resilience goals, objectives, and strategies" into this master plan. The City currently engages in hazard and resilience planning, and mitigation and adaptation efforts in various ways to reduce community risks, vulnerabilities, and costs from future emergencies.

As a guiding principle of the plan, resilience is the capacity to absorb stresses and maintain function in the face of hazards, and adapt, reorganize, and evolve into configurations that improve systems and operations; it is comprised of mitigation, adaptation, response and recovery. Short-term emergency response needs must be balanced with long-term preparedness and recovery capacity, all of which address existing threats to human life and property. Appropriate hazard planning and preparedness also requires consideration of how the city adapts to recurring hazard events and changing circumstances, resilience so subsequent events are less disruptive or and damaging, and ensures that recovery and response efforts are equitable across all communities and planning areas:

- Mitigating hazards focuses upon the City and region's preparation for disasters and long-range planning for post-disaster recovery. It includes actions that can reduce the severity or intensity of a hazard's impact and begins with preparation, avoidance, and minimization. Strong and robust mitigation efforts can reduce the need and expense of response and recovery; mitigation planning ultimately aids agencies at all levels in saving lives, property, and money, speeding recovery from hazards, reducing risks and vulnerability from future disasters, improving community health, safety, and welfare.
- Adaptation entails modifying the natural or built environment to make it more suited to changed or changing conditions and situations. Adaptation can also mean changes in community behavior that better safeguard human and environmental health when faced with the stresses imposed by hazards. It also addresses ongoing and long-term hazards, including climate-oriented threats to human life and property.
- Response is the ability to effectively protect public safety, health, and well-being from a hazard, whether immediately or over time.
- Recovery facilitates repair, replacement, and improvement, ideally to a more resilient condition than before the disaster.

Resilience often focuses on the region's physical characteristics; it must be considered in every infrastructure and capital investment made by the City, as it is critical for siting, specifications, and other factors for cost, maintenance, or feasibility. However, social and economic resilience, including public health, also has an impact on recovery.

While other plans, including the City's Emergency Operations Plan, Continuity of Operations Plan, and the Clark County All-Hazard Mitigation Plan, this plan establishes general hazard guidelines and provides a framework to navigate these challenges. Implementation of these plans in a consistent manner will be a major outcome of this Plan by providing an opportunity to integrate all types of hazard mitigation and adaptation planning for both current and future hazards. The plan:

- Identifies resources, both City and regional stakeholders and assets

OUTCOMES

- By 2050, no homes or critical infrastructure are located in high-risk hazard prone areas, unless appropriate mitigation, prevention, or adaptation measures are taken.
- Earn accreditation by the Emergency Management Accreditation Program (EMAP) by 2025.
- Percentage of residents living in high risk areas reduced over time.



ASSESSED HAZARDS & RISK

- CLIMATE CHANGE: Drought – VERY HIGH
  Addressed by Water Goal
- CLIMATE CHANGE: Extreme Heat – VERY HIGH
  Addressed by Urban Foresty goal
- CLIMATE CHANGE: Severe Storms and Flash Flooding – HIGH
  Addressed by Flooding Goal
- Civil Disobedience, Riots, and Social Disturbances - MODERATE
- Dam Failure – VERY LOW
- Earthquakes and Seismic Activity - HIGH
- Hazardous Materials - HIGH
- Infectious Disease - HIGH
- Infestation - LOW
- Subsidence - LOW
- Terrorism – VERY HIGH
- Wildfire – LOW

KEY ACTIONS

- Develop hazard prevention, mitigation, vulnerability and recovery frameworks that apply to hazards
- Continue infrastructure investments for natural hazards with greatest vulnerability, especially drought, flooding, and seismic activity.
- Prepare for long-term, seasonal hazards such as extreme heat by investing in cooling infrastructure and developing urban design standards that mitigate the urban heat island effect.
- To lessen economic severity of all types of hazards, develop a comprehensive economic recovery framework that's context sensitive and adaptable to a variety of hazard scenarios.
- Increase funding reserves and rainy-day funding to ensure adequate resources are available for emergency operations, preparedness, and response.

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Addressing natural and man-made hazards will reduce risks for the City's most vulnerable populations and neighborhoods, including low income, ethnic and racial, and elderly communities.	Adaptation to community hazards increases the capacity of the community and builds environmental and socio-economic redundancies.	Preparing for hazards ensures community health and well-being, mitigating loss of life, and ensuring the health care system is not shocked nor stressed.	If well-prepared for shocks and stresses resulting from community hazards, properties will be protected and overall costs will be kept low.	As the economy diversifies, new techniques, engineering, and innovations will help the City prepare for specific hazards and impacts.

- Includes a vulnerability assessment.
- Provides strategies for implementation and evaluation of progress, ranging from specific projects to changes in operations, along with a strategy for keeping other emergency plans current through revisions.

To address future stresses and shocks from hazards, there is a pressing need for modernization and long-term investments that will likely yield a safer, healthier, and more resilient Las Vegas. Local businesses and private service providers, including hospitals and health care providers, ambulance and EMT franchisees, disaster relief organizations, and other commercial entities frequently play a key role in providing necessary resources and aid. These are an important component in not only an emergency response effort, but also for preparedness and recovery. A variety of city, regional, state, and Federal agencies help mitigate, adapt to, and respond to hazards, as well as engage in recovery efforts.

A number of City of Las Vegas departments play roles in hazard mitigation and response:

- The Office of Emergency Management (OEM) coordinates preparedness efforts for major emergencies or disasters affecting the city, including from its Emergency Operations Center (EOC), and provides training for the community. It coordinates directly with the state Office of Emergency Preparedness and other county and local emergency services.
- The Office of Communications has been essential to notifying the public and media through a variety of means; clear and concise communication is essential in the event of an emergency.
- The Department of Public Safety, which includes the Las Vegas City Marshals, patrol city buildings and facilities, as well as operate the Detention Center.
- Las Vegas Fire and Rescue provides fire suppression, emergency medical response, as well as fire prevention and education, and fire marshal services (fire code). It also houses two important specialty units: a hazardous materials team and a chemical/biological/radiological/nuclear/explosive (CBRNE) unit.
- Development Services departments, including Building and Safety, Planning, and Public Works ensure the structural safety and stability of buildings, enforce the building code and LVMC, and construct, maintain, and operate roadway, flood control, and wastewater treatment infrastructure.

State and regional service providers can assist with coordination and response; they can also be the key to unlocking Federal aid, disaster funding, and resources in the event of an emergency:

- Clark County, which prepared the most recent Multi-Jurisdiction Hazard Mitigation Plan in 2018. This plan similarly identifies the hazards facing the region and mitigation strategies.
- Southern Nevada Health District
- Las Vegas Metropolitan Police Department
- State of Nevada agencies and departments, including the State Department of Public Safety, Division of Emergency Management, the Nevada National Guard, the Nevada Department of Health and Human Services, the Nevada State Public Health Lab, as well as smaller offices, bureaus, and academic institutions provide statewide services to help prepare for, respond to, and recover from a hazard.
- A diverse array of Federal agencies, particularly:
  - The Justice Department and US Department of Homeland Security, which includes a number of Federal law enforcement and justice agencies, including the FBI, DEA, ICE, ATF, and US Marshals, all of which are dedicated to the investigation and enforcement of man-made hazards. The Southern Nevada Counter Terrorism Center is a multi-agency fusion center that can respond to all types of incidents; the center brings together local resources and intelligence with national data and threat assessments in an effort to ascertain foreign or domestic terrorism plots or activities.
  - FEMA coordinates responses to disasters when requested by state and local authorities and is a key provider of resources and funding. FEMA also established the National Incident Management System (NIMS) as a nationwide, comprehensive system that provides standard terminology, organizational structures, and procedures to enable federal, state, local, and other responders to effectively communicate and work together during all-hazards emergency events.
  - The Centers for Disease Control provides national expertise on epidemiological hazards to public health.

EMERGENCY PREPAREDNESS AND HAZARD MITIGATION COORDINATION HAVE BEEN A CITY AND REGIONAL STRENGTH

The City of Las Vegas Office of Emergency Management has been effective at coordinating and preparing for any major emergency or disaster caused by hazards affecting the City. It complies with and administers FEMA preparedness and training protocols, including those from the NIMS. As the City prepares for and mitigates hazards over the next thirty years, future implementation efforts will utilize a Hazard Prevention Framework that includes:

- Preparation and training – For all hazards, the City's Emergency Operations Plan describes what the City's actions will be during a response to an emergency. The plan describes the role of the EOC and coordination that occurs between City departments and other response agencies, as well as being a liaison between local, state, and federal governments in times of disaster. Continuity of operations are also further identified. Further information about this plan and functions cannot be further disclosed due to its sensitive nature.
- As part of ongoing preparedness, the Office of Emergency Management (OEM) conducts pre-disaster preparedness exercises, often performed alongside the Nevada Division of Emergency Management, Clark County, and other local governments. As part of the City's long-term strategy, public and private critical infrastructure of different types have been identified and prioritized for protection, but not disclosed, as they are critical components of infrastructure.
- Also crucial for emergency response and recovery efforts is financing; While Federal aid may be made available through FEMA, and increase in funding reserves and rainy-day funding to ensure adequate resources are available for emergency operations, preparedness, and response will help ensure increased chances of negative financial impacts.
- Stakeholder involvement and Interagency Coordination - The lack of communication and cooperation among various actors in the time before, during, and after disasters is one of the biggest challenges to be addressed in the hazard mitigation planning process. Proper coordination can get infrastructure and resources in place and can direct aid more quickly to the disaster victims. As the City goes through a disaster, the City must be able to bring together City Council members and city leadership with the media and community stakeholders to communicate events and clear facts. In the prevention phase, stakeholders are also essential to ascertaining hazard and mitigation viewpoints, including vulnerabilities and mapped risks and recommended mitigation strategies. Furthermore, City departments must be incorporated with community partners in the hazard mitigation and adaptation process; residents, businesses, health care and social service agencies, disaster relief organizations, community leaders, educational institutions, should be involved in order to incorporate economic, social and environmental viewpoints into both mitigation and recovery efforts.
- Expanded interagency partnerships and collaboration as part of emergency preparedness for both current and future hazards is important for the sharing of resources and data. While the City has good cooperation between different public agencies, the private and nonprofit sectors, and disaster relief organizations, further coordination can always foster resilience.
- Protocols and agency leads among agencies and nongovernmental organizations enable better coordination in responses when emergencies arise, especially with respect to community resources critical to disaster response, such as emergency shelters and places of assembly. Specific public and private roles and responsibilities must be exercised routinely to determine what works within realistic parameters. Engagement must also be ongoing to ensure outcomes are equitable and address both vulnerable and underrepresented populations and neighborhoods
- Public Education – For hazard mitigation efforts to be successful, information must be conveyed on how to



prepare for hazards, what people can do personally and for their families to prepare (including for seniors, children and pets), how businesses can prepare, and what the City is doing and how it will take action. This also includes the continuous development of web and social media content to engage the public; while the City currently does this,

- OEM prepares the community by providing training and coordination for the Southern Nevada Community Emergency Response Team (CERT) program. CERT training includes disaster preparedness, fire suppression, medical operations, light search and rescue, team organization, weapons of mass destruction/terrorism and disaster psychology. Following a major disaster, professional-first responders providing fire, police, and medical services may not be able to meet the demand for these services; trained CERT graduates know what to expect following a major disaster in terms of immediate services, how to communicate the message about their responsibility for mitigation and preparedness, and how to use needed life-saving skills, with emphasis on decision making skills, rescuer safety and doing the greatest good for the greatest number of people.

- Mitigate risks through policy, incentives, and capital improvements. A fundamental principal of zoning and the City's Unified Development Code is to protect public health, safety, and welfare in an effort to encourage or discourage development in known hazard-prone areas. The City can make changes to Title 19 to mitigate some of the negative impacts of the region's hazards in an effort to avoid or reduce the impact if a disaster occurs by further incorporating resilience as a guiding principle in land use decisions, while integrating those principles into the annual CIP. Since many facilities have solar, enursing battery storage and redundancy can help keep critical electrical loads operational; where possible, microgrids should be developed, especially within the Las Vegas Medical District. Finally, the City can advocate for the enhancement and ongoing refinement of the Southern Nevada building codes through the Southern Nevada Building Officials to require stronger and seismically fit buildings and greater resilience when constructing in identified areas of hazard. Doing so may have a positive long-term effect on insurance rates. Properly applied incentives can support informed investments as well; the SNWA Water Smart landscapes incentive program has been an effective mitigation and adaptation incentive tool.

SOME HAZARDS HAVE VARIED RISKS AND VULNERABILITIES THAT CAN IMPOSE BOTH HIGH SOCIO-ECONOMIC AND ENVIRONMENTAL COSTS AND BURDEN EMERGENCY SERVICES AND CRITICAL INFRASTRUCTURE

Comparatively, the City of Las Vegas faces major man-made and environmental hazards at a different scale than other communities. Certain hazards tend to have similar and predictable impacts from each occurrence, but the specific location and impacts from others are far less predictable. Geography, historical records, computer modeling and weather forecasting provide the ability to analyze locations and timing to provide some level of predictability and preparedness.

To assess current and future risk and vulnerability to hazards, governments have been using a simple but focused approach that involves the rating hazard vulnerability on two component variables. This plan utilizes an adapted assessment derived from climate change vulnerability assessments, but broadly explains hazards based on duration, intensity, and extent of each event type, among other variables that impact the City's environmental, economic, and social systems. Adapting this framework to utilize and formulate a ranking ultimately measures vulnerability to areas of operation. This matrix-based analysis ranks Low-to-High as well as determine areas of potential opportunity; using this qualitative assessment, it is possible to identify what the most critical areas are providing a baseline to follow when prioritizing projects, programs, and capital improvements that affect development and operational capacity of the City. It measures:

- Adaptive Capacity: The ability of a system to adapt to changing conditions.

- Sensitivity: The degree to which a system or area of operation is affected.

- Vulnerability: A measure derived by the assessment of Adaptive Capacity and Sensitivity within a system or area of operation. As an example, high Vulnerability should be addressed by implementing policies and programs that reduce it and promote resilience.

- Potential Opportunity: Sensitivity to a hazard is comparatively low and the ability and capacity to adapt is high, leading to the ability to pursue an opportunity to the benefit of the community.

- Based on the potential hazard-related impacts and the background adapted qualitative analysis within each of the City's Planning Areas and systems, specific details have been identified and assessed in terms of Vulnerability, with the ability to rank and assess risks based on the tables below.

- Specific responses may be governed by the City's Emergency Operations Plan, the Clark County All Hazard Mitigation Plan, and a recovery plan to be adopted; however, reductions in vulnerabilities through mitigation can:

- Avoid the conditions that have changed to reduce a threat or occurrence.

- Address the specific risk by reducing or moving people or infrastructure out of the hazard zone.

- Adapt to the hazard. If an impact cannot be avoided or addressed, an increase in adaptive capacity, or reduction in sensitivities allow for the City to rebound from an impact.

As an example, the City and region is vulnerable to climate change. Southern Nevada has always dealt with extreme heat, limited water, extreme drought, and extreme storm events. However, the extremes of these hazards have intensified over the past decades and are expected to continue intensifying. As described in the conservation goals, data and research from the Desert Research Institute and Nevada State Climatologist indicate that increasing atmospheric greenhouse gas emissions are expected to cause a variety of changes to local climate conditions and increasing the region's overall vulnerability for three specific hazards: extreme heat, drought, and flooding that result from reduced mountain snow pack, more frequent and intense storms, and overall higher temperatures. The specific probability of the extent and frequency climate

		Sensitivity				
		S0	S1	S2	S3	S4
Adaptive Capacity	AC0	V2	V3	V4	V5	V5
	AC1	V1	V2	V3	V4	V5
	AC2	V1	V1	V2	V3	V4
	AC3	PO	V1	V1	V2	V3
	AC4	PO	PO	PO	V1	V2

RISK RANKING TO DETERMINE VULNERABILITY: DEGREE OF RISK BASED ON SENSITIVITY AND ADAPTIVE CAPACITY

Likelihood or probability of occurrence	*Rare / Small*	*Intermittent*	*Frequent, reoccurring, or ongoing*
Critical Function Impacts	Non-critical function / Improving critical function	Improve critical function / Mend a non-critical function	Mend a critical function / Maintain critical function
Citizens or Businesses Affected	Few / Less than total City of Las Vegas population	City of Las Vegas population only	Totality of Las Vegas Valley population
Threat to Life	No / Uncertain	Elevated	Yes

change induced impacts of the three greatest hazards varies and depends on different climate modelling assumptions. However, at larger scales, the impacts of climate change may involve radically shift ecosystems, destabilize economies, and threaten quality of life by exacerbating the stress on already strained infrastructure and community systems. A potential opportunity may also exist; a 2019 USC study suggests Las Vegas may be a city that could experience mass in-migration as a result of climate induced sea level rise, resulting from out-migration of coastal communities, primarily along the West Coast. Similarly, increases in high intensity hurricanes or storms resulting from climate could also translate to in-migration patterns.

IN THE EVENT OF AN EMERGENCY CAUSED BY AN IDENTIFIED HAZARD, THE CITY MUST BE QUICK TO RESPOND WITH MEASURES THAT PROTECT THE HEALTH AND SAFETY OF RESIDENTS AND VISITORS, CRITICAL INFRASTRUCTURE, AND PRIVATE PROPERTY

Disasters and emergencies strike unpredictably and at different sizes and scales. Any unexpected occurrence may require immediate action by the City to avoid substantial financial loss to the City. With proper preparation and mitigation of hazards, the City will ensure sufficient emergency systems are in place to respond during or immediately after an emergency takes place from a natural or man-made disasters utilizing an Immediate Response Framework.



Take Action, Declare an Emergency, and Notify the Public – As head of the City, the Mayor may take necessary action for public health, safety, and welfare. Similarly, the City Council can enact emergency management provisions, declare an emergency, activate the EOC, mobilize first responders and resources, and enter into mutual aid agreements utilizing the provisions of the Las Vegas City Charter, Las Vegas Municipal Code, and applicable chapters of Title 36 of NRS – Military Affairs and Civil Emergencies. Should additional assistance be needed or required, LVMPD and state assistance can be obtained. Major Disaster Declarations and Emergency Declarations issued by the Governor after a natural catastrophe, or upon determination of the President based on the magnitude and severity, can help supplement efforts and available resources to states and local government, as well as to protect public health and safety and further damage to property.

- As an emergency occurs, time is often of the essence; therefore, the City must:
- Activate the Emergency Operations Center and follow the Emergency Operations Plan for the hazard(s) taking place
- Adopt emergency ordinances as necessary
- Mobilize resources and request aid if needed
- Ensure continuity of City operations
- Communicate the hazard, risk, and situation with the public and/or through the media. Enable the emergency broadcast system and push notifications through a variety of means to as many residents and visitors as possible, including through TV, radio, smartphone push notification, and RTC dynamic message signage along roadways. Implementing real-time disaster warning systems with built-in redundancies will allow the City to reach all segments of the community, including those with limited communication technology and non-English speakers.

Protect public health and safety – Move people out of harm's way, treat the injured and prevent new injuries, minimize and avoid deaths.

- Ensure hospitals have capacity to rapidly accept patients, that ICU capacity levels between hospitals are monitored, and that Level I Trauma at UMC can respond to the most severe cases.
- If an evacuation is necessary, use RTC's ITS infrastructure and dynamic signage to direct the evacuation. Consider the utilization of resources for evacuated or displaced residents, school and transit vehicles, and potential shelter-in-place locations, including City community centers or CCSD schools.
- Consider supply chains necessary to sustain the people and systems of the City and Southern Nevada, particularly the transportation of food and supplies along the Interstate 15 corridor, water delivery from Lake Mead, and wastewater treatment. Restoring regular supply chains can be more important than obtaining disaster relief supplies.
- Depending on the need and type of emergency, ensure water, ice, and food distribution is mobilized in a timely manner and that assistance for vulnerable and protected populations is available.

Protect public and private property and critical infrastructure – While mitigation and prevention efforts are intended to avoid property damage or destruction, not all efforts will be successful and some preventative measures may fail. Decades of land use and infrastructure decisions may not cope with some hazards, especially those exacerbated by deferred maintenance. As the emergency unfolds, as data is collected, and as the situation and facts dictate, officials, engineers and subject matter experts may advise on specific means or methods of property and infrastructure preservation; if damaged or destroyed, they may also advise on closure or usability.

RECOVERY AFTER AN EMERGENCY OR DISASTER REQUIRES AN ONGOING COMMITMENT TO THE INVESTMENT IN SERVICES AND INFRASTRUCTURE

After an emergency takes place or as emergency response winds down, it is important that the City assess means of recovery for economic, environmental, social, and public health systems. This also means determining how to rebuild or redevelop in a way that reduces the potential for future loss while simultaneously ensuring an equitable future condition for all residents. Resiliency standards with proven effectiveness to mitigate disasters must be employed. This can be done through a Recovery Framework that speed and streamline response and recovery efforts, including through the adoption of a recovery ordinance and plan to guide management and policy outcomes in recovery that codifies a commitment to achieving outcomes:

Restoration of services and infrastructure– This involves the immediate reconstruction or repair by Public Works officials or utility service providers, sometimes at interim or temporary levels until a new, higher quality, and resilient replacement is developed or constructed. Essential services and businesses that must immediately operate are also a key means of recovery.

Rebuilding– The City must develop public outreach and education strategies for post-disaster conditions to assist with social recovery from devastating and catastrophic events. Distribution of FEMA relief funds and other funding sources aid rebuilding affected properties and restore essential businesses and infrastructure.

Resilience- As disasters traumatize whole communities, not just individuals, a framework and resources for emotional resiliency among residents must be developed to allow communities to rebuild in a way that is better than it was before the event. While the damage caused by a disaster can be devastating, the disaster may be an opportunity to rebuild in a more resilient manner. Rebuilding areas that are damaged to resilient standards may reduce damage from future repeat events. The City can approve the reconstruction of homes and structures as they previously existed, however, rebuilding and recovery must consider the likelihood of a repeat of the disaster. The City may consider the use of redundant smaller-scale infrastructure to promote the resilience of physical networks. Natural solutions, including green infrastructure, could have environmental co-benefits and can be cost effective for mitigating natural hazards when properly used .

CITY OF LAS VEGAS HAZARD VULNERABILITY ASSESSMENT

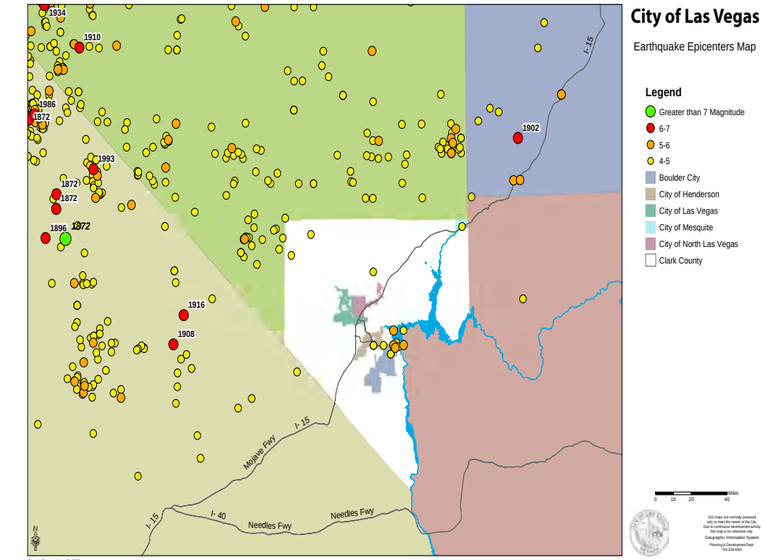
CLIMATE CHANGE: EXTREME HEAT	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**VERY HIGH –** Currently experiencing; 100 degree (or greater) days are projected to occur more frequently and grow in intensity and duration; scientists anticipate that the average temperature in region is expected to rise between 2.5 and 8 degrees Fahrenheit throughout the 21st Century. • Low adaptive capacity for most systems; some systems can adapt to higher temperatures, but physical infrastructure, may have the least capacity to adapt • High sensitivity for most systems; Electrical infrastructure, transit, and aviation extremely sensitive during high load and high temperature periods; sensitive populations may have greater health concerns
Likelihood or probability of occurrence	• Frequent, Reoccurring and Ongoing • Likely to increase in frequency, intensity, and duration
Critical function impacts	Maintain critical functions: • Greater summer electrical load (for cooling) • Potential harm to electrical and grid infrastructure • Public transit operations • Aviation operations (especially at McCarran Airport) • Economic activity that occurs outdoors, including tourism and construction
Citizens or Businesses Affected	Totality of Las Vegas Valley population
Threat to Life	Elevated, especially for vulnerable populations: • Children • Elderly • Sick • Low income • Certain socioeconomic and demographic groups, especially within Downtown Las Vegas, West Las Vegas, East Las Vegas, Charleston, Twin Lakes, and Downtown South
Mitigation and Prevention Measures	• Prepare City facilities to be cooling centers • Ensure shelters have trained staff that can address the needs of at-risk populations • Develop monitoring system for house-bound at-risk populations. • Develop better communication with NV Energy and Southwest Gas so vulnerable populations do not have utilities cut off for non-payment during periods of extreme temperatures • Budget for increased number of high heat days
Adaptation Measures	• Design future buildings, public spaces, and infrastructure to accommodate heat – modify building and zoning codes with respect to orientation, passive heating and cooling • Increase urban tree canopy to provide more shading • Adjust working schedules for those that work outside
Immediate Response Actions	• Set up cooling stations in advance of extreme heat • Activate warnings and communications when forecasted extreme heat is expected
Recovery Measures	• Repair or replace damaged infrastructure

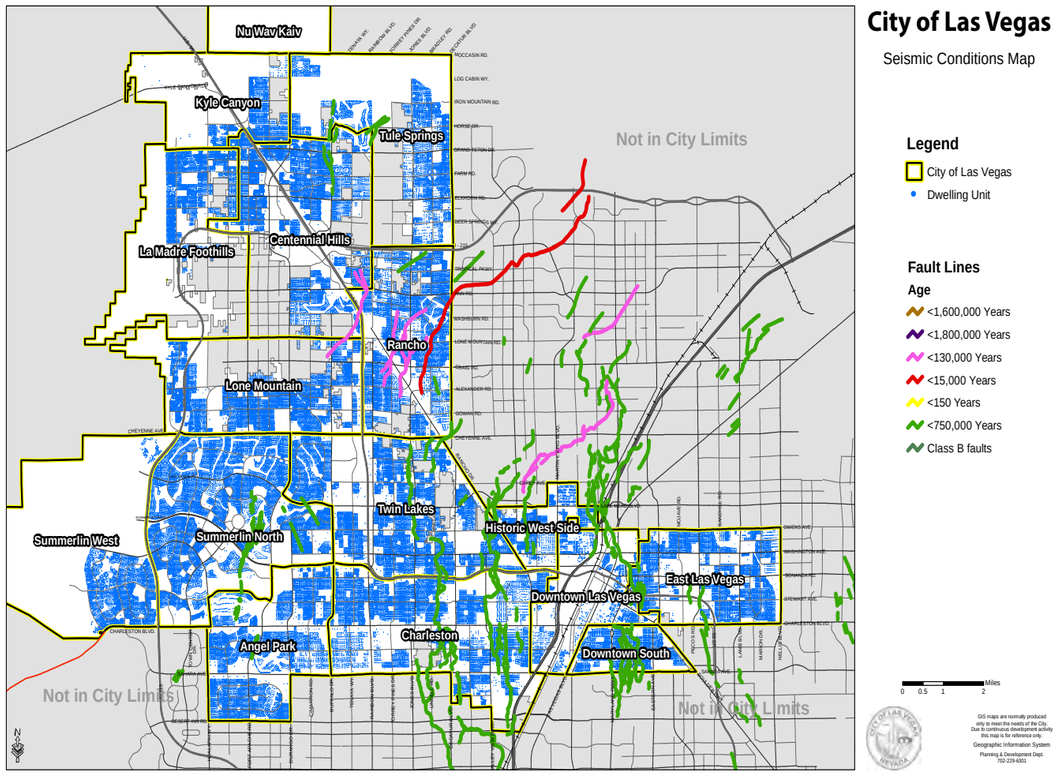
CLIMATE CHANGE: DROUGHT	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**VERY HIGH** – Currently experiencing; Unlike other hazards, droughts have unique attributes as a result of their severity and long term impact. According to climate scientists and SNWA, there is an 80 to 90 percent chance that Southern Nevada will experience another decade's long drought occurring this century. As described in the water goal, this hazard has the immediate effect of a reduction of water supplies across all Colorado River water users; the long-term effect will also be economic and environmental • Very low adaptive capacity for some systems, low for others; reduced water supplies may influence population growth and economic activity • High sensitivity for most systems; the impact to environmental and economic systems could potentially be substantial, albeit even if over an extended period of time.
Likelihood or probability of occurrence	• Frequent, Reoccurring and Ongoing • Likely to increase in frequency, intensity, and duration
Critical function impacts	Maintain critical functions: • Gradual loss of water supply through negotiated cutbacks • Decrease in water quality • Inability to serve resident and commercial population • Loss of hydroelectric capacity at Hoover Dam • Potential loss of economic activity • Impacts to sensitive wildlife ecosystems • Increased risk of desert (range) wildfire along urban fringe
Citizens or Businesses Affected	Totality of Las Vegas Valley population
Threat to Life	No
Mitigation and Prevention Measures	• Scientific study, data collection, and sharing of drought conditions, hydrologic forecasts, snow studies • Policy changes, negotiations, and agreements with other Colorado River Basin states • Securing additional water supplies as described in SNWA's Water Resources Plan • SNWA water conservation strategies, including water use restrictions and regulations, tiered pricing for water consumption, incentives for turf reduction and water, and education
Adaptation Measures	• Completion of third intake to provide redundancy and additional intake for water at lower elevation • Construction of low lake level pumping station • Incorporate "bulletproof" drought tolerant species into Title 19 zoning standards • Addressing additional hazards that are exacerbated by drought, including flooding and wildfire
Immediate Response Actions	• Long term conservation strategies, as adopted by SNWA and implemented by the City • Increase public communication on drought risks and response
Recovery Measures	• Implement strategies discussed in Water Goal

