

Neighborhood Economic Risk Assessment

City of Las Vegas

Q2 2018



APPLIED
ANALYSIS



July 2, 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 second 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 Agüero or Brian Gordon at (702) 967-3333.

Sincerely,


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

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

[illegible]

Methodology of the NRI

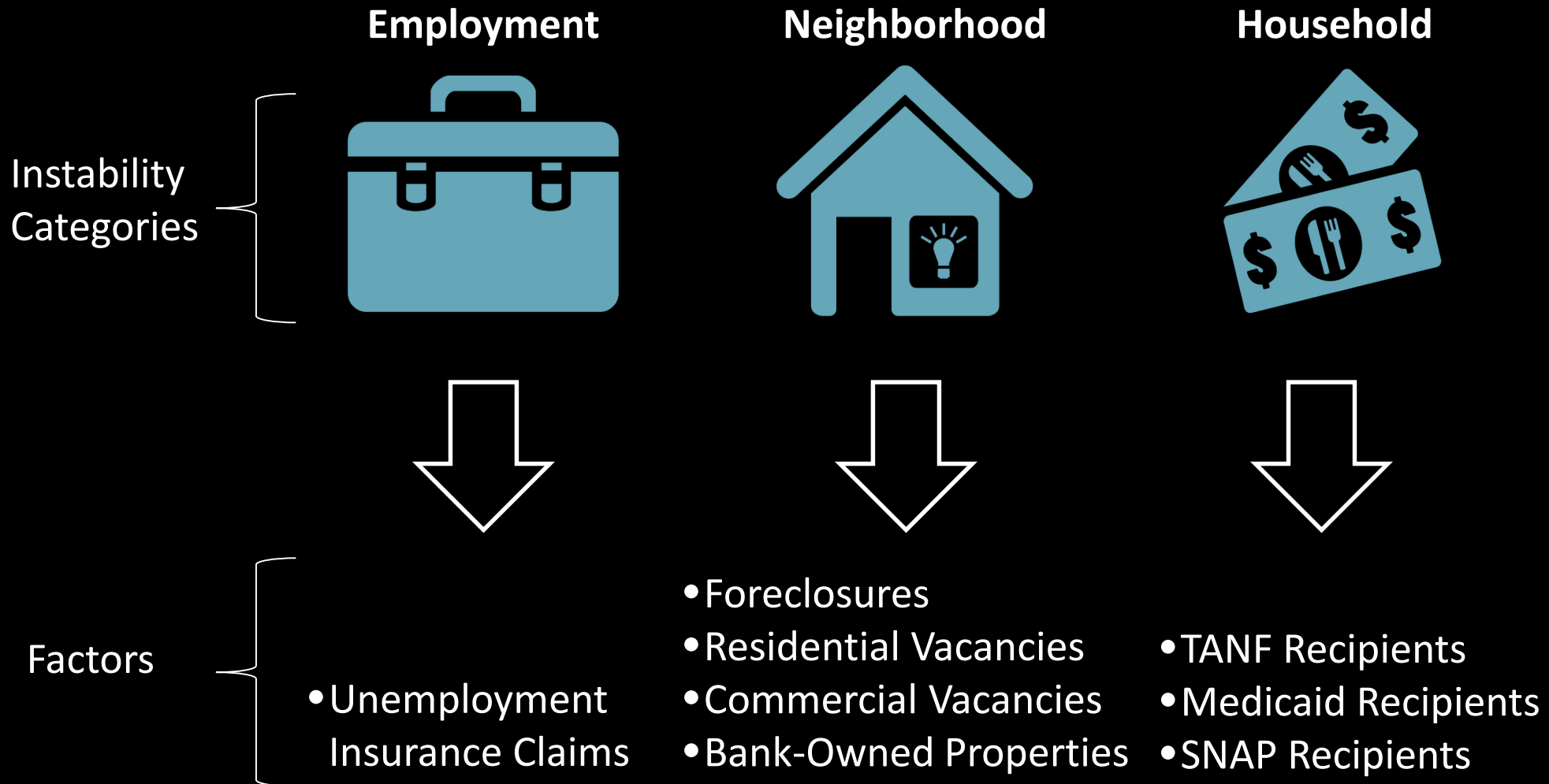
Objective: The City of Las Vegas is seeking to use economic and social data to identify sub-regions within the City at a heightened risk for long-term instability

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

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

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

³ 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 appropriate¹; 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

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

¹Commercial 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%
		Foreclosures	25.0%
 Neighborhood Instability	50%	Residential Vacancies	8.3%
		Commercial Vacancies	8.3%
		Bank-Owned Properties	8.3%

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



Composite Risk

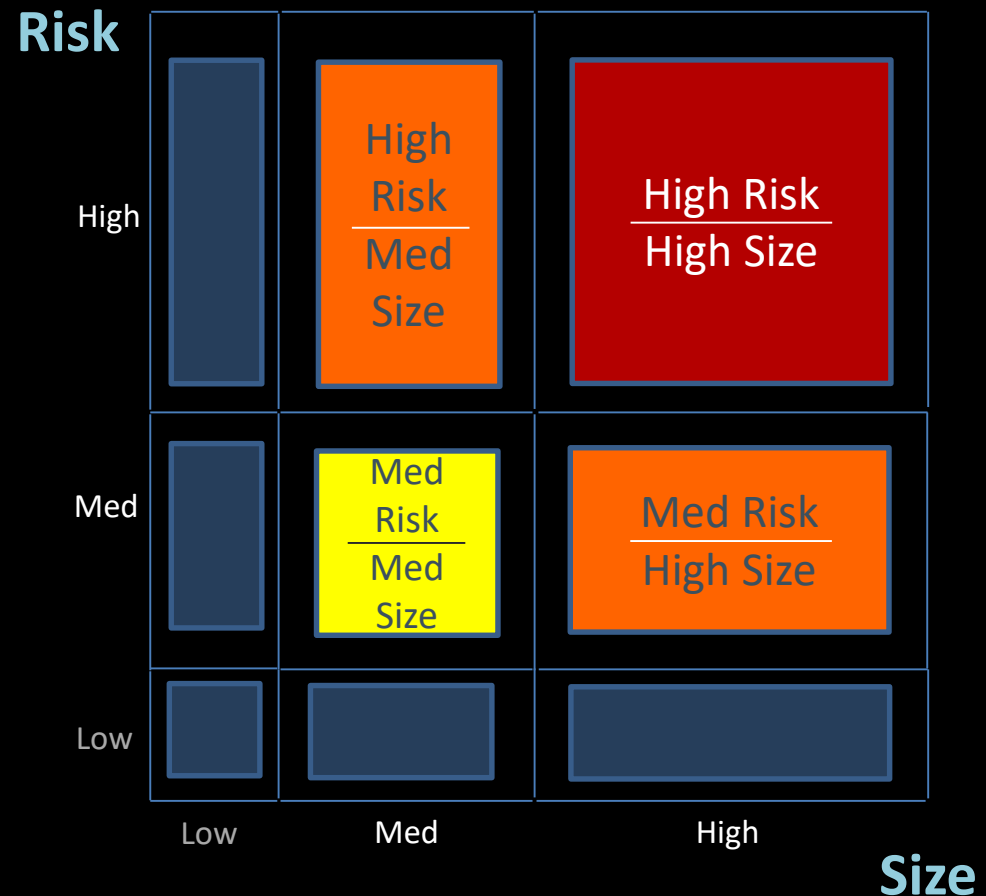
Methodology of the NRI

Relativity and Composite Risk

GOAL

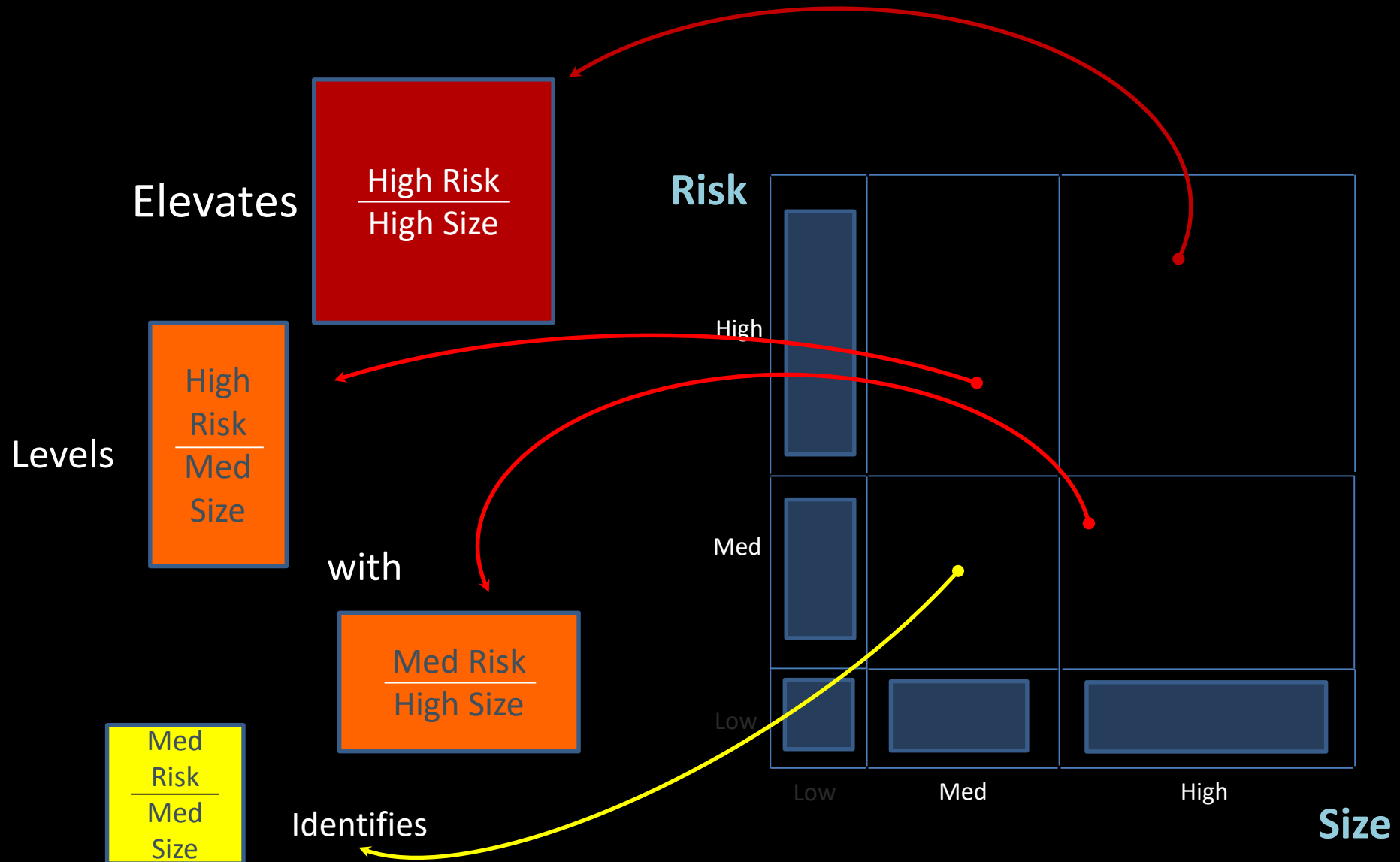
*Focus the City's efforts,
making the best use of limited
resources*

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



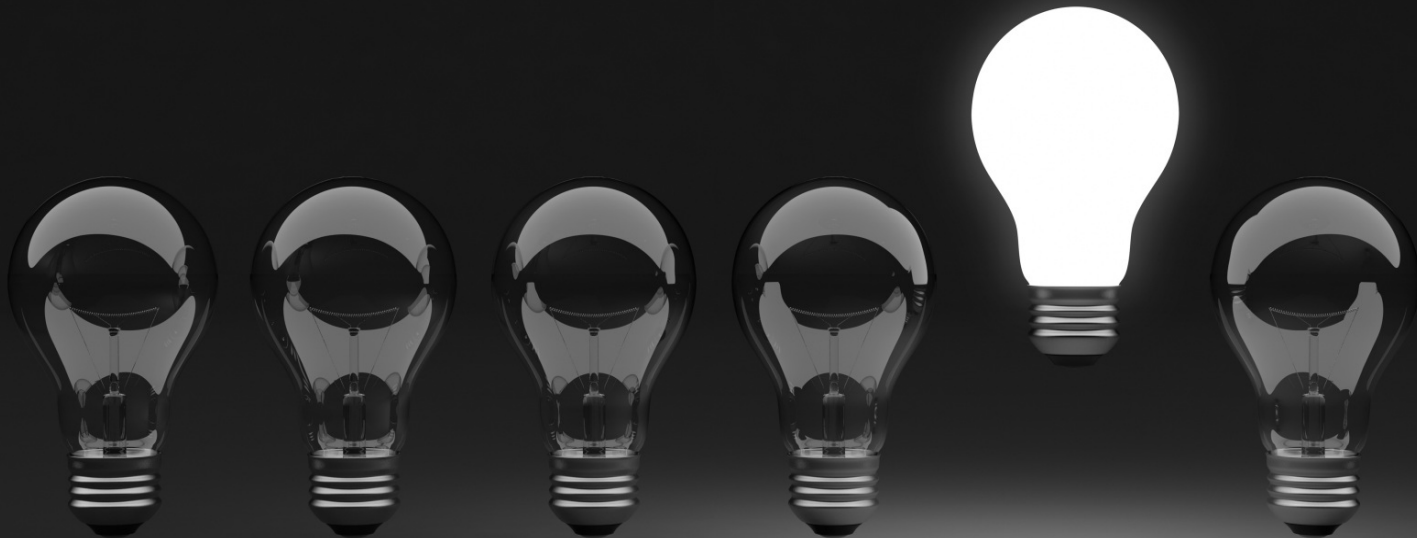
Methodology of the NRI

Relativity and Composite Risk



summary

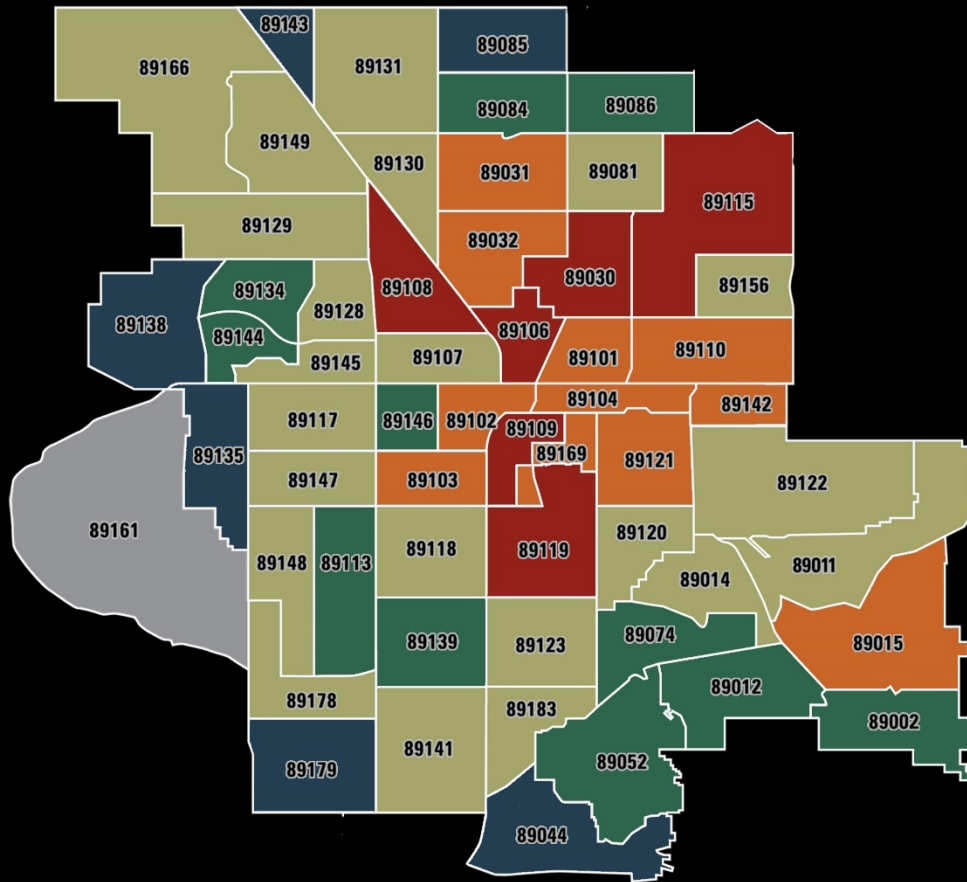
: an abstract, abridgment or
compendium especially of a preceding
discourse



