

# Neighborhood Economic Risk Assessment

City of Las Vegas

Q4 2017





February 6, 2018

Robin Mendoza  
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 Ms. Mendoza:

In accordance with your request, Applied Analysis (“AA”) is pleased to submit the enclosed *City of Las Vegas Neighborhood Economic Risk Assessment* for the fourth quarter of 2017. 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,  
*Applied Analysis*

Applied Analysis

# 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

A dense cloud of words related to methodology, research, and data analysis, including terms like DATA, SEARCH, PROBE, SCAN, FACTOR, ANALYSIS, ASK, EXPLORE, THINK, EXPERIMENT, and LEARNING.

# Methodology of the NRI

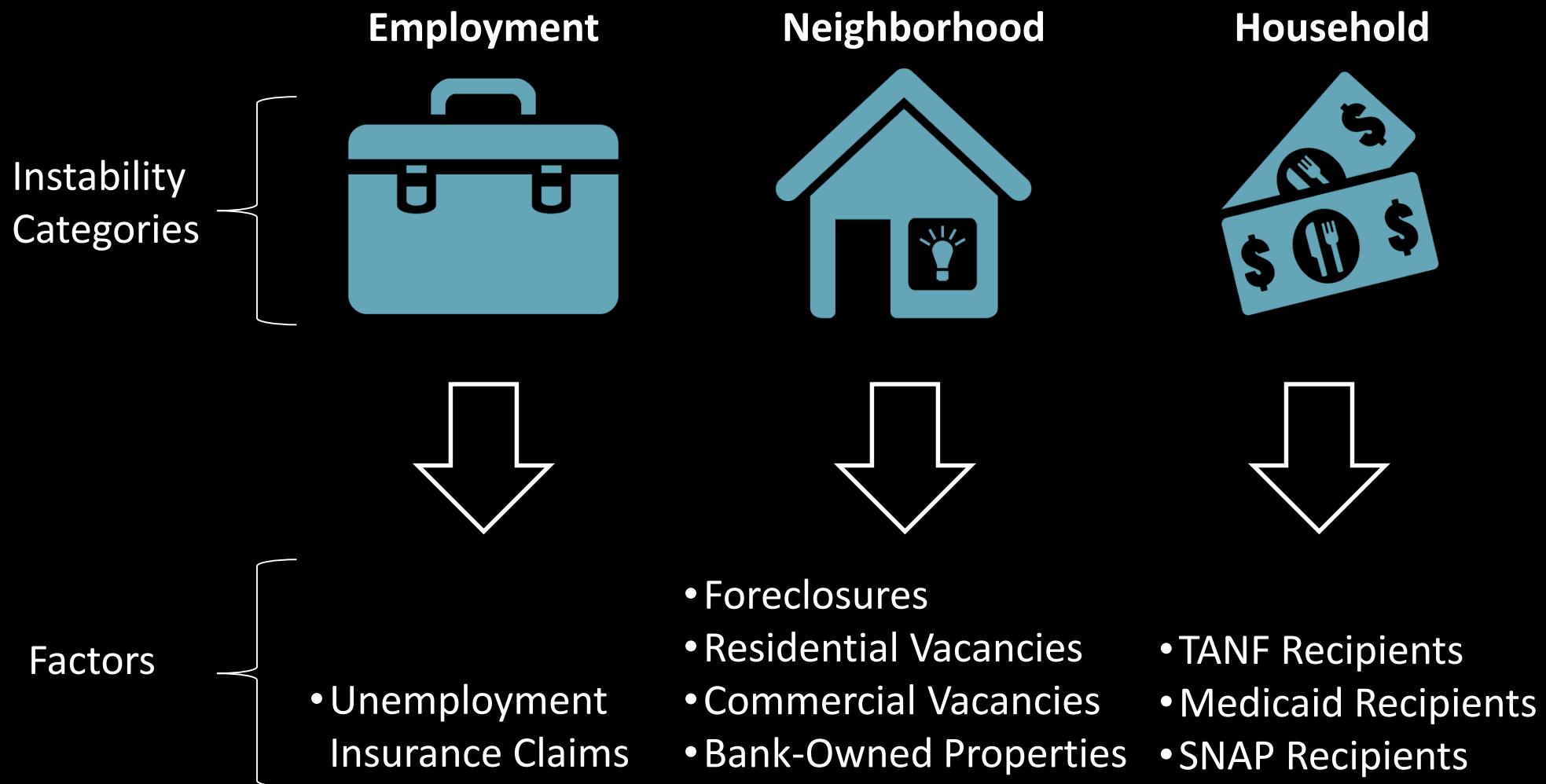
**Objective:** The City of Las Vegas is seeking to use economic and social data to identify sub-regions within the City at a heightened risk for long-term instability

**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)

**Concept:** 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*

# Methodology of the NRI

## Identifying Instability - Categories and Factors



# Methodology of the NRI

## Identifying Instability - Categories and Factors

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

<sup>1</sup> Unemployment insurance claims are a fraction of total unemployment; this variable does not represent the “unemployment rate”.

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

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

# Methodology of the NRI

## 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 appropriate<sup>1</sup>; these measures were then expressed as a 100-base ratio of their valley- or city-wide average

Area	Factor	Factor Index Value
A	650	130
B	600	120
C	550	110
D	500	100
E	450	90
F	400	80
G	350	70
Valley-wide Average = 500		

The diagram shows a bracket grouping areas A through G. An arrow points from the bracket to a second table, which contains only one row for area A. This indicates that area A is being highlighted as an example.

Area	Factor	Factor Index Value
A	650	130

The index score of **130** means this area has this factor at a rate **1.3** times the valley-wide average

<sup>1</sup>Commercial vacancy is expressed as the percentage of commercial space that is available.

# Methodology of the NRI

## 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
 Household Instability	25%	TANF	8.3%
		Medicaid	8.3%
		SNAP	8.3%
 Employment Instability	25%	Unemployment Insurance Claims	25.0%
 Neighborhood Instability	50%	Foreclosures	25.0%
		Residential Vacancies	8.3%
		Commercial Vacancies	8.3%
		Bank-Owned Properties	8.3%

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

# Methodology of the NRI

## 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
Household Instability	25%	TANF	8.3%
		Medicaid	8.3%
		SNAP	8.3%
Employment Instability	25%	Unemployment Insurance Claims	25.0%
Neighborhood Instability	50%	Foreclosures	25.0%
		Residential Vacancies	8.3%
		Commercial Vacancies	8.3%
		Bank-Owned Properties	8.3%

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



**Composite Risk**

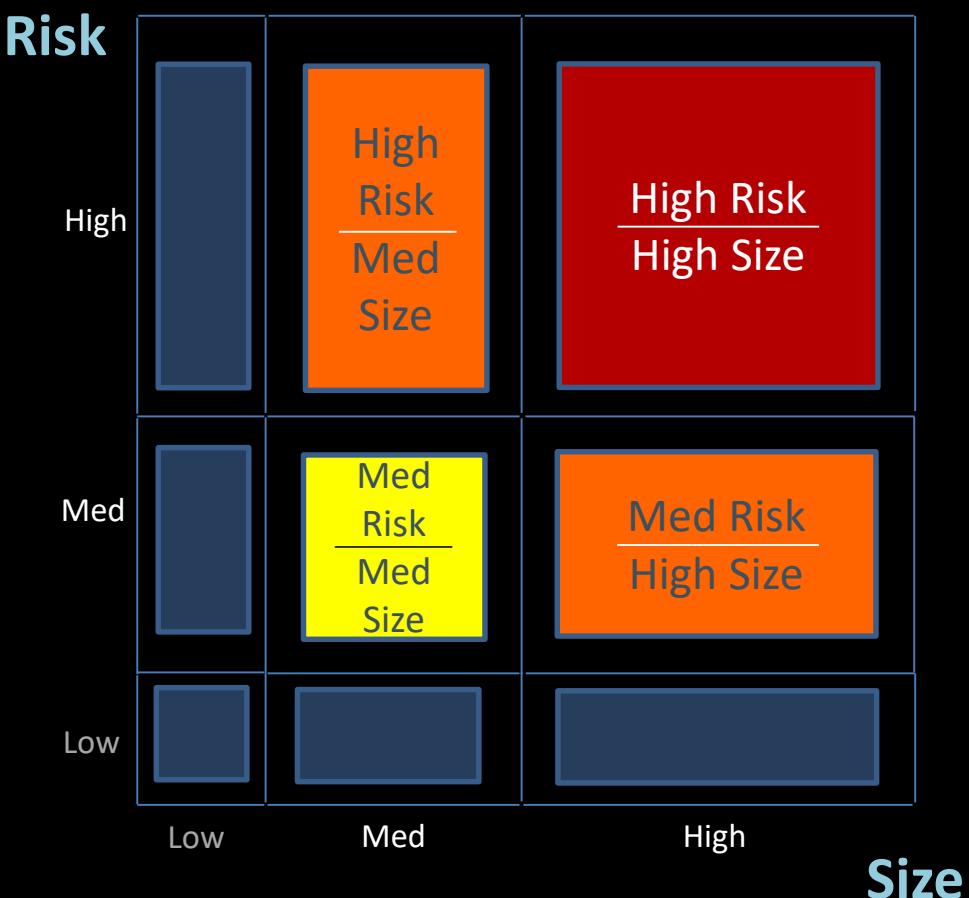
# Methodology of the NRI

## Relativity and Composite Risk

### GOAL

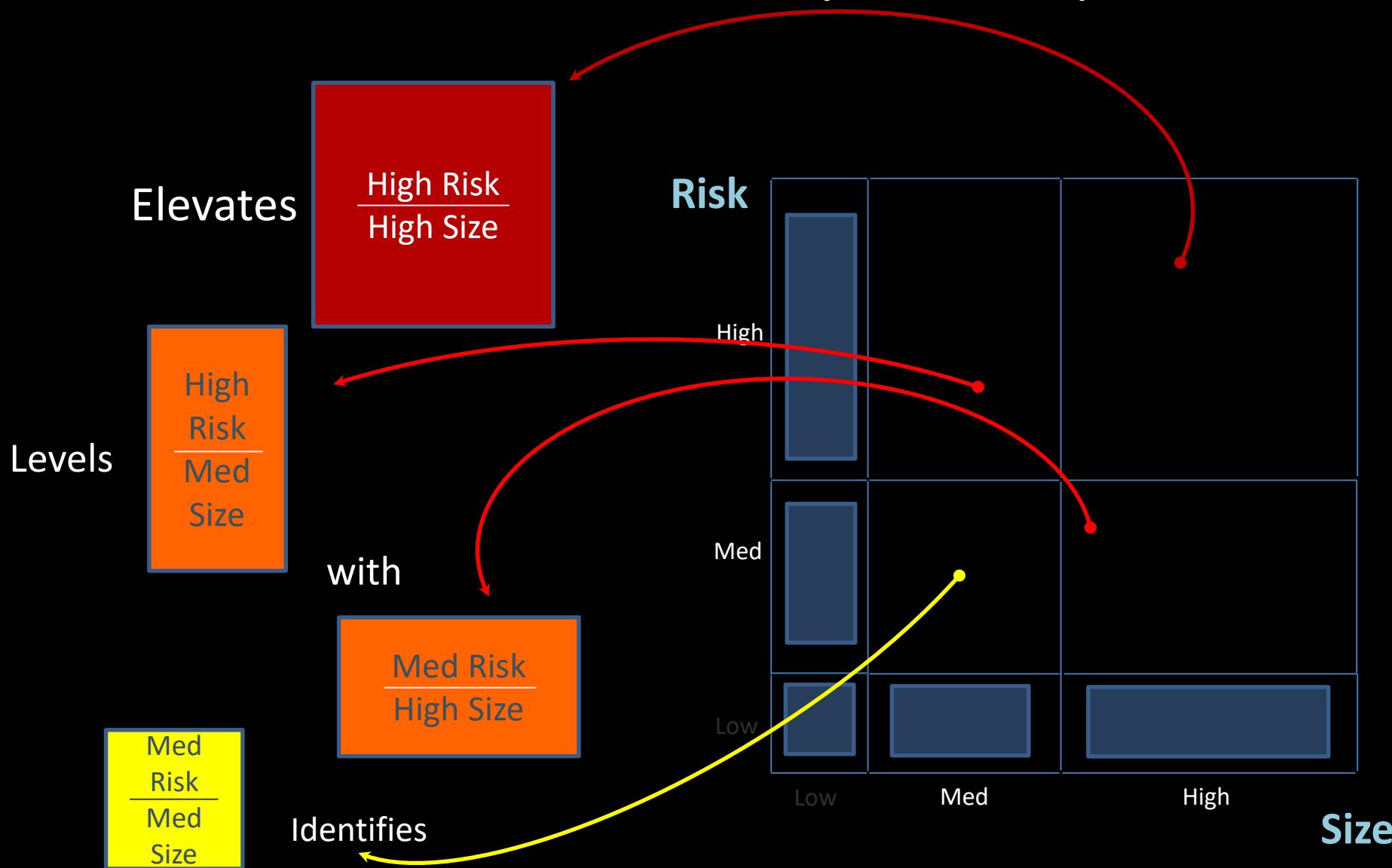
*Focus the City's efforts,  
making the best use of limited  
resources*

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



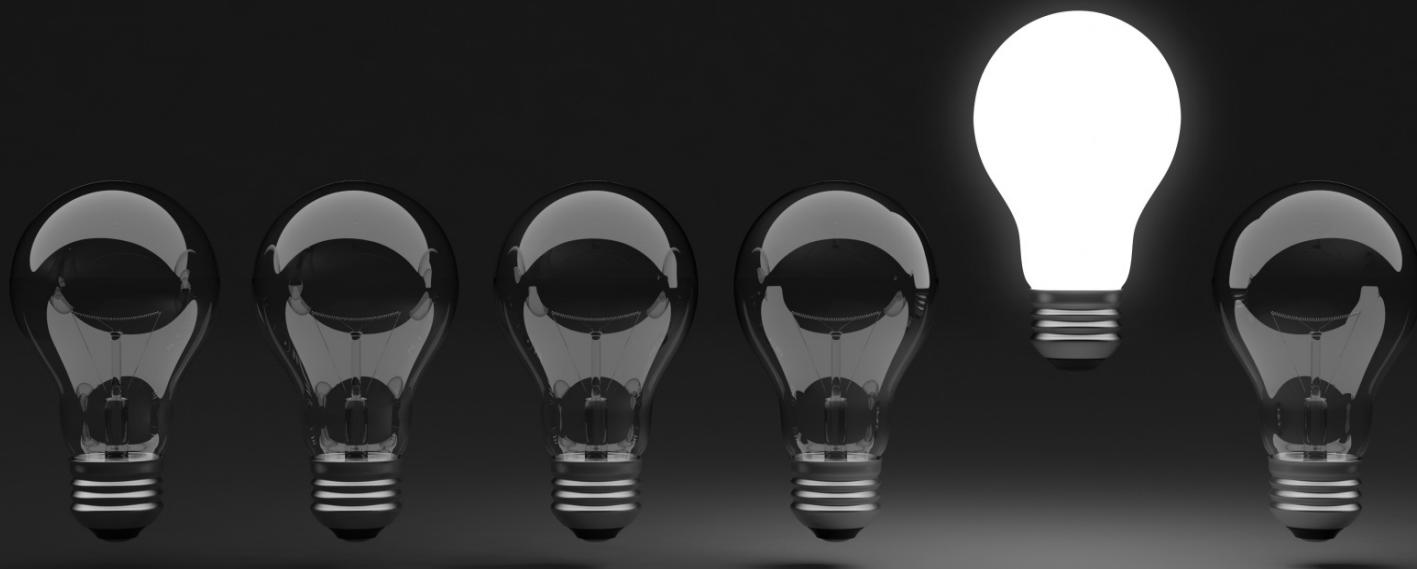
# Methodology of the NRI

## Relativity and Composite Risk



# summary

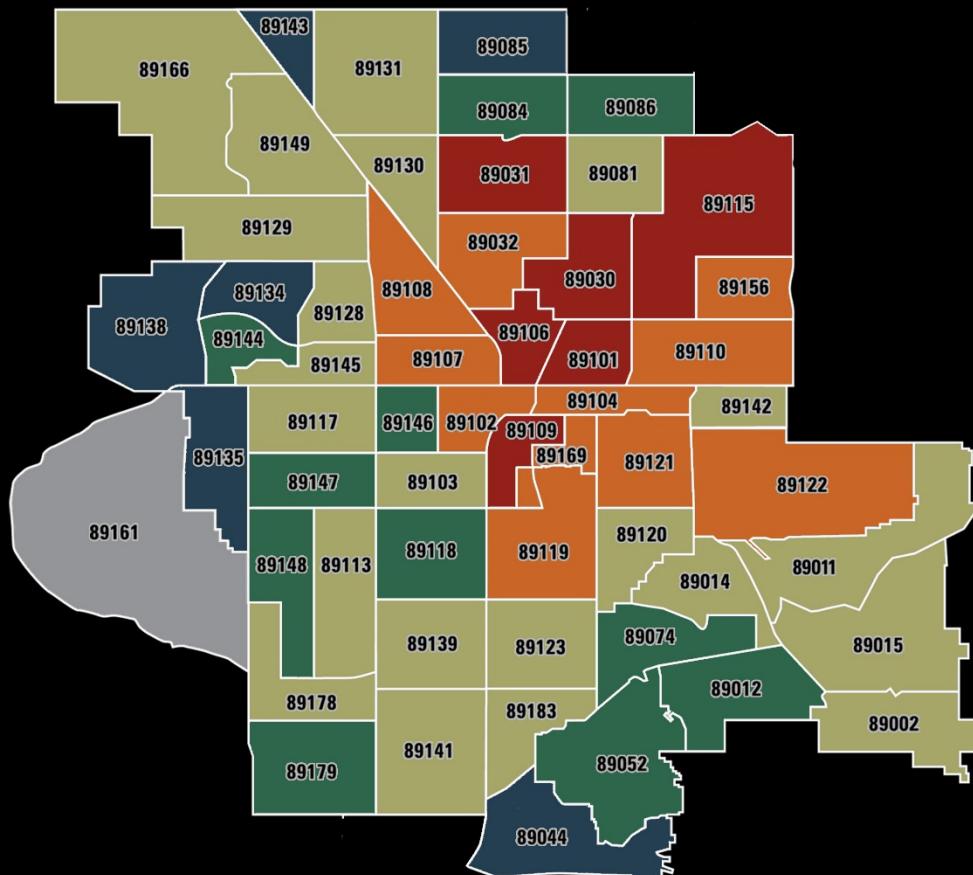
: an abstract, abridgment or  
compendium especially of a preceding  
discourse



