

sahara west walkable community

Community Design Element



Environment
Community Design Element
Quality of Life
Walkable Sustainable
Financial Value



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INTRODUCTION

WHAT IS A WALKABLE COMMUNITY?

A walkable community allows residents to access community amenities needed to conduct routine activities of daily life within a 10-minute walking distance. There are five types of walkable communities designated by Christopher Leinberger of the Brookings Institute. They are:

Traditional Downtown is characterized as the core of the city with high density, tall buildings, and a blend of different uses similar to New York, NY, San Francisco, CA, and Chicago, IL.

Downtown Adjacent is just outside the core area of a city such as Midtown Atlanta, GA, West Philadelphia, PA, and our own Las Vegas Medical District.

Suburban Town has a stock of older buildings and contains a downtown grid system with narrow streets and sidewalks similar to Boulder, CO, Pasadena, CA, or Palo Alto, CA, and our historic John S. Park neighborhood.



Pasadena, California



New York, New York

Redeveloped Regional or Strip Malls that have dying retail centers requiring significant interest to turn them around such as Villa Italia in Denver, CO with housing, office space, and one million square feet of retail.

Greenfield Town is a new suburban town created from scratch requiring new infrastructure and substantial investment from local governments or developers similar to Valencia Town Center, Reston Town Center or Kyle Canyon.



INTRODUCTION

AMERICAN PLANNING ASSOCIATION'S GREAT PLACES IN AMERICA

The American Planning Association (APA) recognizes Great Places in America. The following characteristics are indicative of the APA Great Places in America:

- Capitalizes on building design, scale, architecture, and proportionality to create interesting visual experiences, vistas, or other qualities.
- Accommodates multiple users and provides access (via walking, bicycling, or public transit) to multiple destinations that serve its residents.
- Fosters social interaction and creates a sense of community and neighborliness.
- Promotes security from crime and is made safe for children and other users (i.e., traffic calming, other measures).
- Uses, protects, and enhances the environment and natural features.
- Reflects the community's local character and sets itself apart from other neighborhoods.
- Retains, interprets, and uses local history to help create a sense of place.
- Promotes or protects air and water quality, protects groundwater resources, and responds to the growing threat of climate change.
- Utilizes forms of "green infrastructure" (i.e., local tree cover mitigating heat gain).
- Utilizes measures or practices to protect or enhance local biodiversity or the local environment

In 2010, the historic John S. Park neighborhood was named a Great Place in America under the Great Neighborhoods designation. The designation was due in large part to the historic and sustainable nature of the community, which has long embraced planning as has been home to vocal and engaged residents.



Las Vegas, Nevada—John S. Park



Jacksonville, Florida—Riverside Avondale



Oak Park, Illinois—Frank Lloyd Wright Historic District



INTRODUCTION

WALKABLE COMMUNITIES CREATE LASTING VALUE

Walkable communities incorporate a variety of different elements that increase the value of a community. A 1999 study by the Urban Land Institute of four new pedestrian-friendly communities determined that homebuyers were willing to pay a \$20,000 premium for homes within a walkable community compared to similar houses in surrounding areas.¹

Communities with a mix of shops and businesses within easy walking distance are healthier and more vibrant places to live. Residents of traditional neighborhoods with good pedestrian facilities and stores and services just a short walk away get 70 extra minutes of physical activity per week and are 40% less likely to be overweight or obese than residents of sprawling neighborhoods.²

Relatively simple changes can bring about long-lasting benefits to the well-being of a community. Twenty-seven percent of trips are one mile or less, yet 75% of these are made by car. Walking would take 20 minutes or less.³ The reduction in CO² carbon emissions provides clean air and a healthier environment for children and adults. The findings show that VMT and CO² savings between 8% to over 40% can be achieved with mixed-use, higher density, walkable, regionally accessible development.⁴ In *Growing Cooler*, analysts estimated that compact, regionally accessible development reduces how much people drive (VMT) by 20 to 40 percent, compared to development at the outer suburban edge located in isolated homes, stores and workplaces.⁵

People walk up to three times more in neighborhoods with square city blocks than in neighborhoods with cul-de-sacs or disconnected streets.⁶ Communities that improve non-motorized travel conditions often experience significant increases in non-motorized travel and related reductions in vehicle travel.⁷

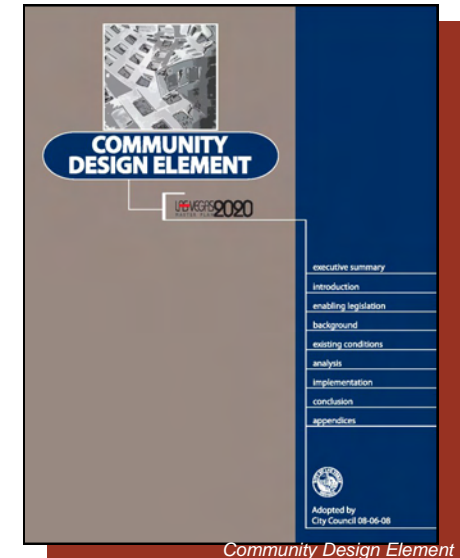
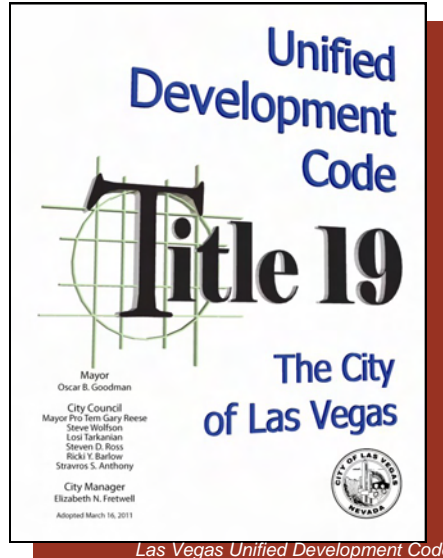
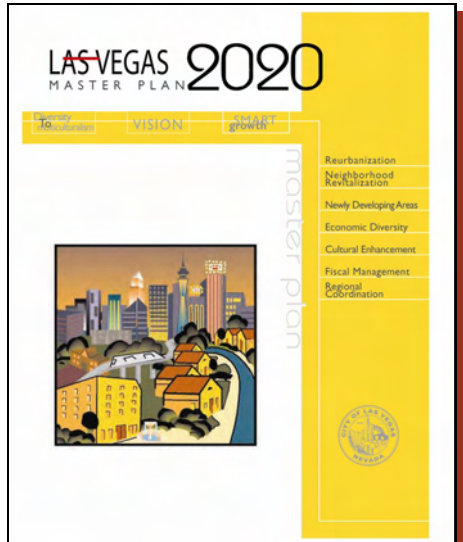
Walkable communities with complete streets are safer and reduce traffic speeds. Complete Streets are better designed streets that maximize the use of public right-of-way to incorporate all the modes of transportation. Narrowing a travel lane from 11 feet to 10 feet reduces speed by 7 mph.⁴

References:

1. Mark J. Eppli and Charles C. Tu, "Valuing the New Urbanism, The Impact of the New Urbanism on Prices of Single-Family Homes", 1999, Urban Land Institute.
2. Brian E. Saelens, "Neighborhood-Based Differences in Physical Activity: An Environment Scale Evaluation," American Journal of Public Health, Sept. 2003, Vol.93, No.9
3. Walkboston.org
4. "Cool Communities Identifying Climate-Friendly Developments in the Washington D.C. Region"
5. In growing cooler (October 2007)
6. Local Government Commission. "Why People Don't Walk and What City Planners Can Do About It", 2008
7. Victoria Transport Policy Institute. "Non-motorized Transportation Planning: Identifying Ways to Improve Pedestrian and Bicycle Transport." In Transportation Demand Management Encyclopedia, 2008



INTRODUCTION



CITY OF LAS VEGAS PLANNING POLICIES

The city of Las Vegas has recognized the need for Walkable Communities and has taken steps to foster their development. Policies within the Las Vegas 2020 Master Plan direct the city to review existing neighborhoods for opportunities to include design elements such as street furniture, landscaping, and pavement treatments to promote walkability. These directives allow the city to cultivate areas within the city into great places to live, work, and recreate. Areas that are walkable allow residents to interact with their community and create a sense of place. In addition, two sustainable resolutions were adopted by City Council to address the creation of environmentally responsible walkable communities.

Community Design Element

Within the Community Design Element of the Las Vegas 2020 Master Plan, Recommendation #2 directs the city to review existing neighborhoods for opportunities to include design elements such as street furniture, landscaping, and pavement treatments. This allows the city to cultivate areas within the city to become great places to live, work, and recreate. The Community Design Element also directs the city to create opportunities for nodes, or districts, with identifying gateway and streetscape amenities that foster community ownership and enhance the unique characteristics of individual neighborhoods.



INTRODUCTION

Complete Streets Standards of Title 19 Unified Development Code

In 2008 the Department of Planning embarked on a major endeavor to merge Titles 18 (the subdivision regulations) and 19 (the zoning regulations) and to update and reorganize the existing language within Title 19 and create a more graphics-oriented document. The merging of Titles 18 and 19 eliminates cross-referencing issues, contradictions, and duplication of information. The new Title 19 document is called the “Unified Development Code” (UDC). The UDC contains Complete Streets standards for new development. The Complete Streets standards achieve a connected transportation system as outlined in the Las Vegas Master Plan 2020 to provide a safe and accessible environment for a variety of transportation modes and users. Complete Streets have detached sidewalks, landscaped medians, bike lanes, amenity and buffer zones landscaped with street trees.

Resolutions Supporting Walkable Communities

R-57-2006 Resolution in Support of Governmental Action to Reduce Global Warming Pollution

Adopts Kyoto Protocol targets for reducing global warming pollution by taking actions such as:

- Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities.

Resolves that the Las Vegas City Council endorses the U.S. Mayors Climate Protection Agreement and will continue to be a leader in the reduction of greenhouse gas emissions through:

- Expanding the availability and use of mass transit for the employees, residents and visitors of the City.
- Improving streetscape enhancements in the highly urbanized areas of the City.

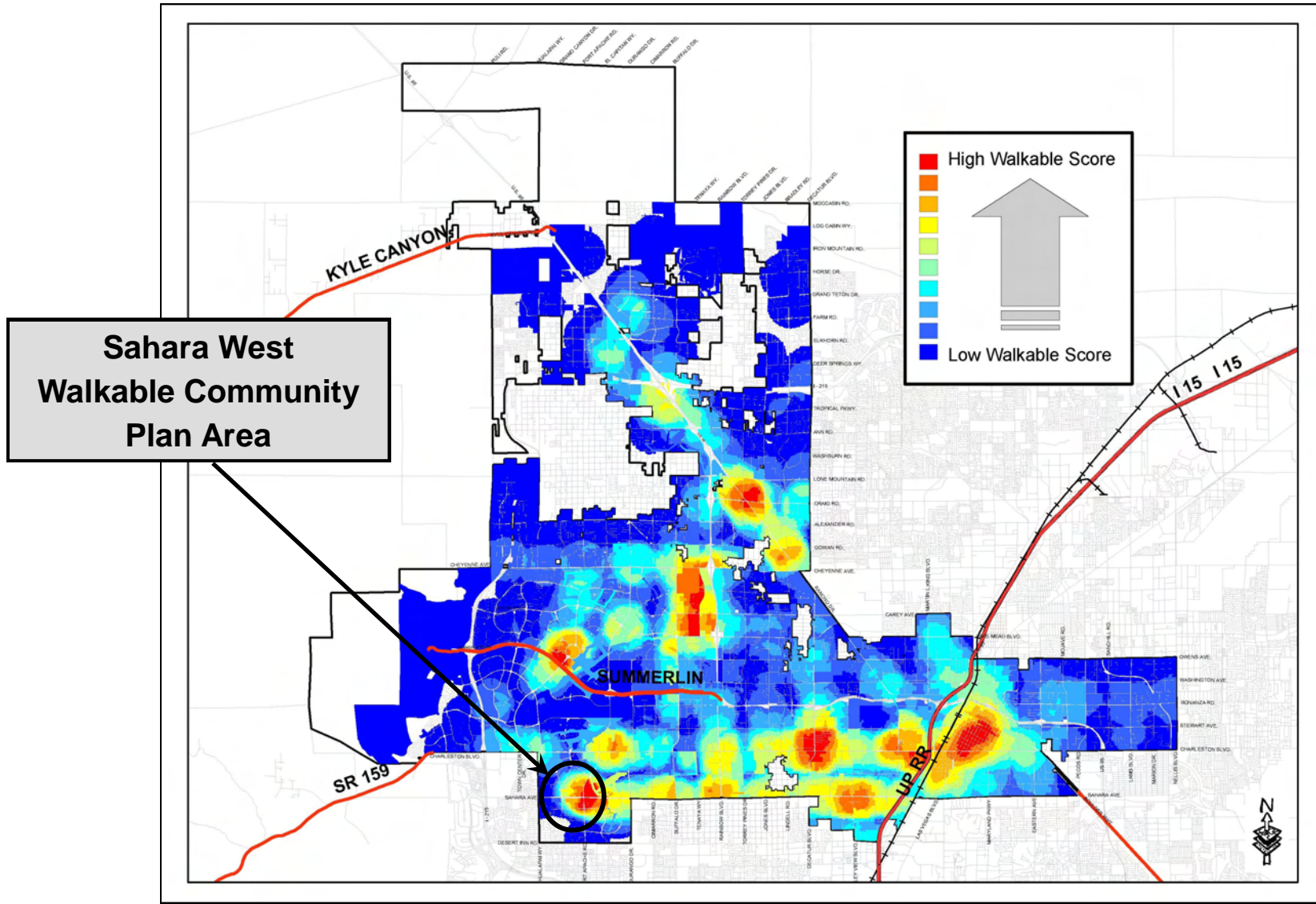
R-50-2008 Resolution Adopting a Sustainable Energy Strategy for the City of Las Vegas

Promotes the environmentally responsible, sustainable development of the City by reducing overall energy consumption, developing infrastructure to facilitate sustainable development, and supporting efforts to improve air quality and conserve non-renewable resources.



INTRODUCTION

CITY OF LAS VEGAS WALKABILITY STUDY MAP

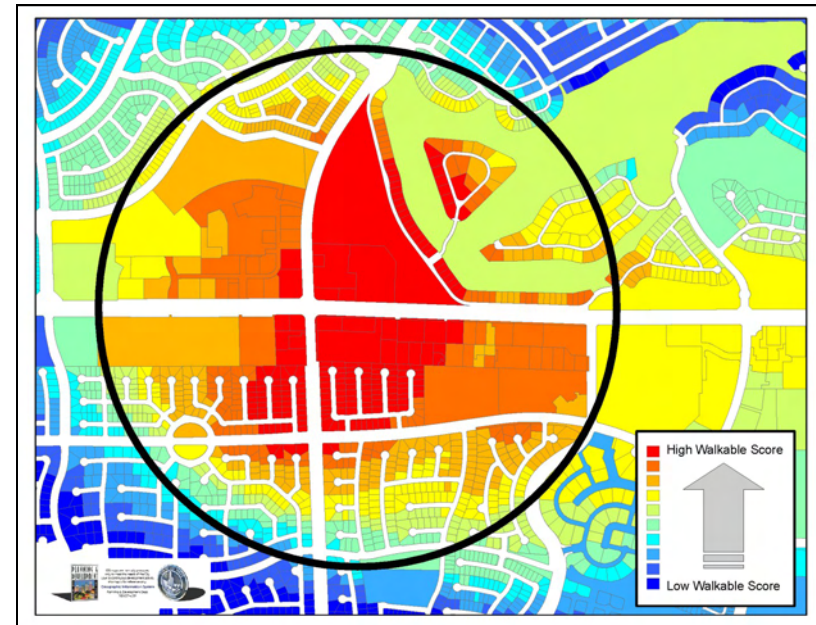


This map shows the intensity of community amenities within the city of Las Vegas

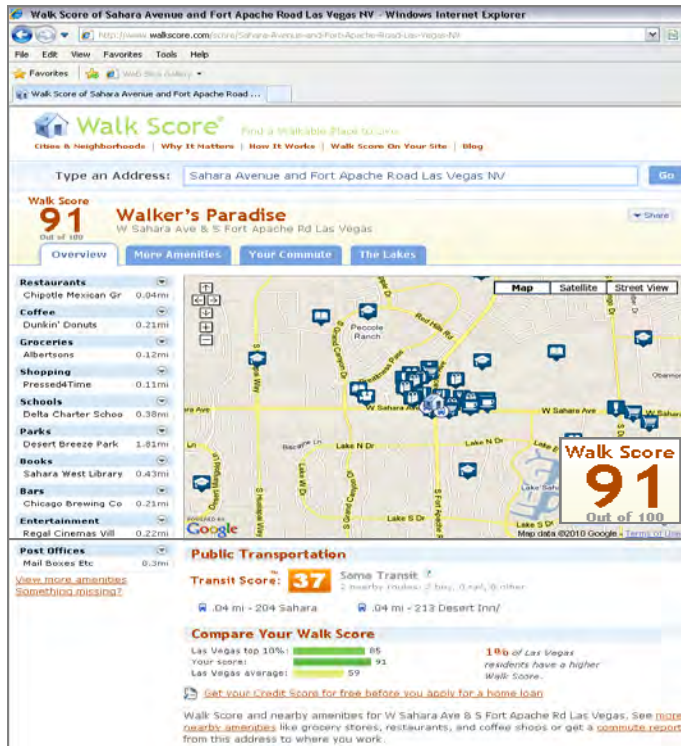


INTRODUCTION

A study was conducted to identify areas within the city of Las Vegas with the greatest potential to become self-sustained walkable communities. The study identified locations within the city that have a good mixture of condominiums, apartments, and single-family homes within close proximity to community amenities concentrated in a central location. By choosing areas with good concentrations of amenities, attention can be focused on pedestrian connections and facilities. The map on the previous page illustrates a number of locations within the city of Las Vegas that have potential to be walkable communities.



CLV gradient map showing the walkability at Sahara Ave. and Fort Apache Road.



Walkscore.com webpage at Sahara Avenue and Fort Apache Road

According to Walkscore.com, the Sahara West Walkable Community Plan area, hereinafter referred to as the “Plan” has a Walk Score of 91 – a “Walker’s Paradise.” A Walk Score of greater than 90 indicates a community where a vehicle is not necessary for daily activities.

The Plan area has both a wide variety and high volume of amenities present. Within a 10-minute walk a resident of the community can find two large shopping centers that contradict the trend of suburban centers by having street-front shops rather than the expansive asphalt parking lots often seen fronting these centers. In addition to shopping, there are 26 dining options ranging from fast food to fine dining available. A mixture of housing types is another component of a walkable community present within the Plan area.



SAHARA WEST WALKABLE COMMUNITY PLAN

The Plan area is located in the southwest sector of the city at the intersection of Sahara Avenue and Fort Apache Road. From the intersection, the Plan boundaries extend approximately one-half mile in all directions. Below is a map of the general Plan area, which was identified as having the ideal concentration of amenities within a 10-minute walk that make the community an excellent candidate for development as a Suburban Town Walkable Community.