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

Summary

Valley-wide NRI



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

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



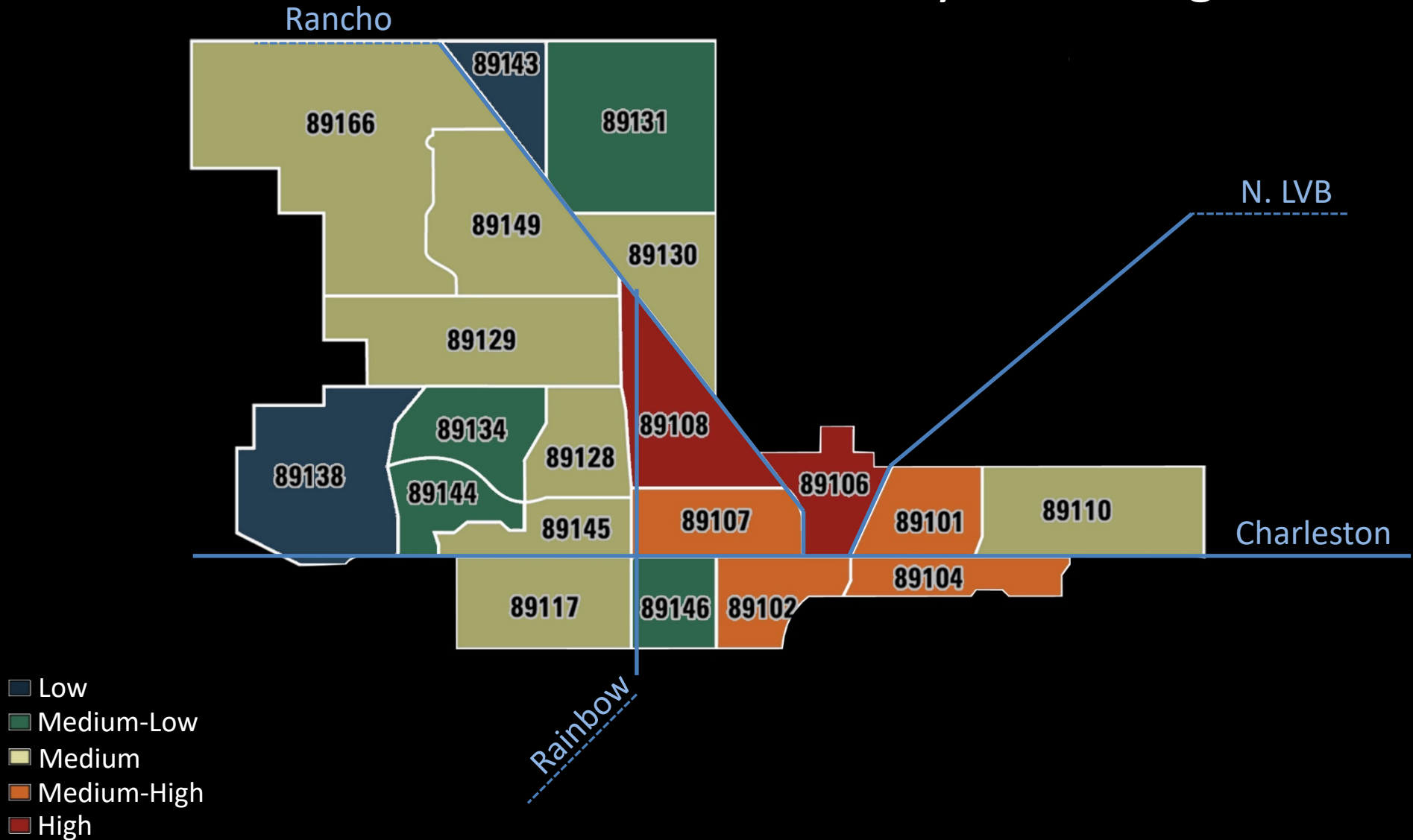
		<u>89107</u>		
		89122		
		89011		
		89156		
		<u>89129</u>		
		<u>89130</u>		
		<u>89117</u>		
		89147		
		<u>89128</u>		
		89148		
		89183		
	89169	89014	89113	
	<u>89102</u>	<u>89145</u>	89139	
	<u>89104</u>	89118	89002	
	89015	89123	<u>89146</u>	
	<u>89101</u>	<u>89149</u>	89074	
89109	89121	89081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

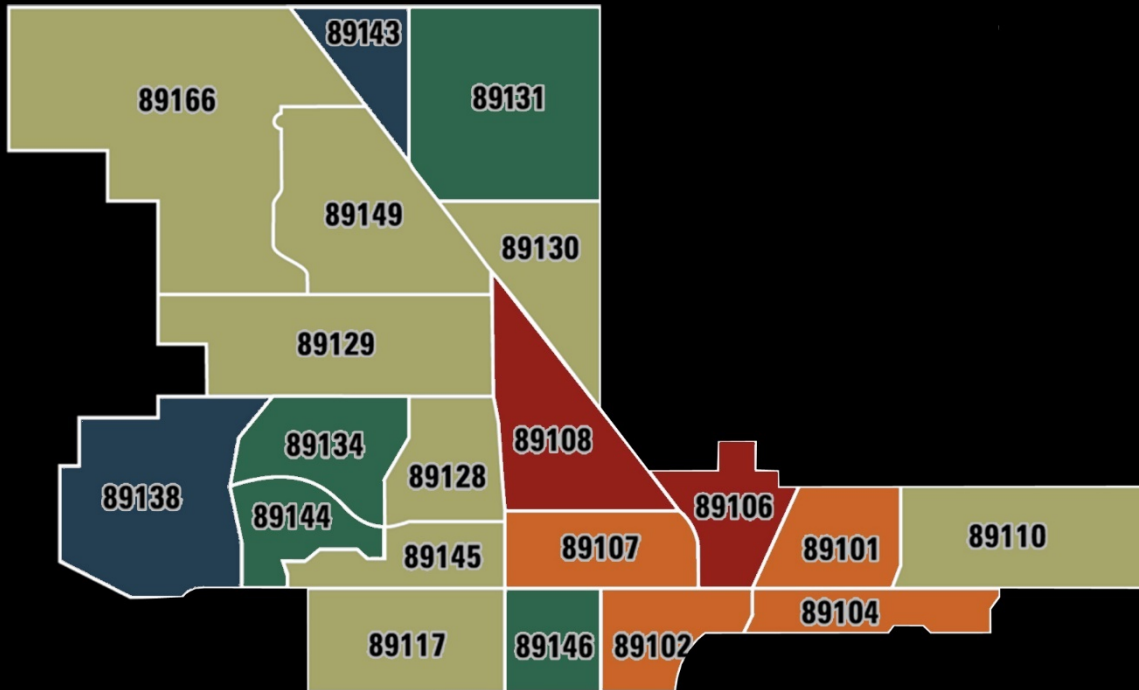
Summary

City of Las Vegas NRI



Summary

City of Las Vegas NRI

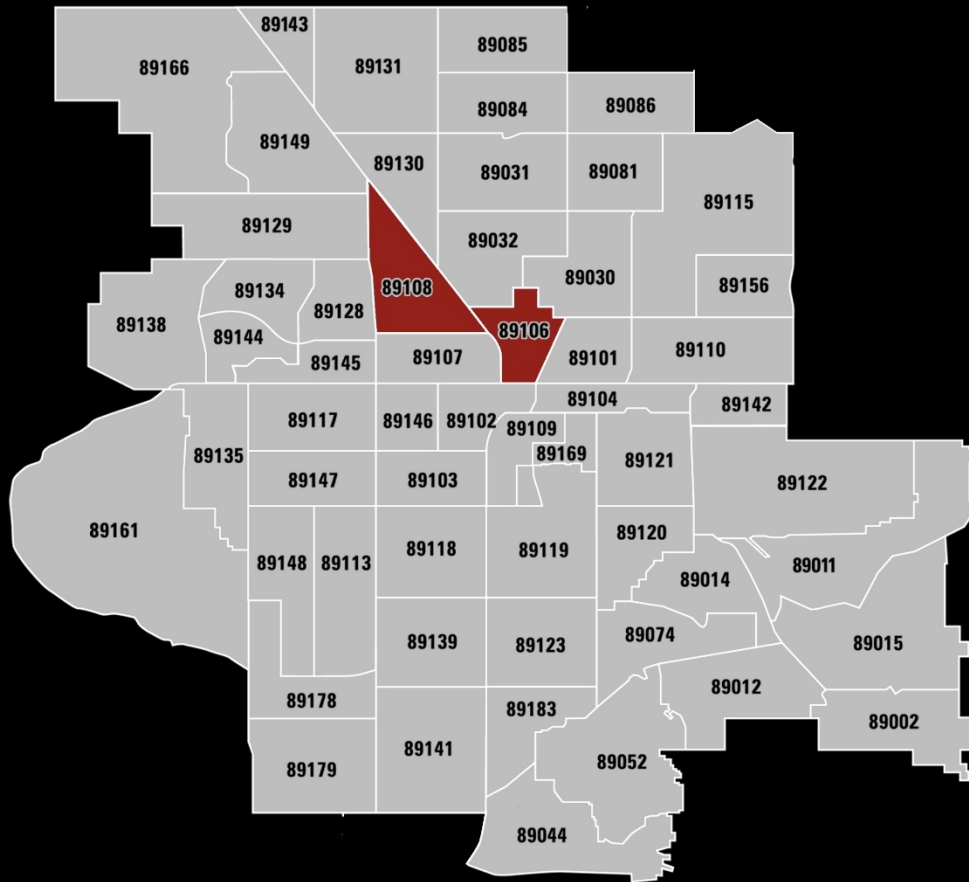


- Low
- Medium-Low
- Medium
- Medium-High
- High

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

Summary

City of Las Vegas NRI



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

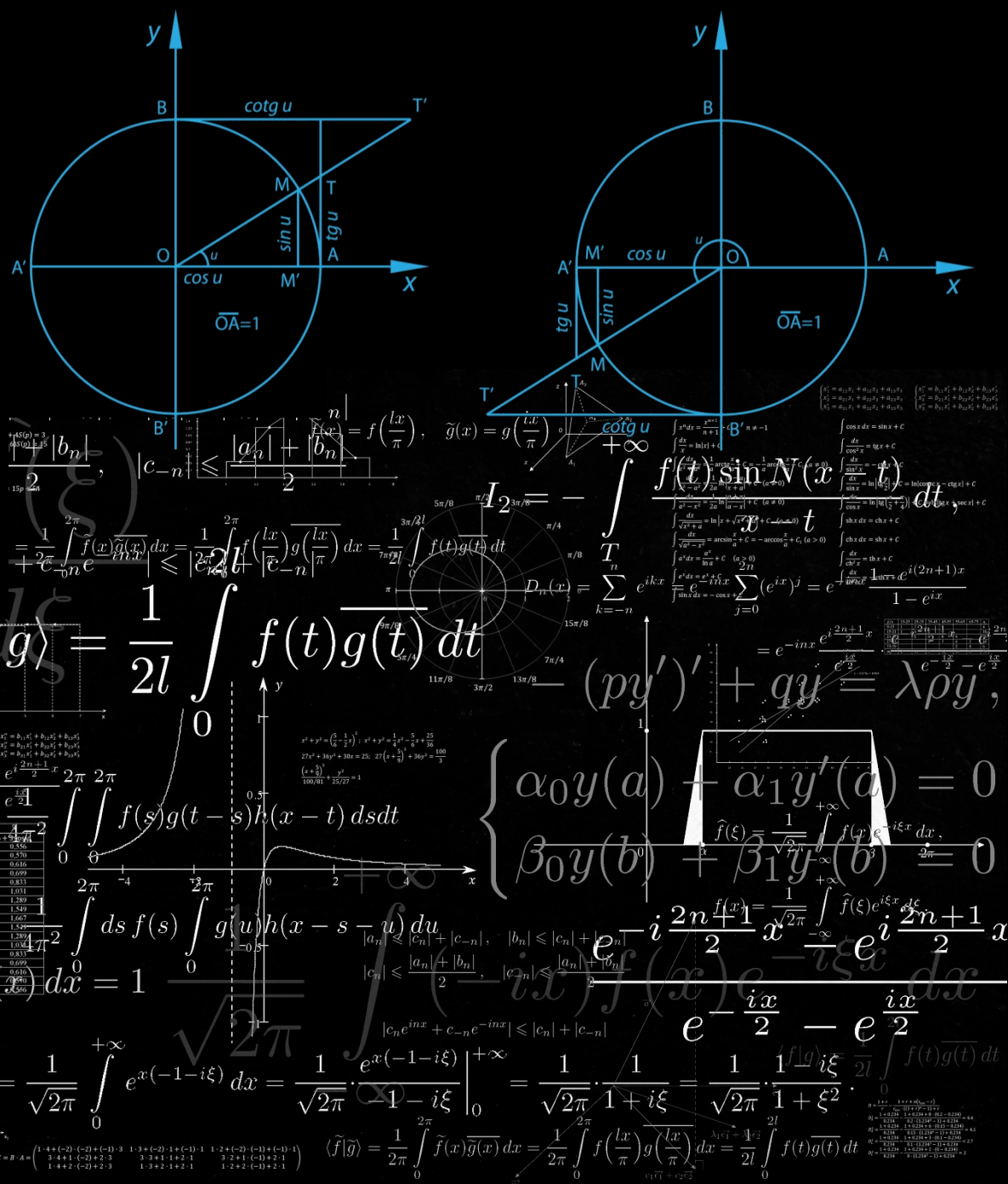
Summary

City of Las Vegas NRI

Zip Code	89108	89106	89102	89104	City Average	LV Valley Average
TANF Recipients Per 1,000 Population	13.7	33.2	18.5	19.3	10.7	9.9
Medicaid Recipients Per 1,000 Population	315.8	617.1	373.6	455.8	258.6	238.7
SNAP Recipients Per 1,000 Population	211.6	469.0	265.7	324.5	171.6	158.2
Unemployment Ins. Per 1,000 Population	11.0	12.6	9.7	14.4	9.6	9.7
Foreclosures Per 1,000 Total Housing Units	0.5	0.4	0.6	0.4	0.4	0.5
Residential Vacancies Per 1,000 Total Housing Units	42.4	95.4	99.8	64.5	51.1	62.1
Commercial Vacancy	19.7%	8.6%	15.1%	10.8%	12.5%	13.1%
Bank-Owned Homes Per 1,000 Total Housing Units	13.7	10.9	6.8	9.3	11.5	10.9

elements

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





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
89109	14.5	9.7	149
<u>89104</u>	<u>14.4</u>	<u>9.7</u>	<u>148</u>
89120	12.9	9.7	132
<u>89106</u>	<u>12.6</u>	<u>9.7</u>	<u>130</u>
89086	12.3	9.7	126
89169	12.2	9.7	125
89156	12.1	9.7	125
89032	11.7	9.7	120
89121	11.4	9.7	118
<u>89146</u>	<u>11.4</u>	<u>9.7</u>	<u>117</u>



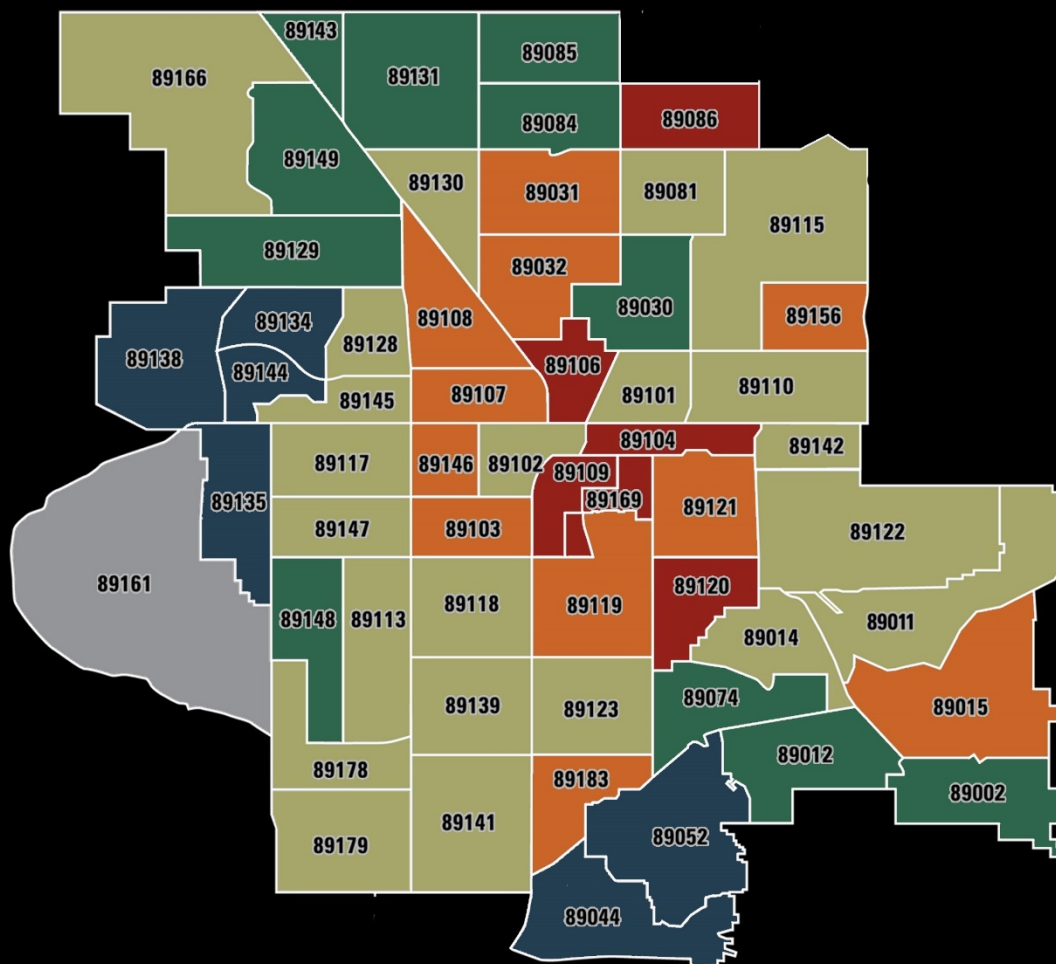
Employment Instability

The rate of unemployment insurance claims per 1,000 residents rose during the quarter to 9.7, an increase of 6.6 percent from 9.1 in the prior quarter.

