Neighborhood Economic Risk Assessment

City of Las Vegas

Q3 2018



APPLIEDANALYSIS.COM



October 3, 2018

Gregory Gray Office of Community Services City of Las Vegas 495 S. Main St. Las Vegas, NV 89101

RE: City of Las Vegas | Neighborhood Economic Risk Assessment

Dear Mr. Gray:

In accordance with your request, Applied Analysis ("AA") is pleased to submit the enclosed City of Las Vegas Neighborhood Economic Risk Assessment for the third quarter of 2018. AA was retained by the City of Las Vegas Office of Community Services ("the City") to assist in the preparation of an index of community economic risk (the "Neighborhood Risk Index" or the "NRI"). This summary presentation report outlines the strategy, methodology and findings of our review and analysis.

This report and index was designed by AA in response to your request. However, we make no representations as to the adequacy of these procedures for all your purposes. Generally speaking, though our findings and estimates are as of the latest data available, this report is intended to develop a methodology to be followed on a continuing basis.

Our report contains economic and real estate data pertaining to the City and the Las Vegas valley as a whole. This information was collected from various third parties and assembled by AA in such a manner as to provide insight based on its aggregated form. While we have no reason to doubt its accuracy, the information collected was not subjected to any auditing or review procedures by AA and; therefore, we can offer no representations or assurances as to its completeness.

This presentation report is a summary of the analyses undertaken and the conclusion of our analyses. It is intended to provide an overview of the analyses conducted and a summary of our findings. AA will retain additional working papers relevant to this study. If you reproduce this report, it must be done so in its entirety.

We welcome the opportunity to discuss this report with you at any time. Should you have any questions, please contact Jeremy Aguero or Brian Gordon at (702) 967-3333.

Sincerely,

Neighborhood Risk Index (NRI)

Applied Analysis was retained by the City of Las Vegas Office of Community Services to develop an index of "neighborhood risk" that would identify focus areas for the deployment of resources under the control of the City.

This is an overview of the development of the Neighborhood Risk Index (NRI). This analysis is inherently limited to the quality of the input data as provided by the listed entities and provides a general overview of how specific geographic areas (defined as zip codes) are being impacted by a variety of social and economic factors. We anticipate that these factors, and the weights they are assigned in this analysis, will evolve over time.

This analysis contains information on eight key variables researched from:

- Nevada Division of Welfare & Supportive Services (three variables)
- Nevada Department of Employment, Training & Rehabilitation (one variable)
- Clark County Recorder (one variable)
- Clark County Assessor (one variable)
- Clark County Comprehensive Planning (one variable)
- Applied Analysis (one variable)



methodology

: a body of methods, postulates or procedures of inquiry in a particular field

DATA LEARNING PROBE PRACTICE DATA STOCK TLUE DATA LEARNING PROBE PRACTICE DATA STOCK THINK STOCK THINK DETECTION PROOF LINK TEACHING DETECTION PROJECT FACTOR ASK FACTS BOOK EXPLORE ANALYSIS INFORMATION DATA SCIENCE FACTOR EDUCATION ASK BOOK KNOWLEDGE TEACHING LINK FACTOR EXAMINATION EXAMINATION EXAMINATION EXPLORE EXAMINE SEARCH ANALYSIS EXPERIMENT CHECK PROBE STOCK THINK LINK SEARCH ANALYSIS ASK BOOK KNOWLEDGE TEACHING DATA SCIENCE FACTOR EXAMINATION EDUCATION ANALYSIS INFORMATION DATA ASK FACTS BOOK EXPLORE SCAN PROJECT FACTOR EXPERIMENT PROOF LINK TEACHING BOOK EXPLORE SCAN PROJECT FACTOR TO THE PROPERTY OF LINK EXPERIMENT PROOF LINK DATA DETECTION EDUCATION DETECTION PROOF LINK STOCK THINK SEARCH PROBE INFORMATION SEARCH PROBE INFORMATION FOR SCAN LEARNING LEARNING FOR SCAN LEARNING SEARCH PROBE INFORMATION ROOMEDEE SCAN LEARNING SEARCH PROBE SEARCH PROBE SCAN LEARNING SEAR INFORMATION LEARNING DATA MARCI EXAMINATION KNOWN LEARNING DATA MARCI EXAMINATION LEARNING LEAR



<u>Objective</u>: The City of Las Vegas is seeking to use economic and social data to identify sub-regions within the City at a heightened risk for long-term instability

Approach: Create a Neighborhood Risk Index (NRI) by: (1) identifying risk categories; (2) decomposing each category into factors, creating common sizing and weights for the factors; and (3) calculating a mathematical composition of the area's risk and size (the NRI)

<u>Concept</u>: By identifying the regions that are at the greatest and most sizable risk, the City can direct resources to areas where they can do the *greatest good for the greatest number of people*

Identifying Instability - Categories and Factors





Commercial Vacancies

Bank-Owned Properties

Unemployment

Insurance Claims

Medicaid Recipients

SNAP Recipients

Identifying Instability - Categories and Factors

Category	Index Factor	Timeframe
	TANF: Temporary Assistance for Needy Families	6 Month Rolling
\$ 0 5	Medicaid	Average
Household Instability	SNAP : Supplemental Nutrition Assistance Program	
Employment Instability	Unemployment Insurance Claims ¹	6 Month Rolling Average
	Foreclosures	6 Month Rolling Total
	Residential Vacancies	
Neighborhood Instability	Commercial Vacancies	Varying Timeframes ²
	Bank-Owned Properties ³	

¹ Unemployment insurance claims are a fraction of total unemployment; this variable does not represent the "unemployment rate".

³ Bank-owned properties are homes that are owned by financial institutions or acquired at foreclosure auction.



² Residential vacancies are based on annual data, commercial vacancies on quarterly data and bank-owned properties on a current snapshot.

Common Sizing of Critical Factors

Common Sizing: All factors were expressed as per 1,000 housing units (**HU**) or per 1,000 population (**POP**) where appropriate¹; these measures were then expressed as a 100-base ratio of their valley- or city-wide average

Area	Factor	Factor Index Value			
А	650	130			
В	600	120			Factor
С	550	110	Area	Factor	Index Value
D	500	100	> A	650	130
Е	450	90			
F	400	80			
G	350	70			
Va	lley-wide Average = 50	00		he index score of 130	
			fac	tor at a rate 1.3 times	s the valley-w

¹Commercial vacancy is expressed as the percentage of commercial space that is available.



Weights and Composite Risk

Not all factors are assumed to be equally important; modeling allows the City to weight factors based on their relative impact or on policy objectives

Category	Category Weight	Index Factor	Factor Weight
A		TANF	8.3%
505	25%	Medicaid	8.3%
Household Instability		SNAP	8.3%
Employment Instability	25%	Unemployment Insurance Claims	25.0%
		Foreclosures	25.0%
		Residential Vacancies	8.3%
Neighborhood	50%	Commercial Vacancies	8.3%
Instability		Bank-Owned Properties	8.3%

Initial conditions for the factor weights assumed 50% household and employment indicators and 50% real estate indicators

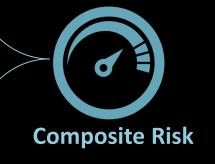


Weights and Composite Risk

Not all factors are assumed to be equally important; modeling allows the City to weight factors based on their relative impact or on policy objectives

Category	Category Weight	Index Factor	Factor Weight
A		TANF	8.3% _
5 D S	25%	Medicaid	8.3%
Household Instability		SNAP	8.3%
Employment Instability	25%	Unemployment Insurance Claims	25.0%
		Foreclosures	25.0%
		Residential Vacancies	8.3%
Neighborhood Instability	50%	Commercial Vacancies	8.3%
		Bank-Owned Properties	8.3%

Once weighted, factors were combined into a single measure...



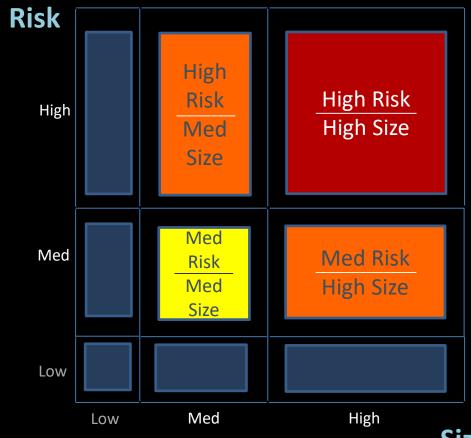


Methodology of the NRI Relativity and Composite Risk

GOAL

Focus the City's efforts, making the best use of limited resources

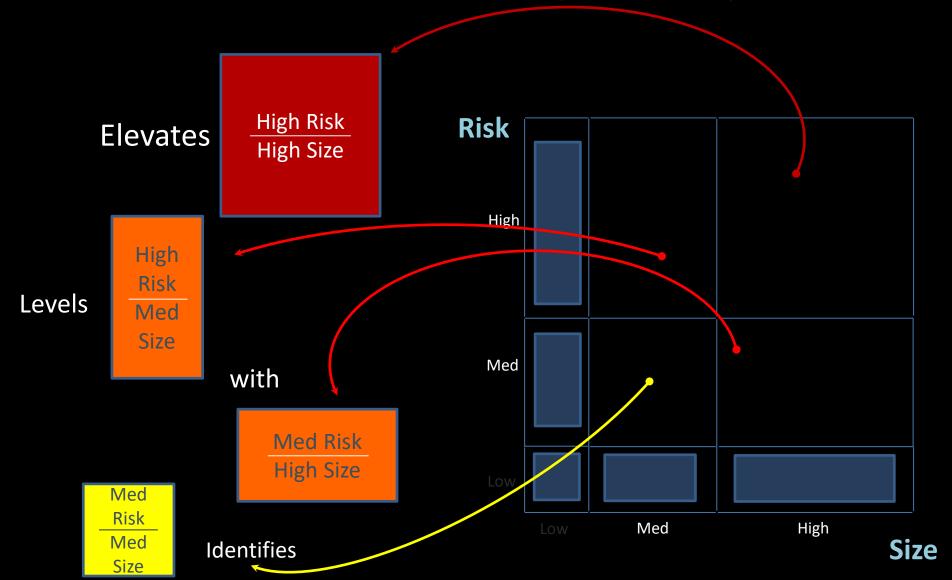
Composite risk was weighted by the number of occupied housing units in the zip code; this way, the City can equalize risk to do the greatest good for the greatest number of people







