

Neighborhood Economic Risk Assessment

City of Las Vegas

Q4 2016



March 17, 2017

Cheryl Ross
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. Ross:

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 2016. 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

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



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

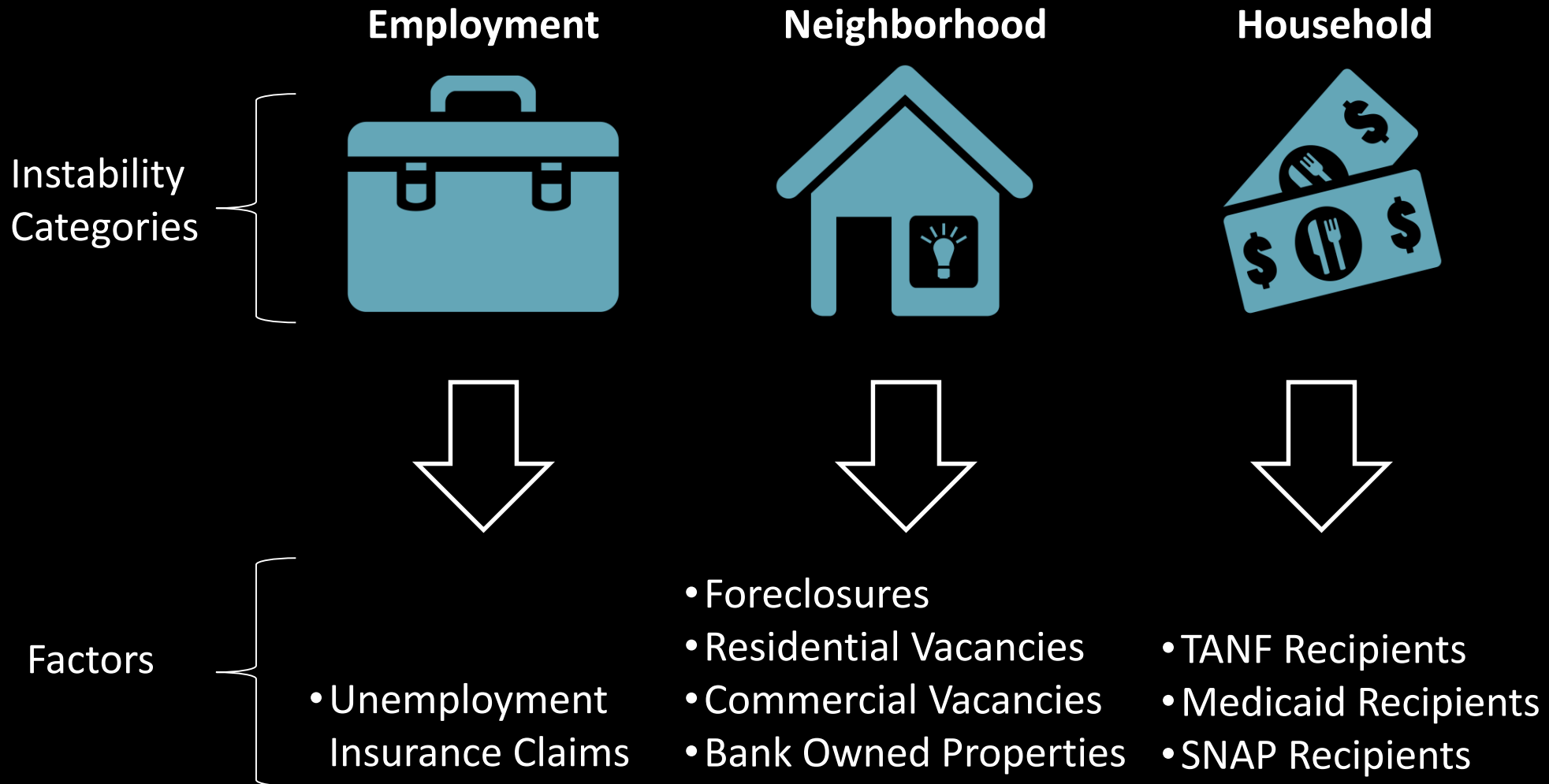
Approach: Create a Neighborhood Risk Index (NRI) by: (1) identifying risk categories; (2) decomposing each category into factors, creating common sizing and weights for the factors; and (3) calculating a mathematical composition of the area's risk and size (the NRI)

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%
		Foreclosures	25.0%
 Neighborhood Instability	50%	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

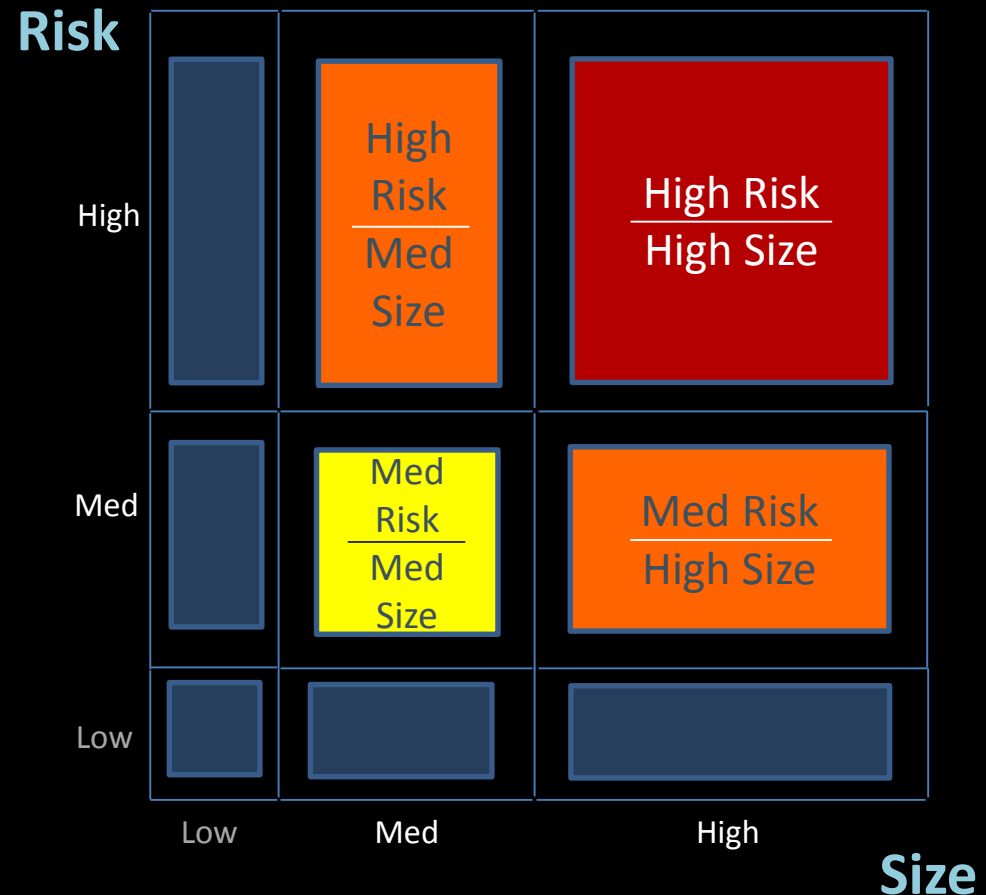
Methodology of the NRI

Relativity and Composite Risk

GOAL

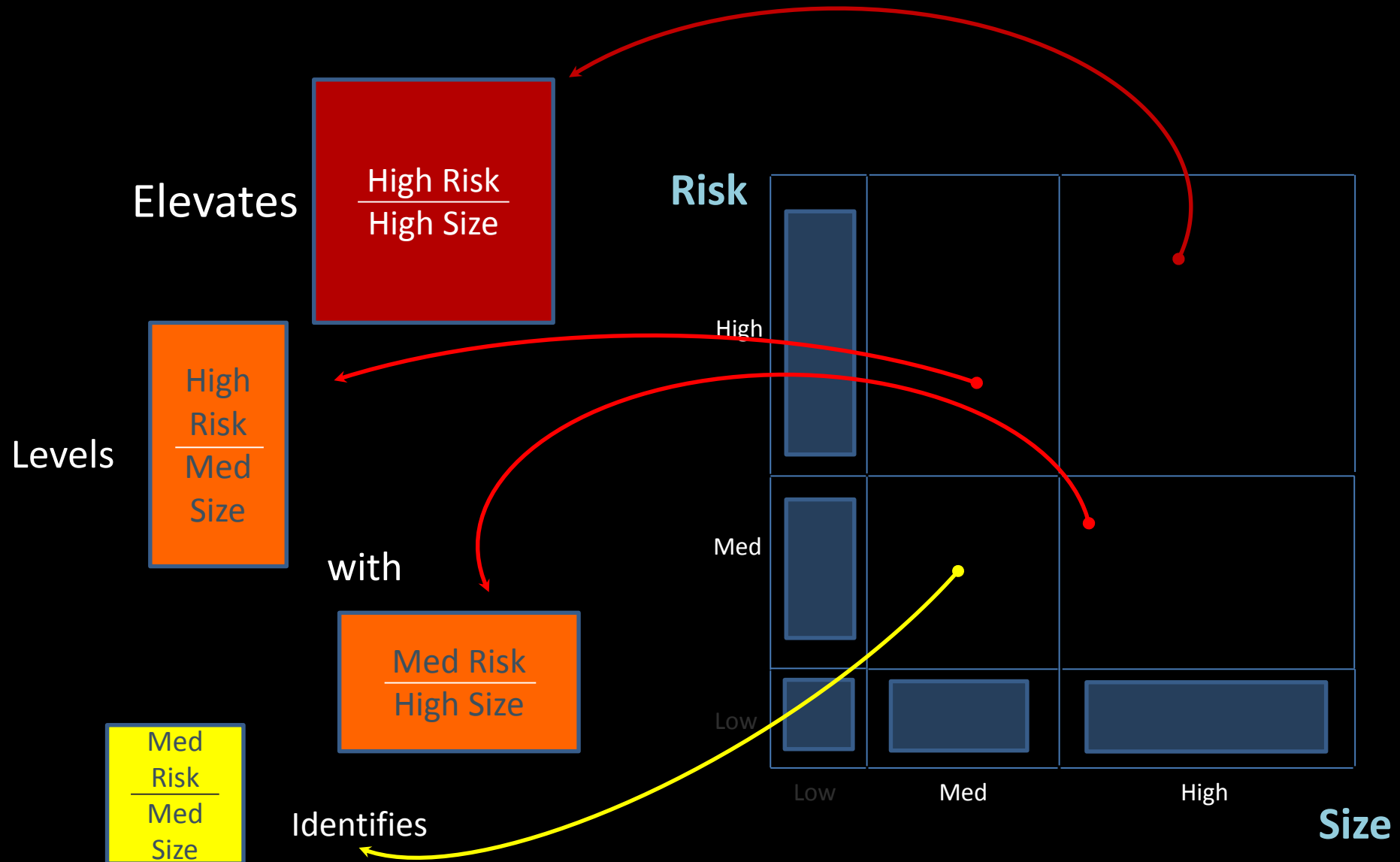
*Focus the City's efforts,
making the best use of limited
resources*

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?



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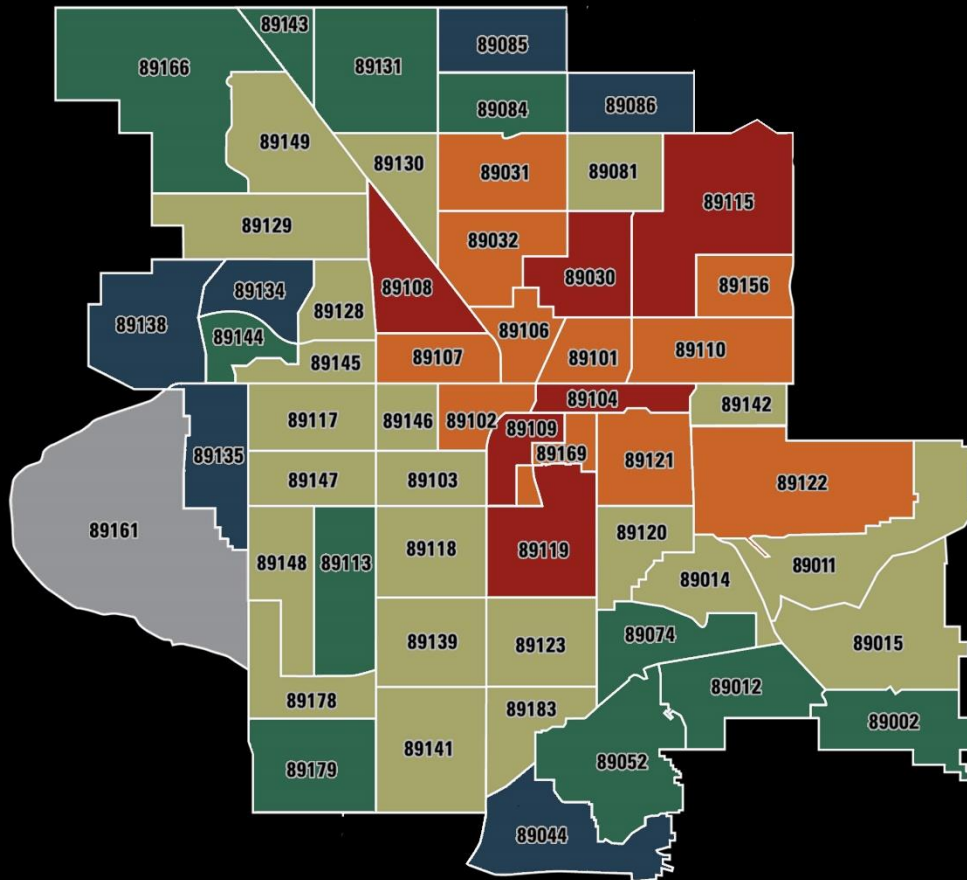


Neighborhood Economic Risk Assessment

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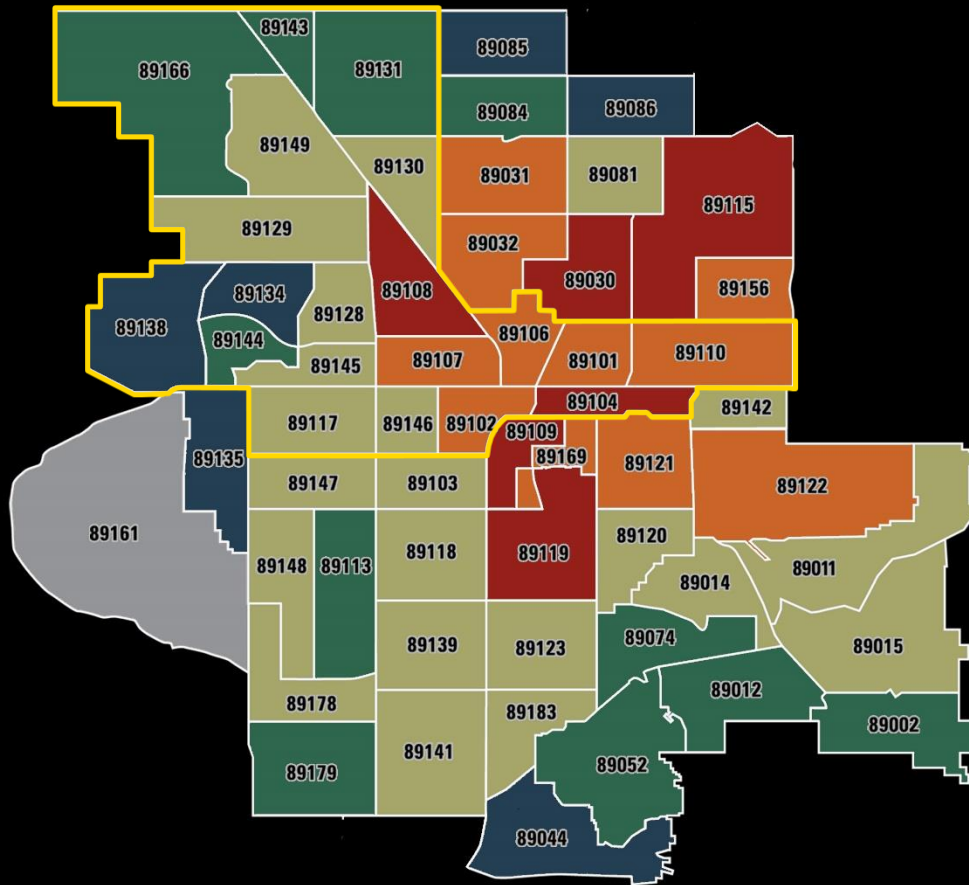
Summary