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

Elements of the NRI

Unemp. Insurance | Valley-wide Distribution Map





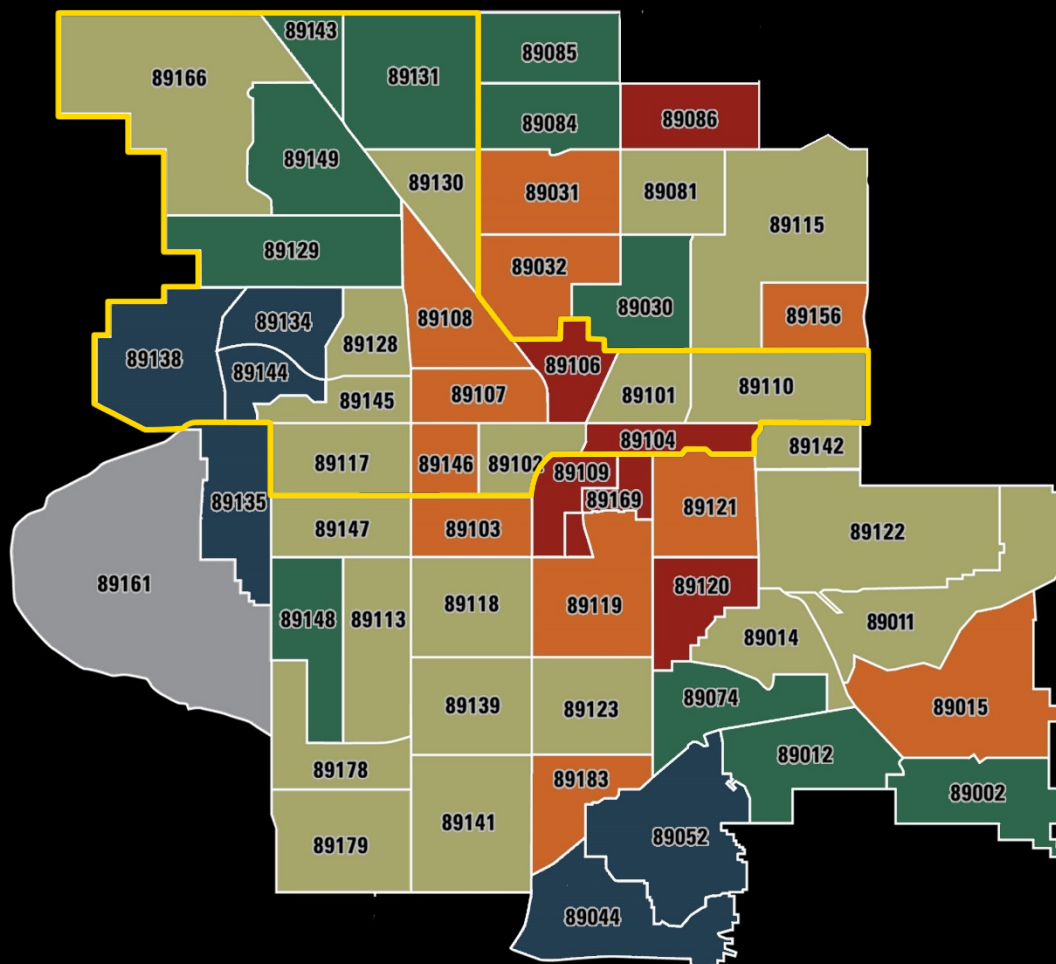
Employment
Instability

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 during the quarter to 9.7, an increase of 6.6 percent from 9.1 in the prior quarter.



- 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	14.4	9.6	150
89106	12.6	9.6	131
89146	11.4	9.6	118
89108	11.0	9.6	114
89107	10.7	9.6	112

Mean unemployment insurance claims per 1,000 residents:

Valley-wide	9.7
City of Las Vegas	9.6

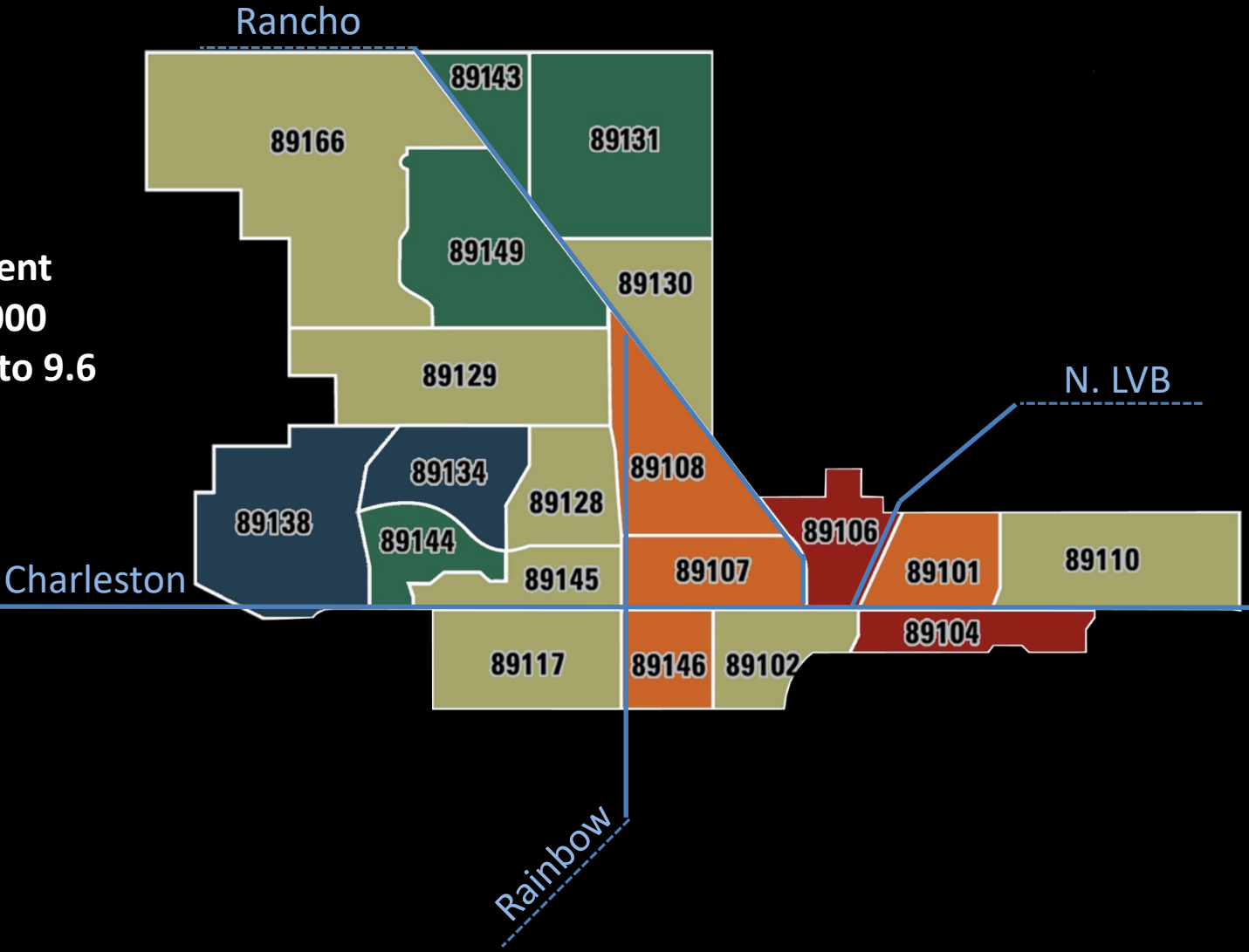


Employment
Instability

Elements of the NRI

Unemp. Insurance | CLV Distribution Map

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



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

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	4.6	0.5	956
89142	1.1	0.5	227
<u>89130</u>	<u>0.8</u>	<u>0.5</u>	<u>157</u>
89015	0.8	0.5	156
89115	0.7	0.5	155
89030	0.7	0.5	152
<u>89166</u>	<u>0.7</u>	<u>0.5</u>	<u>139</u>
<u>89102</u>	<u>0.6</u>	<u>0.5</u>	<u>134</u>
89011	0.6	0.5	130
89032	0.6	0.5	118

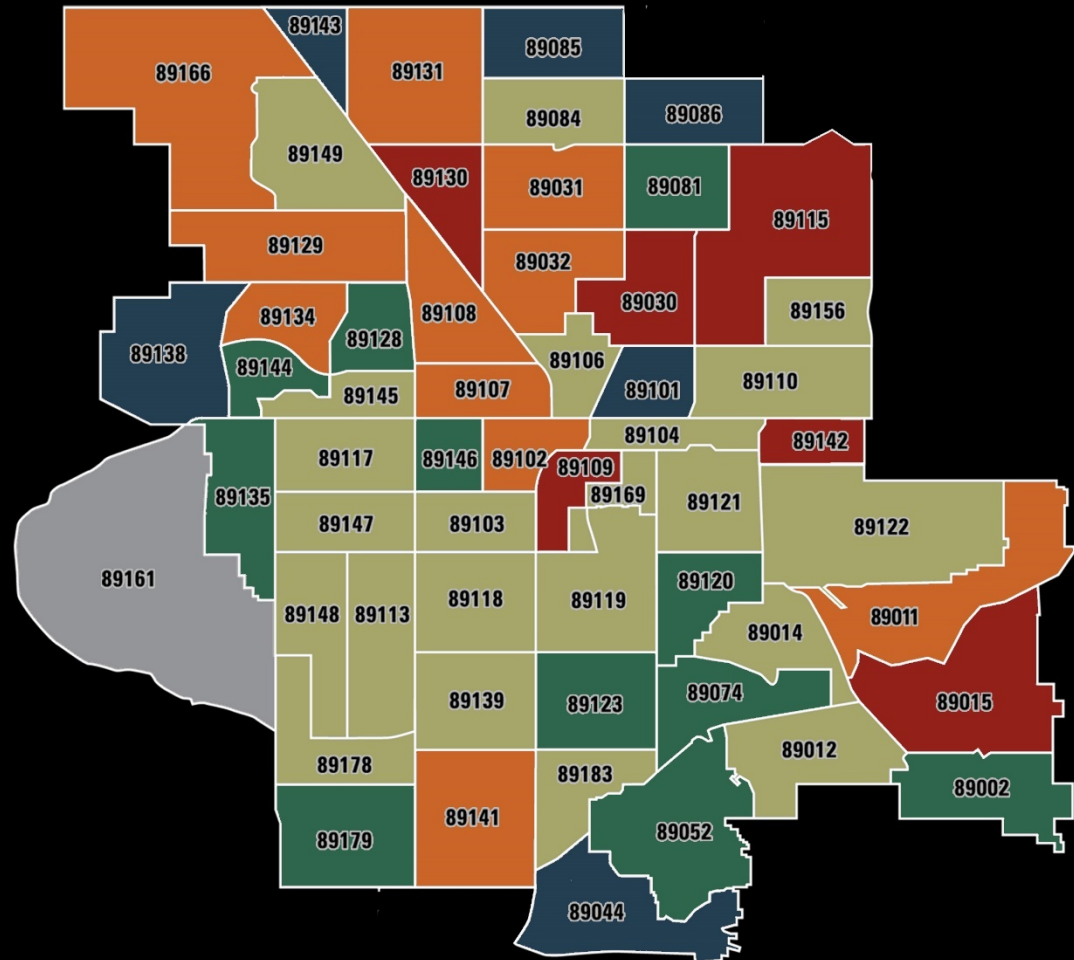


Neighborhood
Instability

Elements of the NRI

Foreclosures | Valley-wide Distribution Map

The rate of foreclosures per 1,000 housing units remained at 0.5 for the quarter.



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



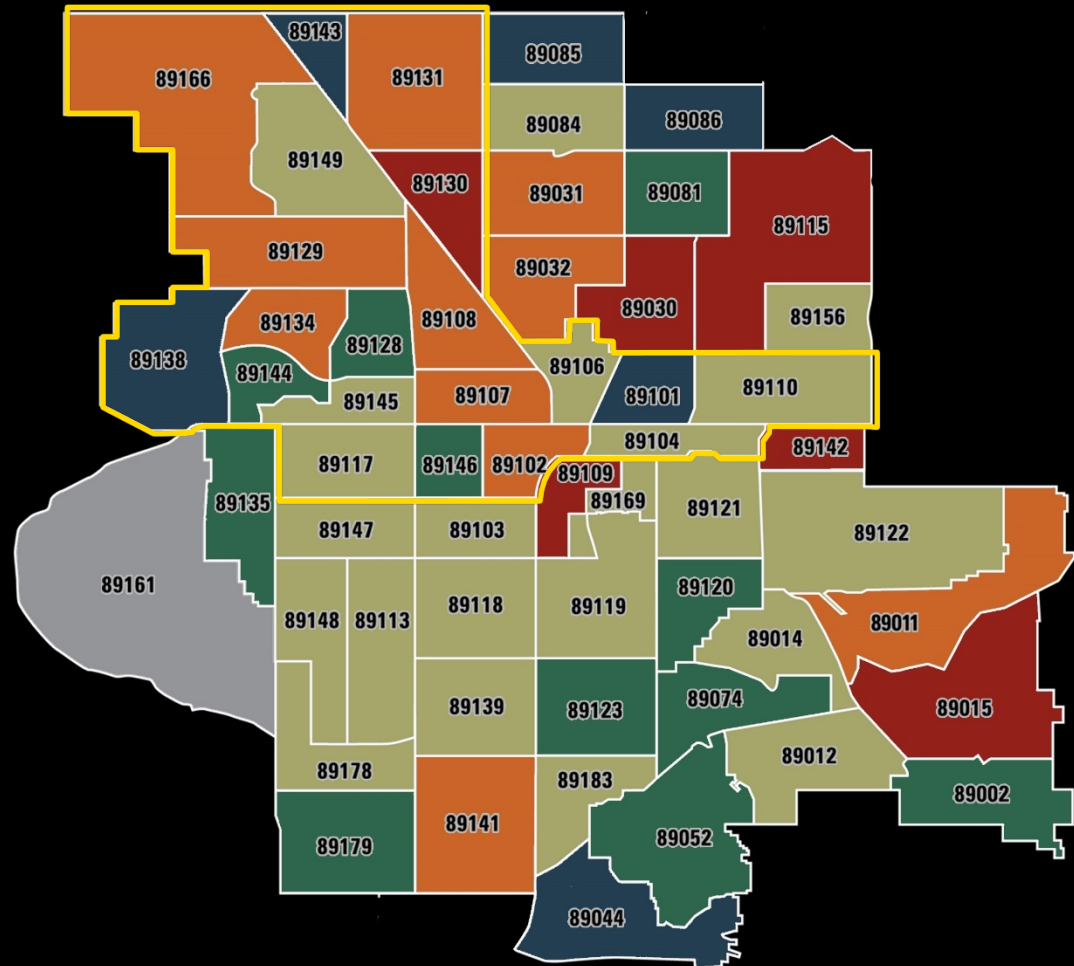
Neighborhood
Instability

Elements of the NRI

Foreclosures | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of foreclosures per 1,000 housing units remained at 0.5 for the quarter.