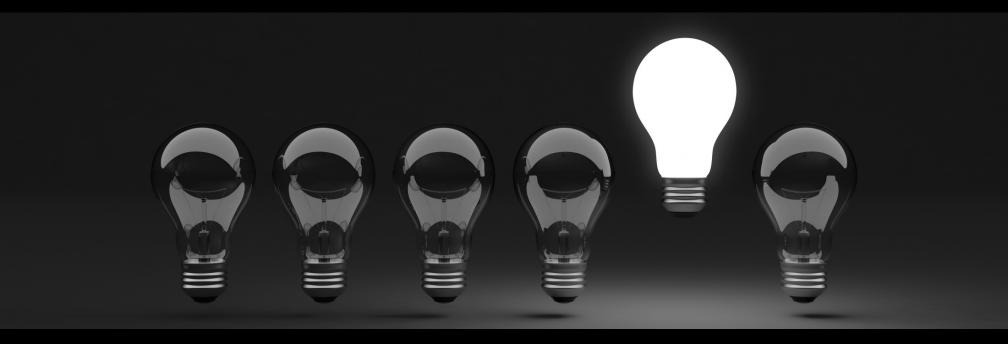
Relativity and Composite Risk





summary

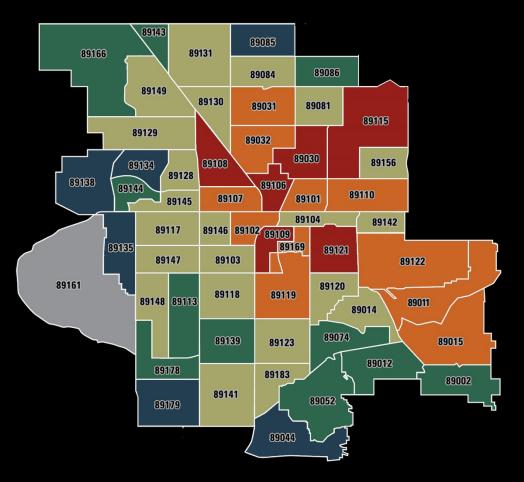
: an abstract, abridgment or compendium especially of a preceding discourse



What Areas in the Las Vegas Valley have the Highest Economic Risk?



Summary Valley-wide NRI



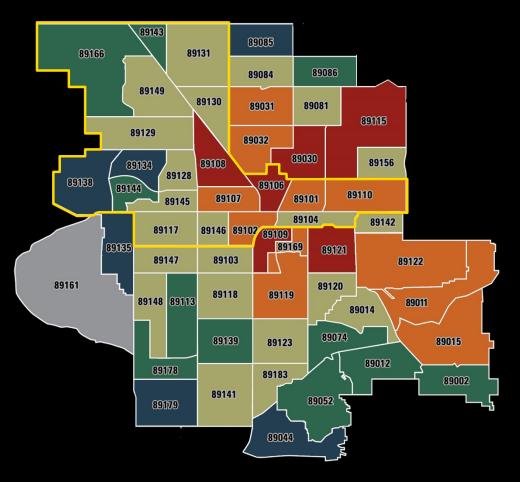
- Low
- Medium-Low
- Medium
- Medium-High
- High

	піgіі		LOW	
High	Medium- High	Medium	Medium- Low	Low
89106	89015	89084	89144	89085
89121	89102	89141	89086	89138
89030	89101	89131	89143	89179
89108	89011	89014	89166	89044
89115	89031	89146	89052	89134
89109	89110	89149	89012	89135
	89107	89148	89139	
	89122	89145	89002	
	89119	89118	89074	
	89032	89123	89178	
	89169	89117	89113	
		89120		
		89147		
		89130		
		89081		
		89142		
		89183		
		89138		
		89129 89156		
		8910 4 89129		
		89103 89104		
		90102		



City of Las Vegas

Summary Valley-wide NRI



- Low
- Medium-Low
- Medium
- Medium-High
- High

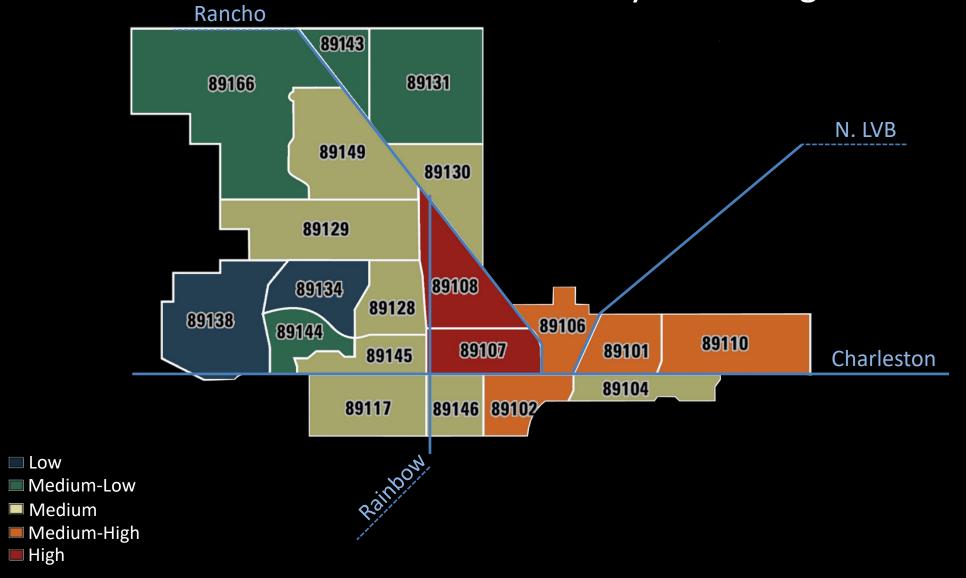
		89103		
		89104		
		<u>89129</u>		
		89156		
		<u>89128</u>		
		89183		
		89142		
		89081		
		89130		
		89147		
		89120		
	89169	89117	89113	
	89032	89123	89178	
	89119	89118	89074	
	89122	89145	89002	
	<u>89107</u>	89148	89139	
89109	<u>89110</u>	<u>89149</u>	89012	89135
89115	89031	<u>89146</u>	89052	<u>89134</u>
<u>89108</u>	89011	89014	<u>89166</u>	89044
89030	<u>89101</u>	<u>89131</u>	<u>89143</u>	89179
89121	<u>89102</u>	89141	89086	<u>89138</u>
<u>89106</u>	89015	89084	<u>89144</u>	89085
High	Medium-	Medium	Medium-	Low
	High		Low	



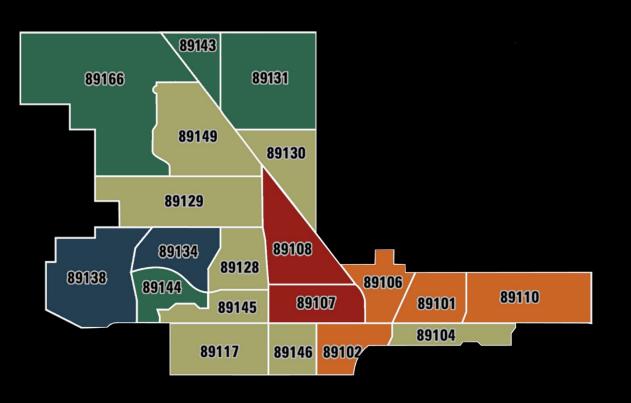
What Areas Within the City have the Highest Economic Risk?*

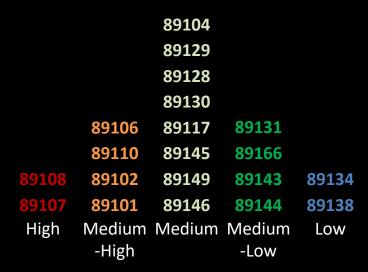
(*) **NOTE:** City of Las Vegas NRI is calculated independently from the valley-wide NRI, so areas within the City can be compared to one another.