Map illustrates the focus of the Plan area and the distance that can be walked within 10 minutes

The goal of the Plan is to recommend improvements that allow residents to easily walk to community amenities and conduct normal daily activities. The City of Las Vegas 2020 Master Plan dictates that the City maintain and renovate its public infrastructure within existing residential neighborhoods as needed.

Recommendations of the Plan are focused on the infrastructure within the public realm (right-of-way) and the development of a diverse selection of amenities creating a self-sufficient community. The improvements seek to encourage and enhance pedestrian connections and circulation within a sustainable community.

The Plan is divided into four sections: Community Amenities; Community Design; Complete Streets; Community Input and Support. Community Amenities can be broken down into four categories that include businesses that provide good and services, employment centers, housing opportunities, and parks. Community Design addresses the ability for pedestrians to circulate within the community without hindrance. Complete streets are better designed streets that maximize the use of public right-of-way to incorporate all the modes of transportation. Community Input and Support incorporates the concerns of the residents and support.



SAHARA WEST WALKABLE COMMUNITY PLAN

DEMOGRAPHICS

The Sahara West Walkable Community Plan is an area that has been dependant upon the automobile. The rate of households with at least one vehicle is higher than for the city of Las Vegas as a whole. The rate of those with no vehicles available is nearly half the rate of the City. Residents of Sahara West use a private vehicle to commute to work more than 98 percent of the time. Adjusted for those who work at home, all Sahara West residents use a private vehicle to commute to work. Approximately 90 percent of the residents drive alone. The median household income of the Plan area is 70% higher than the city of Las Vegas as a whole. Public transportation use is typically lower in high income areas of Las Vegas. In addition, the distance of the commute influences the use of public transportation as those further from their place of employment most often use a private vehicle.

Recent data for the Plan area shows that the unemployment rate has increased dramatically from 2008-2010, rising from four percent to ten percent. The data also indicates that the number of people employed in the Sahara West area has decreased by 20 percent during the same time.¹ In addition, the number of establishments has decreased by 6.5 percent from 2008-2010. The number of employees per establishment has decreased from 10.5 to 9. This may indicate that while some establishments were going out of business, those that remained open were doing so with fewer employees.

References:

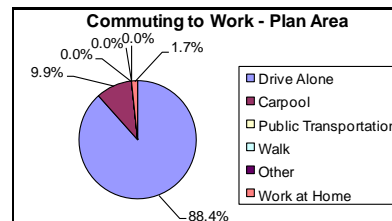
1. SRC Research

Population	
Single Family	2,551
Apartment	2,370
Townhome	22
Condominium	1,340
Total	6,283

Dwelling Units	
Single Family	951
Apartment	1,262
Townhome	14
Condominium	716
Total	2,943

Occupied Housing Units	
Single Family	918
Apartment	1,153
Townhome	13
Condominium	654
Total	2,738

Median Household Income	
Sahara West Walkable Community	\$ 74,544



Age		
Less than 18 years	1,266	20.1%
18 - 64 years	4,255	67.7%
65 years and over	762	12.1%

Race		
White	4,723	75.2%
Black	389	6.2%
Hispanic	548	8.7%
American Indian	29	0.5%
Asian	352	5.6%
Pacific Islander	41	0.7%
Other	21	0.3%
More than one race	180	2.9%
Total	6,283	

Vehicles Available		
None	158	5.8%
One	1,181	43.1%
Two	1,056	38.6%
Three or more	344	12.6%

Commuting to Work		
Drive Alone	1,922	88.4%
Carpool	216	9.9%
Public Transportation	-	0.0%
Walk	-	0.0%
Other	-	0.0%
Work at Home	36	1.7%
Mean Travel Time (Minutes)	24.6	25.4

Source of table data provide by the U.S. Census and CLV Dept. of Planning

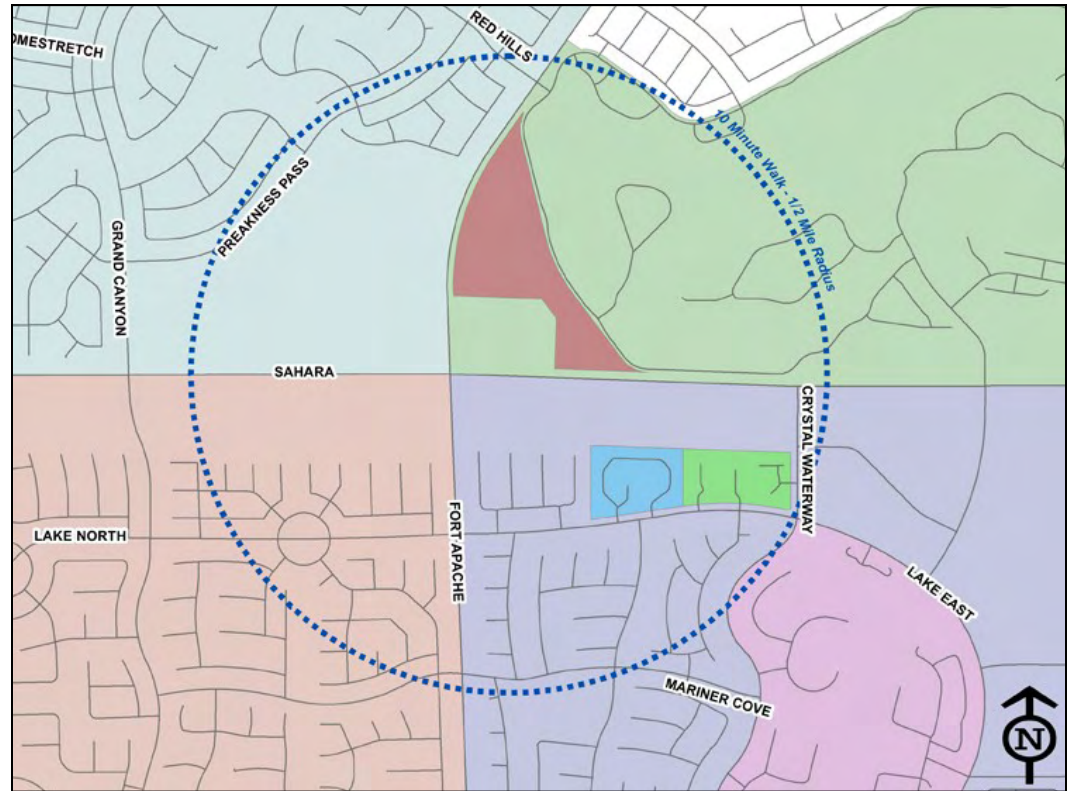


SAHARA WEST WALKABLE COMMUNITY PLAN

COMMUNITY INPUT AND SUPPORT

The residents of the Plan area are those that are most familiar with their community. Receiving input, feedback and dialogue from these residents played an integral role in the development of the community Plan. An open forum created by the Department of Planning allowed the Plan to focus on the needs of the community and learn how residents interact with neighborhood amenities. Through engaging the community with the planning process, the Department of Planning was able to meet with hundreds of area residents who shared insight, ideas and suggestions on how the Sahara West Walkable Community Plan could improve their community.

NEIGHBORHOOD ASSOCIATIONS MAP



Neighborhood Associations are registered with the Department of Parks, Recreations and Neighborhood Services



SAHARA WEST WALKABLE COMMUNITY PLAN

Community Meetings

The first of a series of community meetings was held on August 20, 2009 at M.J. Christensen Elementary School. The purpose of the meeting was to survey the interest of the community in the development of a walkable community plan and to find out what issues the public wanted addressed in such a plan. Between April 21 and July 6, 2010, the Department of Planning made brief presentations at the regularly-scheduled HOA meetings within the Plan area.

Comments received from residents included the following:

- Provide more benches and trash receptacles.
- Reduce vehicle lane widths in order to reduce the speed of traffic.
- Sidewalks are not well lit; additional pedestrian lighting is needed in the area.
- The need to install sidewalks where none are present to complete the sidewalk network around the neighborhood.
- Install additional crosswalks along Fort Apache Road and make the existing ones safer.
- Provide an “All Walk” crosswalk signal at the intersection of Sahara Avenue and Fort Apache Road, stopping traffic in all directions to allow pedestrians to cross in all directions (including diagonally across the intersection).
- The bus stop at Sahara Avenue and Crystal Water Way is used heavily (due to Citibank); provide a pedestrian bridge across Sahara Avenue to safely cross from one side of the street to the other.
- Bus stop at Sahara Avenue and Fort Apache Road is too close to the intersection, making turning movements and visibility difficult.
- Additional items of concern mentioned include the need for additional street trees, shaded bus shelters, and the removal of obstacles (such as utility boxes) from sidewalks.



August 20, 2009 The Department of Planning made a presentation on the potential walkability within the Plan area.

Performing outreach within the Sahara West Walkable Community Plan area allowed the Department of Planning to meet with the community, talk with residents and provide information on walkable community plans. This provided the community the opportunity to familiarize themselves with the Plan well in advance of official public hearings and created an avenue for community residents to work with the City. A multitude of events were attended by the Department of Planning to perform community outreach, including attendance at local back-to-school events, homeowner and neighborhood association meetings, a transportation fair, and holding a general community open house at the Sahara West Public Library. In addition, informational flyers were distributed to businesses within the Sahara West Walkable Community Plan area and informational displays were set up in front of the Sahara West Library and at the Lakes Plaza shopping center.



SAHARA WEST WALKABLE COMMUNITY PLAN

Community Meetings

All outreach information contained contact information for the Department of Planning, including the Walkable Community Plan website address, e-mail information and a telephone number. This was designed to allow residents as many avenues and opportunities as possible for communication and feedback. Through these processes the Department of Planning learned which community amenities are important to residents, gathered ideas on how to create enhanced streetscapes, learned what intersection and transit stop improvements are important to the community, received feedback on how connectivity could be enhanced, and listened to general comments on the public's perception of the walkable community plan. The community input and insight helped to steer the Plan toward the specific needs of the neighborhood and strengthened the goals of creating a walkable community plan.

<i>Outreach Events</i>			
<i>Meeting Date</i>	<i>Organization/Event</i>	<i>Meeting Location</i>	<i>Total members</i>
03/06/10	Regional Transportation Commission Transportation Fair	Meadows Mall, 4701 Meadows Lane	N/A
04/08/10	Peccole Ranch Community Association	9501 Red Hills Road	9,639
04/09/10	Community Informational Table	Albertson's Grocery Store 2550 South Fort Apache Road	N/A
04/21/10	Canyon Gate Home-owners Association	8831 West Sahara Avenue	2,237
04/21/10	Section 7 Community Association	2001 Canyon Gate Drive	8,842
04/23/10	Community Informational Table	Sahara West Public Library 9600 West Sahara Avenue	N/A
04/27/10	West Sahara Community Association	8685 West Sahara Avenue Suite 280	7,014
05/13/10	The Residence at Canyon Gate	2200 South Fort Apache Road	N/A
07/06/10	Baycliff Creeks Home Owners Association	9600 West Sahara Avenue	N/A
09/09/10	The Residence at Canyon Gate	2200 South Fort Apache Road	N/A
10/16/10	Peccole Ranch Community Association	9501 Red Hills Road	9,639
11/03/10	Baycliff Creeks Home Owners Association	9600 West Sahara Avenue	N/A
11/23/10	West Sahara Community Association	8685 West Sahara Avenue Suite 280	7,014
12/11/10	Lakes Festival of Lights	Intersection of Lake East Dr. and Lake Sahara Dr	N/A
07/26/11	Plan Presentation Open House	9501 Red Hills Road	6,283
08/30/11	Plan Presentation Open House	9601 Red Hills Road	6,283



SAHARA WEST WALKABLE COMMUNITY PLAN

COMMUNITY AMENITIES

Community amenities are integral to a walkable community. These amenities provide goods and services that become assets and resources to fulfill the needs of daily life for the surrounding residents. Some of the commercial amenities needed for daily life include grocery stores, banks, restaurants, drugstores, clothing stores, housing complexes, entertainment providers as well as community events. Of the commercial amenities, a grocery store is the most important resource for a walkable community, providing the essential staples for the needs of routine and daily life.

Schools and work places are also an important part of a walkable community. Having a variety of work opportunities within a community is important to preserving a 10-minute walking distance for residents. Having schools or workplaces near residents eliminates the need to commute outside of the community and reduces the amount of carbon dioxide in the air.

Walkable communities need a variety of housing opportunities for different income levels. Having different types of housing in a wide range of prices provides diversity in housing choices. An assortment of housing options and opportunities provide people with a feasible alternative to living within walking distance of their place of work.

An equally important aspect of a walkable community are parks and public spaces. These areas provide places where people can gather and recreate. Parks and open spaces also provide the residents locations to hold community events and socialize with their neighbors while exploring their community.



Albertsons shopping center



Map illustrating average walking distances shopping

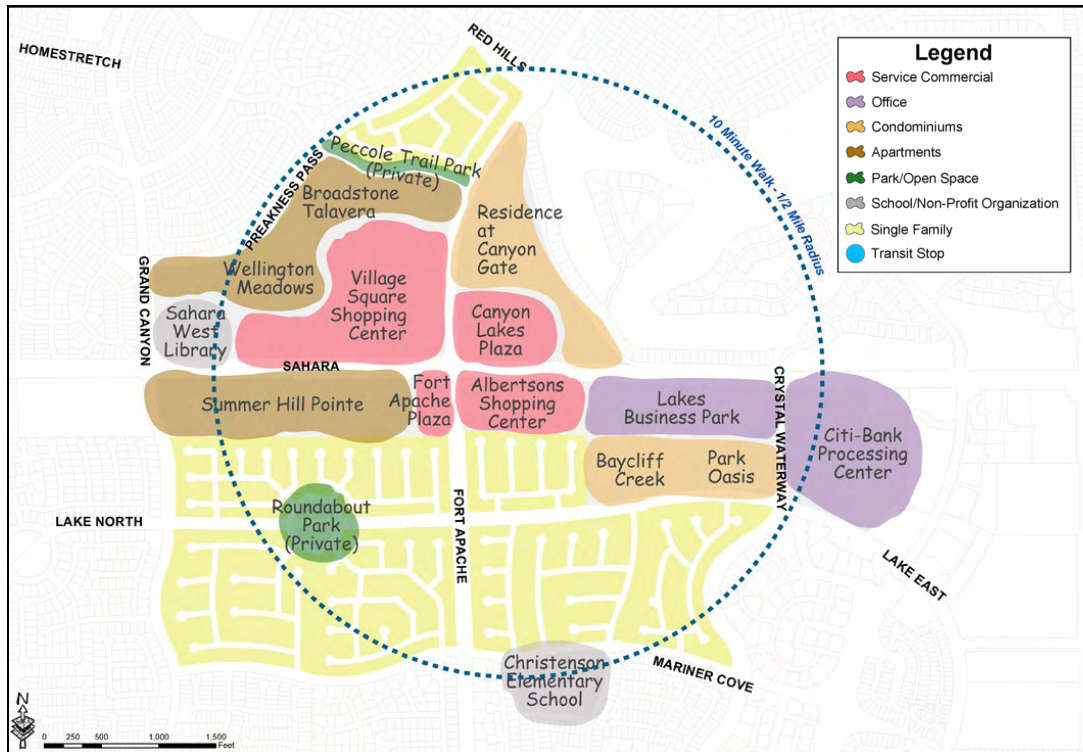


SAHARA WEST WALKABLE COMMUNITY PLAN

COMMUNITY AMENITIES

The Plan area has 255 businesses and 6,283 residents which equates to one business for every 26 residents. At the heart of the community are four commercial properties centrally located at the intersection of Fort Apache Road and Sahara Avenue. The Albertsons shopping center is located on the southeast corner, the Canyon Lakes Plaza is located on the northeast corner, the Sahara West Shopping Center is located on the northwest corner, and the Fort Apache Plaza is located on the southwest corner.

COMMUNITY AMENITIES MAP



Major amenities within the Sahara West Walkable Community Plan Area

Community Assets	Quantity
Library	1
Private Park	2
Public/Private Schools	4
Religious Facilities	1
Banking Services	8
Pharmacy/Drug store	2
Private Health Club	9
Health Care/Hospital	27
Goods Providers General	25
Services Providers General	68
Restaurants	26
Entertainment	7
Office General	54
Apartment Complexes	3
Transit Stops	17



SAHARA WEST WALKABLE COMMUNITY PLAN

Amenities

The only grocery store within the Plan area is located at the southeast corner of Fort Apache Road and Sahara Avenue. The grocery store, which features a full service bank, is surrounded by retail shops consisting of a sandwich shop, a travel agency, an insurance agency, a hair salon, and a private postal service. In a separate building bordering the intersection is a coffee shop, an ice cream parlor, a shoe store, and a full service bank.



Albertsons Grocery Store

The Sahara West Library and Fine Arts Museum is another valuable resource within the Plan area. This cultural resource within the Plan area features a 150-seat multipurpose room, a used bookstore, an international language collection, DVD movies, audio books, 12 public computer workstations, free wireless internet access, and art exhibits.



Sahara West Library



SAHARA WEST WALKABLE COMMUNITY PLAN

Amenities

There are two processing centers which handle administrative services for two major employers within the Plan area. Located in the Lakes Business Park just east of the grocery store, Valley Health Systems is the processing center for the Las Vegas Valley's health care providers. Just across the street from the Lakes Business Park is the Citibank processing center. This center handles all the credit card transactions within the United States for Citibank.



Lakes Business Park

There are eight banking services within the Plan area, including major banks such as Wells Fargo, Citibank, US Bank, and Bank of America. There are two pharmacy/drug store chains, CVS Pharmacy and Walgreens.

Additionally, there are 33 entertainment and dining out opportunities, along with 68 service providers and 25 goods providers, one public elementary school, three private schools, and one religious facility located within the community's boundaries.

While no public parks exist within the Plan area, several local businesses provide private recreational opportunities to the public. A total of 11 private recreational businesses are operated within the Plan area, whose offerings include yoga, boxing, and self-defense studios.

The Plan area has the additional benefit of having a University Medical Center (UMC) Quick Care unit, as well as 26 other health care facilities and offices that include dentists, dermatologists, optometrists, chiropractors, and a health spa. With the abundance of health care facilities nearby, the need travel outside the Plan area for these services is significantly reduced. Should residents require specialized services, medical or otherwise, 13 public transportation stops facilitate travel to other parts of the city.



Bank of the West



Walgreens



UMC Quick Care



SAHARA WEST WALKABLE COMMUNITY PLAN

Amenities

Community events provide an added amenity to the community and opportunities for residents to socialize. The Lakes Festival of Lights is a "grass roots" community event that is planned, organized and operated entirely by unpaid community volunteers. The Lakes Festival of Lights began in 2001 in the wake of the 9-11 attack. A small group of Lakes residents decided they needed something to bring their community together for the Holidays. The first Festival was an overwhelming success and it showed the need for an annual community event. Funding is provided by government grants, corporate sponsorships, and community fundraisers. The event brings out thousands of residents for a day of food, fun and entertainment.