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

# Summary

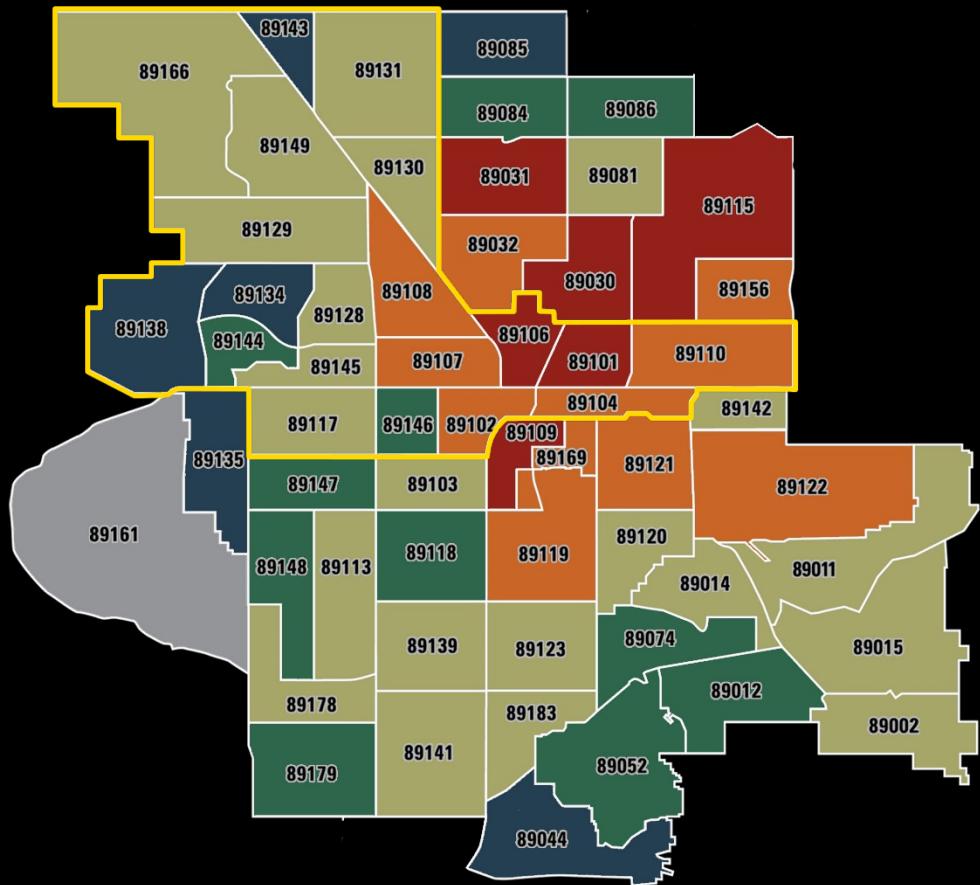
## Valley-wide NRI



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

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

## Valley-wide NRI



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

City of Las Vegas zip codes in **bold**

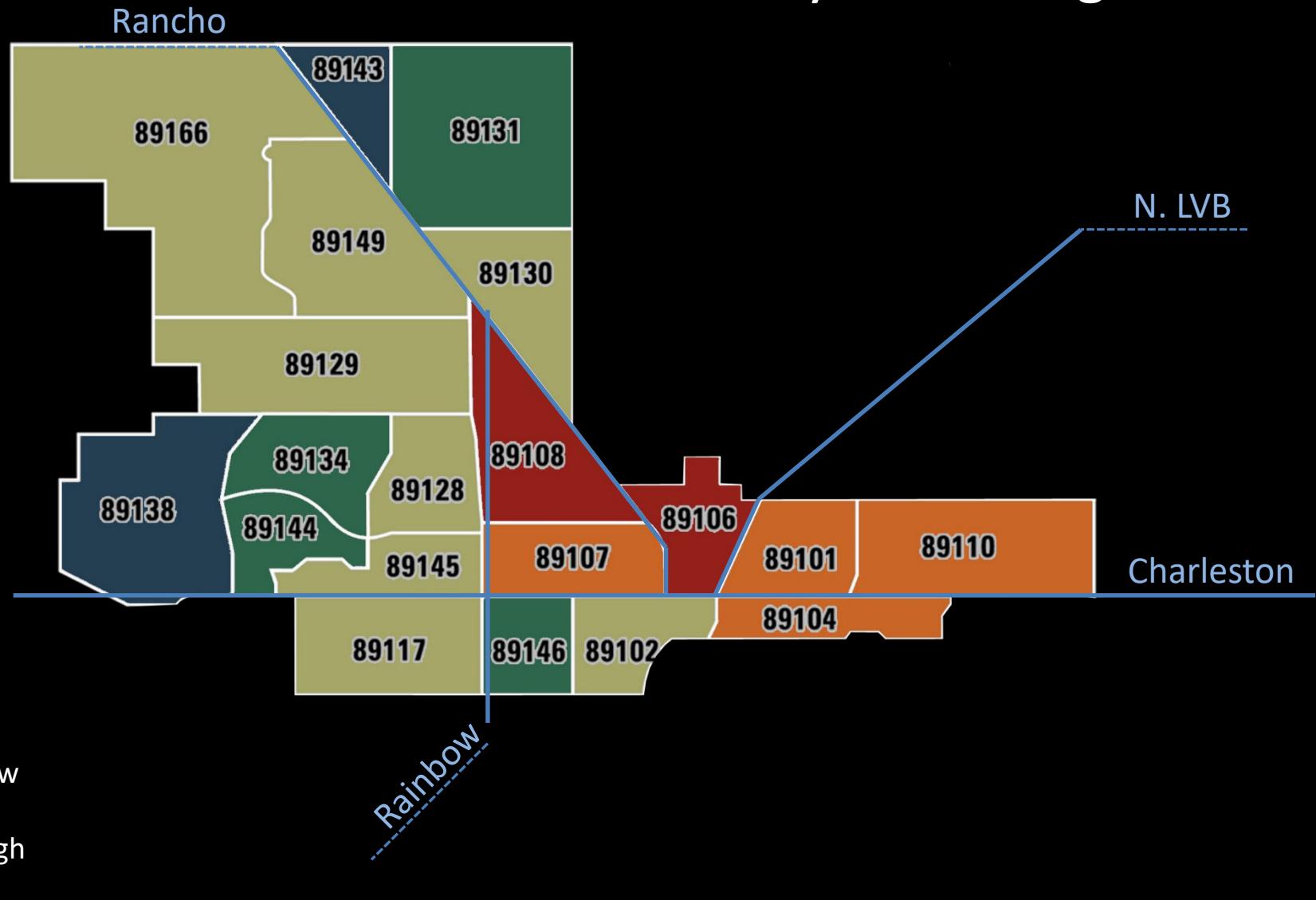
	High	Medium-High	Medium-Low	Medium	Medium-High	Low
<b>89015</b>						
<b>89103</b>						
<b>89011</b>						
<b>89081</b>						
<b><u>89128</u></b>						
<b>89120</b>						
<b>89178</b>						
<b>89142</b>						
<b><u>89117</u></b>						
<b><u>89149</u></b>						
<b><u>89130</u></b>						
<b><u>89108</u>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

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

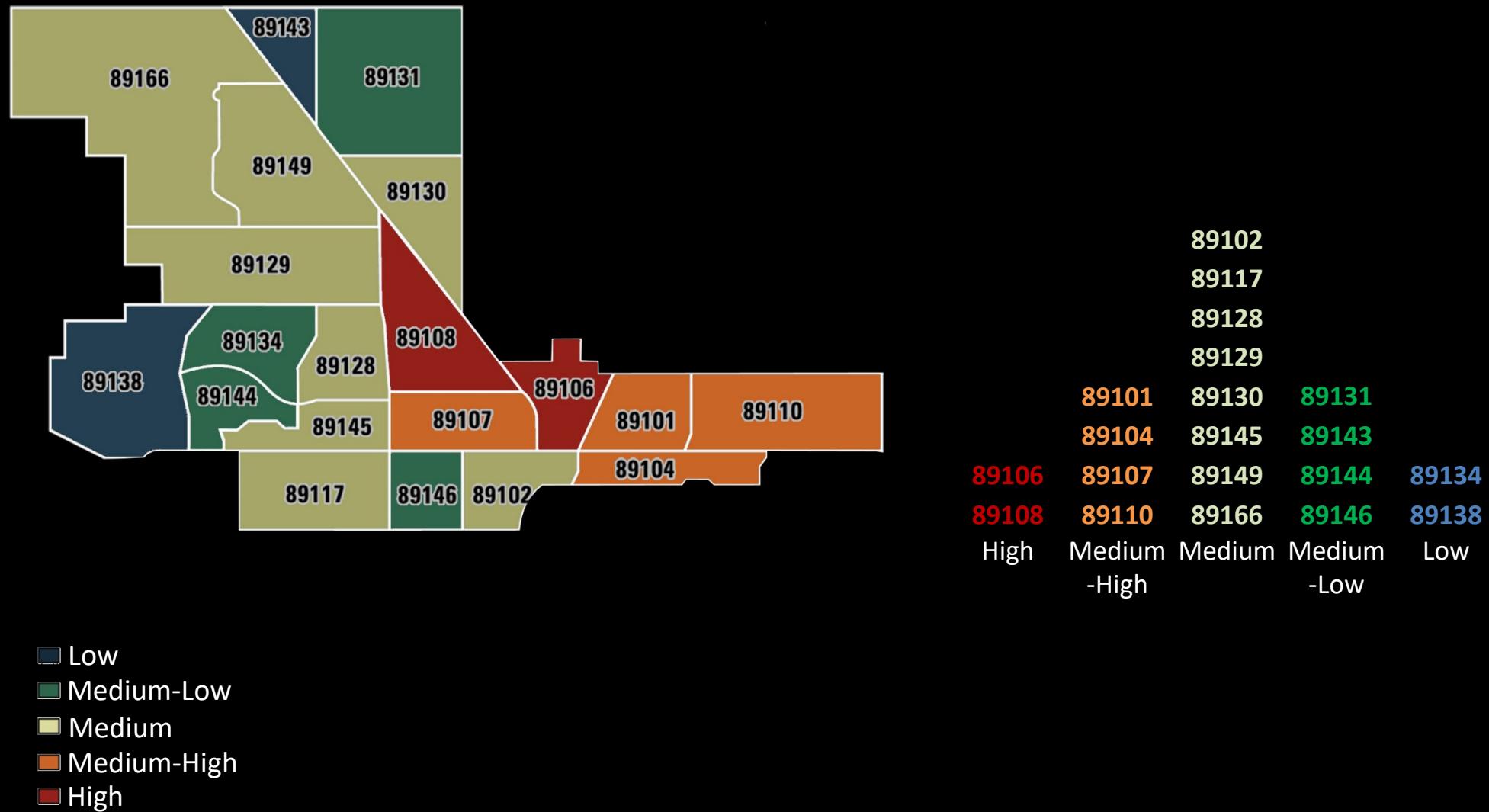
(\*) NOTE: City of Las Vegas NRI is calculated independently from the valley-wide NRI, so areas within the City can be compared to one another.

# Summary

## City of Las Vegas NRI

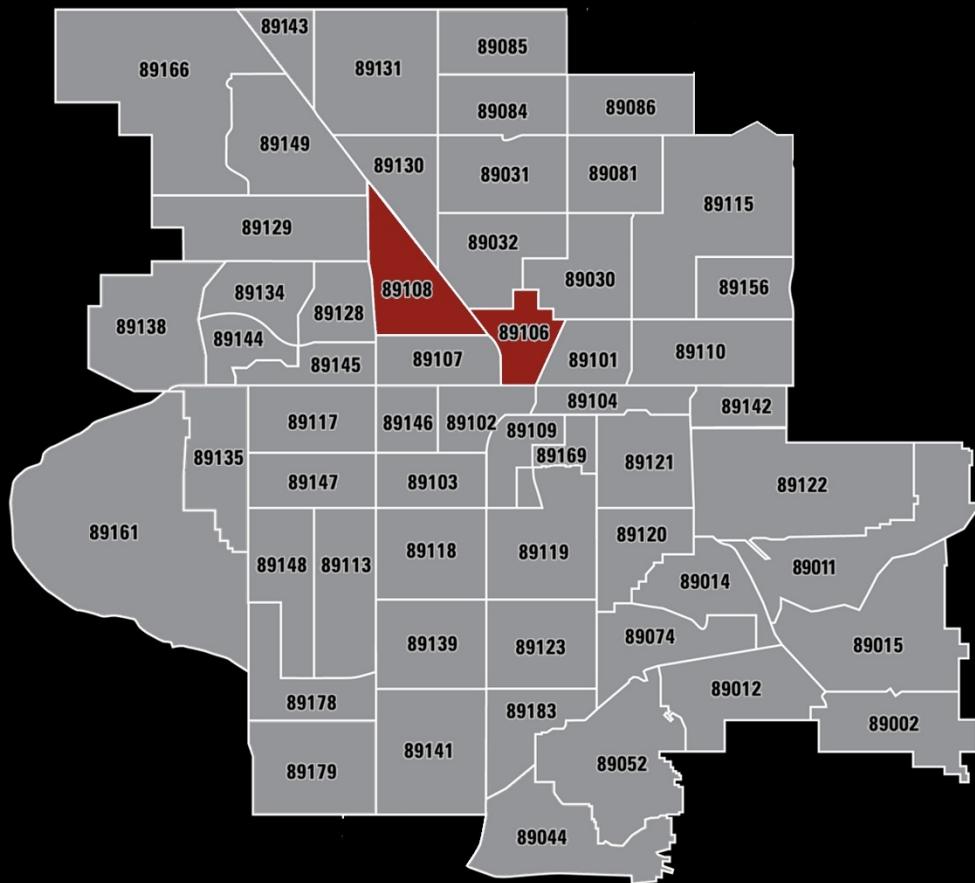


# Summary



# Summary

## City of Las Vegas NRI



89102				
89117				
89128				
89129				
89101	89130	89131		
89104	89145	89143		
<b>89106</b>	<b>89107</b>	<b>89149</b>	<b>89148</b>	<b>89134</b>
<b>89108</b>	<b>89110</b>	<b>89129</b>	<b>89138</b>	<b>89128</b>
High	Medium	Medium	Medium	Low
-High				-Low

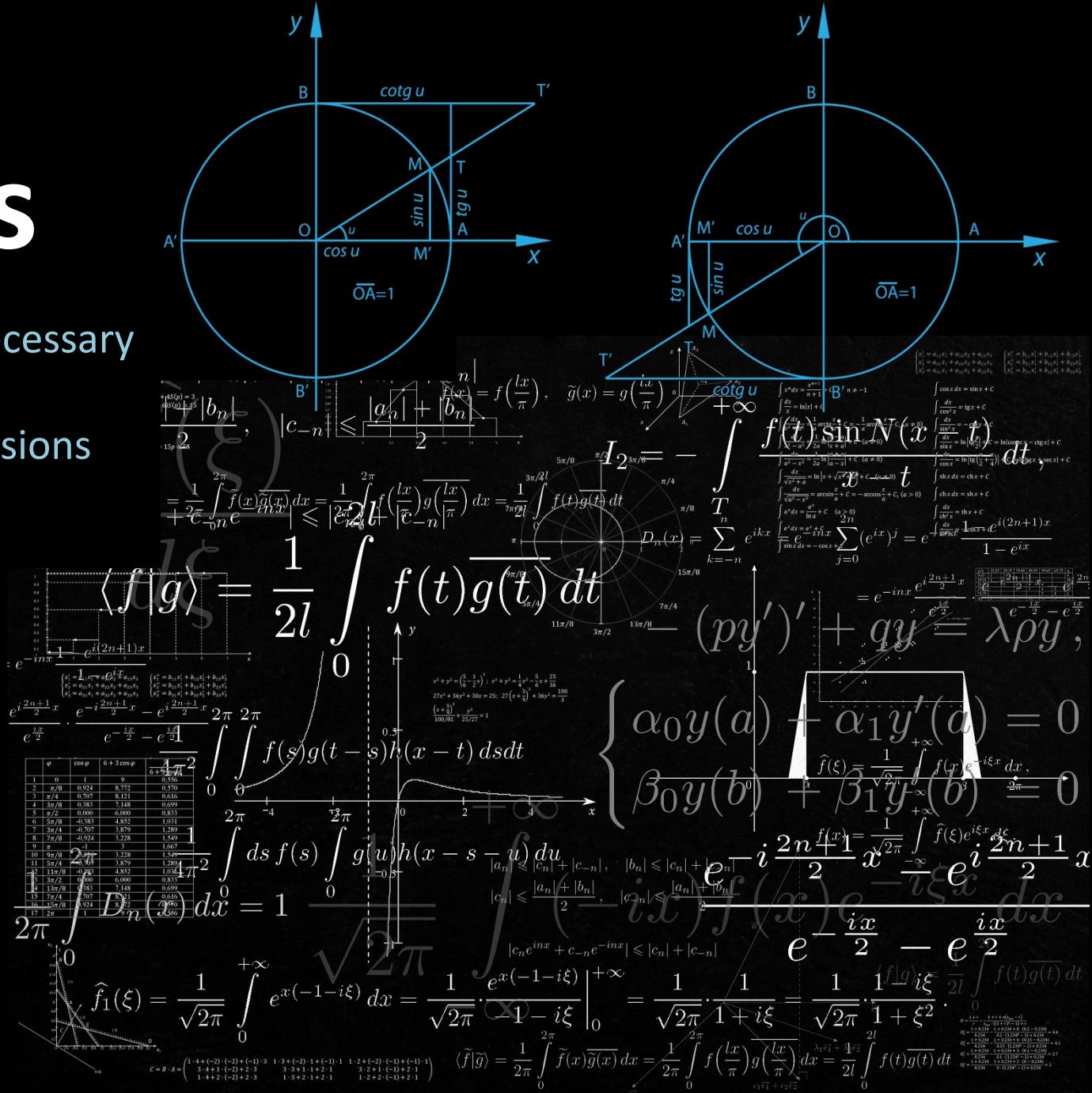
# Summary

## City of Las Vegas NRI

Zip Code	89101	89104	89106	89108	City Average	LV Valley Average
TANF Recipients Per 1,000 Population	22.5	19.5	32.8	13.5	10.0	9.4
Medicaid Recipients Per 1,000 Population	489.6	155.1	582.3	314.4	256.1	237.6
SNAP Recipients Per 1,000 Population	356.4	320.0	439.6	211.3	170.1	157.6
Unemployment Ins. Per 1,000 Population	10.5	14.5	12.8	12.0	10.2	10.3
Foreclosures Per 1,000 Total Housing Units	0.6	0.9	0.7	1.3	1.0	1.2
Residential Vacancies Per 1,000 Total Housing Units	142.6	81.6	169.9	12.1	36.6	39.4
Commercial Vacancy	12.5%	11.0%	8.1%	17.8%	13.0%	13.6%
Bank-Owned Homes Per 1,000 Total Housing Units	9.1	9.9	11.7	14.5	12.0	11.5

# elements

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



# Elements of the NRI



## Employment Instability



Employment  
Instability

# Elements of the NRI

## 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
89169	14.5	10.3	141.4
<b>89104</b>	<b>14.5</b>	<b>10.3</b>	<b>141.0</b>
89120	13.5	10.3	131.2
89109	13.1	10.3	127.8
<b>89106</b>	<b>12.8</b>	<b>10.3</b>	<b>124.5</b>
89032	12.7	10.3	124.0
89119	12.4	10.3	121.1
89121	12.4	10.3	120.7
<b>89108</b>	<b>12.0</b>	<b>10.3</b>	<b>116.5</b>
89156	11.9	10.3	115.5