Valley-wide NRI



Low
 Medium-Low
 Medium
 Medium-High
 High

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



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

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

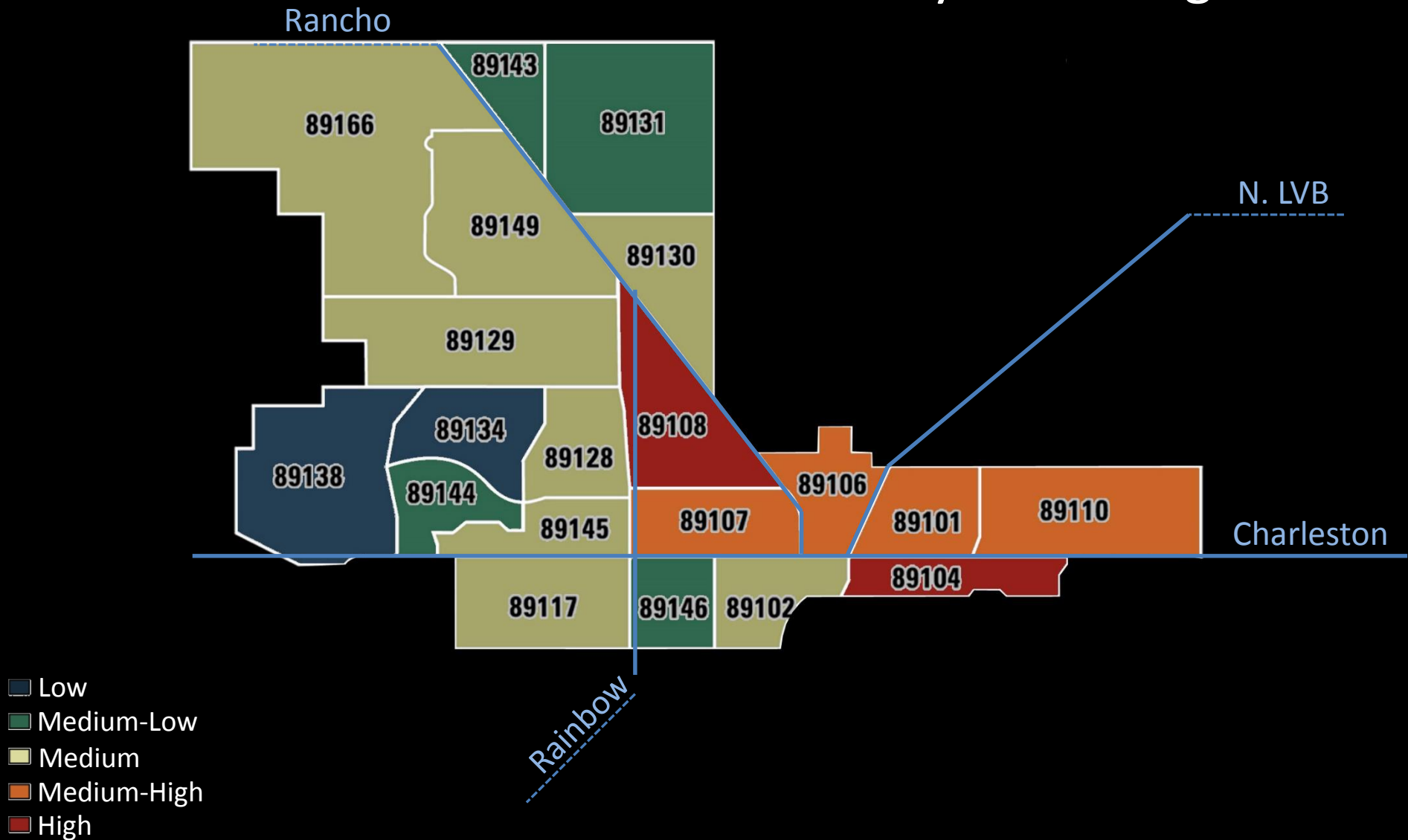
89011				
89014				
89015				
89081				
89103				
89117				
89118				
89120				
89123				
89128				
89129				
89031	89130	89002		
89032	89139	89012		
89101	89141	89052		
89102	89142	89074		
89106	89145	89084		
89030	89107	89146	89113	89044
89104	89110	89147	89131	89085
89108	89121	89148	89143	89086
89109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

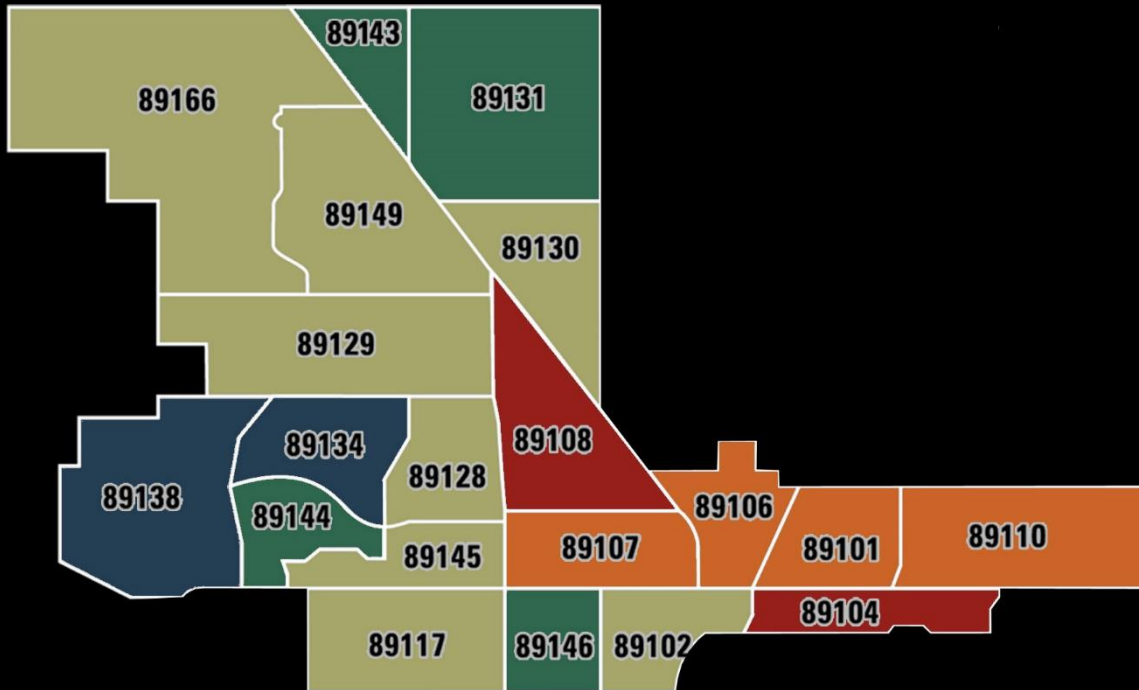
Summary

City of Las Vegas NRI



Summary

City of Las Vegas NRI

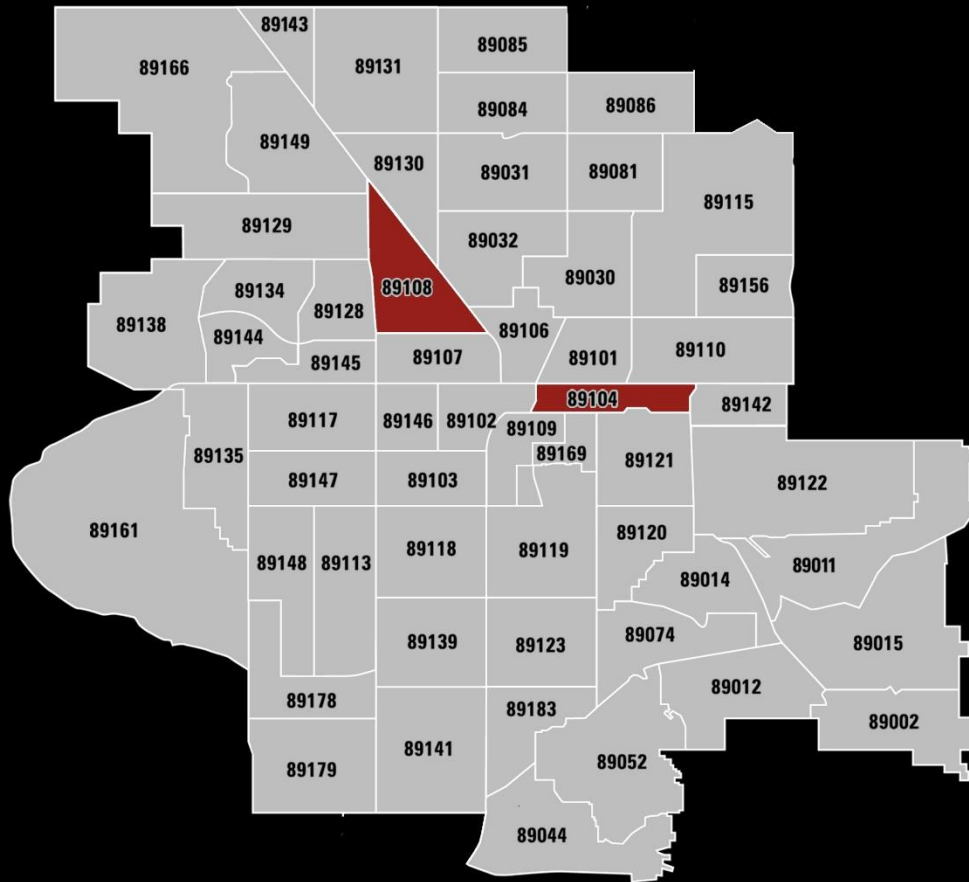


- Low
- Medium-Low
- Medium
- Medium-High
- High

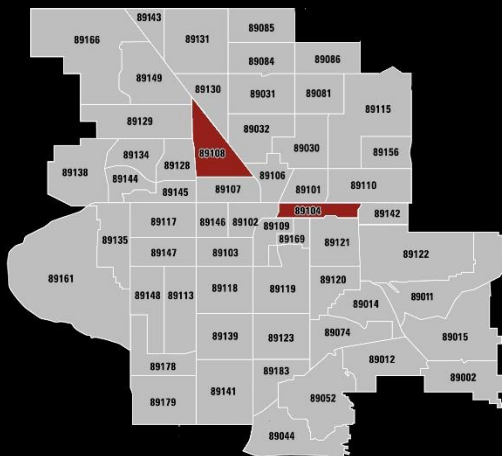
		89102		
		89117		
		89128		
		89129		
	89101	89130	89131	
	89106	89145	89143	
89104	89107	89149	89144	89134
89108	89110	89166	89146	89138
High	Medium	Medium	Medium	Low
	-High		-Low	

Summary

City of Las Vegas NRI



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



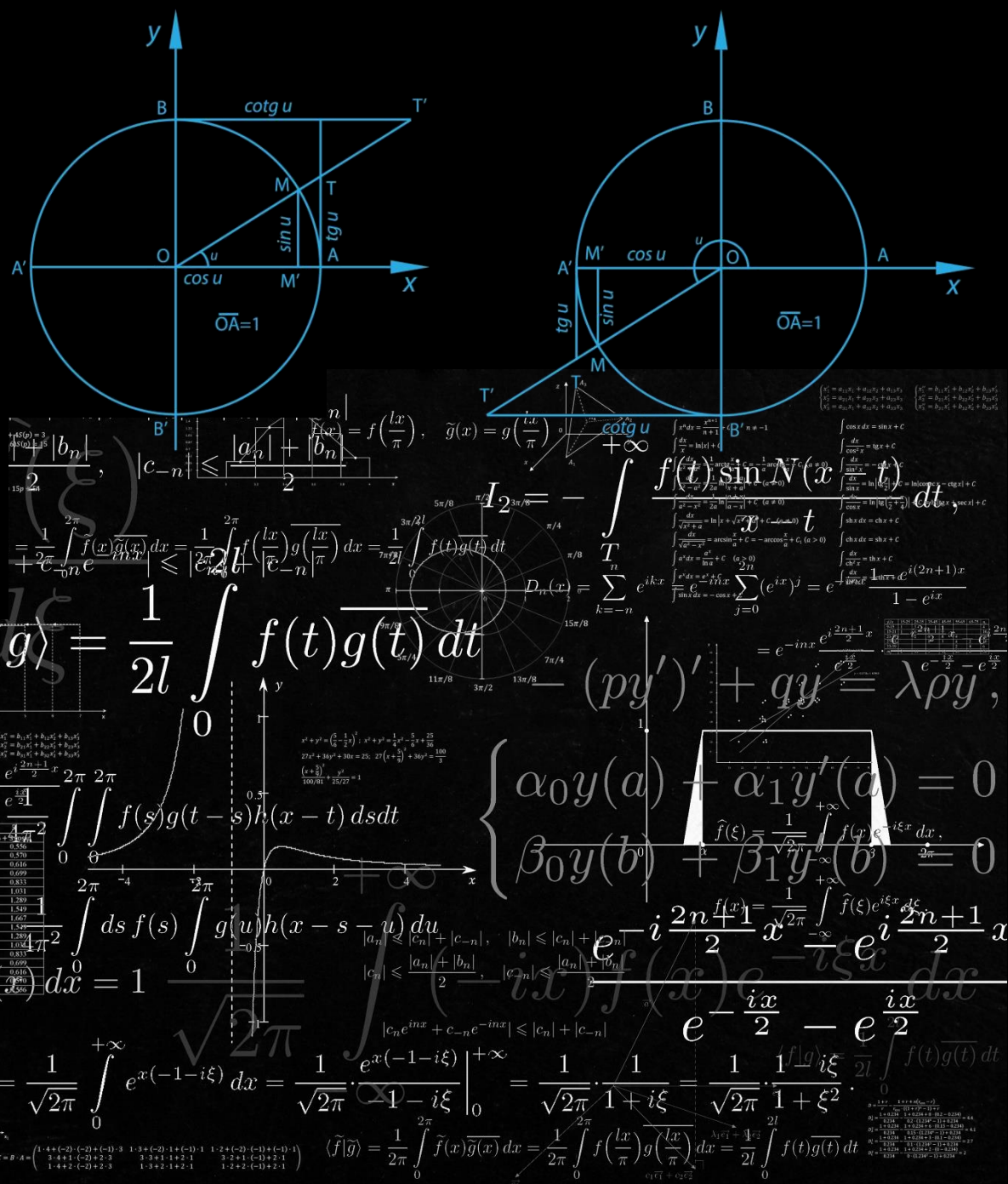
Summary

City of Las Vegas NRI

Zip Code	89104	89108	City Average	LV Valley Average
TANF Recipients Per 1,000 Population	21.3	12.9	10.7	9.5
Medicaid Recipients Per 1,000 Population	431.4	314.6	250.4	231.2
SNAP Recipients Per 1,000 Population	323.1	219.9	174.7	160.3
Unemployment Ins. Per 1,000 Population	14.5	11.3	10.1	10.3
Foreclosures Per 1,000 Total Housing Units	3.8	3.0	2.3	2.4
Residential Vacancies Per 1,000 Total Housing Units	100.8	33.0	63.5	72.4
Commercial Vacancy	13.8%	19.6%	14.1%	14.5%
Bank Owned Homes Per 1,000 Total Housing Units	12.8	16.2	13.9	13.2

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
<u>89104</u>	<u>14.5</u>	<u>10.3</u>	<u>140</u>
89120	13.9	10.3	134
89169	13.1	10.3	126
89121	12.8	10.3	124
89032	12.7	10.3	123
89179	12.6	10.3	122
89119	12.5	10.3	121
89086	12.4	10.3	120
89031	12.3	10.3	119
<u>89146</u>	<u>12.1</u>	<u>10.3</u>	<u>117</u>

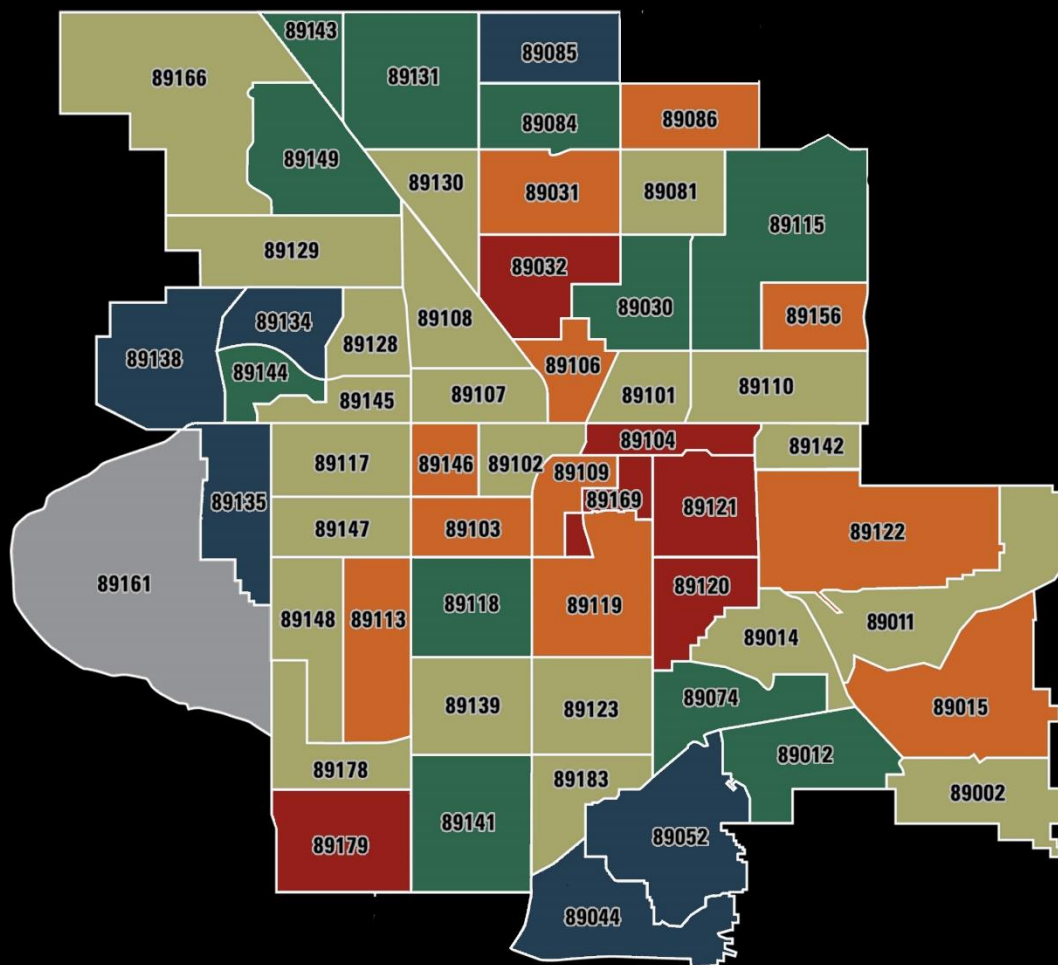


Employment
Instability

Elements of the NRI

Unemp. Insurance | Valley-wide Distribution Map

The rate of unemployment insurance claims per 1,000 residents continued to drop. The rate fell to 10.3 from 10.9 last quarter (down 4.7 percent).