Community Members Visit with Santa



Car Show



Lakes Boat Parade



Craft Fair



Festival Participants



Student Choir



Student Orchestra



SAHARA WEST WALKABLE COMMUNITY PLAN

Amenities

The Sahara West Plan area does not contain a public park. The Plan area contains two privately maintained open spaces within Peccole Ranch and the Lakes Community. Both spaces are open to their respective community members and provide amenities such as benches, lighting, trash receptacles and open turf areas.



Park at Trophy Lake Drive (Private)



Peccole Trail Park (Private)

The Sahara West community has many assets and amenities; however, one amenity that is lacking is the provision of a store that provides household and home repair goods. An ideal site for such an amenity is the vacant big box retail space on the northeast corner of Sahara Avenue and Fort Apache Road. This would give the Sahara West community a full complement of assets and amenities.



Canyon Lakes Plaza; Subject Location Circled in Yellow



SAHARA WEST WALKABLE COMMUNITY PLAN

COMMUNITY DESIGN

Community Design addresses elements that comprise the look and circulation throughout the community. The ability for residents to access community amenities is key to the success of a walkable community. Currently pedestrians traversing the community are hindered by obstacles in the sidewalk path. Pedestrian facilities, such as unencumbered sidewalks protected from the roadway with a landscape buffer that provides shade, enhance the walking environment and link residents to community amenities.

Greater connectivity of a walkable community provides shorter trips and easier access to the amenities. Connectivity allows for greater options for travel direction, ingress and egress, thereby making a neighborhood less isolated and more traversable. It allows community members more choices on how they travel and use their community by creating alternate route options and allowing travelers to walk, bike or drive to their destinations.

The look and character of a community is addressed by design elements that include landscaping and streetscape fixtures (amenities). A visually appealing and cohesive community can be achieved through landscaping choices. Public rights-of-way provide the greatest opportunity to define a community through landscaping and streetscape amenities. Recurring plantings and street amenities such as unique benches and transit stops give the community its identity.



Shaded sidewalk



Sidewalk with landscaped amenity zone



Clearly designated crosswalk

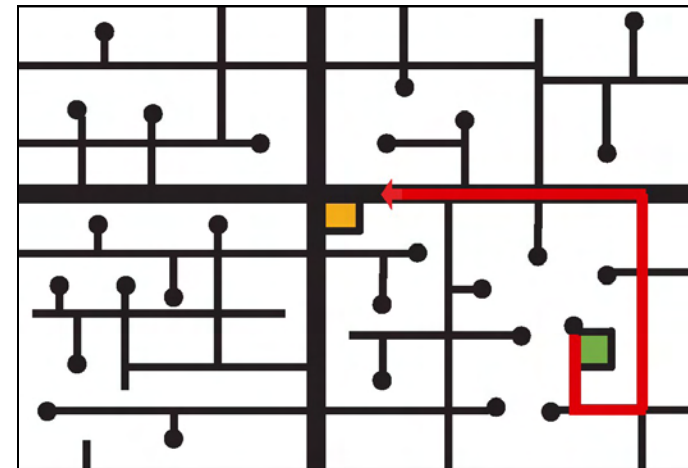


SAHARA WEST WALKABLE COMMUNITY PLAN

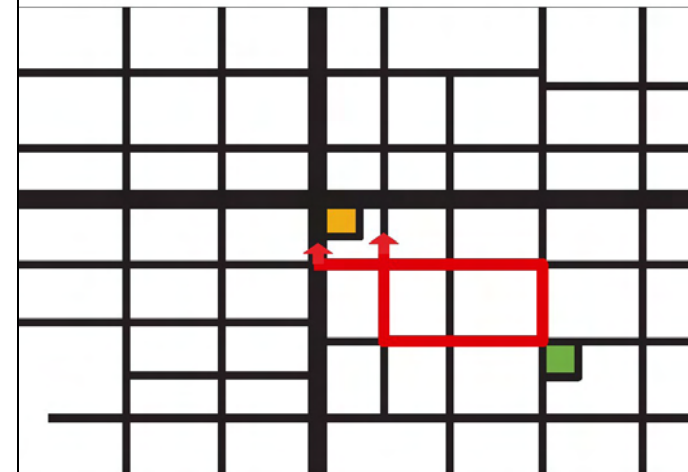
Connectivity

The “connectivity ratio” provides a method to judge the ease of pedestrian circulation throughout the community. The ratio is an index of connectivity equal to the number of links divided by the number of nodes within a study area. Links are defined as roadway or pathway segments between two nodes. Nodes are intersections or the end of a cul-de-sac. A perfect grid has a ratio of 2.5. Most communities tend to adopt a connectivity ratio of 1.4 as a standard, which represents a degree of network connectivity halfway between the extremes of the contemporary suburban network and the traditional urban grid.

The connectivity ratio for the Plan area is 1.17. There are considerably more nodes driving the ratio down. The portion of the planning area north of Sahara Avenue did well with a 1.33 connectivity ratio. The area east of Fort Apache Road and south of Sahara Avenue has a 1.23 connectivity ratio. The area west of Fort Apache Road and south of Sahara Avenue has a connectivity ratio of 1.09. The lower ratio in this area is attributable to the many cul-de-sacs and limited north/south points. Cul-de-sacs prevent “through” automobile traffic, but contribute to the lower pedestrian connectivity ratio score. Therefore, opportunities to provide for additional connections between existing, planned and future developments should be considered in order to provide for an increased connectivity ratio within the Sahara West Walkable Community Plan area.



Poorly Connected Network



Well Connected Network

Link-Node Diagram



SAHARA WEST WALKABLE COMMUNITY PLAN

Connectivity

The lack of pedestrian links to commercial properties and mid-block crossings results in a low connectivity ratio within the Sahara West Walkable Community plan area. Pedestrian links to commercial properties will allow for better circulation and easier access to community amenities through physical barriers (i.e., block walls). Mid-block crossings improve the circulation and provide a bridge across heavy auto traffic areas. Proposed nodes shown in green along Sahara Avenue and on Grand Canyon Drive on the Connectivity Map represent mid-block crossings as illustrated on page 27.

The level of connectivity within the Plan area can be enhanced through a few key connections. While the community is defined by residential neighborhoods with limited vehicular access, allowing pedestrian connections at a few key points within the Plan area will create greater connectivity.

Additional pedestrian connections may be examined between private development where barriers exist, as the Plan area does not contain many opportunities to create additional public connections. These connections could be relatively simple changes that will greatly enhance pedestrian connectivity within the Sahara West Walkable Community Plan at minimal cost to private property owners. Improving the connectivity will reduce the demand for transportation services and improve the balance between jobs and housing, thereby creating options for people who live within walking or cycling distance of their place of work. The Complete Streets chapter of the UDC ensures that all proposed development shall be designed in a manner that provides for and facilitates the logical overall design, placement, and continuity of streets with respect to adjacent land parcels.



Connectivity map for the Plan area. Each red dot equals a node and each blue line equals a link

* The two new nodes can be found on pages 27



SAHARA WEST WALKABLE COMMUNITY PLAN

Pedestrian Street Crossings

An “All Walk” crossing signal could be installed at the intersection of Sahara Avenue and Fort Apache Road to provide greater pedestrian connectivity. This additional phasing of the traffic signal would stop traffic in all directions and allow pedestrians to cross in all directions, including diagonally. An “All Walk” crossing signal would increase circulation for pedestrians to the four areas of the Plan. This improvement would provide better access to community amenities. Coordination with the Freeway and Arterial System of Transportation (FAST) will be required to determine if an “All Walk” crossing signal is warranted.



The intersection of Sahara Avenue and Fort Apache Road

FAST is one of the first truly integrated Intelligent Transportation System (ITS) organizations in the country. Transportation strategies are set by the Operations Management Committee (OMC), comprised of the Regional Transportation Commission (RTC), Clark County, Nevada Department of Transportation (NDOT) and the cities of Henderson, Las Vegas and North Las Vegas. RTC staff is responsible for two major areas that make up the FAST system: the Arterial Management Section, which includes all arterial streets and roadways, and the Freeway Management Section, which includes the entire freeway network.

FAST is designed to both monitor and control traffic. The traffic control component of the system consists of freeway and arterial management. Traffic control is achieved through the use of traffic signals, ramp meters, dynamic message signs, and lane use control signals.

Crosswalks that meet a median in the roadway provide a pedestrian refuge. This allows pedestrians that get caught midway in the crosswalk a safe location to wait until the signal light cycles to the pedestrian walk phase. Pedestrian refuges cannot always be created within an existing median, a minimum width of four feet must exist in order to create space for pedestrians. Where possible, crosswalks should be moved to the median to create a refuge area within the median.

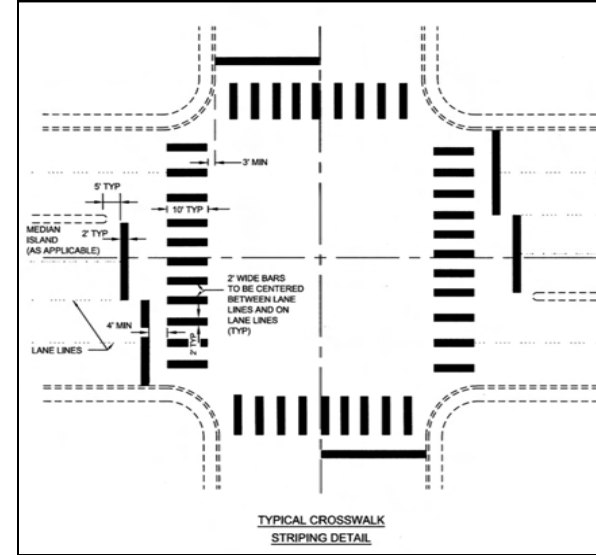
Pedestrian overpasses create an opportunity for pedestrians to move across busy arterial roadways without interacting with vehicular traffic. While they create further travel distances for their users, pedestrian overpasses allow for continuous uninterrupted pedestrian movement while eliminating the dangers of being struck by an automobile. Areas within the Plan area that experience heavy volumes of jaywalking, such as the segment of Sahara Avenue dividing the Summerhill Pointe Apartments and the Village Square Shopping Center, should be examined to determine if a pedestrian overpass will benefit area residents.



SAHARA WEST WALKABLE COMMUNITY PLAN



An existing Continental style crosswalk at the intersection of Fort Apache Road and Red Hills Road



The standard striping detail for the City using the Continental style of crosswalk.

Crosswalks

The image above and to the right is a diagram of the typical crosswalk striping detail standard using Continental style crosswalks. The city has adopted this style of striping for newly constructed intersections. Older intersections throughout the city have a number of different styles that are not as visible. When the older intersections have maintenance performed, the new striping style is installed. The following intersections will need to be re-striped with Continental style crosswalks to increase visibility:

- Sahara Avenue and Fort Apache Road
- Sahara Avenue and Grand Canyon Drive
- Fort Apache Road and Lake North Drive
- Fort Apache Road and Mariner Cove Drive
- Fort Apache Road and Red Hills Drive
- Grand Canyon Drive and Preakness Pass
- Lake North Drive and Grand Canyon Drive
- Lake North Drive and Prize Lake Drive
- Lake North Drive and Trophy Lake Drive
- Lake North Drive at Crystal Water Way
- Lake East Drive at Lake Sahara Drive
- Mariner Cove Drive and Crystal Water Way
- Red Hills Road and Preakness Pass

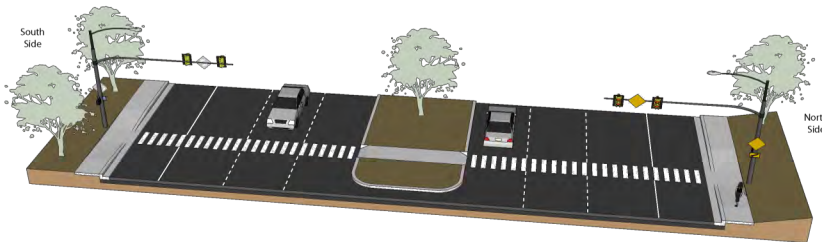


SAHARA WEST WALKABLE COMMUNITY PLAN

Mid-Block Crossings

Sahara Avenue is a major transportation corridor that physically and visually divides the Plan area. Wide automobile corridors can be intimidating for pedestrians to cross. Sahara Avenue lacks a pedestrian crossing for an approximate one-mile stretch between Fort Apache Road and Lake Sahara Drive and experiences heavy jaywalking along the segment that divides the Summerhill Pointe Apartments and the Village Square Shopping Center, 600 feet west for Fort Apache Road.

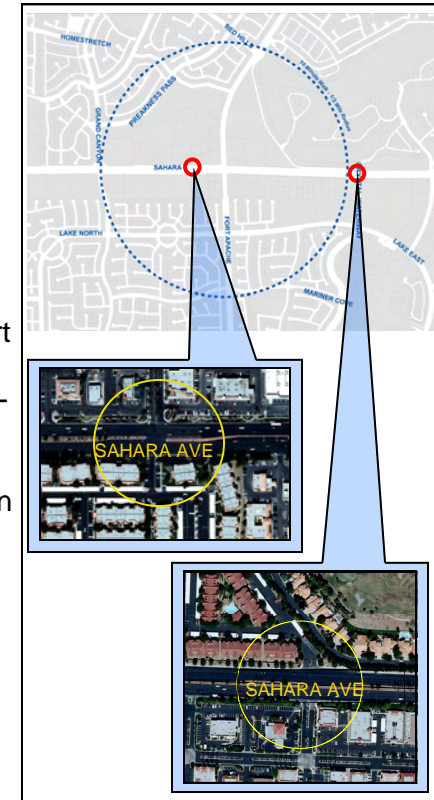
Mid-block pedestrian crossings could provide direct routes to community assets and prevent jaywalking across Sahara Avenue. Currently, pedestrians can only cross Sahara Avenue at Fort Apache Road, Grand Canyon Drive, and at the Village Square traffic signal. Mid-block crossings would relieve pedestrian traffic from busy intersections and provide more direct pedestrian-scaled routes to further facilitate access between residences and amenities. At both locations, full signalized intersections may be warranted in lieu of pedestrian crossings. An evaluation will be required by Freeway and Arterial System of Transportation (FAST) to determine if pedestrian crossings or full traffic signals are warranted.



Sahara Avenue with a pedestrian crossing



Sahara Avenue without pedestrian crossing



Location map and aerial of enhancement locations



SAHARA WEST WALKABLE COMMUNITY PLAN

Mid-Block Crossings

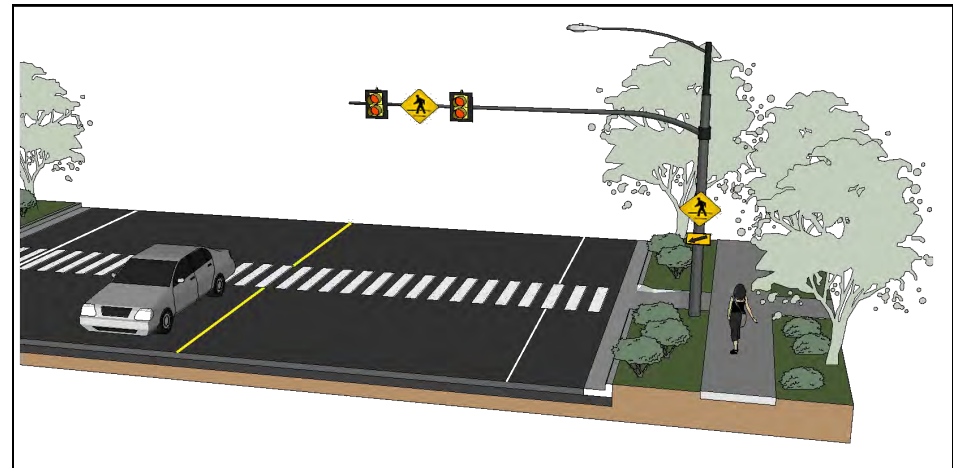
A striped mid-block crossing should be considered on Preakness Pass linking the private Peccole Ranch Trails, pending the review and approval of the Peccole Ranch Community Association. A crosswalk would connect the two private trails that meet on either side of Preakness Pass and provide safe passage for residents. This location may not need a yielding signal as the traffic may not be as great as other streets.



Location map and aerial of enhancement location



Preakness Pass without pedestrian crossing



Preakness Pass after pedestrian crossing



SAHARA WEST WALKABLE COMMUNITY PLAN

Pedestrian Obstacles

Walkable communities facilitate the circulation of all modes of transportation. The existing sidewalks within the Sahara West Walkable Community have obstacles hindering the travel of pedestrians, particularly people with disabilities. Obstacles such as traffic signposts and transit shelters should be moved off the sidewalk to allow for a clear path of travel. All sidewalks should be compliant with the minimum requirements of the UDC and the Americans with Disabilities Act (ADA). The current standards require above-ground utility boxes in excess of 27 cubic feet to be set back a minimum of three feet from the public street right-of-way or sidewalk. In addition, there are many parts of the sidewalks that are chipped, cracked, or uneven and need to be repaired.