- 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
89130	0.8	0.4	170
89166	0.7	0.4	151
89102	0.6	0.4	146
89134	0.5	0.4	123
89129	0.5	0.4	121

Mean foreclosures per 1,000 housing units:

Valley-wide 0.5

City of Las Vegas 0.4

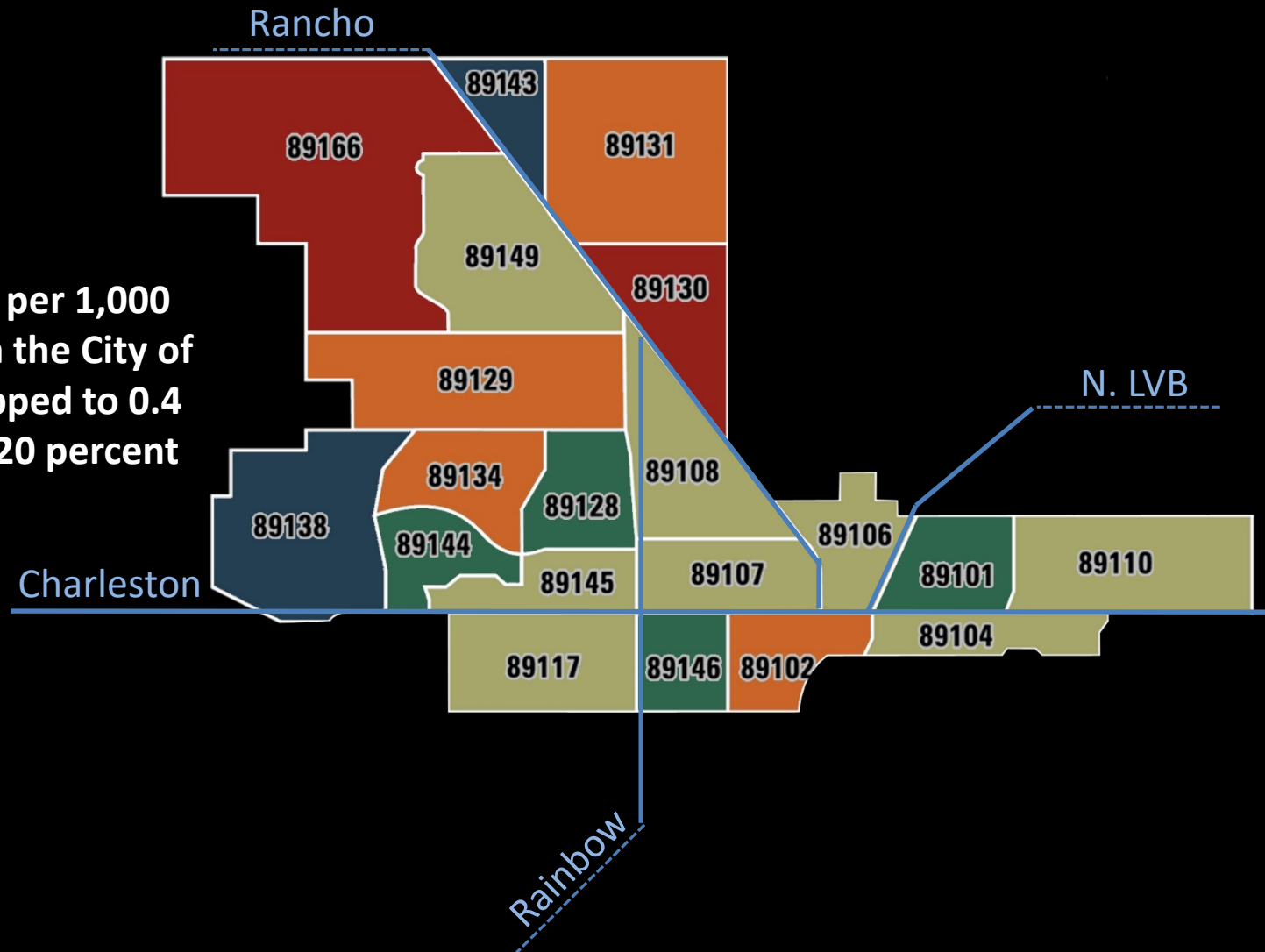


Neighborhood
Instability

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 0.4 from 0.5 last quarter, a 20 percent decrease.



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



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	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>

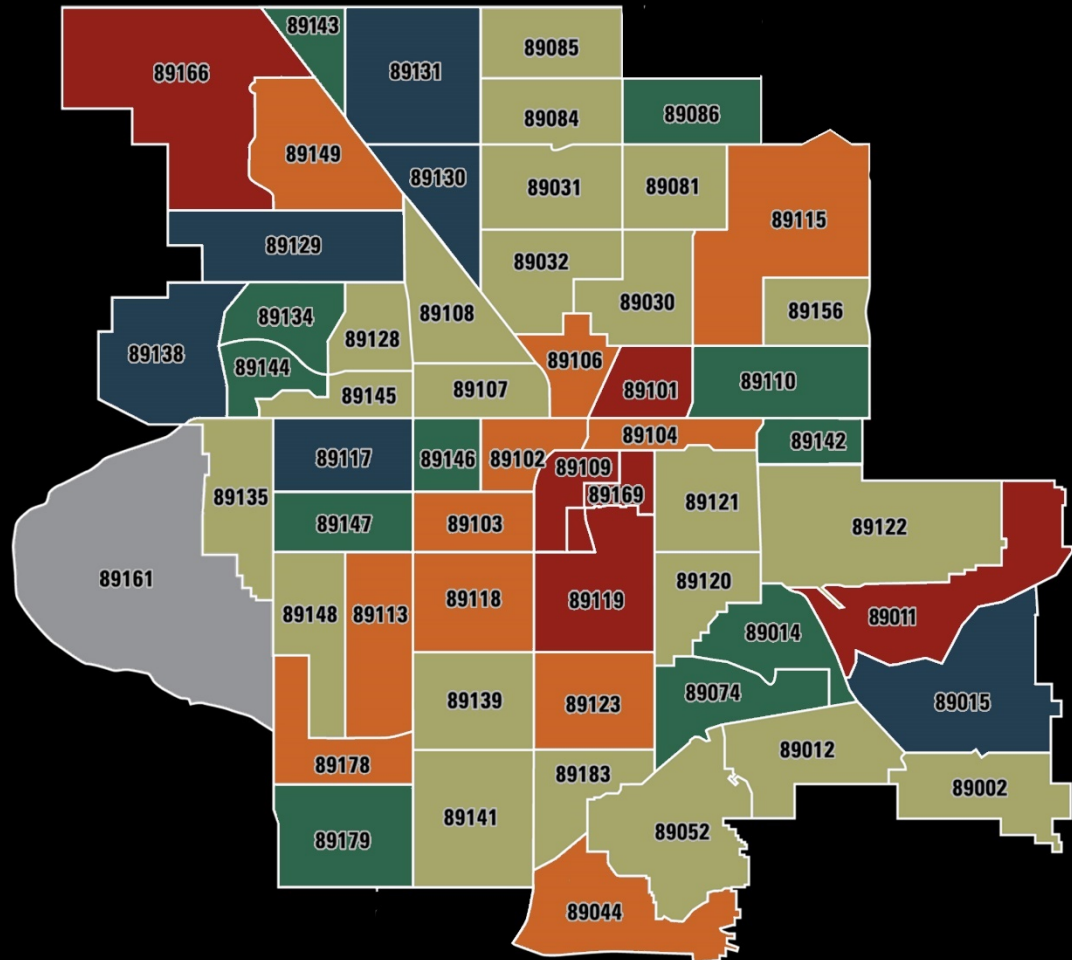


Neighborhood
Instability

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



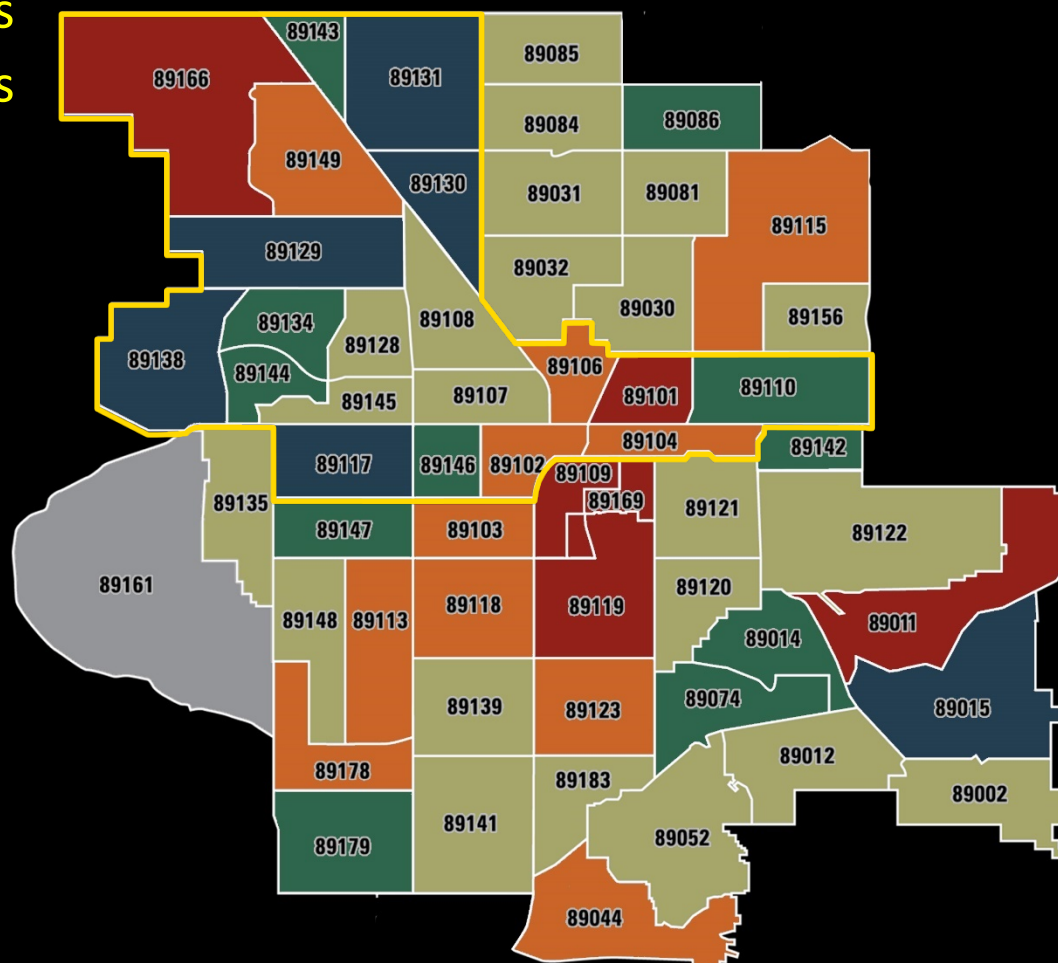
Neighborhood
Instability

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

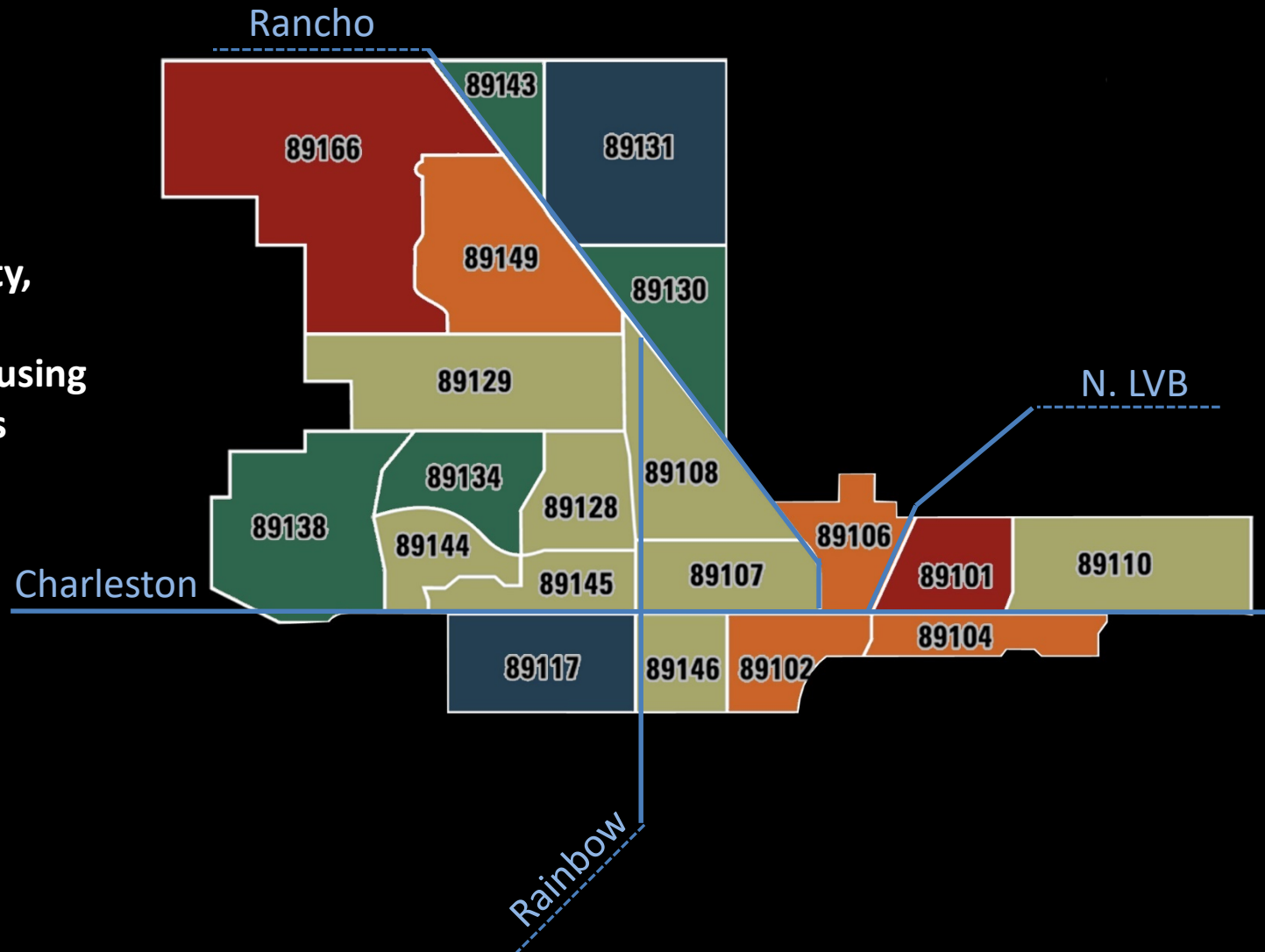


Neighborhood
Instability

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 last year to 51.1 this year.



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



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
89115	38.1%	13.1%	291
89011	30.4%	13.1%	231
89109	26.3%	13.1%	201
89002	22.5%	13.1%	172
89169	21.8%	13.1%	166
<u>89107</u>	<u>19.7%</u>	<u>13.1%</u>	<u>151</u>
<u>89108</u>	<u>19.7%</u>	<u>13.1%</u>	<u>150</u>
89118	18.4%	13.1%	141
89119	18.1%	13.1%	138
89120	18.1%	13.1%	138

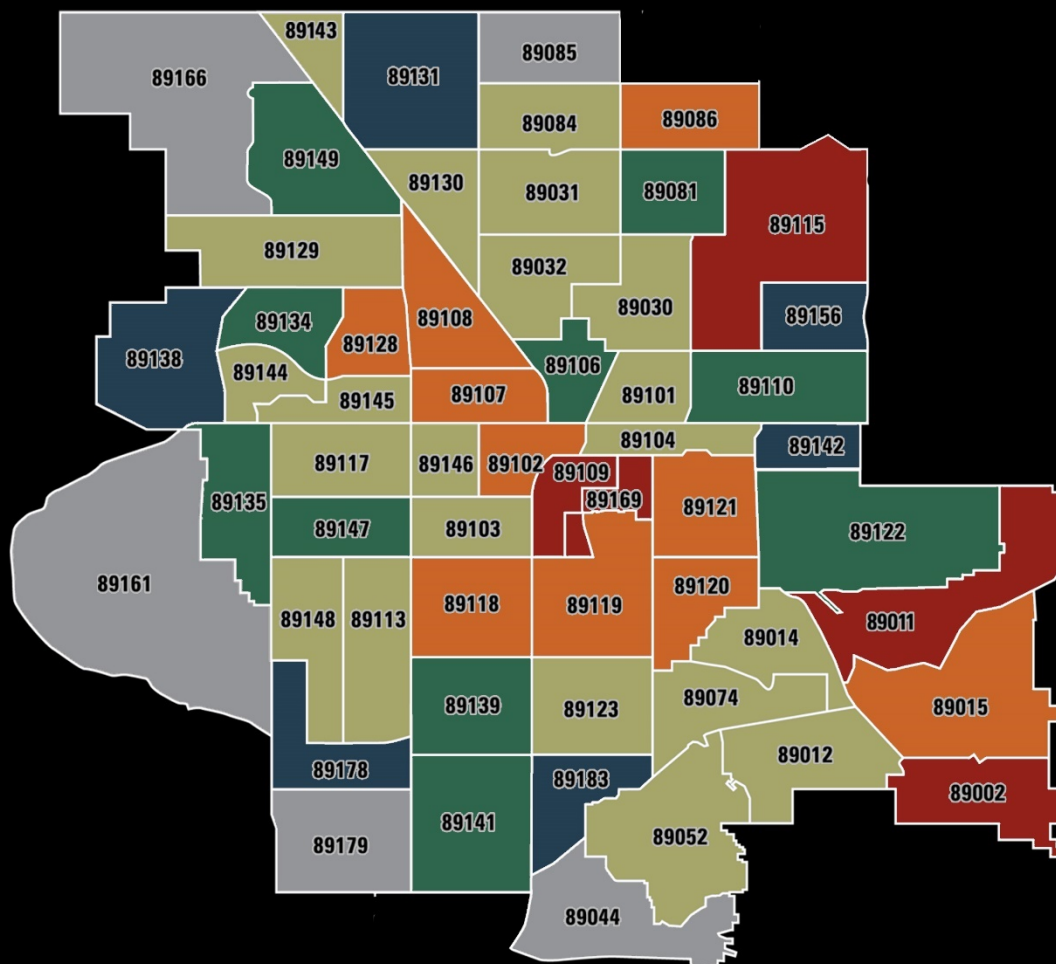


Neighborhood
Instability

Elements of the NRI

Commercial Vacancy | Valley-wide Distribution Map

Valley-wide commercial vacancy continued to drop. The vacancy rate fell to 13.1 percent from 13.5 percent last quarter (down 0.4 percentage points). 89115 had the highest vacancy rate at 38.1%, 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.