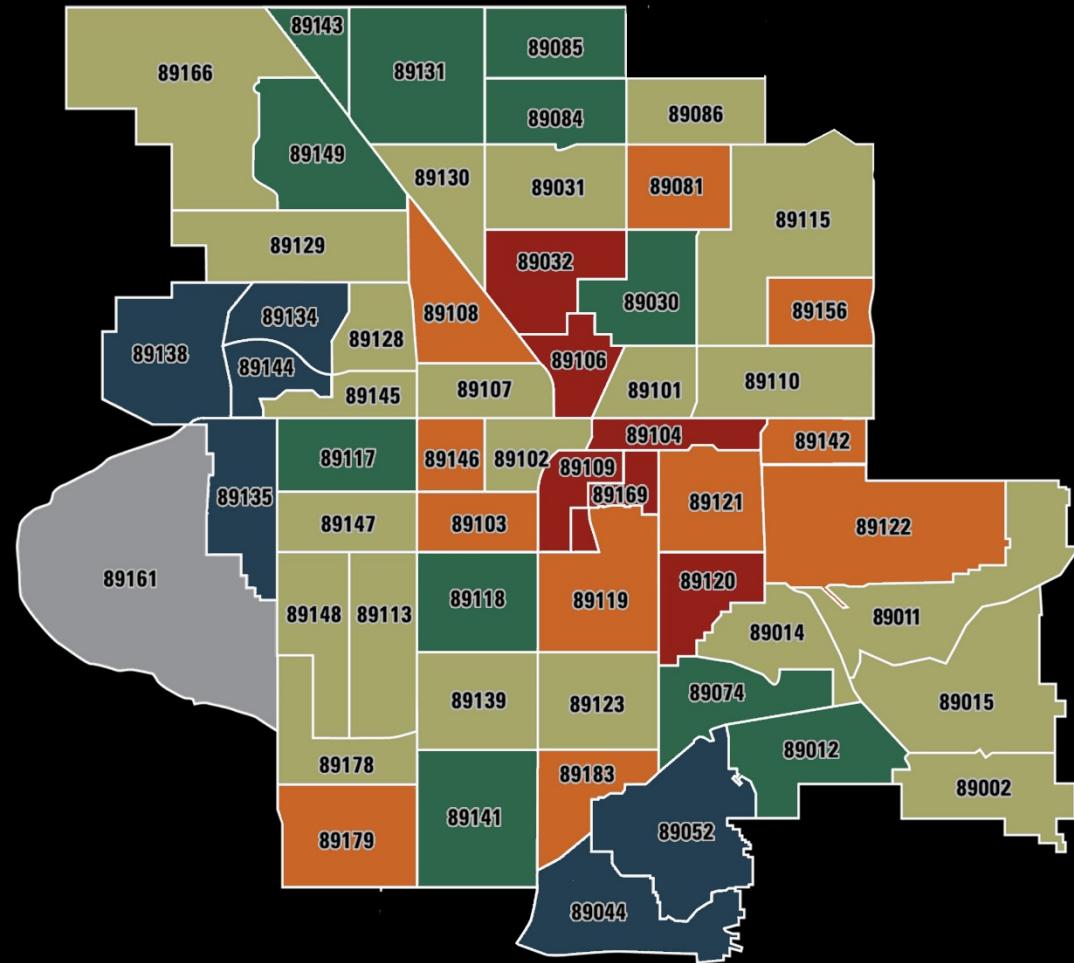
## Employment Instability

The rate of unemployment insurance claims per 1,000 residents rose for the second straight quarter to 10.3, a slight increase from 10.0 previously.

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

# Elements of the NRI

## Unemp. Insurance | Valley-wide Distribution Map





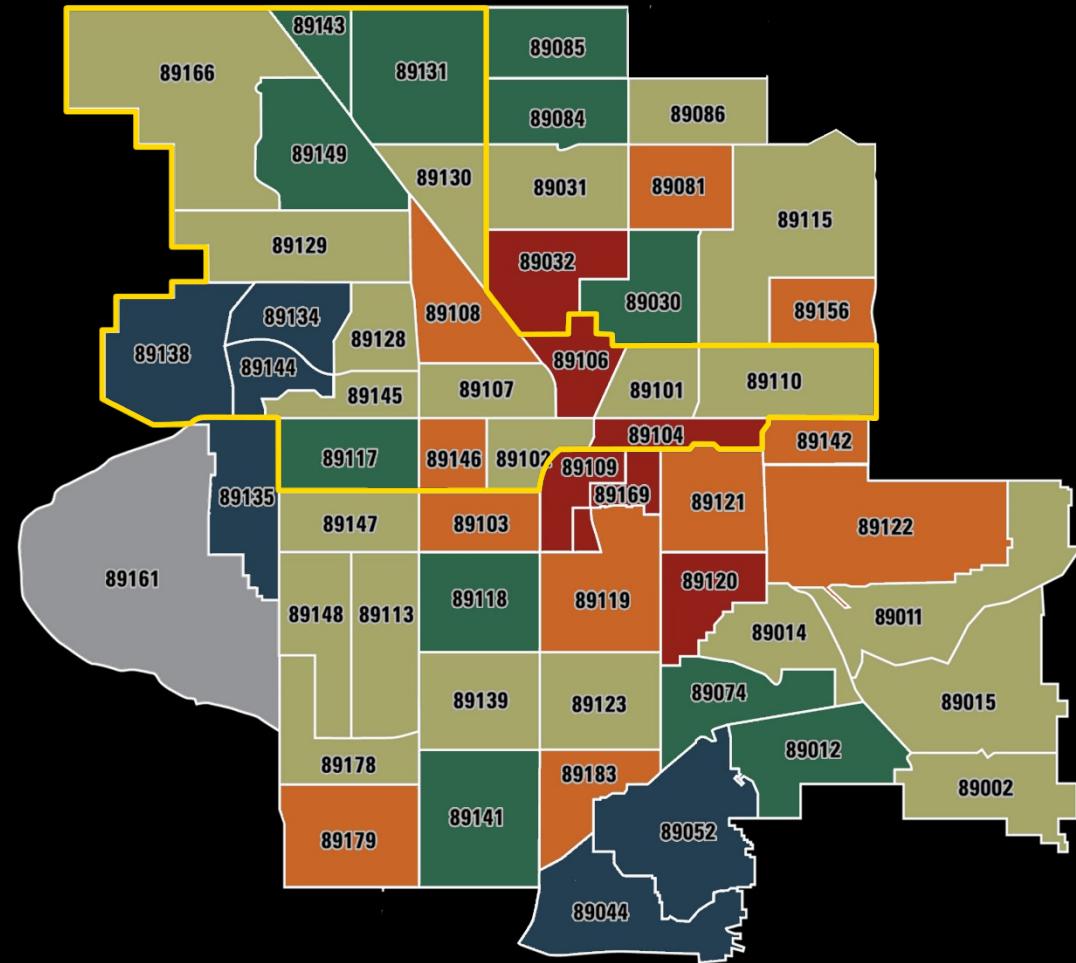
Employment  
Instability

# Elements of the NRI

## Unemp. Insurance | Valley-wide Distribution Map

### City of Las Vegas Zip Codes

The rate of unemployment insurance claims per 1,000 residents rose for the second straight quarter to 10.3, a slight increase from 10.0 previously.



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



Employment  
Instability

# 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	14.5	10.2	142
89106	12.8	10.2	126
89108	12.0	10.2	118
89146	11.5	10.2	113
89107	11.4	10.2	112

Mean unemployment insurance claims per 1,000 residents:

Valley-wide	10.3
City of Las Vegas	10.2

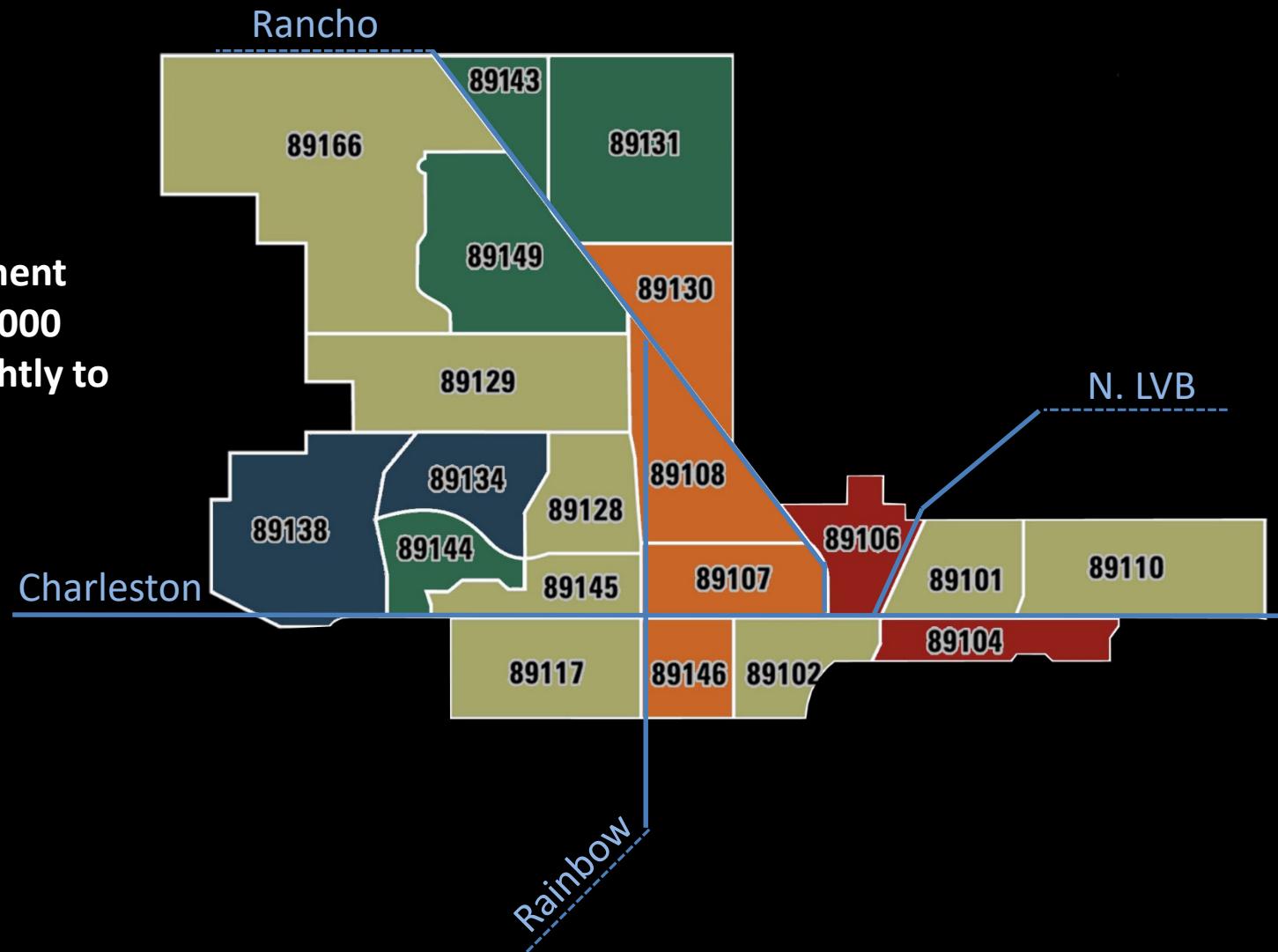


Employment  
Instability

The rate of unemployment insurance claims per 1,000 residents ticked up slightly to 10.2 from 9.8.

# Elements of the NRI

## Unemp. Insurance | CLV Distribution Map



# Elements of the NRI



## Neighborhood Instability



# Elements of the NRI

## 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	17.5	1.2	1,432.0
89156	2.4	1.2	194.9
89031	1.8	1.2	147.2
<b><u>89107</u></b>	<b><u>1.8</u></b>	<b><u>1.2</u></b>	<b><u>146.1</u></b>
89032	1.7	1.2	139.7
89081	1.5	1.2	124.1
89179	1.5	1.2	122.0
89121	1.5	1.2	120.9
89085	1.5	1.2	119.7
89120	1.4	1.2	115.9

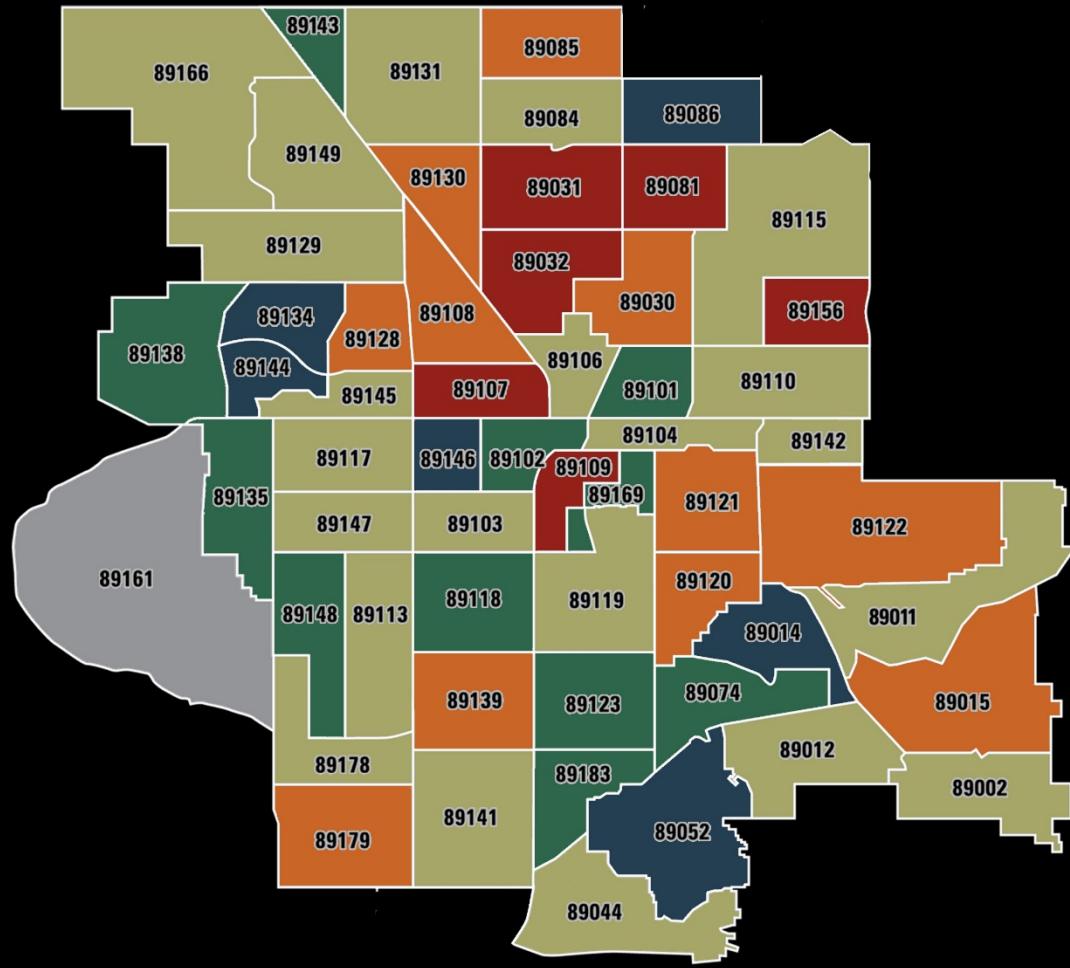


Neighborhood  
Instability

The rate of foreclosures per 1,000 housing units continued to decline. The rate fell to 1.2 from 1.6 last quarter (down 25 percent).

# Elements of the NRI

## Foreclosures | Valley-wide Distribution Map



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



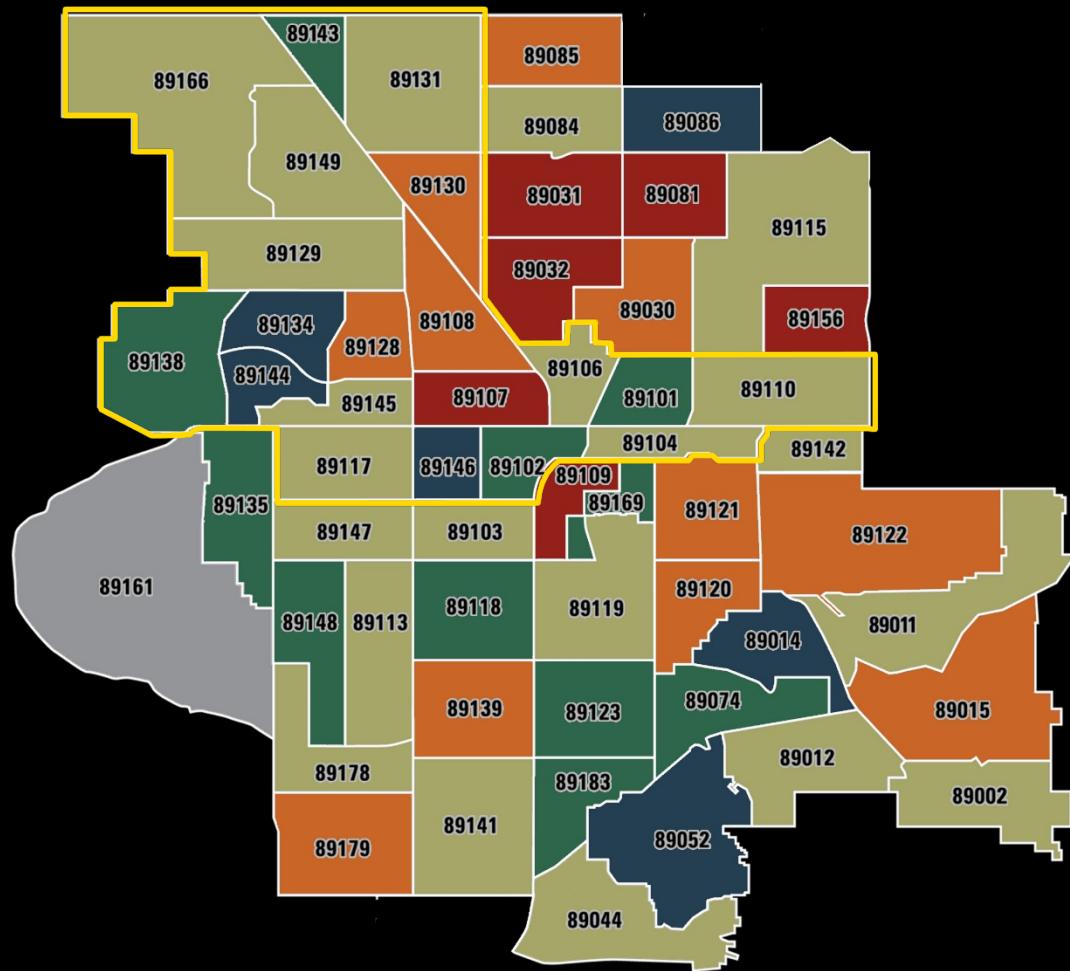
Neighborhood  
Instability

# Elements of the NRI

## Foreclosures | Valley-wide Distribution Map

### City of Las Vegas Zip Codes

The rate of foreclosures per 1,000 housing units continued to decline. The rate fell to 1.2 from 1.6 last quarter (down 25 percent).