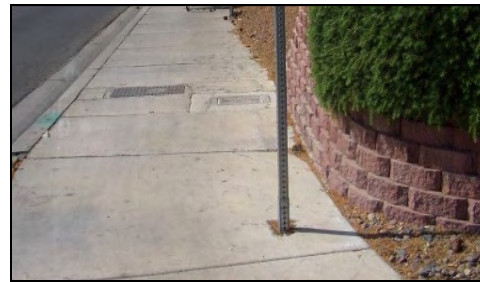
Bus stop obstructing the sidewalk



Streetlight pole obstructing the sidewalk



Streetlight pole in the sidewalk path



Sign post in the sidewalk path



Utility boxes in the sidewalk path

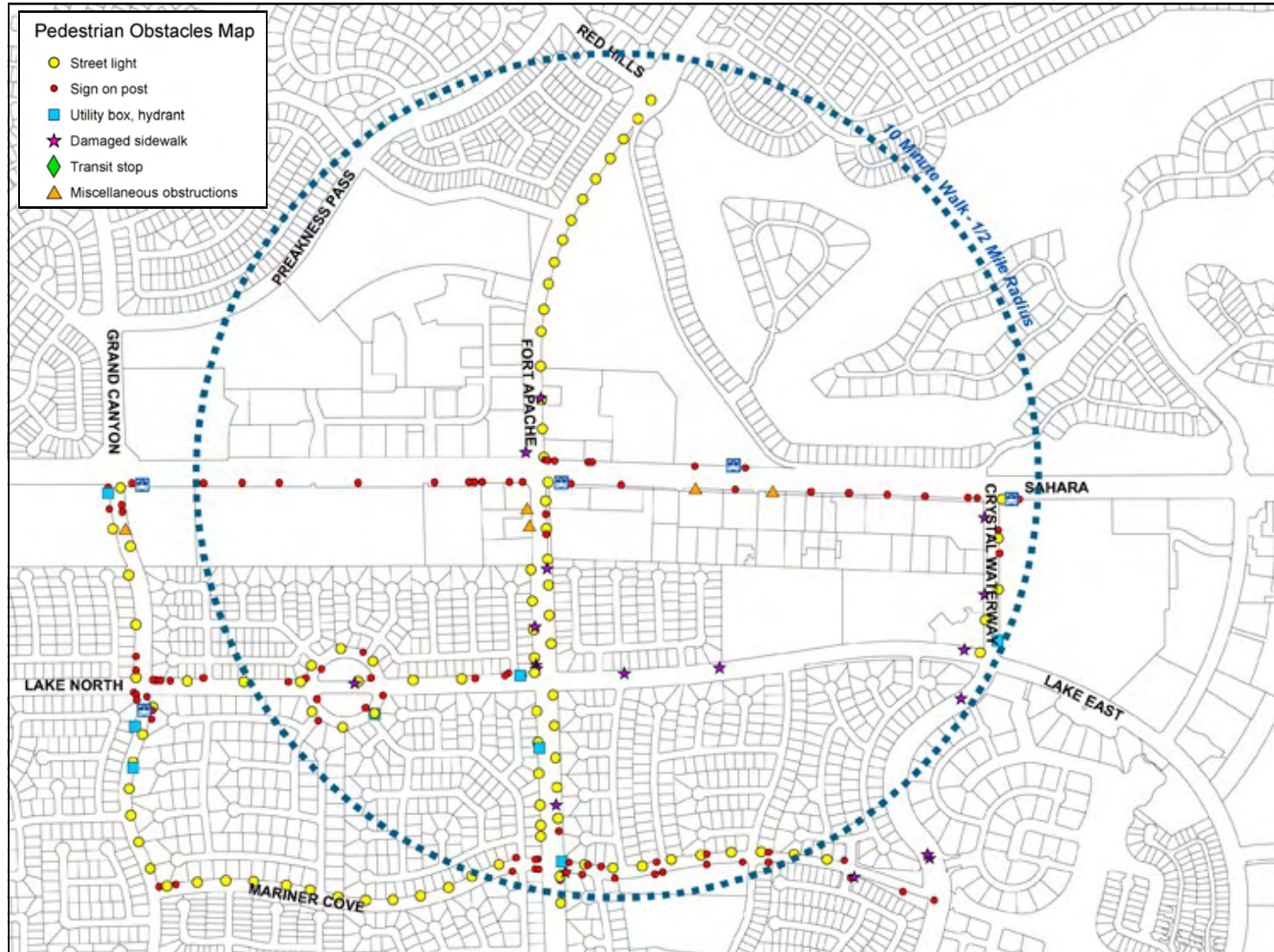


Cracked sidewalks



SAHARA WEST WALKABLE COMMUNITY PLAN

Pedestrian Obstacles



Map detailing pedestrian obstructions within the Plan area



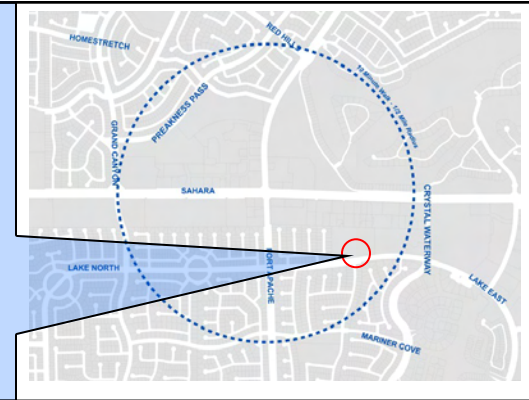
SAHARA WEST WALKABLE COMMUNITY PLAN

Curb Cuts

Curb cuts are another element that make a community walkable and easily traversable for residents. They eliminate tripping hazards and make the community ADA compliant.



Crosswalk at Lake North and Waterview Drives without a curb cut to the sidewalk

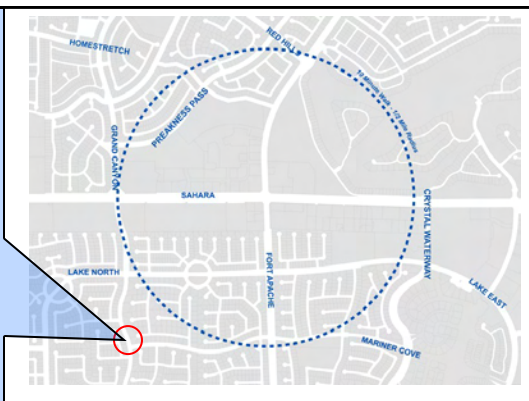


Location map and aerial of enhancement location

The provision of an ADA curb cut is necessary to complete the connection between the crosswalk and sidewalk at the intersections of Lake North and Waterview Drives and Mariner Cove and Grand Canyon Drives. This Plan recommends a sidewalk to be installed along Grand Canyon Drive that will align with the proposed curb cut.



Crosswalk at Mariner Cove and Grand Canyon Drives without a curb cut and sidewalk



The circled area represents the affected area



SAHARA WEST WALKABLE COMMUNITY PLAN

Suggested Routes to School

The city of Las Vegas Suggested Routes to School program has provided school zones and crosswalks to M.J. Christensen School. With improvements to the streets and intersections, the neighborhood becomes a safer place for kids to walk to school. To increase visibility, Continental style crosswalks should be provided for all directions on all non-residential street intersections.

Within this community is a great opportunity for elementary school kids to stay healthy by walking and riding bikes. Groups are more visible and strengthen the community. Children walking in groups are safer with more pairs of eyes watching and better judgment. Groups of four or five kids could meet at a designated location and walk to school as a group. If necessary a stay-at-home parent could volunteer to walk with them.



The suggested routes to school map for M.J. Christensen Elementary School published by the city's Public Works Department



SAHARA WEST WALKABLE COMMUNITY PLAN

Suggested Routes to School



The suggested routes to school map for Clarence Piggott Elementary School published by the city's Public Works Department



SAHARA WEST WALKABLE COMMUNITY PLAN

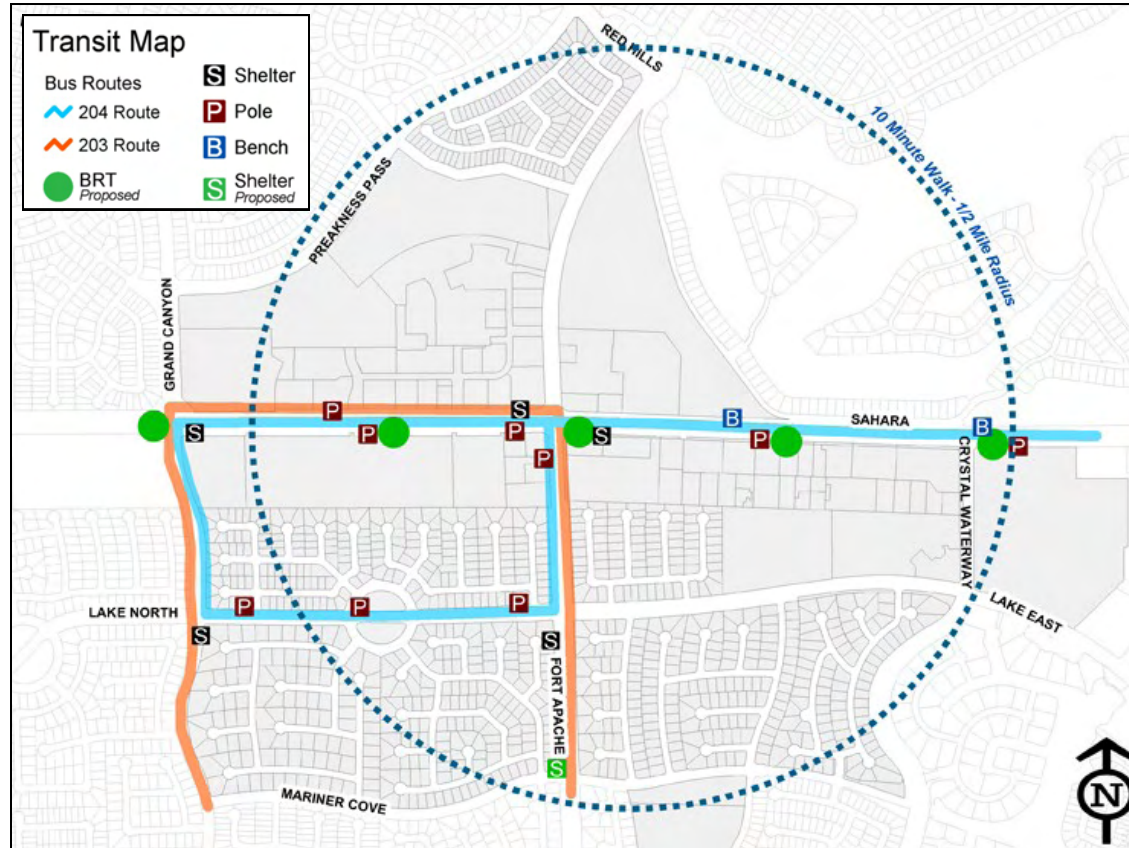
Transit Stops

There are 15 transit stops located within the Sahara West Walkable Community. Ten of the stops are located along Sahara Avenue, two on Fort Apache Road, and two on Grand Canyon Drive. Of the 15 stops, five are sheltered stops with a bench, trash receptacle, solid roof, overhead lighting, and shade screening. Two of the remaining locations have benches without any shelter.

Four locations consist of either a sign attached to a pole or light post. None of the locations has facilities for bikes. None of the locations provides a bus turn-out lane. All of the locations are in fair-to-good condition.

The provision of transit stops within a walkable community provides access to resources outside of the neighborhood. Doctor's offices are not always available within a small community. Visiting friends and relatives can take residents out of their community. When transit stops are available a resident is not limited to their own neighborhood. Transit stops facilitate access to other areas of the valley. The transit stops in the community are evenly spaced between each other. Benches and trash receptacles are recommended to be placed at each transit stop location.

There is one sheltered transit stop on Fort Apache Road south of Sahara Avenue within the Plan area. A full sheltered transit stop is recommended to be placed at Fort Apache Road and Mariner Cove Drive that will serve route 203. The proposed new shelter will provide easier access to transit stops. The shelter should be placed off of the sidewalk similar to the shelter at Fort Apache Road and Lake North Drive.



The above map depicts the bus routes and stops within the Sahara West Walkable Community plan area.



SAHARA WEST WALKABLE COMMUNITY PLAN

Landscape

The addition of landscaping within the public and private realms provides multiple benefits to a community. Trees are a valuable asset to a property. They can add an additional 10% to the property value, cut cooling and heating bills by 60%, and lower air temperatures by as much as five degrees.¹ Trees and shrubs also help reduce glare and soften the built environment, adding aesthetics to a neighborhood and further strengthen its sense of place. With the extensive amount of drought tolerant landscape materials available to the community, the benefits of urban landscape can be experienced by every property owner.

The suggested plant material for the Sahara West Walkable Community Plan reflects the character of the surrounding community while being drought tolerant. The community Plan area has long been characterized by lush lawns and large shade trees, and existing landscaping should be retained when feasible. Any new landscaping introduced to the area should reflect the nature of the surrounding area. Drought tolerant trees with large green leaves were selected and blend in with the existing tree canopy, while flowering evergreen shrubs for arid climates were chosen to maintain a green and colorful landscape. The drought tolerant groundcovers have been chosen to simulate the lush appearance of surrounding lawns without the requisite water usage or maintenance. All suggested plant materials are low maintenance and are proven survivors in the Las Vegas climate. Using plants from the suggested list will create a neighborhood distinguishable from other neighborhoods because of its unique landscaping palette.

The use of landscaping is a great way to soften unattractive utility boxes and create a visually appealing presence within the community. The utility boxes within the Sahara West Walkable Community are randomly scattered at the back of the right-of-way and are easy targets for graffiti. Utility boxes screened with shrubs or tall grasses used for screening allow the boxes to blend into the landscape and their surroundings. Therefore, the current screening standard for utility boxes with shrubs and tall grasses is recommended.



Verbena



Damiana



Myoporum



SAHARA WEST WALKABLE COMMUNITY PLAN

Suggested Plant List:

Common Name

Latin Name

Trees:

Bottle Tree

Brachychiton populneus

Honey Locust (and associated cultivars)

Gleditsia triacanthos

African Sumac

Rhus lancea

Black/Purple Robe Locust
'Ambigua'

Robina pseudoacacia/Robina X

Goldenrain Tree

Koelreuteria paniculata



Giant Lily Turf



Black/Purple Robe Locust

Shrubs:

Damianta

Chrysactinia mexicana

Germander

Teucrium chamaedrys

Indigo Bush

Psoralea fremontii

Orchid Rockrose

Cistus purpureus

Sugar Bush

Rhus ovata



Germander

Groundcover:

Centennial Broom/Coyote Bush

Baccharis X 'Centennial'

Primrose Jasmine

Jasminum mesnyi

Myoporum

Myoporum parvifolium

Verbena species

Verbena sp.

Prostrate Rosemary

Rosmarinus officinalis

Accents:

Giant Lily Turf

Liriope gigantea

Green Desert Spoon

Dasyllirion texanum

Coral Fountain Grass

Russelia equisetiformis



Coral Fountain Grass



Bottle Tree



SAHARA WEST WALKABLE COMMUNITY PLAN

Shade Coverage

The Las Vegas climate is favorable for walking most of the year. For the hotter months landscaping with shade trees can provide additional benefits to pedestrians.

An urban forestry initiative was adopted by the Las Vegas City Council recognizing the numerous economic, social and environmental benefits of trees within the urban environment. Walkable communities help to meet the goals of the initiative which include doubling the city's tree canopy coverage from 10% to 20% by 2035, and to work with existing partners and develop new partnerships in order to ensure that urban forestry remains a priority for the city and Southern Nevada region.

The lack of shade in the summer months makes walking a difficult chore and influences the habits of pedestrians. The location of trees along sidewalks is critical to a walkable community and the creation of a shade canopy. The sun's path should dictate the planting location of trees to provide shade along sidewalks.



Map details shade coverage for the Plan area



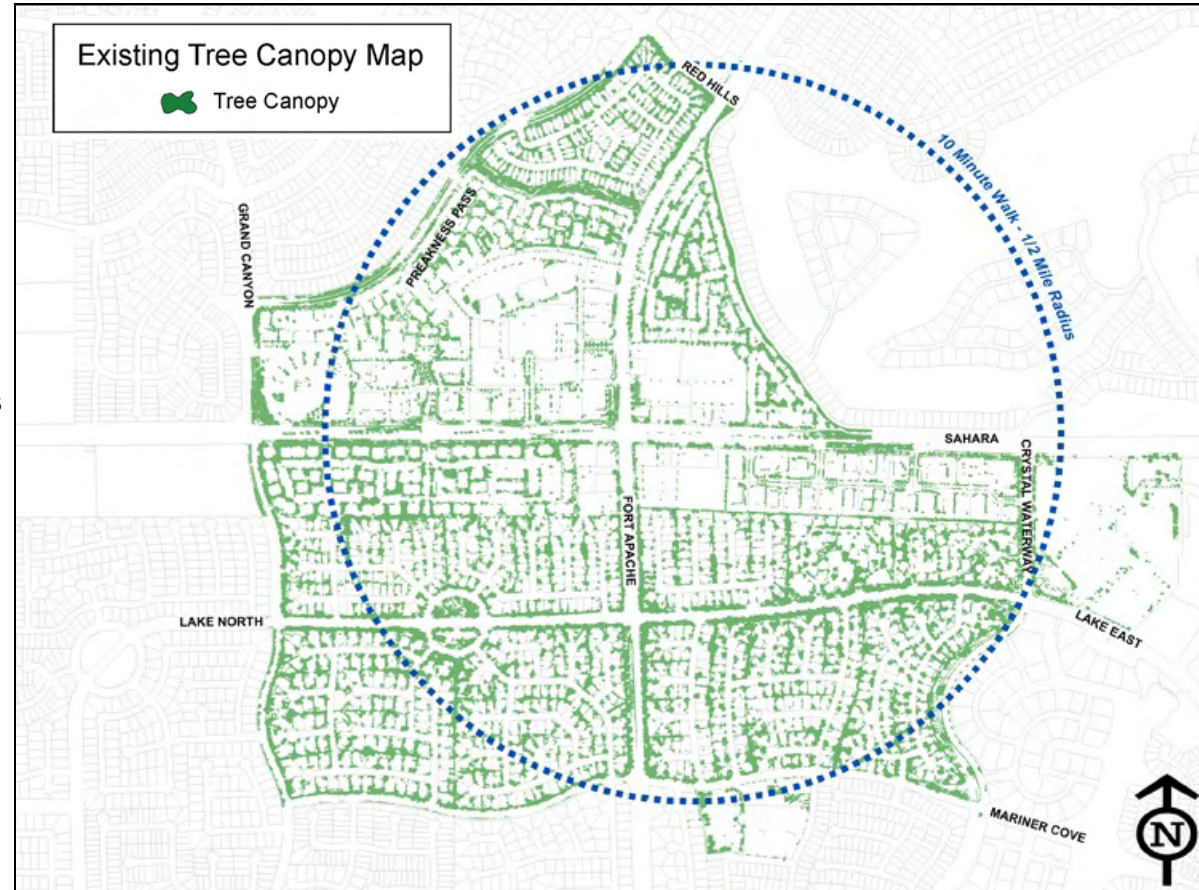
SAHARA WEST WALKABLE COMMUNITY PLAN

Shade Coverage

Except for peak hours in the summer, the position of street trees is a factor in providing shade. During the peak hours shade is determined by the size of the tree canopy. Therefore, planting mature trees properly positioned along sidewalks will provide shade year round.

Trees that line the south side of sidewalks along east/west roadways will provide shade to pedestrians. Trees along north/south roadways can be placed on both sides of the sidewalk to provide shade when the sun is rising and setting.

The tree canopy of the Plan area is plentiful in some areas and sparse in others. Above is a map of the existing tree canopy for the Sahara West Walkable Community. Because of the sun's path during the summer months the trees that are present do not provide shade for pedestrians. On the previous page is a map that represents a survey of the existing shade within the walkable community. Most of the area has good or fair shade, except for a few areas. The north side of Sahara Avenue from the east end of the Plan area to the intersection of Fort Apache Road and Sahara Avenue lacks shade. The west side of Crystal Water Way from Lake North Drive to Mariner Cove Drive has no shade. The east side of Fort Apache Road from Sahara Avenue to Red Hills Road lacks shade and there are sections along the sidewalk in front of the M.J. Christenson School which do not have shade trees. Planting mature trees with large canopies from the suggested plant list and placing them within 25 feet of one another would provide shade for pedestrians along these sections of the roadway.



Map details tree canopy for the Plan area



SAHARA WEST WALKABLE COMMUNITY PLAN

Private Development

The recommendations to this point have been focused on the public realm. For private properties within the Plan area, conformance to the UDC development standards upon redevelopment or renovation will unify the community design by providing walkable, pedestrian-scaled development.

Community design within the Plan area should enhance and promote the characteristics of a Walkable Community. Pedestrian-oriented features should be taken into account in site design, building location, relationship to the roadway, parking lot design and building façade design. These features are addressed within the development standards of the UDC; however, special emphasis and adherence to these elements will strengthen and enhance walkability within the Plan area.