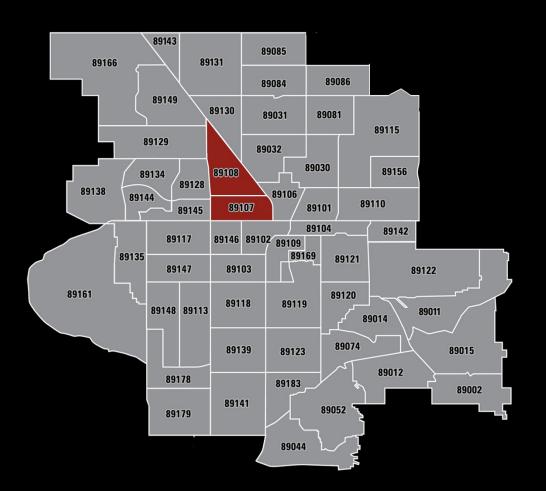






- Low
- Medium-Low
- Medium
- Medium-High
- High





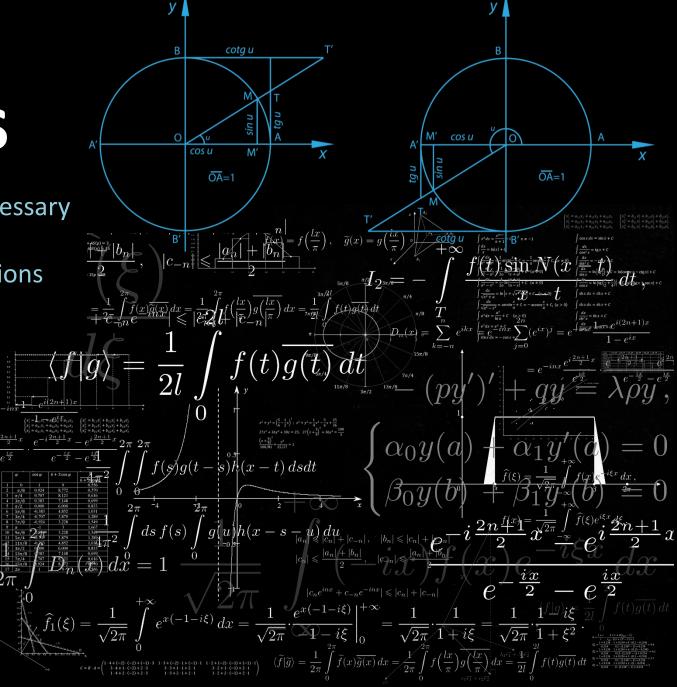
		89104		
		89129		
		89128		
		89130		
	89106	89117	89131	
	89110	89145	89166	
89108	89102	89149	89143	89134
89107	89101	89146	89144	89138
High	Medium	Medium	Medium	Low
	-High		-Low	

Zip Code	89108	89107	89106	89110	City Average	LV Valley Average
TANF Recipients Per 1,000 Population	12.7	12.4	32.2	14.2	10.3	9.5
Medicaid Recipients Per 1,000 Population	317.6	345.1	618.5	332.4	259.6	240.3
SNAP Recipients Per 1,000 Population	209.7	224.4	466.9	218.4	170.5	157.4
Unemployment Ins. Per 1,000 Population	10.1	9.7	11.3	8.6	9.0	9.1
Foreclosures Per 1,000 Total Housing Units	0.8	1.0	0.4	0.8	0.6	0.7
Residential Vacancies Per 1,000 Total Housing Units	42.4	30.0	95.4	30.0	51.1	62.1
Commercial Vacancy	17.3%	21.7%	9.4%	5.8%	12.4%	12.9%
Bank-Owned Homes Per 1,000 Total Housing Units	13.3	15.7	10.6	17.2	11.3	10.8



elements

: a constituent part; necessary data values on which calculations or conclusions are based







Employment Instability





Unemp. Insurance | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

Zip Codes	Unemployment Insurance Claims (per 1,000 POP)	Valley-wide Mean (per 1,000 POP)	Unemployment Insurance Claims Index Value
<u>89104</u>	<u>13.6</u>	<u>9.1</u>	<u>149.3</u>
89109	13.2	9.1	145.1
89086	12.5	9.1	137.5
89169	11.6	9.1	127.2
<u>89146</u>	<u>11.6</u>	<u>9.1</u>	<u>127.1</u>
89120	11.4	9.1	124.5
<u>89106</u>	<u>11.3</u>	<u>9.1</u>	<u>123.7</u>
89156	11.0	9.1	120.6
89032	11.0	9.1	120.6
89121	10.8	9.1	117.9



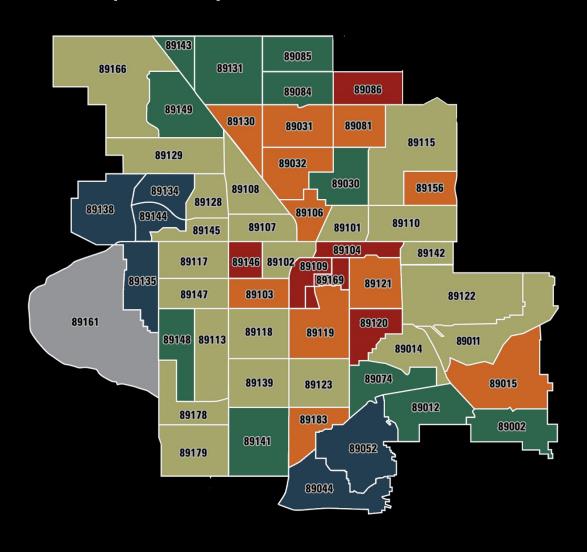


Unemp. Insurance | Valley-wide Distribution Map

The rate of unemployment insurance claims per 1,000 residents declined during the quarter to 9.1, a decrease of 6.2 percent from 9.7 in the prior quarter.



- Medium-Low
- Medium
- Medium-High
- High







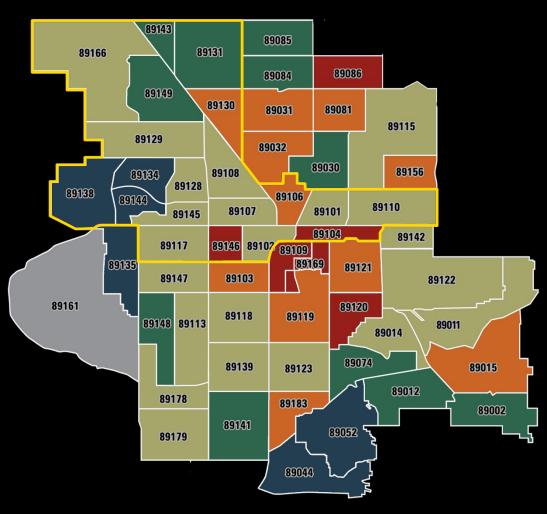
Unemp. Insurance | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of unemployment insurance claims per 1,000 residents declined during the quarter to 9.1, a decrease of 6.2 percent from 9.7 in the prior quarter.



- Medium-Low
- Medium
- Medium-High
- High







Elements of the NRI Unemp. Insurance | CLV Summary Data

Top 5 Zip Codes

In the City of Las Vegas

Zip Codes	Unemployment Insurance Claims (per 1,000 POP)	CLV Mean (per 1,000 POP)	Unemployment Insurance Claims Index Value
89104	13.6	9.0	151
89146	11.6	9.0	128
89106	11.3	9.0	125
89130	10.2	9.0	113
89108	10.1	9.0	111

Mean unemployment insurance claims per 1,000 residents:

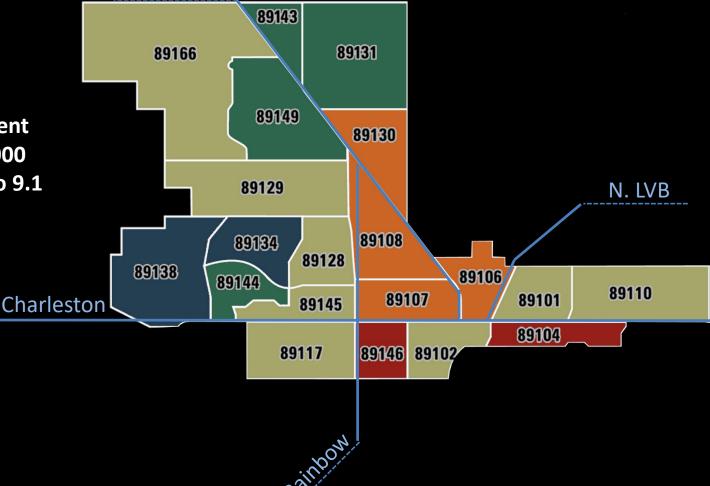
Valley-wide 9.1 City of Las Vegas 9.0

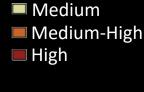




Elements of the NRI Unemp. Insurance | CLV Distribution Map

The rate of unemployment insurance claims per 1,000 residents fell from 9.6 to 9.1 during the quarter.