CLIMATE CHANGE: SEVERE STORMS AND FLASH FLOODING	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**HIGH** – Currently experiencing; Southern Nevada is projected to see an increase in the frequency and severity of storms that can cause flash flooding events, especially during summer monsoonal seasons. Most issues are related to disruptions to transportation, emergency response, minor property damage, and the impact of rapid flash flood events. Through mitigation over time, both the number and overall percentage of residential buildings and residents within the City located has decreased. Safety and loss of life tend to be greatest along flood control facilities and channels. • Moderate adaptive capacity for most systems; flash flooding typically causes temporary nuisances that are being addressed through the Regional Flood Control District's master plan • Moderate sensitivity for most systems, with the impact to transportation and emergency response greatest; the impact of property damage and is greatest within high flood risk areas.
Likelihood or probability of occurrence	• Frequent, Reoccurring and Ongoing • Likely to see increase in frequency, intensity, and duration of monsoonal thunderstorms and flash flooding events
Critical function impacts	Improve critical functions: • Increase storm drain capacity and necessary flood control infrastructure in flood-prone areas so surface streets and low-points on roadways clear rapidly and ponding is avoided
Citizens or Businesses Affected	Totality of Las Vegas Valley population • Flash floods can occur miles away from actual storm occurrence and impact areas downstream or at spot locations • Development may alter drainage patterns
Threat to Life	Yes: • Distant storms may generate unpredictable flash flood conditions; homeless residents, or those that inadvisably use storm drains and flood control facilities as shelter are those at greatest risk. • Safety risks may increase for anyone entering flooded areas
Mitigation and Prevention Measures	• Continue the Regional Flood Control District's communicating the threat of flash flooding, to stay out of flash flood water and the loss of property resulting from floods • Eliminate high-hazard flood locations . • Ensure neighborhoods within flood zones are provided flood control relief • Develop and communicate flood risks and mapping. • Clean and clear storm drains and other flood control facilities of debris
Adaptation Measures	• Adopt flood control design regulations that apply to the 500-year flood • Revise and implement development standards that impose higher flood resilience standards, including hydrologic, grading, and drainage studies for public and private critical infrastructure • Provide detailed mapping to applicants for projects within flood zones • Construct future and upgrade existing flood control facilities to higher flood capacity and resiliency standards
Immediate Response Actions	• Activate warnings and communications when forecasted flooding is possible or occurs • Monitor storm drains and flood control facilities for people • Conduct swift water rescues, especially in known flooding locations
Recovery Measures	• Implement strategies discussed in Flooding Goal • Repair or replaced damaged infrastructure; clear flood facilities of debris

CIVIL DISOBEDIENCE, RIOTS, OR SOCIAL DISTURBANCES	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**MODERATE** - Civil and social disturbances or riots are typically not pre-meditated human caused acts but occur as a result of a catalytic event. Pursuant to the City Charter, the City Council is empowered to prevent riots and ensuring public order; however, should the situation arise, the Mayor can take action to suppress riots and disturbances, using the assistance of Las Vegas Metropolitan Police Department, or if necessary, the Nevada National Guard. • High adaptive capacity for most systems; Most systems can be adaptive to rapidly changing circumstances, Protected buildings and infrastructure offer some levels of security and counter-measures to assure public safety • Low sensitivity for most systems; public spaces and critical buildings and structures are dynamic. In addition, utility infrastructure and services, high stress could be placed on detention and enforcement capabilities, fire suppression efforts, and public health systems for injuries and deaths
Likelihood or probability of occurrence	• Infrequent; Likely to depend on cause of civil unrest
Critical function impacts	Improve critical functions: Police, fire, and emergency response Utility infrastructure, especially energy Key city operational facilities All hospitals and health care facilities Other high profile public places, commercial, and tourism destinations
Citizens or Businesses Affected	Less than total City population
Threat to Life	Uncertain; potential for threat to life exists
Mitigation and Prevention Measures	• Ensure lawful and peaceful assembly and protest to ensure the protection of Constitutional rights • Communicate threats through a public warning system to avoid certain areas • Create or install security barriers to prevent rioting during periods of known assembly • Increase surveillance and protection of infrastructure and public spaces from civil disobedience, gun violence, and social unrest.
Adaptation Measures	• Ensure policies of the City are equitable and do not discriminate • To the extent practical, avoid or minimize political, social, or justice issues likely to spark unrest
Immediate Response Actions	• Immediate law enforcement response • Enact emergency ordinances, curfews, and disbursement tactics • Request aid of LVMPD, Governor, and/or National Guard, as necessary • Set up mobile field hospitals or treatment centers • Potential evacuations of affected areas, or the issuance of shelter-in-place orders • Assess buildings and structures for damage and/or habitability or usability
Recovery Measures	• Repair or replace damaged infrastructure • Repair or replace damaged residential or commercial buildings and structures • Facilitate peaceful mediation of contrasting viewpoints • Economic recovery

EARTHQUAKES AND SEISMIC ACTIVITY	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**HIGH** - As the third most seismically active state in the county, earthquakes and seismic activity Southern Nevada is susceptible to surface ruptures and ground failures from earthquake faulting and shaking, with the region located within "strong" to "very strong" shaking range for an earthquake. Most importantly, because earthquakes can be highly damaging and disruptive and because Southern Nevada is relatively isolated, ensuring accessibility for the movement of freight, especially food and supplies, must be a high priority. Tectonic faulting is found within the valley's surrounding mountains and traverse the valley floor in a north-south trending series. While there have been few high magnitude earthquakes within Southern Nevada itself, tremors from seismic activity can be felt as a result of stronger earthquakes located throughout Central Nevada and Southern California. According to the University of Nevada's Seismology Lab and Nevada Bureau of Mines and Geology, there is potential for moderate damage to buildings and structures valley-wide, including within the City. More than two-thirds of the land and 75 percent of the population within the City is at risk of "very strong" ground shaking from earthquakes and seismic events, while one third of the area and 25 percent of the population are at risk of "strong" ground shaking; another 15 percent of the area and a quarter of the population is at risk of liquefaction. • Low adaptive capacity for most systems; newer buildings, structures, and infrastructure have greater adaptive capacity, but older structures will have the least capacity to adapt unless properly designed for seismic events. • High sensitivity for most systems; buildings and structures, especially those that are pre-code, have greatest sensitivities; all utility infrastructure, transportation, and critical operational facilities; immediate high stress could be placed on public health systems for injuries and deaths
Likelihood or probability of occurrence	• Small • Likely to depend on location and depth of epicenter and magnitude of temblor; most seismic activity within Southern Nevada is small, but any larger regional earthquake is likely to be felt
Critical function impacts	Maintain critical functions: • All hospitals and health care facilities • Key city operational facilities • All utility infrastructure, especially energy, water, and sewer • Ensure freight traffic on Interstate 15 from Southern California and by rail • Ensure operation of natural gas and fuel pipelines into Southern Nevada • Interstate 515 (Future I-11) through Downtown Las Vegas has high potential for failure until replaced • All bridges and structures • Older residential and commercial structures
Citizens or Businesses Affected	Totality of Las Vegas Valley population
Threat to Life	Yes





EARTHQUAKES AND SEISMIC ACTIVITY (CONTINUED)	
Mitigation and Prevention Measures	• Maintain and periodically updates seismic safety maps that document areas of collapsible soils, subsidence, faulting, and fissuring • Prohibit development and reclassify known areas unsuitable for development because of geologic conditions, pursuant to building code. • Study, research, and develop partnerships to develop a regional seismic activity prediction and detection warning systems • Conduct “shake-out” seismic safety drills • Communicate and report seismic events with the public through a variety of means • Continue to upgrade and enforce building standards based on IBC updates and USGS data; require shaking intensity, short and long-term ground accelaration and duration be considered and ensure safety and building functionality can largely be maintained following an earthquake, depending on its magnitude. • Work with regional and statewide leaders to focus resources on strengthening key transportation routes and critical facilities so that the services necessary to maintain the social and economic structure of communities can be quickly and effectively returned after a seismic event. • Assess and rate critical infrastructure for seismic risk, particularly water, wastewater, electrical, natural gas pipelines, bridges, transportation systems; health care facilities and emergency service providers; and significant employment generators in seismically active areas whether within the City, Southern Nevada, or elsewhere within Nevada, California, Utah, or Arizona.
Adaptation Measures	• Led by the Department of Building and Safety and pursuant to NRS 278.580, continue adopting seismic provisions of the International Building Code as applicable, as well as standards for investigating seismic risks to buildings from surface ruptures and liquefaction, to ensure resilient building design • Equip key City facilities and fire stations with solar powered energy storage systems; establish microgrids for redundancy if feasible • Develop, fund, and support a retrofit program that can use best engineering standards for structures located in seismic zones. • Design future buildings, public spaces, and infrastructure to accommodate seismic activity
Immediate Response Actions	• Potential evacuations of affected areas • Conduct search and rescue operations if necessary • Open shelters for affected populations • Assess buildings and structures for damage, habitability, or usability • Shut down pipelines and utility infrastructure • Conduct immediate clean ups of spills
Recovery Measures	• Restore utility service • Reopen closed transportation routes • Demolish, upgrade, or repair damaged structures • Repair or replace damaged infrastructure • Engage in community clean up and restoration

HAZARDOUS MATERIALS	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**HIGH** - The City is vulnerable to both fixed and transportation-related hazardous material events. Because there are relatively few large-scale locations that manufacture or store hazardous materials within the City, most are likely to occur along a transportation facility (freeway, UPRR railroad, or along pipelines) and could be biological, chemical, radiological in nature. Hazardous material events can lead to secondary impacts leading to short or long-term transportation system closures, evacuations, or social disruption. An additional consideration is storage and transportation of high-level radioactive nuclear waste at the proposed Yucca Mountain repository within the Nevada Nation Security Site. The City’s long-standing opposition to the Yucca Mountain project led the City to declare itself a “Nuclear Free Zone.” The State of Nevada routinely opposes and litigates the project. The Nuclear Regulatory Commission has suspended the licensing process for the facility and is unfunded by Congress. Ending the project would require Congressional action. • Low adaptive capacity for most systems; spills, fires, releases, explosions or other accidents can lead to long-lasting economic, environmental, and public health harm. Most systems cannot adapt to human-caused accidents unless they are avoided or eliminated completely • High sensitivity for most systems; most systems are highly sensitive to hazardous materials. The consequences of exposure have equally great issues.
Likelihood or probability of occurrence	• Intermittent • Likely to depend on location of incident
Critical function impacts	Maintain critical functions, depending on the type of hazardous materials incident: Police, fire, and emergency response, especially the City’s CBRN and HazMat unit Key city operational facilities, hospitals and health care facilities Utility infrastructure, especially energy, water, sewer, and fuel/gas into the region Ensure rail service and freight traffic on Interstate 15 from Southern California
Citizens or Businesses Affected	Less than total of City population
Threat to Life	Yes
Mitigation and Prevention Measures	• Limit, regulate, and frequently inspect transportation routes for hazardous materials, especially pipelines and UPRR through Downtown Las Vegas • Limit, regulate, and frequently inspect the distribution, storage, and disposal of hazardous materials through zoning; especially from poor or disadvantaged neighborhoods or vulnerable populations.
Adaptation Measures	• Coordinate hazardous materials transportation with NDOT or NHP means to reroute or restrict transportation through the City or during peak travel periods. • Conduct shelter-in-place safety drills • Communicate hazardous materials incidents through a variety of means and provide immediate instructions
Immediate Response Actions	• Potential evacuations of affected areas, or the issuance of shelter-in-place orders • Conduct immediate clean ups of spills or abate areas containing gas • Conduct search and rescue operations if necessary • Open shelters for affected populations • Assess buildings and structures for damage, habitability, or usability • Shut down pipelines and utility infrastructure
Recovery Measures	• Restore utility service and reopen closed transportation routes • Demolish, upgrade, or repair damaged structures and infrastructure • Engage in community clean up and restoration

INFECTIOUS DISEASE	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**HIGH** - The City and Southern Nevada are susceptible to infectious diseases, particularly due to being an accessible transportation hub and convening location for events and tourism. Typically, those highest at risk for contracting an illness are children, the elderly, or health compromised individuals who currently experience respiratory or immune deficiencies. Because of the communicable nature of infectious diseases, tourism centers or areas with high population densities, such as the Las Vegas Strip, are considered more at risk. Infectious disease impacts are difficult to evaluate due to the wide variation in disease characteristics and the ability to mutate over time. However, infectious diseases can cause human illness and death, as well as economic disruptions at various levels, depending on the extent and severity of the pathogen. • Low adaptive capacity for most systems; biological threats can lead to long-lasting economic and public health harm. Most systems can adapt based on the type of disease and its characteristics, unless vaccines and treatments are available and the avoided or eliminated completely • High sensitivity for most systems; most systems are highly sensitive to disease, leading to acute and chronic illness and death, especially for vulnerable populations. The consequences of exposure have equally great factors that can affect economic systems and supply chains.
Likelihood or probability of occurrence	• Intermittent • Likely to depend on type of infectious disease and communicability
Critical function impacts	Maintain critical functions, depending on the type of infectious disease:: All hospitals and health care facilities Key city operational facilities Ensure freight traffic on Interstate 15 from Southern California and by rail and air
Citizens or Businesses Affected	Totality of Las Vegas Valley population (including visitors)
Threat to Life	Yes, depending on the type of infectious disease
Mitigation and Prevention Measures	• Ensure interdisciplinary teams of public health experts, physicians, community health workers, scientists, media, and communications professionals are in place to help build capacity to recognize and manage critical public health and issues, including outbreaks, immediately following detection and before resources can be mobilized • Activate a citywide or regional communications plan for consistent and timely public health information on the appropriate individual and business responses to disease outbreak. Set up mobile field hospitals or treatment centers • Increase investments in infrastructure and regulation to protect water and food sources and supplies from contamination and effectively remove disease-carrying vectors • Ensure that federal, state, and local plans are in place for managing pandemics, including the potential for economic disruption, widespread shelter-in-place orders, increasing hospital and health care system capacity, and an associated increase in fatalities. • Protect SNWA infrastructure from disease or contamination should water be a vector for exposure • Should pathogens or disease result from animal or insect origin, plants and vegetation, or vermin, abate pursuant to LVMC nuisance ordinances

INFECTIOUS DISEASE	
Adaptation Measures	• Ensure a recovery plan is in place to adapt to shutdowns or modified operation of public services, including school closures, business closures, public facilities, public transportation, and ensure the safe use of public space for the duration of the restrictions, unless quarantines are required • Prepare and stockpile necessary supplies, resources, medication or vaccines (if available) • Ensure strategic supply of personal protective medical equipment, disinfectant supplies, for city officials and health care providers
Immediate Response Actions	• Issue consistent guidance in coordination with the Centers for Disease Control, the State of Nevada's Division of Public and Behavioral Health, and Southern Nevada Health District • Potential evacuations of affected areas, or the issuance of shelter-in-place orders • Enact and enforce quarantines and closure ordinances or orders should communicable diseases prove to have especially high rates of communication, infection, health complications and/or mortality • Adopt additional public health and safety provisions • Set up mobile field hospitals or treatment centers • Ensure or make available personal protective equipment and disinfectant supplies for the public • Ensure supply chains are not disrupted
Recovery Measures	• Resume City operations • Lift quarantines, closures, or • Economic recovery • Notify and prepare public health officials and other appropriate subject matter experts for the after-effects of spread, if necessary



TERRORISM	
Overall Vulnerability and Risk based on assessed adaptive capacity and sensitivity	**HIGH** - Terrorism, whether foreign or domestic, is unpredictable and can take many forms. Las Vegas has been identified by the Federal government as "high-threat, high density," with regard to acts of terrorism. In addition to Downtown Las Vegas and the Strip, a number of other high profile locations and key infrastructure exist throughout the region. Lessons learned from other terrorism events, including 9/11 and the October 1 shootings, have helped the City better prepare and secure public locations and events. • Moderate adaptive capacity for most systems; Most systems can be adaptive to rapidly changing circumstances, Protected buildings and infrastructure offer some levels of security and counter-measures to assure public safety • High sensitivity for most systems; public spaces and critical buildings and structures are dynamic. Critical facilities and iconic locations may carry additional risk due to their importance. In addition, utility infrastructure and services, unless built with multiple redundancies, can be subject to fail if deliberately tampered with or destroyed; immediate high stress could be placed on public health systems for injuries and deaths
Likelihood or probability of occurrence	• Intermittent • Likely to depend on type and scale of incident
Critical function impacts	Improve critical functions: Police, fire, and emergency response All utility infrastructure, especially energy (electric and gas), water, and sewer Key city operational facilities All hospitals and health care facilities Other high profile public places, commercial, and tourism destinations
Citizens or Businesses Affected	Less than total City population
Threat to Life	Yes
Mitigation and Prevention Measures	• Ensure Federal, local, and state laws allow for the lawful collection of surveillance and intelligence data while ensuring the balance and protection of Constitutional rights • Require security plans for areas with gatherings or special events • Communicate terrorism threats through a public warning system • Coordinate security and prevention efforts with the Department of Homeland Security, the state, LVMPD, the National Guard, and other community security authorities on special events, plans and responses to minimize the threat to people and property • Create or install security barriers in high pedestrian areas where necessary • Increase surveillance and protection of infrastructure and public spaces from terrorist threats, gun violence, and cyberterrorism.
Adaptation Measures	• Expand investments in cybersecurity systems to protect critical infrastructure. • Increase the use of Crime Prevention Through Environmental Design (CPTED) approaches for areas that may have a high threat risk.
Immediate Response Actions	• Immediate law enforcement response • Enact emergency ordinances • Set up mobile field hospitals or treatment centers • Potential evacuations of affected areas, or the issuance of shelter-in-place orders • Assess buildings and structures for damage and/or habitability or usability
Recovery Measures	• Repair or replace damaged infrastructure • Economic recovery

IMPLEMENTATION STRATEGIES

- Develop and utilize a Hazard Prevention Framework that prepares for a wide range of hazards:
  - Prepare and train for man-made and natural hazards
    - » Routinely evaluate and update the City's Emergency Operations Plan
    - » Conduct pre-disaster and operations-based preparedness exercises for identified hazards involve the public and emergency management personnel.
    - » Regularly conduct NIMS compliant resource inventories
    - » Increase in rainy-day funding reserve
    - » Expand interagency partnerships, collaboration, and mutual aid agreements
    - » Ensure emergency response considers provisions for evacuating or sheltering low-income, disabled, and other residents that may need assistance
    - » Led by the Departments of Building and Safety and Public Works, adopt updated codes and standards for buildings and infrastructure
  - Engage public and private stakeholders and coordinate with agencies at all levels
    - » Participate in cross-department/agency mutual aid response systems
    - » Integrate departmental and jurisdictional interoperability into public safety communications systems
  - Continue educating the public on the hazards the City faces and how to prepare for each
    - » Disseminate data on the magnitude, frequency, vulnerability risk, and locations the City's hazards.
    - » Continue offering Community Emergency Response Team (CERT) training
    - » Publish resources for residents and visitors to develop emergency kits and evacuation plans, and encourage businesses to develop emergency procedures and shelter-in-place plans
    - » Assemble or collect donated emergency kits and supplies to low-income and vulnerable residents
  - Mitigate risks through policy changes, incentives, and capital improvements
    - » Continue infrastructure investments for the hazards with greatest vulnerability, especially drought, flooding, and seismic activity
    - » Implement the identified prevention and adaptation actions for each hazard
- For each identified hazard within the vulnerability assessment with high socio-economic and environmental costs:
  - Continue evaluating each hazard's vulnerabilities, as well as potential mitigation, adaptation, response, and recovery efforts
- In the event of an emergency, protect the health and safety of residents and visitors, critical infrastructure, and property using a NIMS-based Immediate Response Framework:
  - Bring together City leadership with the media and community stakeholders to communicate events and clear situational facts.
  - Communicate and notify the public using a variety of notification and warning systems
  - Implement the identified emergency response actions for each hazard
- To lessen economic severity of all types of hazards, develop a comprehensive recovery framework that's context sensitive and adaptable to a variety of hazard scenarios
  - Immediately prioritize and restore critical infrastructure and essential services
  - Rebuild for buildings and structures to higher, more resilient standards; relocate structures away from identified hazard prone areas, if possible
  - Repair environmental damage and restore natural areas as buffers from the effects of future disasters
  - Use green infrastructure and low impact development to restore environmental health

SAFETY: FLOODING

NRS 278.160.1(a)(1)

MINIMIZE FLOODING RISKS TO PREVENT DAMAGE TO PROPERTY AND INFRASTRUCTURE

As identified in the Hazard Mitigation goal, flooding has historically been one of the largest and costliest environmental hazards affecting Las Vegas. The overall vulnerability and risk remains high and flooding remains a seasonal occurrence, but the City has adapted well to the overall hazard. The Las Vegas Valley's Hydrographic Basin has only one drainage-way: the Las Vegas Wash, which empties to Lake Mead. Water must flow to the Wash through its tributaries or through storm drains and channels. Flooding usually results in disruptions to transportation, emergency response, minor property damage, and the impact of rapid flash flood events. Severe storms can also have the secondary effect of increasing traffic accidents, sometimes involving the rescue of motorists from flooded areas.



Las Vegas also experiences severe summer thunderstorms when monsoonal moisture from the Gulf of California and Mexico is pushed northward, leading to intense rainfall during short time periods. Combined with the valleys topography and impervious desert soils and surfaces, storm water rapidly flows and collects at lower elevations of the urbanized valley, such as East Las Vegas. As the City has grown, so have the problems with flooding and their associated costs. Since 1960, Southern Nevada has experienced at least 12 floods totaling over $1 million in damages each, 23 flash floods, and 33 deaths.

The Nevada Legislature created the Clark County Regional Flood Control District (RFCD) in 1985 to develop a coordinated and comprehensive Master Plan to address flooding, to plan, fund and coordinate construction of flood control infrastructure, to educate the public of flood dangers, and to monitor rainfall and flow data during storms. The RFCD is governed by a Board of Directors comprised of the same membership as the Regional Transportation Commission, including two members of the Las Vegas City Council. To finance regional flood control infrastructure, a quarter cent sales tax was approved by voters. In additional to major regional facilities, the City's Public Works Department designs minor and local facilities and infrastructure. These can be financed through the creation of Special Improvement Districts. Public Works also reviews and approves drainage studies addressing the existing, interim and future hydrology for private developments greater than two acres or are located within a FEMA designated flood zone (which must also be approved by the RFCD and FEMA). Upon project completion FEMA requires a map revision (LOMR) to reflect the actual change to the flood zones.

The RFCD's 2018 Las Vegas Valley Flood Control Master Plan Update is the guiding document for future flood control facilities, as required by NRS 543. The plan and its hydrologic analyses may be subject to further amendments and revisions in the future as more detailed analyses are completed for facilities during engineering design, and other activities that warrant modification. It encompasses 1,637 square miles over eleven watersheds. This plan, as well as all previous updates are based on future growth and development assumption to represent ultimate conditions. The city also develops its own neighborhood studies that work in conjunction with the RFCD's Master Plan and concentrate on localized and detailed hydrologic analysis, proposed drainage facilities and engineering for specific areas. Each are used as guidance by Public Works.

Finally, as addressed by the Waste and Environmental Justice Goals, the City and RFCD are co-permittees to the region's NPDES stormwater discharge permit that authorizes stormwater discharge to the Las Vegas Wash, provided monitoring best management practices efforts are taken to reduce pollutants. Facilities such as detention



PROPOSED NEW FLOOD CONTROL FACILITIES

Detention Basins and Facilities

- Upgraded Meadows Basin
- Arroyos within Summerlin West
- Box Canyon Detention Basin
- Grand Park Detention Basin (Summerlin West)
- Upgraded Ann Road Detention Basin
- Upgraded Kyle Canyon Detention Basin
- Kyle Canyon Sediment Basin
- Kyle Canyon channels
- Upgraded ULVW Basin
- Upgraded Gowan South Basin

Channels and conveyance

- RCB: Charleston Blvd/Maryland Pkwy, West Charleston Blvd, Sahara, Rancho-Gowan
- RCP: Box Canyon, Stewart-Bonanza

KEY ACTIONS

- Construct the recommended improvements contained within the RFCD's Master Plan to eliminate as much of the FEMA designated flood zone within the City as possible, thereby protecting residents and property.
- Determine the effect an increasingly active monsoonal season may have on storm water infrastructure.
- Increase the number of multi-use facilities and utilize low-impact development and other natural drainage techniques
- Continue coordinating with the RFCD and National Weather Service on early warning notificatations and education on the risks of flooding

OUTCOMES

- By 2050, no residences, businesses, or critical infrastructure are located within flood zones
- No deaths attributable to flooding occur
- Maintain or exceed the City's Community Rating System (CRS) Class 5 status as part of the National Flood Insurance Program.

SEE ALSO:
RFCD Flood Control Master Plan

EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Address flooding problems in planning areas with higher rates of poverty and minority populations must be prioritized.	Addressing and adapting to flooding has made the City and region more resilient and better prepared for potential increases in frequency and intensity of storms.	Well-designed multi-Use flood control facilities provide opportunities for recreation and can be developed to improve the health of the natural environment.	Ensuring proper drainage and flood control protects property and ensures safe transportation and emergency response during storm events.	Low impact development and other natural flood control solutions may be just as effective at preventing flooding.

basins help extract pollutants and capture and remove sediments from stormwater inflow. All flood control design and construction projects should be consistent with NPDES permit requirements and incorporate design strategies that reduced stormwater pollutants. Similarly, construction sites must comply with stormwater permitting requirements and have a Stormwater Pollution Prevention Plan to be in compliance with the Clean Water Act.

THE REGIONAL FLOOD CONTROL DISTRICT'S PLANNING AND INFRASTRUCTURE EFFORTS HAVE SUCCESSFULLY HELPED MITIGATE FLOOD RISKS WITHIN THE CITY

Due to successful flood control and prevention efforts over the past three decades, there are now fewer FEMA designated Special Flood Hazard Areas within the City, fewer flooding incidences, and reduced impacts resulting from precipitation events. Special Flood Hazard Areas (SFHA) that currently exist are now mostly along the Las Vegas Wash and major storm drains including along the Rancho Dr and Washington Ave corridors. Two percent of the City's land is within the 100-year floodplain and 2.5 percent is within the 500-year floodplain. Through mitigation over time, both the number and overall percentage of residential buildings and residents within the City located in the SFHA buildings have decreased. All subdivisions constructed after 1992 have been designed to protect against the 100-year flood (a 1 percent chance of a flood event occurring in a year). Safety and loss of life tend to be greatest along flood control facilities and channels.

Regional facilities safely convey and detain major flood flows with a minimum 100-year frequency flood event flow of 500 cubic-feet-per-second (cfs) or a minimum contributing drainage area of 1 square mile. Analyzing conditions have helped determine what areas may be prone to flooding and help prioritize future facility construction. "Category A" facilities are considered essential for the protection of existing development, and are given priority for the District funding. "Category B" facilities consist of planned flood control improvements that are not required to protect existing development and are typically located in undeveloped areas or may replace an existing facility which currently provides a level of flood protection, but cannot convey the entire 100-year peak flow.

FACILITY DESIGN PERIODS FOR 1" OF RAIN

The following flood types indicate how long it will take for an inch of precipitation to fall.

- 2 year: 20 hours
- 5 year: 2 hours
- 10 year: 30 minutes
- 25 year: 15 minutes
- 50 year: 12 minues
- 100 year: 10 minutes

- Detention basins provide temporary storage of floodwaters during flood events with high rates of inflow and slow discharge. Retention basins are similar, but typically don't discharge water and hold larger volumes. In principle, each detention basin has a maximum area and associated volume to hold flood water, which allows it to drain without overwhelming downstream conveyance systems. Depending on the storm event, each will fill within five to six hours; spillways and outfalls allow floodwaters to pass through downstream.
- Storm drains (reinforce concrete box or pipe) and typically convey flood waters either underground or streets while open flow channels are used if right-of-way is available. Channels are typically less expensive than storm drains and easier flow.
- Many neighborhood surface streets in the Valley act as conveyance corridors for flood flows during major storm events. Local facilities help to decrease the volume of water conveyed to regional facilities via surface streets thereby lessening the impact of surface flow on adjacent properties and allowing for the safe passage of vehicular traffic during a major flood event.

The 2018 Regional Flood Master Plan calls for:

- 793 total miles of conveyance, 484 miles have been built with 309 unbuilt (180 miles are Category A, 129 Category B)
- 110 detention basins, of which, 78 have been built, 14 require expansion, and 32 basins are unbuilt (16 A / 16 B)

Three major watersheds of the Las Vegas Wash cover the City of Las Vegas, each of which require their own facilities based on future changes and development patterns.