These features include building placement and orientation, which require buildings on corner lots to be oriented to the corner and street fronts, while buildings for stand alone projects are to be located at the front of the site at the minimum setback. Building exteriors must be relieved by variations in massing or articulation, and relate height and bulk to human scale.

Properties need to integrate bicycle and pedestrian paths with connections to adjacent commercial and residential areas. Additional pedestrian walkways should be provided that are distinguished through the use of special pavers, bricks or patterned concrete. Pedestrian open spaces and plazas are to be provided in commercial developments. Site amenities are to be provided including benches, pergolas, landscaped arbors or artwork.

Proper screening and placement of utilities, loading zones and parking lots should be considered for each site. Consideration and review should be given to the placement and architectural compatibility of pedestrian lighting. Parking lot design should incorporate the minimum landscape requirements to provide the greatest amount of pedestrian comfort. Adherence to the development standards of the UDC the City of Las Vegas will ensure walkable, pedestrian scaled development within the Plan area. A checklist is available within the Appendix of this Plan to ensure new developments meet the design intent of a walkable community, as well as the development standards of the UDC.



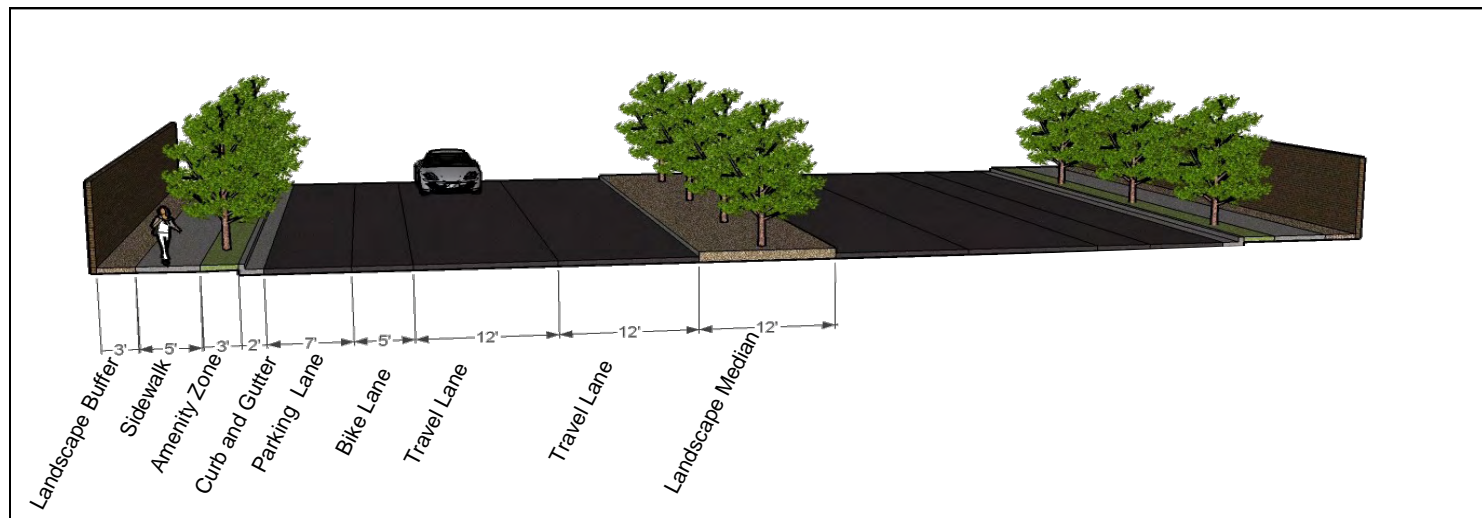
SAHARA WEST WALKABLE COMMUNITY PLAN

COMPLETE STREET DESIGN

Historically the public right-of-way has favored automobile traffic. As communities evolve, the public right-of-way is used by multiple modes of transportation. Modern transportation corridors incorporate a complete street design that includes pedestrian, cyclist, automobile, and mass transit modes. This design approach provides protected sidewalks, bike lanes, crosswalks, refuge medians and bus pullouts. These modes are designed to be accessed by pedestrians of all ages and abilities.

In addition to transportation, complete streets promote a better walking environment by providing aesthetic amenities that define the streetscape in the form of benches, trash receptacles, sidewalks, street trees, landscaping, and street/sidewalk lighting. Streetscapes define a neighborhood's character and create the visual environment in which people interact. By improving the streetscape of a neighborhood, the value and quality of the community improves. These enhancements provide increased value to the neighborhood that will last forever. Below is an illustration of the many components that are incorporated into a complete street.

Retrofitting the roadways within the Plan area to include components found within a complete street is possible; however, it will depend greatly on the existing conditions and availability of funding.



Example highlighting the typical components found in an ideal complete street using the full extent of the right-of-way



SAHARA WEST WALKABLE COMMUNITY PLAN

Examples of Complete Street Design



Example of a complete street with limited right-of-way



Example of an elevated bike path protected from auto traffic



Revitalization of St. George Street in Toronto



Example of a bike lane protected from auto traffic



Example of colored bike lanes for visibility



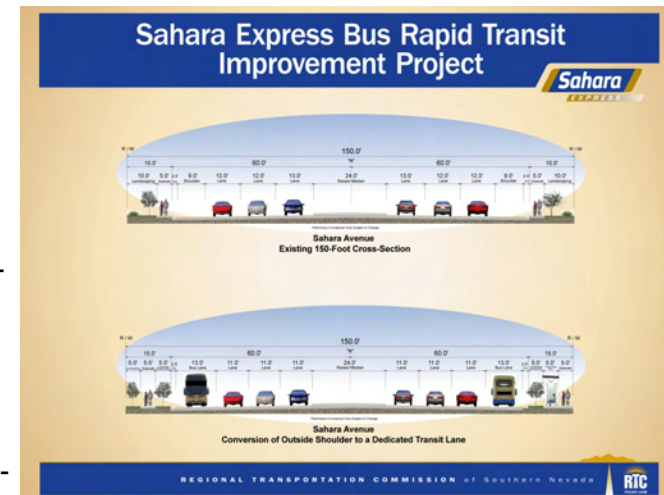
SAHARA WEST WALKABLE COMMUNITY PLAN

Sahara Avenue



Photo simulation of the Sahara Avenue Bus Rapid Transit

The Regional Transportation Commission of Southern Nevada (RTC) is constructing the Sahara Avenue Bus Rapid Transit (BRT) improvement project scheduled for completion in February 2012, which will consist of a 12-mile corridor that extends from Hualapai Way to Boulder Highway. Sahara Avenue is a radial corridor located near the center of the developed metropolitan area that serves the heaviest employment centers in the Las Vegas Valley along with extensive areas of existing and planned commercial and residential development. This intermodal project will improve the efficiency and quality of transit service by converting existing breakdown lanes to bus only lanes, improving passenger amenities, and increasing the use of off-board fare collection. The RTC is utilizing Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant funding for this project, which is part of the federal American Recovery and Reinvestment Act (ARRA) and is part of the continuing process towards transit system improvements in the Las Vegas Valley.



Existing and enhanced cross sections of Sahara Avenue

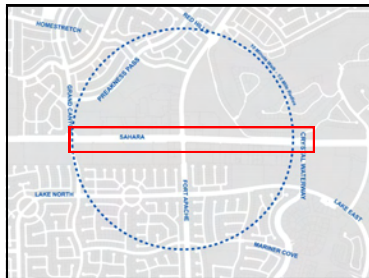


SAHARA WEST WALKABLE COMMUNITY PLAN

Sahara Avenue (Existing Conditions)

Street Amenities	
Lighting	No
Benches	Transit Stops
Speed limit	45 mph
Transit stop	10
Utility boxes screened	No
Obstacles in the sidewalk	Yes

Street Composition	
Landscape buffer	10'
Sidewalk	5'
Amenity zone	No
Parking lane	No
Bike lane	No
Travel lanes	4
Center turn lane	No
Median island	22'
Travel lanes	4
Bike lane	No
Parking lane	No
Amenity zone	No
Sidewalk	5'
Landscape buffer	10'



Sahara Avenue Location Map



Sahara Avenue at Fort Apache Road

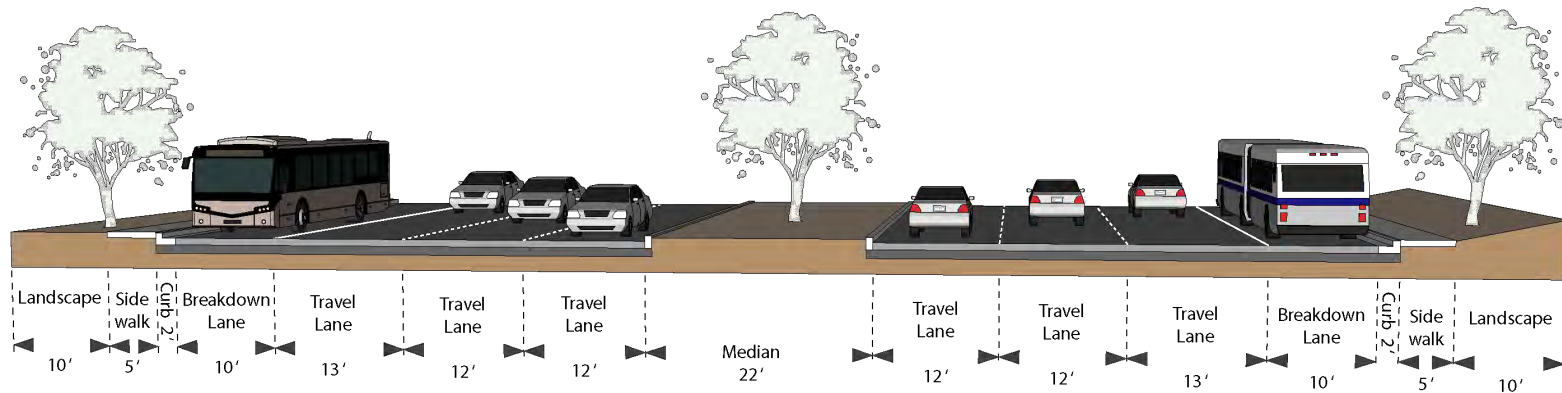


Illustration of Sahara Avenue existing conditions



SAHARA WEST WALKABLE COMMUNITY PLAN

Approximately one and one-half miles to the west of Grand Canyon Drive, Sahara Avenue dissolves into neighborhood and local streets where the traffic volumes greatly diminish. Sahara Avenue is a parkway arterial street with a 22-foot wide median island and three travel lanes in addition to a break down lane on either side. The sidewalk is at the back of the curb with a landscape buffer between the sidewalk and residential property lines.

The proposed UDC parkway arterial streets classification requires a center turn lane or landscape median with three travel lanes on either side, and a landscaped amenity zone between the curb and the sidewalk. Also required in parkway arterial streets is a landscape buffer zone between the sidewalk and the property line.

Even though Sahara Avenue will be a part of the Sahara Avenue Bus Rapid Transit (BRT) project, there are still opportunities to improve the look and use of the road. The BRT line will occupy the outside breakdown lanes and redistribute the amount of space given to each travel lane. This improvement to the roadway will not expand the width of the roadway or the amount of right-of-way currently in use. To better accommodate pedestrian traffic, opportunities to work with the RTC and property owners along Sahara Avenue to add shade trees should be examined.

The residents of the community have expressed concerns about the lighting of the area. Sahara Avenue has street lighting down the middle of the median, but the sidewalk on either side has no lighting. Lighting along the sidewalks of Sahara Avenue in a similar manner to the sidewalk lighting on Fort Apache Road is recommended to provide safe sidewalks for pedestrians.



Sahara Avenue east of Fort Apache Road



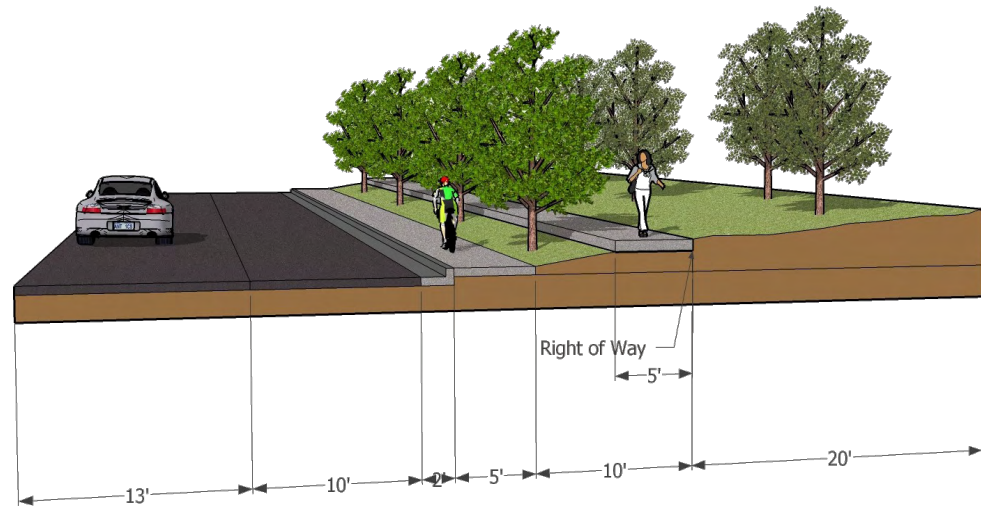
SAHARA WEST WALKABLE COMMUNITY PLAN

Some simple adjustments can be made to encourage walking and other modes of transportation along Sahara Avenue. The right-of-way for Sahara Avenue is under-utilized. The existing build condition of Sahara Avenue is 130 feet wide, but the right-of-way is 150 feet, leaving 10 feet on both the north and south sides of the roadway for potential pedestrian enhancements. A new detached five-foot sidewalk can be installed at the back of the right-of-way allowing for a landscaped amenity zone. The old five-foot sidewalk can be removed and replaced with landscaping, or exploratory measures can be taken to determine if the old sidewalk can be designated as an elevated bike path. Bike paths are impassable at the current configuration with the amount of traffic. By moving pedestrian traffic away from the roadway, the remaining sidewalk could be retrofitted to stay in place and be used as an elevated one-way bike path protected from automobile traffic.

Sahara Avenue also has a second opportunity to provide detached sidewalks for pedestrians with easements into commercial landscape buffers. Except for two commercial lots along the south side of Sahara Avenue within the Plan area there is a 20-foot landscape buffer with mature trees. An easement could be obtained to create landscape buffers to separate pedestrians from automobile traffic. The old five-foot sidewalk can be removed and replaced with landscaping or designated as an elevated bike path.



Sahara Avenue east of Fort Apache Road



Proposed design with detached sidewalk and elevated bike lane



SAHARA WEST WALKABLE COMMUNITY PLAN



Existing north side of Sahara Avenue



Proposed north side of Sahara Avenue

The north side of Sahara Avenue east of Fort Apache Road along the Canyon Gate development wall lacks shade for pedestrians. The existing 10-foot landscape buffer between the back of curb and the private property wall does not provide shade to the pedestrians using the sidewalk. If the landscaping and sidewalk were reversed, a buffer would be created allowing for street trees along the street side that could shade the pedestrians. The old five-foot sidewalk can be removed and replaced with landscaping or designated as an elevated bike path. This landscape buffer is within the right of way and does not have utility boxes that would impede the development of a sidewalk along the property wall. In places where utilities exist underneath the existing sidewalks, the installation of additional landscape upon the removal of sidewalks may be limited due to costly utility relocation costs.

More mature trees with large canopies placed closer to one another would provide shade to pedestrians along this portion of the roadway. Twenty-four inch box trees spaced 25 feet on center is recommended to provide shade for pedestrians. The addition of the mature trees will add the needed shade and not create a sight hindrance for commercial signs as this portion is along a residential portion of Sahara Avenue.



SAHARA WEST WALKABLE COMMUNITY PLAN

Sahara Avenue between Fort Apache Road and Crystal Water Way lacks continuity with its surroundings. The abutting properties have tall, mature pine trees, turf, and various landscaping styles. The landscaped median within Sahara Avenue to the west of Fort Apache Road has a combination of tall palms, medium height trees, short shrubs, and different sized rocks. East of Fort Apache Road the landscaped median is barely noticeable with a tree every 50 feet and no shrubs. Additional plantings within the 22-foot wide median on Sahara Avenue east of Fort Apache Road that reflects landscape themes within the community is recommended to unite both sides of the street. The use of the Suggested Plant List on page 36 is recommended for plants within this portion of the Plan.



Sahara Avenue median west of Fort Apache Road



Sahara Avenue median east of Fort Apache Road

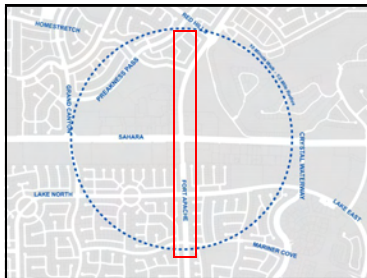


SAHARA WEST WALKABLE COMMUNITY PLAN

Fort Apache Road (Existing Conditions)

Street Amenities	
Lighting	Yes
Benches	Yes
Speed limit	45 mph
Transit stop	3
Utility boxes screened	No
Obstacles in the sidewalk	Yes

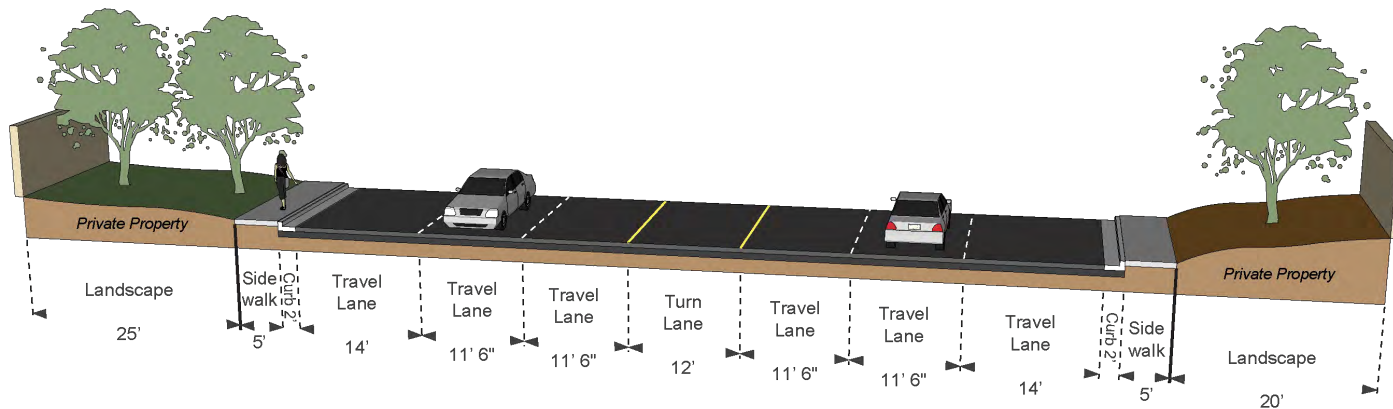
Street Composition	
Landscape buffer	25'
Sidewalk	5'
Amenity zone	No
Parking lane	No
Bike lane	No
Travel lanes	3
Center turn lane	12'
Median island	No
Travel lanes	3
Bike lane	No
Parking lane	No
Amenity zone	No
Sidewalk	5'
Landscape buffer	20'



Fort Apache Road Location Map



Fort Apache Road between Sahara Avenue and Mariner Cove Drive



Existing street section, Fort Apache Road

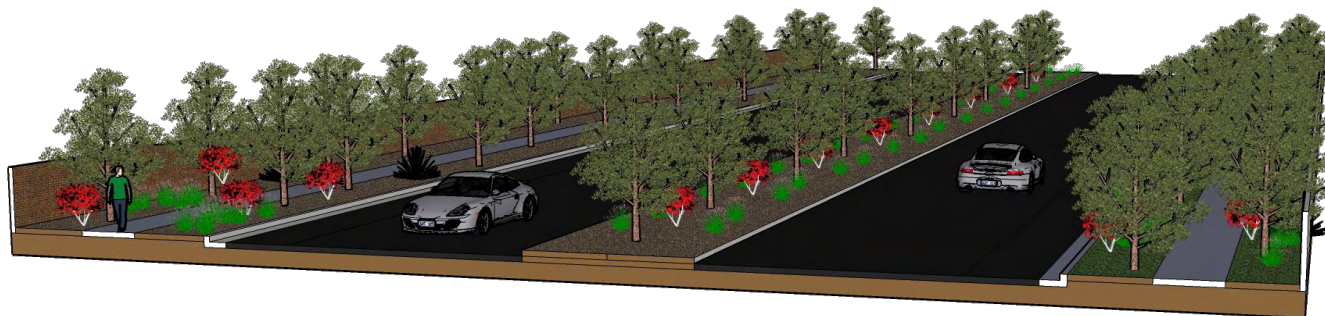


SAHARA WEST WALKABLE COMMUNITY PLAN

Fort Apache Road is a primary arterial and can be intimidating to cross. Improvements can be made to make it accessible for all users and enhance the community.

