And

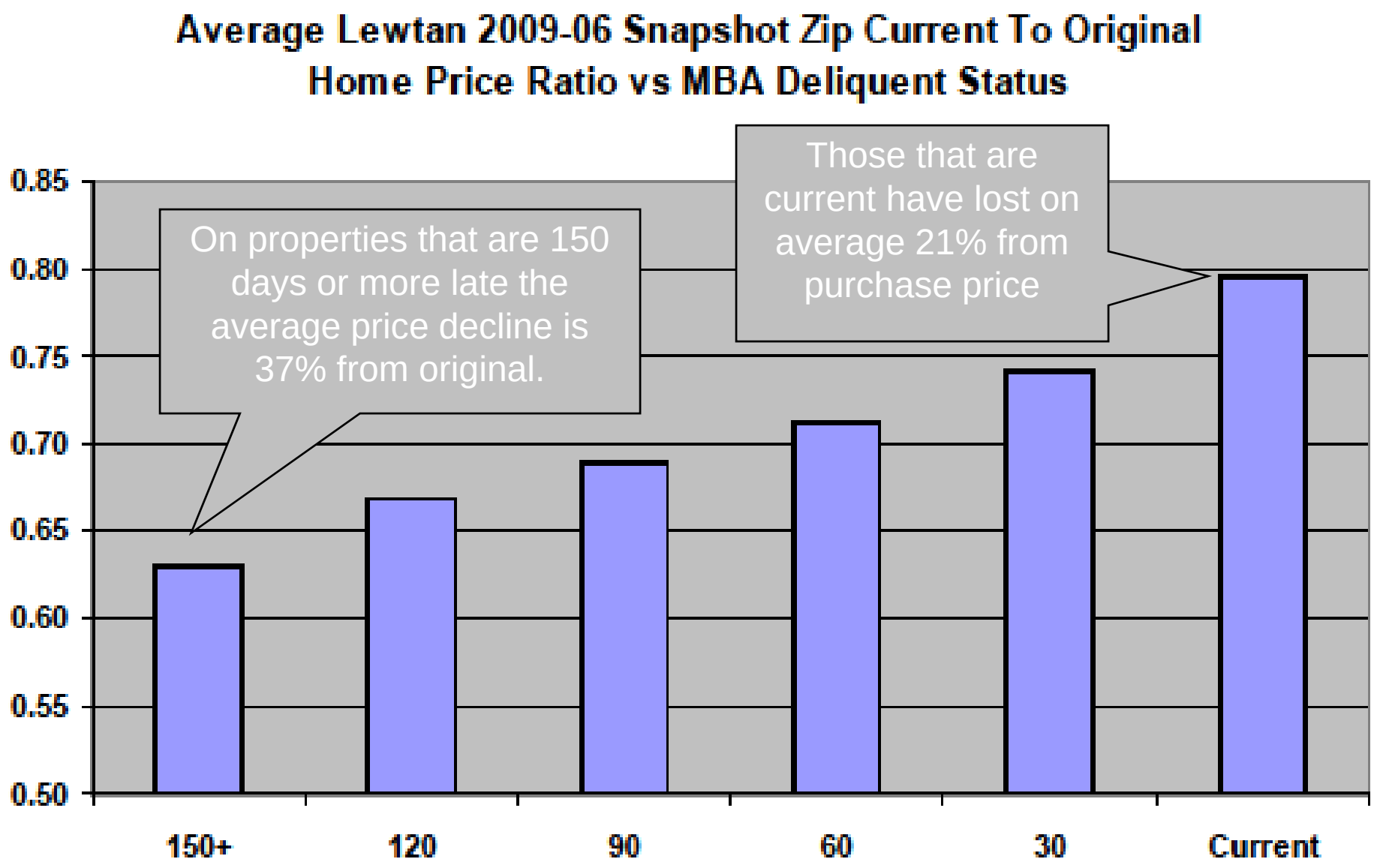
# Current State of Housing and Mortgage Markets: From a Micro Market Metric Perspective

By Norm Miller Ph.D. Burnham-Moores Center for Real Estate, University of San Diego and Michael Sklarz Ph.D.

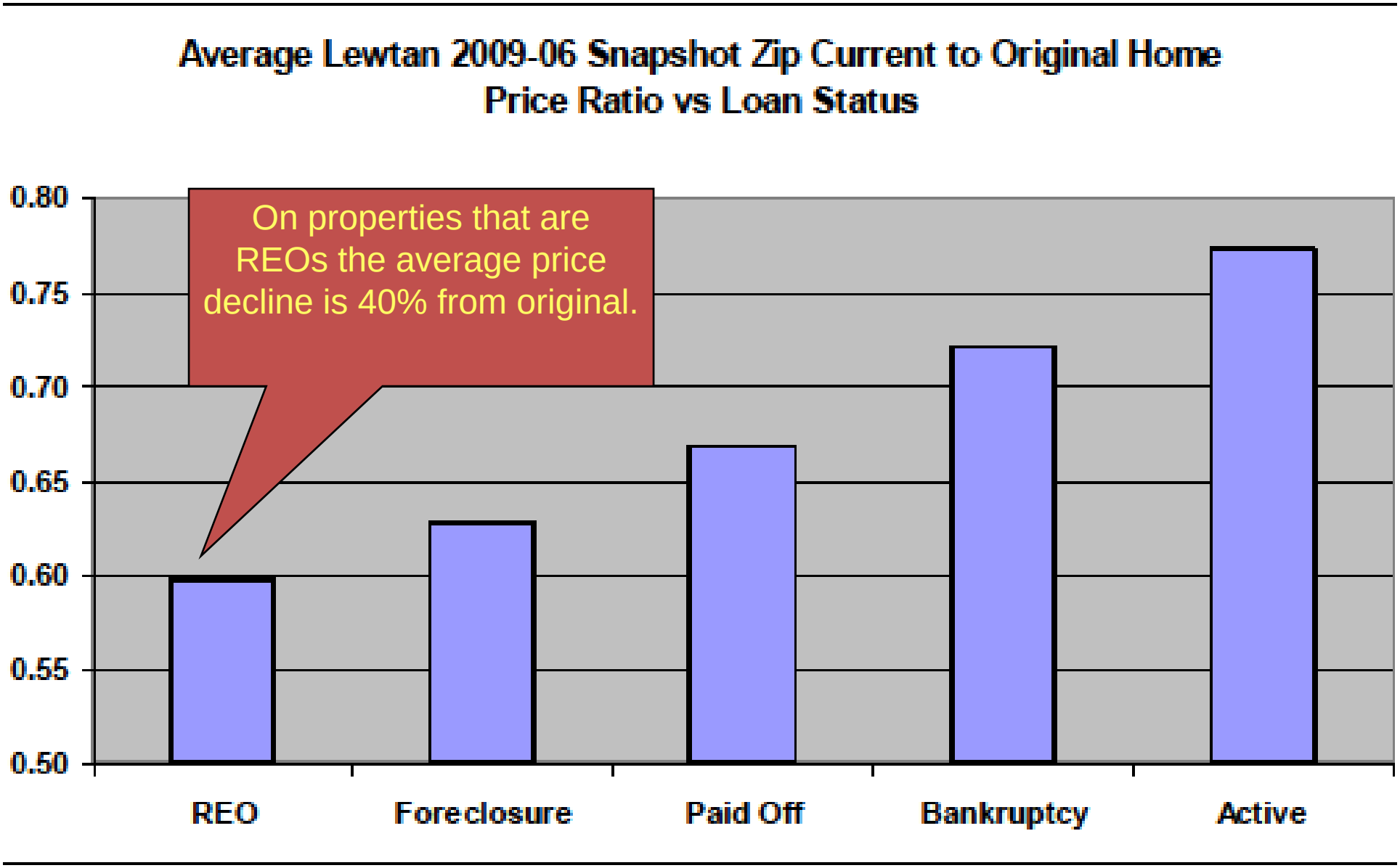
Co-Founders Collateral Analytics

# Let's Start with the State of Securitized Mortgages, LTVs and Defaults

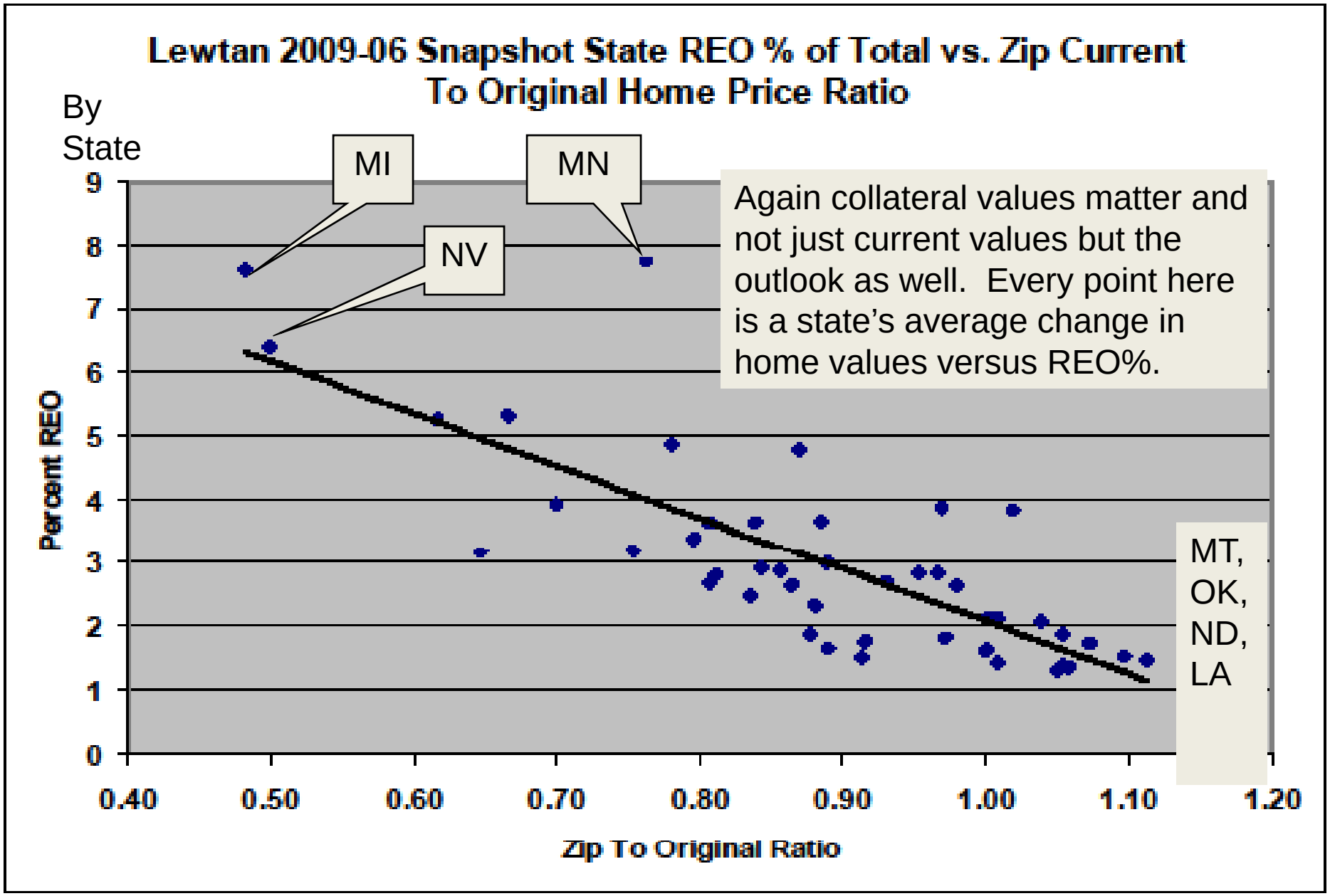
- Lewtan data
- Analysis by Collateral Analytics
- Over 10 million loans
- Some 5000 mortgage pools
- Prime, Alt A, and subprime, HELOCS, 2nds
- National portfolio with about 20% in CA




Note that at the zip code level we find a larger range of decline and consistent picture in terms of default, the more equity a borrower has lost the less likely to pay – collateral values matter much more now than in previous recessions.