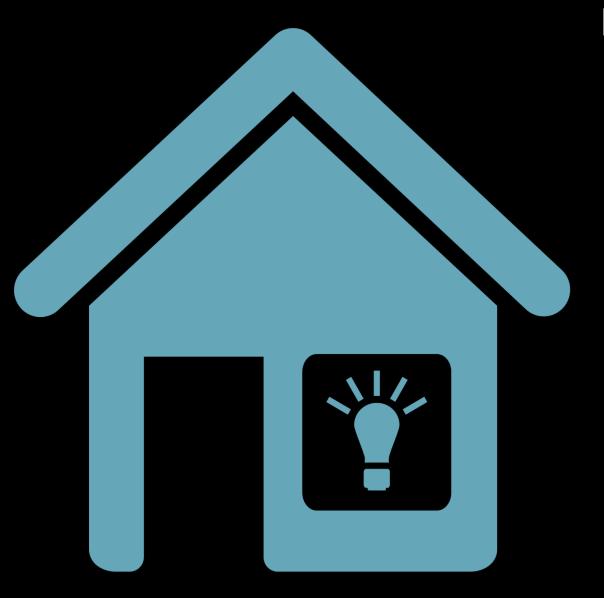


■ Medium-Low

■ Low



Rancho



Neighborhood Instability





Foreclosures | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

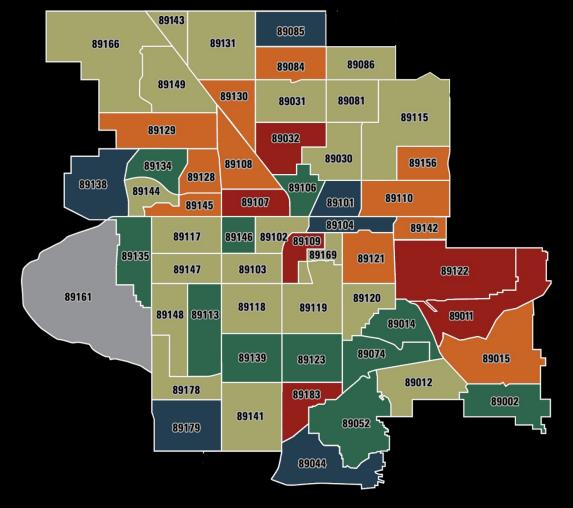
Zip Codes	Foreclosures (per 1,000 HU)	Valley-wide Mean (per 1,000 HU)	Foreclosures Index Value
89109	5.0	0.7	759.5
89183	1.1	0.7	168.6
89032	1.1	0.7	162.8
<u>89107</u>	<u>1.0</u>	<u>0.7</u>	<u>158.1</u>
89122	1.0	0.7	151.1
89011	0.9	0.7	143.1
89084	0.9	0.7	137.7
<u>89129</u>	<u>0.8</u>	<u>0.7</u>	<u>126.8</u>
89142	0.8	0.7	125.1
89015	0.8	0.7	124.2





Elements of the NRIForeclosures | Valley-wide Distribution Map

The rate of foreclosures per 1,000 housing units rose from 0.5 to 0.7 for the quarter.



- Low
- Medium-Low
- Medium
- Medium-High
- High

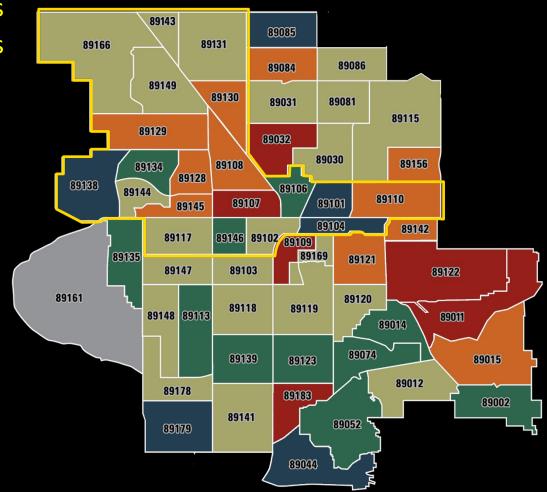




Elements of the NRIForeclosures | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of foreclosures per 1,000 housing units rose from 0.5 to 0.7 for the quarter.



■ Low

■ Medium-Low

■ Medium

Medium-High

High





Elements of the NRIForeclosures | CLV Summary Data

Top 5 Zip Codes

In the City of Las Vegas

Zip Codes	Foreclosures (per 1,000 HU)	CLV Mean (per 1,000 HU)	Foreclosures Index Value
89107	1.0	0.6	170
89129	0.8	0.6	136
89108	0.8	0.6	132
89128	0.8	0.6	131
89145	0.8	0.6	127

Mean foreclosures per 1,000 housing units:

Valley-wide

0.7

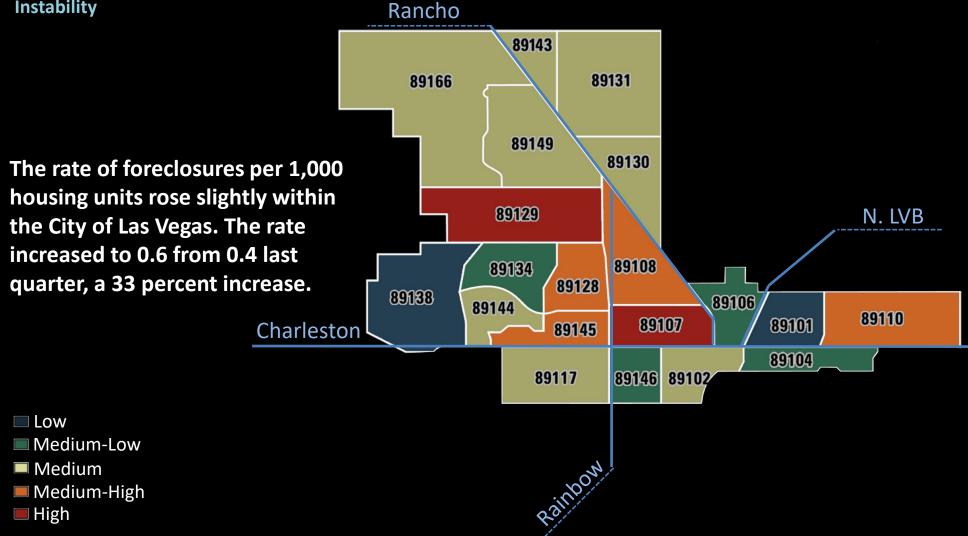
City of Las Vegas

0.6





Elements of the NRIForeclosures | CLV Distribution Map





Residential Vacancy | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

Zip Codes	Residential Vacancies (per 1,000 HU)	Valley-wide Mean (per 1,000 HU)	Residential Vacancies Index Value
89109	684.5	62.1	1,102
<u>89166</u>	<u>162.7</u>	<u>62.1</u>	<u>262</u>
89169	140.6	62.1	226
<u>89101</u>	<u>130.7</u>	<u>62.1</u>	<u>210</u>
89119	127.4	62.1	205
89011	120.8	62.1	194
89103	115.2	62.1	186
<u>89102</u>	<u>99.8</u>	<u>62.1</u>	<u>161</u>
89115	97.6	62.1	157
<u>89106</u>	<u>95.4</u>	<u>62.1</u>	<u>154</u>



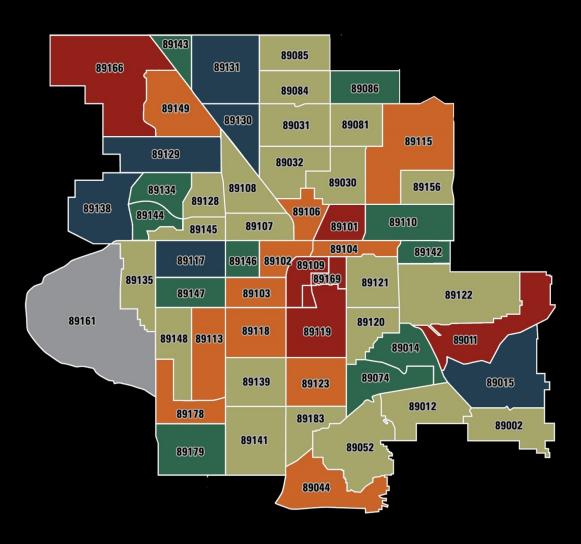
Neighborhood Instability

Elements of the NRI

Residential Vacancy | Valley-wide Distribution Map

Residential vacancies per 1,000 housing units rose significantly year-over-year from 39.4 to 62.1.

- Low
- Medium-Low
- Medium
- Medium-High
- High



Neighborhood Instability

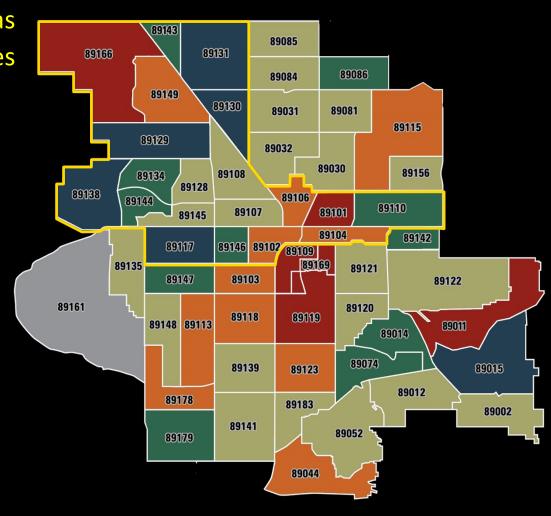
Elements of the NRI

Residential Vacancy | Valley-wide Distribution Map

City of Las Vegas Zip Codes

Residential vacancies per 1,000 housing units rose significantly year-over-year from 39.4 to 62.1.