Fort Apache Road has a center turn lane with three travel lanes on either side. The sidewalk is at the back of curb and has a landscape buffer between the back of the sidewalk and residential property lines on both sides of the street. The west side of Fort Apache Road north of Sahara Avenue has a detached sidewalk with shade trees and landscaping. The UDC primary arterial street classification requires a raised median island with up to three travel lanes on both sides. Primary arterial streets have detached sidewalks with a landscape amenity zone between the curb and the sidewalk on both sides of the roadway.

Fort Apache Road south of Sahara Avenue is visually open with an extensive amount of asphalt paving. The road acts as a visual separation, disconnecting residential and commercial developments. A landscaped median provides an opportunity to give the community a distinct character and identity. In some cases the median design can define the community. By taking planting inspiration from the subdivisions on each side of the roadway and integrating them into a median, a common link between the community could be created. Additionally, a raised landscaped median island provides a physical barrier to motorists, thus creating a refuge island for pedestrians. By visually narrowing the roadway, motorists reduce vehicle speeds and focus their attention on the remaining travel lanes. Narrowing a travel lane by one-foot can reduce speeds by seven miles per hour.



Proposed median island and enhanced sidewalks



Fort Apache Road,
Sahara Avenue to
Mariner Cove Drive



SAHARA WEST WALKABLE COMMUNITY PLAN

Common lots with mature landscaping border the sidewalk on the east and west sides of Fort Apache Road north of Sahara Avenue. This creates an opportunity to provide detached sidewalks for pedestrians along Fort Apache Road. An easement could be obtained to create landscape buffers. This moves pedestrians away from the automobile traffic and into the shaded area within the trees. The remaining sidewalk can remain in place and be used as an elevated bike path protected from automobile traffic or removed and replaced with landscape.

The eastern side of Fort Apache Road north of Sahara Avenue lacks shade for pedestrians. Landscaping exists at the back of sidewalk, but does not provide shade to pedestrians. Additional 24-inch box trees would provide shade to pedestrians along this portion of the roadway. In order to facilitate pedestrian traffic from Peccole Ranch to the eastern portion of the Plan area, a mid-block crossing should be added across Fort Apache Road at the entrance to the private Peccole Ranch community trail, subject to the review and approval of the Peccole Ranch Community Association.



The east side of Fort Apache Road looking south



Fort Apache Road north of Sahara Avenue



SAHARA WEST WALKABLE COMMUNITY PLAN

Lake North Drive

(Existing Conditions East of Fort Apache Road)

Street Amenities	
Lighting	Yes
Benches	No
Speed limit	35 mph
Transit stop	No
Utility boxes screened	No
Obstacles in the sidewalk	Yes

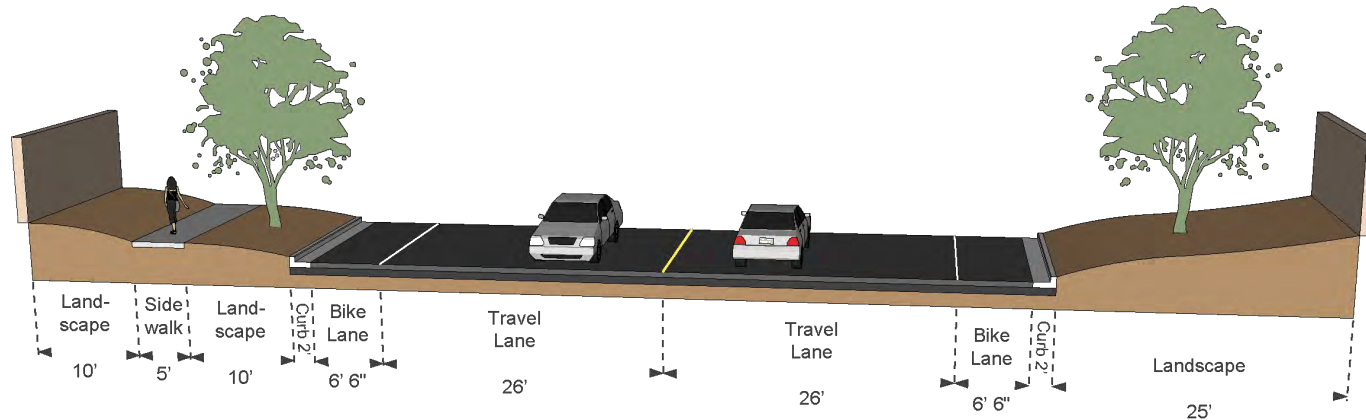
Street Composition	
Landscape buffer	10'
Sidewalk	5'
Amenity zone	10'
Parking lane	No
Bike lane	6'-6"
Travel lanes	1
Center turn lane	No
Median island	No
Travel lanes	1
Bike lane	6'-6"
Parking lane	No
Amenity zone	No
Sidewalk	No
Landscape buffer	25'



Lake North Drive Location Map



Lake North Drive east of Fort Apache Road



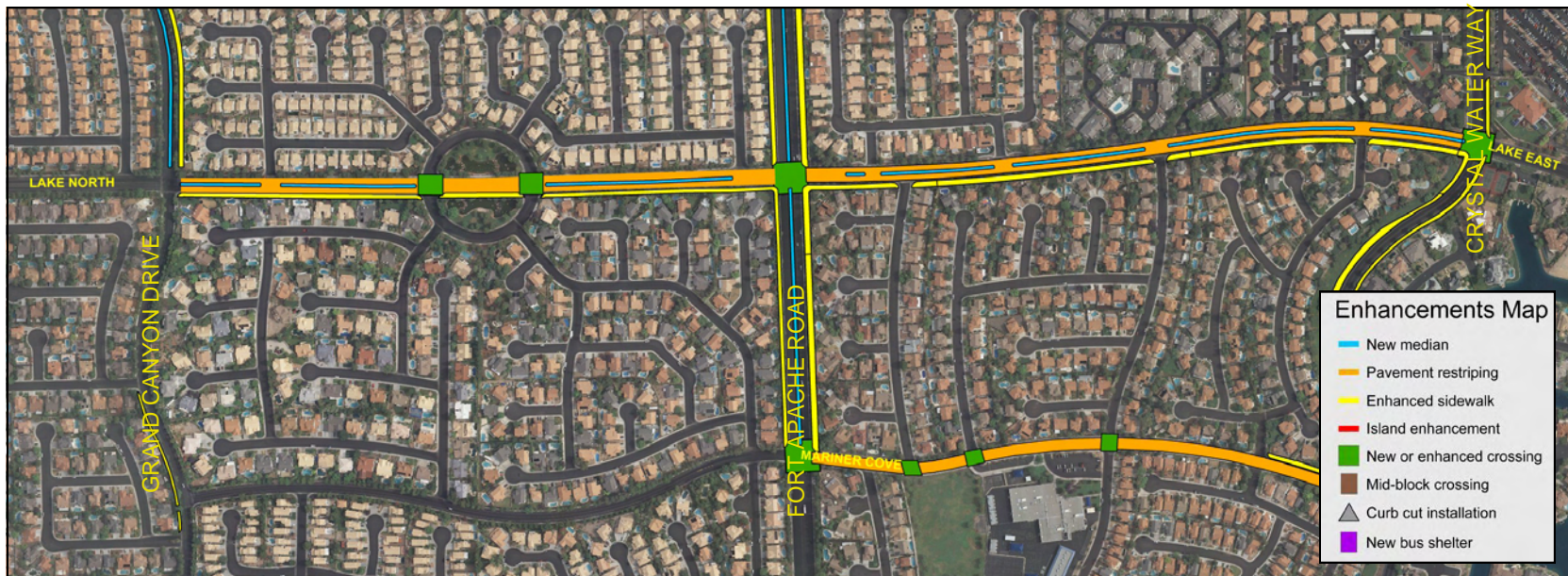
Existing street section, Lake North Drive



SAHARA WEST WALKABLE COMMUNITY PLAN

Lake North Drive west of Fort Apache Road is configured differently than the portion east of Fort Apache Road. West of Fort Apache Road, Lake North Drive has a center turn lane with a travel lane, a bike lane and breakdown lane on both sides. A sidewalk exists on the north side, but there is none south side. A landscape buffer exists on both sides of the street between residential property lines and either the back of curb or the sidewalk. The segment of Lake North Drive east of Fort Apache Road has two wide travel lanes and a bike lane adjacent to the curb on either side of the roadway. The north side has a detached sidewalk with a landscaped amenity zone and a landscape buffer between the residential property line and the back of sidewalk. On the south side there is only a landscaped buffer between the residential property line and the back of curb.

The UDC minor collector street classification requires a travel lane and an auxiliary lane on either side of the center line with a landscape amenity zone between the curb and the sidewalk.



Lake North Drive from Grand Canyon Drive to Crystal Water Way



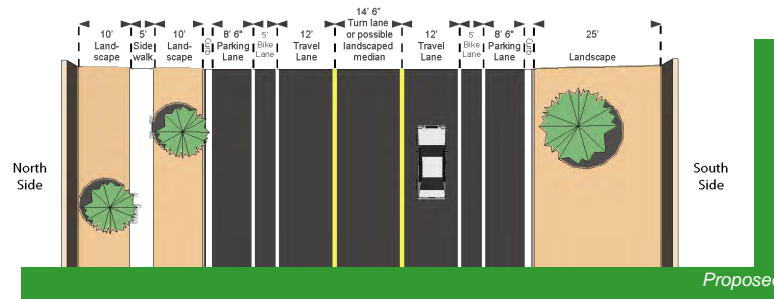
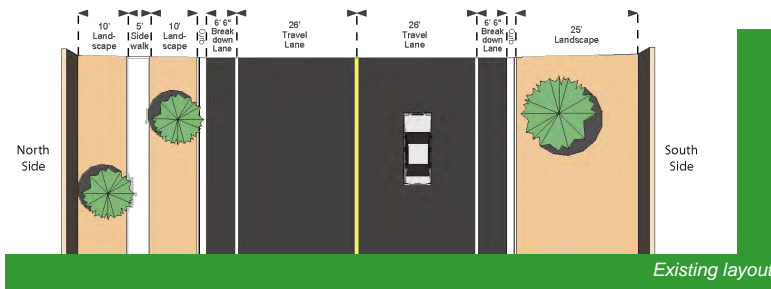
SAHARA WEST WALKABLE COMMUNITY PLAN

There are no sidewalks along the south side of Lake North Drive. A complete street has detached sidewalks on both sides of the street. Without a sidewalk pedestrians are limited to one side of the street and are cut off from the opportunities that exist along the other side. Two options exist to allow for a sidewalk along the south side of Lake North Drive. A sidewalk with an amenity zone could be built within the existing right-of-way, reducing the width of the existing asphalt, or an easement could be obtained to build a sidewalk in the common area adjacent to the southern side of the street allowing for the existing mature trees to provide an instantaneous shade canopy for pedestrians. Special consideration shall be utilized to ensure the critical root zones of existing established trees are protected during construction.

Lake North Drive east of Fort Apache Road has two 26-foot wide travel lanes. The width of the lanes promotes speeding within a residential area. Reductions in travel lane width have reduced vehicle speeds as much as seven miles per hour for each foot of lane reduction. Slower traffic provides for a calmer environment for pedestrians and residents. Restriping Lake North Drive to allow for narrower travel lanes and a center turn lane will enable better use of the right-of-way for sidewalks and a median.



Existing network of sidewalks within the Plan area



Additional enhancements to Lake North Drive include the option to provide a landscaped median in lieu of a center turn lane. Establishment of a median visually narrows the roadway, reduces vehicle speeds, visually unites both sides of the road, and creates an appealing environment for pedestrians to walk, ride, or traverse.



SAHARA WEST WALKABLE COMMUNITY PLAN

Mariner Cove Drive

(Existing Conditions East of Fort Apache Road)

Street Amenities	
Lighting	Yes
Benches	No
Speed limit	25 mph
Transit stop	No
Utility boxes screened	No
Obstacles in the sidewalk	Yes

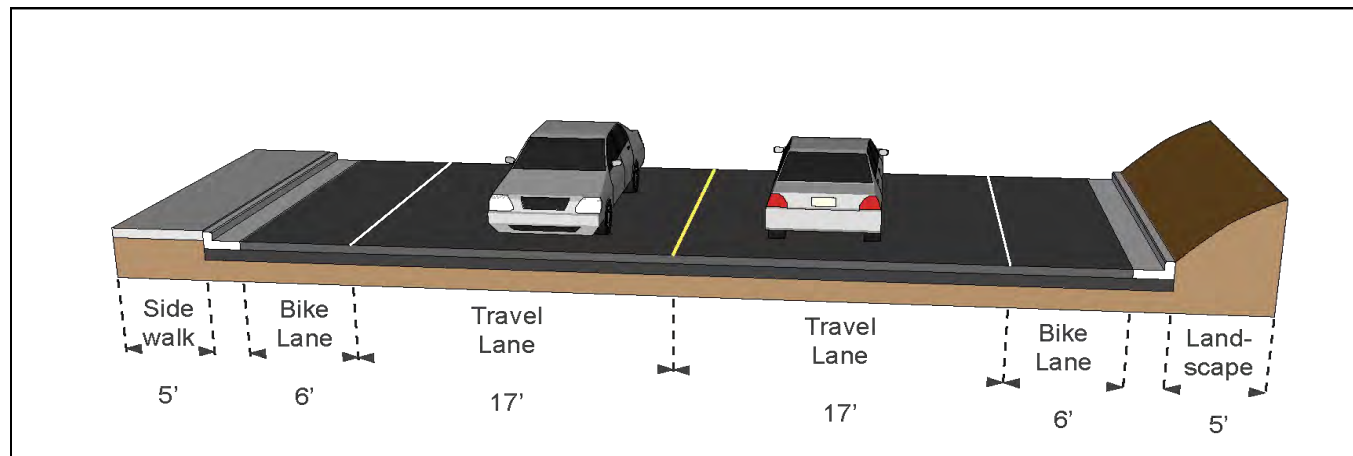
Street Composition	
Landscape buffer	No
Sidewalk	5'
Amenity zone	No
Parking lane	No
Bike lane	6'
Travel lanes	1
Center turn lane	No
Median island	No
Travel lanes	1
Bike lane	6'
Parking lane	No
Amenity zone	No
Sidewalk	No
Landscape buffer	5'



Lake North Drive Location Map



Mariner Cove Drive 400 feet west of Crystal Water Way



Existing street section, Mariner Cove Drive



SAHARA WEST WALKABLE COMMUNITY PLAN

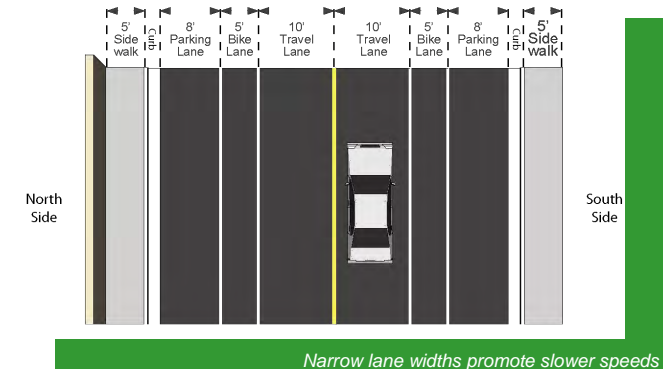
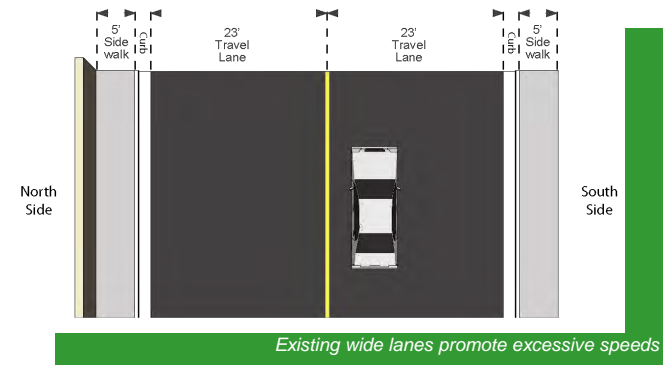
The UDC minor collector street classification requires a travel lane and an auxiliary lane on either side of the center line with a landscape amenity zone between the curb and the sidewalk.

Mariner Cove Drive currently provides a travel lane, a bike lane and a parking lane on both sides of the centerline on the section of the street west of Fort Apache Road. The portion of Mariner Cove Drive to the east of Fort Apache Road has significantly wider travel lanes on both sides of the centerline with bike lanes adjacent to the curb and gutter, and no parking lane provided.

Mariner Cove Drive has 23-foot wide lanes near a public elementary school. Concern was expressed by residents at the city's community meeting with regard to the speed of motorists and the safety on this portion of the street. Reductions in the travel lane width may reduce vehicle speeds as much as seven miles per hour for each foot of lane reduction. To reduce motorist speeds and increase safety, the striping of the street can be reconfigured. The addition of an eight-foot parking lane and a five-foot bike lane would reduce the motorists travel lane to ten feet, reducing vehicle speeds and focusing motorists' attention on the travel lanes.