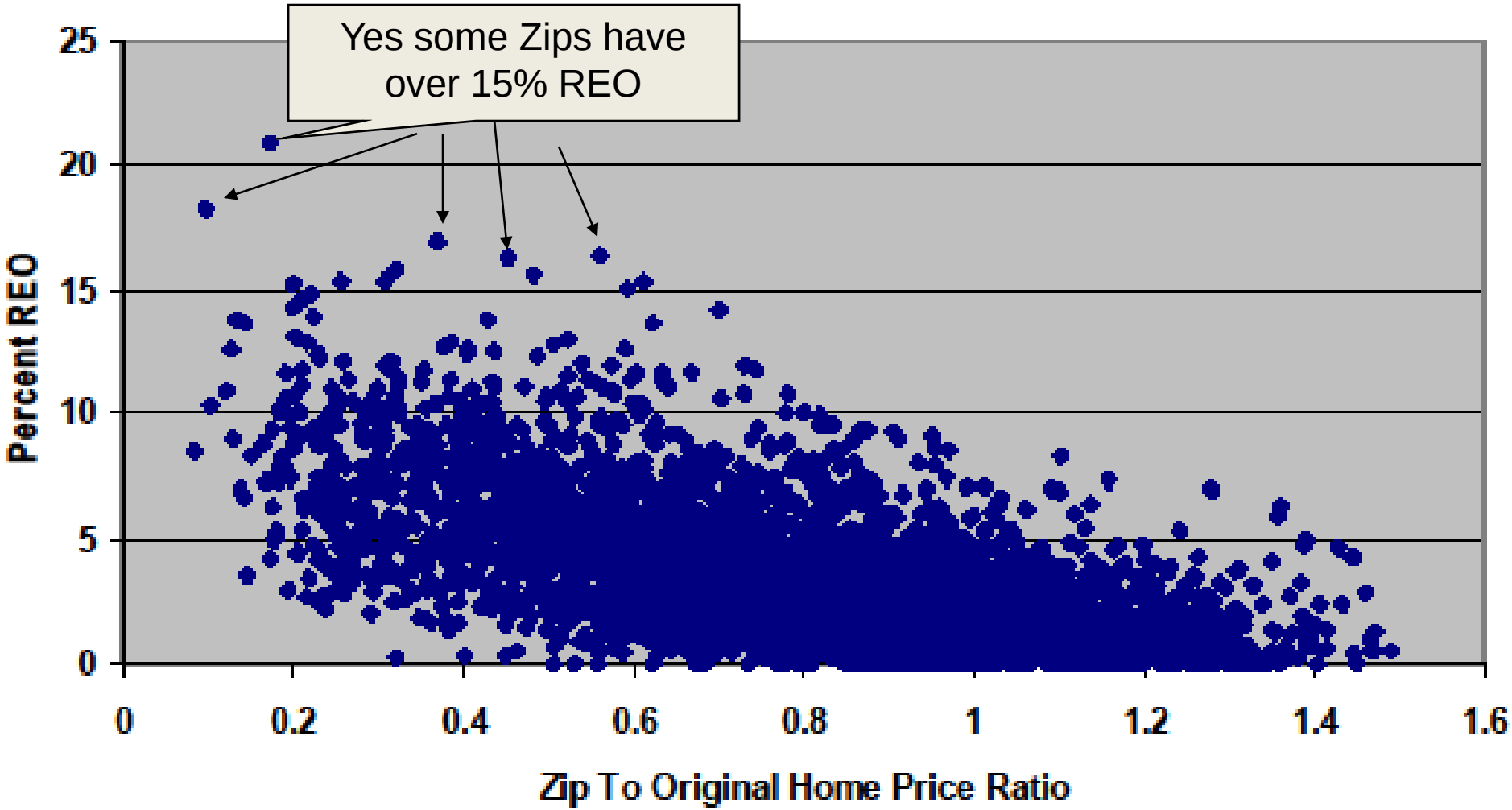



Data: Lewtan  Analysis: Collateral Analytics
Presented by Norm Miller, USD

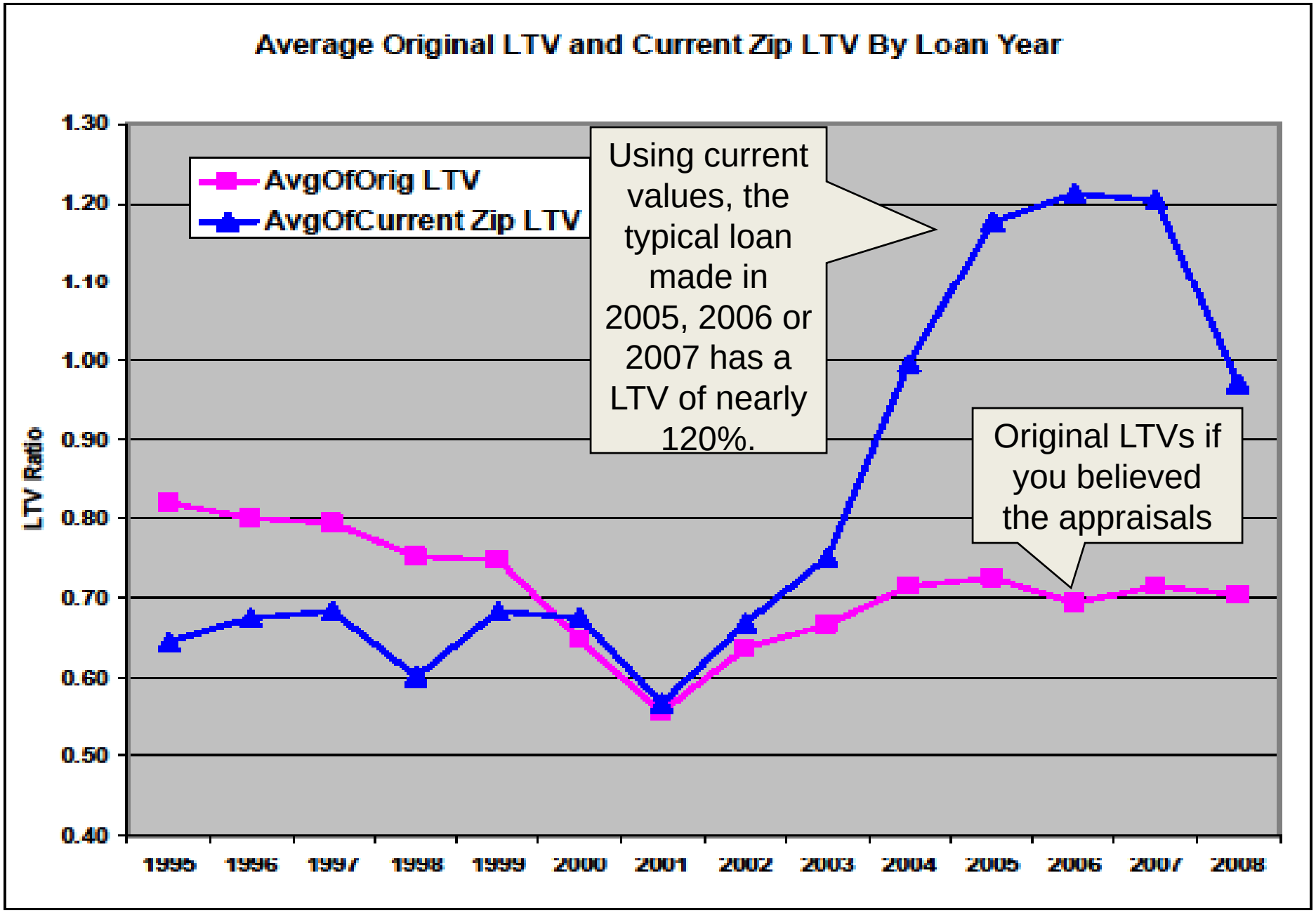



Data: Lewtan Analysis: Collateral Analytics
Presented by Norm Miller, USD

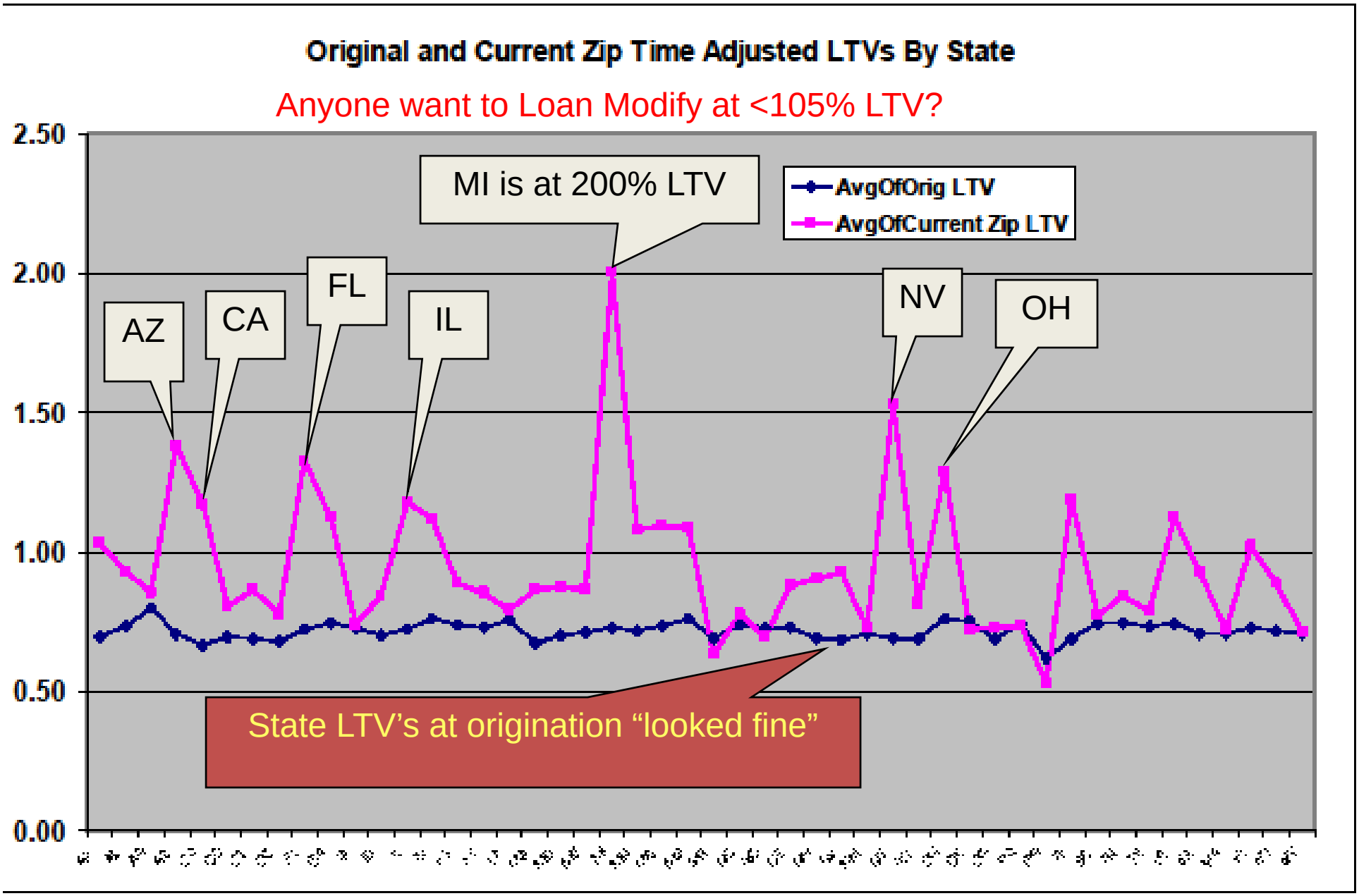
## Lewtan 2009-06 Snapshot Zip REO % of Total Loans vs. Zip Current To Original Home Price Ratio