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



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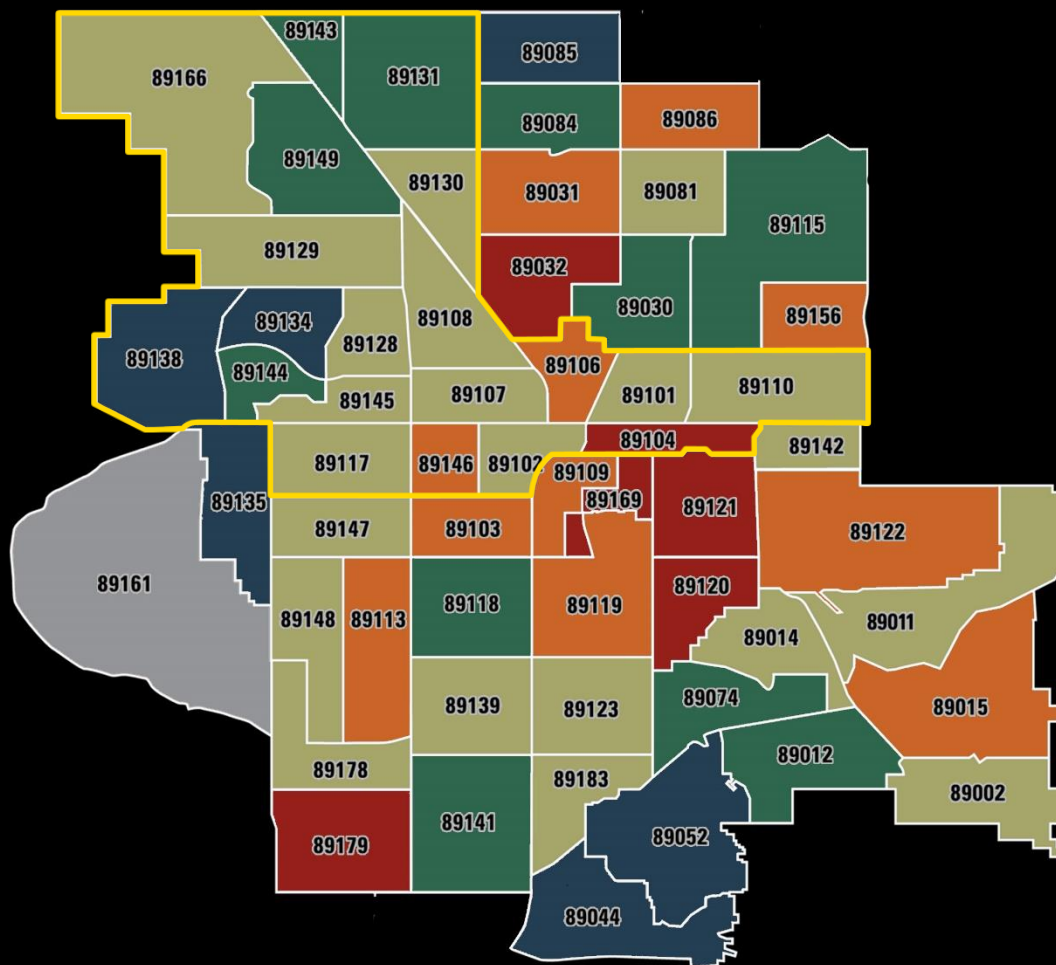
Employment
Instability

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 continued to drop. The rate fell to 10.3 from 10.9 last quarter (down 4.7 percent).



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



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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	10.1	144
89146	12.1	10.1	120
89106	11.9	10.1	118
89108	11.3	10.1	112
89130	11.3	10.1	112

Mean unemployment insurance claims per 1,000 residents:

Valley-wide	10.3
City of Las Vegas	10.1

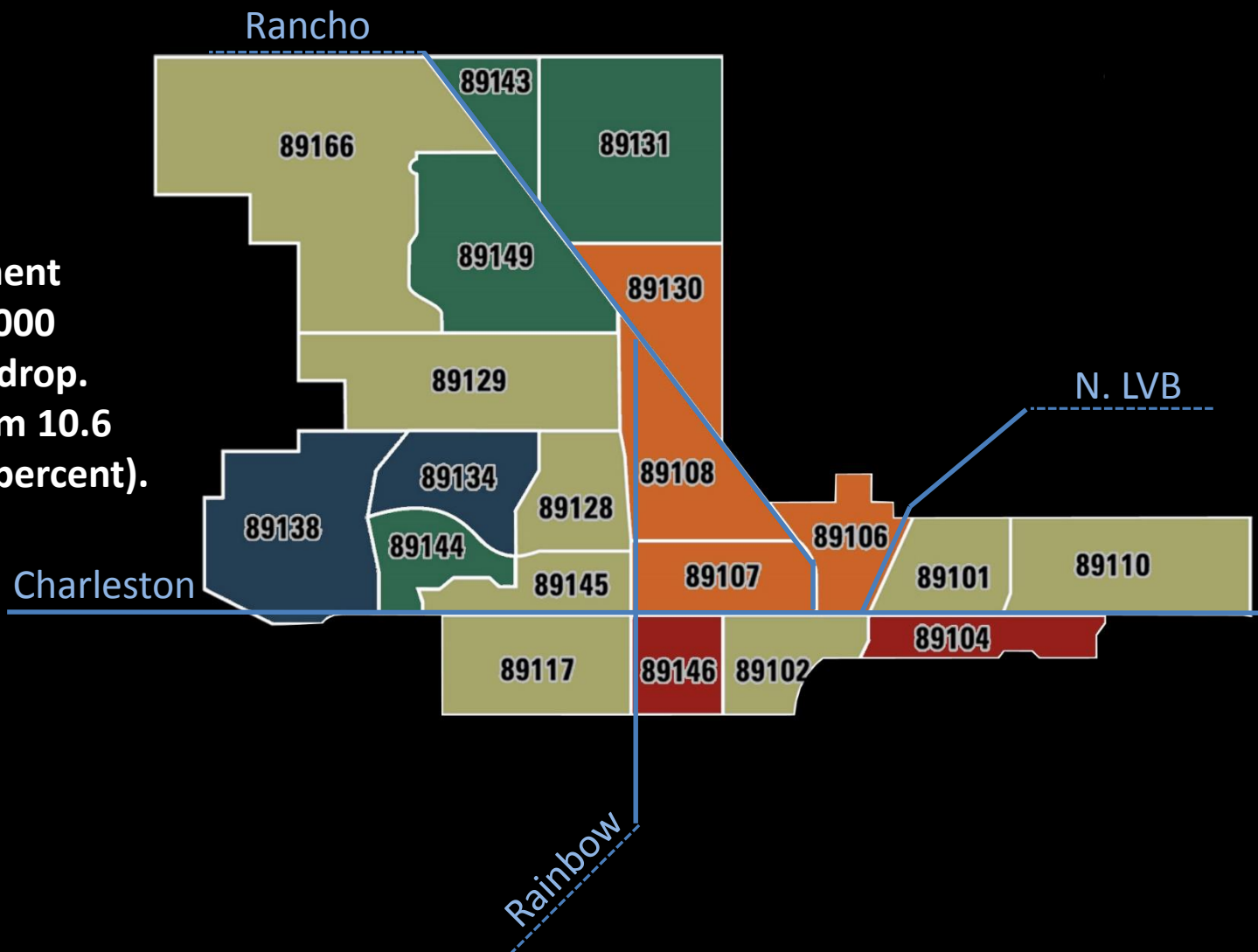


Employment
Instability

Elements of the NRI

Unemp. Insurance | CLV Distribution Map

The rate of unemployment insurance claims per 1,000 residents continued to drop. The rate fell to 10.1 from 10.6 last quarter (down 5.2 percent).



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



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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	8.0	2.4	325
89142	4.6	2.4	189
89156	4.5	2.4	183
89032	4.1	2.4	169
89119	4.0	2.4	163
89122	4.0	2.4	161
<u>89107</u>	<u>3.8</u>	<u>2.4</u>	<u>155</u>
<u>89104</u>	<u>3.8</u>	<u>2.4</u>	<u>153</u>
89081	3.5	2.4	143
89030	3.5	2.4	141

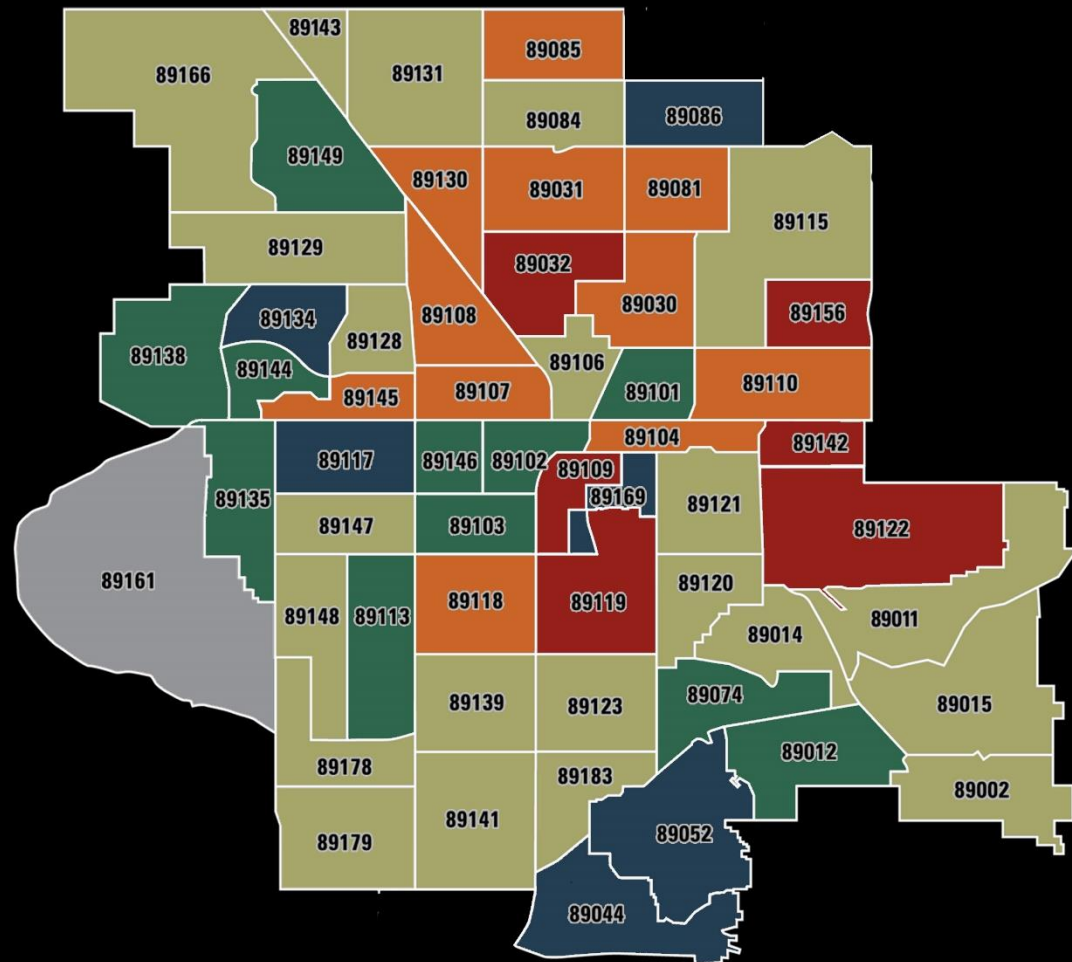


Neighborhood
Instability

Elements of the NRI

Foreclosures | Valley-wide Distribution Map

The rate of foreclosures per 1,000 housing units continued to decline. The rate fell to 2.4 from 2.5 last quarter (down 2.9 percent).



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



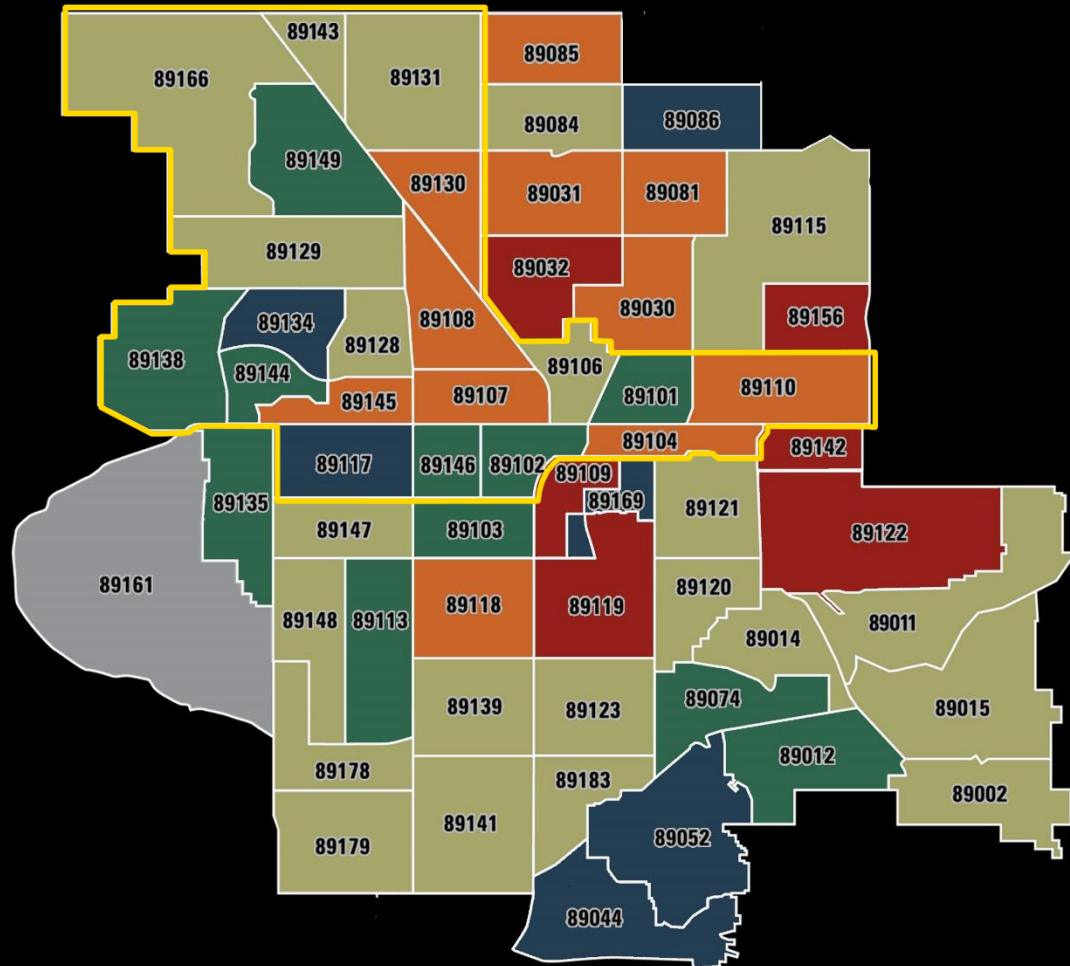
Neighborhood
Instability

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 2.4 from 2.5 last quarter (down 2.9 percent).