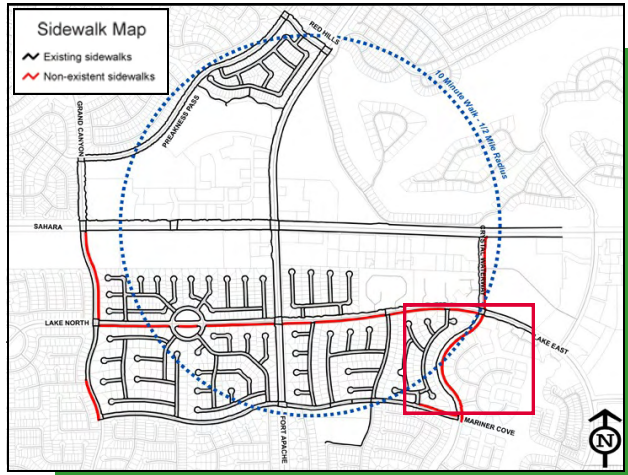


Mariner Cove Drive at M.J. Christensen Elementary



SAHARA WEST WALKABLE COMMUNITY PLAN

At the eastern end of Mariner Cove Drive where it meets Crystal Water Way the street is missing a 600-foot portion of sidewalk. Installing a sidewalk would allow for a continuous path along the north side of the street. This area is on a steep slope and forces pedestrians into the unprotected bike lane. A detached sidewalk could be placed so that there is no conflict with bikes or motorists.



Sidewalk map showing area of concern and non-existing sidewalks



Existing Mariner Cove Drive 400' west of Crystal Water Way



Enhancements Map

- New median
- Pavement restriping
- Enhanced sidewalk
- Island enhancement
- New or enhanced crossing
- Mid-block crossing
- ▲ Curb cut installation
- New bus shelter

Mariner Cove Drive east of Fort Apache Road

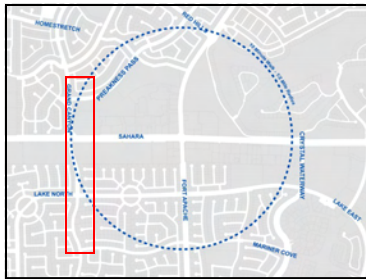


SAHARA WEST WALKABLE COMMUNITY PLAN

Grand Canyon Drive (Existing Conditions)

Street Amenities	
Lighting	Yes
Benches	Transit Stop
Speed limit	35 mph
Transit stop	3
Utility boxes screened	No
Obstacles in the sidewalk	Yes

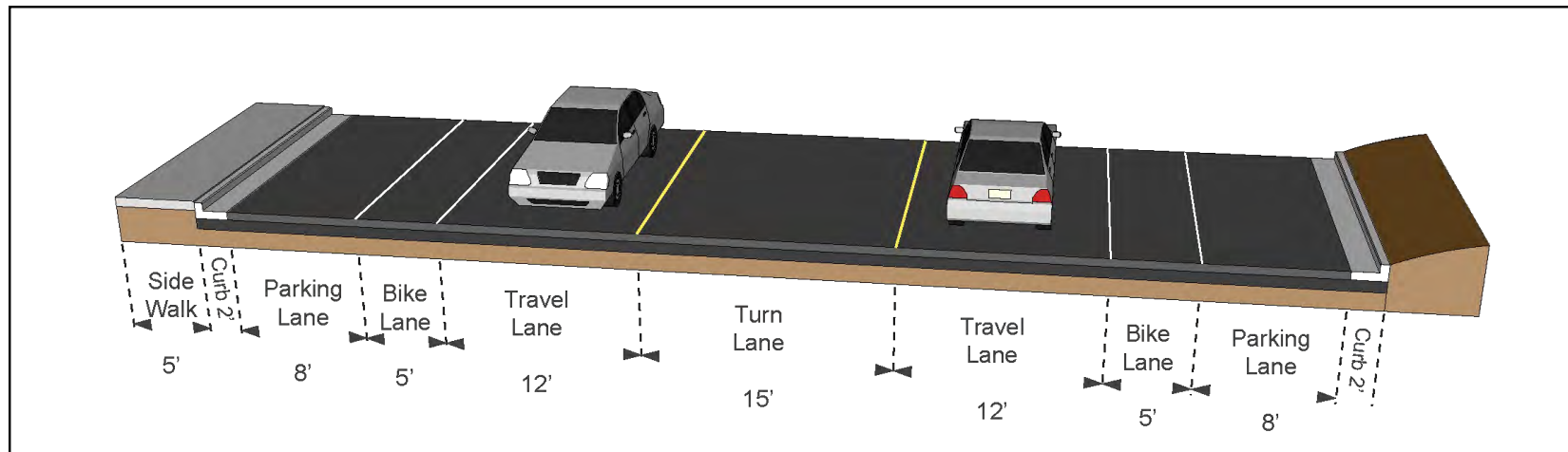
Street Composition	
Landscape buffer	No
Sidewalk	Partial
Amenity zone	No
Parking lane	8'
Bike lane	5'
Travel lanes	1
Center turn lane	15'
Median island	No
Travel lanes	1
Bike lane	5'
Parking lane	8'
Amenity zone	No
Sidewalk	Partial
Landscape buffer	10'



Grand Canyon Drive Location Map



Grand Canyon Drive at Lake North Drive



Existing street section, Grand Canyon Drive



SAHARA WEST WALKABLE COMMUNITY PLAN

Grand Canyon Drive services the community by providing local traffic a means to access primary arterials. The UDC minor collector street classification requires a travel lane and an auxiliary lane on either side of the center line with a landscape amenity zone between the curb and the sidewalk.

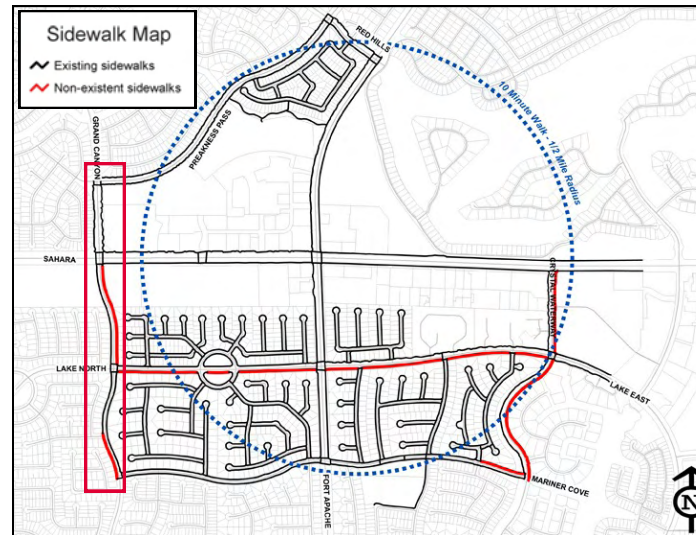
Grand Canyon Drive has two street configurations within the Plan area. Between Sahara Avenue and Lake North Drive there is a center turn lane with a travel lane and bike lane on either side. Adjacent to the curb and gutter is a parking lane. On the west side of the street is a landscaped common lot with the sidewalk next to the curb and gutter. No sidewalk exists on the east side of the street and the common lot of the Summer Hill Pointe Apartments abuts the back of the curb.

Between Lake North Drive and Mariner Cove Drive, Grand Canyon Drive does not have a center turn lane but provides a travel lane, bike lane and parking lane on both sides of the roadway. Adjacent to the curb and gutter is the sidewalk with a common lot between the sidewalk and residential property lines. There is a portion of sidewalk missing between Mariner Cove Drive and Stellar View Avenue on the west side of the street.

The sidewalk is not continuous along Grand Canyon Drive to the Sahara West Library. The path forces pedestrians to switch from one side of the street to the other. A continuous path on both sides of the street will resolve any conflicts with cyclists or motorists and will make Grand Canyon Drive a complete street, thereby providing a safer, more efficient path for pedestrians and motorists. To facilitate pedestrian access to the Sahara West Library, a crosswalk across Grand Canyon Drive at the northern driveway entrance of the Library should be provided. These additions to the street will make Grand Canyon Drive an ideal complete street.

Enhancements Map

- New median
- Pavement restriping
- Enhanced sidewalk
- Island enhancement
- New or enhanced crossing
- Mid-block crossing
- ▲ Curb cut installation
- New bus shelter



Existing network of sidewalks within the Plan area

Grand Canyon Drive south of Sahara Avenue



SAHARA WEST WALKABLE COMMUNITY PLAN

Preakness Pass

(Existing Conditions)

Street Amenities	
Lighting	Yes
Benches	No
Speed limit	25 mph
Transit stop	No
Utility boxes screened	No
Obstacles in the sidewalk	No

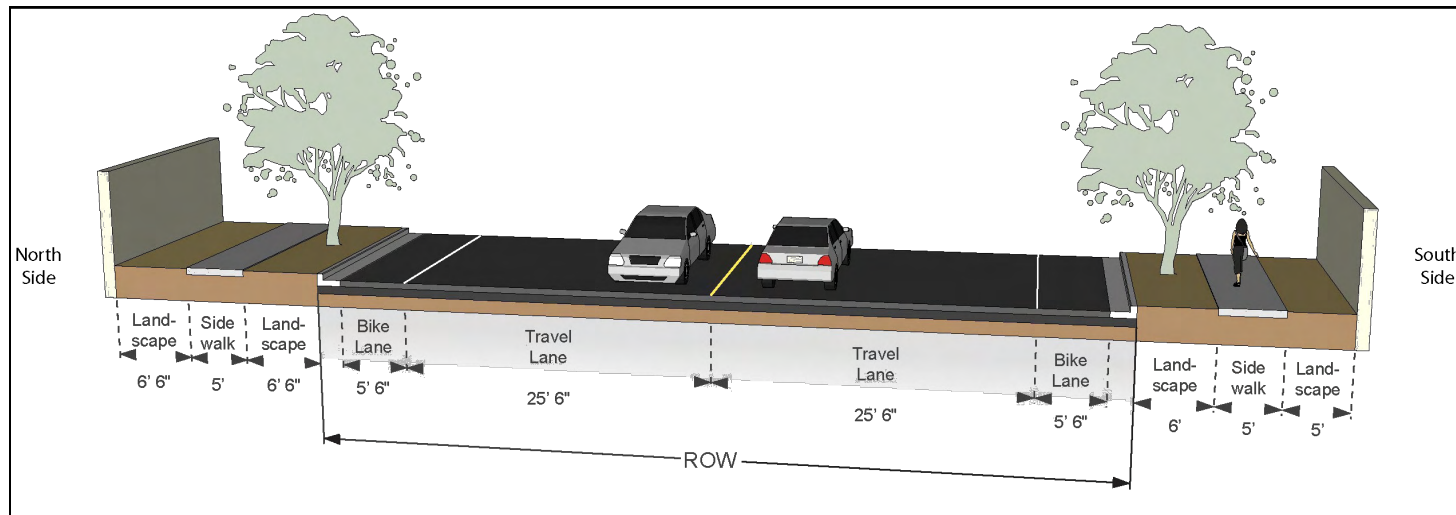
Street Composition	
Landscape buffer	6'-6"
Sidewalk	5'
Amenity zone	6'-6"
Parking lane	No
Bike lane	5'-6"
Travel lanes	1
Center Turn lane	No
Median island	No
Travel lanes	1
Bike lane	5'-6"
Parking lane	No
Amenity zone	6'
Sidewalk	5'
Landscape buffer	5'



Preakness Pass Location Map



Preakness Pass east of Grand Canyon Drive



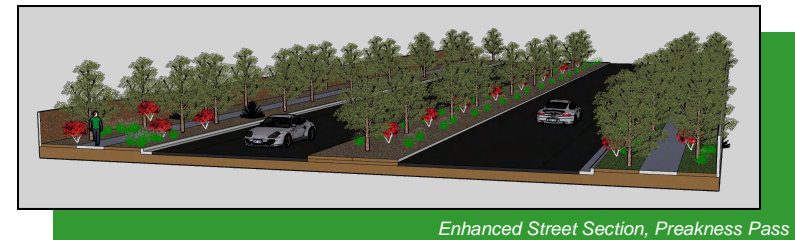
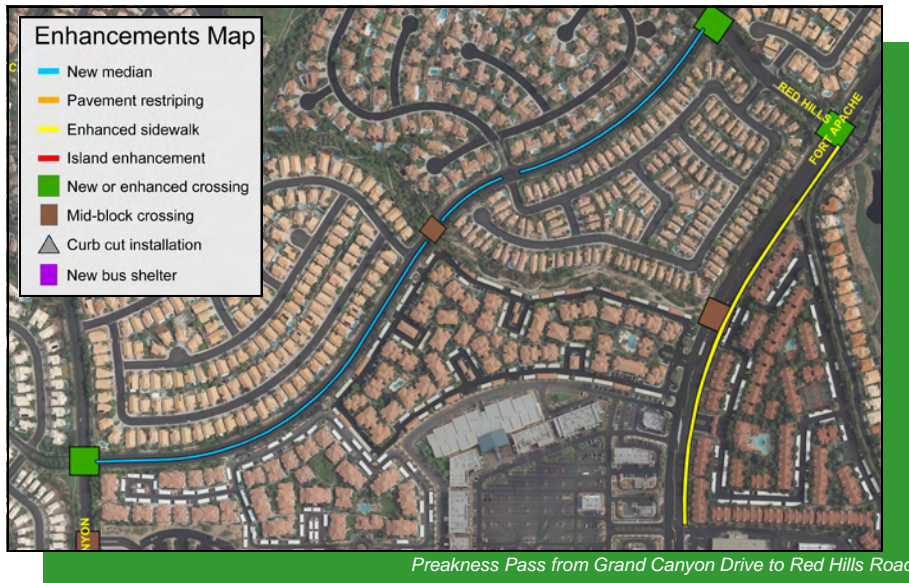
Existing street section, Preakness Pass

SAHARA WEST WALKABLE COMMUNITY PLAN

Preakness Pass has the width of a major collector, but is used as a minor collector that allows traffic to flow between Red Hills Road and Grand Canyon Drive without passing Piggott Elementary School. A major collector defined by the UDC requires a center turn lane or raised median with turn pockets and the capacity for two travel lanes on either side with a bike lane adjacent to the curb and gutter. A three-foot landscaped amenity zone separates the sidewalk from the curb and gutter on both sides of the street.

Preakness Pass has landscaped amenity zones on both sides of the roadway separating the sidewalk from the curb and gutter, with landscape buffers between the back of sidewalk and the residential property lines. Two very wide 25.5-foot travel lanes are on both sides of the centerline with bike lanes adjacent to the curb and gutter. The amount of space that is dedicated to the two bike lanes and travel lanes is 62 feet. The UDC major collector classification used the same amount of space to designate four travel lanes, two bike lanes, and a center turn lane.

Adding an eight-foot parking lane in addition to the existing five and one half-foot bike lanes would reduce the travel lane to a comfortable 12 feet. By visually narrowing the roadway, motorists reduce vehicle speeds and focus their attention on the remaining travel lanes. Additionally, a raised landscape median, subject to the review and approval of the Peccole Ranch Community Association, will provide a physical barrier to motorists and calm traffic. The landscaped median would provide the opportunity for visual cohesion of the community and unite the two sides, thereby creating an appealing environment to walk, ride, or travel through. These additions to the street would make Preakness Pass an ideal complete street.



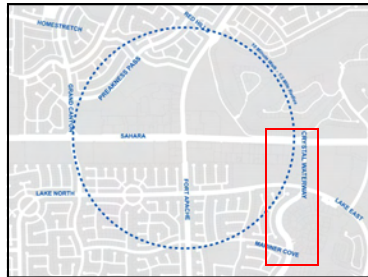
SAHARA WEST WALKABLE COMMUNITY PLAN

Crystal Water Way

(Existing Conditions)

Street Amenities	
Lighting	Yes
Benches	No
Speed limit	25 mph
Transit stop	No
Utility boxes screened	No
Obstacles in the sidewalk	No

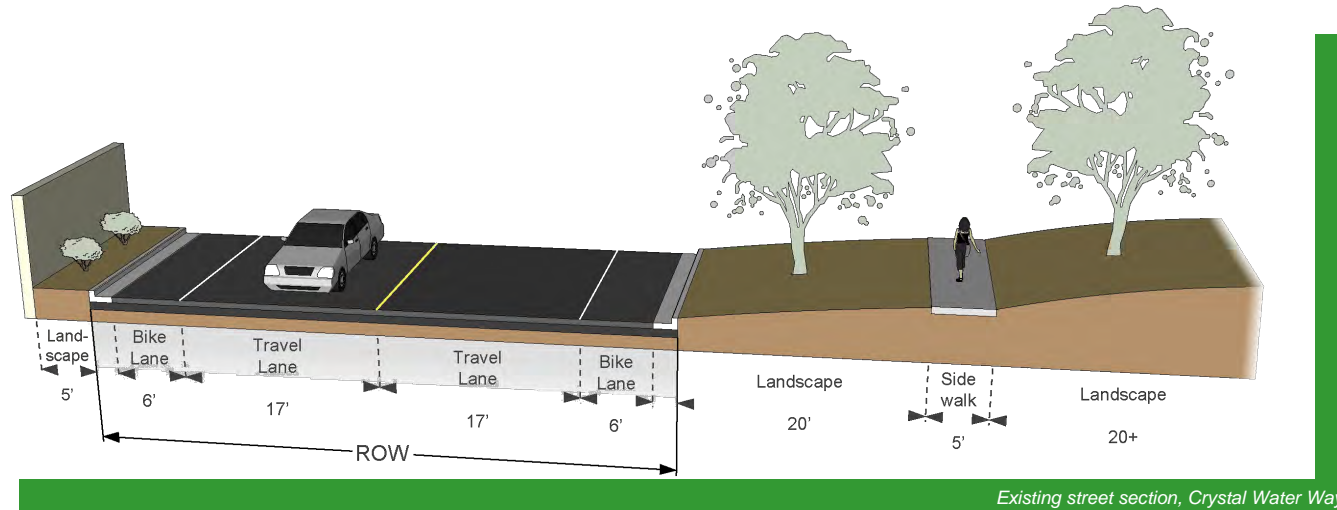
Street Composition	
Landscape buffer	5'
Sidewalk	No
Amenity zone	No
Parking lane	No
Bike lane	6'
Travel lanes	1
Center turn lane	No
Median island	No
Travel lanes	1
Bike lane	6'
Parking lane	No
Amenity zone	20'
Sidewalk	4'
Landscape buffer	10'



Crystal Water Way Location Map



Crystal Water Way south of Lake North Drive



Existing street section, Crystal Water Way



SAHARA WEST WALKABLE COMMUNITY PLAN

Crystal Water Way is a minor collector street that runs north and south connecting traffic from Lake North Drive, Mariner Cove Drive, and Sahara Avenue. The street abuts the Citibank processing center and The Lakes Estates gated community. The UDC minor collector street classification requires a travel lane and an auxiliary lane on either side of the center line with a landscape amenity zone between the curb and the sidewalk.