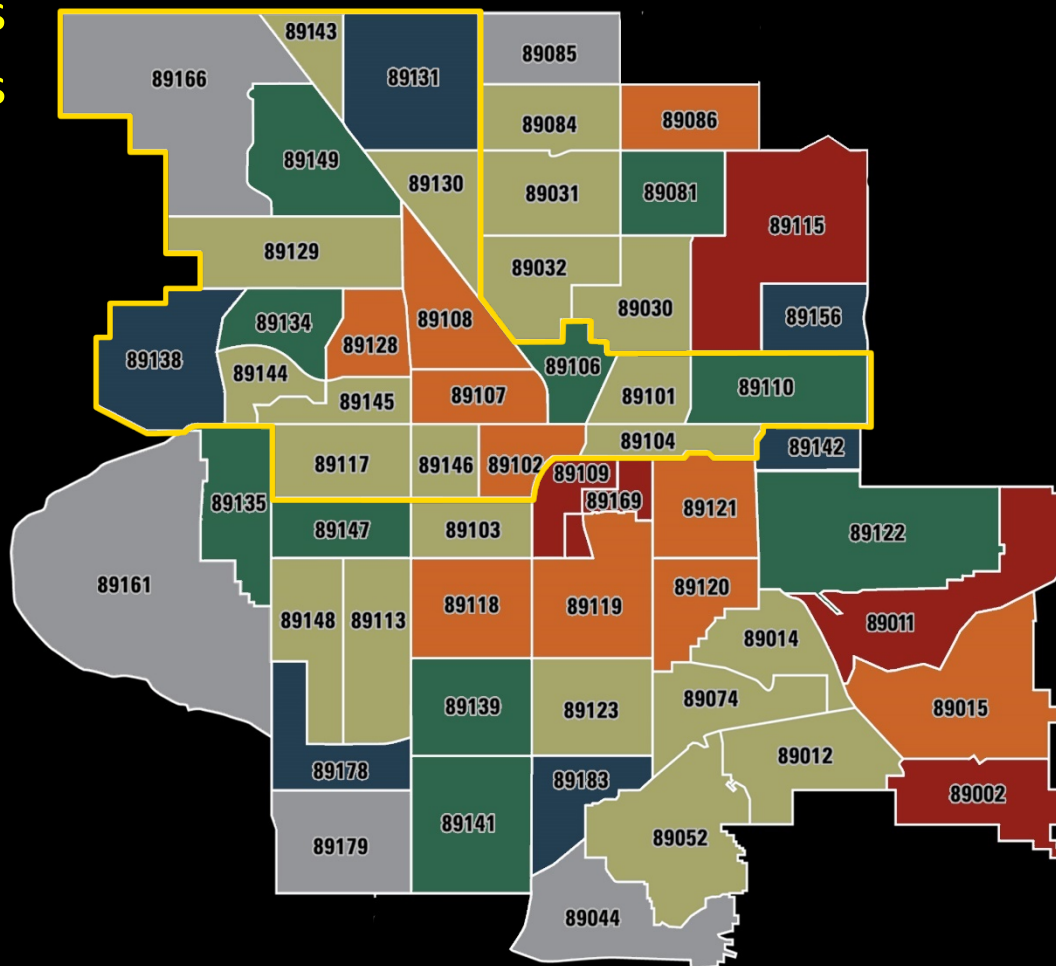
Neighborhood
Instability

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 13.1 percent from 13.5 percent last quarter (down 0.4 percentage points). 89115 had the highest vacancy rate at 38.1%, 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	19.7%	12.5%	158
89108	19.7%	12.5%	157
89128	17.1%	12.5%	137
89102	15.1%	12.5%	121
89146	14.4%	12.5%	115

Mean commercial vacancy rate:

Valley-wide 13.1%

City of Las Vegas 12.5%

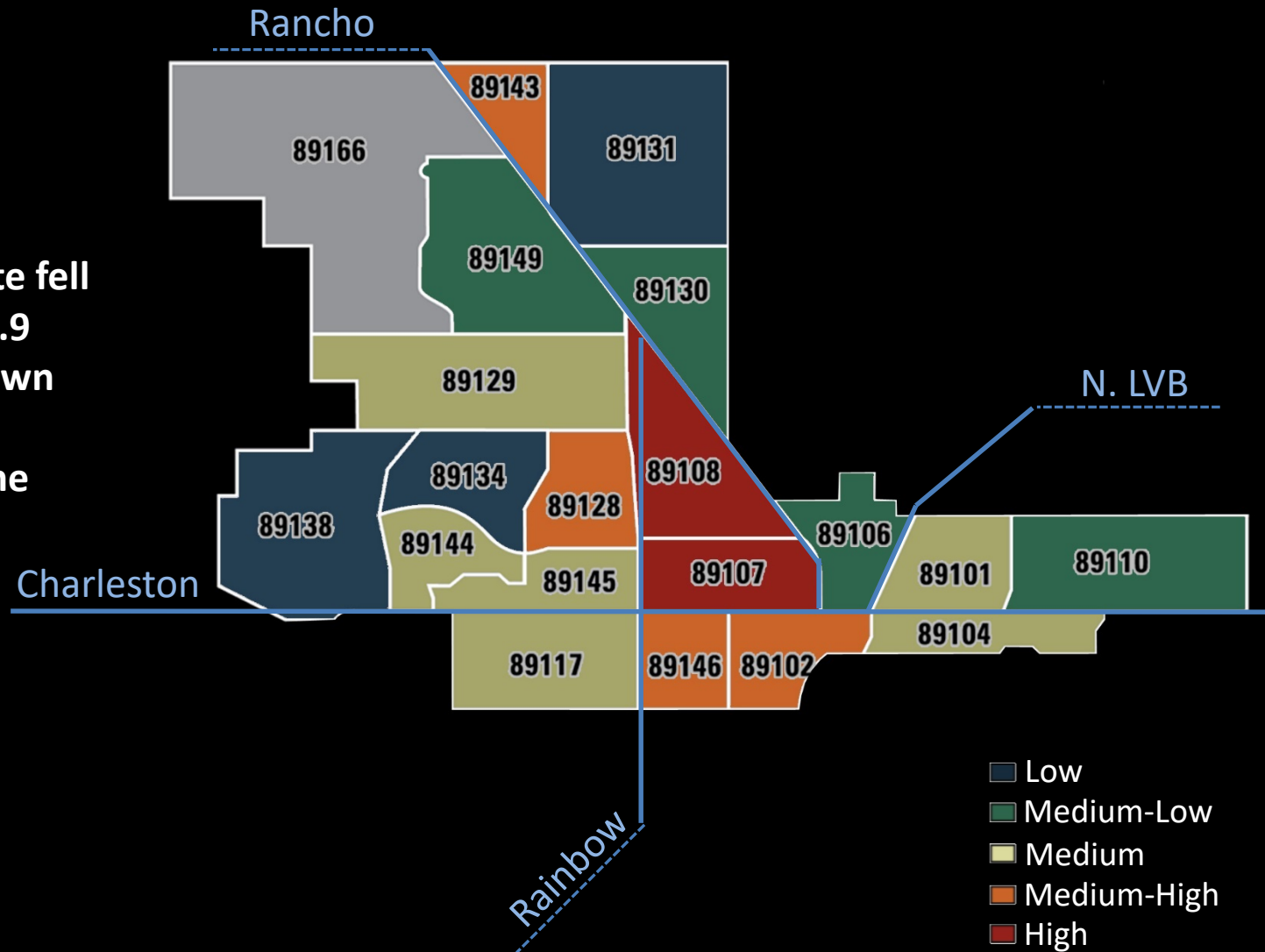


Neighborhood
Instability

Elements of the NRI

Commercial Vacancy | CLV Distribution Map

City-wide commercial vacancy declined in the quarter. The vacancy rate fell to 12.5 percent from 12.9 percent last quarter (down 0.4 percentage points). 89107 and 89108 had the highest vacancy rate at 19.7% percent.



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

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	19.5	10.9	180
89031	19.3	10.9	178
89156	18.3	10.9	169
<u>89143</u>	<u>18.3</u>	<u>10.9</u>	<u>168</u>
89030	17.5	10.9	161
<u>89110</u>	<u>17.4</u>	<u>10.9</u>	<u>160</u>
89032	16.4	10.9	151
89141	16.1	10.9	148
<u>89107</u>	<u>16.0</u>	<u>10.9</u>	<u>147</u>
<u>89131</u>	<u>14.6</u>	<u>10.9</u>	<u>135</u>

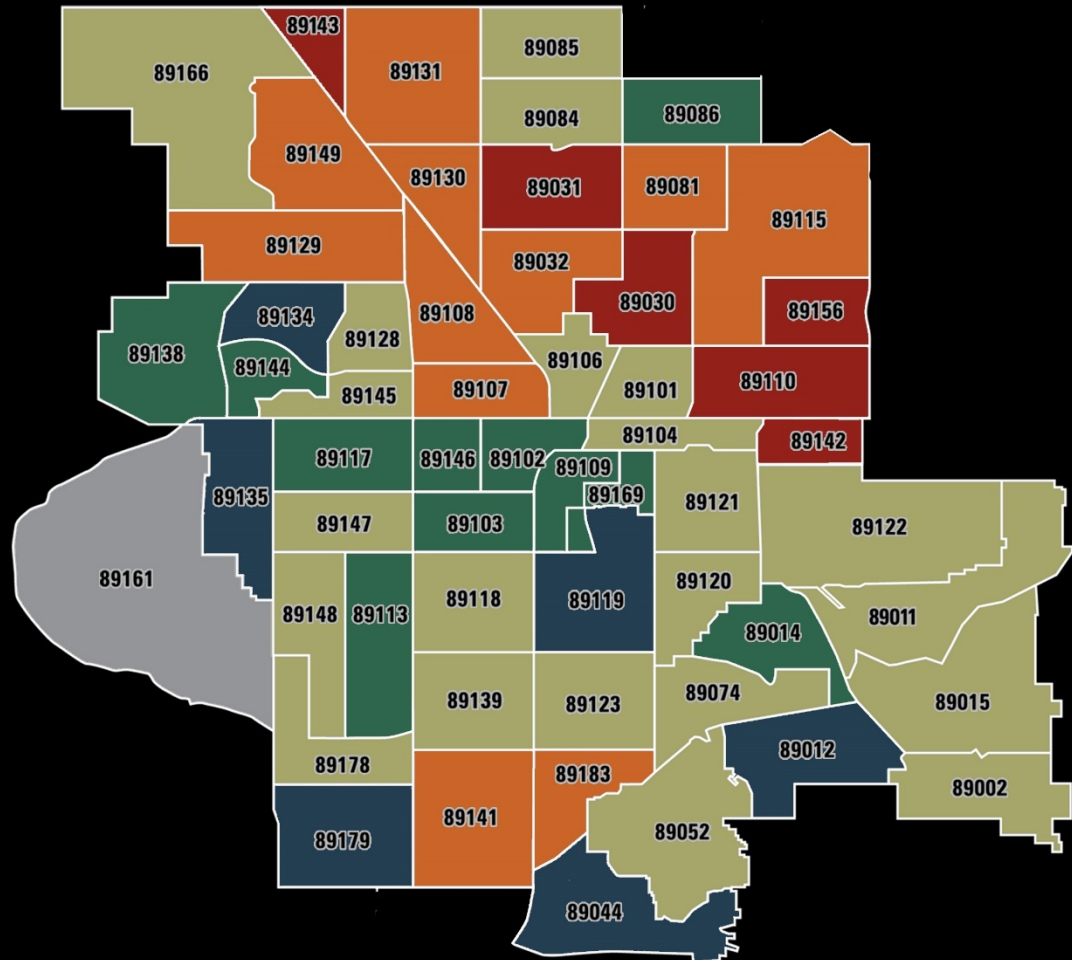


Neighborhood
Instability

Elements of the NRI

Bank-Owned Homes | Valley-wide Distribution Map

The rate of bank-owned homes per 1,000 housing units fell from 11.2 to 10.9 for the quarter.





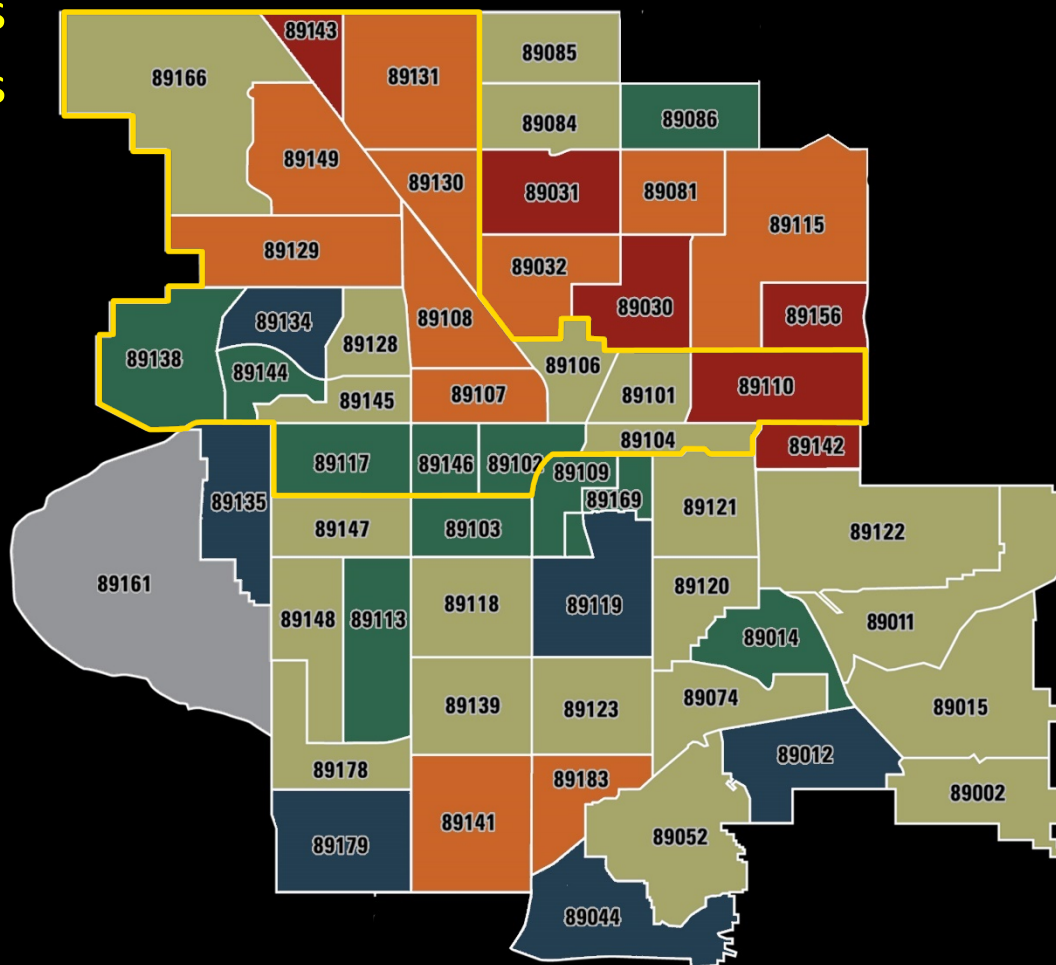
Neighborhood
Instability

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 11.5 to 11.2 for the quarter.