- Low
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- Medium
- Medium-High
- High



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Neighborhood Economic Risk Assessment

Q4 2016



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	3.8	2.3	167
89104	3.8	2.3	165
89145	3.3	2.3	145
89110	3.1	2.3	139
89108	3.0	2.3	132

Mean foreclosures per 1,000 housing units:

Valley-wide 2.4

City of Las Vegas 2.3

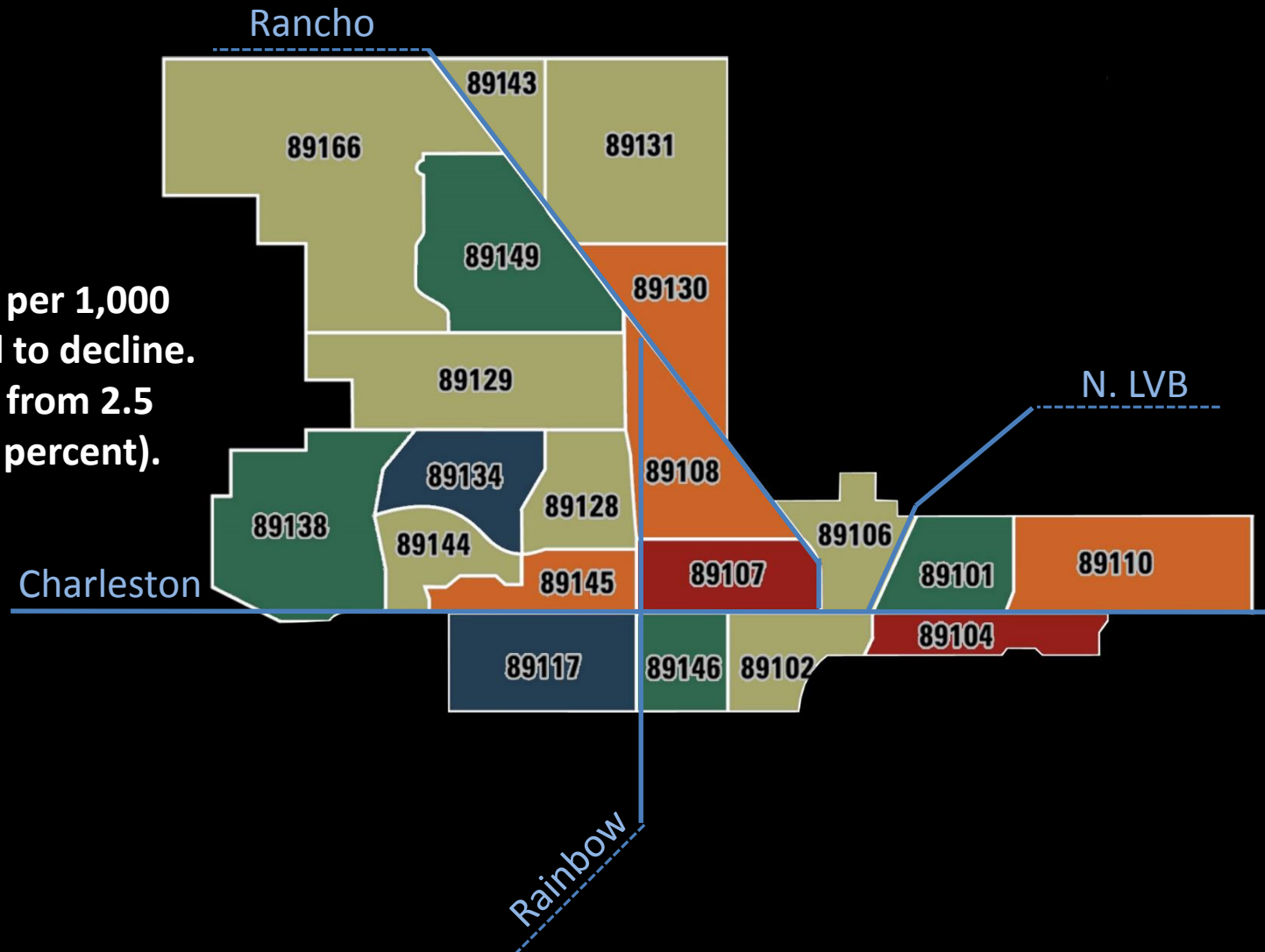


Neighborhood
Instability

Elements of the NRI

Foreclosures | CLV Distribution Map

The rate of foreclosures per 1,000 housing units continued to decline. The rate dropped to 2.3 from 2.5 last quarter (down 10.1 percent).



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Neighborhood Economic Risk Assessment

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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	686.0	72.4	948
89086	206.6	72.4	285
<u>89106</u>	<u>186.9</u>	<u>72.4</u>	<u>258</u>
89179	170.1	72.4	235
<u>89101</u>	<u>161.1</u>	<u>72.4</u>	<u>223</u>
89169	156.9	72.4	217
<u>89166</u>	<u>146.8</u>	<u>72.4</u>	<u>203</u>
89011	129.8	72.4	179
<u>89102</u>	<u>124.9</u>	<u>72.4</u>	<u>173</u>
89178	124.1	72.4	171



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Neighborhood Economic Risk Assessment

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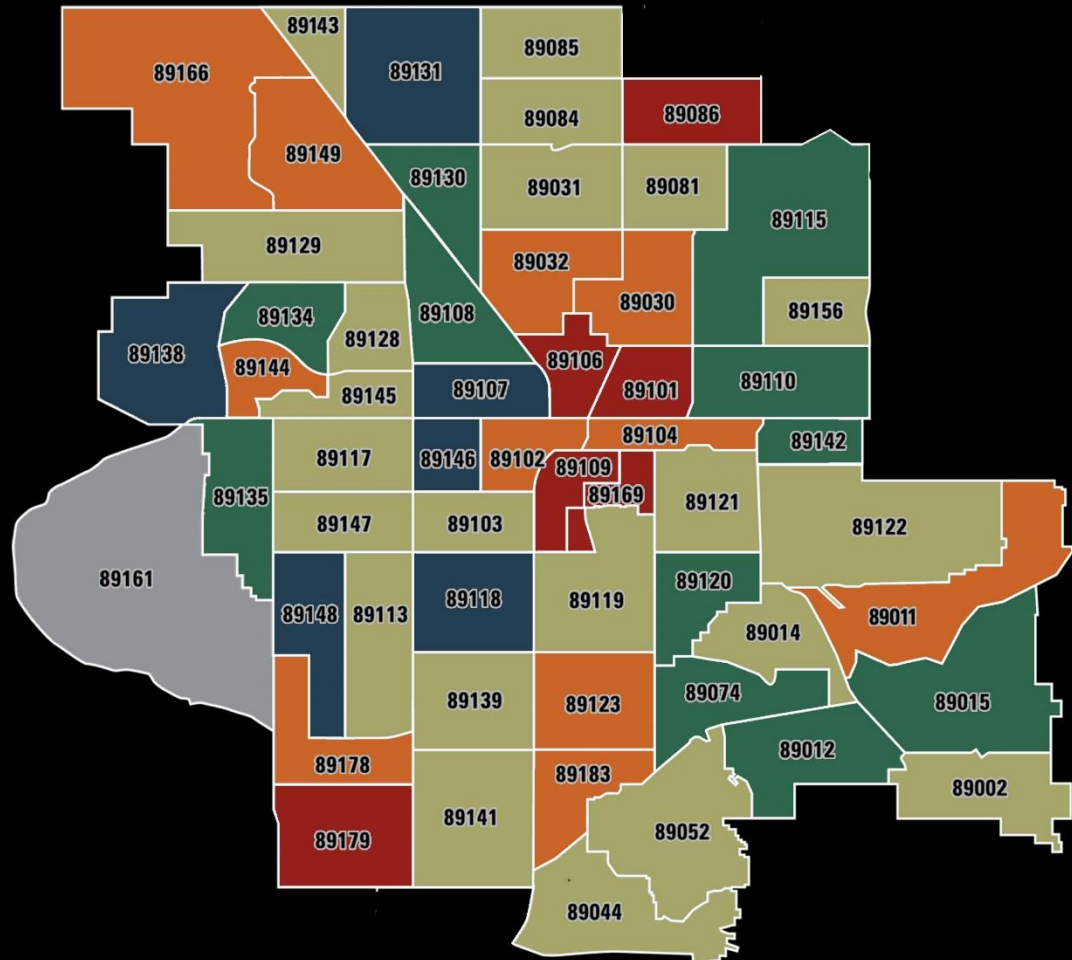


Neighborhood
Instability

Elements of the NRI

Residential Vacancy | Valley-wide Distribution Map

Residential vacancies
per 1,000 housing units
remained unchanged at
72.4 due to annual data.



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



APPLIED
ANALYSIS



Neighborhood Economic Risk Assessment

Q4 2016



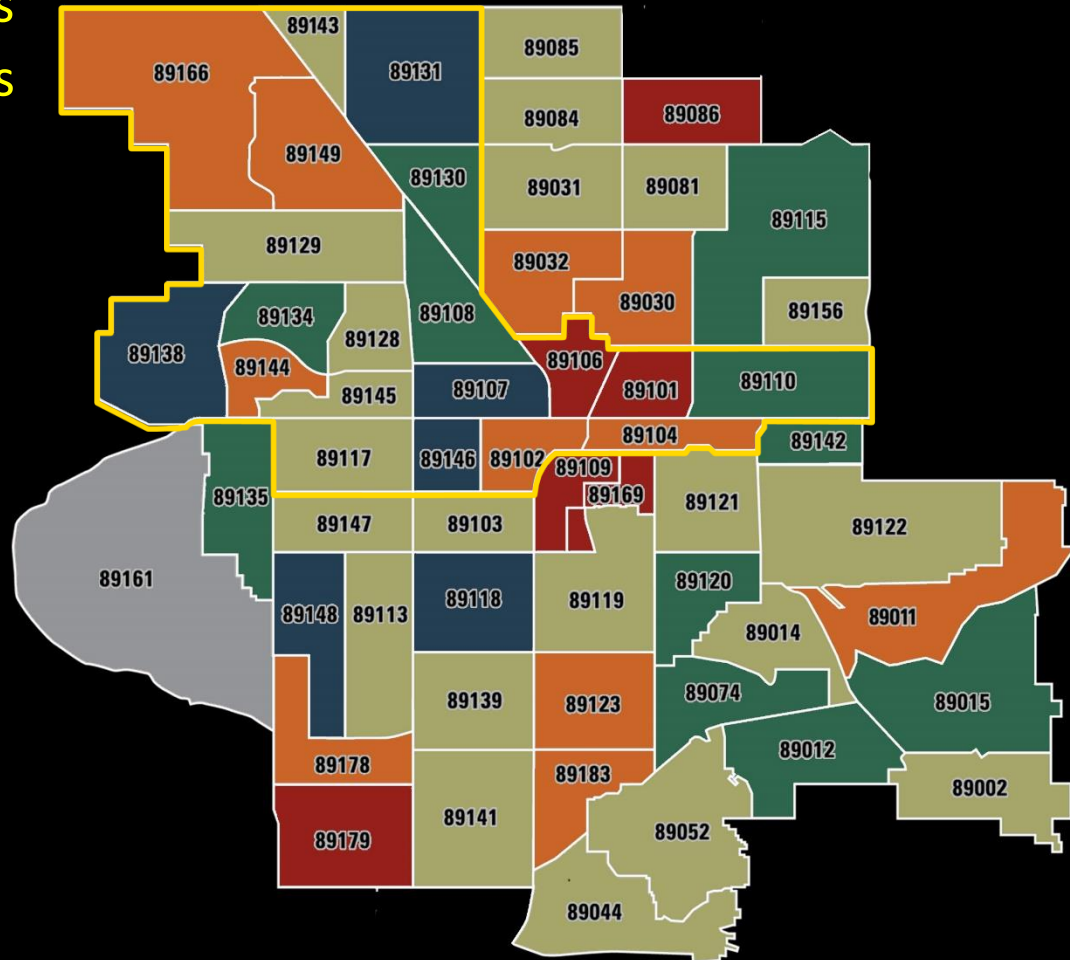
Neighborhood
Instability

Elements of the NRI

Residential Vacancy | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

Residential vacancies
per 1,000 housing units
remained unchanged at
72.4 due to annual data.



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



APPLIED
ANALYSIS



Neighborhood Economic Risk Assessment

Q4 2016



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	186.9	63.5	294
89101	161.1	63.5	254
89166	146.8	63.5	231
89102	124.9	63.5	197
89104	100.8	63.5	159

Mean residential vacancies per 1,000
housing units:

Valley-wide 72.4

City of Las Vegas 63.5

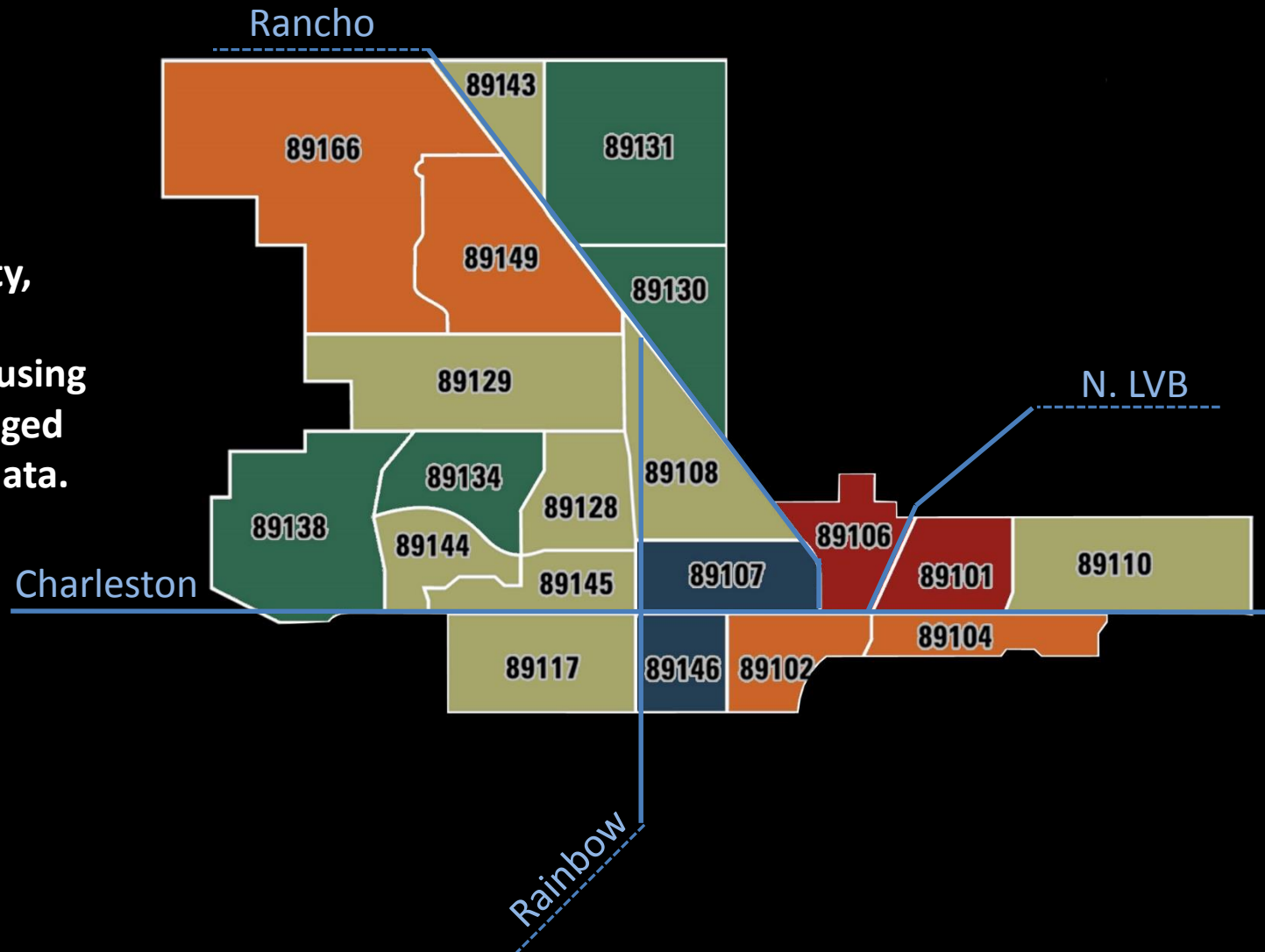


Neighborhood
Instability

Elements of the NRI

Residential Vacancy | CLV Distribution Map

Similarly, within the City,
the rate of residential
vacancies per 1,000 housing
units remained unchanged
at 63.5 due to annual data.