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



# Elements of the NRI

## Foreclosures | 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	1.8	1.0	185
89130	1.3	1.0	140
89108	1.3	1.0	135
89128	1.3	1.0	135
89117	1.2	1.0	120

Mean foreclosures per 1,000 housing units:

Valley-wide	1.2
City of Las Vegas	1.0

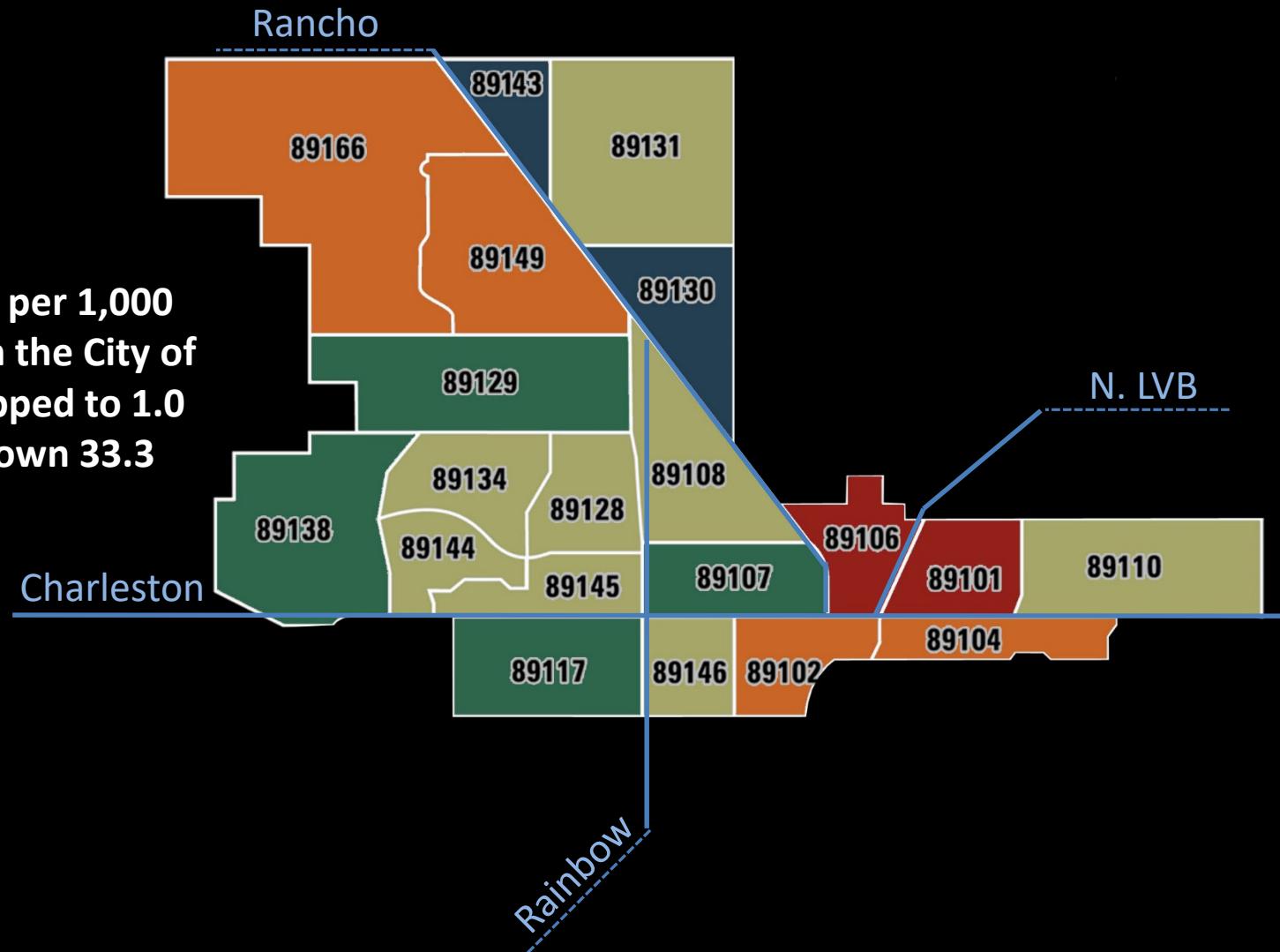


Neighborhood  
Instability

# Elements of the NRI

## Foreclosures | CLV Distribution Map

The rate of foreclosures per 1,000 housing units fell within the City of Las Vegas. The rate dropped to 1.0 from 1.5 last quarter (down 33.3 percent).



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



Neighborhood  
Instability

# Elements of the NRI

## 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	680.1	39.4	1,726.3
89086	189.4	39.4	480.8
<b><u>89106</u></b>	<b><u>169.9</u></b>	<b><u>39.4</u></b>	<b><u>431.1</u></b>
89179	152.8	39.4	387.9
<b><u>89101</u></b>	<b><u>142.6</u></b>	<b><u>39.4</u></b>	<b><u>361.9</u></b>
89169	139.0	39.4	352.9
<b><u>89166</u></b>	<b><u>128.6</u></b>	<b><u>39.4</u></b>	<b><u>326.3</u></b>
89011	110.8	39.4	281.4
<b><u>89102</u></b>	<b><u>105.8</u></b>	<b><u>39.4</u></b>	<b><u>268.6</u></b>
89178	104.4	39.4	264.9

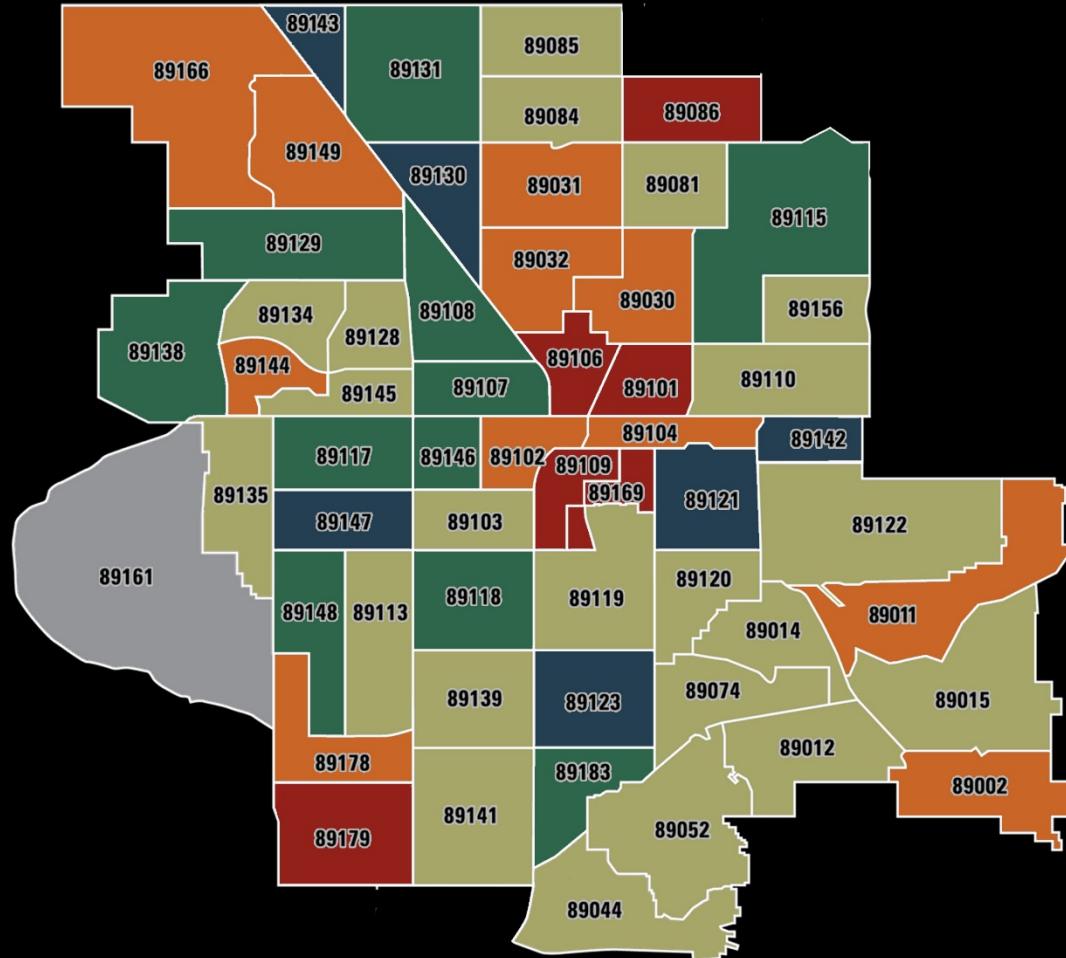


Neighborhood  
Instability

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

# Elements of the NRI

## Residential Vacancy | Valley-wide Distribution Map



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



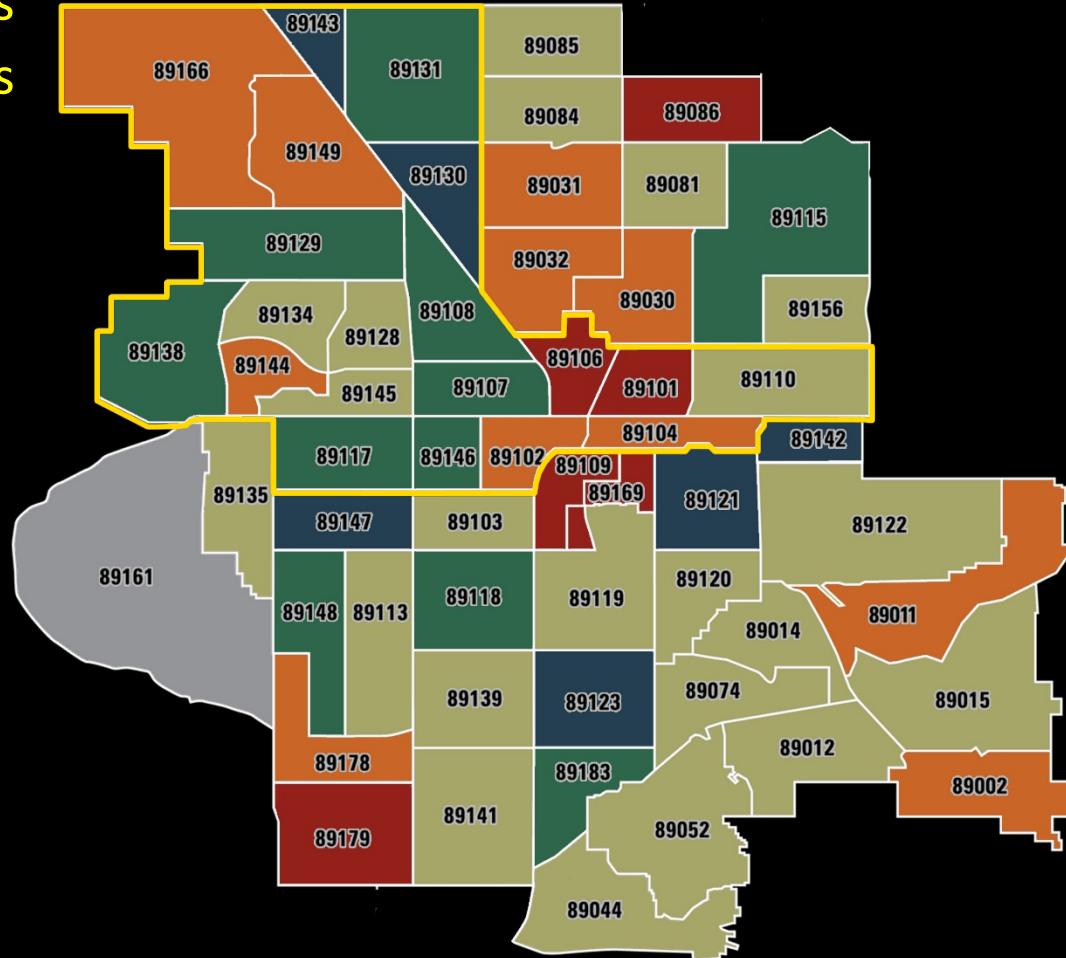
Neighborhood  
Instability

# Elements of the NRI

## Residential Vacancy | Valley-wide Distribution Map

Residential vacancies per 1,000 housing units declined significantly year-over-year from 72.4 to 39.4.

City of Las Vegas  
Zip Codes



- 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
89106	169.9	36.6	464
89101	142.6	36.6	390
89166	128.6	36.6	352
89102	105.8	36.6	289
89104	81.6	36.6	223

Mean residential vacancies per 1,000 housing units:

Valley-wide	39.4
City of Las Vegas	36.6

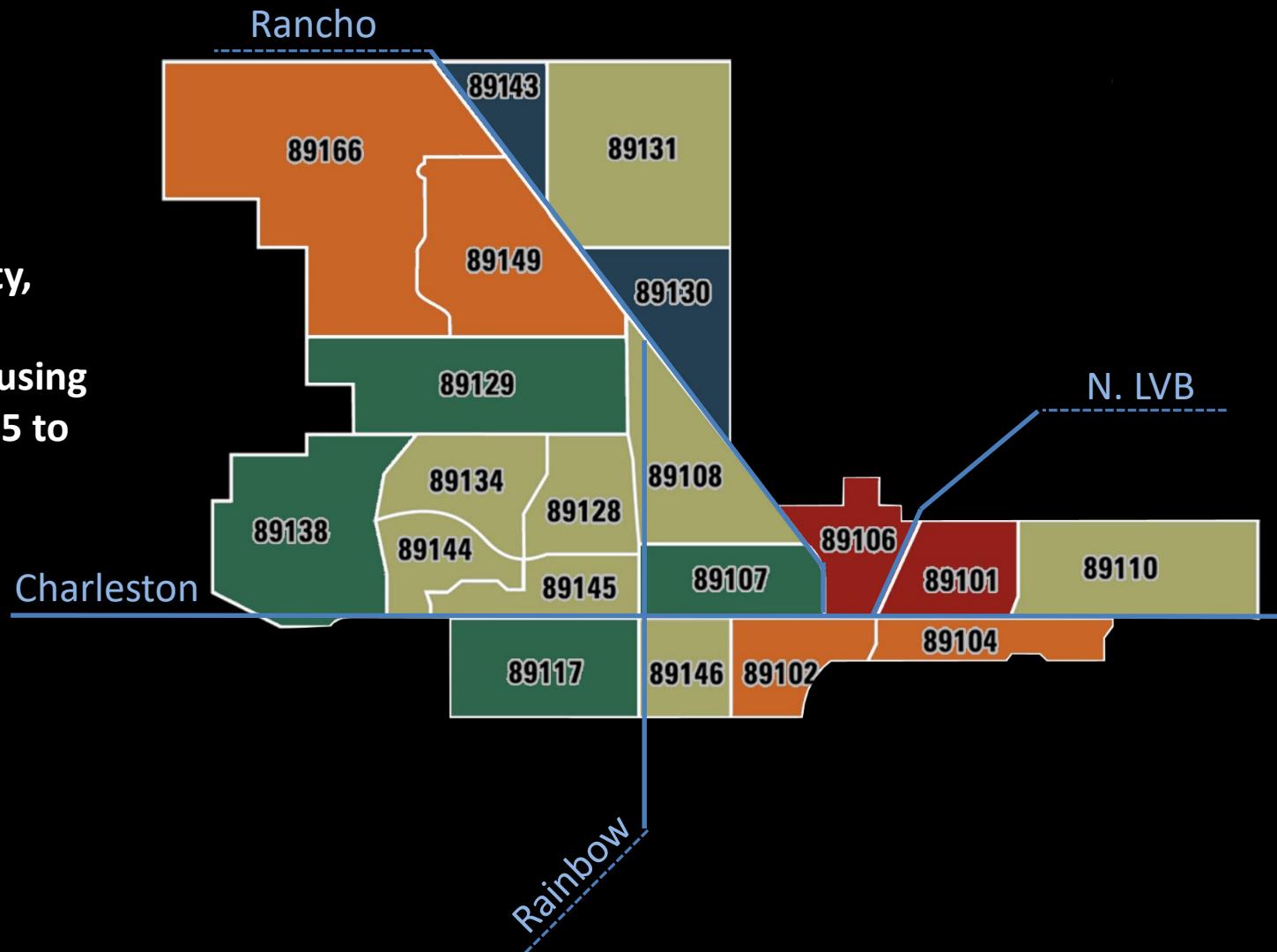


Neighborhood  
Instability

Similarly, within the City,  
the rate of residential  
vacancies per 1,000 housing  
units declined from 63.5 to  
36.6 this year.