Data: Lewtan  Analysis: Collateral Analytics
Presented by Norm Miller, USD

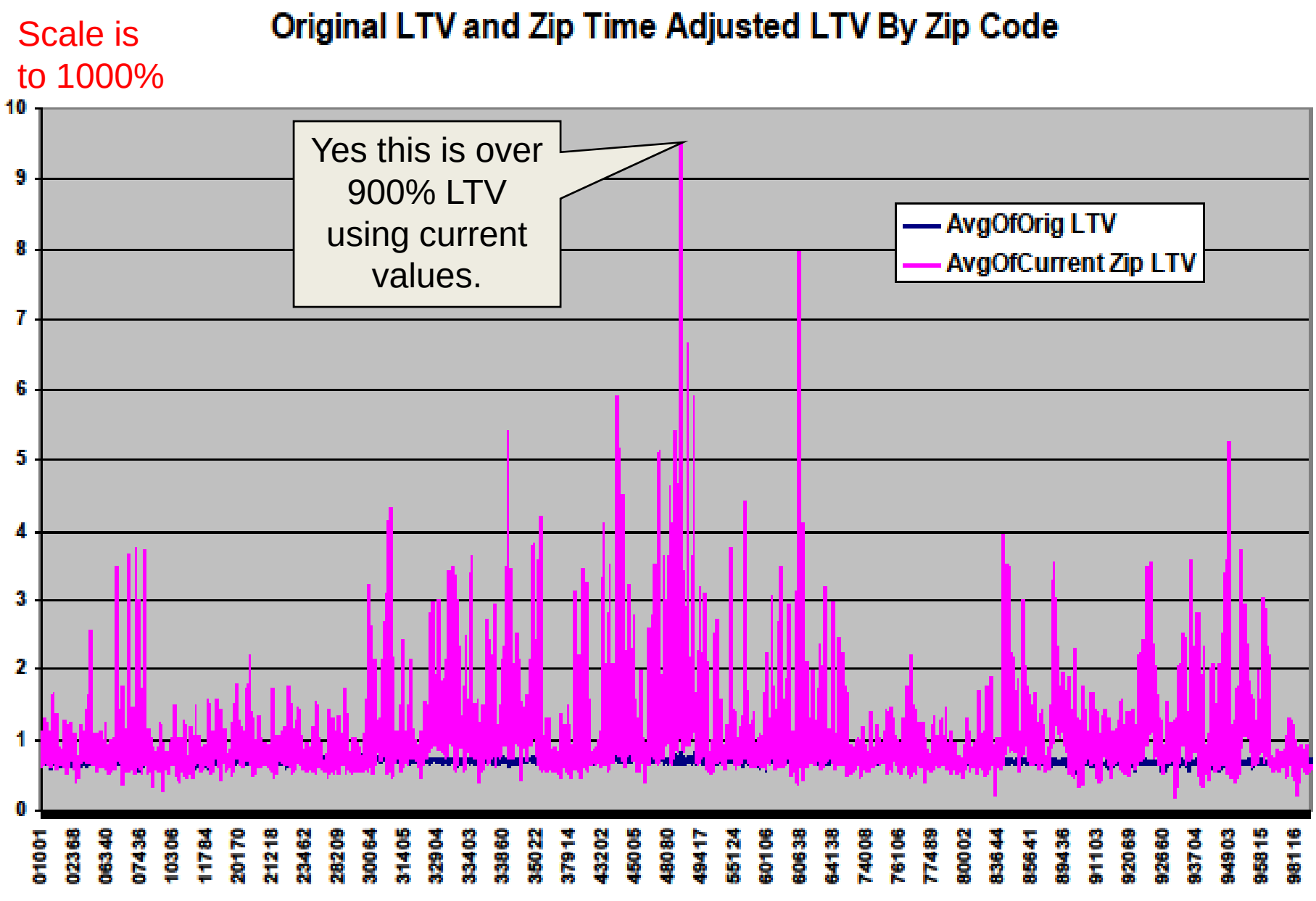



Data: Lewtan Analysis: Collateral Analytics
Presented by Norm Miller, USD



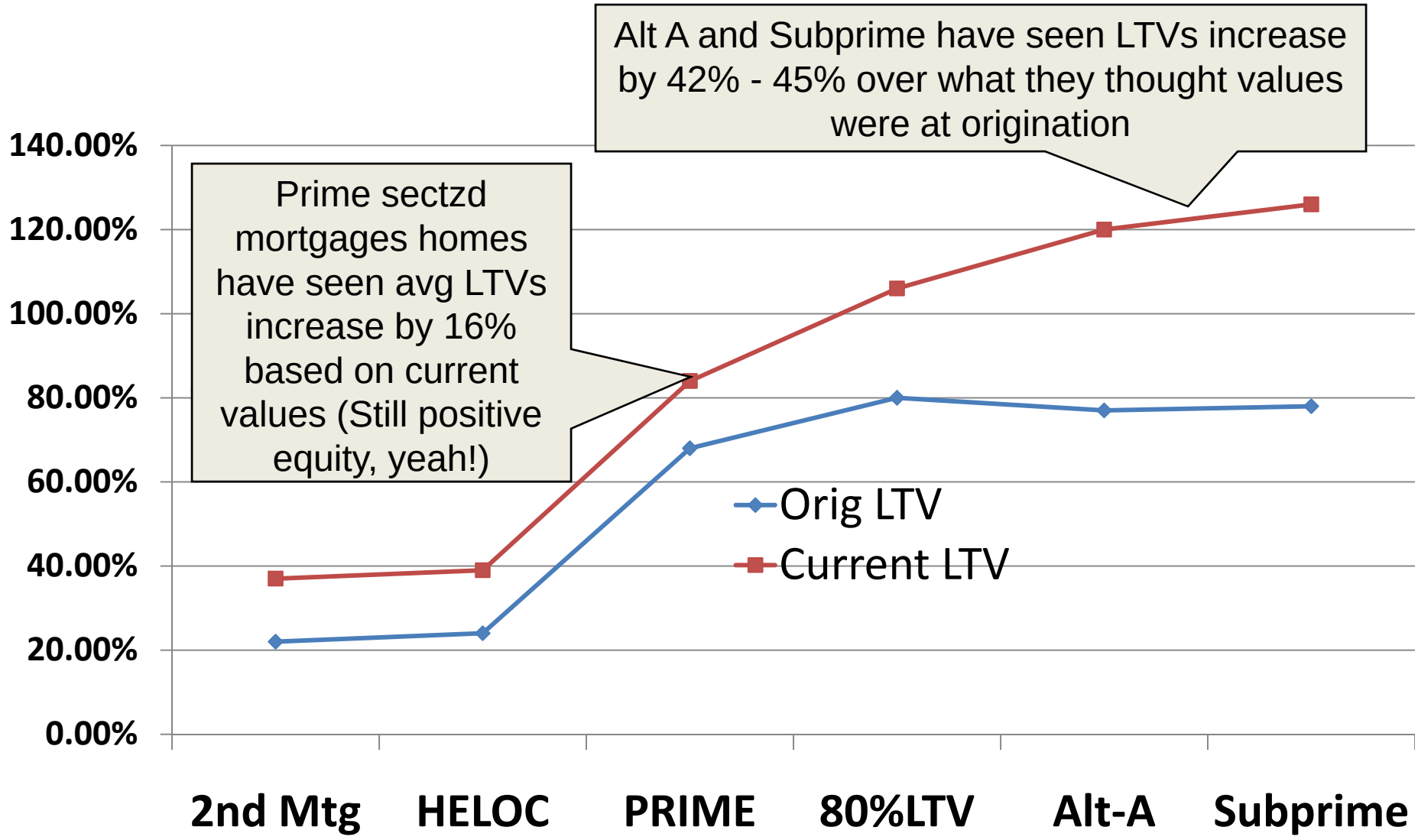

Data: Lewtan Analysis: Collateral Analytics
Presented by Norm Miller, USD

Scale is to 1000%




Data: Lewtan Analysis: Collateral Analytics
Presented by Norm Miller, USD

# Current LTV versus stated Original LTV by Type of Loan



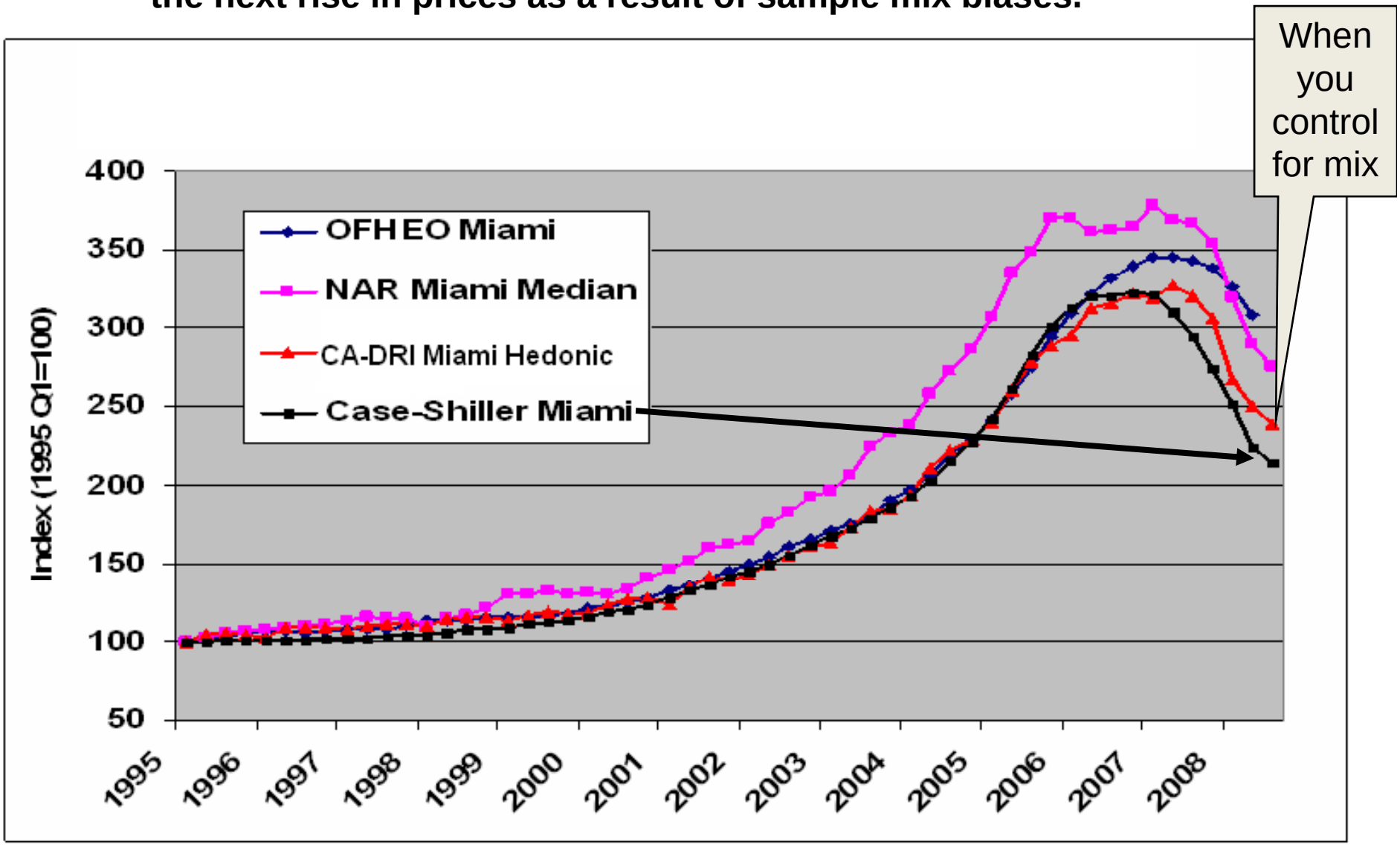

Data: Lewtan Analysis: Collateral Analytics
Presented by Norm Miller, USD

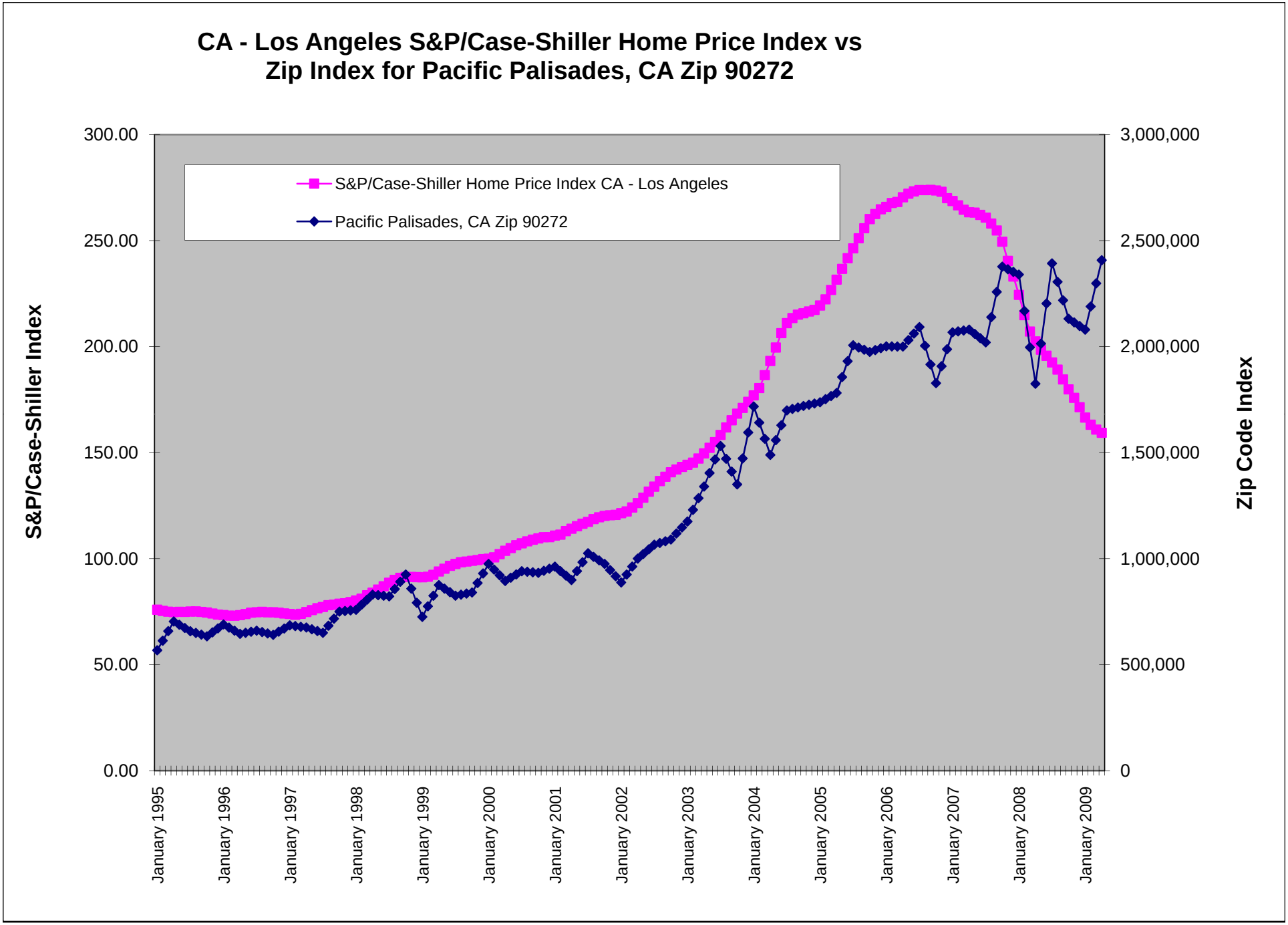