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ANALYSIS



Neighborhood Economic Risk Assessment

Q4 2016



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	40.6%	14.5%	279
89011	34.3%	14.5%	236
89109	25.6%	14.5%	176
89107	24.6%	14.5%	169
89118	19.7%	14.5%	135
89120	19.7%	14.5%	135
89108	19.6%	14.5%	135
89119	18.9%	14.5%	130
89113	18.4%	14.5%	127
89129	18.1%	14.5%	125



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Neighborhood Economic Risk Assessment

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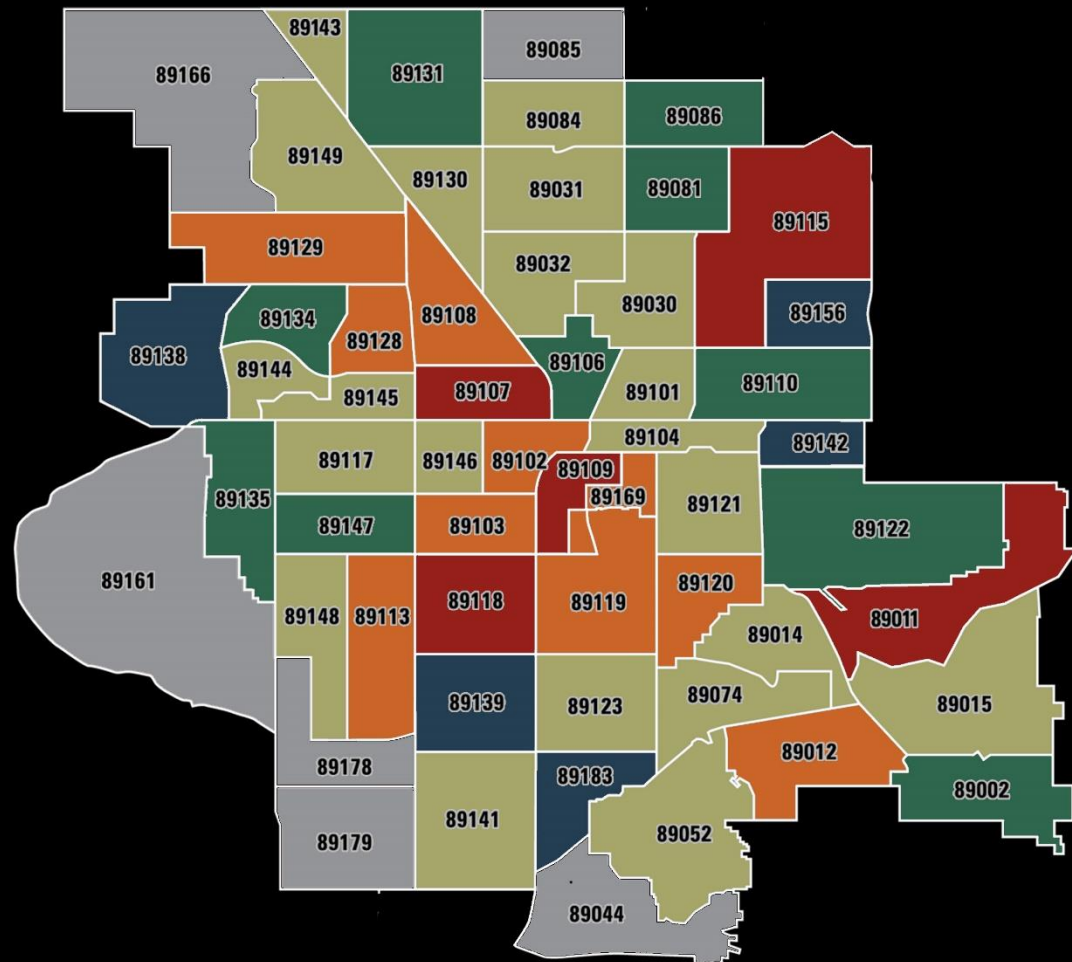


Neighborhood
Instability

Elements of the NRI

Commercial Vacancy | Valley-wide Distribution Map

Valley-wide commercial vacancy continued to drop. The vacancy rate fell to 14.5 percent from 14.9 percent last quarter (down 0.4 percentage point). 89115 once again had the highest vacancy rate at 40.6 percent, while 89011 had the second-highest vacancy rate at 34.3 percent.



- 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.



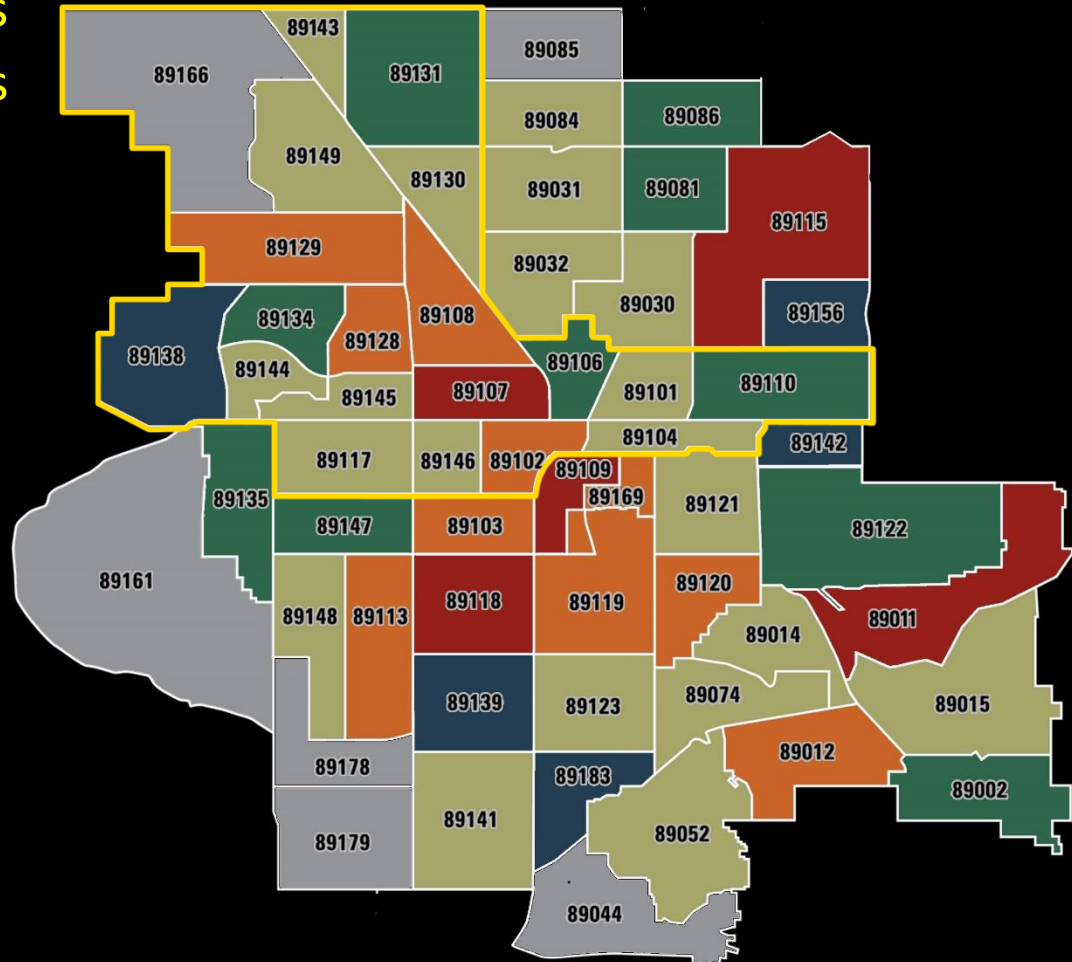
Neighborhood
Instability

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 14.5 percent from 14.9 percent last quarter (down 0.4 percentage point). 89115 once again had the highest vacancy rate at 40.6 percent, while 89011 had the second-highest vacancy rate at 34.3 percent.



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	24.6%	14.1%	174
89108	19.6%	14.1%	138
89129	18.1%	14.1%	128
89102	18.0%	14.1%	127
89128	17.7%	14.1%	125

Mean commercial vacancy rate:

Valley-wide 14.5%

City of Las Vegas 14.1%

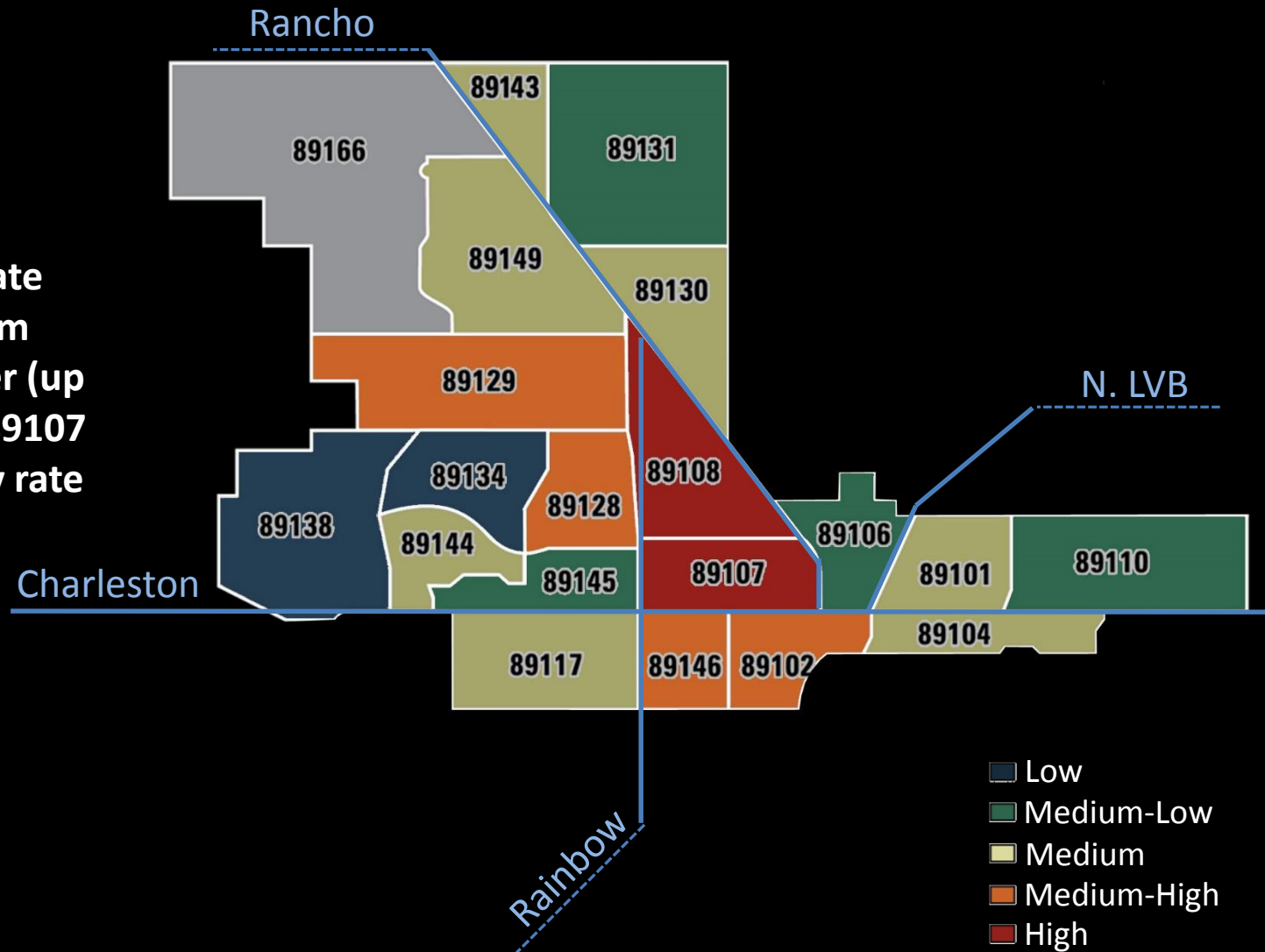


Neighborhood
Instability

Elements of the NRI

Commercial Vacancy | CLV Distribution Map

City-wide commercial vacancy continued to increase. The vacancy rate rose to 14.1 percent from 14.0 percent last quarter (up 0.1 percentage point). 89107 had the highest vacancy rate at 24.6 percent.



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	24.5	13.2	186
<u>89143</u>	<u>22.6</u>	<u>13.2</u>	<u>171</u>
89031	22.5	13.2	170
89030	22.1	13.2	168
89156	22.0	13.2	167
<u>89110</u>	<u>20.6</u>	<u>13.2</u>	<u>156</u>
89032	20.3	13.2	154
89141	19.6	13.2	149
<u>89107</u>	<u>19.0</u>	<u>13.2</u>	<u>144</u>
89081	18.4	13.2	140

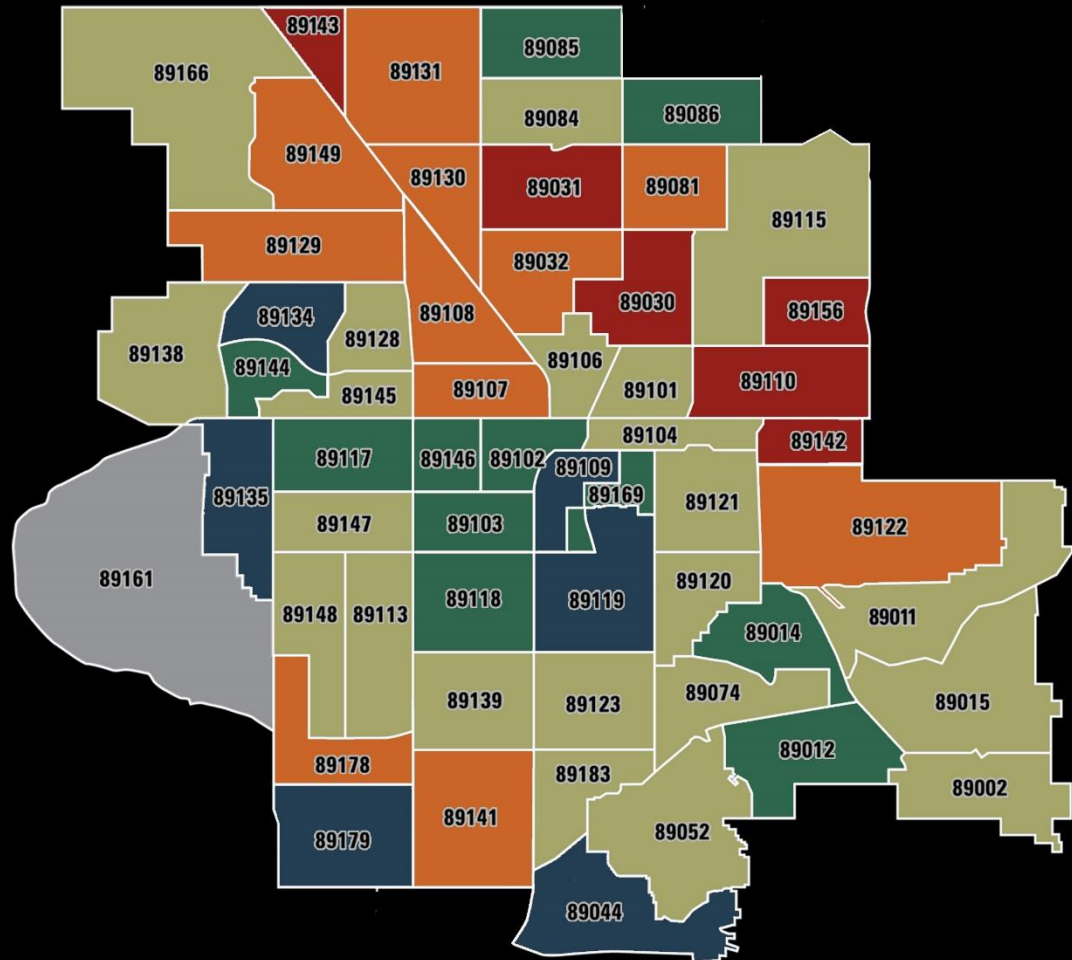


Neighborhood
Instability

Elements of the NRI

Bank Owned Homes | Valley-wide Distribution Map

The rate of bank owned homes per 1,000 housing units continued to decline. The rate fell to 13.2 from 13.6 last quarter (down 3.3 percent).



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



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Neighborhood Economic Risk Assessment

Q4 2016



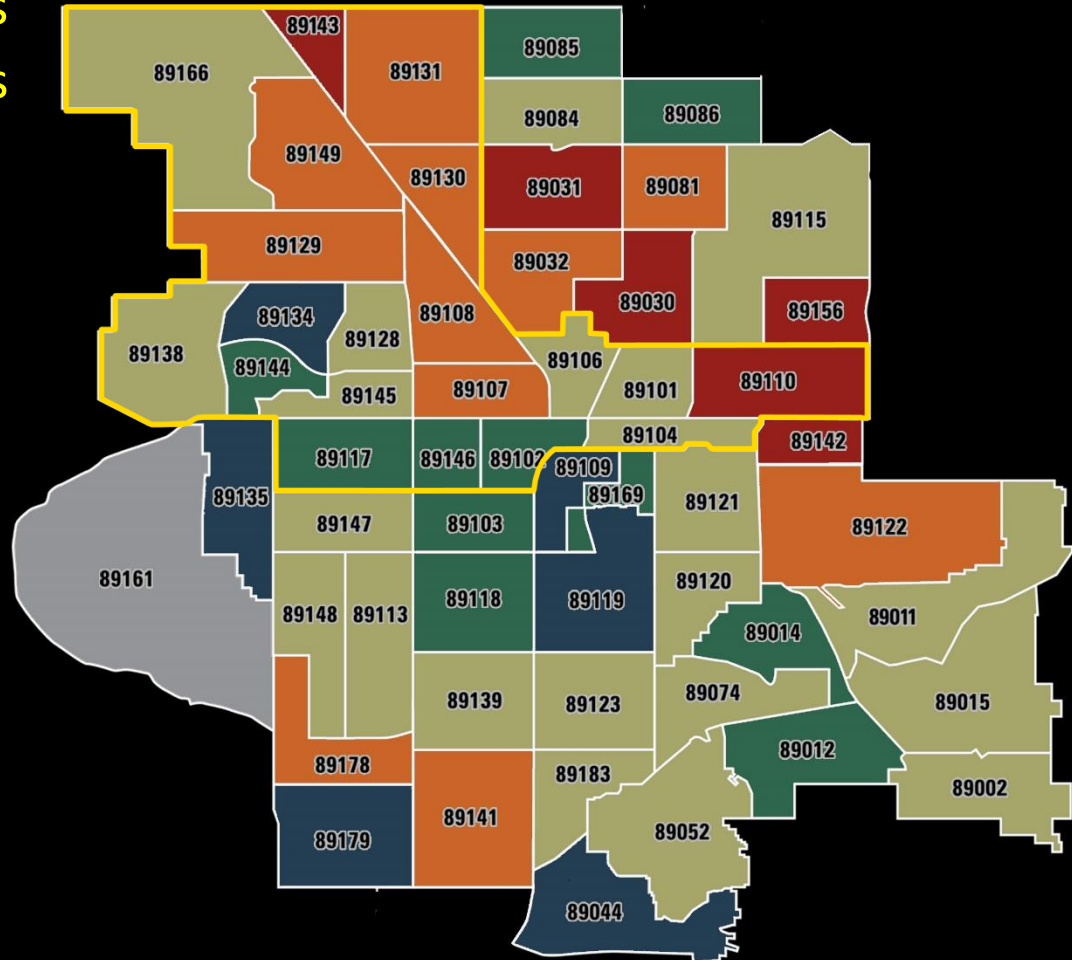
Neighborhood
Instability

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 continued to decline. The rate fell to 13.2 from 13.6 last quarter (down 3.3 percent).