INVESTMENT IN REGIONAL FLOOD CONTROL FACILITIES HAS HELPED REDUCE ADDITIONAL COSTS ON RESIDENTS AND BUSINESSES

Areas with new subdivisions, rural preservation areas, and locations with relatively underdeveloped flood control and drainage infrastructure are likely to be the locations that experience flooding impacts until new facilities are constructed. The RFCD's Master Plan is updated every five years, while the 10-year capital improvement program is updated annually due to constantly changing hydrologic conditions. However, new facilities and infrastructure upgrades should be prioritized for the planning areas with higher rates of poverty and minority populations, which may need or require flood insurance. Because most of the City's mapped flood zones fall within West Las Vegas, Downtown Las Vegas, and East Las Vegas, which have historically faced a greater share of flood damage and cost burden, mitigation and adaptation measures should be focused there to reduce overall threats to property damage and potential for loss of life.

However, these investments have helped mitigate flood damage losses for many residents and businesses. FEMA's Community Rating System recognizes community flood plan management activities that exceed FEMA requirements. The program rewards insured residents for their community's continued involvement, while providing an incentive for new flood protection activities, including reducing flood losses, facilitating accurate insurance ratings, and promoting awareness of flood insurance. The City holds a rating as a Class 5 community translating into a 25 percent flood insurance rate reduction for city property owners within a flood zone.

SOUTHERN NEVADA IS LIKELY TO SEE AN INCREASE IN THE FREQUENCY AND SEVERITY OF STORMS THAT CAN CAUSE FLASH FLOODING EVENTS, ESPECIALLY DURING SUMMER MONSOONAL SEASONS; HOWEVER, UNCERTAINTY IN MODELING WILL LIKELY MAKE FLOOD EVENTS DIFFICULT TO PREDICT

Throughout the 20th Century, the amount of precipitation falling within the desert southwest has been below average, despite an overall increase throughout the remainder of the United States. However, climate research suggests the number of extreme high intensity rainfall events, in

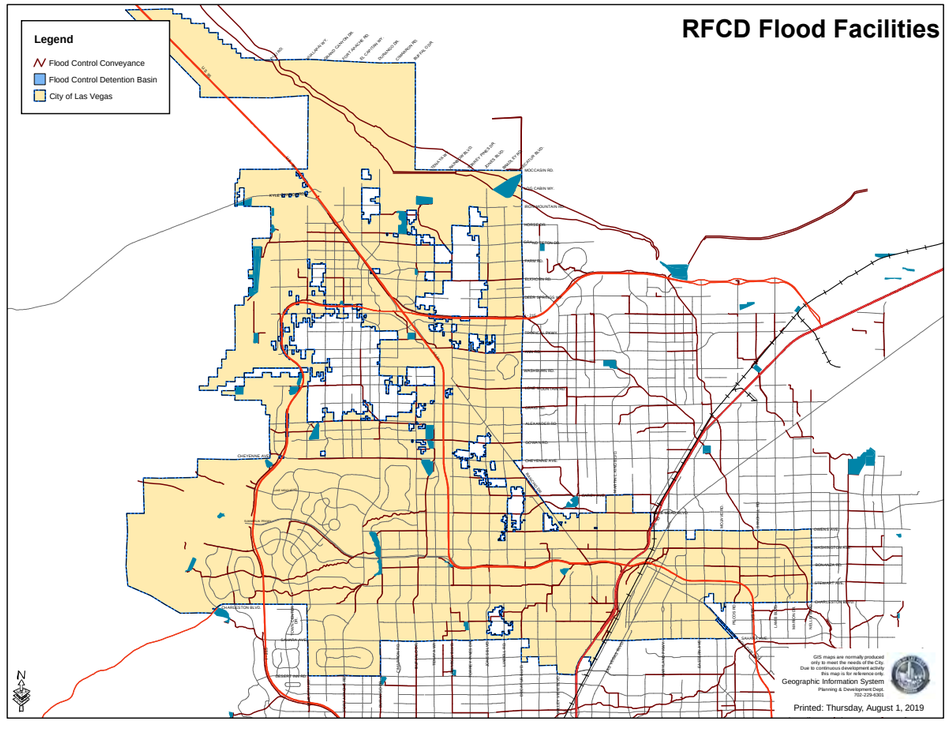
UPPER NORTHERN LAS VEGAS WASH

- $399 million invested in 8 detention basins and 44 miles conveyance
- $204 million Category A facilities proposed and $160 million Category B facilities proposed

This 629 square mile watershed covers the northwestern valley and much of the Nu Wav Kaiv, Kyle Canyon, Centennial Hills, and Tule Springs planning areas, much of which is undeveloped. Stormwater from Mount Charleston and the Sheep Range ultimately drain into the Upper Las Vegas Wash. Thus, the City of Las Vegas is responsible for programming flood control funds for the Upper Northern Las Vegas Wash Watershed. It contains two discharge points: the Upper Las Vegas Wash Detention Basin and a confluence at Ann Road and Ferrell Street. Since Tule Springs Fossil Bed National Monument was created and is a sensitive natural wash, the area will remain undisturbed, necessitating a number of changes and modifications to flood control facilities elsewhere in the watershed. Several future projects must be completed within the next decade to protect existing and future development:

- Expansion of Kyle Canyon Detention Basin
- Expansion of Upper Las Vegas Wash Detention Basin
- Construction of Moccasin Outfall 2
- Construction of Kyle Canyon Sediment Basin

A number of smaller storm drains and channels are proposed for addition or expansion to accommodate the growth within the watershed, most of which flow to detention basins or to other facilities. Within Skye Canyon, a Master Drainage Study recommends improvements as a part of the development.



CENTRAL

- $570 million invested in 4 detention basins and 57 miles conveyance
- $519 million Category A facilities proposed and $53 million Category B facilities proposed

The 56 square mile Central Watershed, located in the middle of the Las Vegas Valley is completely developed. Three main discharge locations exist: the Las Vegas Wash, the Las Vegas Creek and Freeway channels that flow into the Lower Northern Las Vegas Wash Watershed, and a Boulder Highway facility draining into Flamingo Wash. With fewer detention basins, much of the watershed is interconnected by conveyance facilities leading to each respective discharge point. Much of the Central watershed contains FEMA identified flood zones; this requires major modifications and additions of facilities within West Las Vegas, Downtown Las Vegas, and East Las Vegas, including:

- Expansion of the Meadows Detention Basin
- Modify the Carey-Lake Mead Detention Basin to provide a second outlet and is categorized as a priority project
- The East Charleston-Boulder Hwy storm drains
- The West Charleston
- Sahara storm drain
- Stewart and Bonanza storm drains

These conveyance facility modifications are all required due to subsequent hydrology changes occurring elsewhere within the watershed, for which new volumes and flows will create more utilization of each facility. Changes to roadways resulting from freeway improvements such as those made by Project Neon, completely alter the drainage network, thus necessitating the downstream improvements. Additionally, modifications to minor facilities made through street improvements, infill development, and redevelopment all have associated effects on flow.

GOWAN

- $448 million invested in 8 detention basins and 57 miles conveyance
- $127 million Category A facilities proposed and $108 million Category B facilities proposed

The 84 square mile Gowan watershed covers the western Valley and includes much of the rapidly growing La Madre Foothills, Lone Mountain, Rancho, Summerlin West, and Summerlin North planning areas. It is the major western tributary of the Las Vegas Wash, receiving runoff from the Spring Mountains and Red Rock Canyon. Because much of the northwest valley outside of the I-215 Beltway and within Summerlin West is undeveloped, new drainage and flood control facilities connected by conveyance facilities are required, as well as several major modifications and additions.

- Expansion of Gowan South Detention Basin to accommodate new development to the west
- Expansion of Ann Road Detention Basin to accommodate new development to the west
- Construction of Box Canyon Detention Basin to mitigate the Box Canyon flood hazard
- Alexander-Rancho storm drain system to mitigate surface flooding
- Construction of Grand Park Detention Basin as Summerlin West development occurs
- New Summerlin West flood control and conveyance facilities as new development occurs

which heavy precipitation occurs in short periods of time, is likely to increase. Since 1948, the frequency of storms in Southern Nevada with heavy precipitation have increased 30-45%. Academic reports, climate models, and studies seem to confirm the likelihood of more frequent, more intense flash flood seasons, even with a decrease in total annual precipitation. However, most models do not give an accurate prediction of a total increase in incidences or the respective intensities of individual rainfall or flood events. As with other climate hazards impacting the City, it is clear that more research and study will be required to understand the potential increase in the hazard to the City and to what extent design standards for future RFCD facilities or existing flood control infrastructure may be required. Despite these unknowns, flood control infrastructure is currently suited well to the 100-year flood, but adapting flood control design

regulations to greater designs may be warranted. Other adaptation measures, including more resilient development standards for local flood control and drainage, detailed mapping for applicants and developers, and the construction of future and existing flood control facilities to higher flood capacity standards may be warranted as more information is known about future precipitation and flood events.

FLOOD CONTROL FACILITIES HAVE BEEN CONSTRUCTED AT THE EXPENSE OF NATURAL DRAINAGE, LOW IMPACT DEVELOPMENT, AND GREEN INFRASTRUCTURE.

Flood control facilities are intended for safe detainment and conveyance of flood flows to protect property and public safety. In many cases the proper functioning of flood control facilities is paramount and sometimes cannot be compromised by other uses or functions. Concrete channels, dams, and detention basins convey and store flood water effectively and efficiently, require less maintenance and, when designed properly, eliminate the potential for erosion. However, the aesthetic value, creation of nuisance space, and loss of large areas from developable land and nuisance areas and environmental benefits of concrete detention facilities are minimal.

Multi-use opportunities exist with many master planned facilities. Detention basins and linear parks have been designed as joint-use detention facilities that include recreational, space, open space, and sports fields and trails, such as Buckskin Basin in Lone Mountain and Pueblo Park in Summerlin North. Therefore, in early planning stages, the City must work with the RFCD to identify and take advantage of multi-use opportunities afforded by flood control facilities included in the Master Plan.

Similarly, natural washes and arroyos help preserve some desert habitat and corridors and are preferable natural amenities over engineered concrete or earthen flood control infrastructure. Natural washes or other “soft linings” to convey flood flows can be done in a way that ensures a proper level of protection for adjacent properties and flow. While steep slopes and can create higher flow velocities, riprap, gabion, and limited use of lined channels can help preserve the desert environment. There are some areas within the City where remaining natural wash corridors be maintained. On the other hand, the potential of erosion



exists resulting in scour and downstream deposition that could potentially block or dam conventional downstream concrete culverts, grate inlets, and channels, rendering the flood control facility ineffective and damage other areas. Therefore, for facilities in which natural washes are used, the construction of sediment basins, over-sizing culverts, drains, and inlets may be required to account for debris and sediment clogging.

To improve the resiliency of Southern Nevada for increased storm intensities and frequencies, the City must integrate Mojave Desert oriented green infrastructure and Low Impact Development (LID) design standards, utilizing native and adaptive plant species, into Title 19 and other Public Works standards, including:

- Xeriscaped bioretention areas, including in amenity zones, buffer areas, parks, civic spaces, and parking lots
- Curb extensions and openings
- Permeable pavements
- Sediment basins

Using less concrete, revising drainage regulations for new development, and implementing LID green infrastructure techniques can decrease the expected increase in runoff. Ancillary benefits of implementing these techniques include improving air quality, providing shade, creating wildlife habitat, reducing the urban heat island effect, and more. These additional benefits increase the overall value of the flood control solutions to the residents. Because storms and flooding do not follow political jurisdictional boundaries, regional collaboration on LID between the City, RFCD, and other local agencies is critical in order to implement new approaches to mitigating the effects of flooding and improving resiliency.

WARNING THE PUBLIC OF IMPENDING FLOOD EVENTS REMAINS A PRIORITY TO PROTECT PUBLIC SAFETY

As the City and RFCD have constructed flood control infrastructure, deaths attributable to flooding have decreased, but the risk factor remains. As a hazard mitigation and prevention measure, communicating the threat of flash flooding and to stay out of flash flood water during or prior to a storm must continue as an immediate response action. The City must align with both RFCD and National Weather Service messaging during flash flood watches and warnings through social media and other messaging means. As flood events occur, early warning systems can be deployed not only in the areas, but in areas downstream from the flood. Throughout the flash flood season, motorists are warned to take precautions when driving during storms and to stay out of flooded roadways. In known areas of spot flooding, utilizing RTC’s FAST dynamic message signage can also help warn motorists to slow down and avoid any flooded areas. Safety is especially important along flood control facilities, the Las Vegas Wash, and its tributaries. Water flowing through channels and into detention basins can quickly rise and move as quickly as 30 miles per hour, can contain debris, and can be especially dangerous for children and animals. Tunnels, bridges, and culverts can be especially dangerous, as they can injure or trap people; homeless individuals, who commonly use drainage areas as places of refuge, especially during hot summer monsoonal months are particularly susceptible; these areas should be monitored for people, especially ahead of possible flooding events.



IMPLEMENTATION STRATEGIES

- Construct the recommended improvements contained within the RFCD’s Master Plan within the Upper Las Vegas, Gown, and Central watersheds to eliminate as much of the FEMA designated flood zone within the City as possible, thereby protecting residents and property
  - Prioritize facilities within West Las Vegas, Downtown Las Vegas, and East Las Vegas planning areas
- Determine the effect an increasingly active monsoonal season may have on stormwater infrastructure
  - In conjunction with the RFCD, commission or request an academic report, model, or study to determine future frequencies and intensities of flash flood seasons.
  - Determine modifications to design standards for future RFCD facilities or existing flood control infrastructure
- Increase the number of multi-use facilities and utilize low-impact development and other natural drainage techniques
  - Provide a user-friendly document to guide staff, developers, and other entities through the MS4 permit process within the city of Las Vegas.
  - Identify natural drainage channels rather than concrete where feasible to convey stormwater though the region.
  - Amend Title 19 to permit and provide design guidelines for LID and green infrastructure
- Continue coordinating with the RFCD and NWS on early warning notifications and education on the risks of flooding
  - Monitor tunnels and culverts
  - Post additional warnings and signage
  - Construct new barriers to flood control facilities

IV.D SAFETY: HEAT MITIGATION

NRS 278.160.1(a)(2)

SEE ALSO:
Chapter 2: Urban Forestry, Chapter 4: Hazards

Urban Forestry Management Plan

PROVIDE ACCESS TO PUBLIC DRINKING WATER AND COOLING SPACES AND ENSURE ADEQUATE STANDARDS FOR BUILDING COOLING AND SHADING ACROSS ALL AREAS OF THE CITY

At the 2025 Legislative Session, the Nevada Legislature passed and Governor Lombardo approved Assembly Bill 96, requiring municipalities to include a heat mitigation plan as part of the Master Plan's conservation element, which addresses public cooling spaces, drinking water, cool building practices, shade over paved surfaces, such as structures or drought-tolerant urban forestry, and other mitigation measures to address heat in the community.

As an identified hazard throughout this plan, the City must prepare for extreme heat as a long-term, seasonal hazard by investing in urban forestry, cooling infrastructure, and developing urban design standards that mitigate the urban heat island (UHI) effect. As is discussed in the Chapter 2's Urban Forestry Goal and Chapter 4's Hazards goal, the UHI is felt citywide, but is most pronounced in areas of the city closes to Downtown Las Vegas, including East Las Vegas, West Las Vegas, Charleston, Downtown South, and Twin Lakes. In addition to the high risks on public health that can lead to heat exhaustion, heat stress, and heat stroke, extreme heat causes immense strain on city infrastructure, particularly the electrical grid. Increased demands for air conditioning can lead to power outages, damage roads and other transportation infrastructure, cause increased evaporation, and strain water resources, especially during prolonged droughts. Extreme heat is a compounding hazard, as it can lead to higher wildfire risk, which in turn creates poor air quality and increased risk of drought.

DRINKING WATER IS A CRITICAL RESOURCE WHEN EXTREME TEMPERATURES AFFECT THE CITY

The Mojave Desert, classified as a "hot and dry" desert, lacks humidity in the air with increased solar radiation, as sun rays are not blocked by water vapor in the atmosphere. Almost twice as much solar radiation reaches the ground in Las Vegas as in desert areas with more humidity. As a result, human water intake must be adjusted because humidity, temperature, UV index, and elevation are all environmental factors that affect the body's ability to self-regulate.

The global average for necessary daily water intake for the average adult is 2900 mL (about 12 cups), and Las Vegas adults require about 16% (+389mL, or 1.6 cups) more on average. Water intake needs are also affected by age, weight, sex, lifestyle, and health. The traditional "8 glasses of water a day" (1893 mL) is not enough for those who live in low-humidity desert environments like Las Vegas.

During times of extreme heat, it becomes especially important to incorporate electrolytes that are lost with sweat to prevent heat stress. Water must be drunk regularly before feeling thirsty to prevent dehydration. Warning signs of dehydration include dizziness, headache, and dark urine.

KEY ACTIONS

- Recognize that drinking water is a necessity, ensuring all hydration stations within the urban heat island provide potable water, have sufficient flow, and are publicly accessible.
- Develop new and expand access to existing cooling centers to protect vulnerable populations from the impacts of extreme heat.
- Prepare for long-term, seasonal hazards such as extreme heat by investing in cooling infrastructure and developing urban design standards that mitigate the urban heat island effect.

OUTCOMES

- Create a regional office of extreme heat with other municipalities and entities
- Adoption of a cooling center operational protocol
- Produce a public map of drinking water access points and designate clear locations for future installation for rights-of-way, parks, and public buildings.



EQUITABLE	RESILIENT	HEALTHY	LIVABLE	INNOVATIVE
Ensure all areas of the city, especially those most vulnerable to extreme heat, have access to drinking water, cooling centers, and green infrastructure/cooling infrastructure/shade.	Expand public cooling spaces, reinforce essential buildings and mechanical equipment to withstand prolonged heat avoiding possible power disruptions, and prepare an adequate extreme heat response within each area of the City.	To prevent heat-related illnesses, increase access to public drinking water and hydration stations, public cooling spaces, and shaded areas to prevent heat-related illnesses.	Improve everyday public spaces with shade, cooling amenities, drinking water, and comfortable environments that support safe areas for the community to move through and enjoy during extreme temperatures.	Promote and encourage passive cooling, cool roofs, reflective pavements, or other technologies to reduce the urban heat island within City buildings and corridors.

Watching for these dangers can prevent more serious conditions like heat stroke and even death.

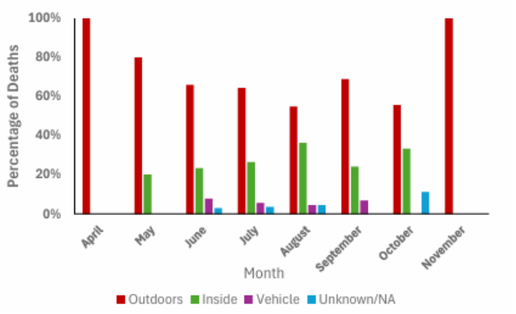
Although the International Building Code and Plumbing Code already requires the provision of drinking fountains for most building and occupancy types, additional steps can be taken to promote plain water intake; free and safe drinking water must be more readily accessible to individuals out in the public and available at all City facilities such as parks, playgrounds, schools, public buildings, and worksites. Considering the high risk of extreme heat, drinking fountains and hydration stations are essential health amenities in project design and capital programs.

The most vulnerable communities are those residing in the areas of the City where the Urban Heat Island (UHI) is most pronounced, as well as locations that are not near green spaces or cooling centers. Socially vulnerable groups include children, the elderly, those with disabilities, people experiencing homelessness, and mobile home community members who are more likely to live in structurally vulnerable housing. It should not be understated that everyday people who commute by transit or bicycle, exercise, or recreate need access to drinking water along critical junctures like trails, community centers, and travel corridors. Therefore, it shall be the policy of the City to:

- Ensure the provision of drinking water infrastructure at its public facilities, and where possible, at strategic locations in public rights of way.
- Provide free access to cool water to anyone in need, whether or not an extreme heat event is taking place.
- Allow for the provision of drinking water, whether at drinking fountains, for vending, or for sale.

ACTIVATION AND ACCESS TO COOLING SPACES REMAINS A GAP FOR CERTAIN AREAS OF THE CITY.

Community members in the City of Las Vegas are used to high temperatures and typically retreat to their air-conditioned homes and buildings at high points in the day. Extreme heat means that these temperatures are getting higher, lasting longer, and starting earlier. Even overnight temperatures may not fall below 90˚F. Prolonged exposure is very risky, particularly to those with mobility issues, health issues, and those who live or work outdoors.

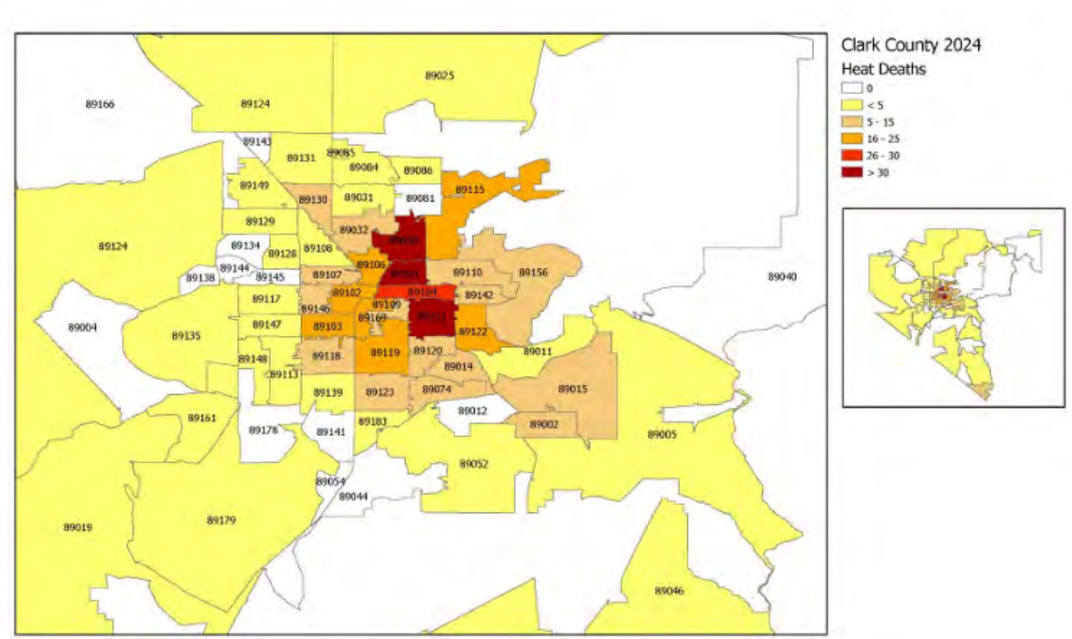


Improper hydration or cooling can lead to heat fatigue, heat stroke, or even death, and in turn increases health care costs for community members and strains the healthcare system. The Centers for Disease Control (CDC) report that over 2,000 people die from extreme heat annually. In 2024, the hottest year on record, the Clark County Coroner's office reported 513 heat-associated death, a 73% increase to the 296 deaths in 2023.

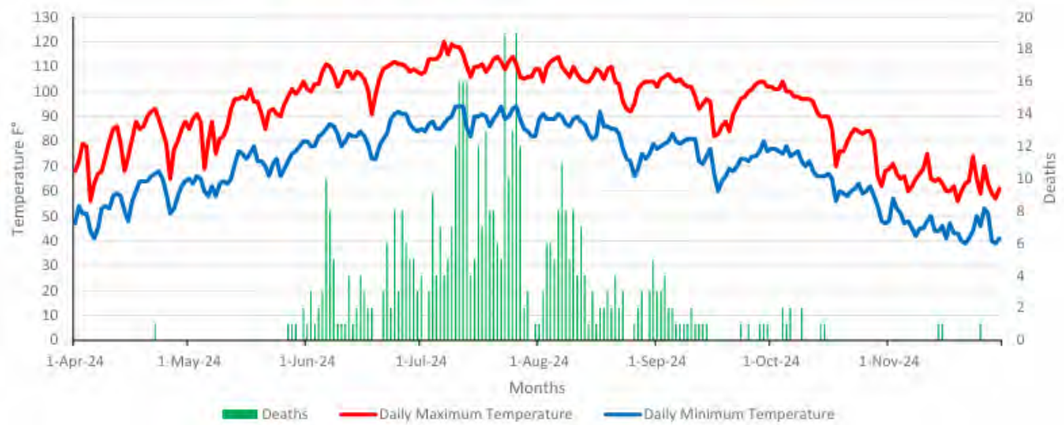
There are two types of cooling spaces: cooling centers and public cooling stations.

- Cooling Center: An indoor location offering relief from the heat with cooling, drinking fountains, or bottled water during daytime hours.
- Cooling Station: A place to access fresh water and respite from extreme heat, regardless of housing status. The National Weather Service, in partnership with the Clark County Coroner and Clark County Social Services, has developed a graduated heat index that defines when people are the most vulnerable. When the weather reaches these "extreme weather" thresholds, protocols require the opening of cooling stations. There are not enough shelters to house community members without homes during the extreme temperatures or weather conditions in the summer months, necessitating access to cooling stations.

Death due to extreme heat may also occur indoors. The many reasons people may be unable to cool their homes lead to death, which could be avoided if they knew of a second location where they could retreat to. Many people choose to stay in their overheated homes because they cannot bring their animals, particularly dogs, to a public cooling center. Typically, cooling stations have been located at public facilities and are targeted toward the unhoused population. This population has fewer places to go to when



*28 cases did not have a known ZIP code for the location of heat injury.



the heat is sudden, long-lasting, and/or extreme. The City's only permanent cooling center is The Courtyard Homeless Resource Center, which offers medical assistance, social services, rest facilities, and a pet kennel. Libraries and community centers may also function as cooling centers, but other facilities are voluntary and do not always meet cooling center requirements.

The Office of Emergency Management (OEM) has long identified the need for generators in community centers for emergency shelter purposes, including providing respite for neighborhoods in distress when a power outage aligns with extreme heat conditions. The community must have an emergency plan in the event of a power outage where their homes are no longer safe from extreme heat.

The City of Las Vegas follows the All-Hazards Emergency Operations Plan (EOP). As it stands, extreme heat coupled with power outages, or "brownouts", is the current trigger for emergency response. Emergency management reaches out to the Parks, Recreation and Cultural Affairs Department, Emergency Management Services (EMS), and public works for electricity concerns and routing power to emergency shelters. States with pre-established emergency mitigation plans activated 24-48 hours early resulted in fewer excess deaths. UNLV and DRI research shows that decision delays of even 12 hours compound mortality, particularly in the UHI's most concentrated zones. An important missing piece is how governments communicate a heat emergency with community members. To fill this gap, a regional heat office, which could be comprised of emergency and planning functions and supported by Southern Nevada's local governments, the National Weather Service, the Southern Nevada Health District, and NSHE institutions, could aid in coordinating extreme heat response with the public. Similar to heat offices developed at the Cities of Phoenix and Tempe, Arizona, a heat office could aid in communicating warnings, cooling center activation, emergency response, and other interactions with the public. Expanded public awareness campaigns to inform community members about heat risks, prevention strategies, and resources to emphasize the importance of hydration, recognizing heat-related illness symptoms, and utilizing cooling centers could help educate community members on how to recognize danger signs, and emergency messaging should be expanded to be accessible via various channels, including radio, streaming services, and mobile phones.

DESIGNING, CONSTRUCTING, AND RENOVATING BUILDINGS WITH COOLING TECHNIQUES WILL BE NECESSARY FOR THE FUTURE BUILT ENVIRONMENT.

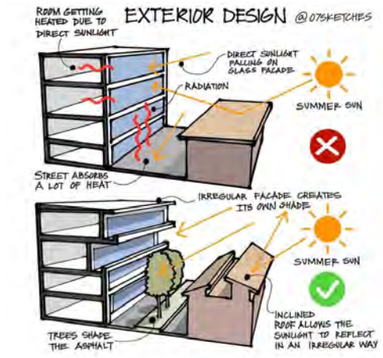
The most vulnerable communities are those residing in the UHI zone's deeper areas and are not near green spaces or a cooling center, especially those without access to central air conditioning. Increased heat exposure and poor air quality contribute to respiratory illnesses and heat-related health conditions.

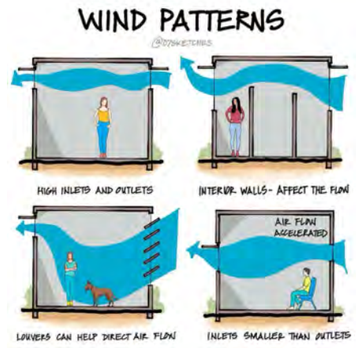
A critical trait of the UHI is hardscape, referring to the non-living, structural elements of landscape design. These are the permanent or semi-permanent features built from materials like stone, brick, concrete, rocks, or gravel. Common hardscape features are walkways and pathways, walls, patios, and outdoor seating. These non-porous surfaces create water runoff that carries untreated water back to Lake Mead, and during monsoon season heightens the urban flash flood risk.

Infrastructure must be reinforced with stronger building codes and regulations to further reduce UHI. Incorporating heat-mitigating designs and materials to provide cooling services like cool roofs and reflective pavements would reduce heat absorption. These efforts would lower indoor temperatures and decrease reliance on air conditioning, further reducing strain on local power grids. The City of Las Vegas can engage communities by increasing financial incentives for water-efficient appliances and irrigation systems. Also, by investing in emergency drought response plans to ensure equitable water distribution during crises.