# We need to do the analysis of value trends at the localized level: CBSA level analysis is misleading especially with indices that do not distinguish the kind of sale transaction

Data: Lewtan  Analysis: Collateral Analytics
Presented by Norm Miller, USD

# Miami-Dade Single Family Home Price Indexes

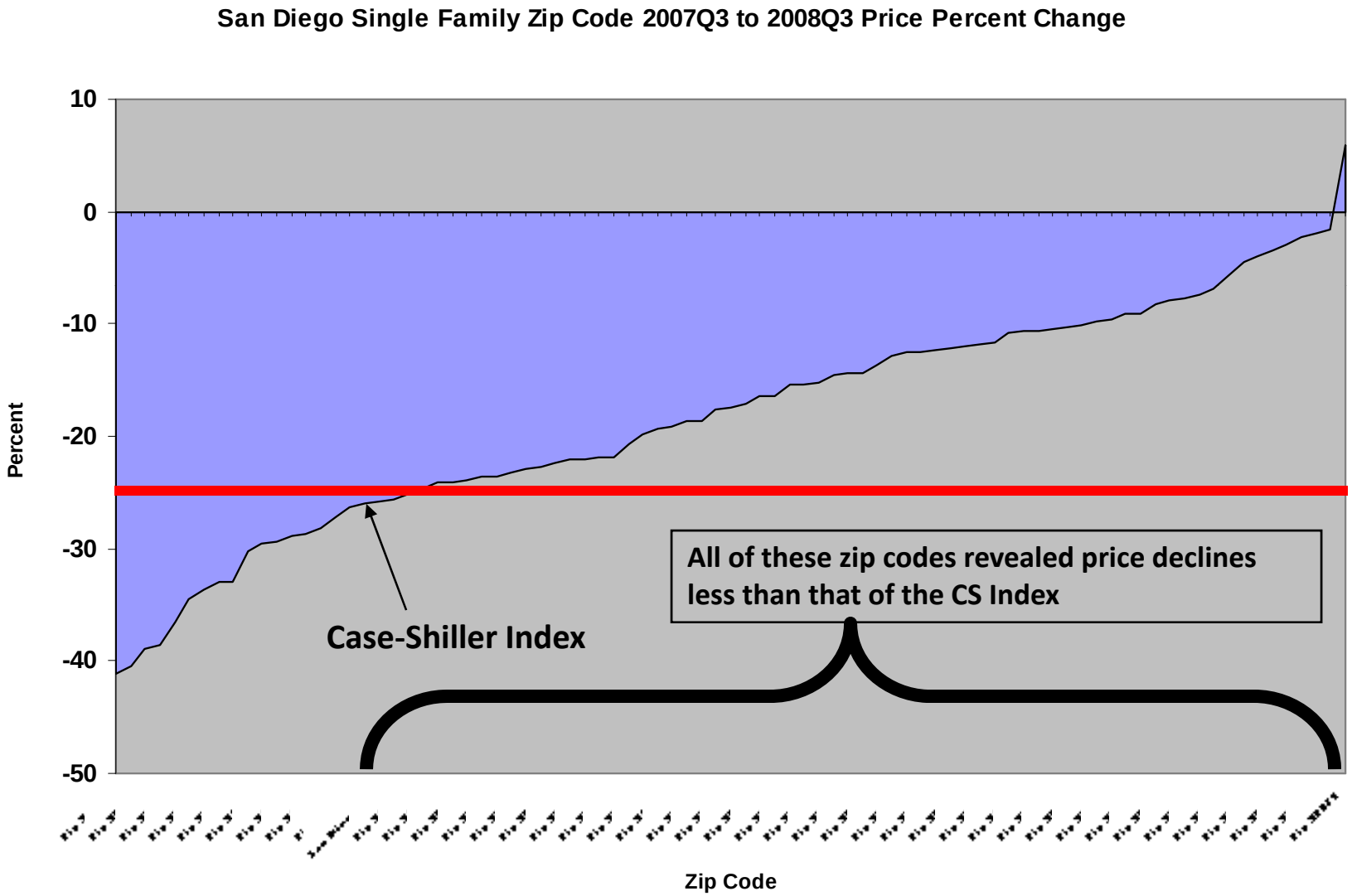
**Case Shiller will over state the decline and will also over state the next rise in prices as a result of sample mix biases.**



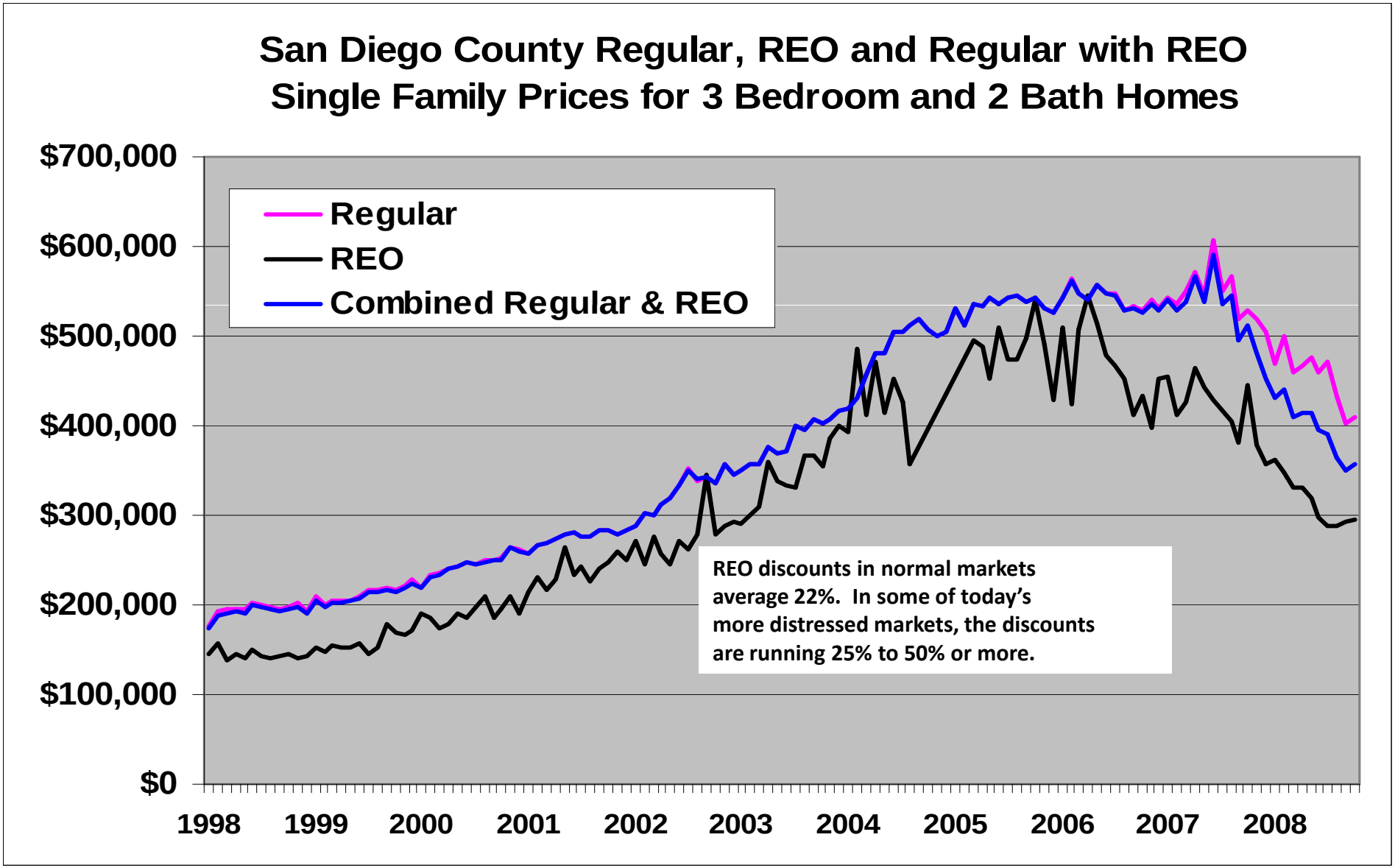



Presented by Norm Miller, USD

# San Diego Single Family Zip Code Past Year Price Percent Change Distribution



# In the current environment, REO sales prices need to be tracked separately from regular sales. Case-Shiller, OFHEO and NAR to not do this.