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	18.3	11.5	160
89110	17.4	11.5	152
89107	16.0	11.5	139
89131	14.6	11.5	128
89130	14.3	11.5	124

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

City of Las Vegas	11.5
Valley-wide	10.9

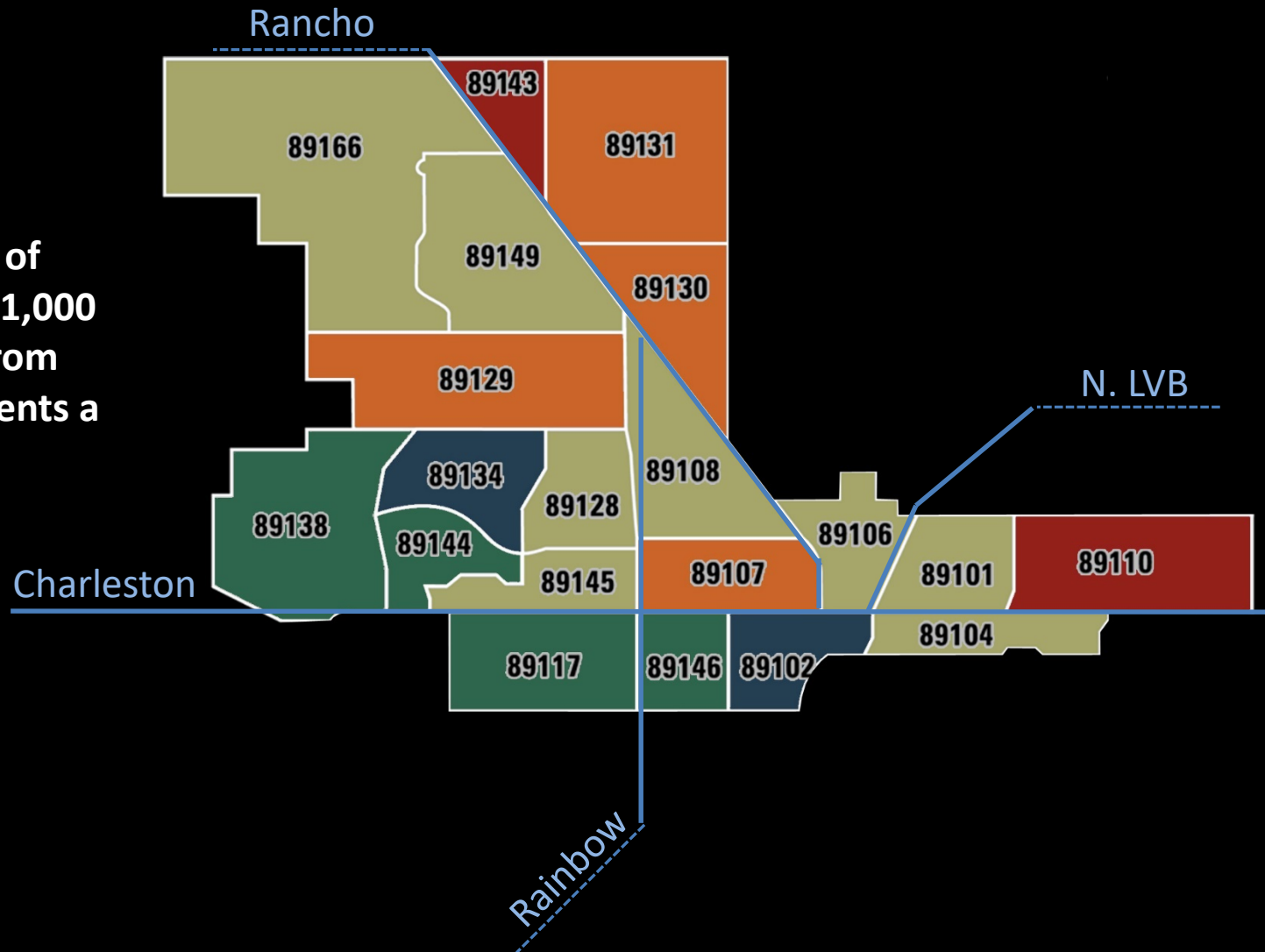


Neighborhood
Instability

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 11.7 to 11.5. This represents a decrease of 1.7 percent.



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

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
<u>89106</u>	<u>33.2</u>	<u>9.9</u>	<u>335</u>
89030	30.3	9.9	306
89115	27.1	9.9	273
<u>89101</u>	<u>25.7</u>	<u>9.9</u>	<u>259</u>
89109	22.9	9.9	231
89169	22.5	9.9	227
<u>89104</u>	<u>19.3</u>	<u>9.9</u>	<u>195</u>
<u>89102</u>	<u>18.5</u>	<u>9.9</u>	<u>186</u>
89119	17.1	9.9	173
89086	15.3	9.9	154

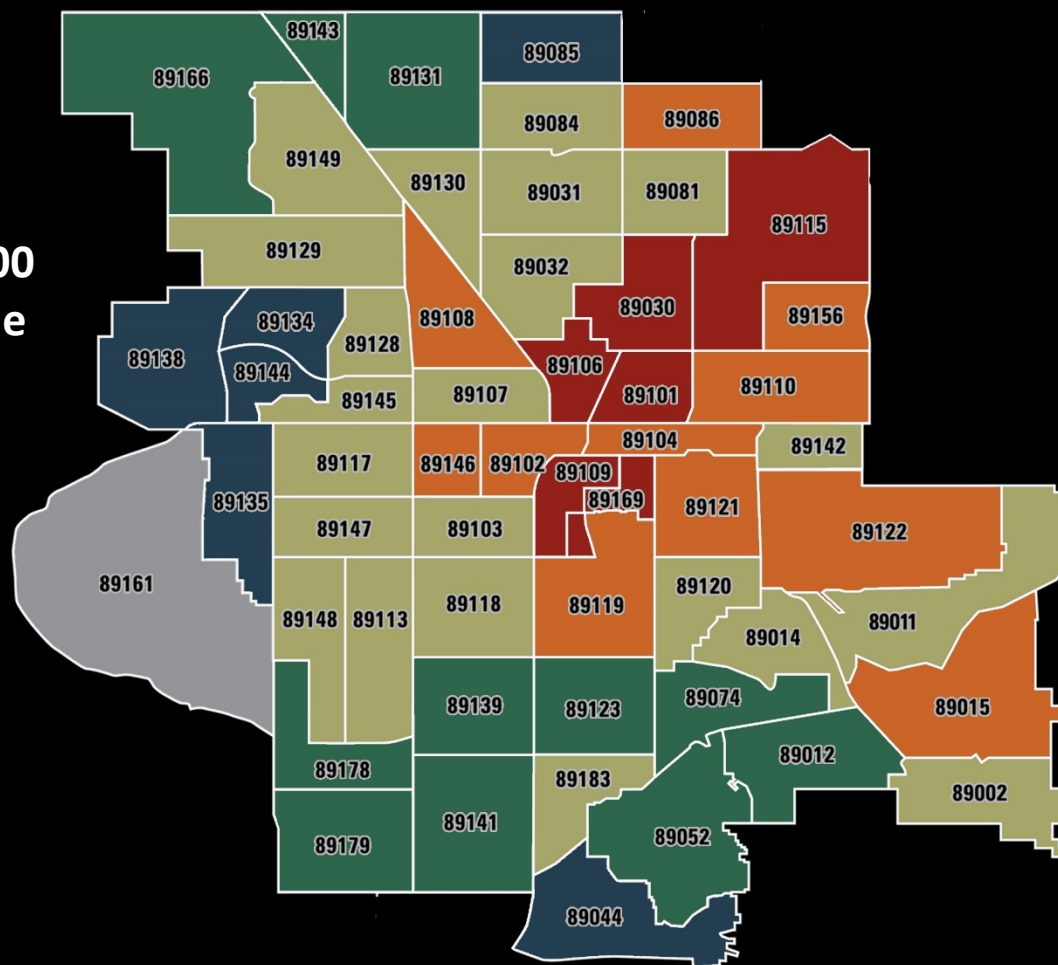


Household
Instability

Elements of the NRI

TANF | Valley-wide Distribution Map

The rate of TANF recipients per 1,000 residents fell during the quarter. The rate declined to 9.9 from 10.2 last quarter, a decrease of 2.9 percent.



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



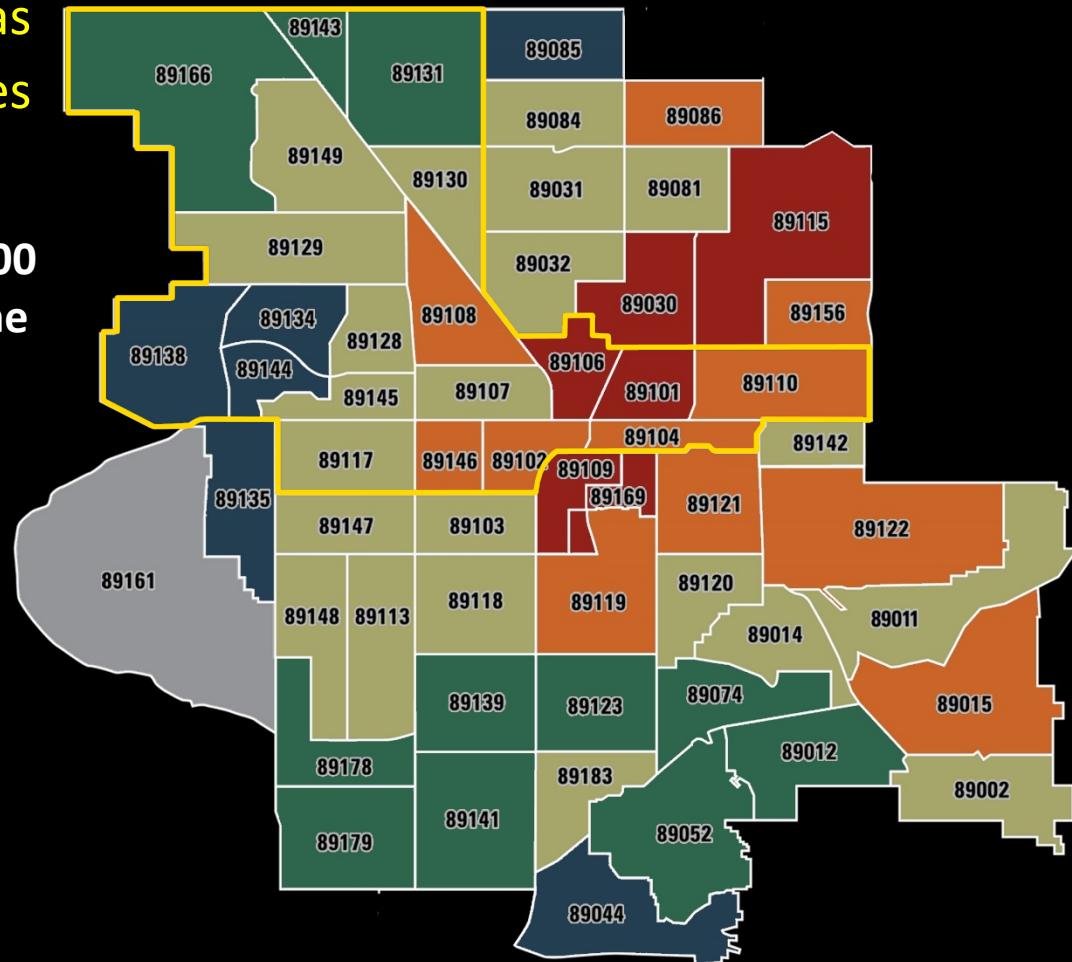
Household
Instability

Elements of the NRI

TANF | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of TANF recipients per 1,000 residents fell during the quarter. The rate declined to 9.9 from 10.2 last quarter, a decrease of 2.9 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	33.2	10.7	309
89101	25.7	10.7	240
89104	19.3	10.7	180
89102	18.5	10.7	172
89110	14.9	10.7	139

Mean TANF recipients per 1,000 residents:

City of Las Vegas	10.7
Valley-wide	9.9

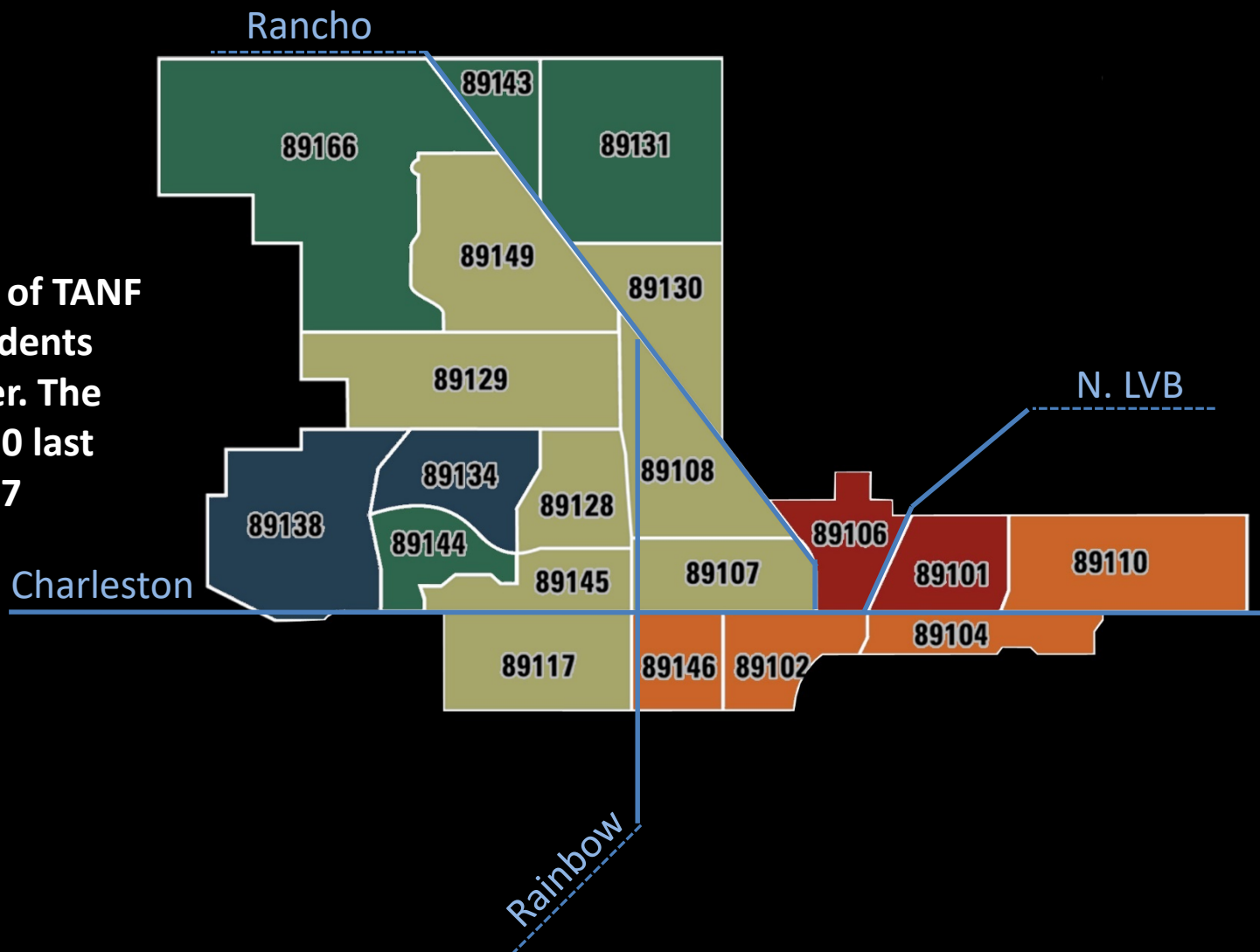


Household
Instability

Elements of the NRI

TANF | CLV Distribution Map

Within the City, the rate of TANF recipients per 1,000 residents also declined this quarter. The rate fell to 10.7 from 11.0 last quarter, a decrease of 2.7 percent.



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



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
<u>89106</u>	<u>469.0</u>	<u>158.2</u>	<u>297</u>
89030	348.8	158.2	243
<u>89101</u>	<u>376.8</u>	<u>158.2</u>	<u>238</u>
<u>89104</u>	<u>324.5</u>	<u>158.2</u>	<u>205</u>
89169	321.2	158.2	203
89115	313.8	158.2	198
89109	307.0	158.2	194
<u>89102</u>	<u>265.7</u>	<u>158.2</u>	<u>168</u>
89119	248.5	158.2	157
89121	230.8	158.2	146

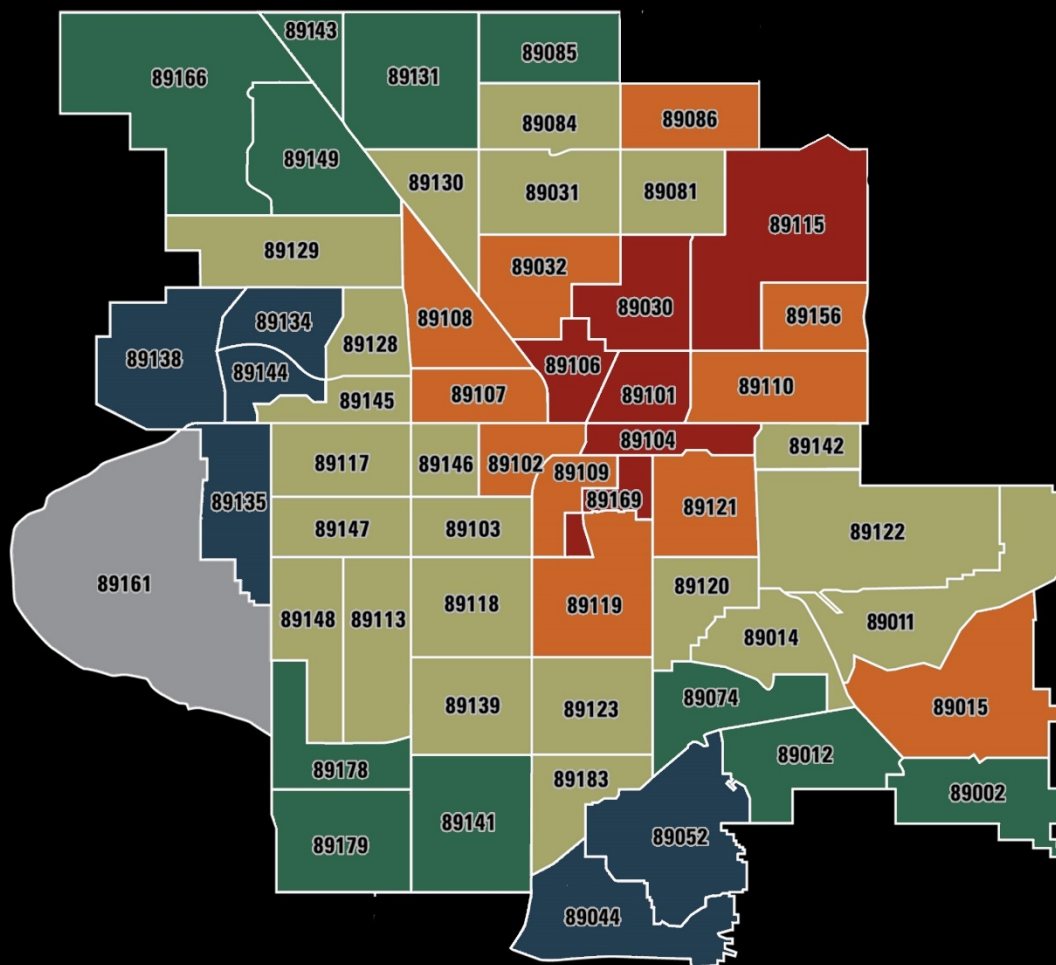


Household
Instability

Elements of the NRI

SNAP | Valley-wide Distribution Map

The rate of SNAP recipients per 1,000 residents decreased from 160.6 to 158.2 this quarter (down 1.5 percent).