- Low
- Medium-Low
- Medium
- Medium-High
- High







Elements of the NRI Residential Vacancy | CLV Summary Data

Top 5 Zip Codes

In the City of Las Vegas

Zip Codes	Residential Vacancies (per 1,000 HU)	CLV Mean (per 1,000 HU)	Residential Vacancies Index Value
89166	162.7	51.1	318
89101	130.7	51.1	256
89102	99.8	51.1	195
89106	95.4	51.1	187
89149	65.6	51.1	128

Mean residential vacancies per 1,000

housing units:

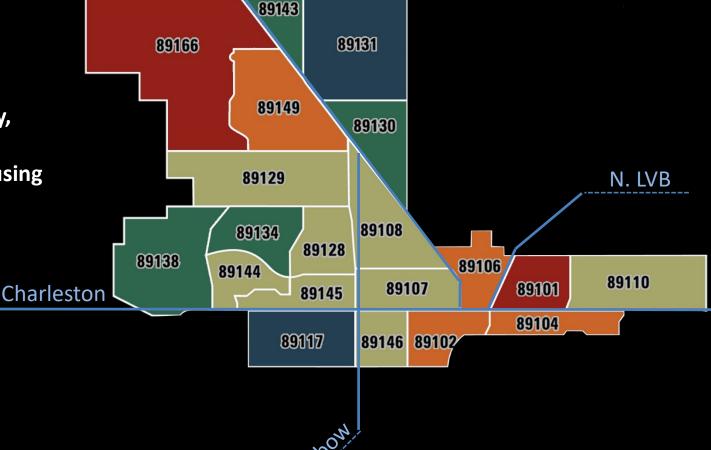
Valley-wide 62.1 City of Las Vegas 51.1





Elements of the NRI Residential Vacancy | CLV Distribution Map

Similarly, within the City, the rate of residential vacancies per 1,000 housing units rose from 36.6 las year to 51.1 this year.





■ Medium-Low

Medium

■ Medium-High

High



Rancho



Elements of the NRI

Commercial Vacancy | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in Bold)

Zip Codes	Commercial Vacancy Rate	Valley-wide Mean	Commercial Vacancy Rate Index Value
89011	43.5%	12.9%	336.6
89115	38.1%	12.9%	294.9
<u>89143</u>	<u>25.3%</u>	<u>12.9%</u>	<u> 195.9</u>
89109	24.0%	12.9%	185.5
89169	23.6%	12.9%	182.4
89002	22.5%	12.9%	174.3
<u>89107</u>	<u>21.7%</u>	<u>12.9%</u>	<u> 167.6</u>
89119	17.9%	12.9%	138.6
89120	17.7%	12.9%	136.7
<u>89108</u>	<u>17.3%</u>	<u>12.9%</u>	<u>133.9</u>



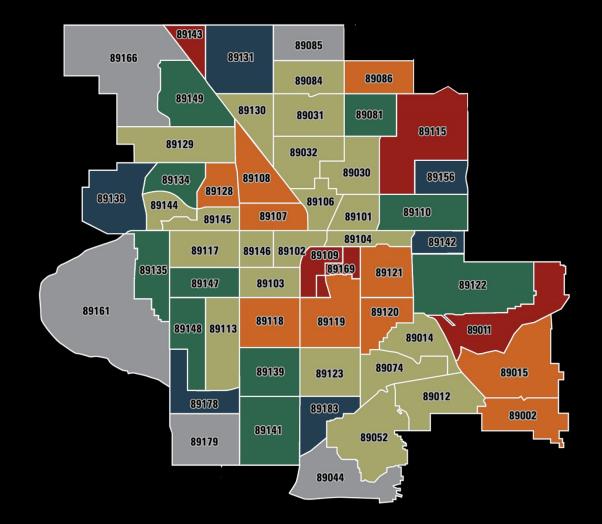
Commercial

Elements of the NRI

Commercial Vacancy | Valley-wide Distribution Map

Valley-wide commercial vacancy continued to drop. The vacancy rate fell to 12.9 percent from 13.1 percent last quarter (down 0.2 percentage points). 89011 had the highest vacancy rate at 43.5%,

followed by 89115 at 38.1%.



■ Low

Instability

- Medium-Low
- Medium
- Medium-High
- High

Note: Zip codes in grey (excluding 89161 which is not part of the index) have no material commercial space.



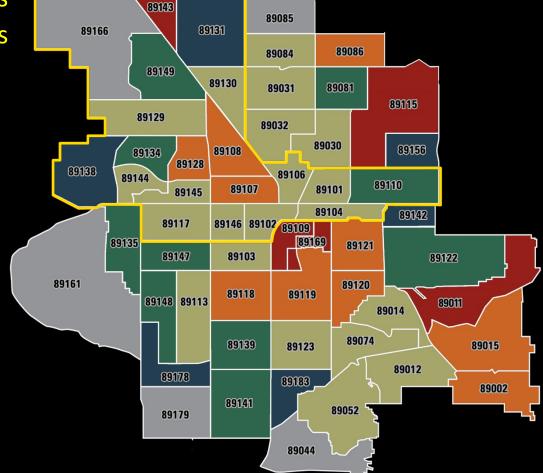
Neighborhood Instability

Elements of the NRI

Commercial Vacancy | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

Valley-wide commercial vacancy continued to drop. The vacancy rate fell to 12.9 percent from 13.1 percent last quarter (down 0.2 percentage points). 89011 had the highest vacancy rate at 43.5%, followed by 89115 at 38.1%.



- Low
- Medium-Low
- Medium
- Medium-High
- High

Note: Zip codes in grey (excluding 89161 which is not part of the index) have no material commercial space.





Elements of the NRI Commercial Vacancy | CLV Summary Data

Top 5 Zip CodesIn the City of Las Vegas

Zip Codes	Commercial Vacancy Rate	CLV Mean	Commercial Vacancy Rate Index Value
89143	25.3%	12.4%	203.9
89107	21.7%	12.4%	174.4
89108	17.3%	12.4%	139.3
89128	16.4%	12.4%	131.7
89129	14.9%	12.4%	119.8

Mean commercial vacancy rate:

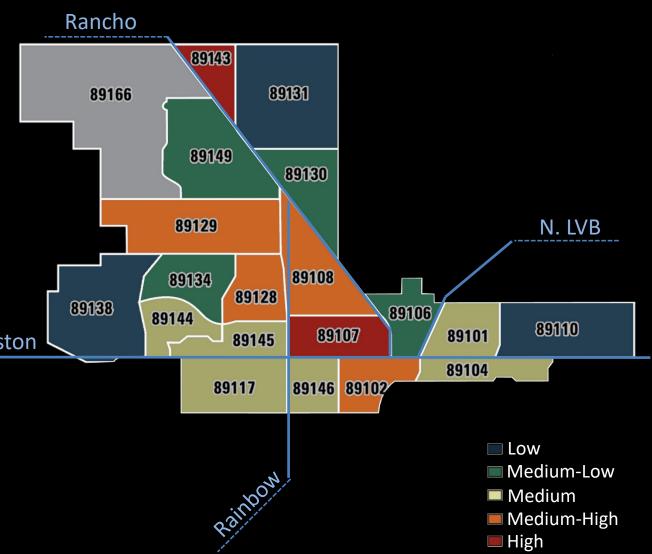
Valley-wide 12.9% City of Las Vegas 12.4%





Elements of the NRI Commercial Vacancy | CLV Distribution Map

City-wide commercial vacancy declined in the quarter. The vacancy rate fell to 12.4 percent from 12.5 percent last quarter (down 0.1 percentage points). 89143 had the highest commercial vacancy rate at 25.3 percent. Charleston



Note: Zip codes in grey have no material commercial space.





Elements of the NRI

Bank-Owned Homes | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

Zip Codes	Bank-Owned Homes (per 1,000 HU)	Valley-wide Mean (per 1,000 HU)	Bank-Owned Homes Index Value
89142	19.7	10.8	183.1
89031	19.4	10.8	179.8
<u>89143</u>	<u>18.7</u>	<u> 10.8</u>	<u>174.0</u>
89156	17.8	10.8	165.5
<u>89110</u>	<u>17.2</u>	<u> 10.8</u>	<u> 159.5</u>
89030	16.8	10.8	156.0
89032	16.2	10.8	150.7
89141	16.1	10.8	149.7
<u>89107</u>	<u>15.7</u>	<u> 10.8</u>	<u> 146.0</u>
89131	14.8	10.8	137.0



Neighborhood

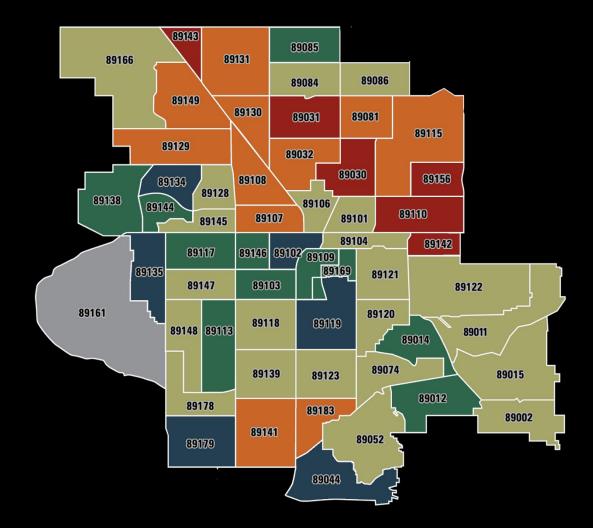
Instability

quarter.