# Elements of the NRI

## Residential Vacancy | CLV Distribution Map





# 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	Commercial Valley-wide Mean	Commercial Vacancy Rate Index Value
89115	38.7%	13.6%	283.6
89011	30.4%	13.6%	222.7
89109	25.7%	13.6%	188.3
<b><u>89107</u></b>	<b><u>22.2%</u></b>	<b><u>13.6%</u></b>	<b><u>162.7</u></b>
89169	21.5%	13.6%	157.5
89118	20.5%	13.6%	150.1
89119	18.6%	13.6%	136.8
89120	18.2%	13.6%	133.3
<b><u>89108</u></b>	<b><u>17.8%</u></b>	<b><u>13.6%</u></b>	<b><u>130.7</u></b>
89015	17.1%	13.6%	125.3

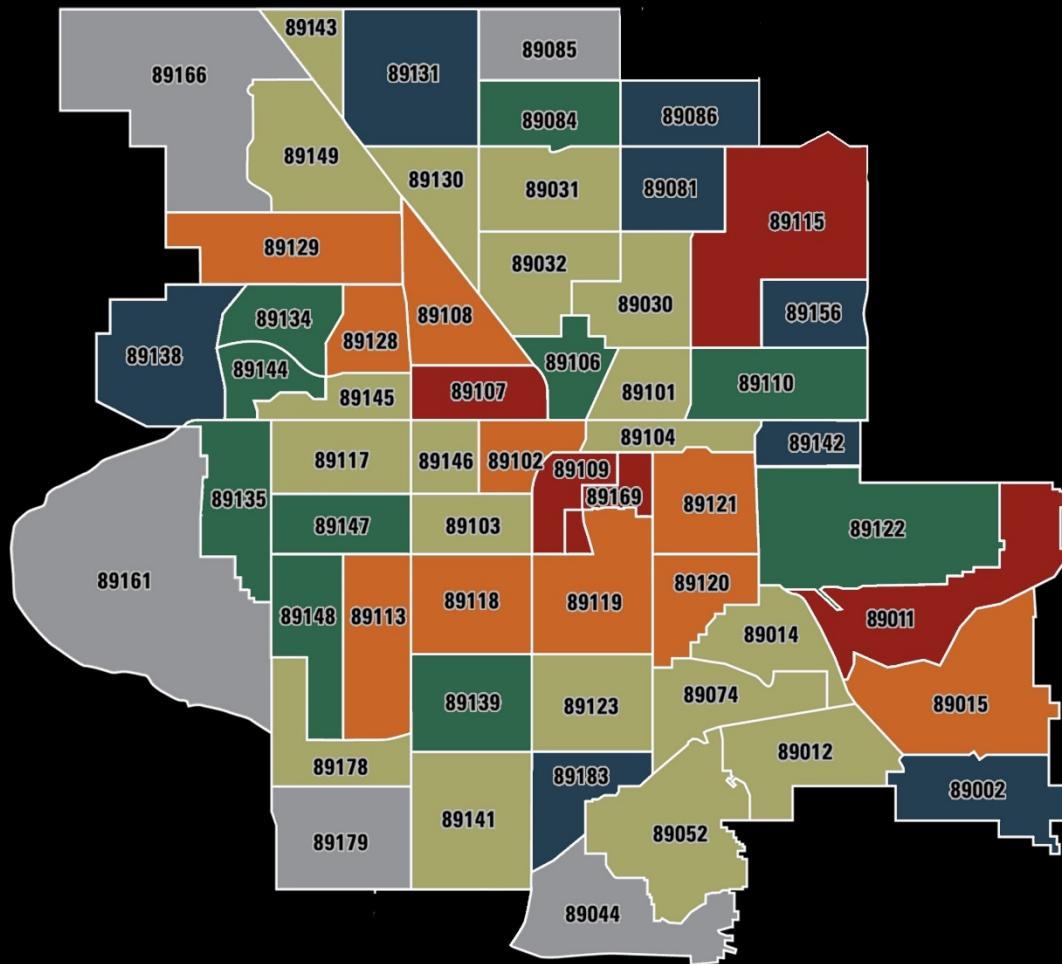


Neighborhood  
Instability

# Elements of the NRI

## Commercial Vacancy | Valley-wide Distribution Map

**Valley-wide commercial vacancy continued to drop. The vacancy rate fell to 13.6 percent from 13.8 percent last quarter (down 0.2 percentage points). 89115 had the highest vacancy rate at 38.7%, followed by 89011 at 30.4% .**



- 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.



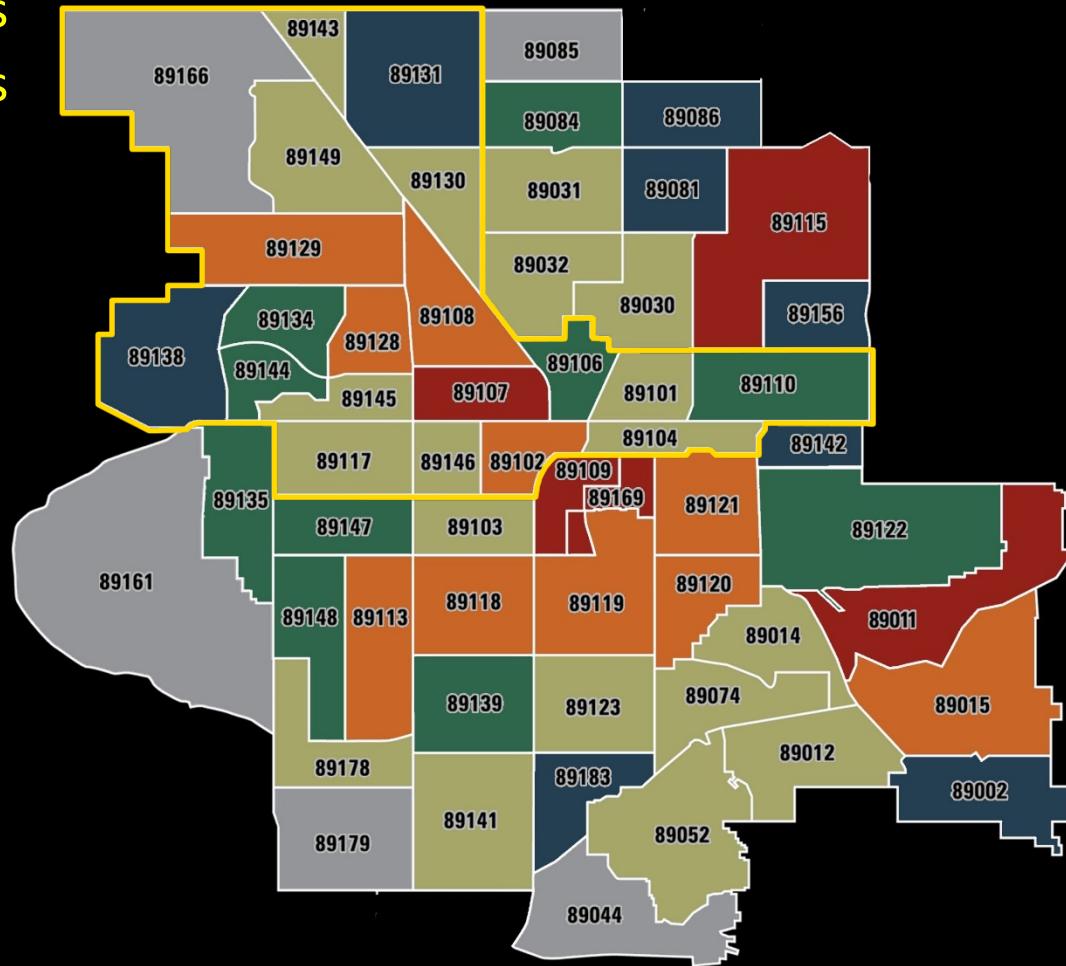
Neighborhood  
Instability

# 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 13.6  
percent from 13.8 percent last  
quarter (down 0.2 percentage  
points). 89115 had the highest  
vacancy rate at 38.7%,  
followed by 89011 at 30.4% .**



- 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 Codes In the City of Las Vegas

Zip Codes	Commercial Vacancy Rate	CLV Mean	Commercial Vacancy Rate Index Value
89107	22.2%	13.0%	171.0
89108	17.8%	13.0%	137.3
89129	17.0%	13.0%	131.3
89102	16.8%	13.0%	129.4
89128	15.8%	13.0%	121.8

Mean commercial vacancy rate:

Valley-wide                    13.6%  
City of Las Vegas            13.0%

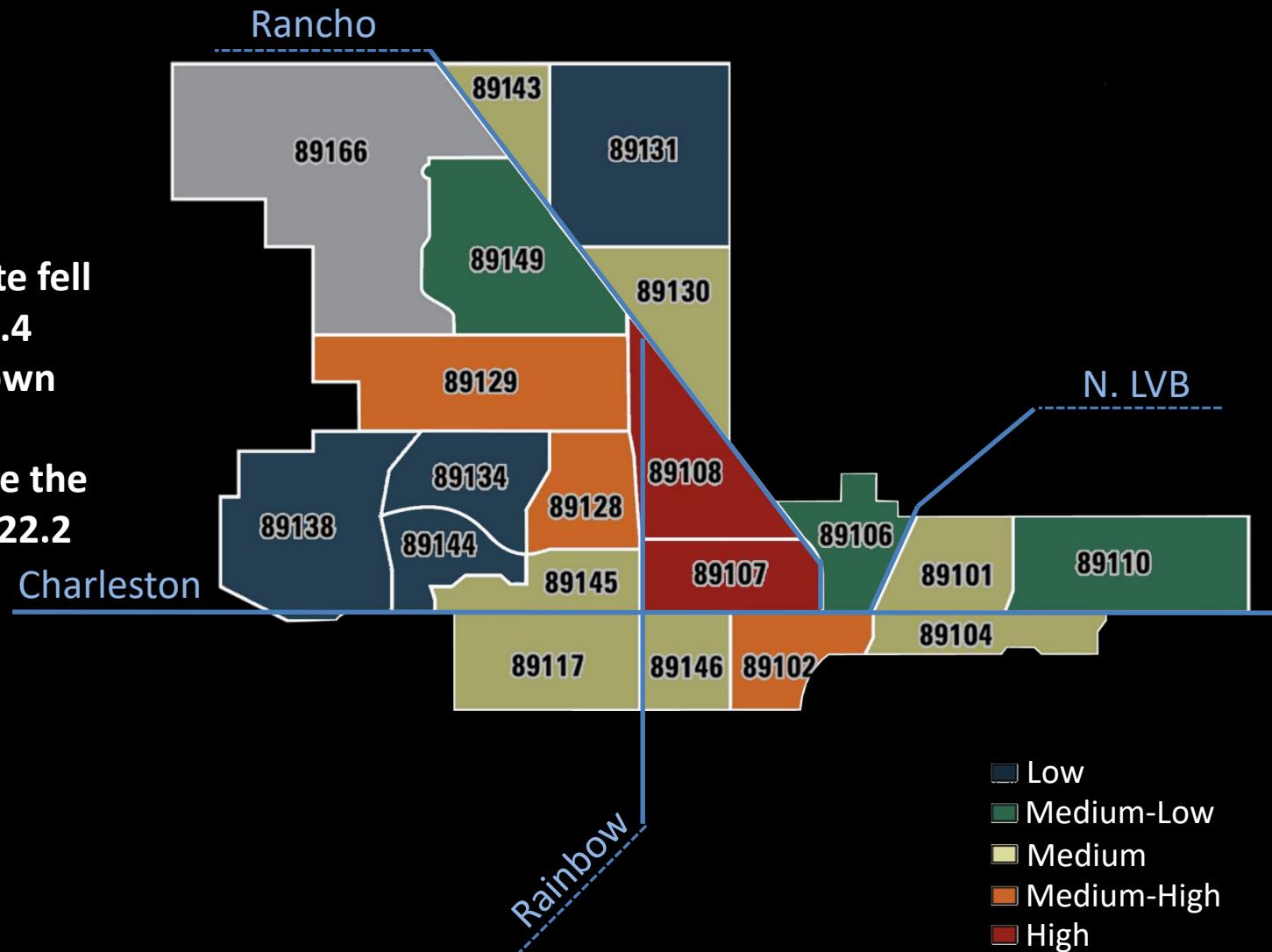


Neighborhood  
Instability

**City-wide commercial vacancy declined in the quarter. The vacancy rate fell to 13.0 percent from 13.4 percent last quarter (down 0.4 percentage points). 89107 continued to have the highest vacancy rate at 22.2 percent.**

# Elements of the NRI

## Commercial Vacancy | CLV Distribution Map



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	20.4	11.5	176.9
89031	20.3	11.5	176.3
89156	19.7	11.5	171.1
<b><u>89143</u></b>	<b><u>19.2</u></b>	<b><u>11.5</u></b>	<b><u>166.8</u></b>
89030	18.7	11.5	162.5
<b><u>89110</u></b>	<b><u>18.4</u></b>	<b><u>11.5</u></b>	<b><u>159.4</u></b>
89032	17.2	11.5	149.0
89141	16.8	11.5	145.9
<b><u>89107</u></b>	<b><u>16.7</u></b>	<b><u>11.5</u></b>	<b><u>145.0</u></b>
89081	16.6	11.5	143.8

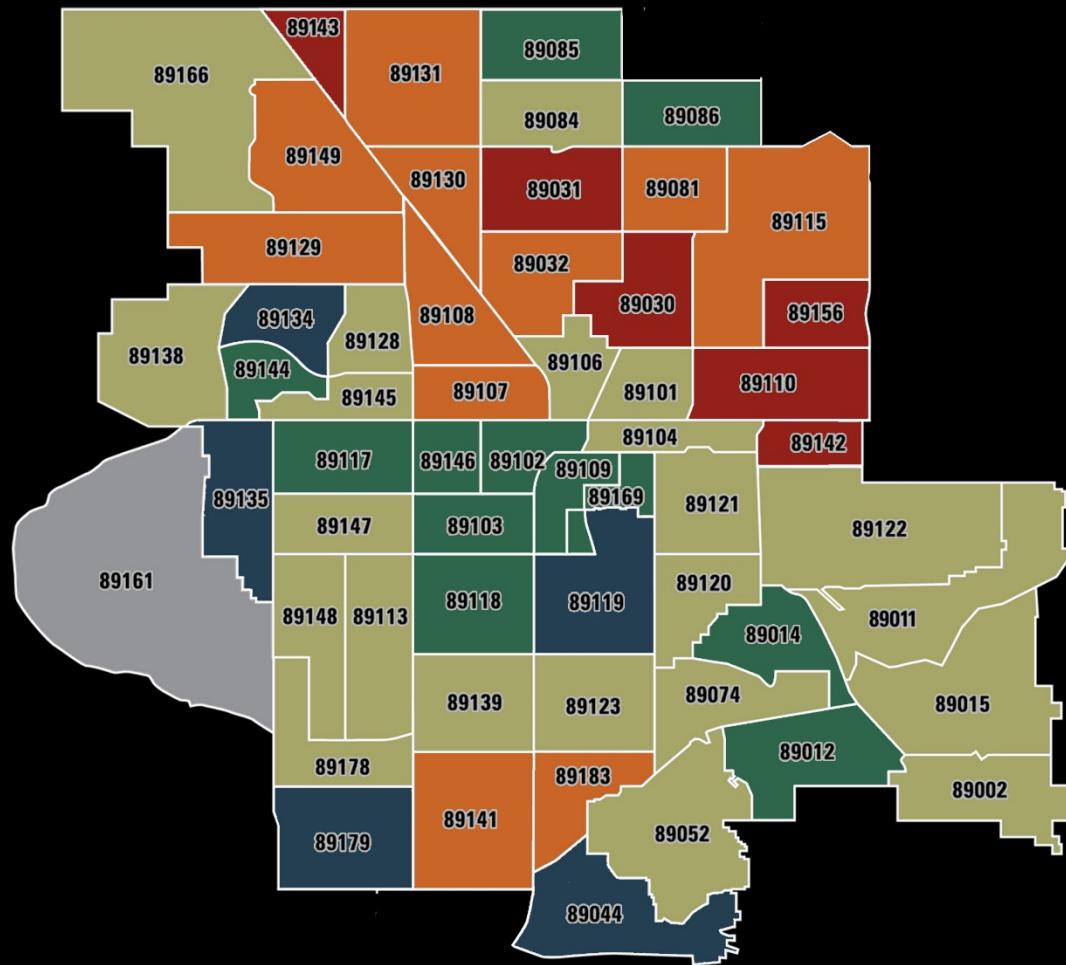


Neighborhood  
Instability

The rate of bank-owned homes per 1,000 housing units fell from 12.1 to 11.5 for the quarter.

# Elements of the NRI

## Bank-Owned Homes | Valley-wide Distribution Map



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



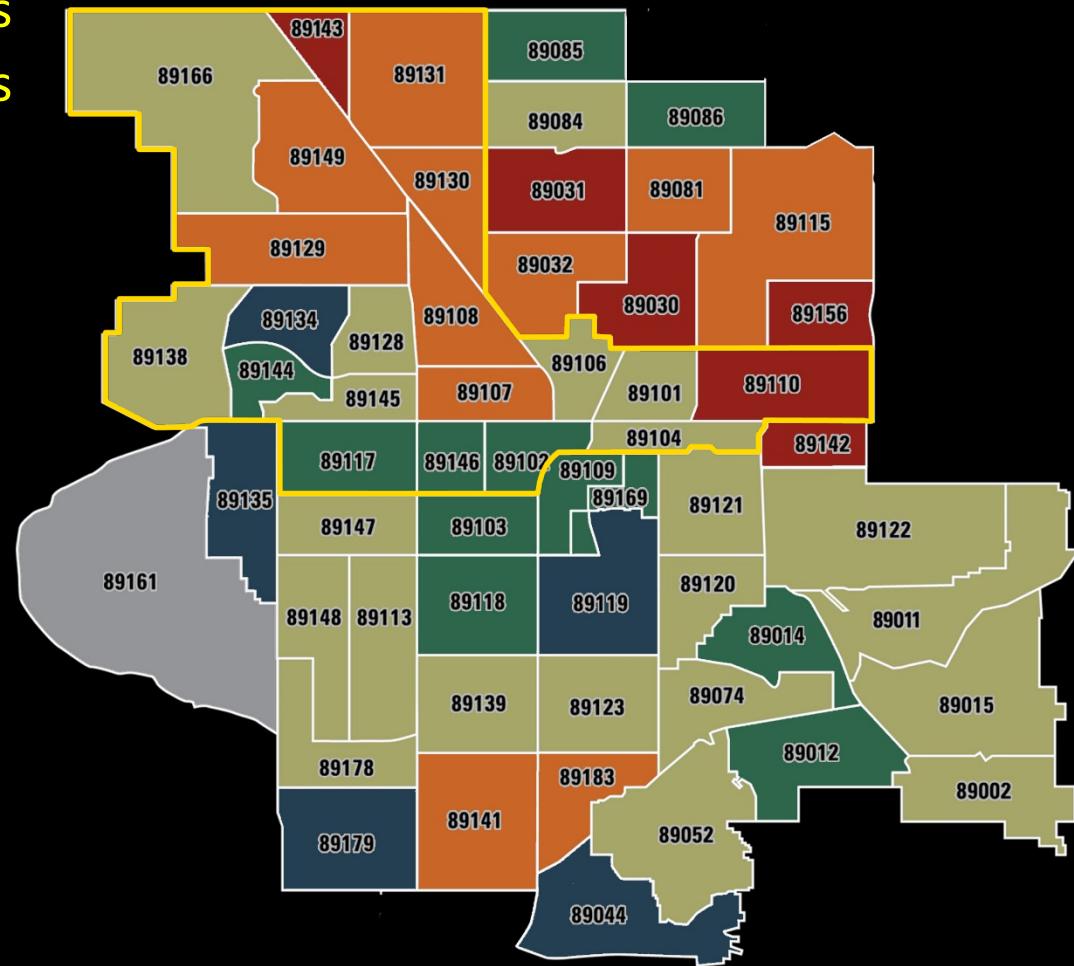
# Elements of the NRI

# Bank-Owned Homes | Valley-wide Distribution Map

# Neighborhood Instability

# City of Las Vegas Zip Codes

**The rate of bank-owned homes per 1,000 housing units fell from 12.1 to 11.5 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	19.2	12.0	160
89110	18.4	12.0	153
89107	16.7	12.0	139
89131	15.2	12.0	126
89108	14.5	12.0	120