Reducing stress on the power grid in times of peak energy use for air conditioning will require incorporating energy-efficient tools. Roofs affect insulation more than the average person may realize. New roofs can be designed using cool-roof technology. Cool roofs are light colored roofs that reflect more than 50% of solar radiation compared to traditional dark roofs, which reflect about 15-20%. New paints with colorants, or special pigments, reflect 30-60% infrared light. Cool-toned colors and glazes can be considered with multiple materials for roofs or pathways.

New and old building designs alike can alter their roof structure. Incorporating shade structures and overhangs





can help divert direct sunlight from the building. Irregular outcrops, facades, and inclinations will create shade and reduce the albedo (sunlight reflectivity) of buildings and pavement. Solar panels will also generate energy that would otherwise heat the building. Green roofs have become increasingly popular, which refers to the incorporation of vegetation, either from plant cover or gardens, that absorb and prevent heat from affecting the entire building, thus preserving insulation. Green roofs are covered in vegetation, which provides shading, reduces building energy use, cleans the air, and absorbs water to prevent flooding. Drought-tolerant vegetation would be highly recommended to avoid conflicts with water conservation mandates. When used, warm-weather turf should be chosen over cool weather turf.

To reduce overreliance on air conditioning and thus prevent strain on the electrical grid, building design can incorporate passive cooling techniques. Instead of directly generating cold air, passive cooling reduces the overall need for cooling by controlling how heat enters, moves through, and exits buildings. Passive cooling works through three key mechanisms: heat control (blocking heat before it enters), heat reduction (cooling the surrounding environment), and heat removal (releasing built-up heat). Louvres, thermal chimneys, or windcatchers are part of the construction of the building and require minimal upkeep once constructed.

Increasing the albedo on pavement and hardscape by incorporating reflective pavement technology may be a consideration, and has been put into practice in cities such as Phoenix and Los Angeles. Light-colored pavements have a naturally high albedo, especially when combined with material aggregates or coatings. Applying a coating to streets in areas with high urban heat will reflect excess heat away from cities. The coating also extends the life of pavements, absorbs some emissions, and reduces pollutants. Treated roads in Raleigh, Virginia showed a 37% reduction in a common roadway pollutant. Additionally, carbon-sequestering concrete has a relatively high albedo, and through the process of integrating CO2 into new concrete, concrete can be carbon neutral or even carbon negative.

Shade must also be incorporated with native drought-resistant trees, as discussed in the City of Las Vegas Urban Forestry Management Plan. However, in areas with high pedestrian activity or transit usage, structural shade must also be considered as a viable solution for locations in which trees may be infeasible.

As part of new capital improvement planning, the City will examine ways to prioritize structural shade for pedestrians, bicyclists, and transit users, and to prevent prolonged heat exposure on appropriate urban corridors. Whether solar covered, fabric based, or framed with other appropriate materials, structures should be used strategically to shade paved surfaces, which will minimize sun andheat exposure to trail users, pedestrians, and bicyclists, making commutes with alternative transportation methods more viable. Identifying bus stops that need additional shade or improvements can be made. Incorporation of shaded rest areas near hydration stations for comprehensive heat mitigation will also take place.

IMPLEMENTATION STRATEGIES

- Recognize that drinking water is a necessity, ensuring all hydration stations within the urban heat island provide potable water, have sufficient flow, and are publicly accessible.
  - Promote more public access to drinking water in policies and/or strategies but avoid setting non-flexible obligations.
    - » Prioritize public access over private installations, e.g., “water ATMs.”
  - Ensure free access to drinking water with consistent maintenance of pre-existing water fountains in parks and public facilities. When possible, install hydration stations for filling reusable containers.
  - Provide drinking water access in public parks, transit hubs, plazas, and public buildings, treating each as essential for health in project design and capital programs.
    - » Provide additional hydration stations along trails to encourage non-motorized commuting.
    - » Provide chilled water where feasible.
    - » Compile and provide public maps for easy hydration station locations.
    - » Plan for long-term maintenance of hydration stations because they are vulnerable to vandalism.
    - » Consider financial responsibilities and coordination needs with utilities.
    - » Ensure all stations provide potable water with safe temperatures, have sufficient flow, and are publicly accessible.
- Develop new and expand access to existing cooling centers to protect vulnerable populations from the impacts of extreme heat.
  - Develop an interlocal agreement with Clark County, the Southern Nevada Health District, the National Weather Service, and other municipalities, to create a regional heat office.
  - Expand public awareness campaigns to inform community members about heat risks, prevention strategies, and resources to emphasize the importance of hydration, recognizing heat-related illness symptoms, and utilizing cooling centers.
  - Create a funding pathway and identify clear triggers for opening cooling centers.
  - Coordinate public transportation schedules to ensure frequent stops to/within a reasonable distance of cooling centers.
  - Consider accessible infrastructure and staff to manage sites and address the needs of visitors as essential elements of cooling spaces.
  - Focus on converting existing staffed facilities into cooling spaces rather than public unstaffed cooling spaces to minimize the chance of essential resources being cut off due to vandalism, etc.
    - » Address challenges posed by excessive use and vandalism that often result in facilities (like restrooms) being locked, which counterproductively removes cooling access during heat events.
    - » Incorporate research (e.g., Desert Research Institute [DRI], Regional Transportation Commission [RTC], etc.) to guide cooling site-locations and design.
    - » Partner with local agencies to educate community members on the negative health impacts of urban heat islands.
    - » Use multimedia to avoid warning fatigue and illustrate the difference between typical climate, physiological warning signs, and emergency broadcasts.
    - » Prepare current city facilities to be cooling centers.
    - » In addition to pools and aquatic centers, designate other recreational cooling spaces, such as splash pads/water spray parks.
  - Expand in-home heat safety support for low-income seniors, people with disabilities, and homebound individuals.
    - » In addition to helping at-risk individuals access residential cooling, in-home heat safety can be supported via service providers and community-based organizations.

IMPLEMENTATION STRATEGIES

  - Work with other states and local partners to find additional pathways for procuring affordable in-home cooling resources for those who need it most.
- Prepare for long-term, seasonal hazards such as extreme heat by investing in cooling infrastructure and developing urban design standards that mitigate the urban heat island effect.
  - Amend applicable development codes in LVMC Titles 16 or 19, using carefully worded planning language to support and accelerate the use of cool building practices among developers.
    - » Include provisions promoting energy conservation through the integration of passive heating and cooling principles, insulation, energy-efficient windows, use of environmentally certified materials, and other techniques to improve energy efficiency in the design of new and existing homes and buildings.
  - Incorporate structural shade into new and pre-existing public spaces to minimize sun/heat exposure to trail users, pedestrians, and bicyclists, making commutes with alternative transportation methods more viable.
  - Address split-incentive barriers in weatherization programs that leave many low-income renters unserved when designing heat-mitigation initiatives.
  - Implement a hybrid incentive structure with baseline requirements (e.g., sustainability points) paired with incentives for exceeding them, such as density bonuses or landscaping swaps to incentivize developers to utilize cool building practices as stated in master planning language.
  - Prioritize the use of incentives for net-zero development.
  - Develop design standards to reduce the impacts of heat islands, especially in older parts of the city.

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PARTNERS 5-8

OUTCOMES 5-10

STRATEGIC ACTION PLANS 5-18

GOVERNANCE 5-20

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05. IMPLEMENTATION

The preceding chapters of this Master Plan describe existing conditions, establish outcomes for the future, and identify key actions and strategies that will aid the City in achieving outcomes over the next thirty years. To accomplish this, the plan must be executed in a thoughtful and deliberate way using a variety of tools, linking the plan to policy, making careful and transparent budget decisions, and incorporating partners internally and across the Southern Nevada region.

This plan serves as the policy guide for moving Las Vegas forward, guiding decisions about future physical and economic development. However, it is more than a plan of the City's Planning Department; maps to guide development decisions and establish a general plan for future land use are just one component of this plan's implementation. This Master Plan is the City's plan, and contains implementation strategies that also cover resource conservation, historic preservation, housing, public facilities and services, parks and recreation, public safety, transportation, and urban agriculture, as well as other publically identified focus areas like economic development, education, and homelessness. Transforming the plan's goals into reality will require a long-term commitment and political consensus. The plan is designed to be a road map for action, incorporating strategies, specific projects, and programs that will achieve the desired results.

This chapter synthesizes the many recommendations within this plan and identifies the actions and timing needed to transform the plan's vision into reality. Furthermore, the plan also describes a method for evaluating its progress and to determine how successful efforts have been over the course of time. By 2050, the future City Council should review how the City was shaped over the previous three decades. This plan anticipates that it will meet its vision, and that thirty years from now:

THE CITY OF LAS VEGAS IS A LEADER IN RESILIENT, HEALTHY CITIES - IT LEVERAGED THE PIONEERING INNOVATIVE SPIRIT OF ITS RESIDENTS TO PROVIDE EQUITABLE ACCESS TO SERVICES, EDUCATION, AND JOBS IN THE NEW ECONOMY.

TENETS OF SUCCESSFUL PLAN IMPLEMENTATION

How will this Master Plan translate to success, given the diversity and complexity of the many opportunities and challenges the City faces? There are a number of basic tenets for successful plan implementation, which either alone or taken together, will contribute to achieving the goal and accomplishing the outcomes.

CITYWIDE COMMITMENT

Successful plan implementation will be directly related to a committed city leadership. While elected and appointed officials will have a strong leadership role, many others - city department directors, staff, and leaders from the community's many institutions and organizations - are also instrumental in supporting the plan and effectuating it. However, commitment reaches beyond just these individuals and includes an array of partners and stakeholders. The input received through the plan's development process provided a foundation to help achieve the city's vision.

During the course of this plan, the people that make up the City - including its residents, City Council members, the Planning Commission, the City Manager and executive leadership, and staff will change over time. So too will specific priorities of the Council, as well as management styles. Other factors, whether socio-economic, demographic, environmental, or technological, may alter the trajectory of specific decision making. Community support and involvement in the plan, its vision, and its outcomes, will transcend these changes that will inevitably take place.

LINKING THE PLAN WITH POLICY AND DECISION MAKING

At its heart, drafting and developing this plan is the first step of a larger political and budgetary process that's intrinsically rooted in policy development and governance. The plan is designed for routine use and should be consistently employed during any process affecting the community's future. Private investment decisions by developers, corporations, and land owners should consider the plan's direction as it is the guide for economic growth and stability of the community and supports the goals and objectives of the overall master plan. Because the plan enumerates specific outcomes for a wide range of topics, each with supportive Key Actions and Implementation Strategies, it can be used as a guide to weighing strengths, weaknessess, opportunities, and threats for the most appropriate decisions and course of action that will lead to the accomplishment of the desired outcome. This may include varying degress of specificity, consideration of different alternatives, and alignment of budget resources available with the anticipated benefits.

USE STRATEGIC ACTION PLANNING

This plan recognizes that not everything will be accomplished immediately. Many outcomes are long-term and will require years of consistent work to accomplish them. For this reason, incremental short-term work will be necessary. Strategic action plans will help facilitate the work of the City over the short-term. The plan's longevity will also provide a resource to adapt longer term policy changes and make appropriate, guided choices for successful implementation over time.

MAKE THOUGHTFUL, STRATEGIC USE OF TOOLS AND STRATEGIES

City officials and departments should apply the recommended tools toward the Key Actions and Implementation Strategies to help shape annual budgets, strategic action plans, and capital improvements. For example, the City's engineering practices can support implementation through infrastructure improvements, streets, and storm systems designed consistent with plan policies and recommendations. Each department, staff person, and elected official should find it a benefit to reference the plan when making decisions and setting priorities.

EVALUATION AND MONITORING

This plan has been developed with a degree of flexibility, allowing nimble responses to emerging conditions, challenges, and opportunities. To help ensure the plan stays fresh and useful, periodic reviews, evaluations, and amendments may be required. This will ensure plan goals and recommendations reflect changing community needs, expectations, and financial realities.

ROLES FOR IMPLEMENTATION

PLANNING COMMISSION ROLE

The Planning Commission is the steward and caretaker of the Master Plan, and oversees its preparation and adoption. It is a required undertaking that must be done to address each of the subjects within the preceding chapters. As an advisory commission appointed by the City Council, the Commission is empowered to hear and approve land use, zoning, and subdivision changes, amendments to the general plan, specific plans, and other policies pursuant to Title 19 of Las Vegas Municipal Code. In this role, the Planning Commission is uniquely situated to advise the City Council, developers, and the public of how the plan is to be implemented and the status of various outcomes.

CITY COUNCIL ROLE

The City Council puts the Master Plan into effect. Some of the recommended strategies for implementation contained within this Chapter may require specific action by the Council, such as setting policy, adopting ordinances, or utilizating any of the enabled powers granted under the City's Charter or Nevada Revised Statutes. It will also be closely engaged in each 2-year strategic plan, budgeting, and council priorities process.

STAFF ROLE

This plan is not just the Planning Department's plan – it's every department's plan. Because the plan's horizon spans three decades, it's important the City's staff, from department directors to front-line staff, understand their respective roles and relationship to it as part of regular City government. Before the plan is implemented, basic training on the plan's contents must be distributed, as well as during regular cycles prior to the City's budget and two-year plans. In addition, new employees should be oriented with the plan's contents, its purpose and functions, and how it can be a tool to address an issue and reach an outcome.

Employees within each of the City's departments are likely to play the most direct roles of plan implementation. Under the direction of the City Manager and Department Directors, specific projects, programs, policies, or partnerships are likely to be carried out at various levels and capacities. Many of these may be legacy functions that the City is already engaged in, but others may require further direction, development, and implementation from staff members.

It is important that throughout the plan's implementation, City staff has empowered leaders that understand specific issues and how they impact specific departments, agencies, or parts of the community. As such, an internal staff-level interdepartmental master plan implementation team should be formed and empowered to lead specific implementation activities or projects in a way that has a direct nexus with the plan itself, and the City's adopted Strategic Action Plan. These staff members must also be prepared for succession and have the ability to work together over time to advance the plan is such a way that multiple people are trained for issues in which longevity may be factor.



TOOLS

Tools to implement the Master Plan generally fall into five categories that align with Key Action identified throughout the plan and ultimately help achieve desired outcomes, provided that they are performed equitably and efficiently:

1. City policies and regulations
2. Capital improvements
3. Partnerships and Collaboration
4. Programs and Service Delivery
5. Legislative changes

Each tool has a different purpose toward plan implementation and may suggest specific immediate changes and others involve ongoing activities. Some tools are preparatory or anticipatory in nature and are foundational steps that the City can take to assess needs and trends, identify and make policy changes, or strengthen collaboration with other regional stakeholders. Other tools may require additional enabling legislation, policy changes, or the complete development of a new concept.

1. CITY POLICIES AND REGULATIONS

One of the primary tools for Plan implementation is zoning, which is included under LVMC Title 19, the Unified Development Code. The city also has several other codes and ordinances to ensure that activities remain compatible with the surrounding area, such as noise, blight and nuisance ordinances.

THE GENERAL PLAN AND ZONING REGULATIONS

The 2050 General Plan Zoning regulations control the intensity and arrangement of land development through standards on lot size or units per acre, setbacks from property lines, building dimensions and similar minimum requirements. Subdivision regulations control the manner in which property is subdivided in the city and the public improvements required to support the development. Various site design elements discussed in this plan are also regulated in Title 19 and address landscaping, lighting, driveways, parking and circulation, pedestrian systems and signs.

Over time, changes to the zoning map should become more consistent with the land use pattern identified on the Place Type Framework Map and future General Plan amendments. In some cases, the city may wish to initiate certain rezonings as part of an overall zoning map amendment. Other changes to the zoning map can be made in response to requests by landowners or developers. In those cases, city officials will need to determine if the time is proper for a change. It is important that the Place Type Framework be understood as a long-range blueprint: Implementation is expected, but gradually in response to needs, conditions and availability of infrastructure. The Zoning Plan section of Chapter 2: Land Use, outlines how the Place Type Framework relates to current zoning.

A phased approach is recommended to implement the land use plan in which the City makes General Plan Amendement changes for entire Areas of the City in a timed and prioritized manner. As the phased area approach takes place, opportunity or catalytic sites identified in this plan or by the City's departments are formally designated for which applicants would enter into a development agreement.

To manage the cycle of general plan amendments, future development applications and approvals should conform with the plan's vision or with the Area plan for that location within the City. Projects that align with the plan's vision, the 2050 General Plan, and zoning could receive an expedited review and priority to change or approval, but for those that don't, the applicant would be subject to additional scrutiny.

LAS VEGAS MUNICIPAL CODE

The powers granted to City Council by the City Charter or enabled through NRS describe a wide range of implementable actions the City may take, ranging from animal control to zoning. When a recommendation from the plan requires a change in policy, Council action by ordinances for Las Vegas Municipal Code is the City's direct regulatory mechanism, either by way of amendments to existing code, or through the creation of new laws.

Incentives and Requirements- Linked directly with zoning regulations, municipal code, and policies are incentives and requirements to move the needle of development or to achieve a desired product, outcome, or market response. With a "carrot and stick" approach, the City is enabled to use these typically for economic or land development purposes. Some of these, as discussed in Chapters 2 and 3 include:

- Tax Increment Financing (TIF)
- Direct grants
- Expedited permitting
- Fee waivers
- Development bonuses

Finally, specific requirements may be imposed or conditioned for the purposes of implementing the plan.

- Discretionary Developer Impact fees
- Exactions
- Conditional use or purpose requirements, such as for open space, affordable housing, building types, architecture, signage, parking, or other useful features

Enforcement- As a means of lawfully implementing the plan, the City has the power to directly ensure the plan and corresponding statutes of NRS, the City's laws and codes, or other implementation actions are put into effect. This is done to attain a desired course of action, ensure compliance with the State, City Council's intent, or to ensure the protection of public health, safety, and general welfare. Enforcement may be in the form of:

- Direct enforcement of the City's laws and codes by LVMPD, the Las Vegas City Marshals, or the City's Code Enforcement/license compliance divisions.
- Enforcement of the Building Code, Fire Code, Zoning Code, or other regulatory codes intended to protect health and safety.
- Ensuring licensed businesses of the City adhere to adopted operating regulations
- Compliance with environmental regulations

Enforcement may also extend to denials by City Council or from the City itself, license or permit revocation, civil penalties, or other fines and penalties.

POLICIES AND POLICY STATEMENTS

Both the City Council and City Manager can express or set policy. The City Council sometimes establishes policies through resolution. While sometime non-binding, resolutions express the intent of City Council and give direction to the City Manager and staff on how an action should be implemented. This Master Plan similarly contains such expressions of policy.

The City Manager also sets and keeps policies, rules, and procedures, as do each of the departments of the City. From a management perspective, this allows the City to specify how Council actions, plan recommendations, or other matters under the purview of the City are to be specifically handled. The City Manager and the City's Departments, will keep, maintain and update all of the policies and policy statements of the City and when applicable, do so in coordination with the Master Plan.

AREA PLANS, SUB-PLANS, INVENTORIES, ASSESSMENTS, AND SURVEYS

When specific planning requires more detail and information, the City may elect to conduct additional sub-plans, inventories, assessments, or surveys to gain community input, determine conditions, test hypotheses, or validate assumptions. These studies, whether previously adopted, currently ongoing, or done in the future, should be conducted with the Master Plan as an overall guide, but also give specificity to subject matter. Examples include:

- Vision 2045 Downtown Masterplan and other subplans for each Area of the City, as recommended in Chapter 2
- Sewer Collection Master Plan
- Parks System plan
- Mobility Master Plan
- Infrastructure, transportation, or traffic studies, such as corridor analyses

TOOLKIT DEVELOPMENT

Finally, if any portion of the plan lacks specific details or requires a compendium of strategies to help implement the plan or achieve a desired outcome, the identified department may elect to develop or refine a toolkit that is consistent with the plan's recommendations. Chapters 2 and 3 describe different toolkits for various types of land, housing, and economic development tools; these may need further refinement or departmental action, then developed into a formal policy, program, regulation or incentive.

2. CAPITAL IMPROVEMENTS

The Capital Improvement Plan (CIP) serves as the city's multi-year planning instrument used to identify needs and financing sources for public infrastructure improvements. The City of Las Vegas's CIP will recommended capital projects, timing, estimated costs and funding for public infrastructure (streets, bikeways, sidewalks, sanitary sewers, waterlines, storm sewers and drainage) and community facilities (public buildings, fire, police and parks). Capital projects identified help support and promote desired development, and to meet the needs of residents and businesses in the city. The number of projects and project timing are influenced by several factors, in particular, the cost, need for environmental clearance or approval by other agencies, and funds available.

The CIP process precedes the budget process and is used by City Council when developing the annual budget. Recommending approval of the CIP by the Council does not mean that they grant final approval of all projects contained within the plan. Rather by recommending approval of the CIP, the Council acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the community and that projects contained in the first year of the plan are suitable for inclusion in the upcoming budget, if funding is available.

PUBLIC INFRASTRUCTURE STANDARDS

Public infrastructure refers to the basic facilities and services needed for the functioning of the city such as city streets, water, sanitary sewer, storm sewer, among others. Standards to ensure consistency and uniformity have been adopted so that each facility is designed and constructed to support existing and future development.

PROPERTY ACQUISITION

Like all municipalities, the City of Las Vegas has the authority to acquire private property for a public purpose. This may include outright purchase acceptance of land donated by another party or acquisition through eminent domain. In addition to the ability to acquire private property for public infrastructure or facilities such as roads, sewers, public buildings and parks, the city may acquire private property to facilitate redevelopment and to eliminate nonconforming uses or structures.

3. PARTNERSHIPS AND COLLABORATION

To implement the Master Plan, the City must forge an array of partnerships with the public and private sector. As detailed further in Section II of this chapter, cooperation through alliances and partnerships will be necessary for the benefit of both the City and those in the region. Partnerships and collaboration can be both formal or informal and take the form of working directly with other organizations on planning, education, funding, or delivery of cost-efficient services and programs.

INTERLOCALS AND COOPERATIVE AGREEMENTS

The City can organize groups of agencies to partner with to achieve either local or community-wide outcomes. This is an important effort because many of the recommendations from the Master Plan may have an impact on other parts of the region.

Under NRS 277, cooperative agreements can be formed between multiple municipalities and political subdivisions of the state. Typically, such an agreement is made for the performance of government functions, infrastructure, or other public purposes. They can also be used to finance public facilities. Similarly, interlocal agreements can be formed to assist with supplementing or consolidating services or for the joint exercise of powers. These agreements have the benefit of maximizing the efficiency of the signatory organizations to help implement the plan.

EDUCATION AND OUTREACH

The City and its Office of Communications do a wide range of award winning educational and outreach activities for the public businesses, including print media, social media, media and press information, and programming through the City's television station KCLV Channel 2. This can be in the form of community events, information campaigns, direct marketing, or work with the local media. Should information need to be communicated as part of implementing the plan, developing strategic messaging campaigns must be carefully crafted to meet the intent of carrying out the action and raising awareness with the intended audience.

4. PROGRAM AND SERVICE DELIVERY

Providing specific programs and service delivery is another core feature of plan implementation. Carrying out existing City programs or developing new ones will be required over the next thirty years, provided that they are authorized from the Plan itself, a strategic action plan, through the City Manager, a state or Federal grant, or Nevada Revised Statutes (NRS).

Some of the plan's recommendations may be funded locally, through outside funds, or through a combination of sources. The City monitors new federal and state funding programs that may be available to assist in implementation. In addition, foundations and other organizations may provide contributions.

A variety of housing, economic development, informational and other programs may be used by the City to assist with implementation of recommendations in this Plan. Transportation and Housing projects, and those funded through a pass-through organization from a Federal agency can direct specific funding toward a Key Action.

5. LEGISLATIVE CHANGES

The City's Government Affairs team has been effective at collaborating and working with state and Federal legislators to make necessary changes for the benefit of the City. Over the years, it has had a number of successes, including the creation and implementation of SNPLMA, the creation of the Tule Springs National Monument, advocacy to stop the proposed Yucca Mountain nuclear waste repository, and obtaining funds for numerous Federally funded infrastructure projects. However, because the state and Federal policy landscape is complex and ever-changing, it is vitally important that the City Council be aware of necessary legislative activity that could be an opportunity or a threat to the City. Government Affairs can be an ally and resource for the City and its departments in this respect.

Nevada is a "Dillon's Rule" state, meaning a municipality is granted only those powers expressly authorized by the Nevada Legislature. Only the provisions contained within NRS or to the City's Charter, can be used to legislatively implement the plan. Limited functional home-rule is provided to address matters of local concern, however, its provisions provide a narrow and do not allow for broader changes, such as the imposition or increase of new revenue sources, fees, or taxes. As a result, the City may need to advocate, in partnership with other local governments, for specific changes and requests when the Legislature convenes in Carson City. Prior to those changes occurring, the City must self-assess during legislative interims and determine what changes or resources are needed, as that may be necessary for successful plan implementation.

Finally, the City must work with its Congressional delegation on Federal policy. Many of the "alphabet" Federal agencies that impact the City and state, including BLM, HUD, or DOT require a close coordination for changes in Federal policy, as well as for grants, appropriations, and rulemaking.

11 PARTNERS

This master plan is for the entire city – not just for government operations or individual departments, but for the entire community at large. While the City can coordinate many of the plan's implementation tasks, responsibility should not solely rest on the government. Instead, the vast array of stakeholders having key roles in either the City or region should all participate. Partnerships with the public and private sector, including CCSD, Clark County, Chamber of Commerce, SNWA, RTC, regional recreation and tourism organizations, neighboring municipalities, local businesses, and large land owners will also lead to success implementing the plan's initiatives. Partnerships may range from sharing information to funding and shared promotions or services. The spirit of cooperation through alliances and partnerships will be sustained to benefit everyone in the region. City government cannot and should not do it all. Only through public/private collaboration can the plan's vision be realized. Below are the partners that have been identified as likely participants or leaders for each goal area from each of the preceding chapters. As the City is currently structured, there are several groups of important departments that can naturally facilitate plan implementation:

- Mayor and City Council: The City Council is the Legislative Department of the City and is empowered by the City Charter to develop regulations and laws by ordinance, programs and policies, capital projects, and support partners by interlocal and resolution. Directly supporting the Council is the City Manager, City Attorney, and City Auditor – the three direct reporting staff that work independently and collaboratively on behalf of the Council.

- City Manager: As part of the Council-Manager system, the City Manager serves as the Chief Administrative Officer of the City and heads the Executive department. The City Manager oversees the efficient and proper administration of the City's affairs, provides information on the state of matters affecting the City, submits the annual budget, advises the Council on the adoption of measures, and ensures general laws and ordinances are carried out. Other officers manage and oversee the operations of three or four departments for each of the core structural components of the City.

  — Community and Development Services: the development services functions are made up of the Building and Safety, Public Works, and Planning Departments. Each serve to provide streamlined services for projects, including entitlements, permitting, inspections, and business licensing

  — Operations and Development: Parks and Recreation and Economic and Urban Development provide direct services to the public, including active recreation and aquatics, special events, business development and redevelopment, and parking. Operations and Maintenance directly maintains the City parks, buildings, and facilities.

  — Community Services: Each of the community services departments provide public facing services. The Office of Community Services provides direct affordable housing, revitalization, and homelessness services, while Youth Development and Social Innovation coordinates and provides educational programming. Cultural Affairs provides public art and events.

  — Public Safety Services: Including Fire and Rescue, Public Safety and Marshals, and supported by Emergency Management, these departments ensure crime rates are low and emergencies are adequately responded to. The Municipal Court, the independent Judicial Department of the City, ensures equitable justice and includes collaboration between law enforcement and the City's attorneys.

  — Internal Services: Consisting of the City Clerk, Finance, Human Resources, and Information Technologies Departments, these departments provide operational support and accounting for the City and its employees

In some cases, more than one partner may be a lead collaborator, which may be the result of varying issues embedded in each goal. In others, there may be an opportunity for a lead City department that jointly works with a regional stakeholder, or must convene in the future to resolve issues. While this is not an exhaustive breakdown, and while other partner entities can (and should) work together to achieve goals and outcomes through the implementation of key actions, this framework provides a guide for which entity, department, or agency takes the lead.