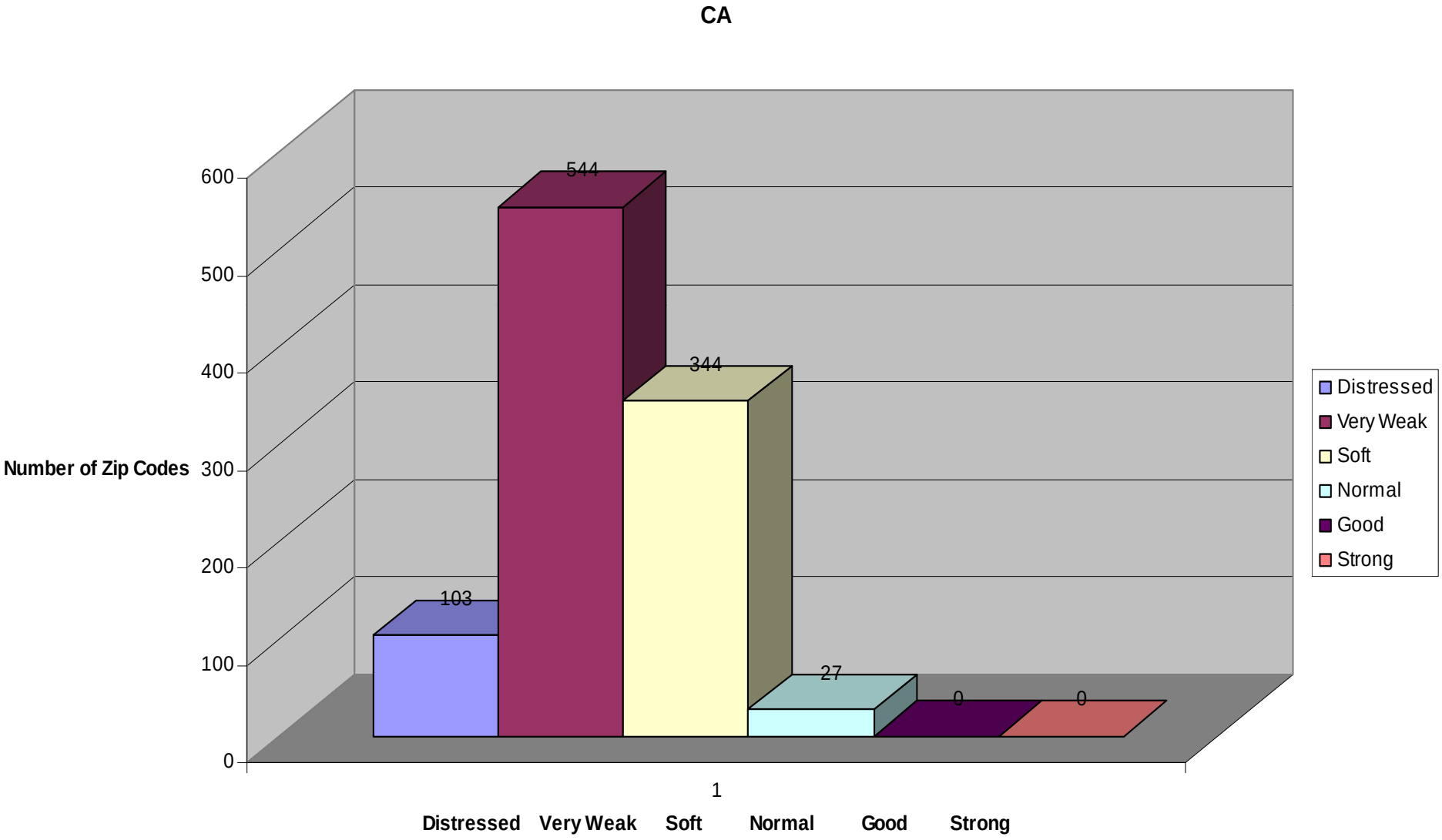


# We can track market conditions by Zip code using several criteria, i.e.

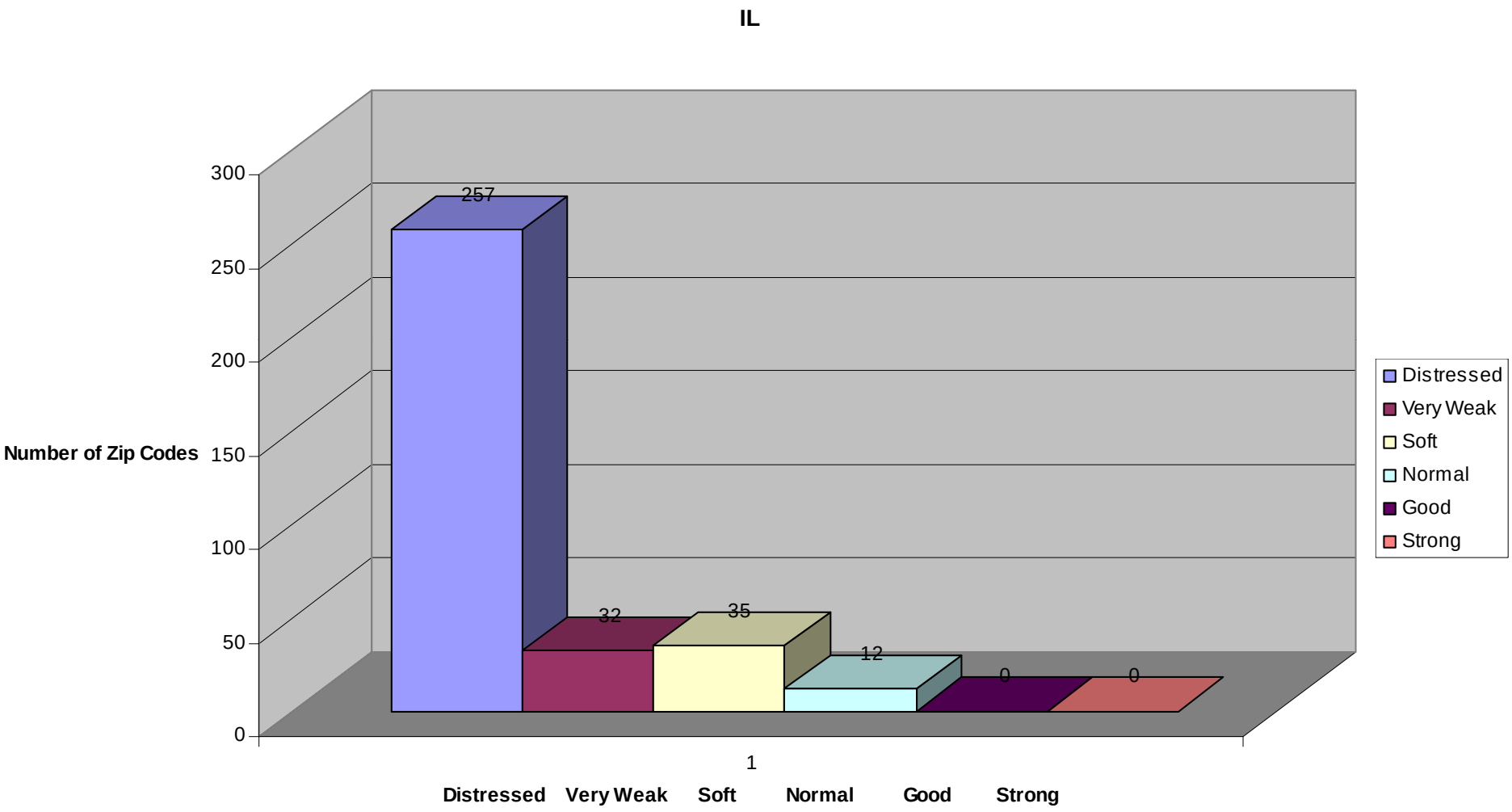
- Foreclosures as a % of sales
- Months remaining inventory (MRI)
- Expired inventory that did not sell (shadow) and (Adj MRI)
- Volume and price trends

# Market Condition Histograms By Zip Code for Some Sample States Are Shown Next

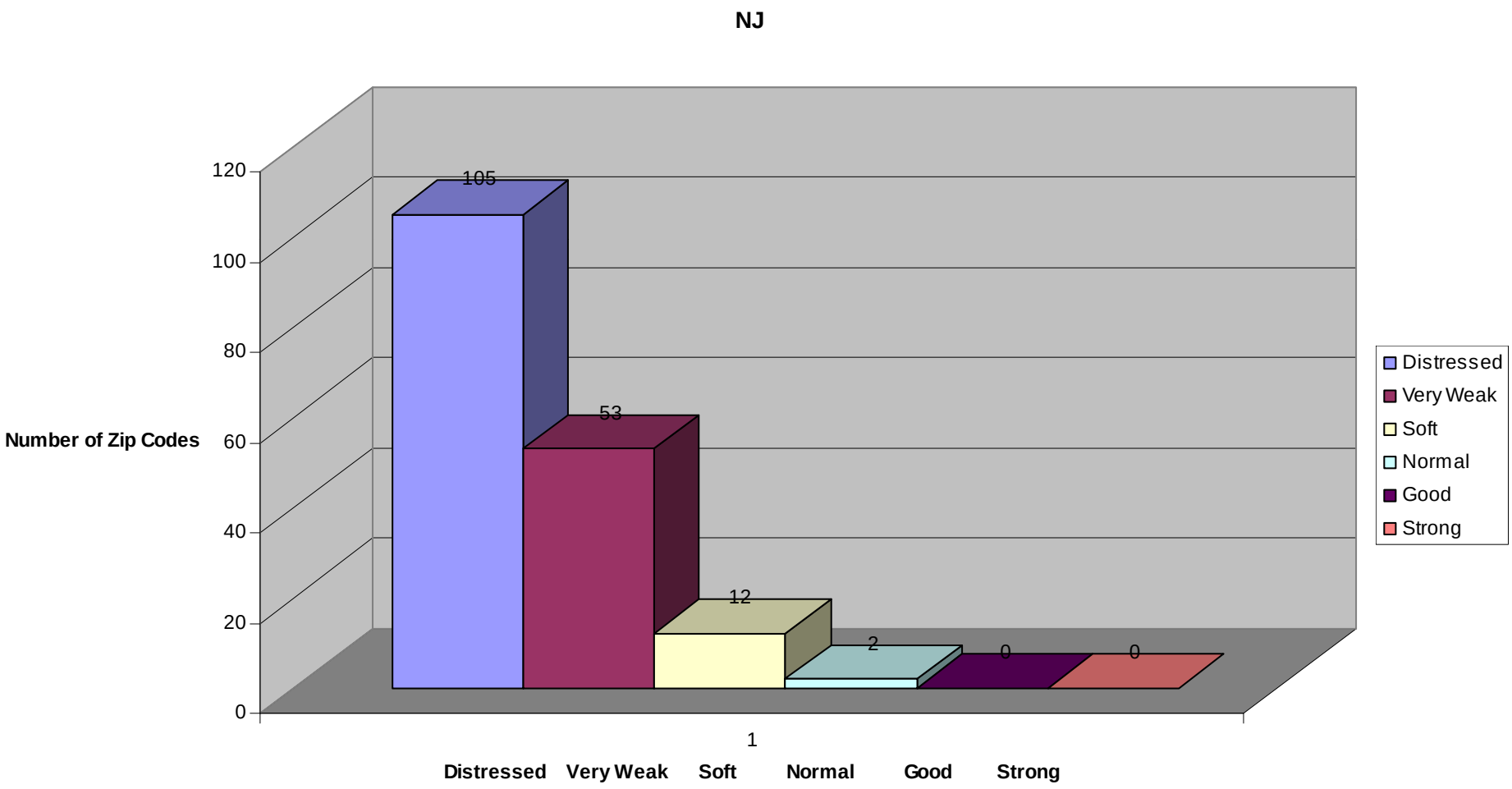
# California


CA
Number of Zip Codes
600
500
400
300
200
100
0
544
344
103
27
0
0
1
Distressed
Very Weak
Soft
Normal
Good
Strong
Distressed
Very Weak
Soft
Normal
Good
Strong