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	22.6	13.9	163
89110	20.6	13.9	148
89107	19.0	13.9	137
89130	17.3	13.9	125
89131	16.7	13.9	121

Mean bank owned homes per 1,000
housing units:

City of Las Vegas 13.9

Valley-wide 13.2

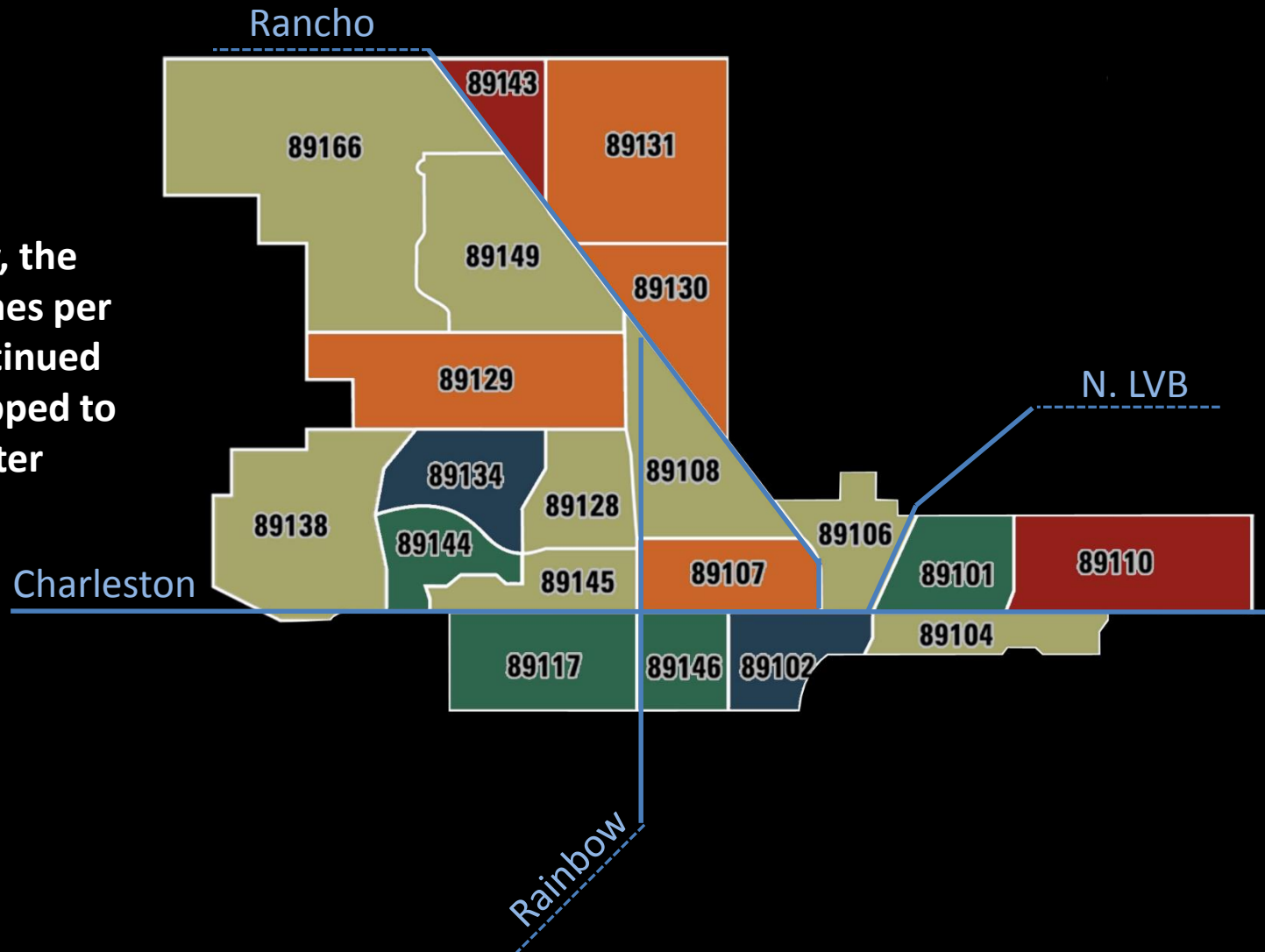


Neighborhood
Instability

Elements of the NRI

Bank Owned Homes | CLV Distribution Map

Similarly, within the City, the rate of bank owned homes per 1,000 housing units continued to decline. The rate dropped to 13.9 from 14.2 last quarter (down 2.6 percent).



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



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Neighborhood Economic Risk Assessment

Q4 2016

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>32.6</u>	<u>9.5</u>	<u>342</u>
89030	30.7	9.5	322
<u>89101</u>	<u>26.6</u>	<u>9.5</u>	<u>280</u>
89115	24.1	9.5	253
89169	22.3	9.5	234
<u>89104</u>	<u>21.3</u>	<u>9.5</u>	<u>224</u>
<u>89102</u>	<u>19.5</u>	<u>9.5</u>	<u>205</u>
89119	15.5	9.5	163
89156	15.5	9.5	163
<u>89107</u>	<u>14.1</u>	<u>9.5</u>	<u>149</u>



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ANALYSIS



Neighborhood Economic Risk Assessment

Q4 2016

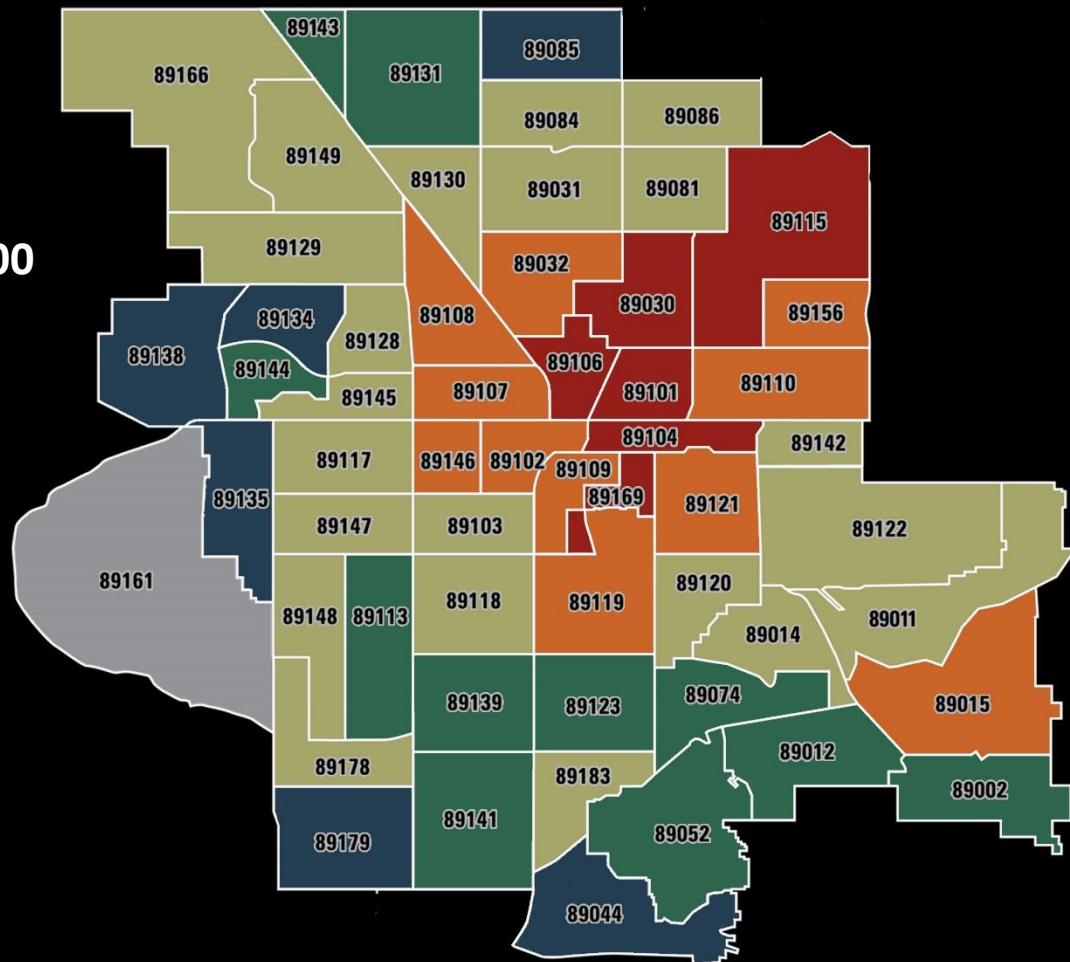


Household
Instability

Elements of the NRI

TANF | Valley-wide Distribution Map

The rate of TANF recipients per 1,000 residents continued to decline. The rate dropped to 9.5 from 9.7 last quarter (down 2.2 percent).



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



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Neighborhood Economic Risk Assessment

Q4 2016



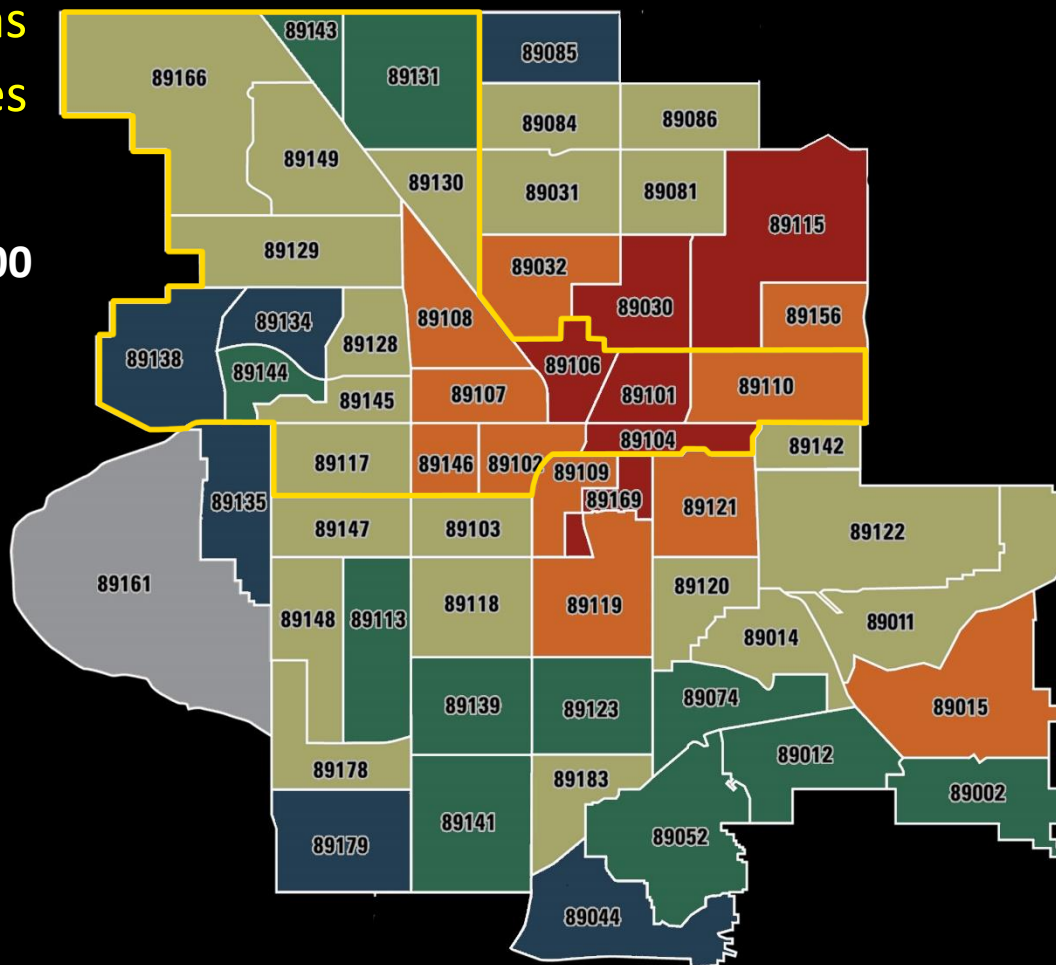
Household
Instability

Elements of the NRI

TANF | Valley-wide Distribution Map

City of Las Vegas
Zip Codes

The rate of TANF recipients per 1,000 residents continued to decline. The rate dropped to 9.5 from 9.7 last quarter (down 2.2 percent).



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



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Neighborhood Economic Risk Assessment

Q4 2016



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	32.6	10.7	304
89101	26.6	10.7	248
89104	21.3	10.7	198
89102	19.5	10.7	182
89107	14.1	10.7	132

Mean TANF recipients per 1,000 residents:

City of Las Vegas	10.7
Valley-wide	9.5



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Neighborhood Economic Risk Assessment

Q4 2016

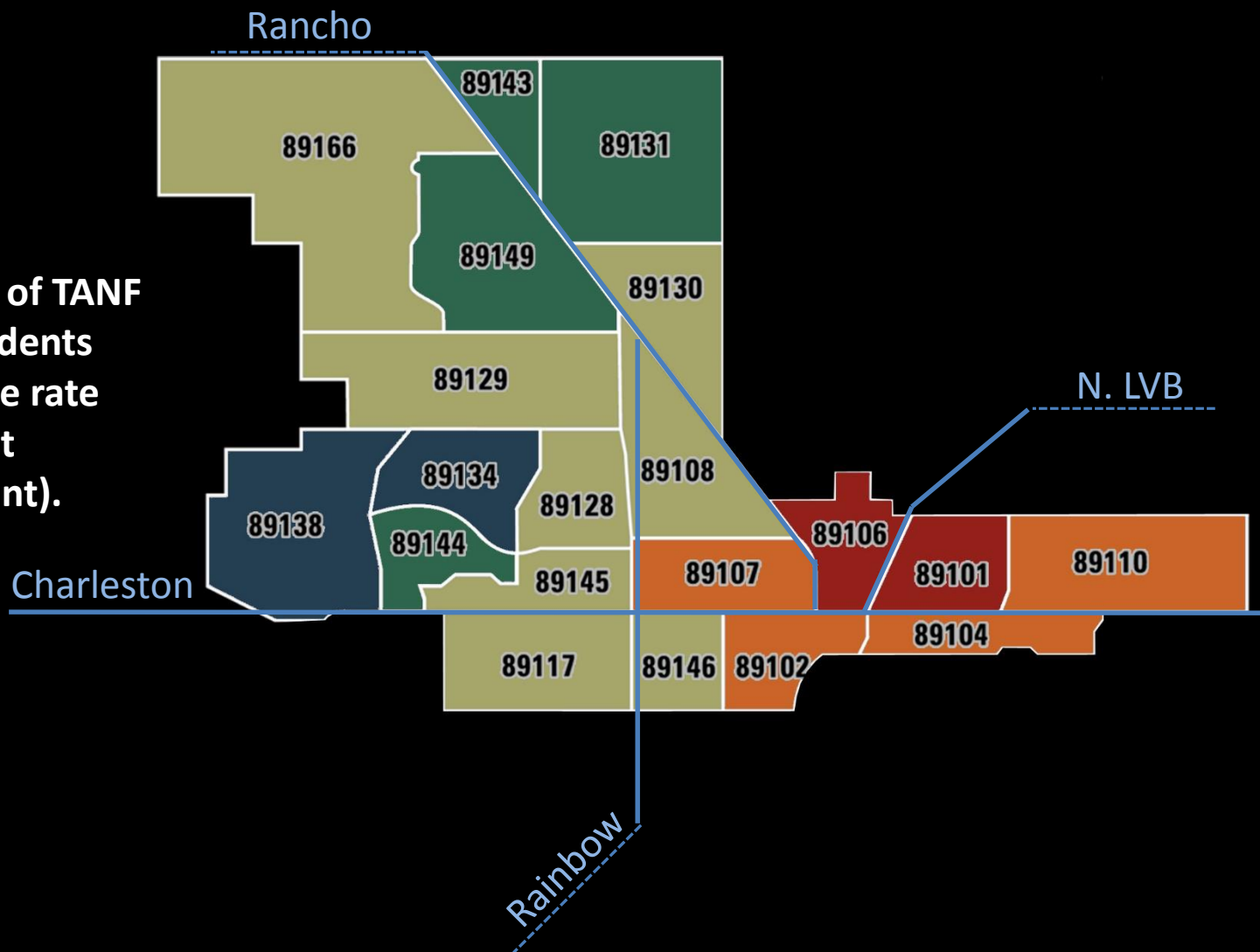


Household
Instability

Elements of the NRI

TANF | CLV Distribution Map

Within the City, the rate of TANF recipients per 1,000 residents continued to decline. The rate fell to 10.7 from 11.0 last quarter (down 2.7 percent).