	CHAPTER 2: LAND USE AND ENVIRONMENT									CHAPTER 3: ECONOMY AND WORKFORCE						CHAPTER 4: SYSTEMS AND SERVICES												
Partner Entities, CLV Departments, and Agencies **Goals**	Land Use	Historic Preservation	Environment	Natural Features	Urban Forestry	Parks	Park Connectivity	Urban Agriculture	Environmental Justice	Equitable Education	School Facilities	Economic and Workforce Development	Redevelopment	Public Finance	Housing	Homelessness	Complete Streets	Transit	Smart Systems	Water	Energy	Waste	GHG Emissions	Public Facilities	Public Health and Social Services	Public Safety	Hazards - Heat Mitigation	Flooding	Implementation
General Public	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	X
Private Sector / Business community	x	x			x				x			x	x	x	x		x	x		x	x	x						X
Chambers of Commerce										x	x	x	x	x														o
Homebuilders and Developers	x				x	x	x		x		x	x	x	x	x	x				x	x						x	x	X
Mayor & City Council														x													x		X
City Manager														x													x		X
Building & Safety	x	x												x						x	x			x			x		o
City Attorney														x												x			X
City Auditor														x															o
City Clerk																													X
Communications		x																								x	x	x	X
Community Services															x	x								x	x				o
Cultural Affairs		x																						x					o
Economic and Urban Development												x	x		x										x				o
Finance														x							x	x		x		x			X
Fire and Rescue																								x	x	x	x		o
Human Resources														x															o
Information Technologies																			x					x					o
Government and Community Affairs										x																			X
Municipal Court																								x		x			o
Operations and Maintenance		x		x	x										x	x				x	x			x			x	x	o
Parks and Recreation				x		x	x	x																x					o
Planning	x	x	x	x	x	x	x	x	x		x		x		x	x	x			x	x	x	x	x	x		x	x	X
Public Safety															x									x	x	x	x		o
Public Works	x	x	x	x	x	x	x		x		x								x	x				x				x	o
Youth Development & Social Innovation										x	x																		o
Clark County (Depts / agencies)	x		x																				x		x				o
CCSD	x							x		x	x																		o
SNWA / LVVWD	x														x					x									o
NV Energy / SW Gas	x								x												x		x						o
Telecommunications	x																		x										o
Republic Services																						x	x						o
State of Nevada (Depts / agencies)		x	x	x	x	x	x	x	x											x	x		x						o
LVGEA										x		x	x																o
Federal agencies	x								x											x									o
NSHE								x		x		x	x										x						o
RTC	x						x		x		x						x	x	x				x						o
CCRFCD	x																										x	x	o
SNHD			x		x				x								x					x			x				o
SNRHA															x	x													o
LVMPD																											x	x	o

OUTCOMES AND PLAN EVALUATION

Prior to development of the City’s Master Plan, the City participated in the STAR Communities program, an effort that provided a comprehensive tracking and rating system for a wide range of sustainability metrics. The City achieved a 4-STAR rating in 2015. The City’s intent was to utilize the program to conduct a baseline assessment. A recertification effort began concurrently as the Master Plan began development; at about that time, the US Green Building Council and STAR Communities merged to form the LEED for Cities and Communities program which incorporated many of the elements from STAR into the LEED rating system. The data-driven, performance-based platform provided the City a way to incorporate many of the metrics from the system as outcomes for each goal of this master plan.

Each goal has reasonable measurable outcomes. It is the intent of this plan to not only utilize specific, consensus outcomes developed by STAR and LEED that are tailored to the City, but to also closely align with the goals, objectives, and strategies outlined within the Southern Nevada Strong Regional Plan.

In order for the plan’s progress to be assessed throughout this plan’s thirty year horizon, an evaluation process is recommended. Evaluation criteria enables a real judgment of planning effectiveness and can measure and provide information on how well the plan is performing. Based on this premise, assessments and evaluations of plans are prudent and necessary:

- After development of the Plan, the City must understand how well it is working, whether outcomes are being met and goals are being achieved and answer to each: why or why not? Knowing which strategies have made an impact toward the desired outcome and which goals were achieved can help shape future planning and decision-making. City officials and members of the public must know whether it is being followed.
- If there are deviations from the plan, or outcomes that perform lesser than expected or anticipated, what happens? Even though this plan is not absolute and shifts and deviations may occur, reasonable degrees of flexibility can be established; a plan too rigid may be too difficult to implement. Good plans take into account a certain degree of evolution in standards on which it was originally based, especially since assumptions change and errors in projections can occur.
- Since conditions may change, periodic updates are recommended to be made—but not at the cost of radically changing goals or to see how the plan as originally adopted performed. If an update is needed, goals that don’t perform as well can be examined and, if ncecessary, undergo adjustment.

Contained within the plan are “Fifty by ‘50” – the most important outcomes within this plan that the City looks to measure. These outcomes are largely the basis for determining achievement of the plan’s goals. For transparent communication of the plan’s outcomes and performance, the City will publish a prepared annual report submitted jointly to the Planning Commission and City Council, pursuant to NRS 278.190. This report, jointly developed by the City Manager’s Office / Strategic Services and Planning Department, with input from other Departments, will be reviewed by the Citizens Advisory Committee to evaluate and discuss annual progress and implementation of the plan, progress of the “Fifty by ‘50” outcomes and others highlighted for each goal, recommendations for plan improvement, CIP requests, and overall progress on goal achievement. The annual report will also be made available for public review on the City’s website and will be an initial step in a coordinated process of developing City Council priorities, a two-year Strategic Action Plan (when needed), the Mayor’s State of the City address, the annual budget, and the CIP.

CHAPTER 2: LAND USE AND ENVIRONMENT		
I.B	Land Use	The percentage of all development that occurs within this plan’s Regional Centers, Mixed-Use Centers, Corridor Mixed-Use, or Neighborhood Center Mixed-Use place types increases over time.
I.C	Historic Preservation	1 local historic district per 100,000 residents
II. B	Environment	The number of endangered species identified by the Clark County MSHCP is reduced
II. C	Urban Forestry	Plant and maintain 60,000 diverse and high quality native and adaptive trees on public and private property by 2050.
II. C	Urban Forestry	The City’s tree canopy increases to 20% by 2035 and 25% by 2050 utilizing native and adaptive drought tolerant tree species.
II. D	Parks	The City will provide 7 acres of parkland / 1,000 (by 2050)
II. E	Park Connectivity	85% of housing units are within ½ mile of public parks (by 2050)
II. F	Food & Urban Agriculture	No food deserts exist in the City by 2050.
II. F	Food & Urban Agriculture	The percentage of residents within ¼ mile of a food hub, healthy food retail outlet, or grocery store increases over time
II. G	Environmental Justice	By 2050, no brownfields are found within the City.
II. G	Environmental Justice	The annual number of days in which the Air Quality Index (AQI) exceeds 100 decreases over time
III	Planning Areas	With community support, adopt a specific plan for each area of the city.
CHAPTER 3: ECONOMY AND WORKFORCE		
I. A	Equitable Education	95% of adult population has attained a high school diploma by 2050.
I. A	Equitable Education	90% 4-year cohort high school graduation rate for all public schools in the City from each race/ ethnicity, special education, ELL students, and low-income subgroup of students (2050)
I. B	School Sites	No school within the City of Las Vegas will be greater than 125% of its designed capacity by 2025, and no school will be greater than 110% of its designed capacity by 2030.
II. A	Economic Development	The number of businesses and the total employment related to each targeted industry sectors as identified in the Comprehensive Economic Development Strategy increases over time
II. A	Economic Development	Local and regional econonmic and business indicators improve, maintain positive trends or increases over time
II. A	Economic Development	The City’s unemployment rate maintains a negative trend over time and is less than or equal to the national unemployment rate
II. A	Economic Development	Equity indicators improve over time:
II. A	Economic Development	Wages and personal econonmic indicators improve, maintain positive trends, or increase over time
II. B	Redevelopment	By 2050, all assessed blighted and deteriorating areas within RDA-1, RDA-2, and other designated infill or redevelopment areas will have been successfully ameliorated
II. C	Public Finance	Maintain a fiscal reserve of at least 20% of operating costs with sufficient ending cash balances of 10% or prior year’s expenditures for operations, 20% for benefits, and 25% for capital projects
II. C	Public Finance	Develop at least one new consensus-based revenue stream
III. A	Housing	80% of City residents spend less than 45% of AMI on housing and transportation costs combined by 2050
III. A	Housing	Beginning in 2021, the City and SNRHA develop affordable housing produced at a rate of 5% annually
III. A	Housing	33% of total housing available is affordable housing, divided into affordability rates at 80% AMI, 50% AMI, and 30% and below AMI

III. B	Homelessness	The total unsheltered homeless population is reduced 50% by 2035, with functional-zero homelessness by 2050
III. B	Homelessness	The percentage of total residents and household living below the poverty line decreases by 25% by 2030 and those extremely low income households living at 30% of AMI decreases 50% by 2030
CHAPTER 4: SYSTEMS AND SERVICES		
I. A	Complete Streets	By 2050, the mode split for Drive Alone is 40%, 20% for transit, and 5% for Walking and Biking.
I. A	Complete Streets	By 2050, the Jobs-Housing balance index is 1.25.
I. A	Complete Streets	By 2050, the number of pedestrian, bicyclist, and vehicular fatalities caused by road crashes is zero.
I. B	Transit	75% of the region's residents are within a 1/2 mile of bus service, and 100% of the region will have access to some type of public transportation service by 2050.
I. B	Transit	By 2050, the population density along high capacity transit routes is at least 30 dwelling units per acre for BRT routes and 40 dwelling units per acre for LRT routes.
I. C	Smart Systems	Citywide implementation of a fiber-optic network for IoT devices by 2050
II. A	Water	Community water consumption will be reduced to 105 GPCD by 2035 and 90 GPCD by 2050, consistent with SNWA's Water Resource Plan
II. A	Water	LVVWD incurs no violation of Safe Drinking Water Act/EPA drinking water rules for chemical and microbial contaminants and turbidity
II. A	Water	The City remains in compliance with its NPDES permit with no violations of Clean Water Act effluent and reporting guidelines for all treated wastewater
II. B	Energy	80% of region's energy consumption at residential and commercial buildings is reduced through energy efficiency measures by 2050
II. B	Energy	50% of both municipal and community energy supply is from renewable sources by 2030, consistent with the Nevada RPS; and 100% by 2050
II. C	Waste	80% of the region's waste disposed of by landfill is reduced by 2050 and a recycling rate of at least 40% is achieved
II. D	GHG Emissions	28% of community greenhouse gas emissions are reduced by 2025 and 80% of community greenhouse gas emissions are reduced by 2050 from all major sectors
III. A	Public Facilities	To provide equitable access to all public buildings, facilities, and services, ensure that by 2050, 75% of residents live within 2 miles of a recreation or community center, library, or cultural center.
III. B	Public Health	By 2030, the City increases the number of hospital beds to 25 beds per 10,000 residents and maintains the number of ICU beds above 4 per 10,000 residents
III. B	Public Health	By 2030, the region increases the number of physicians to above 400 per 100,000 residents
III. B	Public Health	Personal health indicator trends improve over time
IV. A	Public Safety	Maintain Fire and Rescue Department's ISO Class 1 rating and CFAI accreditations.
IV. A	Public Safety	LVMPD maintains a ratio of 2 officers per 1,000 residents or better.
IV. A	Public Safety	Overall violent crime rates improve to a minimum of 5.5 homicides, 400 aggravated assaults, 70 forcible rapes, and 2,500 property crimes per 100,000 residents annually.
IV. B	Hazards	By 2050, no homes or critical infrastructure are located in high-risk hazard prone areas, unless appropriate mitigation, prevention, or adaptation measures are taken.
IV. C	Flooding	By 2050, no residences, businesses, or critical infrastructure are located within flood zones

OUTCOMES BY CHAPTER SUMMARY

✓ Indicates a Fifty by '50 outcome (pages 5-11 and 5-12)

CHAPTER 2: LAND USE AND ENVIRONMENT			FIFTY BY '50
I.B	Land Use	Each TOD placetype achieves a minimum score of 70 using the EPA's Smart Location Calculator by 2050	
I.B	Land Use	The percentage of all development that occurs within this plan's Regional Centers, Mixed-Use Centers, Corridor Mixed-Use, or Neighborhood Center Mixed-Use place types increases over time.	✓
I.B	Land Use	Total Index Score of 60 or greater on the Livability Index	
I.C	Historic Preservation	1 local historic district per 100,000 residents	✓
I.C	Historic Preservation	Increase of eligible historic landmarks by 20% by 2050	
I.C	Historic Preservation	The number of designated historic districts and neighborhoods increases	
I.C	Historic Preservation	The number of eligible structures and sites designated as local historic landmarks, added to local historic districts, and/or rehabilitated, restored, or converted through adaptive reuse increases annually	
I.C	Catalytic Sites	At least 60% of new residential and non-residential development occurs in designated placetypes, infill, and redevelopment areas by 2050	
II. B	Environment	The number of threatened species identified by the Clark County MSHCP is reduced	
II. B	Environment	The number of endangered species identified by the Clark County MSHCP is reduced	✓
II. B	Environment	No net loss of identified habitat areas of threatened or endangered species	
II. B	Environment	No net loss of identified wetlands or desert areas	
II. B	Environment	Identified natural areas and arroyos have been restored	
II. B	Environment	Existing and new identified invasive species have been eradicated or contained to prevent population growth and expansion	
II. C	Urban Forestry	Plant and maintain 60,000 diverse and high quality native and adaptive trees on public and private property by 2050.	✓
II. C	Urban Forestry	The City's tree canopy increases to 20% by 2035 and 25% by 2050 utilizing native and adaptive drought tolerant tree species.	✓
II. C	Urban Forestry	85% of the City's population lives within a 1/3 mile from green infrastructure features that provide localized cooling through park space, tree canopy cover, or vegetative surfaces.	
II. D	Parks	The City will provide 7 acres of parkland / 1,000 (by 2050)	✓
II. E	Park Connectivity	85% of housing units are within ½ mile of public parks (by 2050)	✓
II. E	Park Connectivity	90% of housing units are within 3 miles of trail (by 2050)	
II. F	Food & Urban Agriculture	At least one City-owned, operated, or leased community garden or urban agricultural site within each planning area by 2030.	
II. F	Food & Urban Agriculture	No food deserts exist in the City by 2050.	✓
II. F	Food & Urban Agriculture	The percentage of residents within ¼ mile of a food hub, healthy food retail outlet, or grocery store increases over time	✓
II. F	Food & Urban Agriculture	The percentage of residents that are food insecure and utilizing SNAP decreases over time	

CHAPTER 2: LAND USE AND ENVIRONMENT			FIFTY BY '50
II. F	Food & Urban Agriculture	The percentage of children, seniors, and other identified vulnerable population that are food insecure decreases over time	
II. G	Environmental Justice	Achieve attainment or maintenance status for all measured criteria pollutants	
II. G	Environmental Justice	For any non-attainment pollutants, a decrease in the annual concentration	
II. G	Environmental Justice	By 2050, no brownfields are found within the City.	✓
II. G	Environmental Justice	The annual number of days in which the Air Quality Index (AQI) exceeds 100 decreases over time	✓
II. G	Environmental Justice	For each identified planning area, priority environmental justice conditions, risks, and exposure are reduced	
III	Planning Areas	With community support, adopt a specific plan for each area of the city.	✓

CHAPTER 3: ECONOMY AND WORKFORCE			FIFTY BY '50
I. A	Equitable Education	95% post-secondary attainment including high-quality credentials and associate, bachelor and graduate/professional degrees by 2050	✓
I. A	Equitable Education	33% of adult population has attained at least a Bachelor's degree by 2030 and 40% by 2050	
I. A	Equitable Education	90% 4-year cohort high school graduation rate for all public schools in the City from each race/ethnicity, special education, ELL students, and low-income subgroup of students (2050)	✓
I. A	Equitable Education	Literacy and subject matter proficiency rates improve over time for elementary, middle and high school students.	
I. A	Equitable Education	CCSD graduation rates increase to 95% by 2050	
I. A	Equitable Education	All schools within the City will be rated three stars or higher on the Nevada School Performance Framework.	
I. A	Equitable Education	Per pupil funding rates are greater than the national average.	
I. B	School Sites	No school within the City of Las Vegas will be greater than 125% of its designed capacity by 2025, and no school will be greater than 110% of its designed capacity by 2030.	✓
I. B	School Sites	The City will work with CCSD to site, permit, and/or construct at least 18 new elementary schools, 3 new middle schools, and 3 new high schools as population increases and space by 2050.	
I. B	School Sites	Percentage of schools within City of Las Vegas meeting the State of Nevada class-size requirements will increase by 50%.	
II. A	Economic Development	The number of businesses and the total employment related to each targeted industry sectors as identified in the Comprehensive Economic Development Strategy increases over time	✓
II. A	Economic Development	Local and regional econonmic and business indicators improve, maintain positive trends or increases over time	✓

CHAPTER 3: ECONOMY AND WORKFORCE			FIFTY BY '50
II. A	Economic Development	The City's unemployment rate maintains a negative trend over time and is less than or equal to the national unemployment rate	✓
II. A	Economic Development	Equity indicators improve over time	✓
II. A	Economic Development	Wages and personal econonmic indicators improve, maintain positive trends, or increase over time	✓
II. B	Redevelopment	By 2050, all assessed blighted and deteriorating areas within RDA-1, RDA-2, and other designated infill or redevelopment areas will have been successfully ameliorated	✓
II. B	Redevelopment	Over time, an increase of the percentage of all new commercial, residential, mixed-use that occur within RDA-1, RDA-2, and other designated infill or redevelopment areas.	
II. B	Redevelopment	The RDA's tax increment increases over time	
II. C	Public Finance	Maintain a fiscal reserve of at least 20% of operating costs with sufficient ending cash balances of 10% or prior year's expenditures for operations, 20% for benefits, and 25% for capital projects	✓
II. C	Public Finance	Develop at least one new consensus-based revenue stream	✓
II. C	Public Finance	The per capita amount of competitive Federal grant awards to the City increase over time	
III. A	Housing Choices	The percentage of new residential development that occurs within this plan's Regional Centers, Mixed-Use Centers, Corridor Mixed-Use, or Neighborhood Center Mixed-Use place types increases over time.	
III. A	Housing Choices	80% of City residents spend less than 45% of AMI on housing and transportation costs combined by 2050	✓
III. A	Housing Choices	Beginning in 2021, the City and SNRHA develop affordable housing is produced at a rate of 5% annually	✓
III. A	Housing Choices	Beginning in 2023, and annually thereafter, there is no net loss of subsidized affordable units	
III. A	Housing Choices	33% of total housing available is affordable housing, divided into affordability rates at 80% AMI, 50% AMI, and 30% and below AMI	✓
III. B	Homelessness	The total unsheltered homeless population is reduced 50% by 2035, with functional-zero homelessness by 2050	✓
III. B	Homelessness	The percentage of total residents and households living below the poverty line decreases by 25% by 2030 and those extremely low income households living at 30% of AMI decreases 50% by 2030	✓
III. B	Homelessness	The number and percentage of families, women, youth, LGBTQ, and additional homeless subpopulations that are homeless or living below the poverty line decreases over time	
III. B	Homelessness	The total unit count of bridge, transitional, and rapid-rehousing unit types increases to meet or exceed demand	

CHAPTER 4: SYSTEMS AND SERVICES			FIFTY BY '50
I. A	Complete Streets	Beginning in 2025, vehicle miles traveled (VMT) within the City is reduced 0.5% annually.	
I. A	Complete Streets	By 2050, the mode split for Drive Alone is 40%, 20% for transit, and 5% for Walking and Biking.	✓
I. A	Complete Streets	By 2050, the Jobs-Housing balance index is 1.25.	✓
I. A	Complete Streets	By 2050, the number of pedestrian, bicyclist, and vehicular fatalities caused by road crashes is zero.	✓
I. A	Complete Streets	By 2050, 100% of identified sidewalks are PROWAG compliant, 70% of identified crosswalks are marked and if on street parking is present, have curb extensions.	
I. A	Complete Streets	Maintain a minimum "Silver" level Bicycle Friendly Community designation from the League of American Bicyclists.	
I. B	Transit	By 2050, the mode split is 20% for transit.	
I. B	Transit	75% of the region's residents are within a 1/2 mile of bus service, and 100% of the region will have access to some type of public transportation service by 2050.	✓
I. B	Transit	The number of dwelling units within ¼ mile of a public transit route increases over time.	
I. B	Transit	The number of dwelling units within ½ mile of a station of a high capacity transit route, transit center, park 'n' ride, or mobility hub increases over time.	
I. B	Transit	By 2050, 50% of homes are within ½ mile of a public transit route or are served by a call 'n' ride or microtransit service areas.	
I. B	Transit	By 2050, the population density along high capacity transit routes is at least 30 dwelling units per acre for BRT routes and 40 dwelling units per acre for LRT routes.	✓
I. C	Smart Systems	Implementation and support of identified "Smart Cities" demonstration projects occurring within the City's Innovation District pursuant to the framework identified in the Smart Plan	
I. C	Smart Systems	Debut annual "Emerging Technology" deployments.	
I. C	Smart Systems	Ongoing deployment of coordinated FAST smart mobility TSM/ITS and V2I technologies for use and application by connected and autonomous vehicles	
I. C	Smart Systems	Citywide implementation of a fiber-optic network for IoT devices by 2050	✓
I. C	Smart Systems	Number of public EV charging stations increases to 1.07 per 10,000 residents	
I. C	Smart Systems	EV registrations increases over time	
I. C	Smart Systems	Creation of "Smart City" analytic dashboard	
II. A	Water	Community water consumption will be reduced to 105 GPCD by 2035 and 90 GPCD by 2050, consistent with SNWA's Water Resource Plan	✓
II. A	Water	CLV municipal operations shall reduce total water consumption 2% annually, covering the sectors of buildings and facilities, park and landscaping, and wastewater treatment	
II. A	Water	LVVWD incurs no violation of Safe Drinking Water Act/EPA drinking water rules for chemical and microbial contaminants and turbidity	✓
II. A	Water	The City remains in compliance with its NPDES permit with no violations of Clean Water Act effluent and reporting guidelines for all treated wastewater	✓
II. A	Water	The City incurs no major NPDES violations on its MS4 permit for stormwater quality	

CHAPTER 4: SYSTEMS AND SERVICES			FIFTY BY '50
II. B	Energy	80% of region's energy consumption at residential and commercial buildings is reduced through energy efficiency measures by 2050	✓
II. B	Energy	50% of both municipal and community energy supply is from renewable sources by 2030, consistent with the Nevada RPS; and 100% by 2050	✓
II. B	Energy	Municipal operations shall reduce total energy consumption 2% annually, covering the sectors of buildings and facilities, streetlighting, and wastewater treatment	
II. C	Waste	80% of the region's waste disposed of by landfill is reduced by 2050 and a recycling rate of at least 40% is achieved	✓
II. C	Waste	Eliminate landfill-based emissions by 2050	
II. C	Waste	CLV municipal operations shall reduce waste stream 2% annually	
II. D	GHG Emissions	Achieve carbon neutrality for City of Las Vegas municipal operations by 2050	
II. D	GHG Emissions	28% of community greenhouse gas emissions are reduced by 2025 and 80% of community greenhouse gas emissions are reduced by 2050 from all major sectors	✓
III. A	Public Facilities	To provide equitable access to all public buildings, facilities, and services, ensure that by 2050, 75% of residents live within 2 miles of a recreation or community center, library, or cultural center.	✓
III. A	Public Facilities	Maintain a facility service standard of 3.6 City employees (non-public safety) per 1,000 residents and 321 square feet per employee	
III. B	Public Health	By 2030, the City increases the number of hospital beds to 25 beds per 10,000 residents and maintains the number of ICU beds above 4 per 10,000 residents	✓
III. B	Public Health	By 2030, the region increases the number of physicians to above 400 per 100,000 residents	✓
III. B	Public Health	Personal health indicator trends improve over time	✓
III. B	Public Health	The number of adults and children with insurance increase to above 95%	
III. B	Public Health	Designated Health Professional Shortage Area designations are removed within the City	
IV. A	Public Safety	Maintain Fire and Rescue Department's ISO Class 1 rating and CFAI accreditations.	✓
IV. A	Public Safety	90% of response times are in compliance with NFPA standards from dispatch to first response.	
IV. A	Public Safety	LVMPD maintains a ratio of 2 officers per 1,000 residents or better.	✓
IV. A	Public Safety	LVMPD and Las Vegas City Marshals achieve and maintain CALEA accreditation.	
IV. A	Public Safety	Overall violent crime rates improve to a minimum of 5.5 homicides, 400 aggravated assaults, 70 forcible rapes, and 2,500 property crimes per 100,000 residents annually.	✓
IV. B	Hazards	By 2050, no homes or critical infrastructure are located in high-risk hazard prone areas, unless appropriate mitigation, prevention, or adaptation measures are taken.	✓
IV. B	Hazards	Earn accreditation by the Emergency Management Accreditation Program (EMAP) by 2025.	
IV. B	Hazards	Percentage of residents living in high risk areas reduced over time.	
IV. C	Flooding	By 2050, no residences, businesses, or critical infrastructure are located within flood zones	✓
IV. C	Flooding	No deaths attributable to flooding occur	
IV. C	Flooding	Maintain or exceed the City's Community Rating System (CRS) Class 5 status as part of the National Flood Insurance Program.	

IV STRATEGIC ACTION PLANS

On their own, long-range master plans often do not produce results without short-term, time-based implementation plans paired with them. The master plan is absolutely necessary to establish vision, guide beyond political timeframes, and start to plan the funding streams that need to be established over a 30-year horizon to meet outcomes. Often what is lacking is the breaking down of a plan into manageable and implementable steps. For this reason, it is recommended that the City Council and city management adopt 2-year strategic action plans. Two years accounts for political leadership, the election cycle, the annual budget and CIP cycle, and is a commitment that is realistic to keep to the public and stakeholders. It forces accountability internally and externally.

A 2-year strategic action plan is developed through direct consultation with this Master Plan, its overall vision, goals, the Fifty by Fifty outcomes, and key actions. These must align with direct input from:

- The general public and CAC
- The Mayor and City Council
- City leadership
- City departments
- The private sector

In developing each year's strategic action plans, several important points must be adhered to, as recommended in the Public Finance goal:

- The priorities of the City Council, each of the City's strategic action plans, and department level strategic business plans must be aligned with the plan's outcomes, the budget process, and the CIP. While there are several ways to adjust and accommodate this, once Council priorities are determined, any discretionary funds available should be dedicated toward the outcome first; otherwise, other operational and short-term projects won't move the City toward a desired outcome. The CIP is a compilation and analysis of the capital needs anticipated during the short, mid, or long-term. Recommended capital improvements shall conform with this plan, pursuant to NRS 278.0226, to help in achieving its goals and outcomes. Therefore, any new CIP requests that are made must be reviewed for conformance with the Master Plan.
- During each strategic planning and budgeting process, ideas must be clearly communicated throughout the City. The City Council and executives must communicate the desired outcomes, goals, and priorities to the directors and managers, especially to the Finance Department and Public Works Departments as they prepare the annual budget and CIP so that resources are appropriately applied. The City already reports the results of the facilitations and strategic priorities transparently, as well as the City's budget and spending, and should continue to do.
- Measure and Evaluate – As described below/next, with defined goals and outcomes, the City must measure and evaluate progress to ensure resources are spent accordingly and worth the investments made. Regular budget , deviations from the original budget can be made quickly, keeping the organization agile while still reaching its goals.

Fortunately, the City has taken steps to do this. Previous facilitated annual retreats have been held with City leadership and the City Council to develop strategic priorities. The process should therefore be no different than the ones previously undertaken, only done so framed with the Master Plan and its "Fifty by '50" outcomes as a guide. Given that, the City should align the cycle of development of these Strategic Action Plans and would typically follow a schedule as suggested on the next page.

SAMPLE TWO-YEAR ACTION PLAN
YEAR 1 (ODD FISCAL YEARS)
July 1: Begin fiscal year – Collect prior year data, report development
Quarter 1: • Annual report delivered at a joint Planning Commission-City Council workshop • Council priority development for Years 1-2 • Facilitated meetings with departments • Prepare 2-Year Strategic Action Plan and departmental strategic business plans • Consideration and adoption of two-year Strategic Action Plan, conforming departmental strategic business plans
Quarter 2: Year 2 Budget/CIP development process
January: State of the City – deliver update on Year 1 progress, recommendations and outlook for Year 2
Quarters 3-4: Submit Year 2 tentative and final budgets and CIP for Council approval; approval by State
YEAR 2 (EVEN FISCAL YEARS)
July 1: Begin fiscal year - Collect prior year data, report development
Quarter 1: • Annual report delivered at a joint Planning Commission-City Council workshop • Approve bill draft requests and legislative priorities for odd-year legislative session
Quarter 2: Year 3 Budget/CIP development process
November Election
January: State of the City – deliver update on Year 2 progress, recommendations and outlook for Year 3 and newly seated council
February – June: State legislative session
Quarters 3-4: Submit Year 3 tentative and final budgets and CIP for Council approval; approval by State
CYCLE REPEATS

V STRATEGIC GOVERNANCE

RECOMMENDATIONS FOR CONSIDERATION

Implementation of this master plan may require some aditional recommendations to ensure they are long-lasting and accountable. While some are bold and innovative, they remain advisory and should be carefully reviewed and studied to determine their ultimate impact on meeting the long-term goals of the plan and direction of the City Council

CITIZENS ADVISORY COMMITTEE (CAC)

Upon adoption of the plan, it is recommended that the City Council form a CAC to oversee implementation of the master plan and specific advisory opinions and recommendations for the City Council or Planning Commission's consideration. This should be a formally created board with equitably appointed representatives from each of the sixteen areas of the City and comprised of members that reflect the demographic makeup of the City. The CAC should also include representation from:

- The private sector and developers
- Seniors
- Youth
- LGBTQ+
- Law enforcement
- Educators
- Homeless

Subject to the Open Meeting law, the CAC's primary purpose would be to routinely discuss municipal and community matters of the City in an open forum and advise Council members on measures necessary for the implementation of the Master Plan. The CAC should be well supported and guided by designated staff members from relevant or applicable city departments. Doing so will fulfill the intent of NRS 278.190, which requires promotion of the plan with members of the public.

CONSOLIDATION OF BOARDS AND COMMISSIONS

With creation of a CAC, an opportunity exists for the City to consider compressing the City's numerous other Boards and Commissions that meet infrequently and do not have any other requirement to convene pursuant to the City Charter or NRS. While some have a specific purpose and actively or regularly meet to carry out specific duties, including the Planning Commission, Historic Preservation Commission, Arts Commission, and Civil Service Board, others do not. The City Council should carefully weigh such an action to consolidate these groups so as to not limit opportunities for civic participation or discussion of specific topics.