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

City of Las Vegas	12.0
Valley-wide	11.5

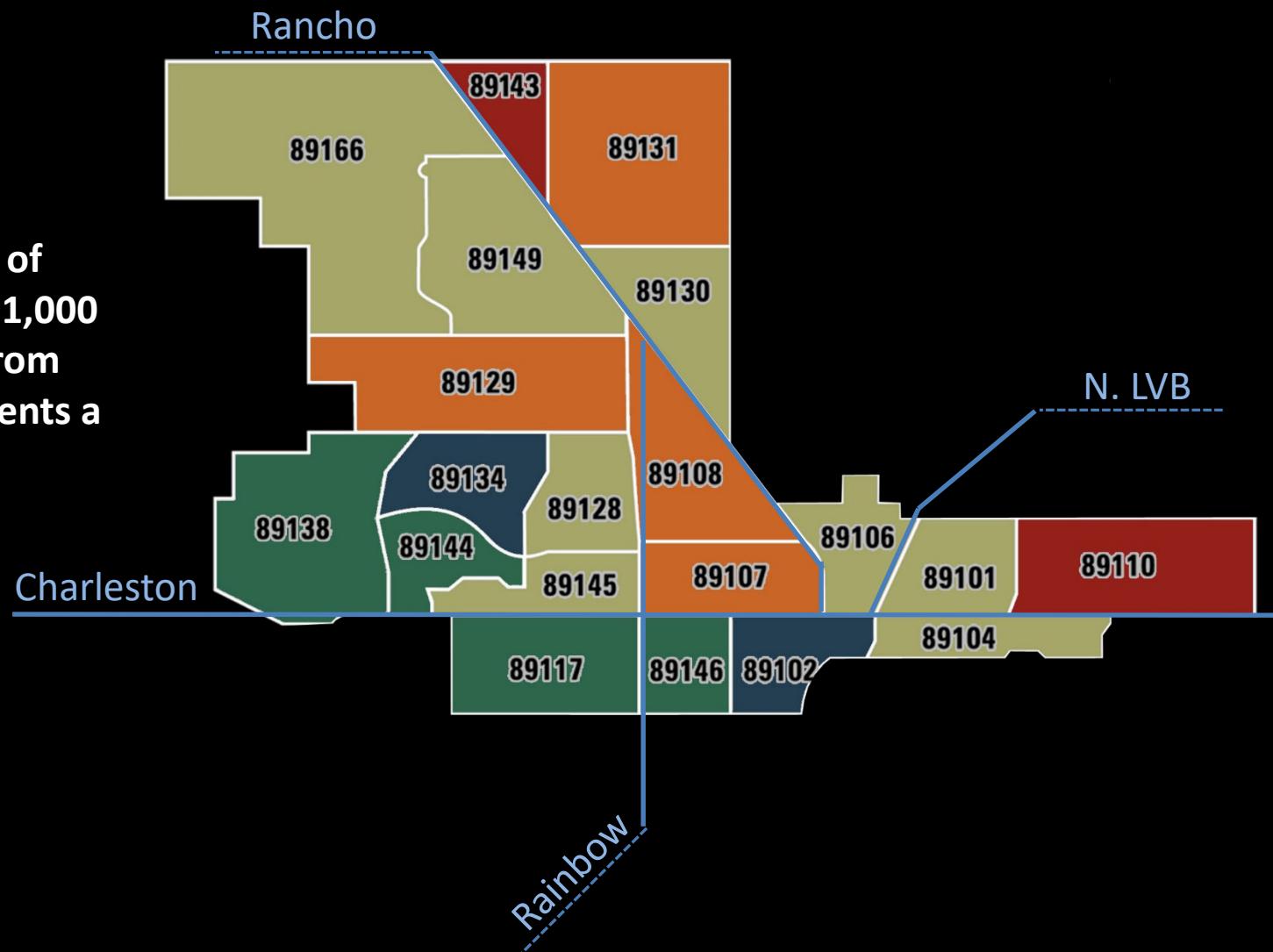


Neighborhood  
Instability

# Elements of the NRI

## Bank-Owned Homes | CLV Distribution Map

Within the City, the rate of bank-owned homes per 1,000 housing units also fell, from 12.6 to 12.0. This represents a decrease of 5 percent.



APPLIED  
ANALYSIS

Neighborhood Economic Risk Assessment



Q4 2017

# Elements of the NRI



## Household Instability



Household  
Instability

# Elements of the NRI

## 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
<b><u>89106</u></b>	<b><u>32.8</u></b>	<b><u>9.4</u></b>	<b><u>348.1</u></b>
89030	29.5	9.4	313.6
89169	23.8	9.4	253.2
89115	23.1	9.4	245.0
<b><u>89101</u></b>	<b><u>22.5</u></b>	<b><u>9.4</u></b>	<b><u>239.1</u></b>
<b><u>89104</u></b>	<b><u>19.5</u></b>	<b><u>9.4</u></b>	<b><u>206.9</u></b>
89119	18.7	9.4	198.5
89109	17.9	9.4	189.8
89086	16.1	9.4	171.3
<b><u>89102</u></b>	<b><u>15.7</u></b>	<b><u>9.4</u></b>	<b><u>166.5</u></b>

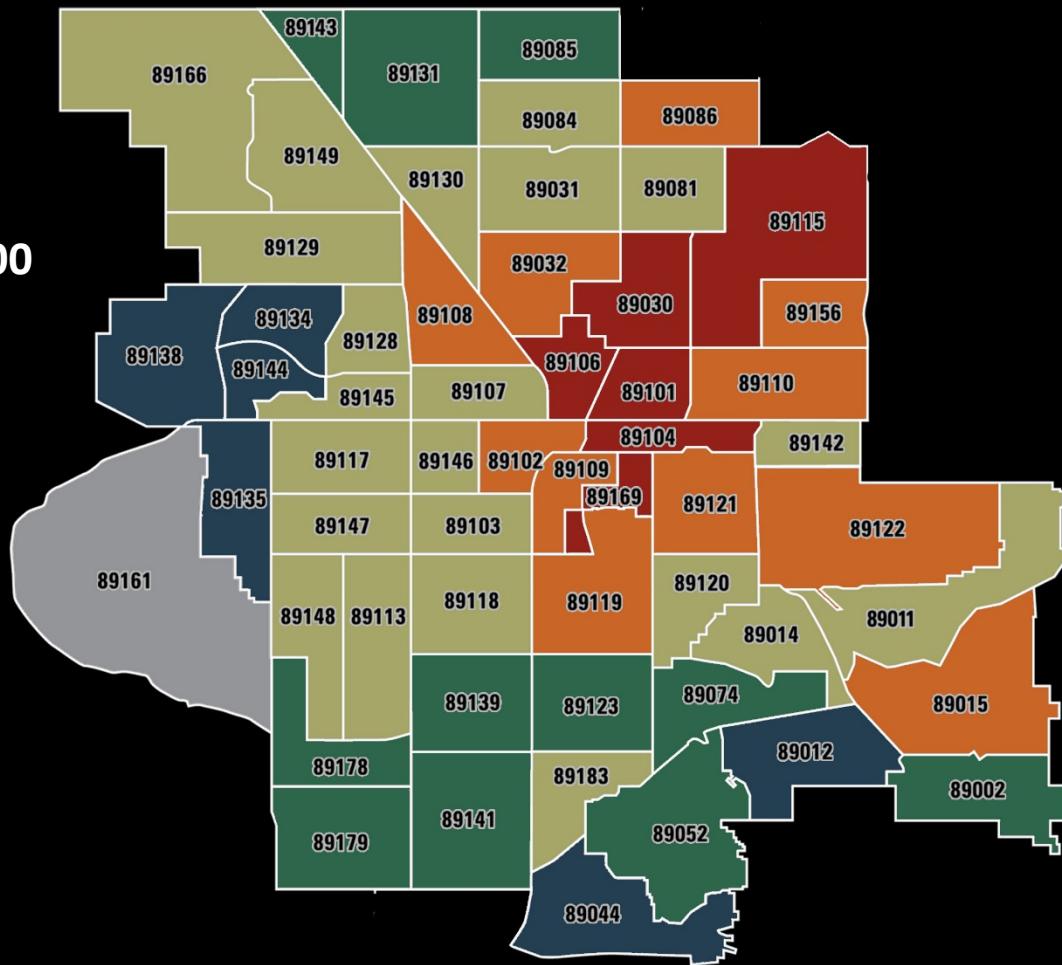


## Household Instability

# Elements of the NRI

## TANF | Valley-wide Distribution Map

The rate of TANF recipients per 1,000 residents rose during the quarter. The rate increased to 9.4 from 8.8 last quarter (up 6.8 percent).



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



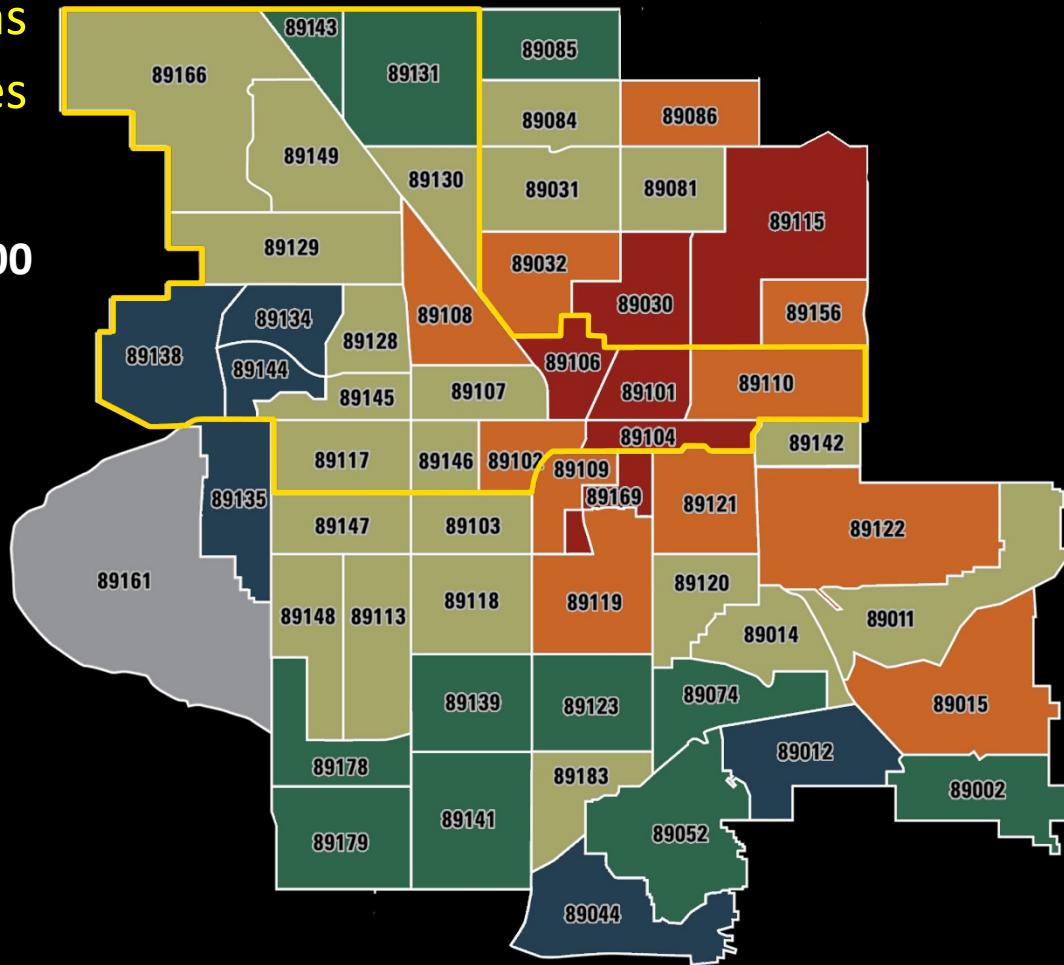
Household  
Instability

# Elements of the NRI

## TANF | Valley-wide Distribution Map

City of Las Vegas  
Zip Codes

The rate of TANF recipients per 1,000 residents rose during the quarter. The rate increased to 9.4 from 8.8 last quarter (up 6.8 percent).



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



Household  
Instability

# 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	32.8	10.0	326
89101	22.5	10.0	224
89104	19.5	10.0	194
89102	15.7	10.0	156
89110	13.8	10.0	137

Mean TANF recipients per 1,000 residents:

City of Las Vegas	10.0
Valley-wide	9.4

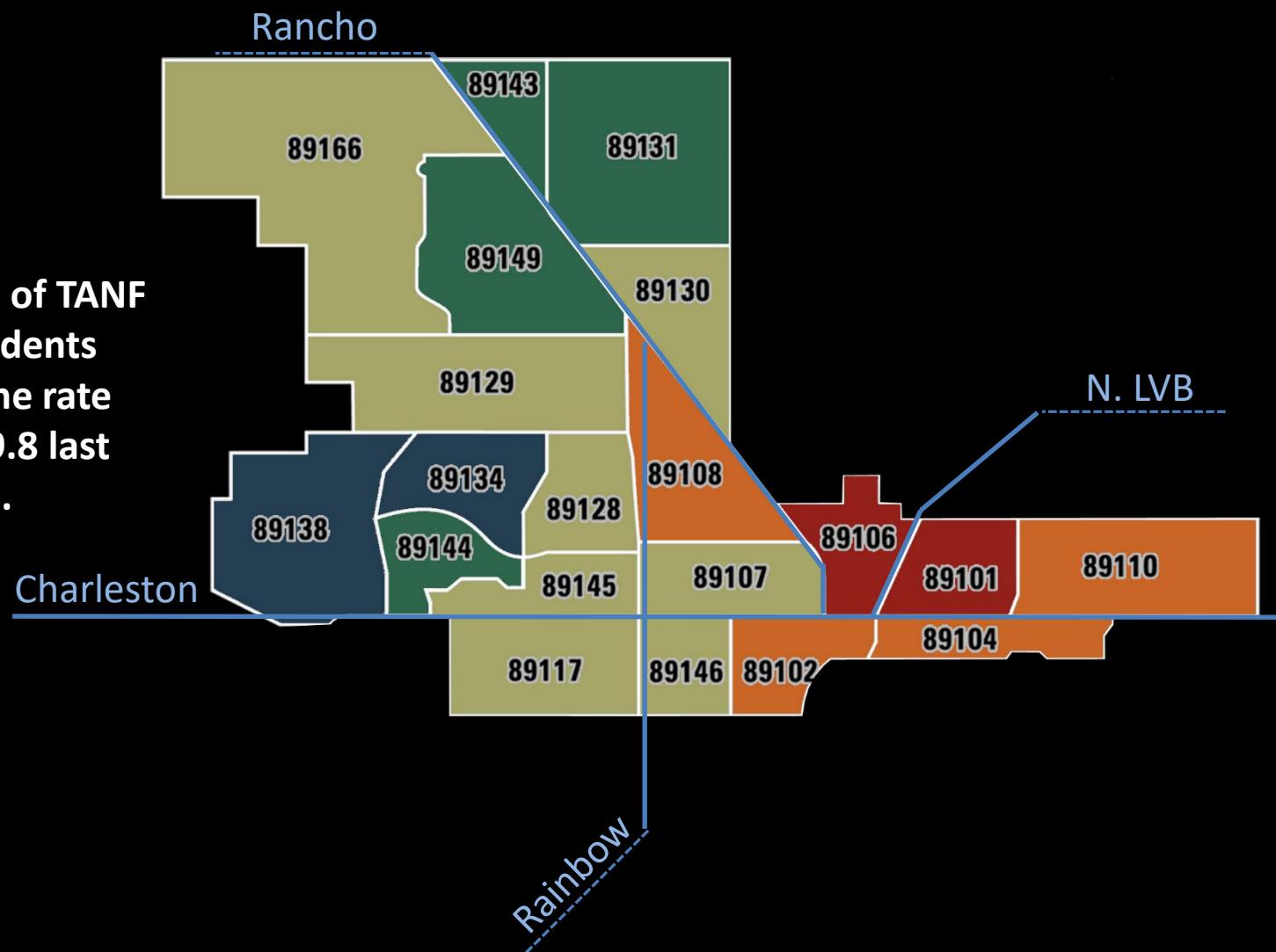


Household  
Instability

# Elements of the NRI

## TANF | CLV Distribution Map

Within the City, the rate of TANF recipients per 1,000 residents also rose this quarter. The rate increased to 10.0 from 9.8 last quarter (up 2.0 percent).





Household  
Instability

# 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
<b>89106</b>	<b>439.6</b>	<b>157.6</b>	<b>279.0</b>
89030	376.5	157.6	239.0
<b>89101</b>	<b>356.4</b>	<b>157.6</b>	<b>226.2</b>
<b>89104</b>	<b>320.0</b>	<b>157.6</b>	<b>203.1</b>
89169	317.9	157.6	201.8
89109	297.8	157.6	189.0
89115	285.6	157.6	181.3
<b>89102</b>	<b>270.8</b>	<b>157.6</b>	<b>171.9</b>
89119	258.3	157.6	164.0
89121	230.2	157.6	146.1

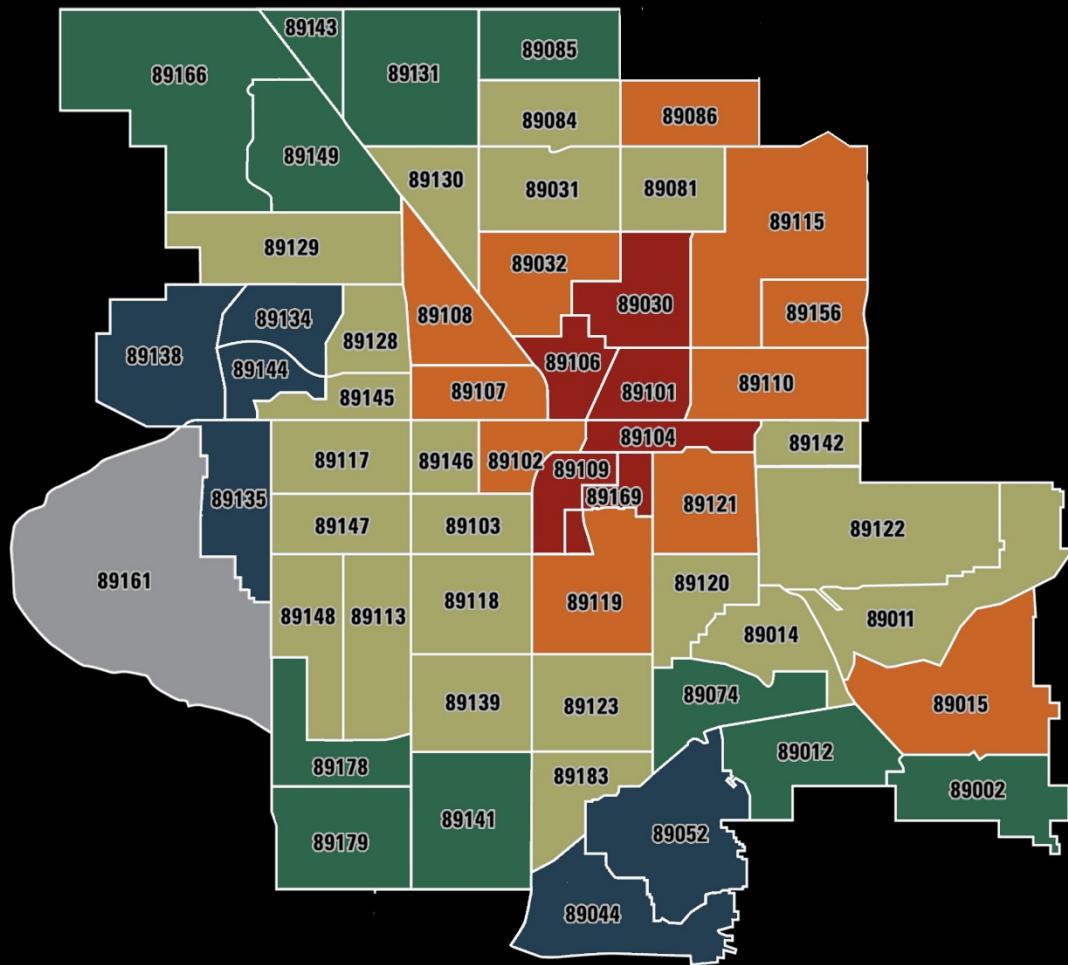


## Household Instability

The rate of SNAP recipients per 1,000 residents increased to 157.6 from 156.6 last quarter (up 0.6 percent).