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



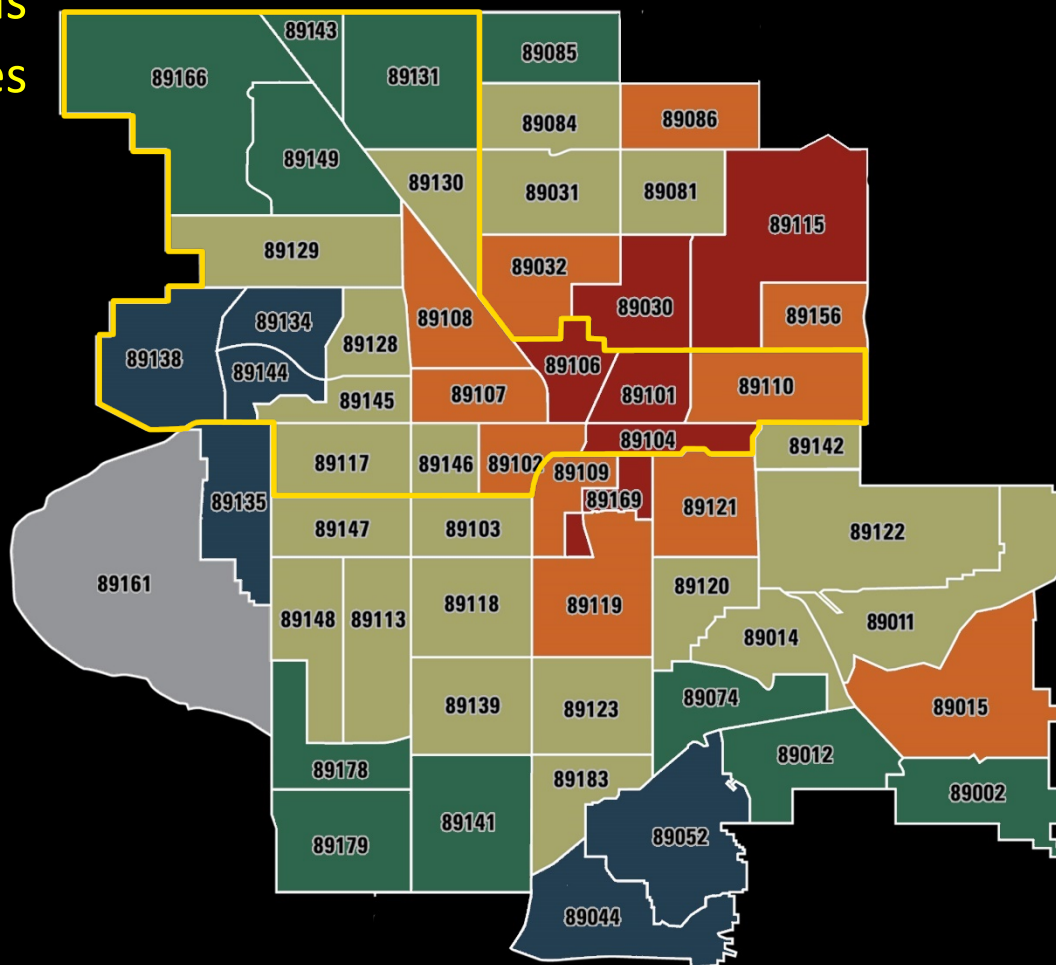
Household
Instability

Elements of the NRI

SNAP | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of SNAP recipients per 1,000 residents decreased from 160.6 to 158.2 this quarter (down 1.5 percent).



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



Household
Instability

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	469.0	171.6	273
89101	376.8	171.6	220
89104	324.5	171.6	189
89102	265.7	171.6	155
89107	225.5	171.6	131

Mean SNAP recipients per 1,000 residents:

City of Las Vegas 171.6

Valley-wide 158.2

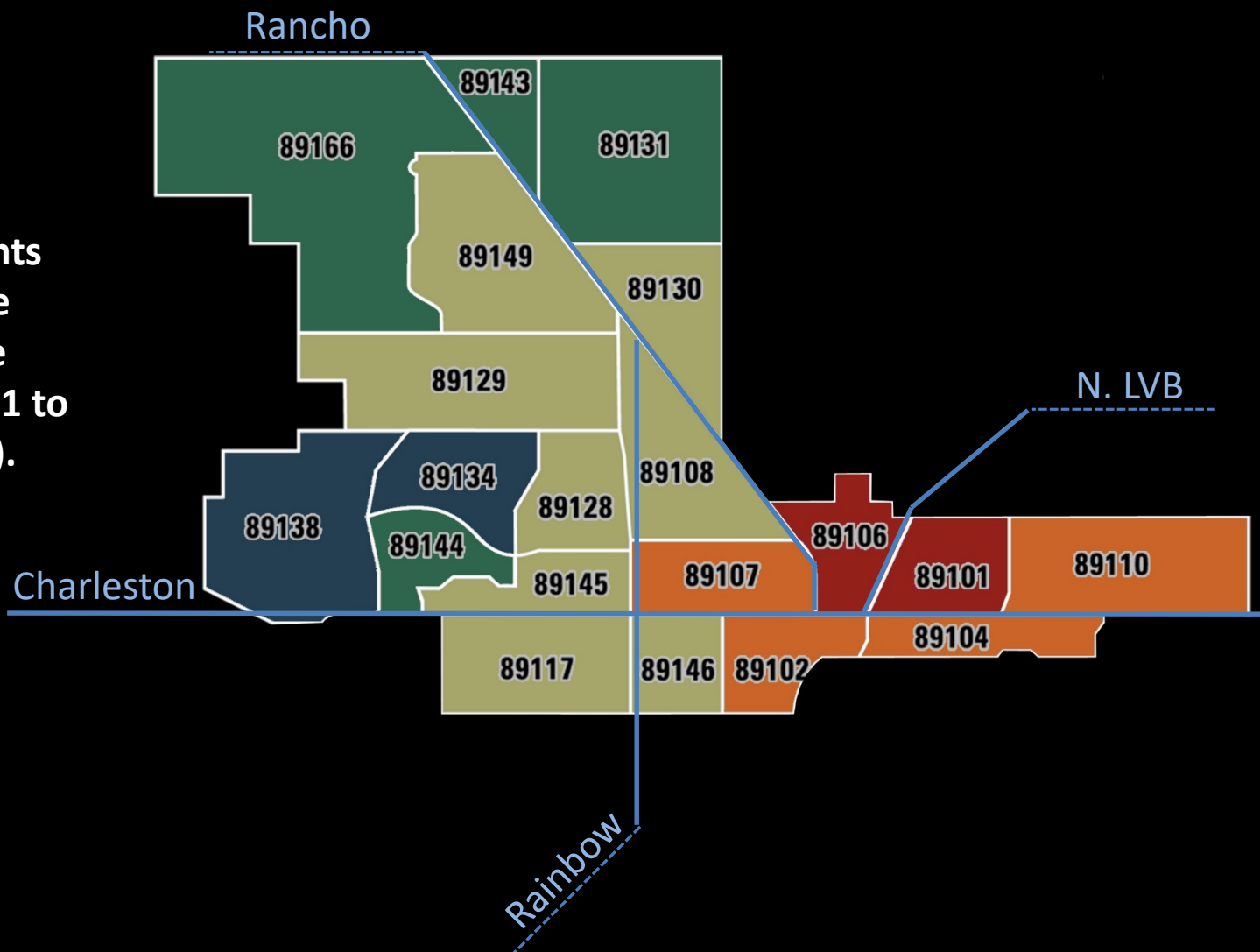


Household
Instability

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 173.1 to 171.6 (down 0.9 percent).



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



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
<u>89106</u>	<u>617.1</u>	<u>238.7</u>	<u>259</u>
89030	538.0	238.7	225
<u>89101</u>	<u>512.8</u>	<u>238.7</u>	<u>215</u>
<u>89104</u>	<u>455.8</u>	<u>238.7</u>	<u>191</u>
89109	442.1	238.7	185
89115	428.7	238.7	180
89169	408.7	238.7	171
<u>89102</u>	<u>373.6</u>	<u>238.7</u>	<u>157</u>
<u>89107</u>	<u>343.4</u>	<u>238.7</u>	<u>144</u>
89156	339.8	238.7	142

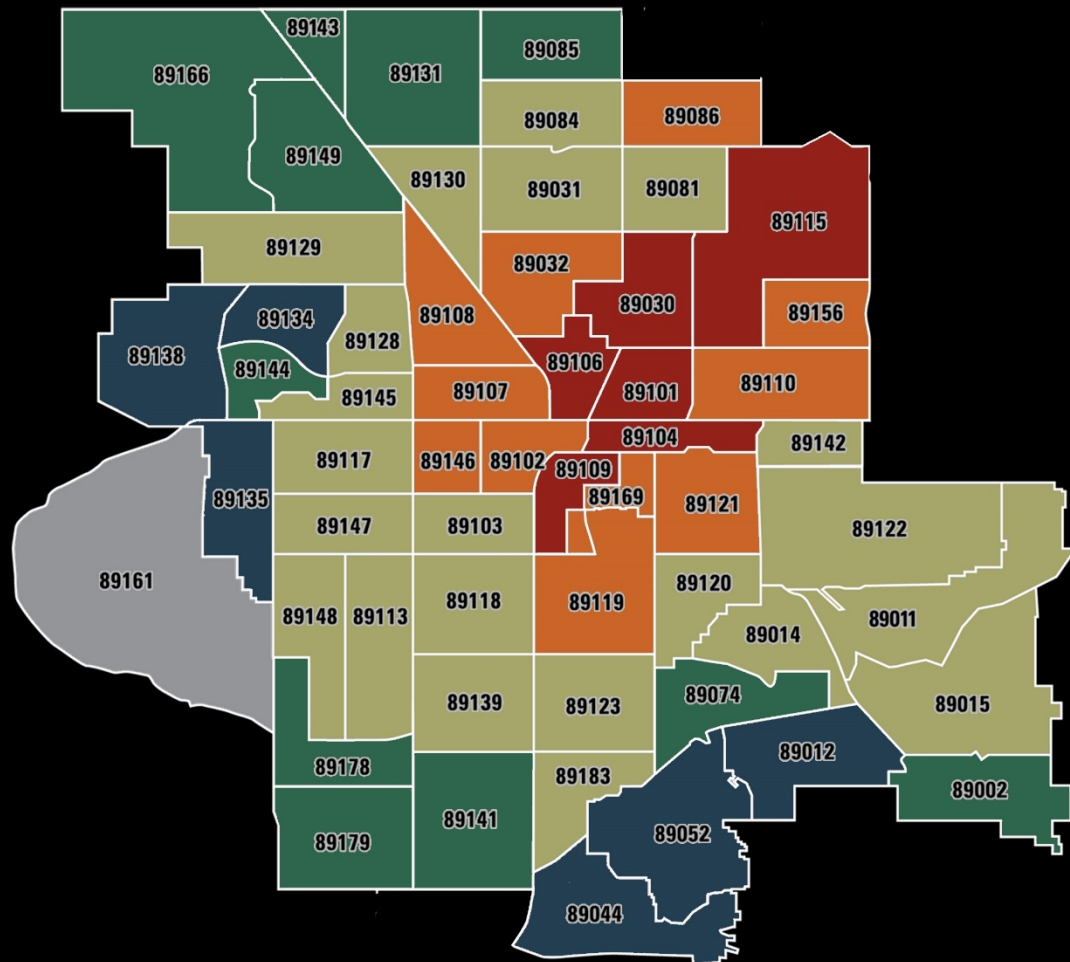


Household
Instability

The rate of Medicaid recipients per 1,000 residents decreased slightly to 238.7 from 240.5 last quarter (down 0.7 percent).

Elements of the NRI

Medicaid | Valley-wide Distribution Map



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



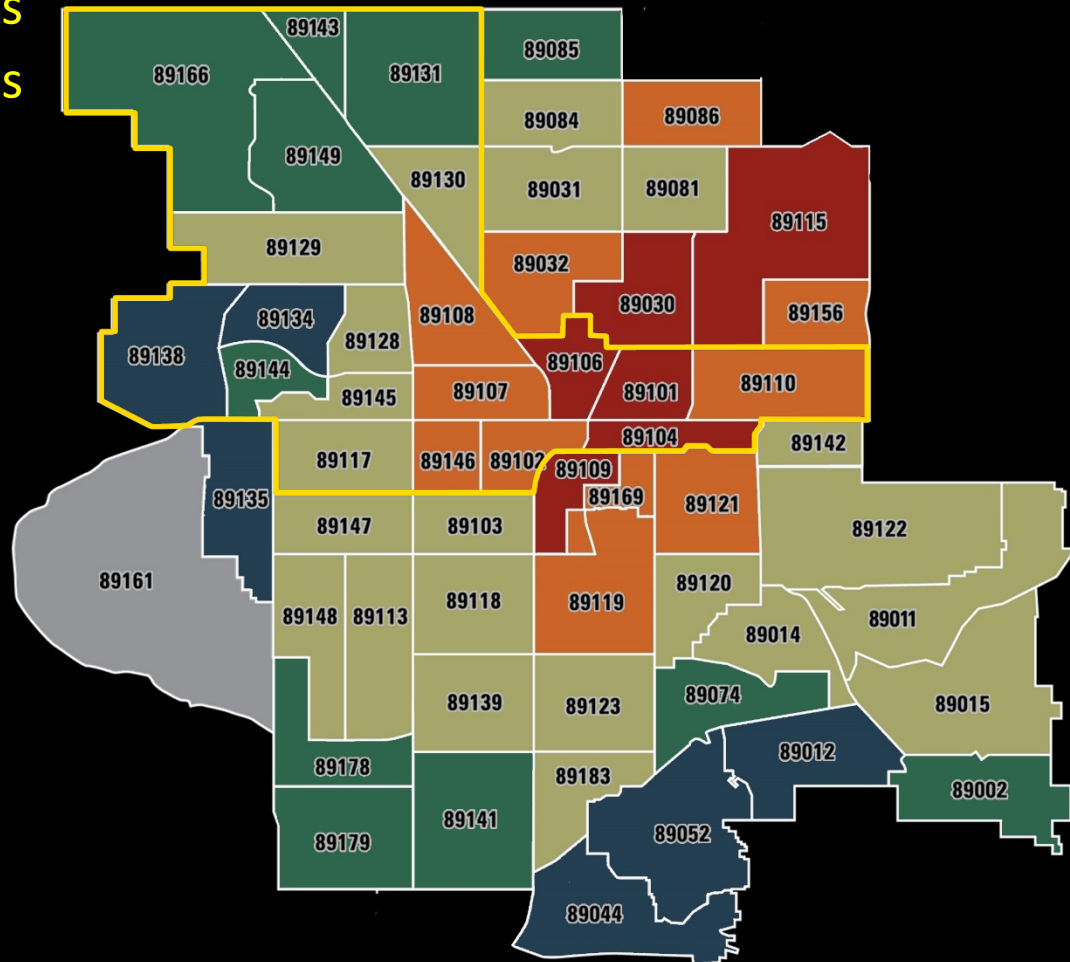
Household
Instability

City of Las Vegas
Zip Codes

The rate of Medicaid recipients per 1,000 residents decreased slightly to 238.7 from 240.5 last quarter (down 0.7 percent).