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



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Neighborhood Economic Risk Assessment

Q4 2016



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>428.4</u>	<u>160.3</u>	<u>267</u>
<u>89101</u>	<u>395.5</u>	<u>160.3</u>	<u>247</u>
89030	356.3	160.3	222
<u>89104</u>	<u>323.1</u>	<u>160.3</u>	<u>202</u>
89169	302.0	160.3	188
89115	295.8	160.3	185
<u>89102</u>	<u>280.5</u>	<u>160.3</u>	<u>175</u>
89119	259.7	160.3	162
89109	251.4	160.3	157
89121	238.9	160.3	149



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Neighborhood Economic Risk Assessment

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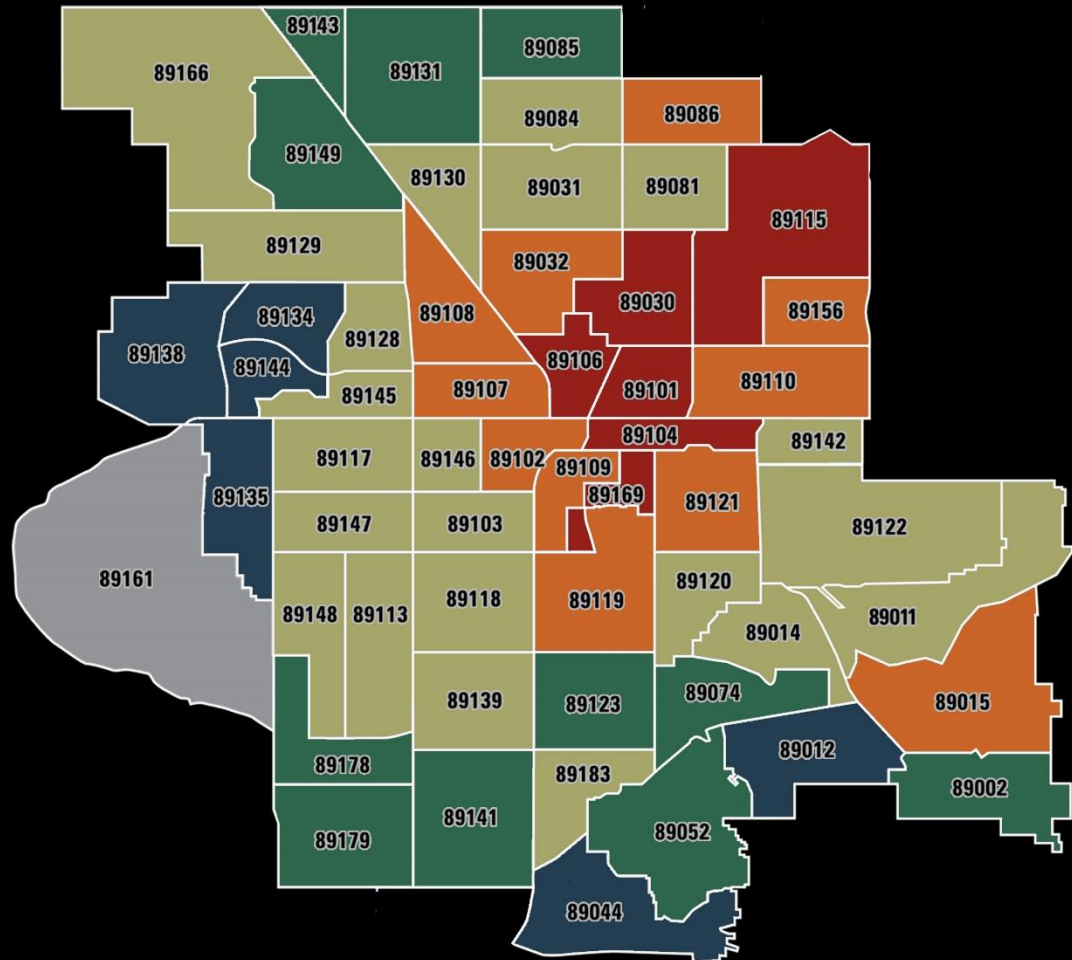


Household
Instability

Elements of the NRI

SNAP | Valley-wide Distribution Map

The rate of SNAP recipients per 1,000 residents increased to 160.3 from 160.2 last quarter (up 0.04 percent).



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



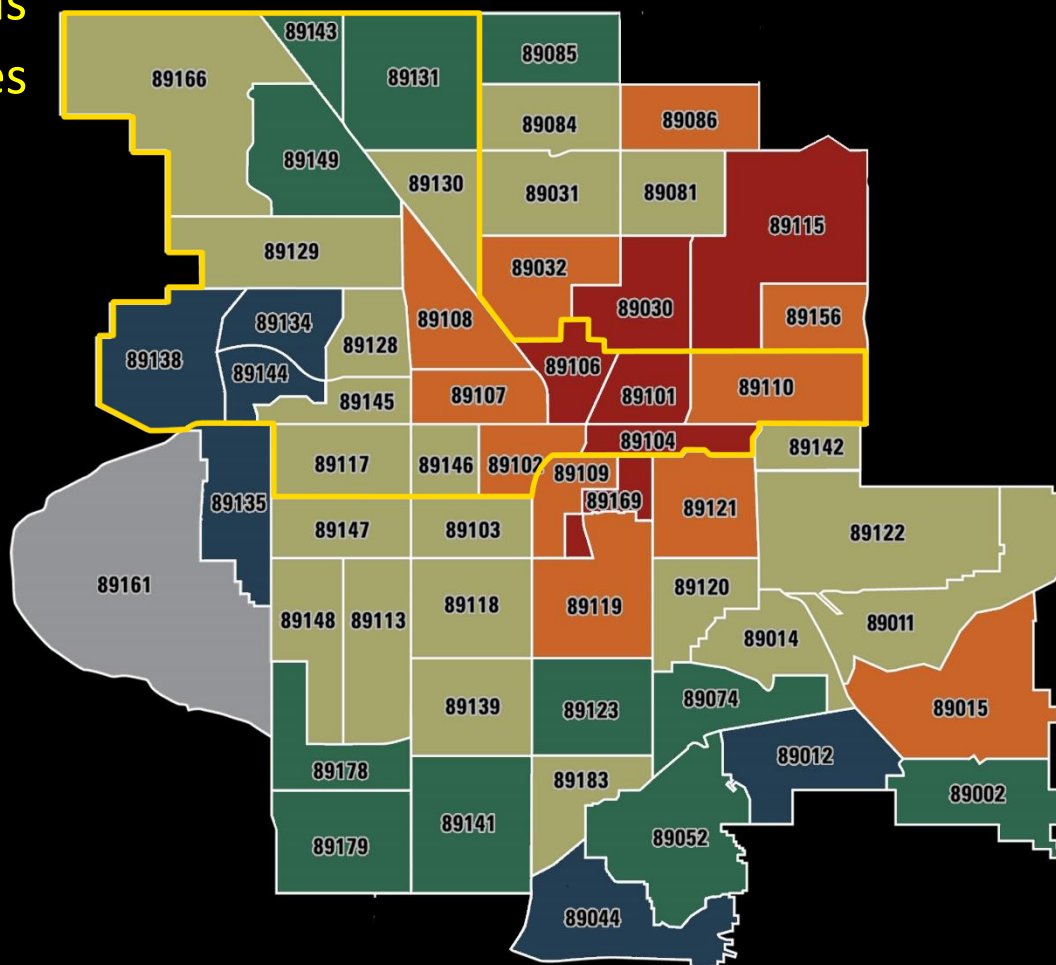
Household
Instability

City of Las Vegas
Zip Codes

Elements of the NRI

SNAP | Valley-wide Distribution Map

The rate of SNAP recipients per 1,000 residents increased to 160.3 from 160.2 last quarter (up 0.04 percent).



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



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Neighborhood Economic Risk Assessment

Q4 2016



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	428.4	174.7	245
89101	395.5	174.7	226
89104	323.1	174.7	185
89102	280.5	174.7	161
89107	225.6	174.7	129

Mean SNAP recipients per 1,000 residents:

City of Las Vegas 174.7

Valley-wide 160.3



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Neighborhood Economic Risk Assessment

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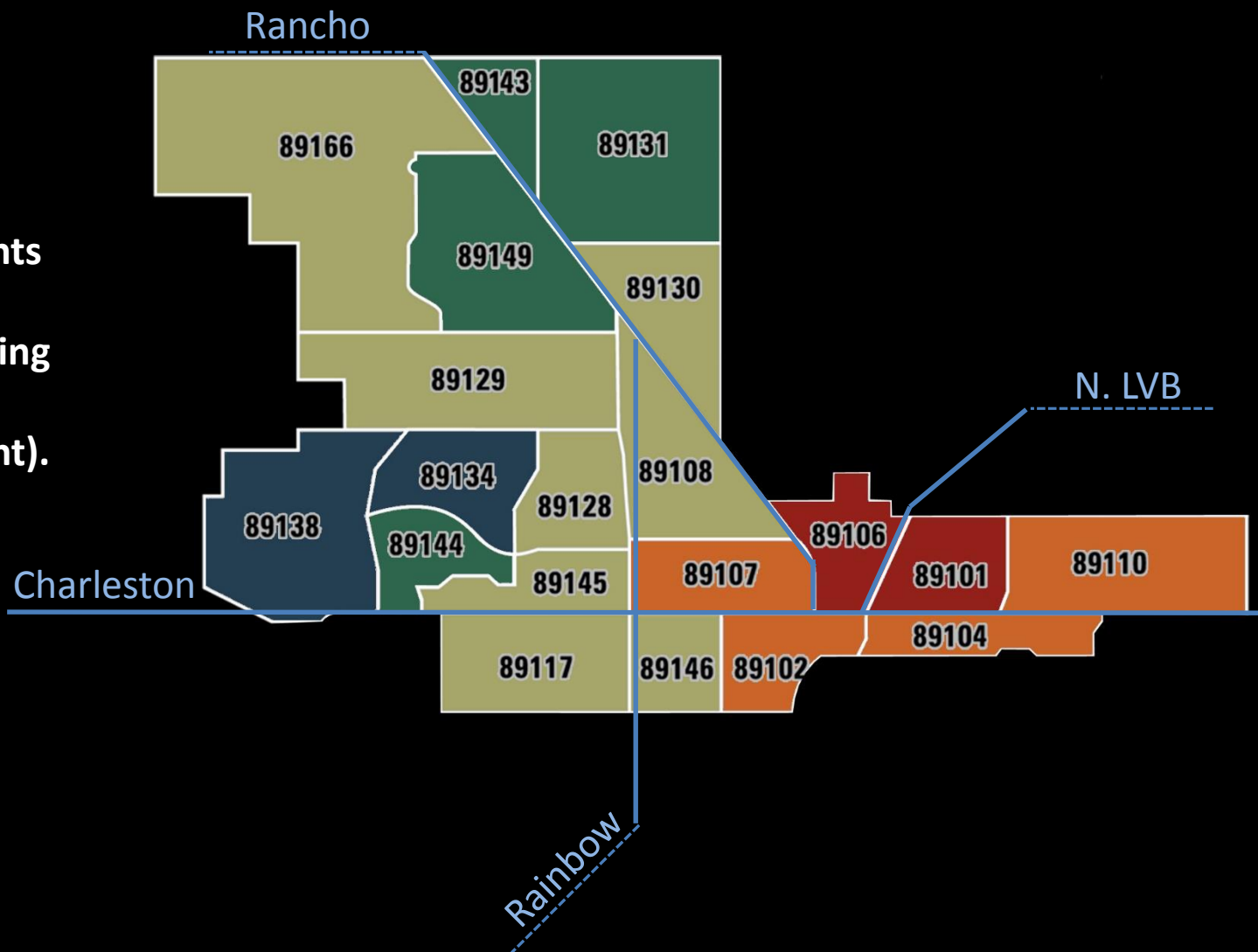


Household
Instability

Elements of the NRI

SNAP | CLV Distribution Map

The rate of SNAP recipients per 1,000 residents continued to decline, falling to 174.7 from 174.9 last quarter (down 0.1 percent).



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



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Neighborhood Economic Risk Assessment

Q4 2016



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>542.0</u>	<u>231.2</u>	<u>234</u>
<u>89101</u>	<u>503.1</u>	<u>231.2</u>	<u>218</u>
89030	484.1	231.2	209
<u>89104</u>	<u>431.4</u>	<u>231.2</u>	<u>187</u>
89115	385.9	231.2	167
89169	367.4	231.2	159
<u>89102</u>	<u>366.7</u>	<u>231.2</u>	<u>159</u>
89109	352.4	231.2	152
<u>89107</u>	<u>332.0</u>	<u>231.2</u>	<u>144</u>
89156	330.7	231.2	143

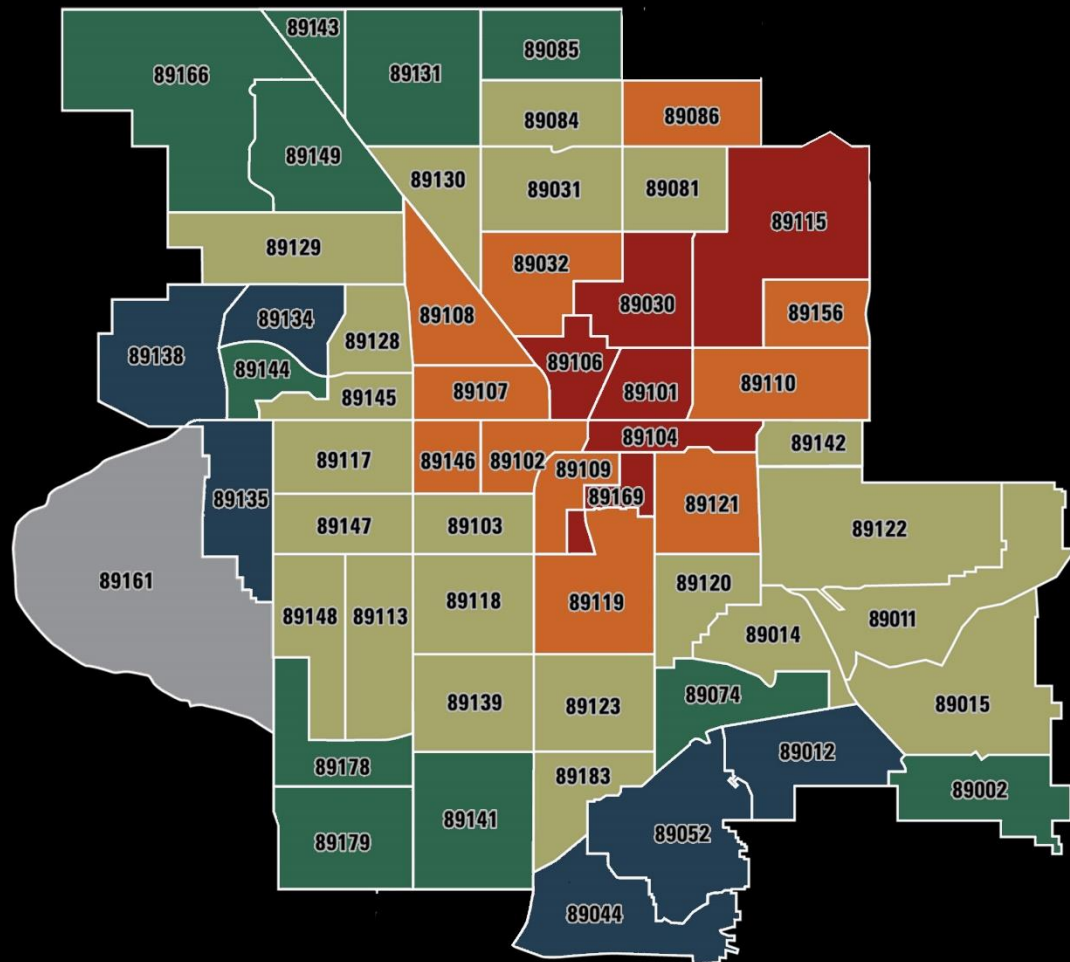


Household
Instability

The rate of Medicaid recipients per 1,000 residents continued to increase. The rate rose to 231.2 from 229.2 last quarter (up 0.8 percent).