# Elements of the NRI

## SNAP | Valley-wide Distribution Map



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



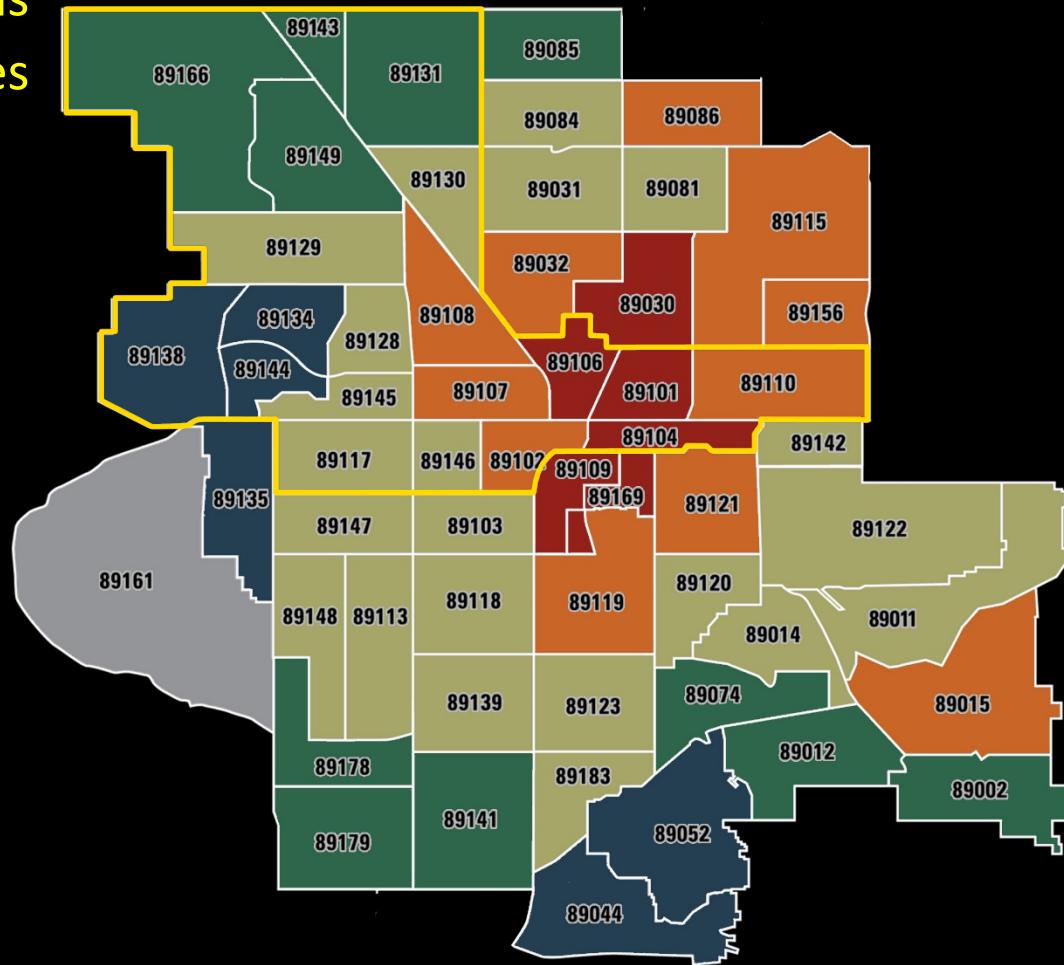
## Household Instability

# Elements of the NRI

## SNAP | Valley-wide Distribution Map

### City of Las Vegas Zip Codes

The rate of SNAP recipients per 1,000 residents increased to 157.6 from 156.6 last quarter (up 0.6 percent).



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



# Elements of the NRI

## SNAP | CLV Summary Data

Household  
Instability

### 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	439.6	170.1	259
89101	356.4	170.1	210
89104	320.0	170.1	188
89102	270.8	170.1	159
89107	221.1	170.1	130

Mean SNAP recipients per 1,000 residents:

City of Las Vegas	170.1
Valley-wide	157.6

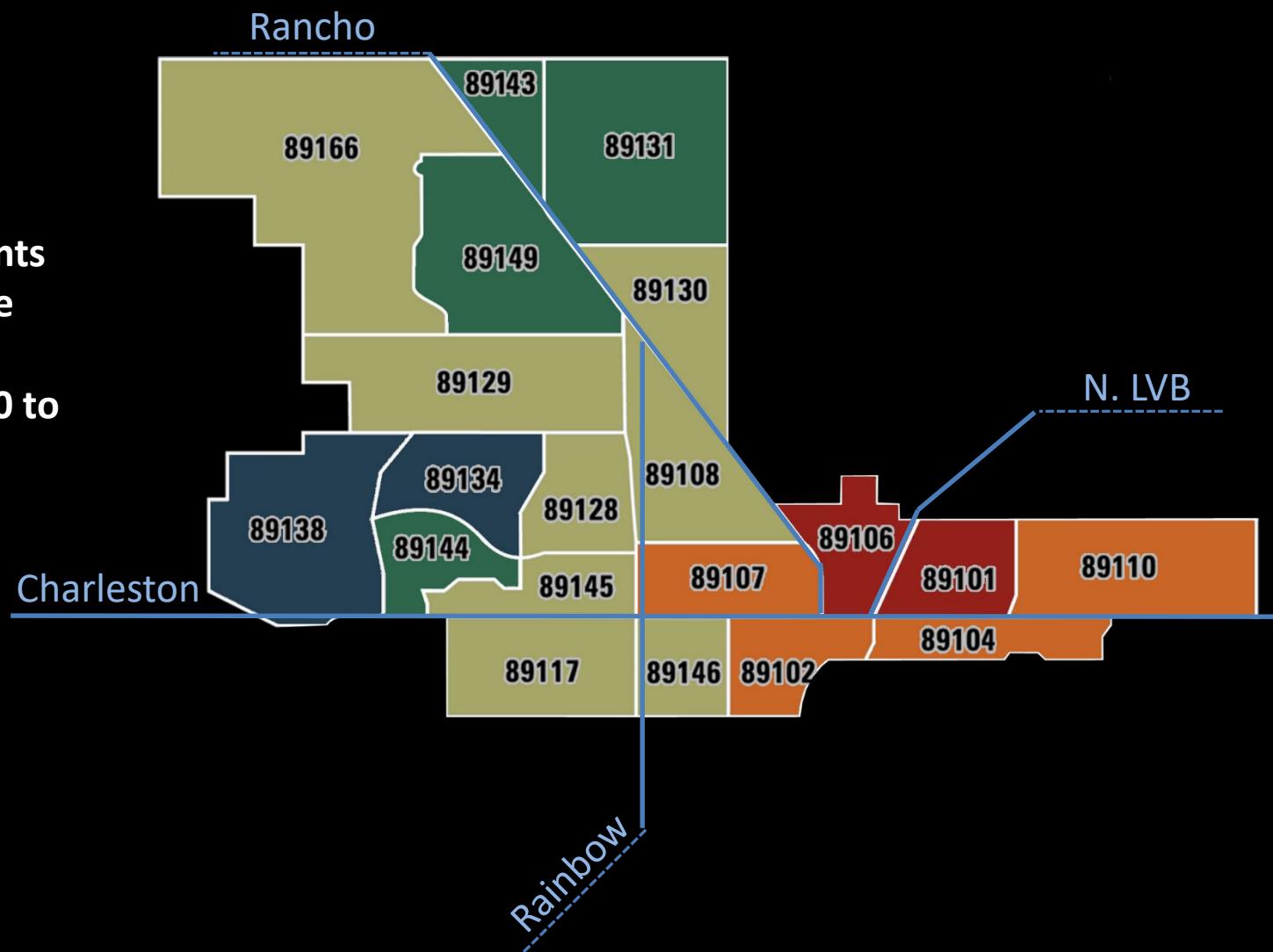


Household  
Instability

# Elements of the NRI

## SNAP | CLV Distribution Map

The rate of SNAP recipients per 1,000 residents in the city increased during the quarter, rising from 169.0 to 170.1 (up 0.7 percent).





Household  
Instability

# Elements of the NRI

## Medicaid | Valley-wide Summary Data

### Top 10 Zip Codes

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

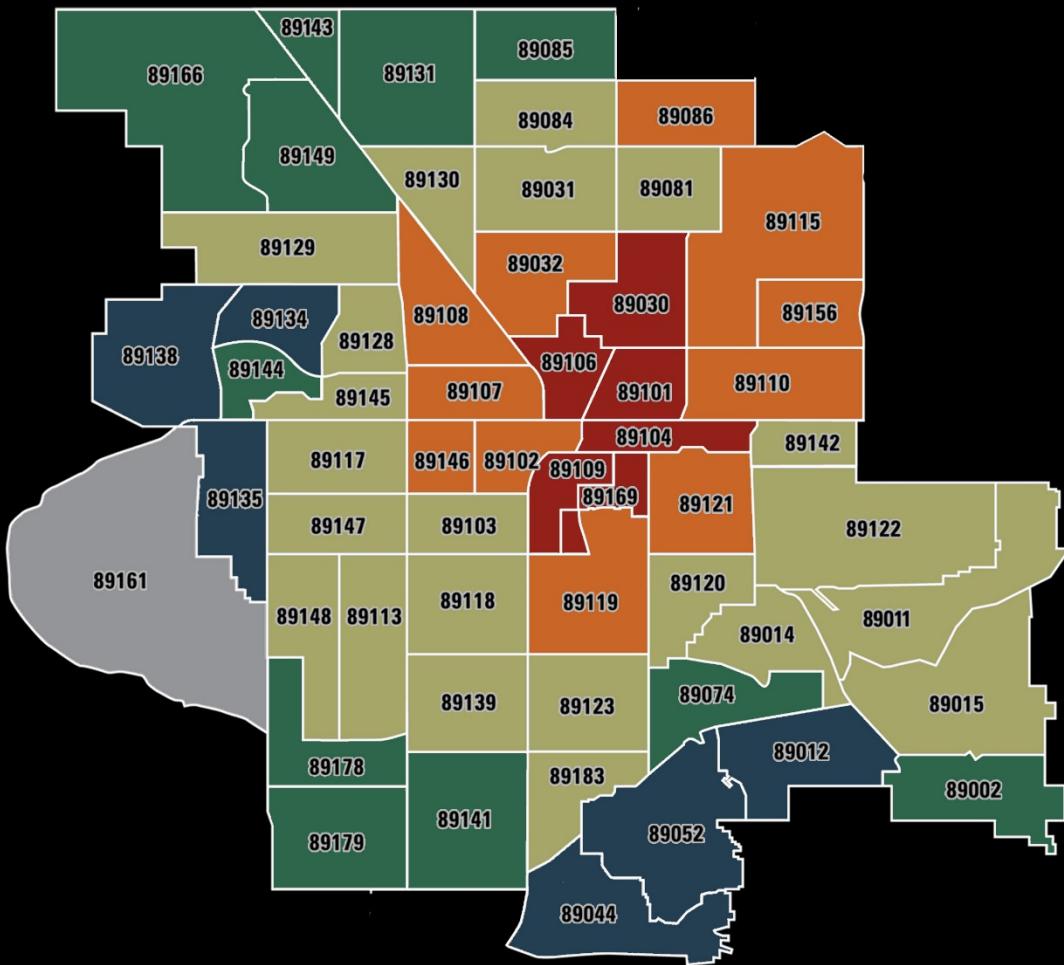
Zip Codes	Medicaid Recipients (per 1,000 POP)	Valley-wide Mean (per 1,000 POP)	Medicaid Recipients Index Value
<b>89106</b>	<b>582.3</b>	<b>237.6</b>	<b>245.1</b>
89030	531.3	237.6	223.6
<b>89101</b>	<b>489.6</b>	<b>237.6</b>	<b>206.0</b>
<b>89104</b>	<b>453.8</b>	<b>237.6</b>	<b>191.0</b>
89109	423.8	237.6	178.4
89169	405.8	237.6	170.8
89115	391.0	237.6	164.6
<b>89102</b>	<b>380.5</b>	<b>237.6</b>	<b>160.1</b>
89119	351.2	237.6	147.8
89156	339.2	237.6	142.7



## Household Instability

The rate of Medicaid recipients per 1,000 residents continued to increase. The rate rose slightly to 237.6 from 235.7 last quarter (up 0.8 percent).

# Elements of the NRI Medicaid | Valley-wide Distribution Map



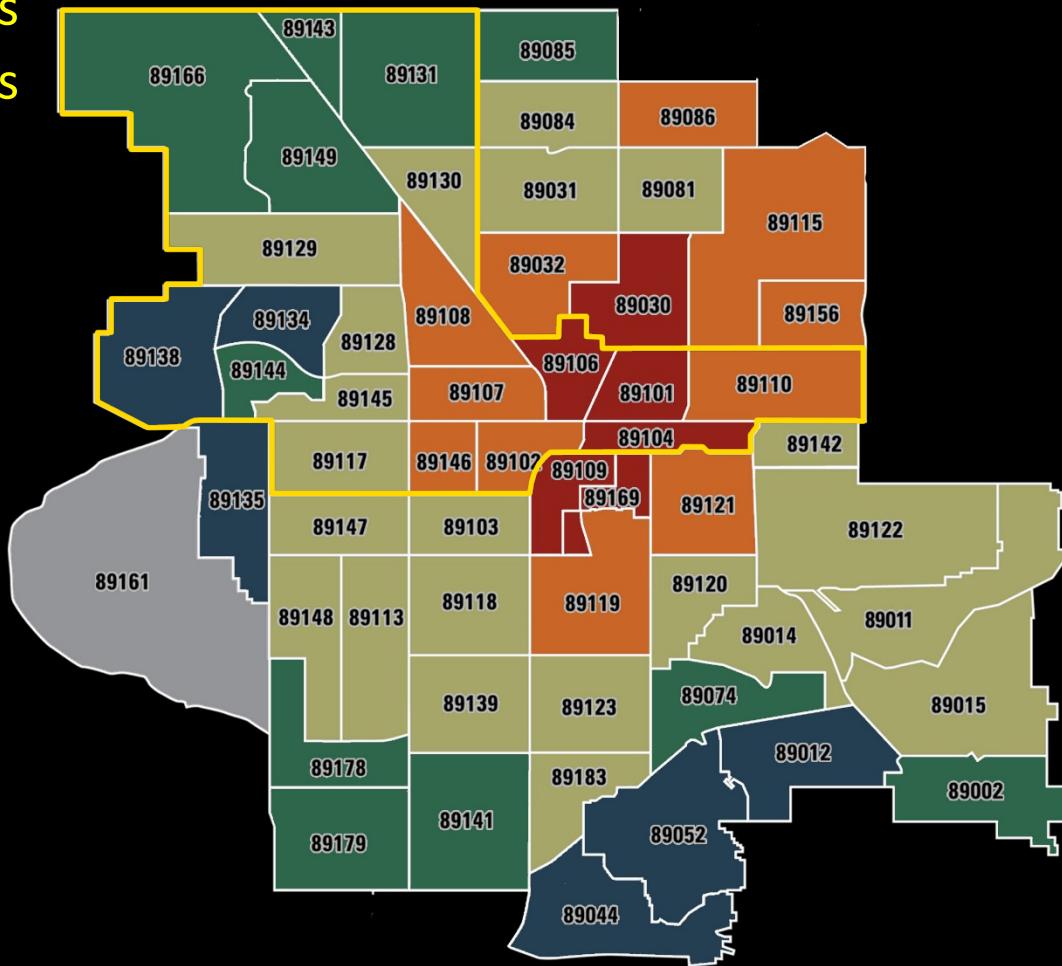
- Low
- Medium-Low
- Medium
- Medium-High
- High



## Household Instability

The rate of Medicaid recipients per 1,000 residents continued to increase. The rate rose slightly to 237.6 from 235.7 last quarter (up 0.8 percent).

### City of Las Vegas Zip Codes



# Elements of the NRI

## Medicaid | Valley-wide Distribution Map



# Elements of the NRI

## Medicaid | CLV Summary Data

Household  
Instability

### 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	582.3	256.1	227
89101	489.6	256.1	191
89104	453.8	256.1	177
89102	380.5	256.1	149
89107	337.8	256.1	132

Mean Medicaid recipients per 1,000 residents:

City of Las Vegas      256.1  
Valley-wide            237.6

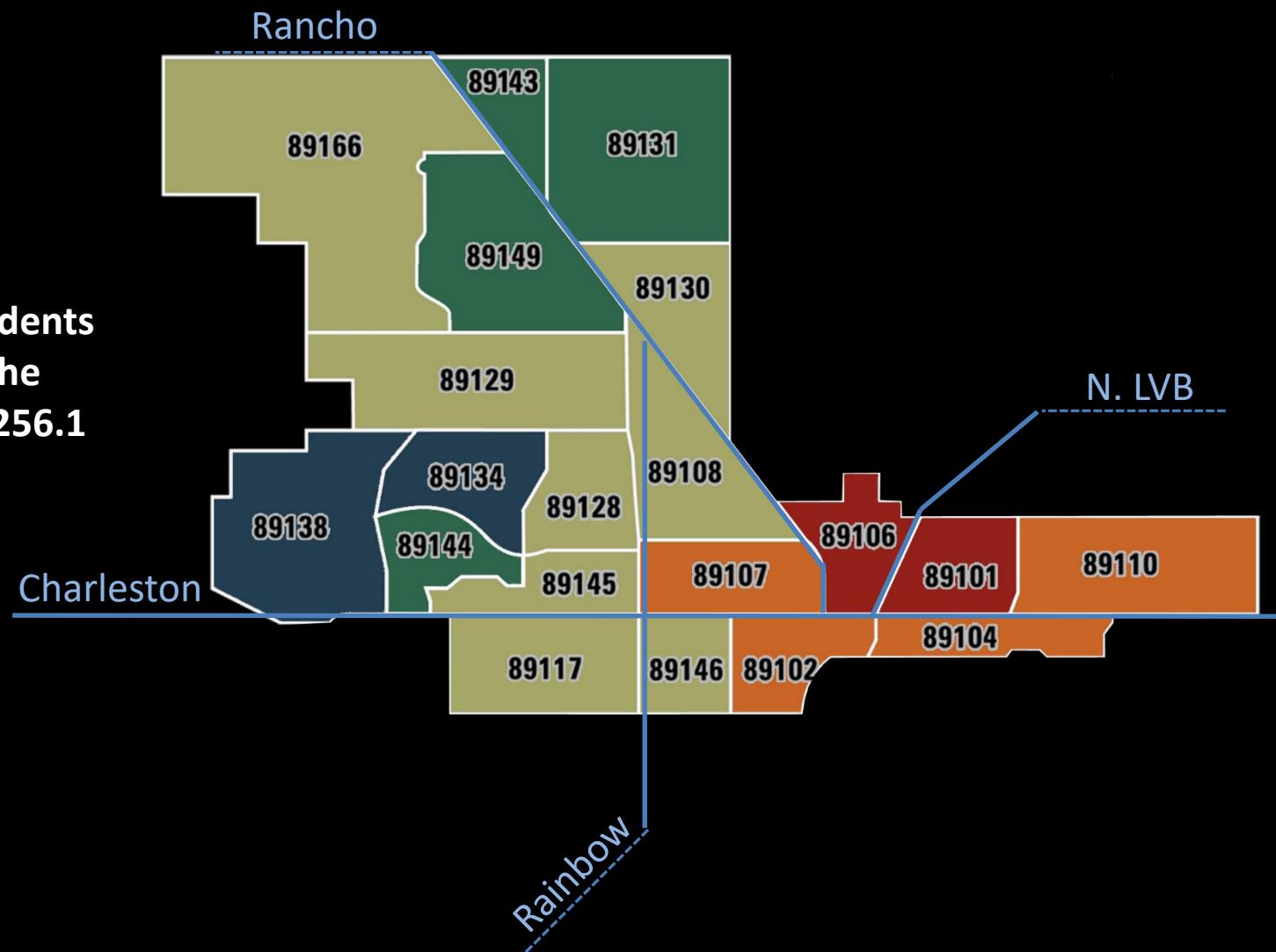


## Household Instability

The rate of Medicaid recipients per 1,000 residents continued to increase. The rate rose from 254.1 to 256.1 this quarter.