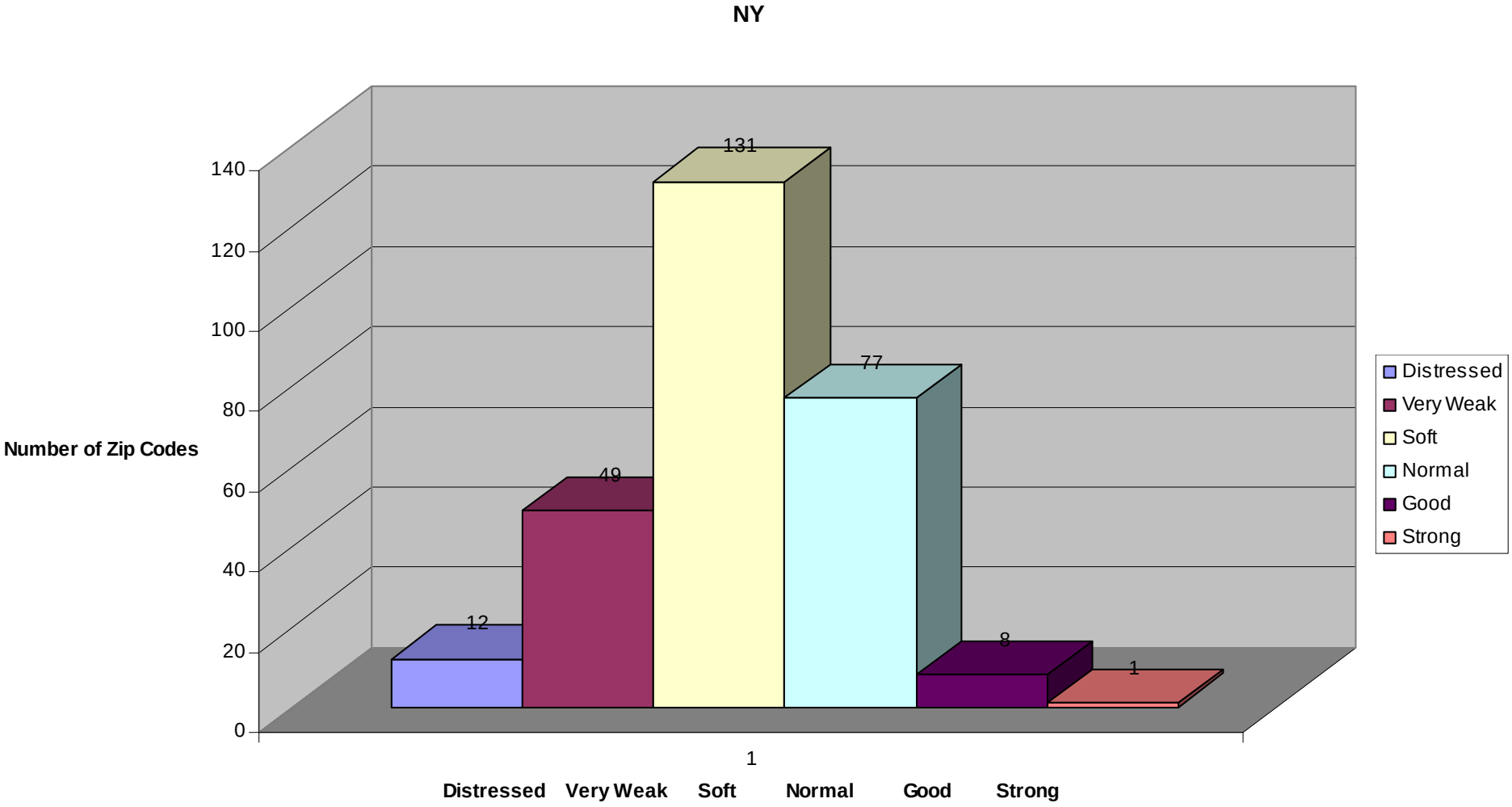
# Illinois


IL
Number of Zip Codes
300
250
200
150
100
50
0
257
32
35
12
0
0
1
Distressed
Very Weak
Soft
Normal
Good
Strong
Distressed
Very Weak
Soft
Normal
Good
Strong

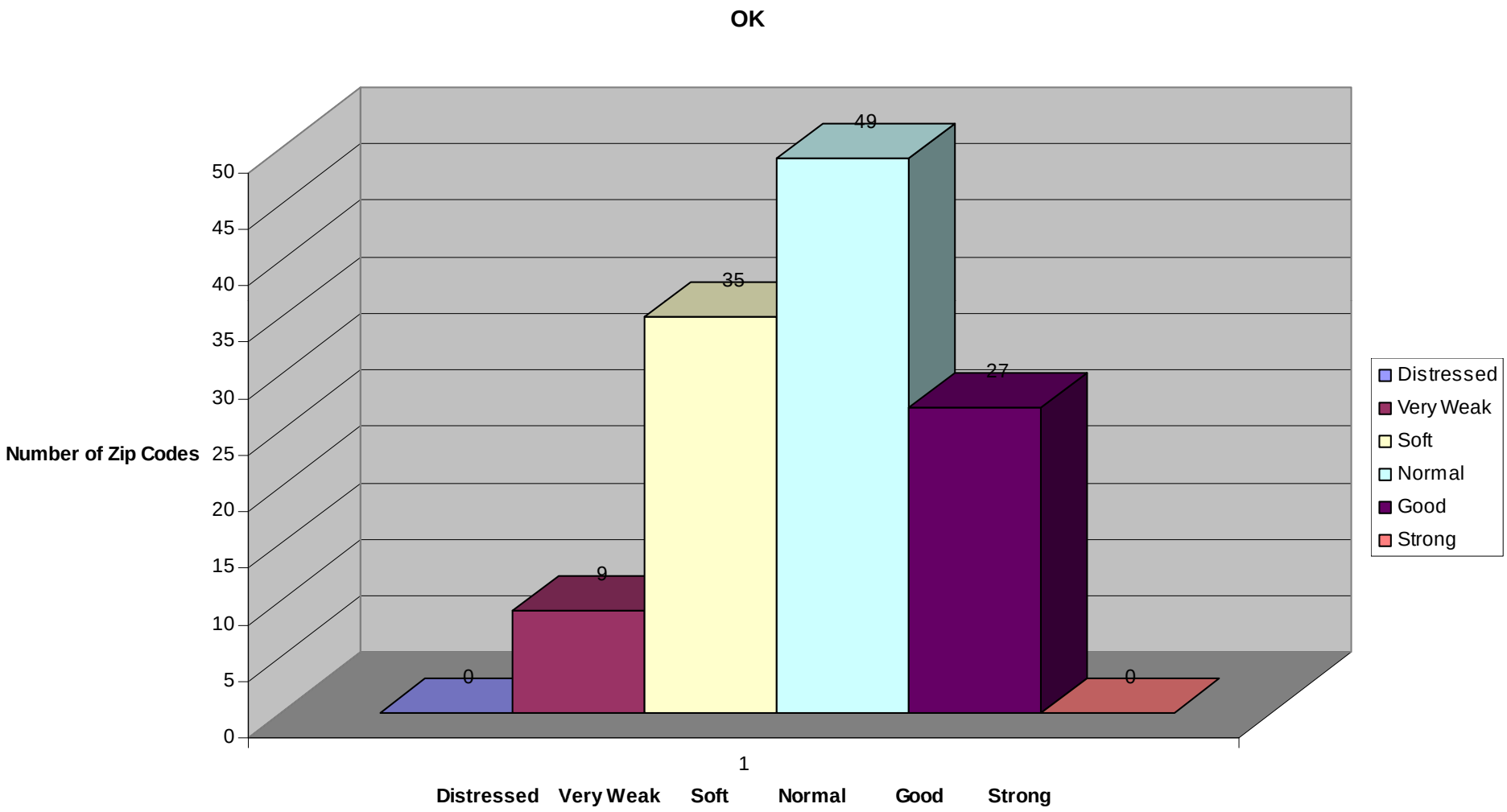
# New Jersey


NJ
Number of Zip Codes
120
100
80
60
40
20
0
105
53
12
2
0
0
1
Distressed
Very Weak
Soft
Normal
Good
Strong
Distressed
Very Weak
Soft
Normal
Good
Strong

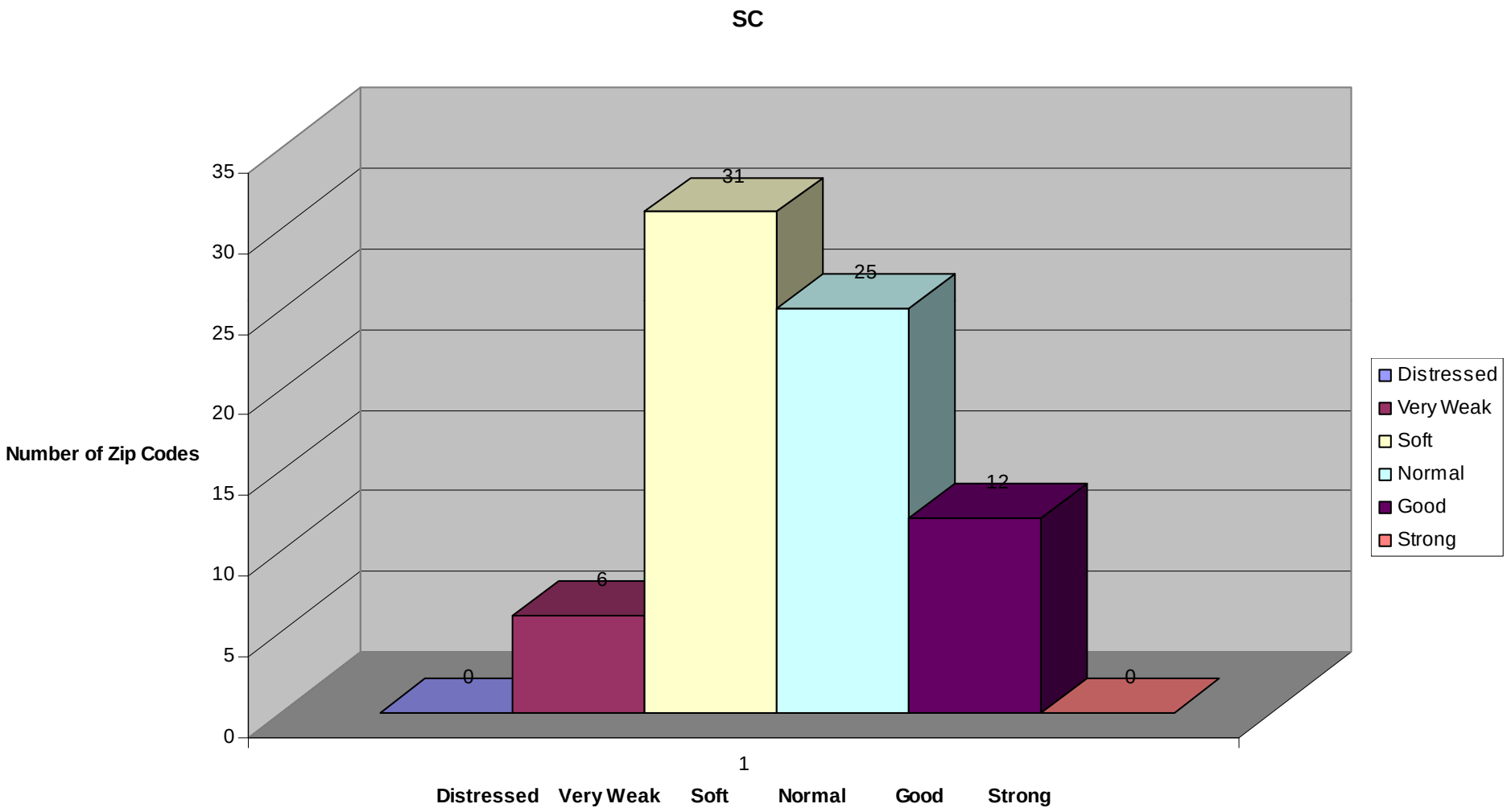
# New York


NY
Number of Zip Codes
0
20
40
60
80
100
120
140
12
49
131
77
8
1
1
Distressed
Very Weak
Soft
Normal
Good
Strong
Distressed
Very Weak
Soft
Normal
Good
Strong