Elements of the NRI

Medicaid | Valley-wide Distribution Map



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





Household
Instability

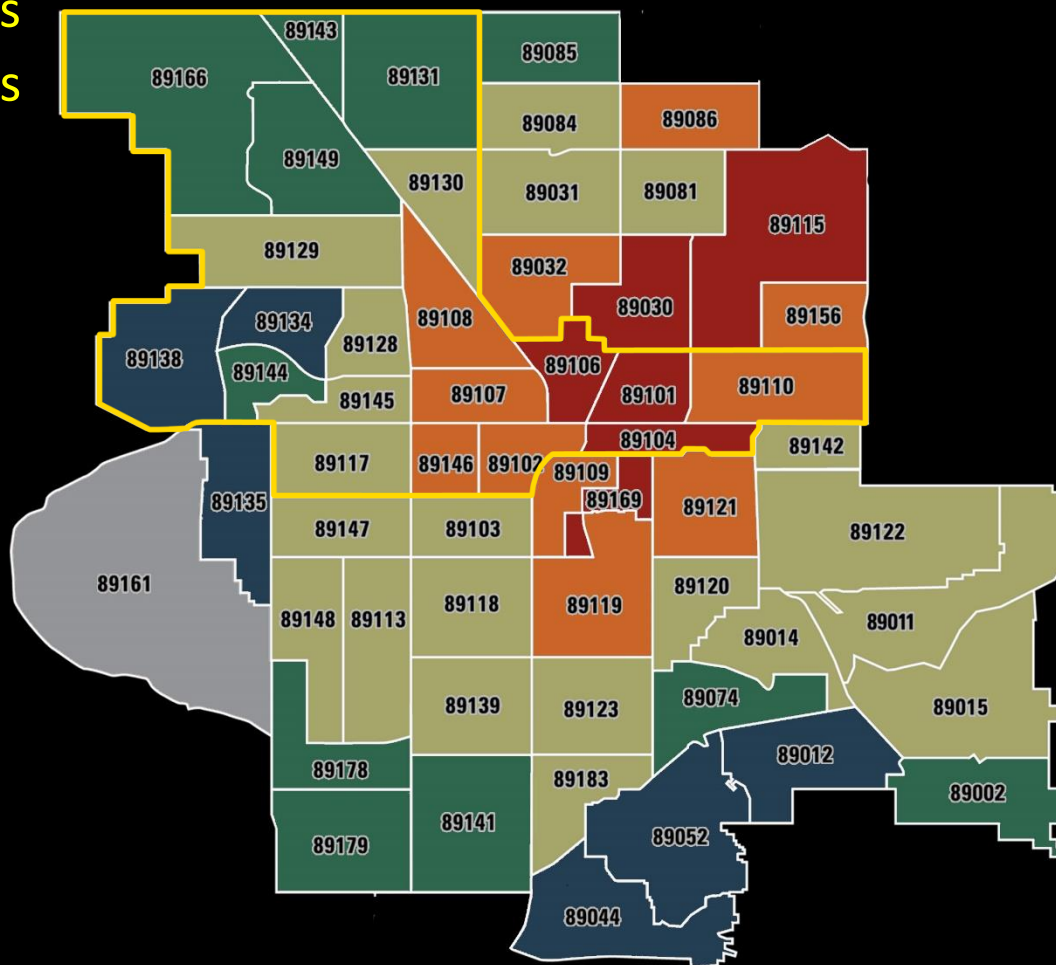
City of Las Vegas
Zip Codes

The rate of Medicaid recipients per 1,000 residents continued to increase. The rate rose to 231.2 from 229.2 last quarter (up 0.8 percent).

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

Elements of the NRI

Medicaid | Valley-wide Distribution Map





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	542.0	250.4	216
89101	503.1	250.4	201
89104	431.4	250.4	172
89102	366.7	250.4	146
89107	332.0	250.4	133

Mean Medicaid recipients per 1,000 residents:

City of Las Vegas 250.4

Valley-wide 231.2

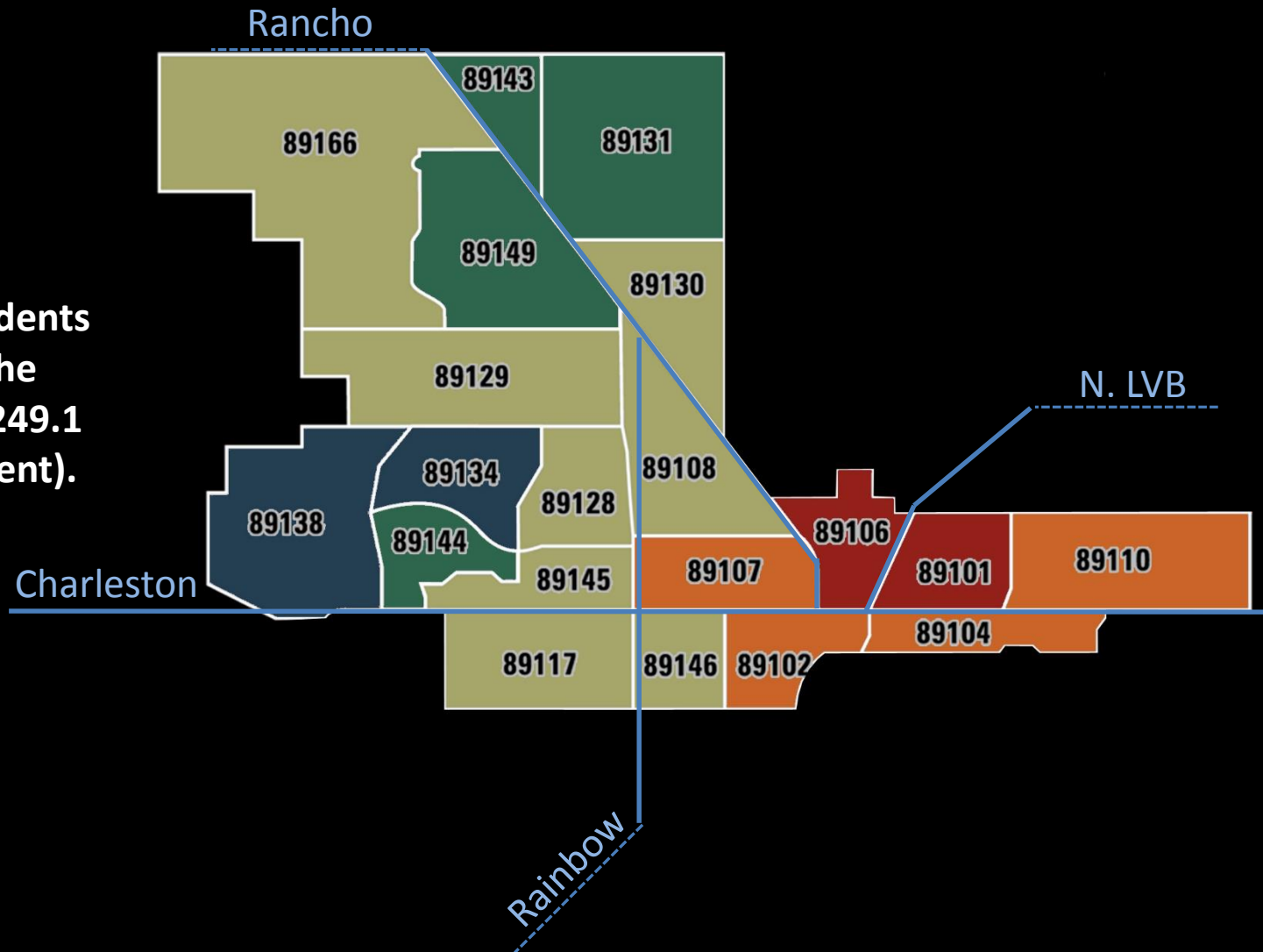


Household
Instability

Elements of the NRI

Medicaid | CLV Distribution Map

The rate of Medicaid recipients per 1,000 residents continued to increase. The rate rose to 250.4 from 249.1 last quarter (up 0.5 percent).



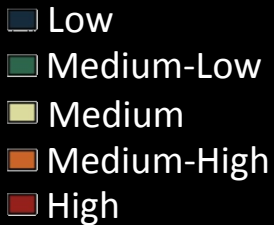
Elements of the NRI



Composite Risk



Elements of the NRI



89031	89129	89002	
89101	89130	89014	
89102	89139	89074	
89107	89141	89084	
89108	89145	89085	
89115	89146	89117	89012
89119	89147	89131	89044
89121	89166	89143	89052
89122	89178	89144	89134
89142	89179	89148	89135
89169	89183	89149	89138
Medium-High	Medium	Medium-Low	Low

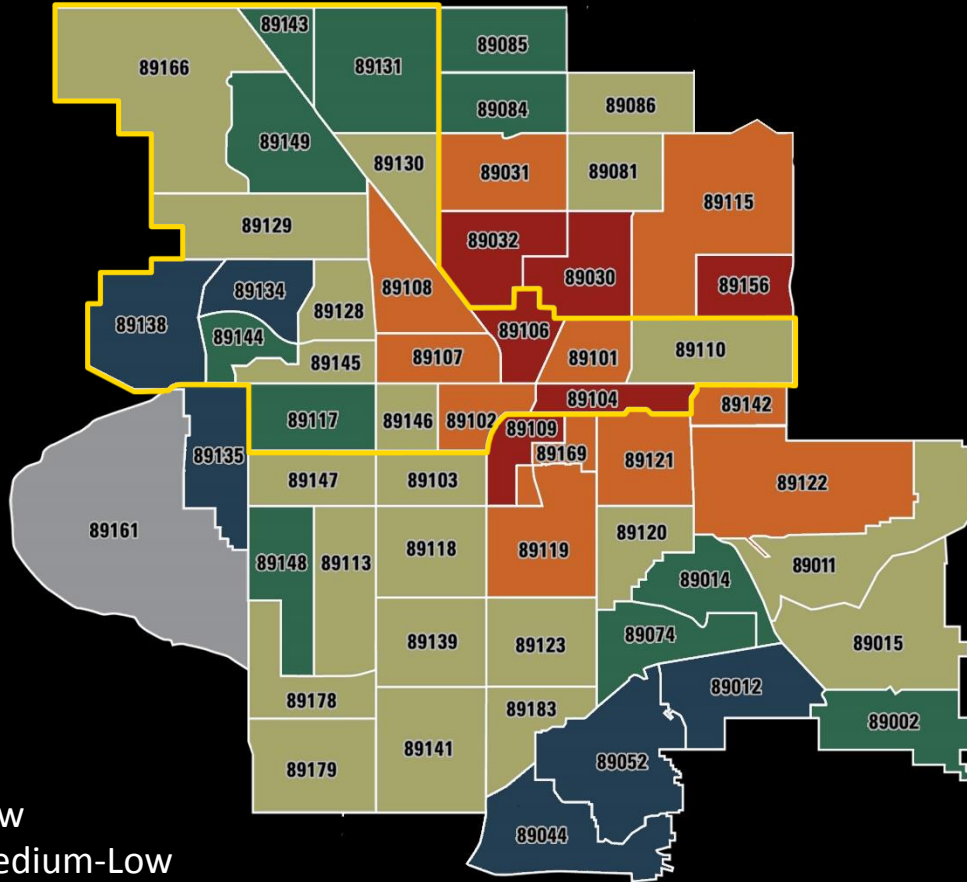


Composite
Risk

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**

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



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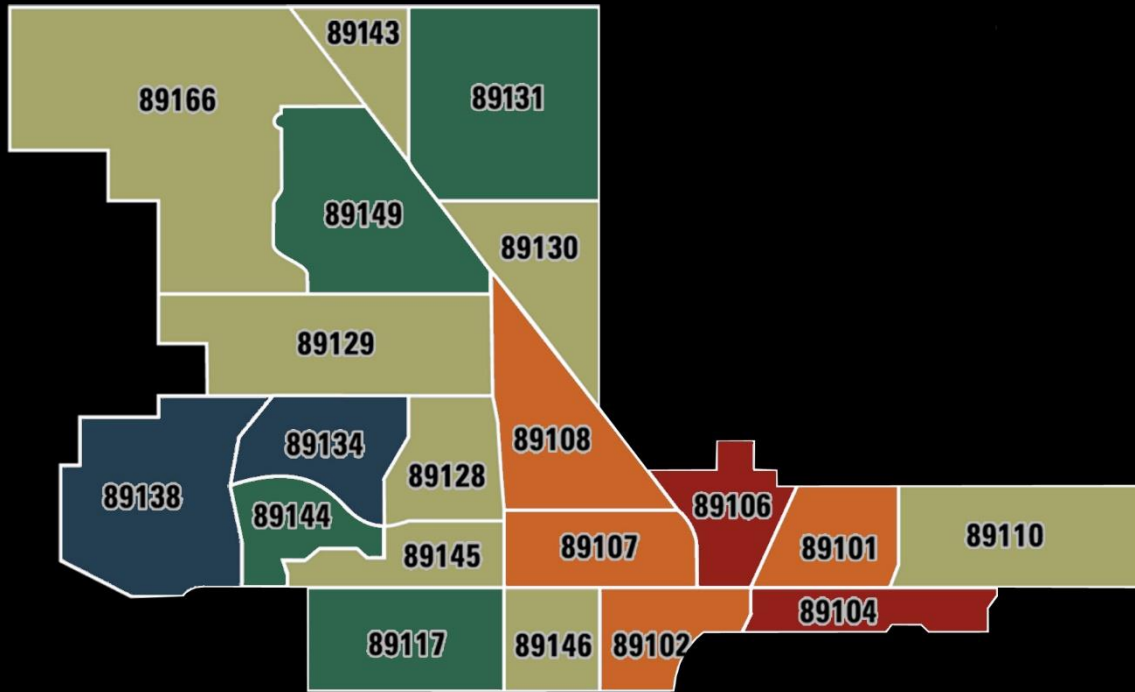
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Composite
Risk

Elements of the NRI

Composite Risk | CLV Distribution Map



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

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



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Neighborhood Economic Risk Assessment

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



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Neighborhood Economic Risk Assessment

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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	3,942	244.0	100
89030	13,638	153.8	95
89119	21,427	131.8	93
<u>89104</u>	<u>12,466</u>	<u>151.9</u>	<u>90</u>
89115	19,493	131.3	90
<u>89108</u>	<u>27,449</u>	<u>117.2</u>	<u>89</u>
89121	24,777	117.0	85
89032	14,547	135.9	84
<u>89106</u>	<u>8,989</u>	<u>156.6</u>	<u>83</u>
89031	21,613	116.9	81

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)
89104	12,466	152.6	100
89108	27,449	117.7	98
89106	8,989	155.3	90
89101	14,548	129.7	87
89110	22,487	112.5	86



Additional Considerations



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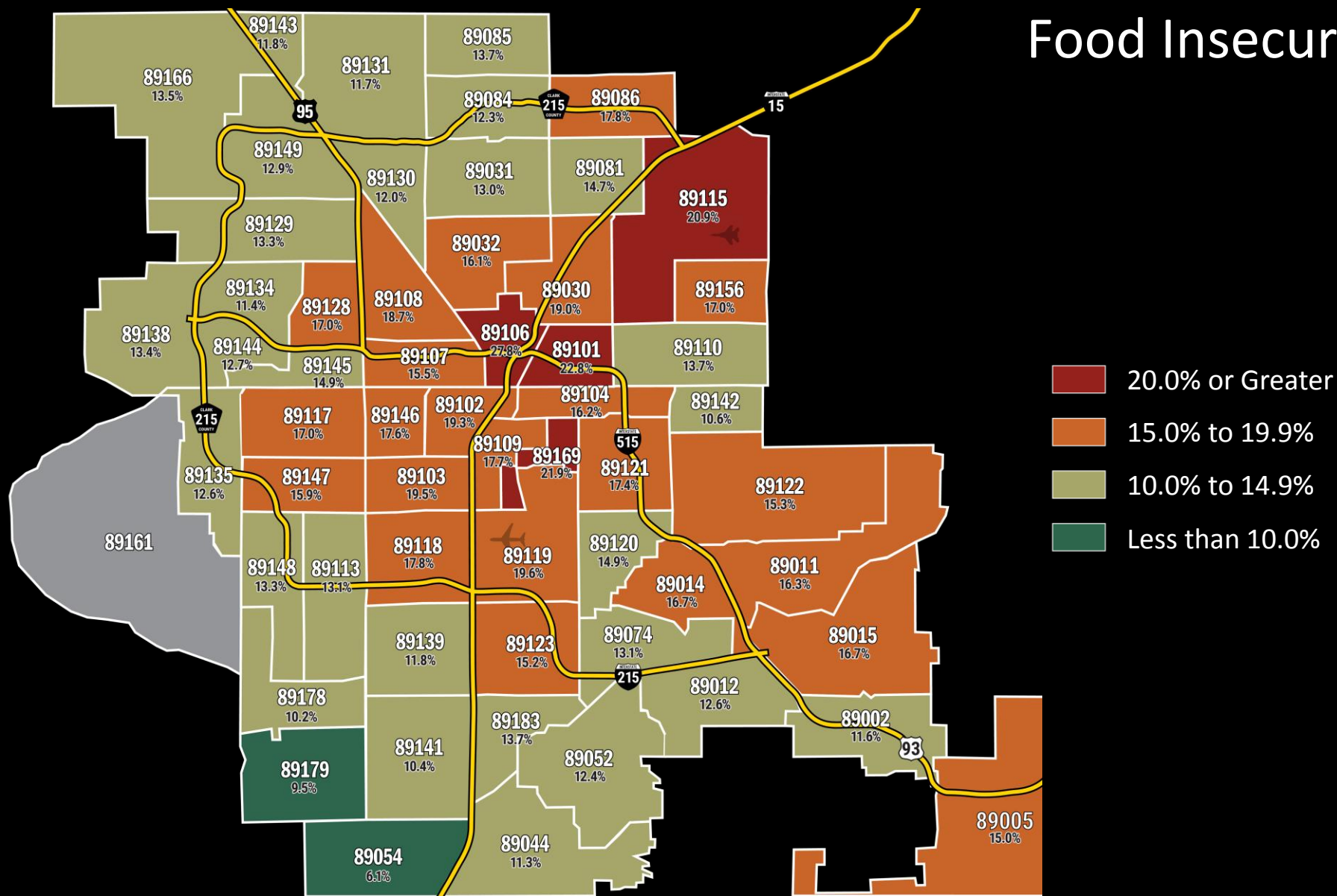


Neighborhood Economic Risk Assessment

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Alternative Measures of Risk

Food Insecurity



Note: Based on 2014 data.



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Neighborhood Economic Risk Assessment

City of Las Vegas

Q4 2016