# Elements of the NRI

## Medicaid | CLV Distribution Map



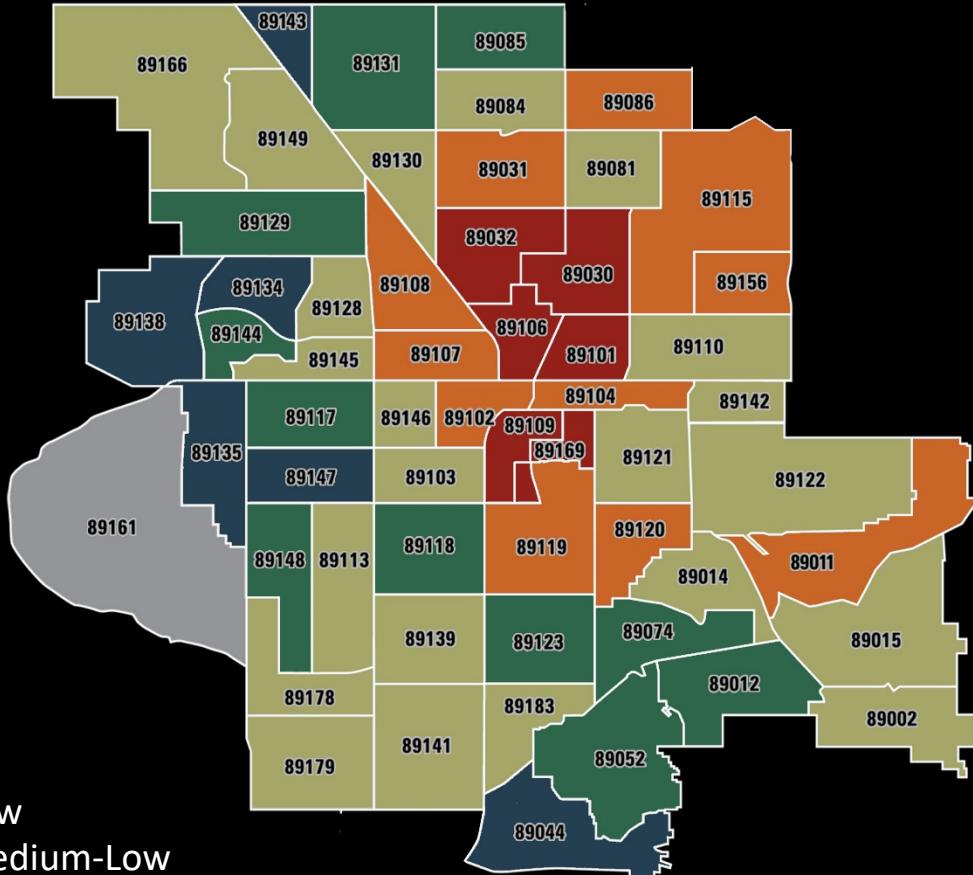
# Elements of the NRI



## Composite Risk



## Composite Risk



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

# Elements of the NRI

## Composite Risk | Valley-wide Distribution Map

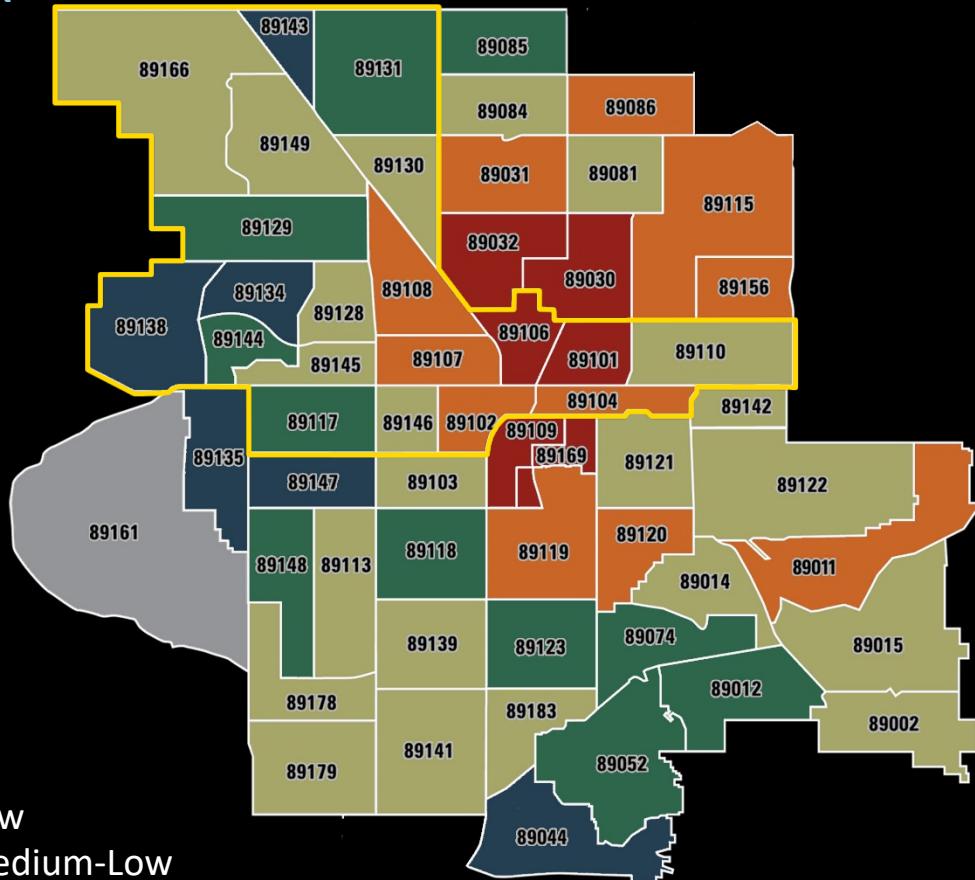
89015	89156	89011	89081	89128	89178	89120	89117	89149	89129	89014	89119	89139	89183	
89106	89123	89147	89032	89130	89114	89121	89122	89131	89118	89145	89141	89121	89142	89166
89032	89130	89104	89109	89169	89120	89011	89110	89113	89146	89144	89109	89110	89113	89144
89030	89107	89106	89109	89169	89120	89011	89110	89104	89074	89135	89108	89104	89084	89135
89101	89101	89104	89109	89169	89120	89011	89110	89102	89131	89134	89031	89122	89118	89134
89115	89115	89110	89119	89169	89121	89012	89112	89102	89002	89143	89101	89107	89086	89085
89052	89052	89002	89052	89044	89012	89052	89052	89052	89052	89138	89115	89103	89044	89138
										High	Medium-	Medium-	Medium-	Low
										High	High	High	High	Low



# Elements of the NRI

## Composite Risk | Valley-wide Distribution Map

Composite  
Risk

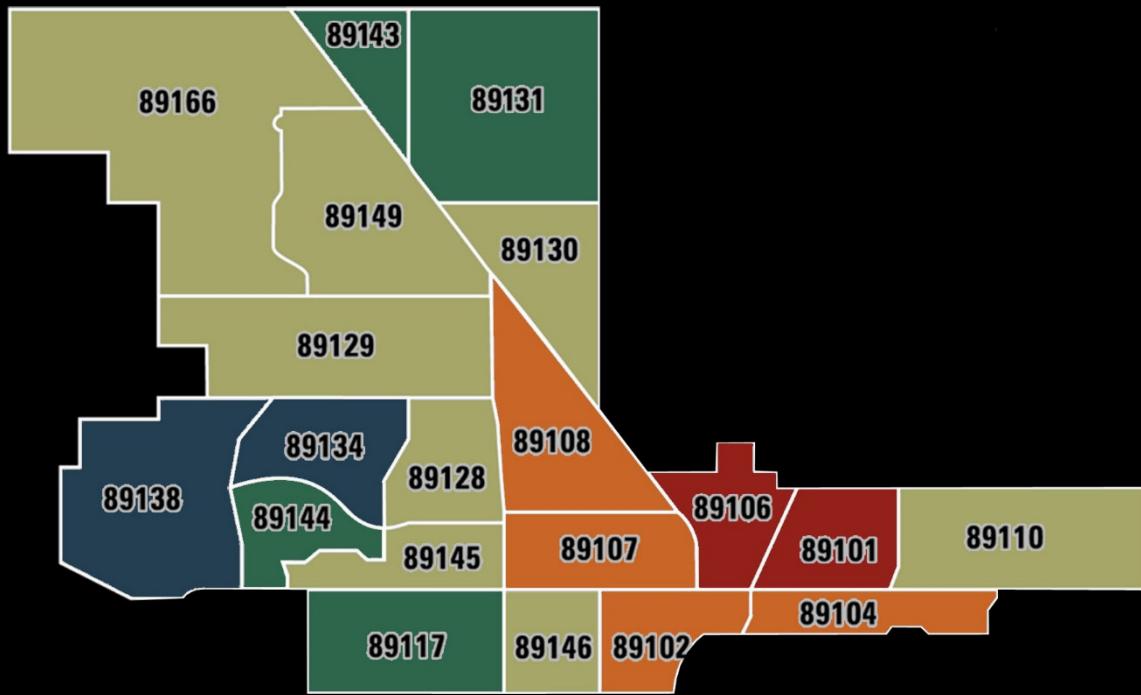


City of Las Vegas zip codes in **bold**

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



Composite  
Risk



# Elements of the NRI

## Composite Risk | CLV Distribution Map

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

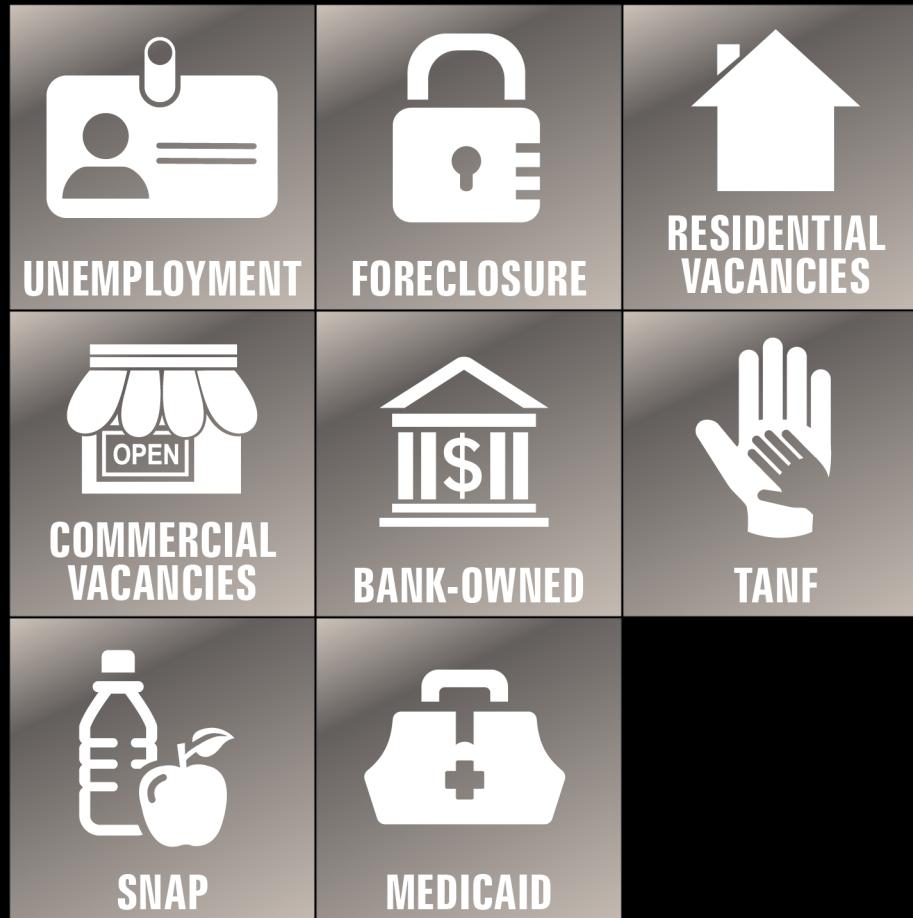
- Low
- Medium-Low
- Medium
- Medium-High
- High

# **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).
- 2) 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)
89109	3,334	614.0	100.0
<b><u>89108</u></b>	<b><u>28,054</u></b>	<b><u>192.0</u></b>	<b><u>34.4</u></b>
89031	22,159	188.2	34.7
89030	13,956	181.5	36.4
<b><u>89101</u></b>	<b><u>14,543</u></b>	<b><u>181.5</u></b>	<b><u>34.5</u></b>
89115	20,021	180.5	34.8
89119	20,345	178.2	33.3
<b><u>89106</u></b>	<b><u>8,998</u></b>	<b><u>175.2</u></b>	<b><u>35.9</u></b>
89032	14,751	169.9	33.4
89169	10,766	166.5	33.3

# 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

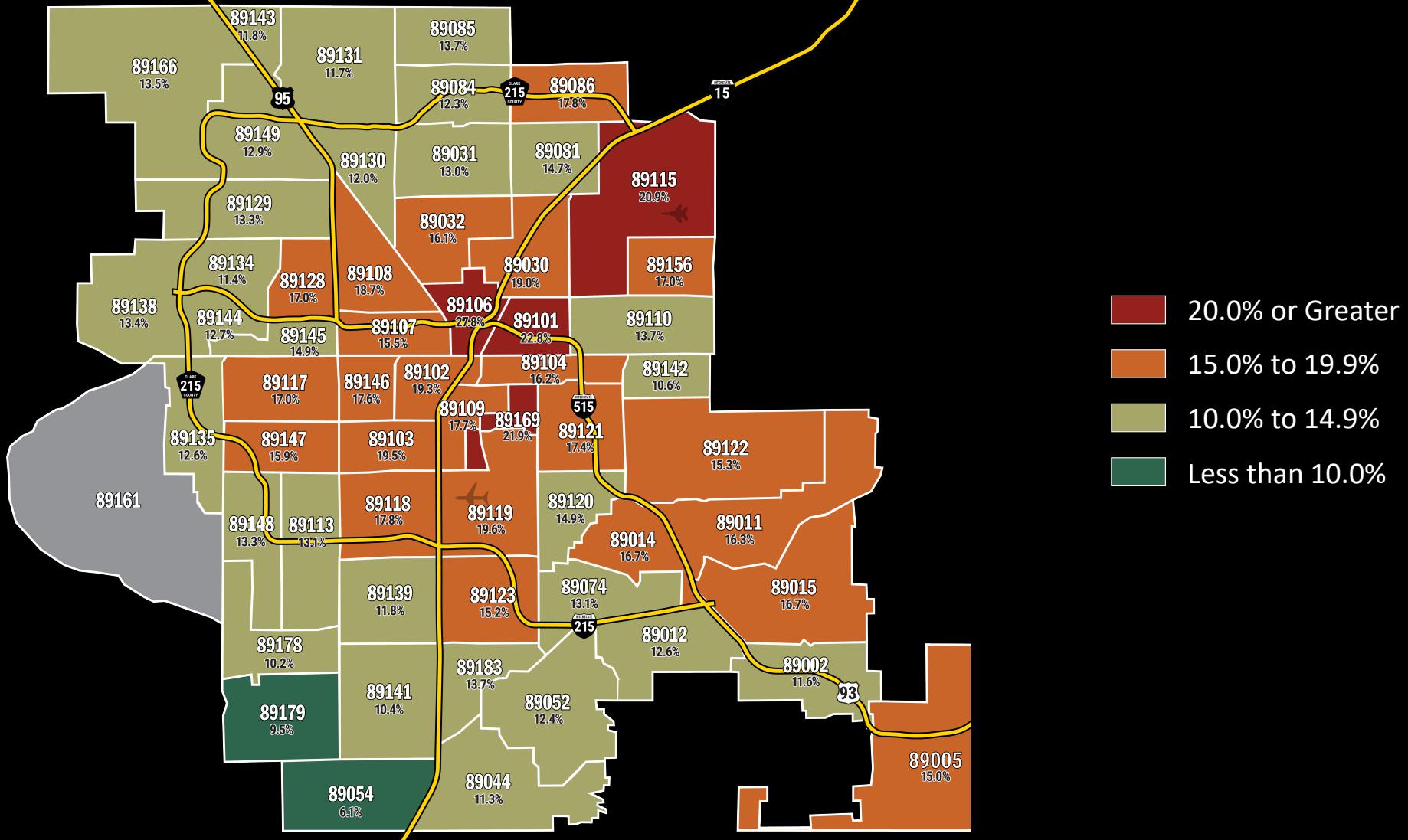
Zip Codes	Occupied Housing Units	Composite Risk (Factor Weighted Average)	Neighborhood Risk Index (NRI)
89108	28,054	201	100
89101	14,543	185	96
89106	8,998	177	100
89110	22,555	166	82
89104	12,625	163	89

# Additional Considerations

Neighborhood Economic Risk Assessment

# Alternative Measures of Risk

## Food Insecurity



Note: Based on 2016 data.



APPLIED  
ANALYSIS

## Neighborhood Economic Risk Assessment

Q4 2017

# Neighborhood Economic Risk Assessment

City of Las Vegas

Q4 2017