COMPREHENSIVE REVISION OF LVMC

Repeal and amend such portions of code that may no longer be applicable or of use can help streamline the efficiency and effectiveness of the City's government. An effective review of the laws and policies of the City is also necessary for good governance. Las Vegas Municipal Code contains many provisions that are outdated, no longer used, or ineffective.

"GUIDING PRINCIPLES OFFICIALS"

The City has already had success in forming different offices and creating positions that reflect the guiding principles of this plan, including a Chief Sustainability and Resilience Officer and Office of Sustainability, and a Chief Innovation Officer and Office of Innovation. Therefore, the Plan recommends hiring of additional officials within the City Manager's Office, Organizational Development, Human Resources, or other appropriate departments covering other guiding principles of this plan, including:

- A Chief Livability Officer that may coordinate and oversee regional issues relating to overall city and community quality of life.
- A Chief Health Officer that may coordinate between SNHD and other departments on workplace health and safety, public health, and Health-in-All policies
- A Chief Equity Officer that may oversee organizational diversity and community human and civil rights. A dedicated environmental justice staff member is recommended.

INTER-DEPARTMENTAL ORGANIZATION

With the development of specific plans for each area of the City, an opportunity exists to create specialty teams, interdepartmental working groups, or cross-department integration. Specific divisions of departments and staff could be dedicated to focused areas to handle all concerns of the City from the public, developers or businesses. As an example, one area (or small groups of multiple areas) of the City could have a dedicated team comprised of a staff member (or members) that know and understand the area's respective geography and neighborhoods and work exclusively on projects or issues within those boundaries:

- Long Range Planning: to provide project review and facilitate specific questions or concerns arisen from the special area plan, as well as coordinate directly with the CAC.
- Public Planning: to handle specific questions from the public and to provide initial resources on zoning, permitting, special exceptions, and information to the public and developers
- Case Planning: to handle specific planning cases and entitlements that appear before the Planning Commission (and City Council, if necessary)
- Economic and Urban Development: to address business and workforce development
- Business licensing: to handle any issues from businesses
- Youth Development and Social Innovation: to coordinate school and education issues between the City and CCSD.
- Code Enforcement: to address both proactive and initiated enforcement and public safety concerns
- Parks and Recreation: to handle special events and any issue related to parks or facilities
- Community Services: to handle matters relating to housing, affordability, and homelessness.
- Public Works: to coordinate capital projects, traffic, transit, transportation, or parking concerns and provide project review

EXPANSION OF THE NUMBER OF SEATS ON LAS VEGAS CITY COUNCIL

Currently there are six wards of the Council serving approximately 112,000 residents each. The ratio of members to residents will only continue to increase over time; if the number of councilmembers were to remain fixed, by 2050, Councilmembers would be representing more than 160,000. While smaller in size, the City of Reno's City Council is also composed of a Mayor and six members. And due to changes made during the 2019 legislative session, the Clark County Commission will expand to 9 members beginning in 2022. While there is no direct formula for size, for other cities about the same size as Las Vegas,

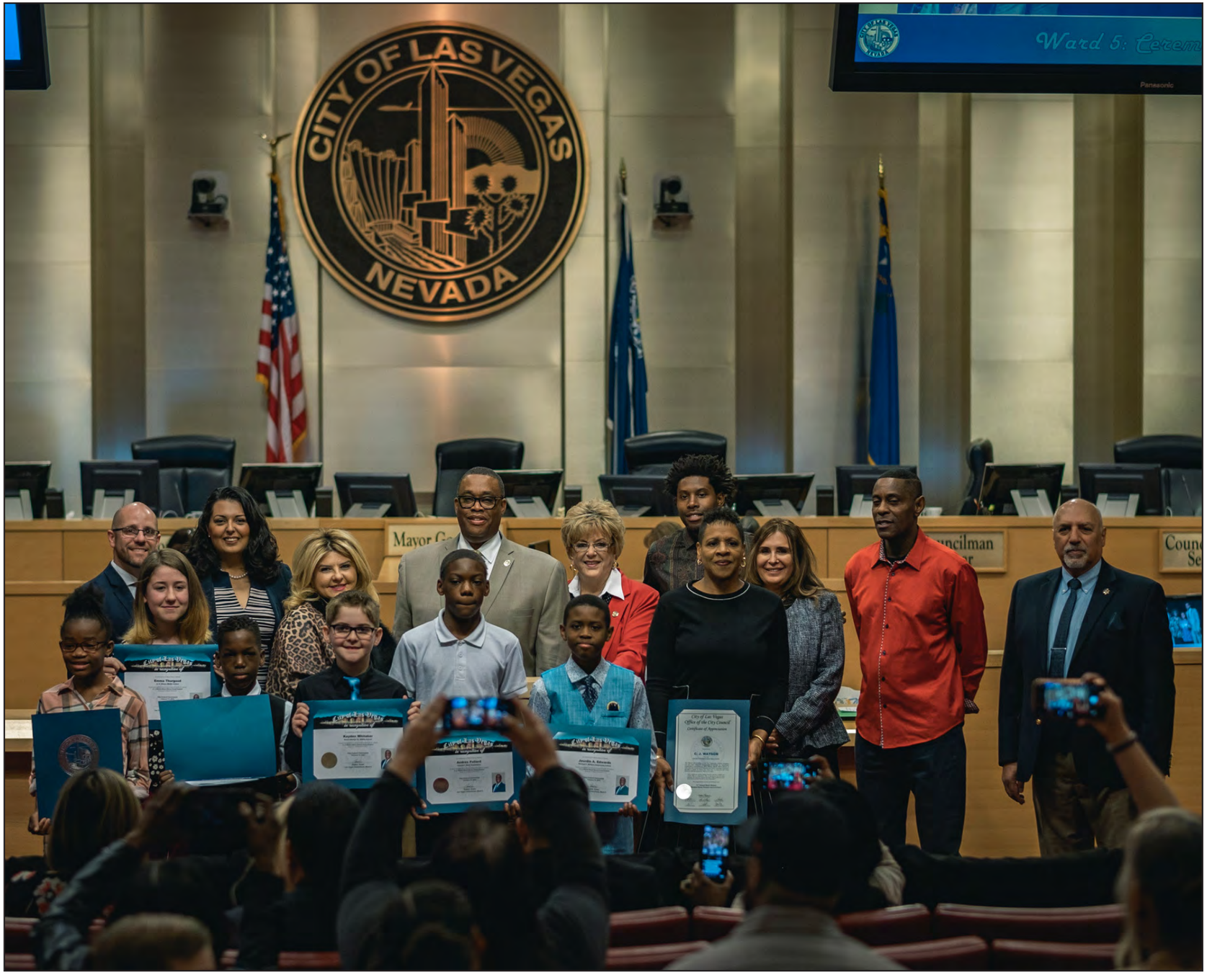
- **Boston, MA:** Mayor-Council – 13 total: 9 councilmembers by district, plus 4 elected at large
- **Detroit, MI:** Mayor-Council – 9 total: 7 councilmembers by district, plus 2 elected at large
- **Memphis, TN:** Mayor-Council – 13 councilmembers by district
- **Oklahoma City, OK:** Council-Manager – 9 total: 8 councilmembers by district, plus Mayor elected at large
- **El Paso, TX:** Council-Manager – 9 total: 8 councilmembers by district, plus Mayor elected at large

Should the City consider an increase in Council size, it may add to administrative costs, but will also increase public access, responsiveness, and the share of representation. A similar expansion of the municipal judiciary may also be needed, but the City is already empowered to create such additional Municipal Court departments as needed.

AN UPDATED CITY CHARTER FOR THE 21ST CENTURY

Article VIII of the Nevada Constitution grants the Legislature the power to form municipal governments through general law or by Special Act. The City's current Charter was established in 1983, and periodically amended by the Legislature. This Master Plan suggests many topics in which the City is not otherwise empowered to act and may require enabling powers for the Council to act. Limited "functional" home rule authority for matters of local concern are described in NRS Chapter 268 – powers and duties common to general law and chartered cities, but there are limitations on exercising those powers. Additional powers are also enumerated under NRS 268, but the City Council may need additional enumerated capabilities for them to explicitly perform expanded duties to accomplish the outcomes of the plan, whether within the Charter itself or within statute. While a wholesale revision of this foundational document may not be required, at nearly forty years of age, some of the recommendations within this Plan may give the City Council and its management pause to consider future amendments to allow for more efficient self-governance and limited home rule. Some of those provisions could include:

- Inclusion of enabling provisions for specific issues.
- Voter approved amending provisions.
- The ability to form or establish other committees or subcommittees to transparently discuss specific matters in a formal setting prior to consideration by the full Council.
- Additional revenue enabling authority.
- Utilization of the hybrid strong mayor-city manager system that includes traditionally defined executive-legislative powers common in other Nevada general law cities and some chartered cities. Executive functions are overseen by a trained city manager and coordinated with an official Mayoral executive position that reserves the right to veto items passed by the City Council, subject to a supermajority override.



VI ACTION PLAN

The implementation tools outlined in this Chapter should be used to achieve the goals and objectives of the Master Plan. Comprehensive implementation actions have been developed to organize and apply these tools. Under each topic, specific actions, tools, and a timeframe for implementation are identified. The details of the strategies to implement the Master Plan are specified in the table below.

TIMEFRAME

- Ongoing: annually
- Short-Term: 1-5 years
- Mid-Term: 1-10 years
- Long-Term: 10-30 years

RESPONSIBLE PARTY

- PLAN: Planning Department
- EUD: Economic and Urban Development
- CMO: City Manager's Office
- FIN: Finance
- OCS: Office of Community Services
- OM: Operations and Maintenance
- PR: Parks and Recreation
- PS: Public Safety
- OEM: Office of Emergency Management
- CA: Cultural Affairs
- PW: Public Works
- YDSI: Youth Development and Social Innovation
- RDA: Redevelopment Authority

PARTNERS

- BLM: Bureau of Land Management
- CC: Clark County
- CoC: Las Vegas Metro Chamber of Commerce
- DEV: Developers
- LVCCLD: Las Vegas-Clark County Library District
- LVMPD: Las Vegas Metropolitan Police Department
- NPS: National Park Service
- NSHE: Nevada System of Higher Education
- REP: State Representative
- RFCD: Regional Flood Control District
- RTC: Regional Transportation Commission of Southern Nevada
- SNHD: Southern Nevada Health District
- TEL: Telecommunications providers
- UNCE: University of Nevada Cooperative Extension
- UNLV: University of Nevada, Las Vegas
- UTIL: Utilities

TOOL

- CIP: Capital Improvement
- LEG: Federal/State Legislative changes
- PAR: Partnership
- POL: Local policy or regulation (PC/CC)
- PRG: CLV Program

COST

- $ = Primarily internal staff time
- $$ = outside consulting services expected; $25,000<cost<$100,000
- $$$ = $100,000<Capital improvements<$1,000,000
- $$$$ = 1 million - 10 million
- $$$$$ = 10 million+

EASE OF IMPLEMENTATION

- Grade scale of A to D (A being easiest to implement) based on anticipated level of effort and cost

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 2: LAND USE AND ENVIRONMENT									
I.A	Land Use	Transform zoning regulations for corridors and nodes to encourage a greater mixture of uses and densities to support transit.	Livable	SHORT	PLAN	Dev	POL	$$	B
I.A	Land Use	Create subarea plans for each planning area	Livable	SHORT	PLAN	Public	POL	$$	B
I.A	Land Use	Prioritize catalytic redevelopment sites	Livable	SHORT	EUD	Dev	INC	$$	B
I.A	Land Use	Require new subdivisions to be built with greater emphasis on traditional neighborhood design principles.	Livable	SHORT	PLAN	Dev	POL	$$	C
I.A	Land Use	Incentivize new development types by streamlining the development review process.	Livable	SHORT	PLAN	Dev	INC	$$	C
I.A	Land Use	Develop a strategy for integrating "missing middle" housing types into existing neighborhoods.	Livable	MID	OCS	Dev	POL	$	C
I.A	Land Use	Strengthen neighborhood identity and pride by planning area.	Livable	SHORT	PLAN	Public	PRG	$	C
I.B	Historic Preservation	Promote and expand awareness of historic preservation and embed into development decisionmaking.	Livable	ON	PLAN	Public	PRG	$	A
I.B	Historic Preservation	Continue to strengthen the City's Historic Preservation Office and Commission	Livable	ON	PLAN	Public	PRG	$$$	B
I.B	Historic Preservation	Conduct proactive historic surveys for different locations and resource types	Livable	ON	PLAN	Public	PRG	$$	C
I.B	Historic Preservation	Prioritize education about value of historic preservation resources available, celebrating cultural heritage	Livable	ON	PLAN	Public	PRG	$$	B
I.B	Historic Preservation	Balance redevelopment pressures with preservation efforts to preserve key resources while encouraging adaptive reuse and sensitive infill development	Livable	LONG	PLAN	Dev	PRG	$$	D
I.C	Catalytic Sites	Amend zoning for corridor and mixed-use place types to incorporate stronger design standards and a more flexible mixture of uses.	Livable	ON	PLAN	Dev	POL	$$	C
I.C	Catalytic Sites	Develop a set of incentives for sites outside the RDA to help finance redevelopment.	Livable	SHORT	EUD	Dev	INC	$	C
I.C	Catalytic Sites	Work with property owners of catalytic sites to encourage packaging their sites for redevelopment by marketing them via requests for proposals or qualifications.	Livable	ON	EUD	Private	PRG	$	D
I.C	Catalytic Sites	Host investor tours, developer matchmaking events to spark interest in key redevelopment sites.	Livable	ON	EUD	Dev	PRG	$	B
I.C	Catalytic Sites	Streamline the development review process and entitlements for priority redevelopment sites.	Livable	SHORT	PLAN	Dev	PRG	$$	B

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 2: LAND USE AND ENVIRONMENT									
III. B	Environment	SNPLMA must continue be supported as it has been an effective tool for concentrating urban growth, while providing funding for open space	Livable	ON	PW	BLM	PRG	$	B
III. B	Environment	Utilize Tule Springs National Monument to its potential as a valuable open space asset for the City	Resilient	ON	PR	NPS	PRG	$$	C
III. B	Environment	Preserve and maintain open space as a balance to man-made development.	Resilient	LONG	PLAN	BLM	PRG	$$	D
III. B	Environment	Preserve and protect areas of important environmental/ ecological consideration, and incorporate such areas into the park and recreation system.	Resilient	LONG	PLAN	BLM	PRG	$$$$	D
III. B	Environment	Preserve and maintain our natural resources for ourselves and future generations.	Resilient	LONG	PLAN	BLM	PRG	$$$$	C
III. B	Environment	Use native plants to meet environmental objectives and reduce maintenance requirements; use native plants to reduce watering, fertilizing, and mowing.	Resilient	ON	PLAN	Dev	POL	$	B
III. B	Environment	Be a model for stewardship through city practices, maintenance, operations, land management, and facilities.	Resilient	ON	PLAN	Dev	POL	$$	C
III. B	Environment	Continue to partner with agencies, organizations, and businesses to enhance natural resource access and management.	Resilient	ON	PLAN	BLM	PAR	$	A
III. B	Environment	Develop and implement sustainable practices.	Resilient	ON	PLAN	Private	PRG	$	C
III. B	Environment	Reclaim areas of environmental/ecological deterioration using available resources from the public, quasi-public and private sectors.	Resilient	LONG	PLAN	Private	PRG	$$$$$	D
III. B	Environment	Adopt a policy to further enable the use of conservation easements and the transfer of development rights program pursuant to NRS 111 for open space and sensitive lands that warrant protection	Livable	SHORT	PLAN	Private	POL	$$	D
III. B	Environment	Protect historical sites by the inclusion of them into an open space park system	Livable	MID	PLAN	SHPO	POL	$$$$	C
III. C	Urban Forestry	Within each area of the city, especially those with vulnerable populations, and when temperatures exceed 100 degrees, prepare an adequate extreme heat response	Equitable	ON	OCS	SNHD	PRG	$$$$	B
III. C	Urban Forestry	Institute resilient best management urban design practices to ensure high quality landscape architecture for public facilities and private developments	Resilient	MID	PLAN	Private	CIP	$$	C
III. C	Urban Forestry	Increase outreach and education on trees and landscaping	Livable	ON	PLAN	Public	PRG	$$$	B
III. C	Urban Forestry	In keeping with Tree City USA and urban forestry commitments, plant 60,000 high quality trees composed of a diverse list of native and adaptive species on public and private property that are tolerant of heat, cold, and wind; water efficient; low maintenance; non-invasive, and pest and disease resistant.	Resilient	ON	PR	Private	PRG	$$$$	C

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 2: LAND USE AND ENVIRONMENT									
III. D	Parks	Increase the amount of park and open space acreage	Equitable	ON	PW	Private	CIP	$$$$$	A
III. D	Parks	Continue to integrate education, arts, and culture into community centers	Livable	ON	PR	Public	PRG	$$$$	C
III. D	Parks	Ensure safe, accessible park design	Livable	SHORT	PW	Private	PRG	$	A
III. D	Parks	Develop innovative park typologies as part of redevelopment	Innovative	SHORT	PLAN	Private	PRG	$$	B
III. E	Park Connectivity	Work with appropriate agencies and stakeholders to implement the region's non-motorized loop.	Healthy	SHORT	PR	RTC	CIP	$$$$$	C
III. E	Park Connectivity	Continue to improve bicycle and pedestrian access along major roads and increase safety of alternative transportation.	Healthy	ON	PW	RTC	CIP	$$$$$	C
III. E	Park Connectivity	Revise residential zoning to require a greenway along corridors and limit the use of walls	Healthy	SHORT	PLAN	Private	POL	$$	C
III. E	Park Connectivity	Explore public-private partnerships to formalize public access to privately-held open spaces	Innovative	ON	PR	Private	PAR	$$	B
III. F	Food & Urban Agriculture	Decrease food deserts and reduce food swamps in low-income, food insecure planning areas, further incentivize the establishment of grocery stores and healthy food retail outlets.	Healthy	MID	PLAN	UNCE	POL	$$	D
III. F	Food & Urban Agriculture	Provide at least one accessible community garden for urban agriculture activity in each planning area.	Livable	SHORT	PLAN	UNCE	POL	$$	B
III. F	Food & Urban Agriculture	Work closely with the Southern Nevada Food Council, CCSD, the University of Nevada Cooperation Extension, Three Square Food Bank, and other stakeholders to address food insecurity, hunger, and access issues for city residents.	Healthy	LONG	PLAN	UNCE	PAR	$	B
III. F	Food & Urban Agriculture	Further expand allowable agricultural uses and activities within the community.	Livable	SHORT	PLAN	Private	POL	$	B
III. G	Environmental Justice	Hire a staff member within the City that has experience with environmental justice.	Equitable	SHORT	PW	CC	PRG	$	B
III. G	Environmental Justice	Implement the actions from the Land Use Chapter that reduce or eliminate brownfield and greyfield locations.	Healthy	ON	EUD	NDEP	CIP	$$$$$	C
III. G	Environmental Justice	Implement projects and actions from other parts of this plan that improve air and water quality	Healthy	ON	PW	CC	CIP	$$$$$	D
III. G	Environmental Justice	Incorporate environmental justice criteria and priorities into LVMC and continue to enforce environmental regulations and permitting to ensure clean air and water.	Healthy	SHORT	PLAN	CC	POL	$$	C

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 3: ECONOMY AND WORKFORCE									
I. A	Equitable Education	Expand the role and scope of the Department of Youth Development and Social Innovation as a partner to educate City youth	Livable	SHORT	YDSI	CCSD	PRG	$$$$	B
I. A	Equitable Education	Continue offering and expand supplemental before and after school programs and partnerships to achieve better K-12 educational outcomes	Livable	ON	YDSI	CCSD	PRG	$$$$	B
I. A	Equitable Education	Develop an educational support program with underperforming CCSD schools to provide additional resources for students and parents	Innovative	SHORT	YDSI	CCSD	PRG	$$$$	C
I. A	Equitable Education	Resolve to support continuing education, workforce development, and collegiate program to improve post high school educational outcomes	Innovative	MID	YDSI	NDEP	PAR	$$	C
I. A	Equitable Education	Partner with NSHE to expand UNLV and CSN campuses and siting and development of a new state college campus tailored to City of Las Vegas residents with a dedicated focus on granting targeted and specialized 2 and 4 year degrees to further add teacher capacity.	Livable	LONG	YDSI	NSHE	LEG	$$$$$	D
I. B	School Sites	Coordinate with CCSD on future school and facility needs to better integrate school siting, future student growth, and facility needs in city capital improvement programming	Livable	ON	PLAN	CCSD	PAR	$	C
I. B	School Sites	Resolve to support future bond measures for capital improvement plans that alleviate overcrowding, add classrooms, and eliminate portables	Livable	SHORT	CMO	CCSD	POL	$	B
I. B	School Sites	For future CCSD school facilities, additions, and expansions, partner with CCSD to acquire land or property for schools where overcrowding exists, expedite permitting and construction and ensure optimal locations of schools within master planned communities	Equitable	SHORT	PLAN	CCSD	PAR	$	C
I. B	School Sites	Continue working with CCSD on Safe Routes to School for existing and future schools	Healthy	ON	PW	CCSD	PRG	$	A
I. B	School Sites	As part of a larger legislative request, coordinate with CCSD to enable additional development funding for school construction	Equitable	SHORT	CMO	CCSD	LEG	$	D
I. B	School Sites	Work with CCSD to ensure dedicated magnet schools and academies and special and alternative schools are built and equitably distributed so additional seats are available	Equitable	SHORT	YDSI	CCSD	PAR	$	C
I. B	School Sites	Better assess new charter and private school development, while accommodating their construction	Equitable	ON	PLAN	Private	POL	$	B
II. A	Econ. Dev't	Participate in the drafting of future iterations of the Comprehensive Economic Development Strategy (CEDs) and develop a strategic plan that specifically aligns and implements the strategy	Innovative	ON	EUD	LVGEA	POL	$	B
II. A	Econ. Dev't	Partner with regional organizations to incentivize and attract new businesses with well-paying jobs to targeted sectors	Innovative	ON	EUD	LVGEA	INC	$	C
II. A	Econ. Dev't	Foster a low cost and responsibly regulated business environment where small businesses can grow and thrive	Livable	ON	PLAN	LVGEA	POL	$	B

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 3: ECONOMY AND WORKFORCE									
II. A	Econ. Dev't	Collaborate, expand, and contribute to regional workforce development efforts with key education stakeholders and providers	Livable	ON	EUD	NSHE	PAR	$$$$$	D
II. B	Redev't	Update and adopt a Redevelopment Plan for both RDA-1 and RDA-2 in alignment with this plan and the Vision 2045 Downtown Las Vegas Masterplan	Livable	SHORT	RDA	Private	POL	$	C
II. B	Redev't	Modify the RDA's TIF program for specific identified purposes and to capture added value.	Livable	SHORT	RDA	Private	POL	$	C
II. B	Redev't	Consider selective expansion of redevelopment areas consistent with Land Use goals and the 2050 General Plan to ensure redevelopment, small business development, and the ability to attract major large employers that are aligned with the Comprehensive Economic Development Strategy (CEDs)	Innovative	MID	RDA	Private	INC	$$	D
II. C	Public Finance	Work to attain reasonable legislative changes that permit flexibility in revenue generation.	Equitable	SHORT	CMO	NV	LEG	$	D
II. C	Public Finance	Adopt budget savings and government efficiency measures.	Equitable	SHORT	FIN	Private	PRG	$	C
II. C	Public Finance	Maintain accessible and transparent budgets, audits, and reviews of City expenditures.	Equitable	ON	CMO	Private	PRG	$	A
II. C	Public Finance	Resolve to align the annual budget and capital improvement projects to achieve outcomes of the master plan.	Livable	ON	CMO	Private	POL	$	B
III. A	Housing Choices	Diversify and improve housing stock to include a range of building types and "missing middle" housing appropriate for transit-oriented developments	Livable	MID	PLAN	Private	PRG	$$	C
III. A	Housing Choices	Integrate affordable housing into the place types identified in the Land Use Chapter through the use of zoning regulations and other enabled policies	Livable	SHORT	PLAN	Private	POL	$	C
III. A	Housing Choices	Amend LVMC Title 19 to remove affordability barriers and to allow more mixed residential dwelling unit types in areas of transformation and enhancement, including accessory dwelling units, garage conversions, casitas, or granny flats, with selective applications in areas of preservation	Livable	SHORT	PLAN	Private	POL	$	B
III. A	Housing Choices	Accommodate a population increase of approximately 309,000 new residents by constructing approximately 110,000 new dwelling units, of which 121,000 of the City's total 366,535 projected units must be affordable or meet HUD's affordability criteria	Equitable	LONG	PLAN	SNRHA	PRG	$$	C
III. B	Homeless	Adopt and annually evaluate the City's Homeless Strategic Plan designed to guarantee that basic needs are met in the community and ensure it is in alignment with Help Hope Home, the Southern Nevada Continuum of Care and other regional efforts	Livable	SHORT	OCS	CoC	PRG	$	A
III. B	Homeless	Employ direct homelessness prevention measures and a "Housing First" strategy to quickly and efficiently serve at-risk or homeless individuals	Livable	ON	OCS	CoC	PRG	$$$$$	D
III. B	Homeless	Provide intervention services, to serve as a basic temporary resource and provide a pathway out of homelessness	Livable	ON	OCS	CoC	PRG	$$$$$	B

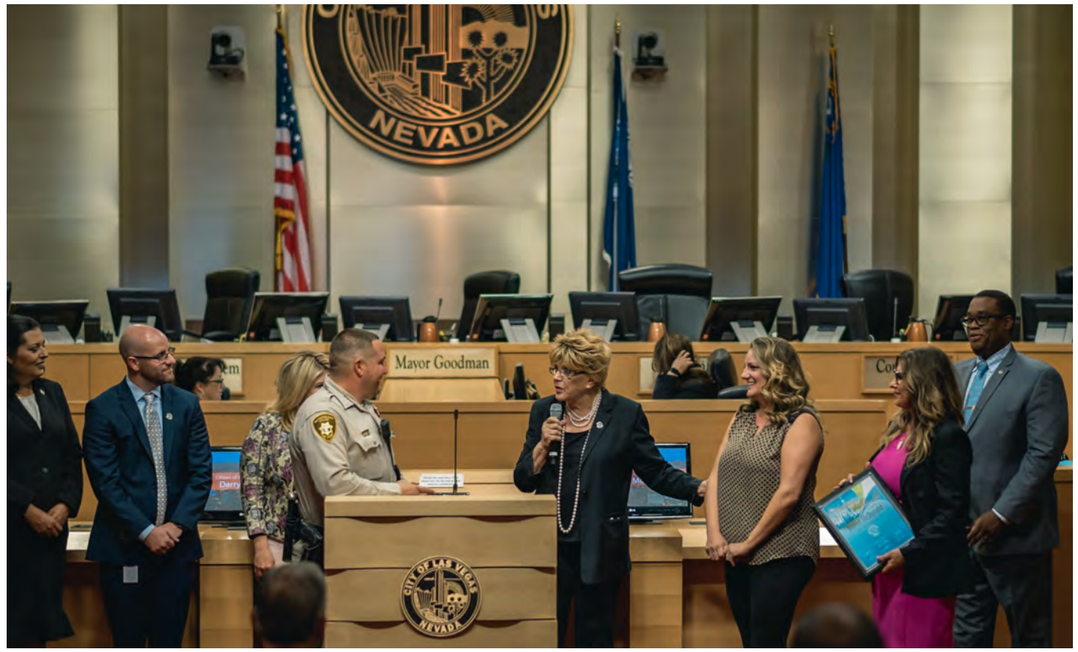
Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 3: ECONOMY AND WORKFORCE									
III. B	Home-less	Develop sustainable funding streams and resources that can be leveraged and applied to combatting homelessness	Equita-ble	SHORT	CMO	CoC	PAR	$$$$	C
III. B	Home-less	Educate the community and homeless individuals and families on homelessness issues while thoughtfully mitigating impacts of homelessness on the community	Livable	SHORT	CMO	CoC	PRG	$$$	A

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 4: SYSTEMS AND SERVICES									
I. A	Complete Streets	To reduce VMT and diversify the City's modal split, adopt the "Layered Complete Street Network" as part of the Master Plan for Streets and Highways, and construct the recommended improvements essential for traffic management, safety, and regional economic development.	Livable	ON	PW	RTC	CIP	$$$$$	B
I. A	Complete Streets	Achieve a jobs-housing balance through the adoption of TOD placetypes	Livable	SHORT	PLAN	RTC	POL	$$	B
I. A	Complete Streets	Infrastructure must be well maintained by properly allocating funding and resources	Livable	ON	OM	RTC	CIP	$$$$$	C
I. A	Complete Streets	Further reduce VMT, congestion, wasted time, and emissions by working with regional partners to embrace transit, TDM, TSM, carpooling, ridesharing, and other transportation solutions.	Resilient	ON	PW	RTC	PAR	$$$	B
I. B	Transit	Working with RTC, resolve to build and implement the key recommendations of the On Board Mobility Plan	Livable	MID	PW	RTC	PAR	$$$$$	D
I. B	Transit	Implement the placetypes recommended in the Land Use chapter to facilitate mixed-use TOD, infill, and redevelopment within proximity of quality public transportation.	Livable	SHORT	PLAN	RTC	POL	$$	B
I. B	Transit	Work with RTC to ensure equitable transit funding.	Equita-ble	MID	PW	RTC	LEG	$$$$	D
I. C	Smart Systems	Construct a citywide fiber network to support the development of IoT, mobility, public safety, and other applications	Innova-tive	SHORT	IT	TEL	CIP	$$$$$	C
I. C	Smart Systems	Fully leverage Downtown Las Vegas and Nu Wav Kaiv as innovation centers for future smart infrastructure where opportunities to leverage light manufacturing and aerospace, UAV, autonomous technologies, and supportive military or defense activities can exist.	Innova-tive	SHORT	EUD	LVPT	INC	$$$	C
I. C	Smart Systems	Further enable the electrification of transportation by continuing to develop vehicle charging infrastructure	Innova-tive	ON	PLAN	UTIL	CIP	$$$$	B
II. A	Water	Collaborate with SNWA on updates to the Water Resources and Conservation Plans , specifically as it relates to development trends and projections, land use, and conservation best-practices.	Resilient	ON	PLAN	SNWA	PAR	$$$$	B
II. A	Water	Engage LVVWD and/or SNWA to develop programs and participate in the development design review processes to ensure projects meet or exceed minimum expectations for water efficiency.	Resilient	ON	PLAN	SNWA	PRG	$$$$	B