Elements of the NRI

Bank-Owned Homes | Valley-wide Distribution Map

The rate of bank-owned homes per 1,000 housing units fell from 10.9 to 10.8 for the



- □ Low
- Medium-Low
- Medium
- Medium-High
- High

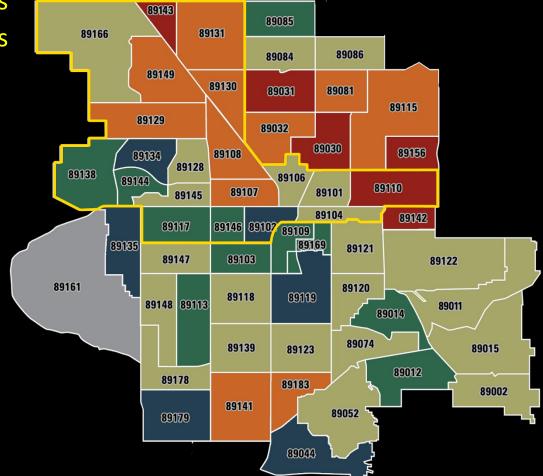
Neighborhood Instability

Elements of the NRI

Bank-Owned Homes | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of bank-owned homes per 1,000 housing units fell from 10.9 to 10.8 for the quarter.



- □ Low
- Medium-Low
- Medium
- Medium-High
- High





Elements of the NRI Bank-Owned Homes | CLV Summary Data

Top 5 Zip Codes

In the City of Las Vegas

Zip Codes	Bank-Owned Homes (per 1,000 HU)	CLV Mean (per 1,000 HU)	Bank-Owned Homes Index Value
89143	18.7	11.3	166
89110	17.2	11.3	152
89107	15.7	11.3	139
89131	14.8	11.3	131
89129	14.5	11.3	128

Mean bank-owned homes per 1,000 housing units:

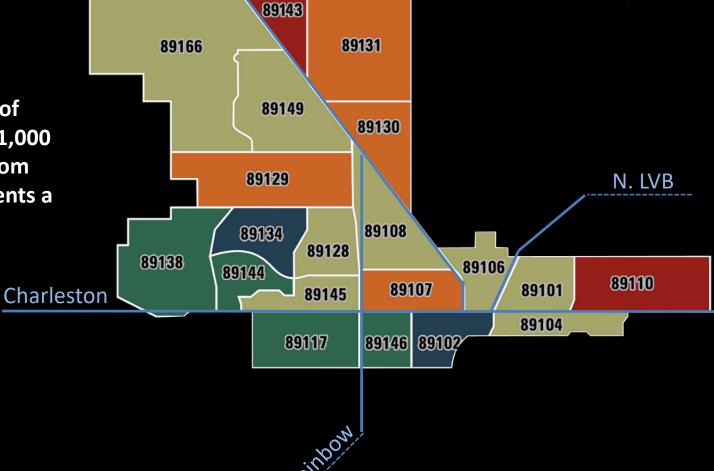
City of Las Vegas 11.3 Valley-wide 10.8

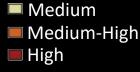




Elements of the NRIBank-Owned Homes | CLV Distribution Map

Within the City, the rate of bank-owned homes per 1,000 housing units also fell, from 11.5 to 11.3. This represents a decrease of 1.7 percent.





■ Low



■ Medium-Low

Rancho

Elements of the NRI



Household Instability





TANF | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

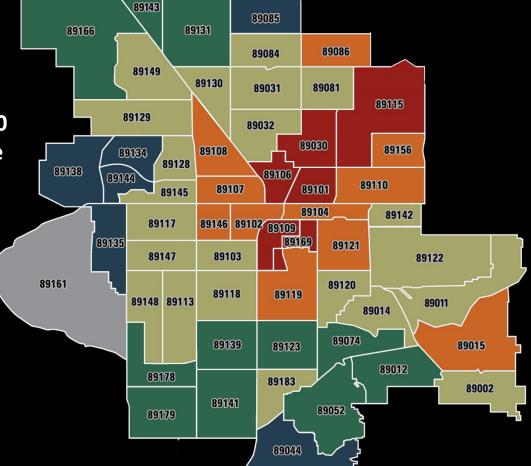
Zip Codes	TANF Recipients (per 1,000 POP)	Valley-wide Mean (per 1,000 POP)	TANF Recipients Index Value
<u>89106</u>	<u>32.2</u>	<u>9.5</u>	<u>338.4</u>
89030	28.5	9.5	299.2
89115	25.7	9.5	269.2
<u>89101</u>	<u>24.6</u>	<u>9.5</u>	<u>258.0</u>
89109	23.8	9.5	249.5
89169	22.7	9.5	238.6
<u>89104</u>	<u> 18.5</u>	<u>9.5</u>	<u>194.4</u>
<u>89102</u>	<u>17.5</u>	<u>9.5</u>	<u>183.1</u>
89119	17.3	9.5	182.0
89086	15.8	9.5	165.9





Elements of the NRITANF | Valley-wide Distribution Map

The rate of TANF recipients per 1,000 residents fell during the quarter. The rate declined to 9.5 from 9.9 last quarter, a decrease of 4.0 percent.





■ Medium-Low

Medium

Medium-High

High

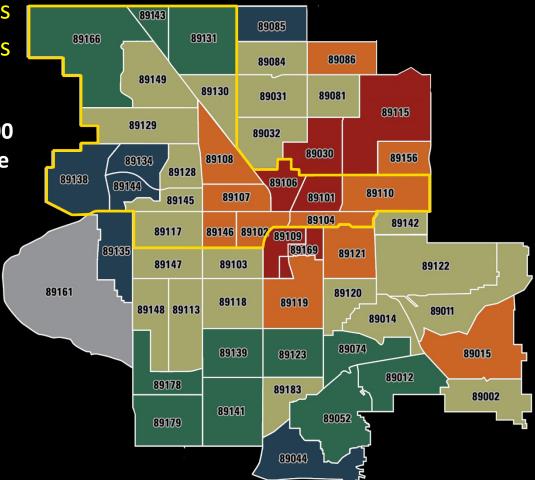




Elements of the NRI TANF | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of TANF recipients per 1,000 residents fell during the quarter. The rate declined to 9.5 from 9.9 last quarter, a decrease of 4.0 percent.



■ Low

■ Medium-Low

Medium

Medium-High

High





Elements of the NRI TANF | CLV Summary Data

Top 5 Zip Codes

In the City of Las Vegas

Zip Codes	TANF Recipients (per 1,000 POP)	CLV Mean (per 1,000 POP)	TANF Recipients Index Value
89106	32.2	10.3	314
89101	24.6	10.3	239
89104	18.5	10.3	180
89102	17.5	10.3	170
89110	14.2	10.3	138

Mean TANF recipients per 1,000 residents:

City of Las Vegas 10.3 Valley-wide 9.5





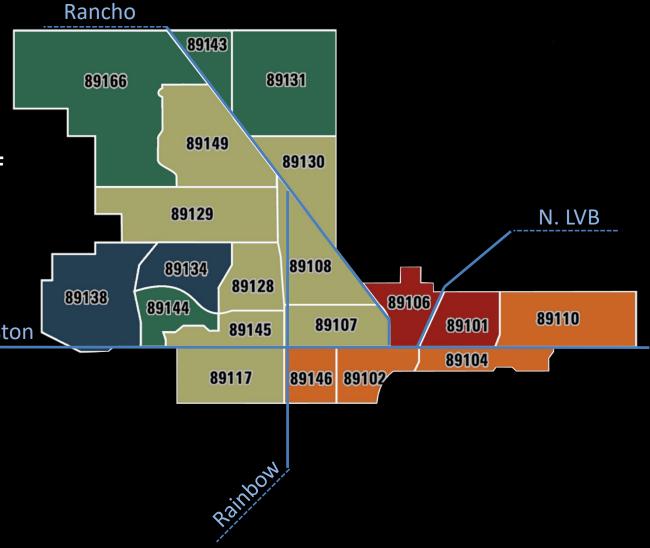
Elements of the NRITANF | CLV Distribution Map

Within the City, the rate of TANF recipients per 1,000 residents also declined this quarter. The rate fell to 10.3 from 10.7 last quarter, a decrease of 3.7 percent.

Charleston



- Medium-Low
- Medium
- Medium-High
- High







Elements of the NRI SNAP | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

Zip Codes	SNAP Recipients (per 1,000 POP)	Valley-wide Mean (per 1,000 POP)	SNAP Recipients Index Value
<u>89106</u>	<u>466.9</u>	<u> 157.4</u>	<u> 296.6</u>
89030	382.4	157.4	242.9
<u>89101</u>	<u>374.5</u>	<u> 157.4</u>	<u>237.9</u>
89169	321.6	157.4	204.3
<u>89104</u>	<u>321.4</u>	<u> 157.4</u>	<u>204.2</u>
89115	313.3	157.4	199.0
89109	308.7	157.4	196.1
<u>89102</u>	<u>264.3</u>	<u> 157.4</u>	<u> 167.9</u>
89119	246.0	157.4	156.3
89121	231.9	157.4	147.3



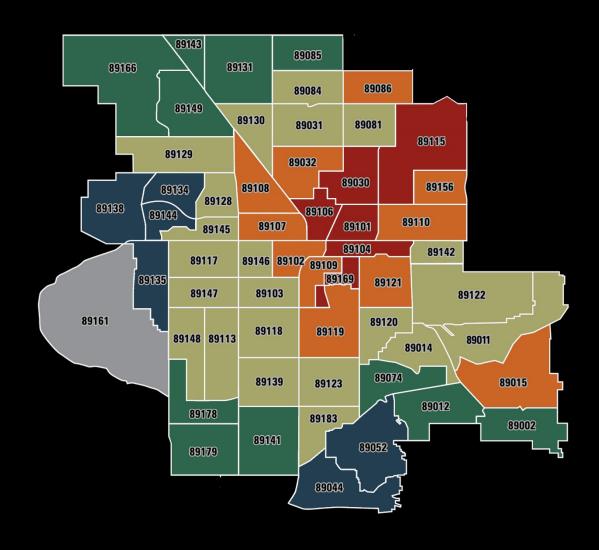


Elements of the NRI SNAP | Valley-wide Distribution Map

The rate of SNAP recipients per 1,000 residents decreased from 158.2 to 157.4 this quarter (down 0.5 percent).