# Oklahoma

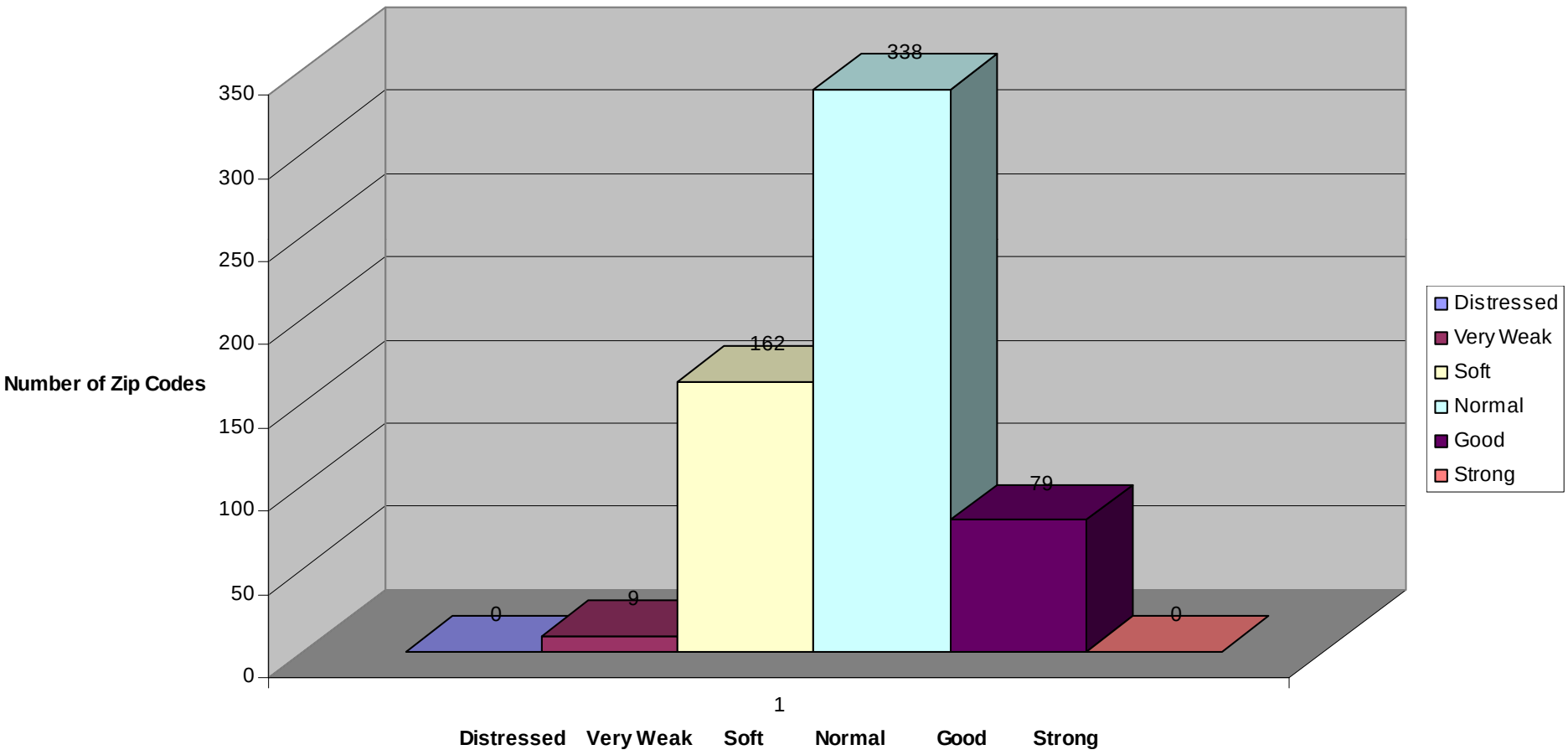

OK
Number of Zip Codes
50
45
40
35
30
25
20
15
10
5
0
0
9
35
49
27
0
1
Distressed
Very Weak
Soft
Normal
Good
Strong
Distressed
Very Weak
Soft
Normal
Good
Strong

# South Carolina



# Texas

**TX**


Number of Zip Codes
350
300
250
200
150
100
50
0
0
9
162
338
79
0
1
Distressed
Very Weak
Soft
Normal
Good
Strong
Distressed
Very Weak
Soft
Normal
Good
Strong

CANADA
Ottawa
Havana
Caracas
Bairiki
Suva
Brasília
Wellington
Rank by ZIP Code
6
5
4
3
2
1
Weak
Good
Lake Superior
Lake Huron
Lake Michigan
Lake Ontario
Lake Erie
MINNESOTA
WISCONSIN
MICHIGAN
IOWA
ILLINOIS
INDIANA
OHIO
KANSAS
MISSOURI
KENTUCKY
TENNESSEE
ARKANSAS
MISSISSIPPI
ALABAMA
GEORGIA
LOUISIANA
TEXAS
OKLAHOMA
WEST VIRGINIA
VIRGINIA
NORTH CAROLINA
SOUTH CAROLINA
PENNSYLVANIA
NEW YORK
NEW JERSEY
DEL.
MD.
CONN.
R.I.
MASS.
VERMONT
NEW HAMPSHIRE
MAIN
QUÉBEC
ONTARIO
UNITED STATES
Atlantic Ocean
St. Paul
Green Bay
Madison
Milwaukee
Grand Rapids
Lansing
Flint
Ann Arbor
Detroit
Toledo
Cleveland
Akron
Fort Wayne
Chicago
Rockford
Cedar Rapids
Des Moines
Omaha
Peoria
Springfield
Kansas City
St. Louis
Springfield
Indianapolis
Columbus
Dayton
Cincinnati
Louisville
Evansville
Lexington
Nashville
Clarksville
Knoxville
Memphis
Little Rock
Chattanooga
Huntsville
Birmingham
Atlanta
Athens
Augusta
Columbus
Shreveport
Jackson
Charlotte
Fayetteville
Raleigh
Durham
Winston-Salem
Richmond
Norfolk
Virginia Beach
Washington, D.C.
Baltimore
Philadelphia
Allentown
Pittsburgh
New York
Bridgeport
Hartford
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Syracuse
Rochester
Buffalo
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Toronto
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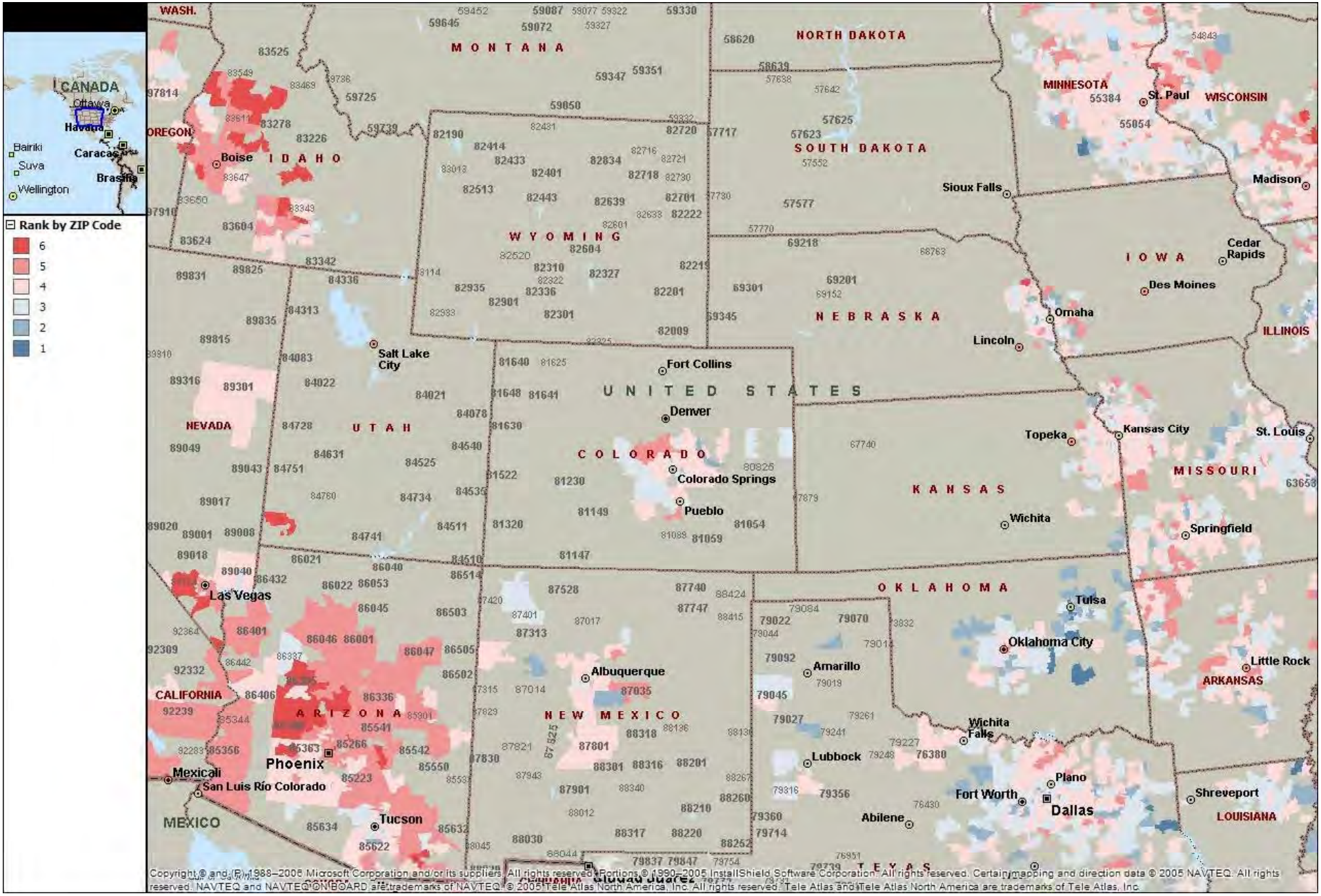