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 4: SYSTEMS AND SERVICES									
II. A	Water	Ensure a continued commitment to water efficiency and water reduction for municipal operations	Healthy	ON	OM	LVVWD	CIP	$$$$	B
II. A	Water	Collaborate to clean up sensitive areas that flow to Lake Mead to prevent stormwater pollution, and comply with the NPDES MS4 permit.	Healthy	ON	PW	RFCD	CIP	$$$	B
II. A	Water	Manage, maintain, and upgrade water and wastewater treatment infrastructure to reduce leaks in the system and eliminate contamination, ensuring clean water returns to Lake Mead for return-flow credits.	Resilient	ON	PW	SNWA	CIP	$$$$$	B
II. B	Energy	Continue leading municipal clean energy efforts	Resilient	ON	PLAN	UTIL	CIP	$$$$	B
II. B	Energy	Expand community renewable energy, energy conservation, storage, and green building efforts	Resilient	SHORT	PLAN	UTIL	CIP	$$$$$	B
II. B	Energy	Study, determine the feasibility, and/or implement City energy programs in partnership with the region's utilities	Resilient	SHORT	CMO	UTIL	PAR	$$	B
II. B	Energy	Electrify transportation by developing a robust EV charging network	Resilient	ON	PW	UTIL	CIP	$$$$	B
II. C	Waste	Work collaboratively to educate the public on proper recycling, determine additional opportunities to increase waste diversion rates, and address special waste streams while ensuring waste costs are kept low	Resilient	SHORT	PLAN	REP	PAR	$$	A
II. C	Waste	Continue working with public agencies, non-profits, and members of the public to collaborate on waste clean-up events/ programs	Healthy	SHORT	OCS	Public	PAR	$	B
II. C	Waste	Ensure a continued commitment to waste reduction and recycling for municipal operations	Resilient	SHORT	OM	REP	PRG	$$$	C
II. C	Waste	Require the provision of single-stream recycling service at multi-family and commercial properties	Livable	SHORT	PLAN	REP	POL	$	D
II. D	GHG Emis-sions	Emerge as a carbon neutral municipality	Resilient	LONG	PLAN	UTIL	PRG	$$$$$	D
II. D	GHG Emis-sions	Continue implementing community-wide energy efficiency and renewable energy programs for power generation and residential, commercial, and industrial sectors, while increasing waste diversion rates	Resilient	ON	PLAN	UTIL	PAR	$$$$$	B
II. D	GHG Emis-sions	Focus efforts to improve transportation-based emissions through vehicle miles traveled (VMT) reduction and modal shifts, transit-oriented develoment (TOD), infill, and redevelopment, and transportation electrification	Resilient	LONG	PLN	RTC	PRG	$$$$$	D
III. A	Public Facilities	During future CIP planning, strategically identify priority facility and service needs and resources, whether provided by City, County, regional, state, or Federal providers, including the needs of priority populations and priority planning areas for evaluation to ensure adequate and equitable access to public resources.	Equita-ble	LONG	PW	Private	CIP	$$$$$	C
III. A	Public Facilities	Implement the City's Sewer Facilities Plan to ensure wastewater treatment needs are met, especially in areas anticipated for infill and redevelopment.	Livable	MID	PW	Private	CIP	$$$$$	C

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 4: SYSTEMS AND SERVICES									
III. A	Public Facilities	Continue proactive coordination with above ground and underground wet and dry utilities to ensure infrastructure is in place, the development process is smooth, and disturbances to pedestrian, bicycle, and vehicular rights of way are minimized.	Livable	ON	PLAN	UTIL	PAR	$$	C
III. A	Public Facilities	Collaborate with the Las Vegas-Clark County Library District to site and locate additional facilities in underserved and future growth areas.	Equitable	SHORT	PLAN	LVCC-LD	CIP	$	B
III. A	Public Facilities	Dedicate more places and spaces for the arts.	Livable	ON	CA	Private	CIP	$$$	B
III. B	Public Health	Adopt a Health-in-all-Policies statement and commit to increased partnerships with the Southern Nevada Health District and health care providers to improve key population health care indicators	Healthy	SHORT	CMO	SNHD	PAR	$	B
III. B	Public Health	Complete the build-out of the UNLV School of Medicine and leverage the Las Vegas Medical District to ensure training, recruitment, and retention of doctors and nurses to overcome shortages	Innovative	MID	EUD	UNLV	PAR	$$$$$	C
III. B	Public Health	Develop a City-specific Community Health Needs and Public Health System Assessment addressing personal health Indicators and health care facilities citywide and their accessibility.	Healthy	SHORT	OCS	SNHD	PRG	$$	B
IV. A	Public Safety	Continue to adequately train, equip, and fund public safety personnel and officers to remain a trusted resource that quickly responds to calls for service.	Healthy	ON	PS	FR	PRG	$$$$	A
IV. A	Public Safety	Construct the recommended public safety capital projects to provide adequate police and fire protection coverage when need is warranted .	Livable	ON	PS	LVMPD	CIP	$$$$$	C
IV. A	Public Safety	Improve built environment safety and adopt a safe communities strategic plan with an approach that balances property and violent crime prevention with community needs.	Livable	SHORT	PS	LVMPD	PRG	$$	C
IV. A	Public Safety	Increase fire prevention and emergency response efforts.	Healthy	ON	FR	Public	PRG	$	A
IV. A	Public Safety	Develop Safe Communities strategies for planning areas to facilitate an understanding of public safety concerns.	Livable	SHORT	PS	LVMPD	PAR	$$	C
IV. B	Hazards	Develop hazard prevention, mitigation, vulnerability and recovery frameworks that apply to hazards	Resilient	SHORT	OEM	CC	PRG	$	A
IV. B	Hazards	Continue infrastructure investments for natural hazards with greatest vulnerability, especially drought, flooding, and seismic activity.	Resilient	ON	PW	MULTI	CIP	$$$$$	C
IV. B	Hazards	Prepare for long-term, seasonal hazards such as extreme heat by investing in cooling infrastructure and developing urban design standards that mitigate the urban heat island effect.	Resilient	SHORT	PLAN	DEV	PAR	$$$$	B
IV. B	Hazards	To lessen economic severity of all types of hazards, develop a comprehensive economic recovery framework that's context sensitive and adaptable to a variety of hazard scenarios.	Resilient	SHORT	EUD	LVGEA	PRG	$	B

Sec.	Topic	Key Action	Prime Guiding Principle	Timing	Lead Dept.	Partner	Tool	Cost	Ease
CHAPTER 4: SYSTEMS AND SERVICES									
IV. B	Hazards	Increase funding reserves and rainy-day funding to ensure adequate resources are available for emergency operations, preparedness, and response.	Resilient	ON	FIN	NV	LEG	$$$$$	B
IV. C	Flooding	Construct the recommended improvements contained within the RFCD's Master Plan to eliminate as much of the FEMA designated flood zone within the City as possible, thereby protecting residents and property.	Resilient	LONG	PW	RFCD	CIP	$$$$	C
IV. C	Flooding	Determine the effect an increasingly active monsoonal season may have on storm water infrastructure.	Resilient	SHORT	PW	RFCD	CIP	$	B
IV. C	Flooding	Increase the number of multi-use facilities and utilize low-impact development and other natural drainage techniques	Livable	LONG	PW	RFCD	CIP	$$$	C
IV.C	Flooding	Continue coordinating with the RFCD and National Weather Service on early warning notificatations and education on the risks of flooding	Resilient	ON	PW	RFCD	PAR	$$	A
IV.D	Heat Mitigation	Ensure hydration stations provide potable water and are publicly accessible.	Livable	ON	PW		CIP	$$	A
IV.D	Heat Mitigation	Develop new and expand access to existing cooling centers to protect vulnerable populations from the impacts of extreme heat.	Healthy	ON	PARK	MULTI	PRG	$$	B
IV.D	Heat Mitigation	Investing in cooling infrastructure and develop UHI urban design standards	Resilient	LONG	PLAN	MULTI	POL	$	C



LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Regional Center (See Page 2-22 - 2-23)

FBC - Form-Based Code

- Implements the vision of the 2045 Downtown Las Vegas Masterplan, serving as a primary regional center of the metro area.
- Diverse, human-scale, walkable mixed use built environments, accessible throughout Downtown Las Vegas.
- Intensity and design vary by Downtown districts, ranging from an intense casino center and entertainment district to civic and business uses to diverse residential neighborhoods.
- Targeted use types, including medical, gaming and tourist activities, entertainment, maker, live/work, and industrial; includes housing ranging from high density residential mixed-use development, to walkable urban neighborhoods.
- Zoning classified using transect zones, ranging between high intensity mixed -use to low intensity neighborhoods.
- **Density:** Variable density: Densities may range from 5.5 - unlimited dwelling units per acre.
- **Applicable Special Areas:** DTLV - See LVMC Title 19.09 - Form Based Code
- **Compatible Zoning Districts:** T6-UC, T6-UG, T5-C, T5-M, T5-MS, T5-N, T4-C, T4-MS, T4-N, T3-N





TC - Town Center

- Implements the Centennial Centre Town Center plan; future Centennial Hills special area plan.
- High intensity, high density, regional center located around US 95 and I-215 in the northwestern valley, with integrated suburban commercial, offices, and residential, built at a scale that allows for multiple modes of transportation.
- **Density:** Up to 25 dwelling units per acre (as noted)
- **Applicable Special Areas:** TC - See Town Center Development Standards as adopted and amended; MTC (partial)
- **Compatible Zoning Districts:** T-C (includes subdesignations of L, M, ML, MLA, SC, GC, MS, SX, UC, EC, PC, PF), similar in form and character as other general plan categories.
- Residential: L- Low (< 5.5 d.u./acre); ML- Medium Low (5.6 - 8 d.u./acre); MLA- Medium Low Attached (8.1-12 d.u./acre); M- Medium (12.1-25 d.u./acre)
- Commercial: SC- Service Commercial; GC- General Commercial; MS- Main Street Mixed Use ; SX- Suburban Mixed Use (similar to SC, allows M); UC- Urban Center Mixed Use (multi-story mixed-use, office, residential, retail, and complimentary supportive uses); EC- Employment Center Mixed Use (mixed-use business parks, commercial, offices)
- Other: PF - Public Facilities





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Mixed Use Center (See Page 2-24 - 2-25)

TOD-1 - Transit Oriented Development 1 (High)

- Higher intensity, mixed use, transit oriented development, suitable for future light rail transit corridors.
- Located near hubs of areas of the city at major intersections of transit corridors.
- Incorporates shopping, services, dining, employment, residential and office uses (especially on upper floors), and civic uses.
- There is a walkable, multi-modal emphasis that re-establishes grid layout.
- Storefronts have direct sidewalk access and face the street.
- Pocket parks, squares, and neighborhood parks are incorporated into the development.
- Surface parking is substantially reduced.
- **Density:** Greater than 15 dwelling units per acre.
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** All existing zoning shall continue to be temporarily allowed, but will phase into another zoning category after action is taken by Planning Commission or City Council. TOD-O applies (R-3, R-4, R-TH, C-1, C-2, O, C-V).





TOD-2 - Transit Oriented Development 2 (Low)

- Moderate intensity, mixed use, transit oriented development, suitable for current and future bus rapid transit corridors.
- Located near hubs of areas of the city at major intersections of transit corridors.
- Incorporates shopping, services, dining, employment, residential and office uses (especially on upper floors), and civic uses.
- There is a walkable, multi-modal emphasis that re-establishes grid layout.
- Storefronts have direct sidewalk access and face the street.
- Pocket parks, squares, and neighborhood parks are incorporated into the development.
- Surface parking is substantially reduced.
- **Density:** Up to 30 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** All existing zoning shall continue to be temporarily allowed, but will phase into another zoning category after action is taken by Planning Commission or City Council. TOD-O applies (R-3, R-4, R-TH, C-1, C-2, O, C-V).





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Corridor Mixed Use (See Page 2-26 - 2-27)

TOC-1 - Transit Oriented Corridor 1 (High)

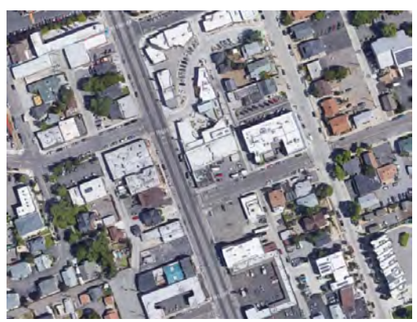
- Higher intensity, linear corridor mixed use, suitable for future light rail transit corridors.
- Incorporates shopping, services, dining, employment, residential and office uses (especially on upper floors), and civic uses. Building heights and residential densities may be greater, depending on the context and location.
- There is a walkable, green streetscape with multi-modal emphasis and greater flexibility; access from the street is managed.
- Storefronts have direct sidewalk access and face the street, with limited parking allowed.
- Neighborhood parks and greenways are integrated along the corridor.
- Surface parking is substantially reduced and to the rear, but some drive-thrus and auto-oriented uses are acceptable.
- **Density:** Up to 40 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** All existing zoning shall continue to be temporarily allowed, but will phase into another zoning category after action is taken by Planning Commission or City Council. TOD-O applies (R-3, R-4, R-TH, C-1, C-2, O, C-V).





TOC-2 - Transit Oriented Corridor 2 (Low)

- Lower intensity, linear corridor mixed use, suitable for future bus rapid transit corridors.
- Incorporates shopping, services, dining, employment, residential and office uses (especially on upper floors), and civic uses. Building heights and residential densities may be lower, depending on the context and location.
- There is a walkable, green streetscape with multi-modal emphasis and greater flexibility; access from the street is managed.
- Storefronts have direct sidewalk access and face the street, with limited parking allowed.
- Neighborhood parks and greenways are integrated along the corridor.
- Surface parking is substantially reduced and to the rear, but some drive-thrus and auto-oriented uses are acceptable.
- **Density:** Up to 30 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** All existing zoning shall continue to be temporarily allowed, but will phase into another zoning category after action is taken by Planning Commission or City Council. TOD-O applies (R-3, R-4, R-TH, C-1, C-2, O, C-V).





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Neighborhood Mixed Use Center (See Page 2-28 - 2-29)

NMXU - Neighborhood Mixed Use Center

- Moderate intensity, mixed use, “micro” transit oriented development, suitable for bus rapid transit, rapid bus, or fixed route transit corridors. May also occur as a neighborhood serving town or village center for an Area of the City.
- A walkable node that may be near major intersections of transit or transportation corridors.
- A “main street” feel is emphasized.
- Incorporates neighborhood serving retail, shopping, services, dining, employment, residential and office uses (especially on upper floors), and civic uses.
- Buildings are mid-rise or low-rise; may include townhomes, flats, condos, or apartments. Live/work units may be present.
- May include a conversion of a former strip mall or shopping center.
- There is a walkable, multi-modal emphasis that may establish a grid layout. In suburban areas, may serve as a mobility hub that incorporates a park ‘n’ ride, kiss ‘n’ ride, microtransit, TNC and delivery service, or carpooling.
- Storefronts have direct sidewalk access and face the street. Entrances are connected to the sidewalk surrounding the center.
- Strong emphasis on placemaking and character of the neighborhood.
- Pocket parks, squares, and neighborhood parks are incorporated into the development; schools may be present.
- Surface parking is substantially reduced.
- **Density:** Variable - Up to 25 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** All existing zoning shall continue to be temporarily allowed, but will phase into another zoning category after action is taken by Planning Commission or City Council. TOD-O applies (R-3, R-4, R-TH, C-1, C-2, O, C-V).









LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Low Density Residential

L - Low Density Residential

- Generally permits single family detached homes, manufactured homes on individual lots, community gardens, home occupations, and family child care.
- **Density:** Up to 5.5 dwelling units per acre
- **Applicable Special Areas:** CE, GTV, IMR, LM
- **Compatible Zoning Districts:** U, R-E, R-D, R-1, R-SL, R-MH, PD*





ML - Medium Low Density Residential

- Generally permits single family detached homes, including compact lots and zero lot lines, mobile home parks, two-family dwellings, and local supporting uses including parks, schools, or churches.
- **Density:** Up to 8.5 dwelling units per acre
- **Applicable Special Areas:** CE, GCV, GTV, LM
- **Compatible Zoning Districts:** U, R-E, R-1, R-SL, R-CL, R-2, R-MH, PD*





MLA - Medium Low Density Residential - Attached

- Generally permits multi-family attached units including plexes, townhouses, condominiums, and low-density apartments; appropriate for residential portions of a Village Center or Town Center, transitional uses, and local supporting uses including parks, schools, or churches.
- **Density:** Up to 12.5 dwelling units per acre
- **Applicable Special Areas:** GTV, LM
- **Compatible Zoning Districts:** R-TH, R-2, R-MH, PD*





*PD zoning is allowed in applicable special area

LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Low Density Residential

SF1 - Single Family Detached 1

- Single family detached homes
- **Density:** Up to 3.5 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





SF2 - Single Family Detached 2

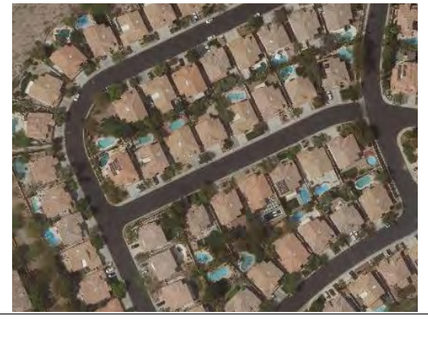
- Single family detached homes
- **Density:** Up to 6 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





SF3 - Single Family Detached 3

- Single family detached homes
- **Density:** Up to 10 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Low Density Residential

SFZL - Single-Family Zero Lot Line

- Single family attached and detached homes, allowing for a zero lot line.
- **Density:** Up to 12 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





PCD - Planned Community Development

- Generally permits a mix of residential uses, maintains an average overall density ranging from two to eight dwelling units per acre depending upon compatibility with adjacent uses.
- **Density:** Up to 8 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** PD





TND - Traditional Neighborhood Development

- Generally permits walkable mixed-use neighborhood developments that allows for a balanced, integrated mix of housing, commercial, and civic uses with multimodal, interconnected and accessible streets, retained natural features, and recreational elements.
- **Density:** Variable
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** R-E, R-1, R-2, R-3, R-4, O, C-1, C-2, T-D





*PD zoning is allowed in applicable special area

LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Medium Density Residential

M - Medium Density Residential

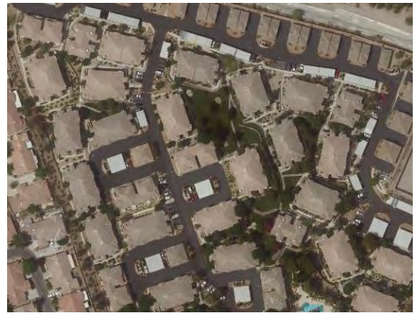
- Generally permits multi-family units such as plexes, townhouses, and medium-density apartments.
- **Density:** Up to 25.5 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** R-TH, R-2, R-3, PD*





MF1 - Multi Family Low Density

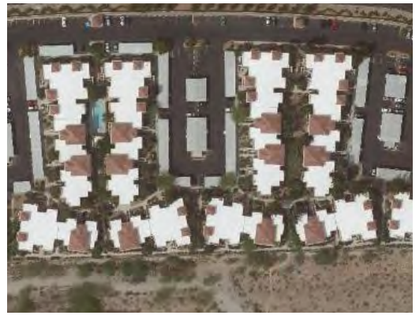
- Low-density multi-family development, including multi-family housing, apartments, townhomes, and plexes.
- **Density:** Up to 14 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





MF2 - Multi Family Medium Density

- Medium-density multi-family development, including multi-family housing, apartments, townhomes, and plexes.
- **Density:** Up to 21 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Medium Density Residential

SFA - Single Family Attached

- Attached single-family housing.
- **Density:** Up to 18 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C

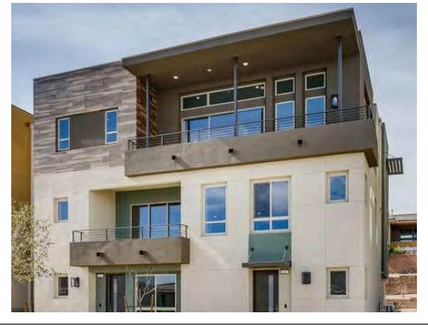




SFSD - Single Family Special Lot

- Single family housing.
- **Density:** Up to 18 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C

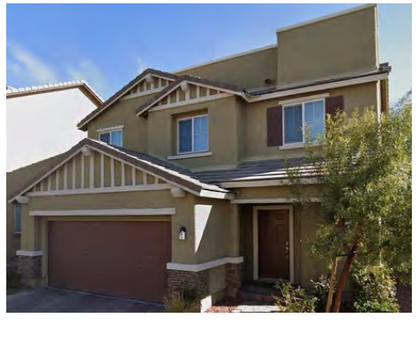




RSL - Residential Small Lot

- Higher density detached and attached single-family homes, including duplexes, compact lots, townhomes, and apartments.
- **Density:** Up to 15 dwelling units per acre
- **Applicable Special Areas:** CE
- **Compatible Zoning Districts:** PD





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Medium Density Residential

MFM - Multi-Family Medium

- Higher density variety of multi-family units such as condominiums, low-density multi-family, and residential buildings.
- **Density:** Between 15-25 dwelling units per acre
- **Applicable Special Areas:** GCV, GTV, LM
- **Compatible Zoning Districts:** PD



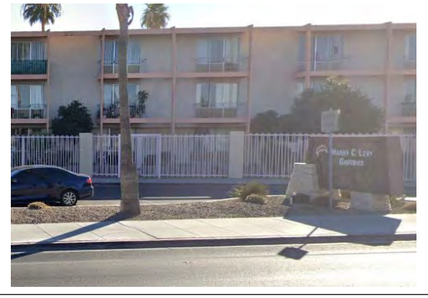


High Density Residential

H - High Density Residential

- Generally permits high-density multi-family development, including plexes, townhomes, large apartments, condominiums, and other high-density multi-family dwellings.
- **Density:** Greater than 25.5 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** R-TH, R-2, R-3, R-4

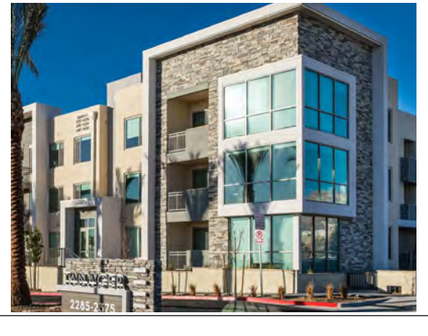




MF3 - High Density Multi-Family

- Multi-family attached units including plexes, townhouses, condominiums, and high-density apartments.
- **Density:** No maximum density
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Commercial

GC - General Commercial

- Generally permits higher intensity retail, service, wholesale, office, mixed-use developments with a residential component or other general business uses; may include commercial activities with outdoor storage, noise, lighting or other characteristics not generally compatible with residential areas.
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** P-O, O, C-1, C-2





SC - Service Commercial

- Gernerally permits medium intensity retail, office, or other commercial uses serving local patrons, and does not include intense commercial uses; includes neighborhood shopping centers, public and semi-public uses, offices, or mixed-use developments with a residential component.
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** P-O, O, C-1





O - Office

- Generally permits small lot office conversions as a transition from from residential and commercial uses and large planned offices; includes medical offices, professional businesses, and offices for civic and social organizations.
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** P-O, O





*PD zoning is allowed in applicable special area

LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Commercial

CC - Community Commercial

- Low to medium intensity retail, office or other commercial uses and serves as an employment center;
- **Applicable Special Areas:** GCV
- **Compatible Zoning Districts:** U, R-E, R-D, R-1, R-SL, R-MH, PD*





VC - Village Commercial

- Medium intensity mix of neighborhood-oriented offices, business, and retail
- **Applicable Special Areas:** CE, LM, SUM
- **Compatible Zoning Districts:** P-C, PD*





TC - Town Center*

- Large commercial, community complexes that become a primary business center for Summerlin, including regional shopping, mid and high-rise structures, high density residential, cultural, and community and recreational facilities.
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Commercial

EC - Employment Center

- Office, light industry, business and support commercial services, and higher density multi-family residential
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





NF - Neighborhood Focus

- Low intensity, neighborhood oriented retail, offices, services, and recreational amenities
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





NC - Neighborhood Commercial

- Low intensity, neighborhood-oriented retail and services
- **Applicable Special Areas:** LM
- **Compatible Zoning Districts:** PD





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Industrial

LI-R - Light Industrial and Research

- Generally permits medium to low intensity industrial activities, light assembly, commercial, business parks, research and development laboratories, warehousing and distribution, and other supporting ancillary uses.
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** P-O, O, C-1, C-2, C-PB, C-M, M





Parks and Open Space

PR-OS - Parks, Recreation, and Open Space

- Generally permits parks, recreational facilities, public and private golf courses, trails, drainage and detention areas, and open spaces.
- **Applicable Special Areas:** All
- **Compatible Zoning Districts:** C-V





COS - Community Open Space

- Public and semi-public parks, recreational facilities, golf courses, open spaces, trails, and civic spaces.
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Public Facilities

PF - Public Facility

- Generally permits public and semi-public buildings and facilities, civic uses and spaces, hospitals and medical facilities, wastewater treatment plants, libraries, infrastructure, and utilities.
- **Applicable Special Areas:** CE, GTV, IMR, LM
- **Compatible Zoning Districts:** C-V, P-C, PD*





Rural Preservation

RNP - Rural Neighborhood Preservation

- Generally permits large lot, single family estates and ranches, typically in suburban areas designated for preservation as established by interlocal agreements, and allowing for non-commercial agricultural use and husbandry.
- **Density:** Up to 2 dwelling units per acre
- **Applicable Special Areas:**
- **Compatible Zoning Districts:** U, R-E, (RP-O Rural Preservation Overlay)





DR - Desert Rural Density Residential

- Generally permits large lot, single family estates and ranches, typically in suburban or peripheral rural areas, allowing for non-commercial agricultural use and husbandry.
- **Density:** Up to 2.5 dwelling units per acre
- **Applicable Special Areas:** IMR
- **Compatible Zoning Districts:** U, R-E





*PD zoning is allowed in applicable special area

LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Rural Preservation

R - Rural Density Residential

- Generally permits medium lot, single family estates and ranches, typically in suburban or peripheral rural areas, allowing for agricultural use.
- **Density:** Up to 3.6 dwelling units per acre
- **Applicable Special Areas:** IMR
- **Compatible Zoning Districts:** U, R-E, R-D, R-1





ER - Estate Residential

- Large lot, suburban single family estates.
- **Density:** Up to 2 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





EQR - Equestrian Residential

- Large lot, suburban single family estates.
- **Density:** Up to 2 dwelling units per acre
- **Applicable Special Areas:** SUM
- **Compatible Zoning Districts:** P-C





LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Zoning (LVMC Title 19) - http://online.encodeplus.com/regs/lasvegas-nv/index.aspx

- U: Undeveloped - 19.06.050
- R-E: Residential Estate - 19.06.060
- R-D: Single Family Residential - Restricted - 19.06.065
- R-1: Single Family Residential - 19.06.070
- R-SL: Single Family Small Lot Residential - 19.06.075
- R-CL: Single Family Compact Lot - 19.06.080
- R-TH: Single Family Attached - 19.06.090
- R-2: Medium-Low Density Residential - 19.06.100
- R-3: Medium Density Residential - 19.06.110
- R-4: High Density Residential - 19.06.120
- R-MH: Mobile/Manufactured Home - 19.06.130
- P-O: Professional Office - 19.08.050
- O: Office - 19.08.060
- C-D: Design Commercial - 19.08.065
- C-1: Limited Commercial - 19.08.070
- C-2: General Commercial - 19.08.080
- C-PB: Planned Business Park - 19.08.085
- C-M: Commercial / Industrial - 19.08.090
- M: Industrial - 19.08.100
- C-V: Civic - 19.10.020
- P-C: Planned Community - 19.10.030
- PD: Planned Development - 19.10.040
- R-PD - Residential Planned Development (Not available) - 19.10.050
- T-C: Town Center - 19.10.060
- T-D: Traditional Development - 19.10.070
- T6-UC: Urban Core - 19.09.050.E.004
- T6-UG: Urban General - 19.09.050.E.008
- T5-M: Maker - 19.09.050.E.012
- T5-C: Corridor - 19.09.050.E.016
- T5-MS: Main Street - 19.09.050.E.020
- T5-N: Neighborhood - 19.09.050.E.024
- T4-M: Maker - 19.09.050.E.026
- T4-C: Corridor - 19.09.050.E.028
- T4-N: Neighborhood - 19.09.050.E.036
- T3-N: Neighborhood - 19.09.050.E.040

LAND USE DESCRIPTIONS - (CHAPTER 2 / I) - LVMC TITLE 19.00.030 - 19.00.050

Overlays

- A-O: Airport Overlay - 19.10.080 - Height limitations from North Las Vegas Airport and McCarran International Airport
- CD-O: Designed Commercial Overlay - 19.10.090 - Development standards along Charleston Blvd (Valley View to Rancho)
- DC-O: Designed Commercial Overlay - 19.10.100 - Downtown casino signage standards
- DTLV-O: Downtown Las Vegas Overlay - 19.10.110 - Interim development standards for Downtown Las Vegas
- DE-O: Downtown Entertainment Overlay - 19.10.120 - Special standards for Fremont East (Las Vegas Blvd to 8th)
- G-O: Gaming Enterprise Overlay - 19.10.130 - Gaming enterprise districts pursuant to LVMC 6.40 / NRS 463.0158
- HS-O: Hillside Overlay - 19.10.140 - Protects foothill areas and slopes of 15% or greater
- HD-O: Historic Designation Overlay - 19.10.150 - Protects historically designated properties, sites, objects (see Chapter 2 / I.D)
- SB-O: Las Vegas Blvd Scenic Byway - 19.10.160 - Signage standards for property along Las Vegas Blvd (Sahara to Washington)
- LW-O: Live/Work Overlay - 19.10.170 - Allows live/work units in specified districts of Downtown Las Vegas
- RP-O: Rural Preservation Overlay - 19.10.180 - Protects properties and neighborhoods in rural settings (see Chapter 2 / I.B)
- TOD-O: Transit Oriented Development Overlay - 19.10.200 - Applies to TOD land uses (see Chapter 2 / I.B)

Redevelopment Area Categories

The following designations are legacy general plan categories within the City's Redevelopment Areas (RDA-1, RDA-2, and RDA-3). These categories and their corresponding compatible zoning continue to exist, but may phase into another category, including FBC, TOD-1, TOD-2, TOC-1, TOC-2, or NMXU, after action is taken by Planning Commission or City Council.