On the west side of Crystal Water Way there are detached sidewalks with landscaped amenity zones between 5 and 20 feet in width at different intervals. There are two bike lanes on both sides of the asphalt where the UDC requires an eight-foot multi-use sidewalk for bikes and pedestrians. The east side of Crystal Water Way has no sidewalks with a landscape buffer between the back of the curb and residential property lines.

The existing sidewalk is four feet wide and limits the maneuverability of pedestrians. The sidewalk should be replaced with a standard five-foot sidewalk. The east side of the street lacks a sidewalk and forces pedestrians to choose between walking along the road or climbing a sloping path and walking along the side of a hill. A sidewalk should be placed along the east side of the road to establish Crystal Water Way as complete street.

The west side of Crystal Water Way has a generous landscaped amenity zone and landscape buffer between the adjacent residential properties and the sidewalk. The addition of shade trees will provide relief from the direct sun and extreme heat for pedestrians. Providing 24-inch box trees placed 25 feet on center would make Crystal Water Way a complete street. To create a cohesive streetscape, any new landscape shall extend the full length of Crystal Water Way, between Sahara Avenue and Desert Inn Road.



West side of Crystal Water Way existing sidewalk

Enhancements Map

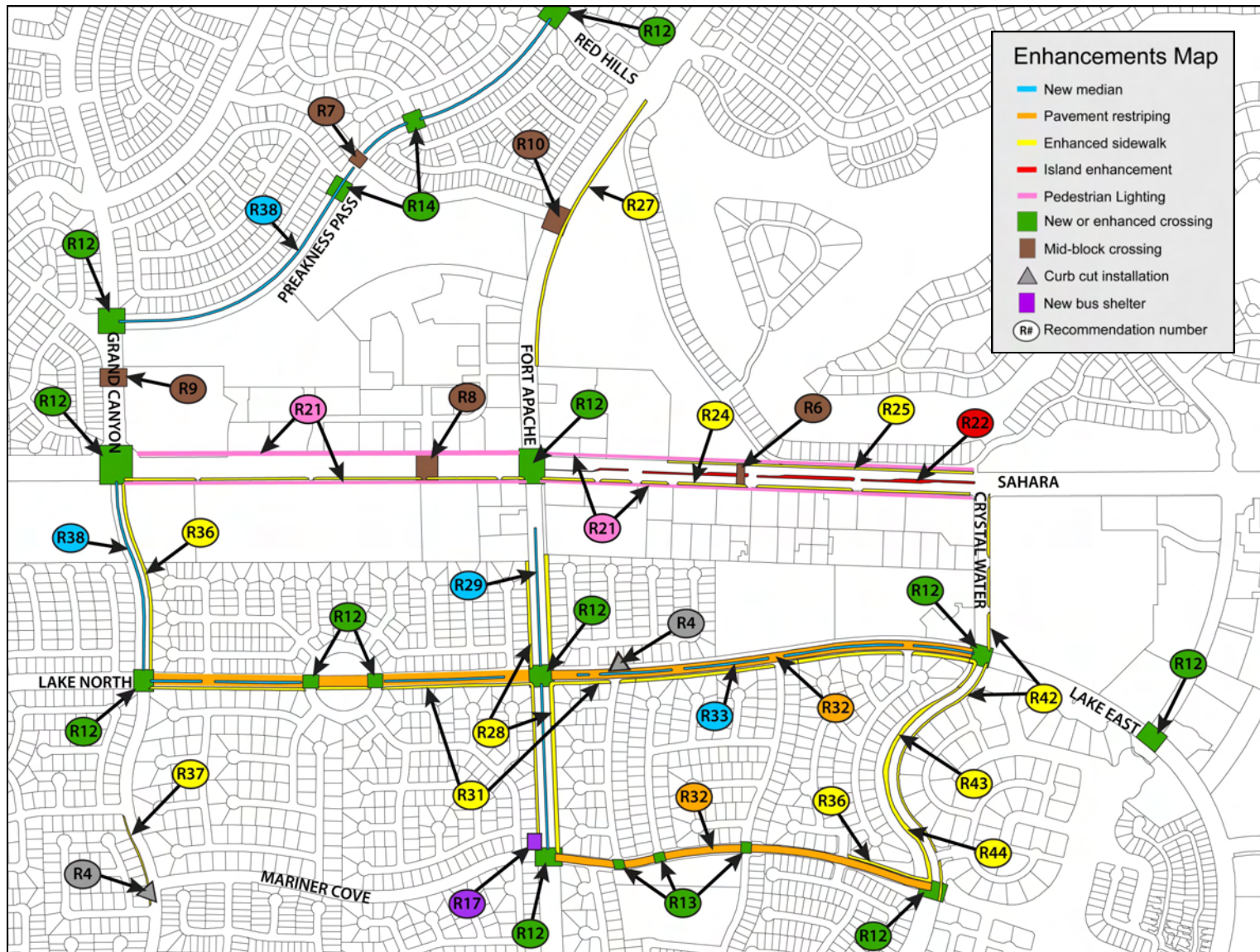
- New median
- Pavement restriping
- Enhanced sidewalk
- Island enhancement
- New or enhanced crossing
- Mid-block crossing
- ▲ Curb cut installation
- New bus shelter



Crystal Water Way south of Sahara Avenue



PLAN IMPLEMENTATION



PLAN IMPLEMENTATION

RECOMMENDATIONS

The implementation section of this plan provides recommendations that allow residents to easily walk to community amenities and conduct normal daily activities. The recommendations are based on input from residents at community meetings. All new development shall conform to the UDC. Any future design of new street amenities must take into account the location of existing sewer and public utility easements and meet the minimum City of Las Vegas design standards. Potential funding sources include, but are not limited to, the following:

- **Special Improvement District:** All parcels are assessed a percentage of the cost of improvements based on street frontage (as a general rule).
- **Federal Grants:** The Department of Transportation periodically has funding available for bicycle and pedestrian improvements.
- **Standard Development Process:** As land goes through redevelopment, the enhancements must be installed by the developer as part of the approval for the project.

COMMUNITY AMENITIES

Recommendation #1: Encourage uses that increase the walkability and self-sufficient nature of the Plan area, and that are missing from the area such as parks and public plazas, and stores for home improvement needs (see page 21).

COMMUNITY DESIGN

Connectivity

Recommendation #2: Relocate all obstacles hindering the travel of pedestrians and other people with disabilities along the sidewalks of the Plan area, including transit shelters. Bring utility boxes, and traffic sign posts up to current UDC compliance (see page 29).

Recommendation #3: Fix all damaged, cracked, chipped, and uneven portions of the existing sidewalk within the Sahara West Walkable Community (see page 29).

Recommendation #4: Provide curb cuts for crosswalks located at the intersections of (see page 31):
Lake North Drive and Waterview Drive
Mariner Cover Drive and Grand Canyon Drive



PLAN IMPLEMENTATION

Recommendation #5: Where the median is wide enough, move crosswalks to allow for a pedestrian refuge within the median island (see page 25).

Recommendation #6: Construct a mid-block crossing across Sahara Avenue west of the exit to the Canyon Gate condominiums and east of the Canyon Lakes Plaza (see page 27).

Recommendation #7: Construct a mid-block crossing across Preakness Pass at the Peccole Ranch Trail intersection (see page 28).

Recommendation #8: Construct a mid-block crossing across Sahara Avenue, 600 feet west of Fort Apache Road at the eastern driveway of the Summerhill Pointe Apartments. Evaluate if an at-grade crossing or pedestrian overpass is warranted (see page 27).

Recommendation #9: Construct a mid-block crossing across Grand Canyon Drive at the northern exit of the Sahara West Library, subject to the review and approval of the Peccole Ranch Community Association (see page 58).

Recommendation #10: Construct a mid-block crossing across Fort Apache Road at the Peccole Ranch Private Trail entrance, subject to the review and approval of the Peccole Ranch Community Association (see page 50).

Recommendation #11: If conditions warrant, examine the feasibility of providing an “All Walk” crossing signal at the intersection of Sahara Avenue and Fort Apache Road (see page 25).

Recommendation #12: Stripe and re-stripe the following intersections with Continental style crosswalks (see page 26):

- Sahara Avenue and Fort Apache Road
- Sahara Avenue and Grand Canyon Drive
- Fort Apache Road and Lake North Drive
- Fort Apache Road and Mariner Cove Drive
- Fort Apache Road and Red Hills Drive
- Grand Canyon Drive and Preakness Pass
- Lake North Drive and Grand Canyon Drive
- Lake North Drive and Prize Lake Drive
- Lake North Drive and Trophy Lake Drive
- Lake North Drive at Crystal Water Way
- Lake East Drive at Lake Sahara Drive
- Mariner Cove Drive and Crystal Water Way
- Red Hills Road and Preakness Pass

Recommendation #13: Restripe and add continental style crosswalks in all directions at intersections along the designated suggested routes to school pathway to the M.J. Christensen Elementary School (see page 32).



PLAN IMPLEMENTATION

Recommendation #14: Restripe and add continental style crosswalks in all directions at intersection along the designated suggested routes to school pathway to Clarence Piggott Elementary School (see page 33).

Recommendation #15: Work with existing property owners within the Plan area to ensure properties are renovated and redeveloped with the design principles and standards of the UDC (see page 39).

Recommendation #16: Any new streetscapes shall conform to the standards of the UDC as conditions allow (see page 40).

Transit Stops

Recommendation #17: Work with RTC to provide a bench and trash receptacle at each transit stop within the Sahara West Walkable Community plan area (see page 34).

Recommendation #18: Work with RTC to construct a full sheltered transit stop with benches, screening, trash receptacles, and lighting on the Route 203 at Fort Apache Road and Mariner Cove Drive (see page 34).

Landscaping

Recommendation #19: Use landscape materials from the Suggested Planting List within the Plan area, while retaining existing landscaping where feasible (see page 36). All new landscaping shall conform to the UDC.

Recommendation #20: Work with utility companies as street improvements occur to bring utility boxes into compliance with current UDC screening standards (see page 35).



PLAN IMPLEMENTATION

SAHARA AVENUE

Recommendation #21: Provide pedestrian lighting for the sidewalk along the north and south sides of Sahara Avenue from Crystal Water Way to Grand Canyon Drive (see page 44).

Recommendation #22: Add landscaping to the Sahara Avenue median east of Fort Apache Road to Crystal Water Way (see page 47).

Recommendation #23: Use landscaping in the Sahara Avenue median that is on the Suggested Planting List in the Landscape section of this Plan (see page 36).

Recommendation #24: Use the existing right-of-way to its full extent along the south side of Sahara Avenue and provide a detached sidewalk at the outer limits of the existing right-of-way or work with property owners to place a sidewalk within the private landscape areas bordering the right-of-way to provide a pedestrian path closer to the community amenities. The old sidewalk can be removed and replaced with landscaping or designated as an elevated bike path (see page 45).

Recommendation #25: Place a five-foot wide sidewalk along the Canyon Gate development wall on the north side of Sahara Avenue east of Fort Apache Road. The old sidewalk can be removed and replaced with landscaping or designated as an elevated bike path. The addition of 24-inch box trees with the capacity for large canopies spaced 25 feet on center are recommended to provide shade for pedestrians (see page 46).

Recommendation #26: Work with the RTC and property owners along Sahara Avenue to add shade trees from the preferred planting list along the street frontages and sidewalk areas abutting Sahara Avenue (see page 44).



PLAN IMPLEMENTATION

FORT APACHE ROAD

Recommendation #27: Work with existing property owners within the Plan area to provide trees with a capacity for large canopies to be placed 25 feet on center along the Canyon Gate development wall on the east side of Fort Apache Road between Sahara Avenue and Red Hills Road (see page 50).

Recommendation #28: Work with existing property owners to provide a detached sidewalk on both sides of Fort Apache Road from Sahara Avenue to Mariner Cove Drive in the adjacent common area where feasible to create a landscape buffer zone between the auto traffic and pedestrians (see page 49). Special consideration shall be utilized to ensure the critical root zones of existing established trees are protected during the installation of a new sidewalk. The old sidewalk can be removed and replaced with landscaping or designated as an elevated bike path.

Recommendation #29: Add a median on Fort Apache Road between Sahara Avenue and Mariner Cove Drive (see page 49). This action item is subject to the location of the existing underground utility lines.

Recommendation #30: Provide landscaping for the Fort Apache Road median that is on the Suggested Plant List in the Landscape section of this Plan (see page 36).

LAKE NORTH DRIVE

Recommendation #31: Work with existing property owners to provide a detached sidewalk along the south side of Lake North Drive from Grand Canyon Drive to Crystal Water Way in the adjacent common area where feasible, or reduce the paved roadway surface by adding a sidewalk with amenity zone within the dedicated right-of-way (see page 52). Special consideration shall be utilized to ensure the critical root zones of existing established trees are protected during construction.

Recommendation #32: Reconfigure Lake North Drive to include bike lanes, one travel lane in each direction, a center turn lane which can accommodate a median, and a sidewalk with amenity zone along the south side of the roadway (see page 52).

Recommendation #33: Add a median on Lake North Drive from Grand Canyon Drive to Crystal Water Way and provide landscaping that is from the Suggested Plant List in the Landscape section of this Plan (see page 52). This action item is subject to the location of the existing underground utility lines.



PLAN IMPLEMENTATION

MARINER COVE DRIVE

Recommendation #34: Work with existing property owners to provide a detached sidewalk in the common area adjacent to the north side of Mariner Cove Drive between Coral Bay Way and Crystal Bay Way where feasible (see page 56).

Recommendation #35: Restripe Mariner Cove Drive east of Fort Apache Road to Crystal Water Way with an eight-foot parking lane, a five-foot bike lane, and a 10-foot travel lane on both sides of the center line (see page 55).

GRAND CANYON DRIVE

Recommendation #36: Work with existing property owners to provide a detached sidewalk along the east side of Grand Canyon Drive between Sahara Avenue and Lake North Drive where feasible (see page 58).

Recommendation #37: Work with existing property owners to provide a detached sidewalk along the west side of Grand Canyon Drive between Mariner Cove Drive and Stellar View Avenue where feasible (see page 58).

Recommendation #38: Add a landscaped median on Grand Canyon Drive between Sahara Avenue and Lake North Drive. This action item is subject to the location of the existing underground utility lines (see page 58).

Recommendation #39: Provide landscaping for the Grand Canyon Drive median from Sahara Avenue to Lake North Drive that is on the Suggested Plant List in the Landscape section of this Plan (see page 36).



PLAN IMPLEMENTATION

PREAKNESS PASS

Recommendation #40: Add a landscaped median on Preakness Pass from Grand Canyon Drive to Red Hills Road, subject to the review and approval of the Peccole Ranch Community Association (see page 60). This action item is subject to the location of the existing underground utility lines.

Recommendation #41: Use landscaping for the Preakness Pass median that is on the Suggested Plant List in the Landscape section of this Plan (see page 36).

CRYSTAL WATER WAY

Recommendation #42: Work with existing property owners to provide a detached sidewalk along the east side of Crystal Water Way between Sahara Avenue and Mariner Cove Drive where feasible (see page 62).

Recommendation #43: Replace the existing four-foot wide sidewalk with a five-foot wide sidewalk along Crystal Water Way from Mariner Cove Drive to Lake North Drive (see page 62).

Recommendation #44: Add 24-inch box shade trees from the Suggested Plant List in the Landscape section of this Plan (page 36) with the capacity for large canopies to be spaced 25 feet on center along the east side of the existing sidewalk from Lake North Drive to Mariner Cove Drive. To create a cohesive streetscape, any new landscape or planting themes installed shall extend the full length of Crystal Water Way, between Sahara Avenue and Desert Inn Road (see page 62).



APPENDIX

DEVELOPMENT CHECK LIST

This checklist will help new developments meet the design intent of a walkable community as well as the development standards of the UDC. The checklist below summarizes the desired elements for new development within the Plan area:

Capitalizes on building design, scale, architecture, and proportionality to create interesting visual experiences, vistas, or other qualities:

- Architecture is aesthetically compatible with existing development to perpetuate a sense of place.
- Corner buildings are oriented to the street corner fronts to create an active streetscape.
- Individual buildings are located at the minimum front setback to create an active streetscape.
- Utilities, loading zones, parking lots and related features are sited to allow for adequate visual screening from the adjacent right-of-way.
- Special pavers, bricks or patterned concrete are used to improve the pedestrian experience.
- Benches, pergolas, landscaped arbors or artwork are included in pedestrian open spaces and plazas.

Accommodates multiple users and provides access (via walking, bicycling, or public transit) to multiple destinations that serve its residents:

- Bicycle and pedestrian paths are connected to adjacent commercial and residential developments.
- Subdivisions provide access to pathways and roadways.
- Utilities, loading zones, parking lots and related features are sited so as not to impede the sidewalk.
- Parking lot design incorporates adequate landscaping to provide the greatest amount of pedestrian comfort.

Fosters social interaction and creates a sense of community and neighborliness:

- Provides landscaped plazas or other open space that incorporate benches, pergolas, landscaped arbors or artwork.
- Bicycle and pedestrian paths are connected to adjacent commercial and residential developments.
- Subdivisions provide access to pathways and roadways.



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Promotes security from crime and is made safe for children and other users through traffic calming and other measures:

- ❑ Mid-block crossings, chicanes, landscaped medians and narrower land widths are provided where feasible.
- ❑ Streets accommodate multiple users through narrower lanes, bike paths and detached sidewalks with a landscape buffer between pedestrians and the street.
- ❑ Pedestrian lighting in parking lots and along roadways is provided.
- ❑ Uses, protects and enhances the environment and natural features:
- ❑ Existing trees and mature landscaping are incorporated into new designs where feasible.
- ❑ Landscaping is compatible with surrounding development to promote a sense of place.

Reflects the community's local character and sets itself apart from other neighborhoods:

- ❑ Architecture is aesthetically compatible with existing development to perpetuate a sense of place.
- ❑ Amenities, such as pedestrian lighting, are designed for architectural compatibility.

Retains, interprets, and uses local history to help create a sense of place:

- ❑ Architecture and landscaping is aesthetically compatible with existing development to perpetuate a sense of place.

Promotes or protects air and water quality:

- ❑ Incorporates curb cuts in parking lot landscape to filter parking lot run-off.
- ❑ Trees are provided to filter particulates from the air and sequester carbon.

Utilizes forms of "green infrastructure" such as local tree cover to mitigate heat gain:

- ❑ Existing trees and mature landscaping are incorporated into new designs where feasible.
- ❑ Landscape buffers with 24-inch box trees are provided between curb and sidewalk to provide shade for pedestrians.



APPENDIX

ACRONYM KEY

ADA – Americans with Disabilities Act

APA - American Planning Association

ARRA – American Recovery and Reinvestment Act

BRT – Bus Rapid Transit

FAST – Freeway and Arterial System of Transportation

HOA – Home Owners Association

ITS – Intelligent Transportation System

NDOT – Nevada Department of Transportation

OMC – Operations Management Committee

RTC – Regional Transportation Commission

TIGER – Transportation Investment Generating Economic Recovery

UDC – Unified Development Code

UMC – University Medical Center

VMT – Vehicle Miles Traveled