- Medium-Low
- Medium
- Medium-High
- High







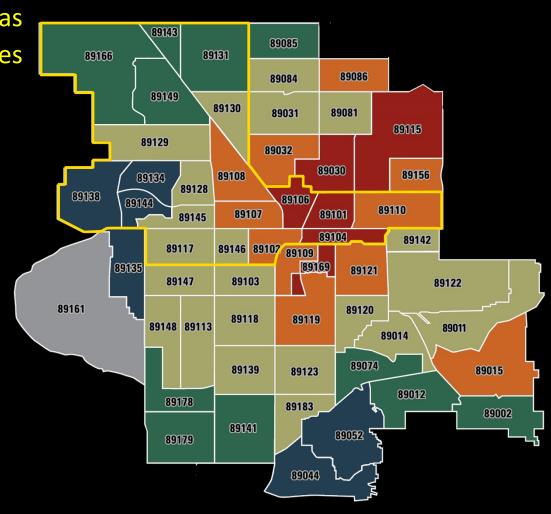
Elements of the NRI SNAP | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of SNAP recipients per 1,000 residents decreased from 158.2 to 157.4 this quarter (down 0.5 percent).



- Medium-Low
- Medium
- Medium-High
- High







Elements of the NRI SNAP | CLV Summary Data

Top 5 Zip Codes

In the City of Las Vegas

Zip Codes	SNAP Recipients (per 1,000 POP)	CLV Mean (per 1,000 POP)	SNAP Recipients Index Value
89106	466.9	170.5	274
89101	374.5	170.5	220
89104	321.4	170.5	189
89102	264.3	170.5	155
89107	224.4	170.5	132

Mean SNAP recipients per 1,000 residents:

City of Las Vegas 170.5

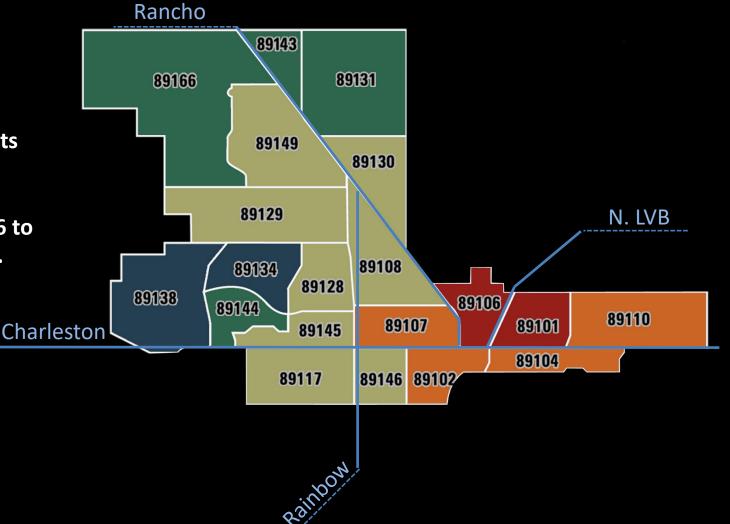
Valley-wide 157.4





Elements of the NRI SNAP | CLV Distribution Map

The rate of SNAP recipients per 1,000 residents in the city decreased during the quarter, falling from 171.6 to 170.5 (down 0.6 percent).



- Low
- Medium-Low
- Medium
- Medium-High
- High





Elements of the NRI

Medicaid | Valley-wide Summary Data

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

Zip Codes	Medicaid Recipients (per 1,000 POP)	Valley-wide Mean (per 1,000 POP)	Medicaid Recipients Index Value
<u>89106</u>	<u>618.5</u>	<u>240.3</u>	<u>257.4</u>
89030	539.4	240.3	224.4
<u>89101</u>	<u>514.3</u>	<u>240.3</u>	<u>214.0</u>
<u>89104</u>	<u>457.1</u>	<u>240.3</u>	<u>190.2</u>
89109	447.7	240.3	186.3
89115	430.8	240.3	179.3
89169	413.5	240.3	172.1
<u>89102</u>	<u>375.2</u>	<u>240.3</u>	<u>156.1</u>
<u>89107</u>	<u>345.1</u>	<u>240.3</u>	<u>143.6</u>
89156	345.0	240.3	143.6



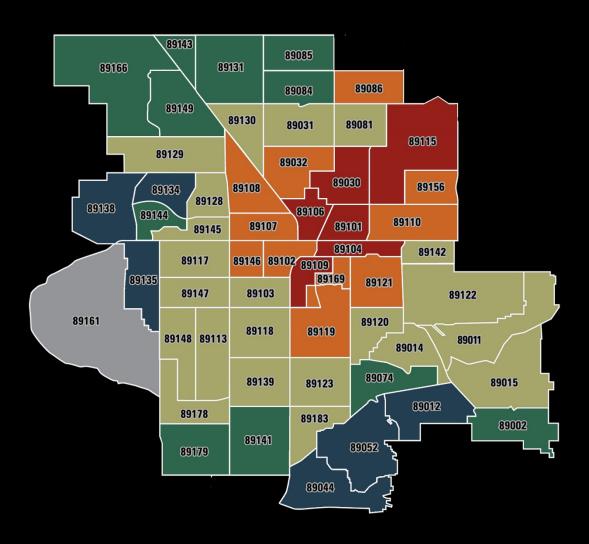


Elements of the NRI Medicaid | Valley-wide Distribution Map

The rate of Medicaid recipients per 1,000 residents increased slightly from 238.7 to 240.3 last quarter (up 0.7 percent).



- Medium-Low
- Medium
- Medium-High
- High







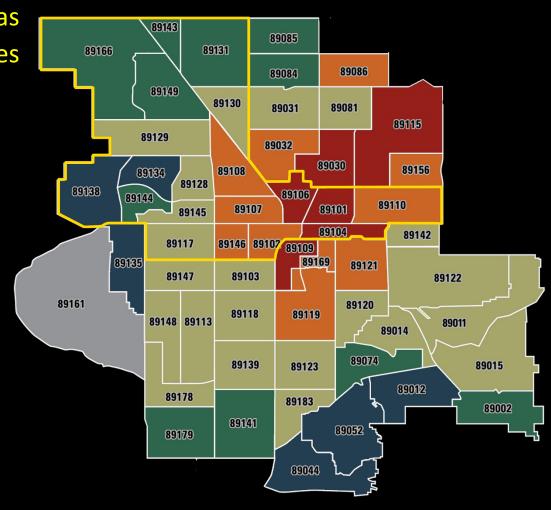
Elements of the NRI Medicaid | Valley-wide Distribution Map

City of Las Vegas Zip Codes

The rate of Medicaid recipients per 1,000 residents increased slightly from 238.7 to 240.3 last quarter (up 0.7 percent).



- Medium-Low
- Medium
- Medium-High
- High







Elements of the NRI Medicaid | CLV Summary Data

Top 5 Zip Codes

In the City of Las Vegas

Zip Codes	Medicaid Recipients (per 1,000 POP)	CLV Mean (per 1,000 POP)	Medicaid Recipients Index Value
89106	618.5	259.6	238
89101	514.3	259.6	198
89104	457.1	259.6	176
89102	375.2	259.6	145
89107	345.1	259.6	133

Mean Medicaid recipients per 1,000 residents:

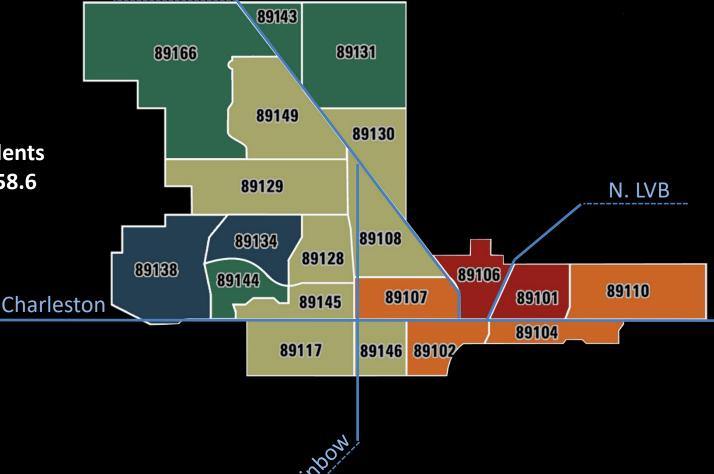
City of Las Vegas 259.6 Valley-wide 240.3





Elements of the NRI Medicaid | CLV Distribution Map

The rate of Medicaid recipients per 1,000 residents increased slightly from 258.6 to 259.6 this quarter, an increase of 0.4 percent.