Elements of the NRI

Medicaid | Valley-wide Distribution Map



- Low
- 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	617.1	258.6	239
89101	512.8	258.6	198
89104	455.8	258.6	176
89102	373.6	258.6	144
89107	343.4	258.6	133

Mean Medicaid recipients per 1,000 residents:

City of Las Vegas 258.6

Valley-wide 238.7

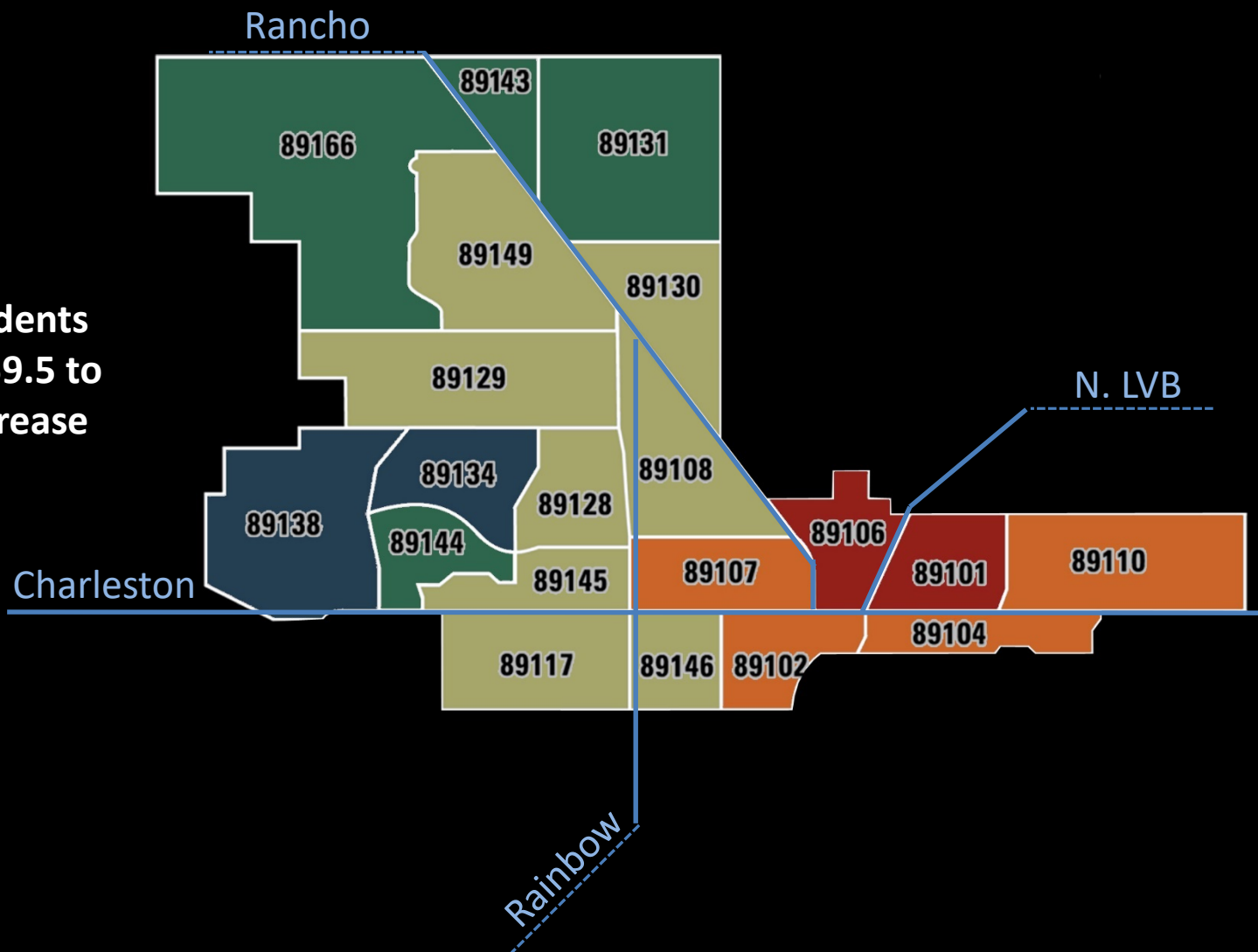


Household
Instability

Elements of the NRI

Medicaid | CLV Distribution Map

The rate of Medicaid recipients per 1,000 residents declined slightly from 259.5 to 258.6 this quarter, a decrease of 0.3 percent.



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

Elements of the NRI



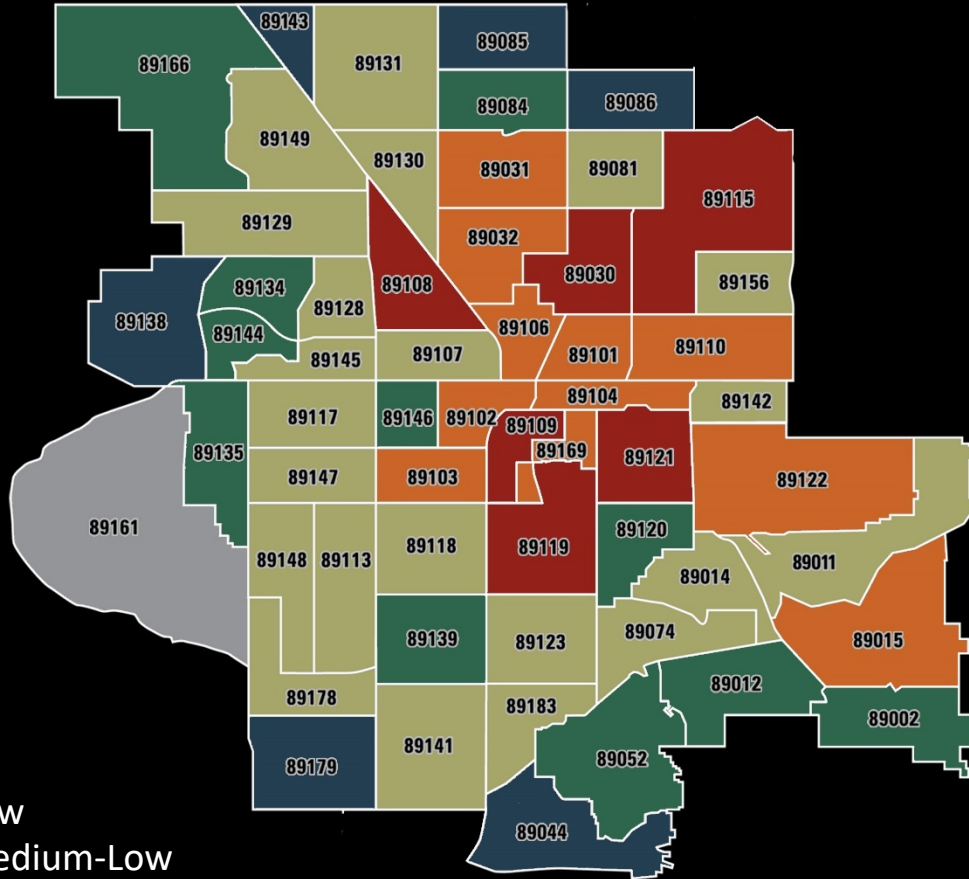
Composite Risk



Composite
Risk

Elements of the NRI

Composite Risk | Valley-wide Distribution Map



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

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

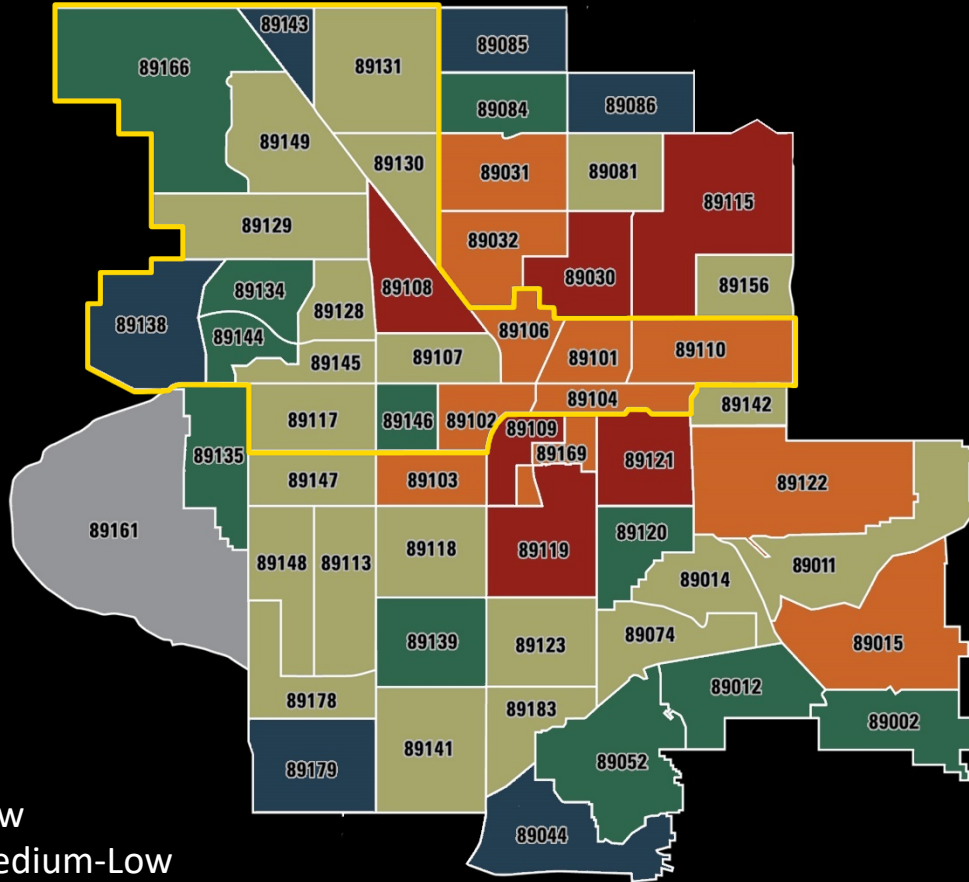


Composite
Risk

Elements of the NRI

Composite Risk | Valley-wide Distribution Map

City of Las Vegas



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

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

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



APPLIED
ANALYSIS



Neighborhood Economic Risk Assessment

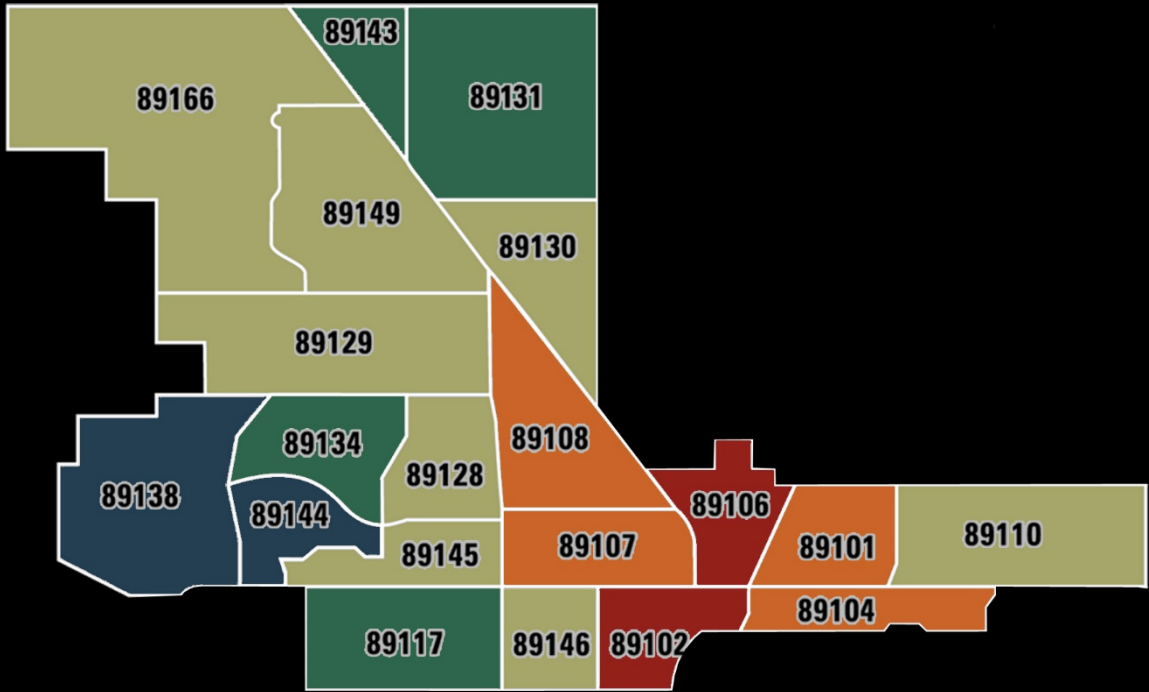
Q2 2018



Composite
Risk

Elements of the NRI

Composite Risk | CLV Distribution Map



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

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

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.

 UNEMPLOYMENT	 FORECLOSURE	 RESIDENTIAL VACANCIES
 COMMERCIAL VACANCIES	 BANK-OWNED	 TANF
 SNAP	 MEDICAID	

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	3,288	441.6	100
89115	18,179	164.3	64
89030	14,265	152.6	55
<u>89106</u>	<u>9,657</u>	<u>152.6</u>	<u>48</u>
89169	10,742	140.5	45
89142	10,625	133.0	43
<u>89104</u>	<u>12,868</u>	<u>131.5</u>	<u>45</u>
<u>89102</u>	<u>13,903</u>	<u>129.3</u>	<u>45</u>
<u>89101</u>	<u>14,698</u>	<u>124.5</u>	<u>44</u>
89015	15,453	124.0	45

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.

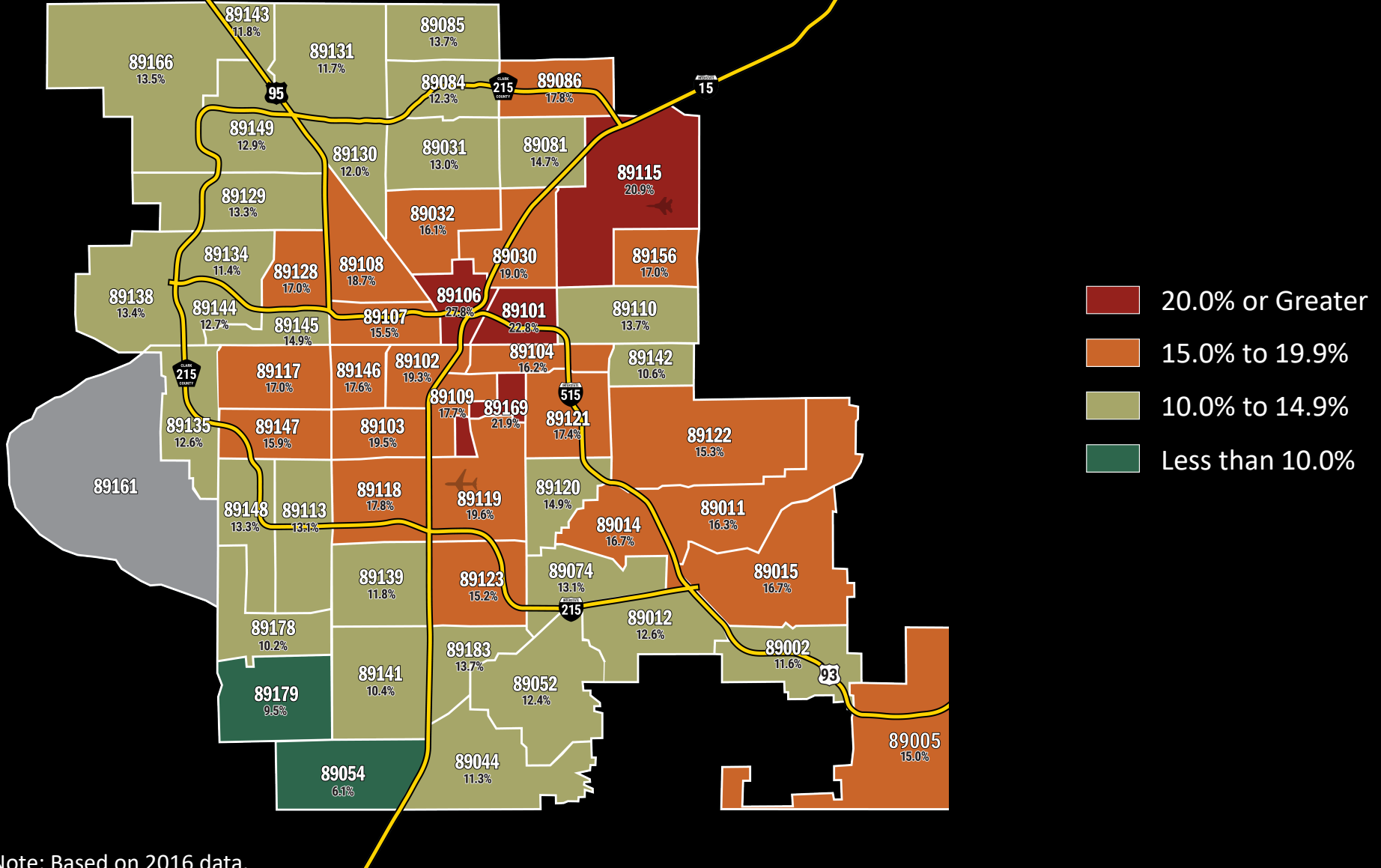
Top 5 Zip Codes In the City of Las Vegas

Zip Codes	Occupied Housing Units	Composite Risk (Factor Weighted Average)	Neighborhood Risk Index (NRI)
89106	9,657	151.6	91
89102	13,903	132.3	89
89104	12,868	131.9	86
89101	14,698	124.6	85
89108	27,250	119.3	100

Additional Considerations

Alternative Measures of Risk

Food Insecurity



Note: Based on 2016 data.

Neighborhood Economic Risk Assessment

City of Las Vegas

Q2 2018



APPLIED
ANALYSIS