- C - Commercial: corresponds with O, SC, GC general plan categories (O, P-O, C-1, C-2 zoning districts)
- MXU - Mixed Use: corresponds with L, ML, M, H, O, SC, GC general plan categories (R-E, R-MH, R-1, R-2, R-3, R-4, R-TH, O, P-O, C-1, C-2 zoning districts)

Special Areas, Master Planned Communities, and Development Agreements

- CE: Cliff's Edge - Providence
- DTLV: Downtown Las Vegas
- GCV: Grand Canyon Village
- GTV: Grand Teton Village
- IMR: Iron Mountain Ranch
- LM: Lone Mountain / Lone Mountain West
- MTC: Montecito Town Center
- SUM: Summerlin North / Summerlin West
- SKYE: Skye Canyon
- TC: Town Center
- ULVW: Upper Las Vegas Wash (Future)

Project	Area
IDENTIFIED CAPITAL IMPROVEMENTS - ENVIRONMENT, PARKS (CHAPTER 2 / III)	
Urban Foresty tree plantings and green infrastructure (60,000 trees)	Citywide
Parks System Plan - Additional identified parks (Imagine LV Parks)	Citywide
Brownfield remediation	Downtown Las Vegas
Environmental Justice projects - improve conditions to highly impacted areas	Citywide
Civic Plaza	Downtown Las Vegas
Downtown Central Park	Downtown Las Vegas
James Gay Park upgrades and urban agriculture	Downtown Las Vegas
Cashman Community Park	Downtown Las Vegas
Gateway Neighborhood Park	Downtown Las Vegas
Fremont Neighborhood Park	Downtown Las Vegas
I-515 Cover Park	Downtown Las Vegas
East Las Vegas Infill Parks (70 acres)	East Las Vegas
West Las Vegas Infill Parks (50 acres)	West Las Vegas
Downtown South Infill Parks (25 acres)	Downtown South
Charleston Infill Parks (76 acres)	Charleston
Twin Lakes Infill Parks (90 acres)	Twin Lakes
Angel Park Infill Parks (47 acres)	Angel Park
Summerlin West Parks and Open Space (694 acres)	Summerlin West
Lone Mountain Parks and Open Space (266 acres)	Lone Mountain
Rancho Infill Parks (127 acres)	Rancho
Centennial Hills Infill Parks (111 acres)	Centennial Hills
La Madre Foothills Parks and Open Space (1,141 acres)	La Madre Foothills
Box Canyon Park and Open Space	La Madre Foothills
Kyle Canyon Parks and Open Space (544 acres)	Kyle Canyon
Tule Springs Parks and Open Space (127 acres)	Tule Springs
Floyd Lamb Park improvements and expansion	Tule Springs
Northwest Regional Park	Kyle Canyon
Mirabelli Community Center Improvements	Charleston
East Las Vegas Community Center Improvements	East Las Vegas
Doolittle Community Center Improvements	West Las Vegas
Neighborhood community centers	Citywide
Chuck Minker Sports Complex replacement	East Las Vegas
Pickleball complex - Wayne Bunker Park	Lone Mountain
Regional aquatics complex - Pavilion Pool	Summerlin North
Regional community sports complex -	Summerlin West
Grand Park (Summerlin West)*	Summerlin West
Little Red Rocks Park and Open Space preservation*	Summerlin West
Summerlin West arroyos*	Summerlin West
Children's exploration park	Future
Regional amphitheater	Future
Demonstration / botanical garden	Future

Project (From Mobility Master Plan)	Street rehab	Bicycle	Pedestrian	Transit	Mobility	Timing
IDENTIFIED CAPITAL IMPROVEMENTS - TRANSPORTATION (CHAPTER 4 / I.A - I.B)						
4th St - Las Vegas Blvd to Bridger Cycletrack	x	x	x	x		MID
7th St - Bridger to Stewart Complete Street	x		x			SHORT
8th St - Bridger to Stewart Complete Street	x		x			SHORT
9th St - Fremont to Stewart Complete Street	x		x			SHORT
Adcock and Garside Safe Routes to School Improvements			x			SHORT
Alexander Rd - Hualapai to Cimarron Street Rehab and Buffered Bike Lanes / Trail	x	x	x			MID
Alexander Rd - Hualapai to Cliff Shadows Street Rehab and Buffered Bike Lanes / Trail	x	x	x			SHORT
Alta Dr - Desert Foothills to Durango Street Rehab and Enhanced Bike Lanes / Trail	x	x	x			MID
Alta Dr - Durango to Rainbow Street Rehab and Buffered Bike Lanes	x	x	x			SHORT
Arterial / Collector Rehab (corridors to be determined)	x					MID
Bonanza Rd - "Grand Paseo" Complete Street - Maryland to Nellis	x	x	x	x		SHORT
Bonanza Rd - MLK to Main Streetscape and Bike Lane/Trail Retrofit		x	x			SHORT
Bonanza Rd - Rancho to Nellis Bus Turnouts and Shelter Relocations				x	x	SHORT
Bonanza Trail - Pedestrian/Bike Enhancement at US 95/Jones		x	x			SHORT
Bottleneck Improvement - Ann / Centennial Center					x	SHORT
Bottleneck Improvement - Charleston / Nellis					x	SHORT
Bottleneck Improvement - Charleston/CC-215 Interchange					x	SHORT
Bottleneck Improvement - US 95 / Decatur southbound off ramp					x	SHORT
Boulder Ave - 1st to Art Way Complete Street			x			SHORT
Bradley Rd - Ann to Grand Teton Road Diet / Buffered Bike Lanes	x	x	x		x	MID
Buffalo Rd - Cheyenne to Charleston Bus Turnouts and Shelter Relocations			x	x	x	SHORT
Buffalo Rd - Lake Mead to Cheyenne Street Rehab and Bike Lane Retrofit	x	x				SHORT
Buffalo Rd - Sahara to Charleston Street Rehab, Buffered Bike Lanes, and Enhanced Median	x	x	x			SHORT
California Ave - Commerce to 3rd Complete Street	x		x			SHORT
CC-215 Beltway Trail - Tenaya to Centennial Pkwy		x	x			SHORT
CC-215 Beltway Trail Bridges (Lake Mead, Grand Canyon, Torrey Pines)		x	x			MID
Centennial Center - Ann to Grand Montecito Traffic Calming / Trail		x	x		x	SHORT
Centennial Hills Sawtooth Infill / Trail improvements (Various Locations)					x	SHORT
Charleston / US 95 Interchange Safety and Capacity Improvements					x	SHORT
Charleston Blvd - Rancho to MLK Sidewalk / Streetscape Improvement			x			SHORT
Charleston Blvd LRT		x	x	x		MID
Cheyenne Ave - 215 to Decatur Bus Turnouts / Shelter Relocations				x	x	MID
Cheyenne Ave - CC-215 to Hualapai Street Rehab	x					SHORT
Cheyenne Trail - CC-215 to Ronemus		x	x			MID
Cheyenne Trail - CC-215 to Ronemus		x	x			LONG
Cimarron Rd - Oakey to Vegas Buffered Bike Lanes, Traffic Calming and Street Rehab	x	x	x			SHORT
Cimarron Rd / Summerlin Pkwy Ped/Bike Bridge		x	x			SHORT
Cimarron Road - Oakey to Vegas Buffered Bike Lanes, Traffic Calming, and Street Rehab	x	x	x			SHORT
City Pkwy - Bonanza to Grand Central Capacity and Complete Street	x	x	x	x	x	SHORT

Project (From Mobility Master Plan)	Street rehab	Bicycle	Pedestrian	Transit	Mobility	Timing
IDENTIFIED CAPITAL IMPROVEMENTS - TRANSPORTATION (CHAPTER 4 / I.A - I.B)						
City Pkwy / US 95 Interchange					x	SHORT
Clark High School Safe Routes to School Improvement - Arville between Sirius and Sahara	x	x	x			SHORT
Clark High School Safe Routes to School Improvement - Pennwood between Decatur and Valley View	x	x	x			SHORT
Cliff Shadows Pkwy / Shaumber Rd Connector - Lone Mountain to Washburn					x	LONG
Colorado St - Commerce to 3rd Complete Street	x		x			SHORT
Craig Rd - Decatur to Rancho Bus Turnouts and Shelter Relocations				x	x	MID
Decatur Blvd - Farm to Elkhorn Street Rehab and Bike Lane Retrofit	x	x				SHORT
Decatur Blvd - Lone Mountain to CC-215 Street Rehab and Bike Lane Retrofit	x	x				MID
Decatur Blvd - US 95 to Elkhorn Bus Turnouts and Shelter Relocations				x	x	SHORT
Decatur Blvd - Washburn to Tropical Street Rehab	x					SHORT
Decatur Blvd LRT		x	x	x	x	MID
Deer Springs - Hualapai to Durango Street Rehab and Bike Lane Retrofit	x	x				MID
Desert Inn Rd - Fort Apache to Hualapai Street Rehab and Bike Lane Retrofit	x	x				SHORT
Durango Dr - Brent to Moccassin Street Rehab and Buffered Bike Lanes	x	x	x			MID
Durango Dr - Centennial to US 95 Street Rehab and Bike Lane Retrofit	x	x	x			MID
Durango Dr - Sahara to Charleston Street Rehab and Bike Lane Retrofit	x	x	x			SHORT
Durango Dr -Farm to Brent Lane Street Rehab and Buffered Bike Lanes	x	x				SHORT
Durango/Westcliff/Buffalo - Route 121 Bus Turnouts and Shelter Relocations			x	x	x	SHORT
Eastern Ave - Cedar to Owens Complete Street	x	x	x	x	x	SHORT
Eastern Ave - Cedar to Sahara Bus Turnouts and Shelter Relocations				x	x	SHORT
Egan Crest - Dorell to Grand Teton Bike Lane Retrofit	x	x				MID
Elkhorn Rd - Grand Canyon to Durango Street Rehab and Buffered Bike Lanes	x	x				MID
Elkhorn Rd - Jones to Decatur Street Rehab and Buffered Bike Lanes	x	x				MID
Farm Rd - Shaumber to Oso Blanca Bike Lane Retrofit	x	x				MID
Farm Rd - Tenaya to Durango Street Rehab and Enhanced Bike Lanes	x	x				SHORT
Fort Apache / Rampart - Route 120 Bus Turnouts and Shelter Relocations			x	x	x	SHORT
Fort Apache / Rampart / Durango Trail - Desert Inn to Cheyenne		x	x			SHORT
Fort Apache Rd - Deer Springs to Grand Teton Street Rehab and Buffered Bike Lanes	x	x				MID
Fremont St - 8th to Maryland Pedestrian Enhancements / Streetscape			x			SHORT
Gowan Rd - Hualapai to Buffalo Road Diet / Buffered Bike Lanes / Traffic Calming Medians	x	x	x			SHORT
Grand Canyon Dr - Cheyenne to Alexander Street Rehab and Buffered Bike Lanes	x	x				SHORT
Grand Canyon Dr - Deer Springs to Grand Teton Street Rehab and Enhanced Bike Lanes	x	x				MID
Grand Central / Industrial Connector over UPRR					x	SHORT
Grand Central Street Rehab - Iron Horse to City Parkway	x					SHORT
Grand Montecito Pkwy - Centennial to Oso Blanca Street Rehab and Enhanced Bike Lanes	x	x				MID

Project (From Mobility Master Plan)	Street rehab	Bicycle	Pedestrian	Transit	Mobility	Timing
IDENTIFIED CAPITAL IMPROVEMENTS - TRANSPORTATION (CHAPTER 4 / I.A - I.B)						
Grand Teton / US 95 Overpass		x	x		x	MID
Grand Teton Dr - Durango to Buffalo Street Rehab and Buffered Bike Lanes	x	x				SHORT
Grand Teton Dr - Jones to Decatur Street Rehab and Buffered Bike Lanes	x	x				MID
Grand Teton Dr - Puli to Oso Blanca Street Rehab and Buffered Bike Lanes	x	x				MID
Grand Teton Dr - Sky Pointe to Durango Street Rehab and Buffered Bike Lanes	x	x				SHORT
Hancock Elementary School Safe Routes to School Improvement - Lindelle Between Charleston and Oakey			x			SHORT
Harris Avenue Safe Routes to School Upgrades - Bruce to Wardelle	x	x	x		x	SHORT
Hillpointe Dr - Lake Mead to Rampart Traffic Calming / Buffered Bike Lane Retrofit	x	x	x			SHORT
Hillpointe Dr - Lake Mead to Rampart Traffic Calming / Buffered Bike Lane Retrofit		x	x			SHORT
Horse Dr - Jones to Decatur Street Rehab and Buffered Bike Lanes	x	x				MID
Hualapai Wy - Charleston to Sahara Street Rehab and Bike Lane Retrofit	x	x				SHORT
Hualapai Wy - Cheyenne to Alexander Street Rehab and Buffered Bike Lanes	x	x				MID
I-15 / Meade Ave HOV Interchange					x	MID
I-15 Frontage Road - Washington to Lake Mead					x	SHORT
I-515 / Downtown Access Project					x	MID
Jackson Avenue - "H" to "C" Complete Street Improvements	x	x	x			SHORT
John Herbert / CC-215 Interchange / Frontage Road to Oso Blanca / Oso Blanca Underpass		x	x	x	x	SHORT
Jones Blvd - Ann to CC-215 Street Rehab and Buffered Bike Lanes	x	x			x	MID
Jones Blvd - Ann to CC-215 Street Rehab and Buffered Bike Lanes	x	x			x	MID
Jones Blvd - CC-215 to Elkhorn Street Rehab and Buffered Bike Lanes	x	x				MID
Jones Blvd - Elkhorn to Horse Street Rehab and Enhanced Bike Lanes	x	x			x	MID
Jones Blvd - Lone Mountain to Rancho Street Rehab and Buffered Bike Lanes	x	x			x	SHORT
Lake Mead / Hills Center / Town Center - Route 210 Bus Turnouts and Shelter Relocations			x	x	x	SHORT
Lake Mead Blvd - Hills Center to Anasazi Street Rehab and Bike Lane Retrofit	x	x				SHORT
Lake Mead Blvd - Losee to Tonopah Complete Street	x	x	x	x	x	SHORT
Lamb Blvd - Stewart to Owens Complete Street	x	x	x	x	x	SHORT
Las Vegas Blvd - Charleston to Sahara Complete Street			x			SHORT
Las Vegas Blvd - Stewart to Charleston Complete Street			x			SHORT
Las Vegas Blvd - Stewart to Owens Complete Street / Bike Lane Retrofit		x	x			SHORT
Lone Mountain Trail extension and area connecting trails		x	x			
Losee Rd Extension - Lake Mead to Owens					x	SHORT
Main St - US 95 to Owens Complete Street	x	x	x	x	x	MID
Marion Dr - Charleston to Owens Traffic Calming and Overpass at Las Vegas Wash		x	x		x	MID
Maryland Pkwy - Stewart to Bruce Street Rehab and Bike Lane Retrofit	x	x	x	x	x	SHORT

Project (From Mobility Master Plan)	Street rehab	Bicycle	Pedestrian	Transit	Mobility	Timing
IDENTIFIED CAPITAL IMPROVEMENTS - TRANSPORTATION (CHAPTER 4 / I.A - I.B)						
Maryland Pkwy / I-515 HOV Interchange					x	MID
Maryland Pkwy BRT	x	x	x	x	x	MID
Michael Wy - Lake Mead to Rancho Enhanced Bike Lanes / Trail	x	x	x		x	MID
Michael Wy - Meadows to Rancho Enhanced Bike Lanes / Trail		x	x		x	MID
Michael Wy / US 95 Bike / Ped Bridge		x	x			MID
MLK Blvd - Alta to Carey Bus Turnouts and Shelter Relocations				x	x	SHORT
MLK Blvd - Oakey to Teddy Extension, Widening of Rancho Drive, and Direct Connect to D.I. Overpass	x	x	x	x	x	MID
Nellis Ave - Owens to Charleston Bus Turnouts and Shelter Relocations				x	x	SHORT
Nu Wav Kaiv roadways (Phase 1 - Upper Las Vegas Wash)					x	SHORT
Nu Wav Kaiv roadways (Phase 2 - Job Creation Zone, LVPT)					x	MID
Oakey Blvd - Buffalo to Rainbow Street Rehab and Enhanced Bike Lanes	x	x	x			MID
Oakey Blvd - Durango to Buffalo Street Rehab and Enhanced Bike Lanes	x	x	x			MID
Oakey Blvd - Valley View to Western Street Rehab and Bike Lane Retrofit	x	x	x			SHORT
Ogden Ave - Las Vegas Blvd to 13th Complete Street			x			SHORT
Owens Ave - H to UPRR Crossing Complete Street	x	x	x	x	x	SHORT
Owens Ave - Las Vegas Blvd to Nellis Street Rehab and Bike Lane Retrofit	x	x				MID
Owens Ave - MLK to H Street Rehab and Enhanced Bike Lanes	x	x				MID
Owens Ave - UPRR to Las Vegas Blvd Street Rehab and Pedestrian Safety Countermeasures	x		x			MID
Paradise Rd - Sahara to St Louis Complete Street/Gateway Conversion	x		x	x		SHORT
Peak Trail - Tenaya to Rancho with Ped / Bike Bridge over US 95		x	x			MID
Peak Trail - Tenaya to Rancho with Ped / Bike Bridge over US 95		x	x			LONG
Pioneer Trail extension		x	x			SHORT
Rainbow Blvd - US 95 to Lone Mountain Bus Turnouts and Shelter Relocations				x	x	MID
Rainbow Blvd - US 95 to Smoke Ranch Street Rehab and Bike Lane Retrofit	x	x				MID
Rainbow Blvd - Westcliff to Sahara Complete Street	x	x	x	x	x	SHORT
Rampart Blvd - Charleston to Summerlin Pkwy Auxiliary Lanes					x	LONG
Rancho Dr - Alta to Charleston Street Rehab and Sidewalk Widening/ Street Trees - Alta to Charleston	x		x			SHORT
Rancho Dr - Charleston to Sahara Street Rehab	x					MID
Sahara Ave / Las Vegas Blvd Circular Pedestrian Bridge			x			MID
Sahara Ave BRT upgrades				x		MID
Sandhill Rd - Owens to Washington Traffic Calming and Overpass at Las Vegas Wash		x	x		x	MID
Shaumber Rd - Grand Teton to Centennial Street Rehab and Bike Lane Retrofit	x	x				MID
Sheep Mountain Pkwy - CC-215 to Grand Teton With Direct Ramps to/ from CC-215, including multi-use trail		x	x		x	MID
Sheep Mountain Pkwy - Grand Teton to US 95 including multi-use trail		x	x		x	LONG
Smoke Ranch Rd - Rainbow to Buffalo Street Rehab and Buffered Bike Lanes	x	x				SHORT
Spencer Greenway- Charleston to Sahara		x	x			SHORT
St Louis - Paradise to Boulder Hwy Street Rehab, Enhanced Bike Lanes, and Decorative Medians - Trail upgrades	x	x	x			MID

Project (From Mobility Master Plan)	Street rehab	Bicycle	Pedestrian	Transit	Mobility	Timing
IDENTIFIED CAPITAL IMPROVEMENTS - TRANSPORTATION (CHAPTER 4 / I.A - I.B)						
Summerlin Area Traffic Signalization Project (Far Hills/Carriage Hills, Far Hills/Sageberry, Far Hills/Laurelglen, Hualapai/Crestdale, Alta/Desert Foothills, Desert Foothills/Desert Sunrise)					x	SHORT
Summerlin Pkwy HOV Interchange (Durango)					x	LONG
Summerlin Pkwy Overlay - CC-215 to Buffalo	x				x	SHORT
Summerlin Pkwy Trail - Rampart to CC-215		x	x			SHORT
Summerlin Pkwy Ultimate Improvements - CC-215 to US 95					x	MID
Symphony Park Ave - Main to Grand Central Extension with Bridge over UPRR		x	x	x	x	SHORT
Symphony Park Pedestrian Bridge (Bridger)		x	x			SHORT
Symphony Park Pedestrian Bridge (Hoover)		x	x			SHORT
Symphony Park Roadway Infrastructure			x		x	SHORT
Tenaya Wy - Alexander to Smoke Ranch Street Rehab and Enhanced Bike Lanes	x	x				SHORT
Tenaya Wy - Cheyenne to Smoke Ranch Bus Turnouts, Shelter Relocations, Median Retrofit	x	x	x	x	x	SHORT
Tenaya Wy - Lake Mead to Washington Street Rehab and Enhanced Bike Lanes	x	x				SHORT
Tenaya Wy - Smoke Ranch to Lake Mead Street Rehab and Enhanced Bike Lanes	x	x				SHORT
Tenaya Wy - Smoke Ranch to Lake Mead Street Rehab and Enhanced Bike Lanes	x	x				SHORT
Torrey Pines Dr - Sahara to US 95 Street Rehab and Enhanced Bike Lanes	x	x	x			MID
Town Center Dr - ADA Upgrade at Hualapai and Canyon Run roundabouts					x	MID
Tropical Pkwy - Decatur to Jones Street Rehab and Enhanced Bike Lanes	x	x				SHORT
Upper Las Vegas Wash Trail - Decatur to Moccasin		x	x			MID
US 95 / Alexander Road - Overpass Completion and Bike Lane Extension	x	x	x		x	SHORT
US 95 / Smoke Ranch HOV interchange					x	LONG
US 95 / Vegas Drive Overpass Completion	x	x	x	x	x	SHORT
Various Intersection Improvements Citywide For Bike Lane Pinch Points (Sahara/Durango, Charleston/Durango, Tenaya/Cheyenne, Tenaya/Lake Mead, Tenaya/Azure, and Washington/Buffalo)		x			x	SHORT
Various Intersection Improvements Citywide For Capacity and Safety (Lake Mead/Jones, Charleston/Torrey Pines, Cheyenne/Rainbow, Sahara/ Rancho, Charleston/Merialdo, Cheyenne/Jones, Charleston/Community College, Sahara/Las Vegas Boulevard)				x	x	SHORT
Vegas Dr - Decatur to Rancho Street Rehab and Enhanced Bike Lanes	x	x				MID
Vegas Dr - Jones to Decatur Street Rehab and Enhanced Bike Lane	x	x				MID
Vegas Dr - Rainbow to Jones Street Rehab and Enhanced Bike Lanes	x	x				MID
Vegas Dr - Rampart to Buffalo Street Rehab and Enhanced Bike Lanes	x	x				SHORT
Vegas Dr - Rancho to MLK Street Rehab and Enhanced Bike Lanes	x	x				MID
Washburn Rd - Durango to Tenaya Sawtooth Infill and Traffic Calming			x		x	SHORT
Washington Ave - Bruce to Nellis Street Rehab and Buffered Bike Lanes		x	x			SHORT
Washington Ave - Jones to Decatur Street Rehab and Bike Lane Retrofit	x	x				SHORT
Washington Ave - Jones to Rainbow Street Rehab and Bike Lane Retrofit	x	x				SHORT

Project (From Mobility Master Plan)	Street rehab	Bicycle	Pedestrian	Transit	Mobility	Timing
IDENTIFIED CAPITAL IMPROVEMENTS - TRANSPORTATION (CHAPTER 4 / I.A - I.B)						
Washington Ave - Las Vegas Blvd to Bruce Street Rehab and Bike Lane Retrofit / Trail	x	x	x			SHORT
Washington Ave - MLK to Main Bike Lane Retrofit/Streetscape / Trail		x	x			SHORT
Washington Ave - Rainbow to Durango Street Rehab and Enhanced Bike Lanes / Trail	x	x	x			SHORT
Wyoming - Industrial to Las Vegas Blvd, Capacity Improvements and Complete Street	x	x	x	x	x	SHORT

Projects listed within this table are derived from the Mobility Master Plan, some of which may be under construction.

Project	Area
IDENTIFIED CAPITAL IMPROVEMENTS - SMART SYSTEMS (CHAPTER 4 / I.C)	
Fiber-Optic Infrastructure Network	Citywide
LED Streetlights	Citywide
LED Park and field area lighting improvements	Citywide
Electric Vehicle Charging Infrastructure	Citywide
Advanced Smart City innovation and mobility program	Downtown Las Vegas
GoMED Autonomous shuttle circulator / microtransit	Downtown Las Vegas
Smart metering, IoT sensors, and building management systems	Citywide
Arterial / intersection ITS, DSRC / V2x infrastructure	Citywide
Nevada Electric Highway (DC fast charge, EV charging)	Nu Wav Kaiv
Cybersecurity upgrades	Citywide

Project	Area
IDENTIFIED CAPITAL IMPROVEMENTS - FLOODING (CHAPTER 4 / IV)	
Meadows Basin upgrades	Charleston
Arroyos / natural channels	Summerlin West
Box Canyon Detention Basin	La Madre Foothills
Grand Park Detention Basin	Summerlin West
Ann Road Detention Basin upgrades	La Madre Foothills
Kyle Canyon Detention Basin upgrades	La Madre Foothills
Kyle Canyon Sediment Basin	Kyle Canyon
Kyle Canyon channels	Kyle Canyon
Upper Las Vegas Wash Detention Basin upgrades	Tule Springs
Gowan South Basin upgrades	Twin Lakes
Charleston / Maryland Pkwy RCB	Downtown Las Vegas
West Charleston Blvd RCB	Charleston
Sahara Ave RCB	Downtown South
Rancho-Gowan RCB	Rancho
Box Canyon RCP	La Madre Foothills
Stewart-Bonanza RCP	East Las Vegas

Project	Area
IDENTIFIED CAPITAL IMPROVEMENTS - PUBLIC FACILITIES (CHAPTER 4 / II - III)	
Fire Station 1 - (I-515 Downtown Access Project impacts)	Downtown Las Vegas
Fire Station 46 (I-11 / Skye Canyon Park)	Kyle Canyon
Fire Station 49 (Skye Canyon Park / Moccasin)	Kyle Canyon
Fire Station 109 (Jones / Ann)	Rancho
Fire Station 142 (Hualapai / Grand Teton)	La Madre Foothills
Fire Station 145 (Cliff Shadows / Alexander)	Lone Mountain
Fire Station 147 (Lake Mead / Desert Foothills)	Summerlin West
Fire Station 148 (Durango / Tropical)	Centennial Hills
Fire Station 149 (Jones / Iron Mountain	Tule Springs
Fire Station I (Kyle Canyon / Witch Mountain)	Kyle Canyon
Future Fire Station	Nu Wav Kaiv
Future Fire Station	Summerlin West
Regional Public Safety Complex	La Madre Foothills
Civic Center Plaza	Downtown Las Vegas
Health & Wellness Center (Main St)	Downtown Las Vegas
Health & Wellness Center (Jackson Ave)	Downtown Las Vegas
New Area Command (LVMPD)	Kyle Canyon
Detention Center upgrades	East Las Vegas
Strong Start Academy (Wardelle)	East Las Vegas
Employment-Training Center (Historic Westside)	Downtown Las Vegas
Public Arts Program	Citywide
Future satellite government center facilities	Summerlin West
Downtown beautification program	Downtown Las Vegas
Corridor of Hope family shelter	Downtown Las Vegas
City museums	Citywide
Greenlink West transmission line (NV Energy)	Nu Wav Kaiv
Utility corridor / transmission improvements	Citywide
Sanitary sewer upgrades / Wastewater Collection System Master Plan	Citywide
WPCF upgrades; future expansion	Clark County