[■] Medium-Low

High



Rancho

[■] Medium

[■] Medium-High

Elements of the NRI

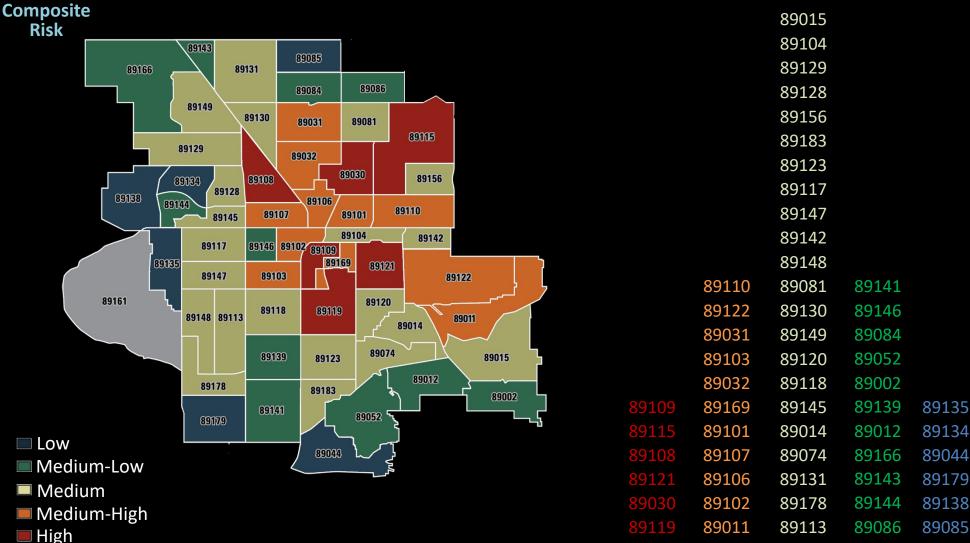


Composite Risk



Elements of the NRI

Composite Risk | Valley-wide Distribution Map





Low

Low

Medium- Medium Medium-

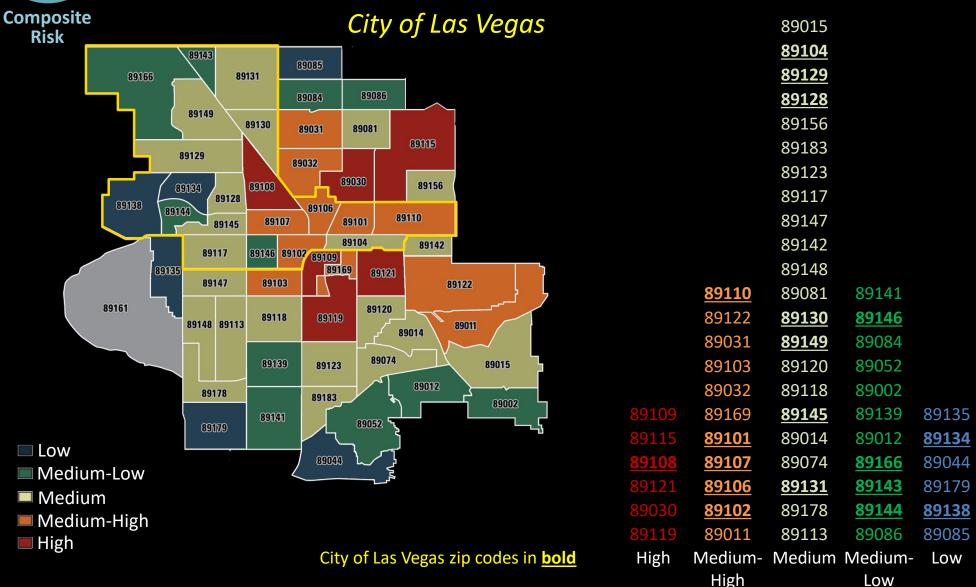
High

High

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Elements of the NRI

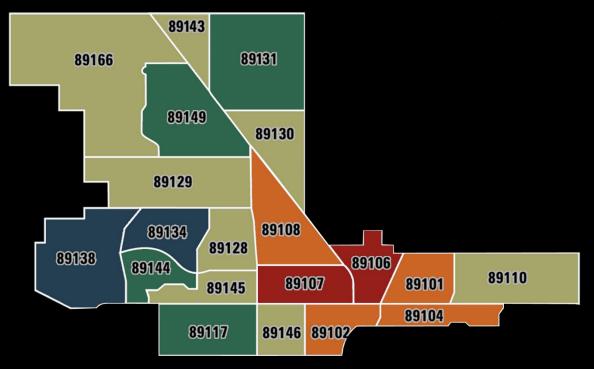
Composite Risk | Valley-wide Distribution Map

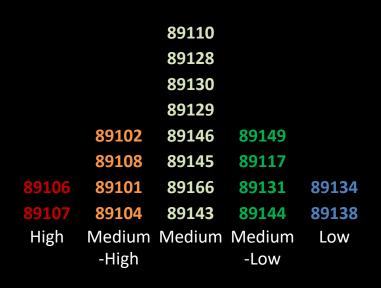






Elements of the NRI Composite Risk | CLV Distribution Map





- Low
- Medium-Low
- Medium
- Medium-High
- High



How does the Composite Risk Index differ from the Neighborhood Risk Index?

Review of the NRI Methodology

- 1) A relative level of risk was assigned to each zip code for all risk factors (as shown in the elements of the NRI series).
- Risk factors are combined to create a Composite Risk Index.
 The Composite Risk Index assigns a weight to each risk factor.
- 3) To create the Neighborhood Risk Index, the Composite Risk Index is weighted by occupied housing units. Zip codes with the highest risk and highest number of occupied housing units can be found and targeted.



Risk factors are assigned a weight of the total 100 percent distribution. TANF recipients, for example, are assigned a weight of 8.3 percent.



The Composite Risk Index is weighted by occupied housing units to find and target zip codes with the highest risk and highest number of occupied housing units, creating the NRI.





This implies that two zip codes with equally high composite risk may be ranked differently based on their number of occupied housing units.

NRI | Valley-wide Summary Data

Zip codes with high Composite Risk may not always have equally high Neighborhood Risk once occupied housing units are factored in.

Top 10 Zip Codes

(Zip Codes Within the City noted in **Bold**)

Zip Codes	Occupied Housing Units	Composite Risk (Factor Weighted Average)	Neighborhood Risk Index (NRI)
		, 3	
89109	3,288	391.7	100.0
89115	18,179	150.3	66.4
<u>89106</u>	<u>9,657</u>	<u> 146.6</u>	<u>51.9</u>
89030	14,265	142.6	57.7
89169	10,741	140.9	51.6
89011	11,224	131.6	48.6
<u>89107</u>	<u>13,073</u>	<u>131.0</u>	<u>51.0</u>
89032	15,419	125.3	51.4
89156	9,446	121.0	41.5
<u>89102</u>	<u>13,903</u>	<u>120.6</u>	<u>47.6</u>

NRI | CLV Summary Data

Zip codes with high Composite Risk may not always have equally high Neighborhood Risk once occupied housing units are factored in.

Top 5 Zip Codes

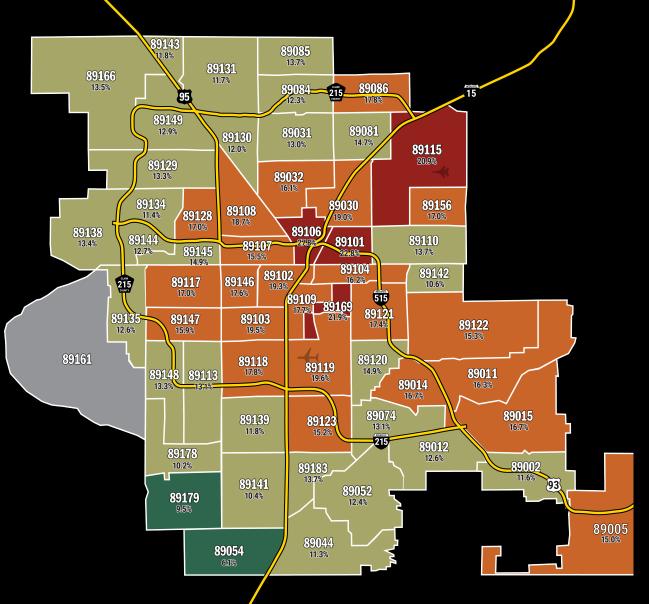
In the City of Las Vegas

Zip Codes	Occupied Housing Units	Composite Risk (Factor Weighted Average)	Neighborhood Risk Index (NRI)
89106	9,657	145.0	86
89107	13,073	132.5	86
89102	13,903	122.6	81
89108	27,250	120.0	100
89101	14,698	119.8	80



Alternative Measures of Risk

Food Insecurity



20.0% or Greater

15.0% to 19.9%

10.0% to 14.9%

Less than 10.0%

Note: Based on 2016 data.



Neighborhood Economic Risk Assessment

City of Las Vegas

Q3 2018