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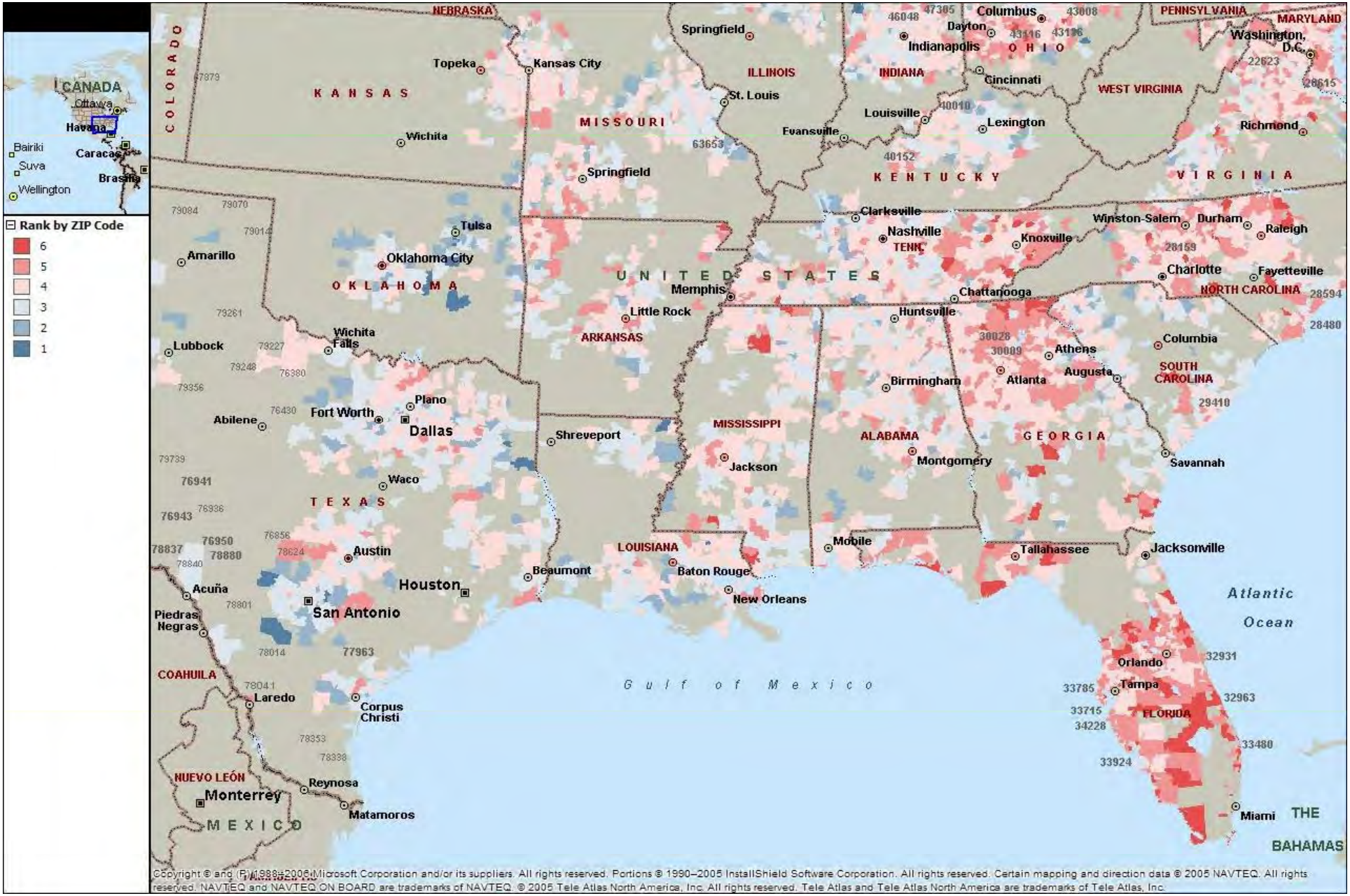


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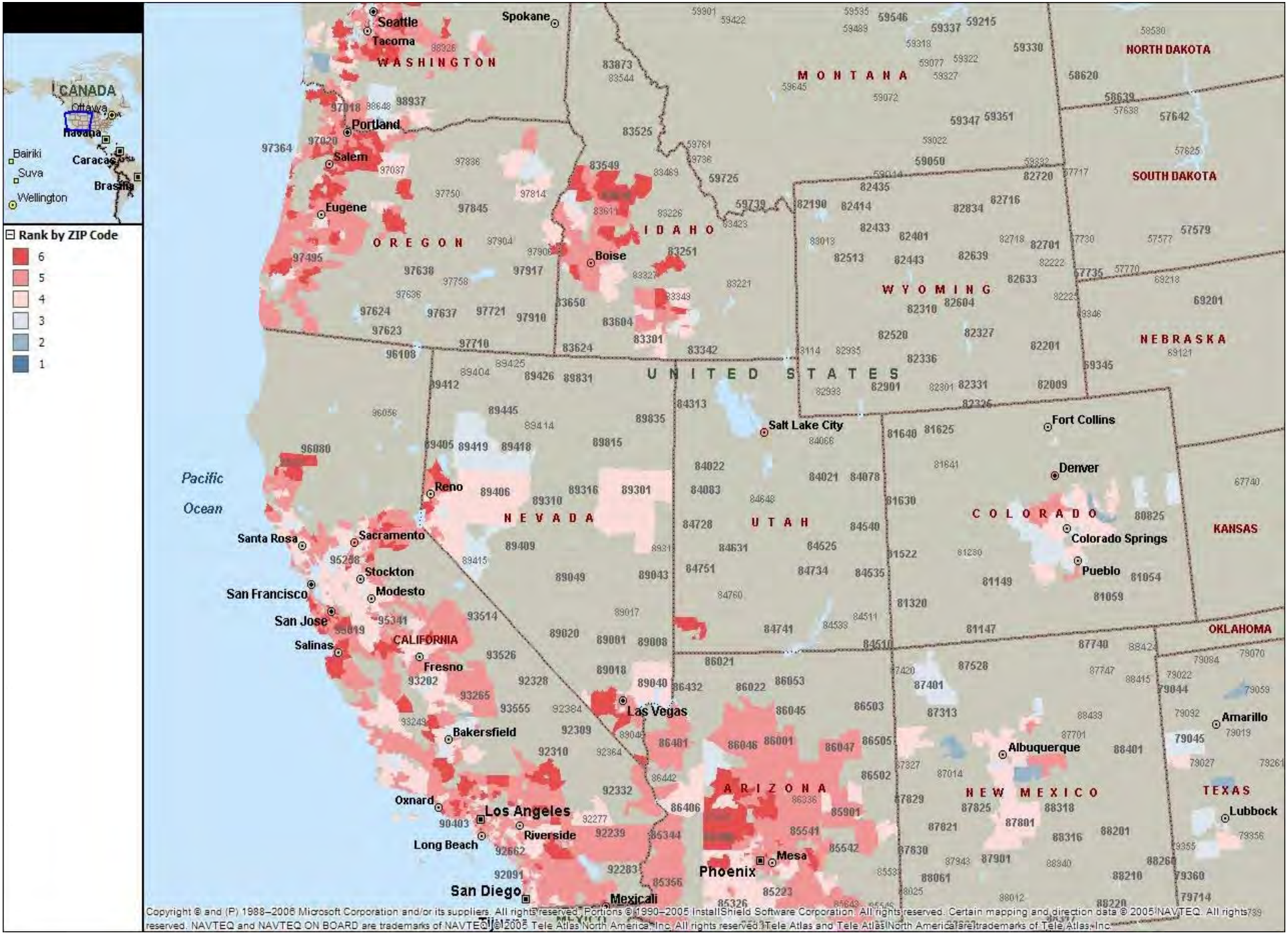


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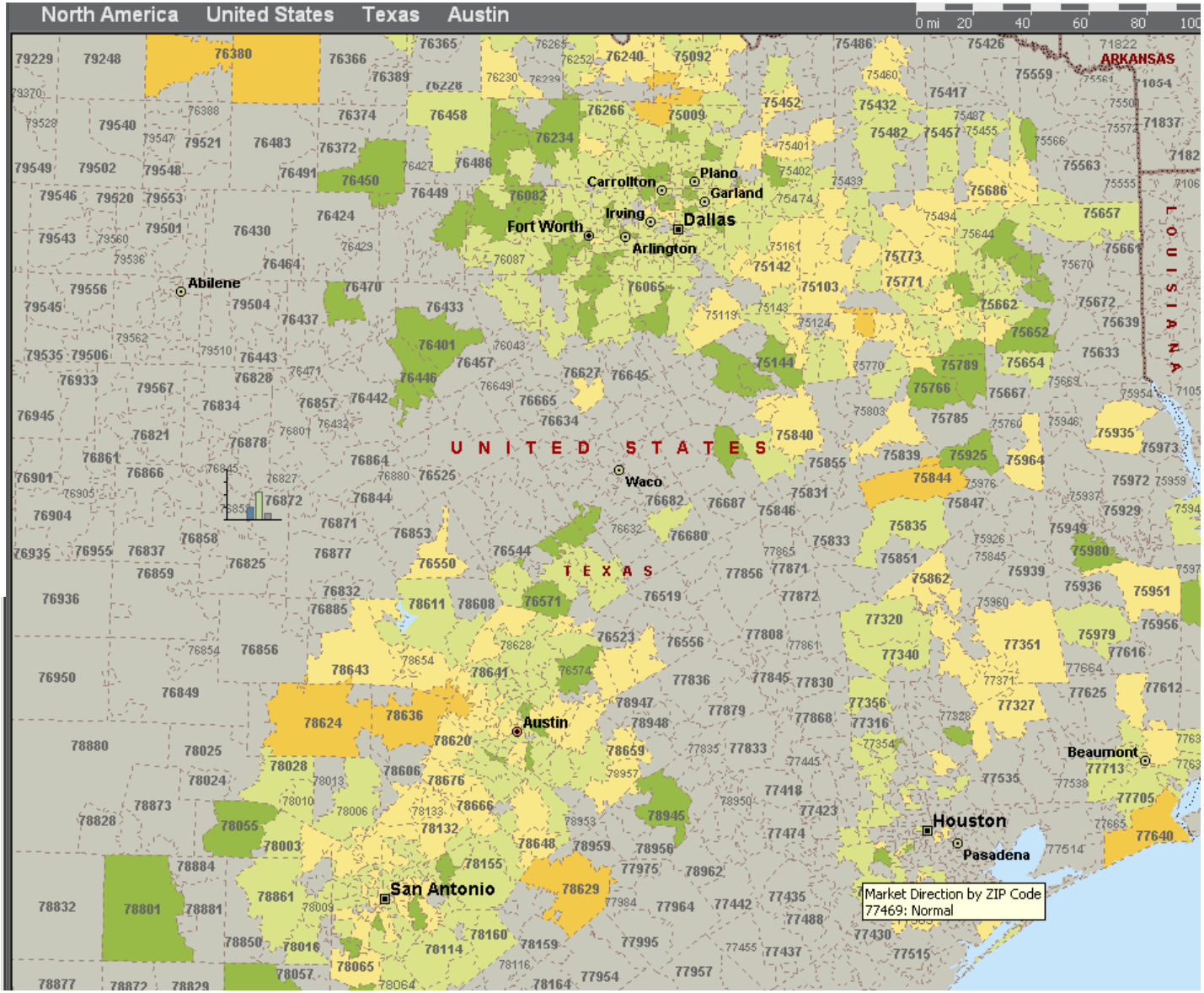



**Market Direction by ZIP Code**

- Distressed
- Very Weak
- Soft
- Normal
- Good
- Strong

# Let’s slice MRI by Price Range

- We can also slice by size or property type or any number of attributes.

# Collateral Intelligence Desktop Valuation Analytic Model

**Query By City-Zip (Hide Details...)**

City and State OR Zip: 75789

Sub Area: 75789

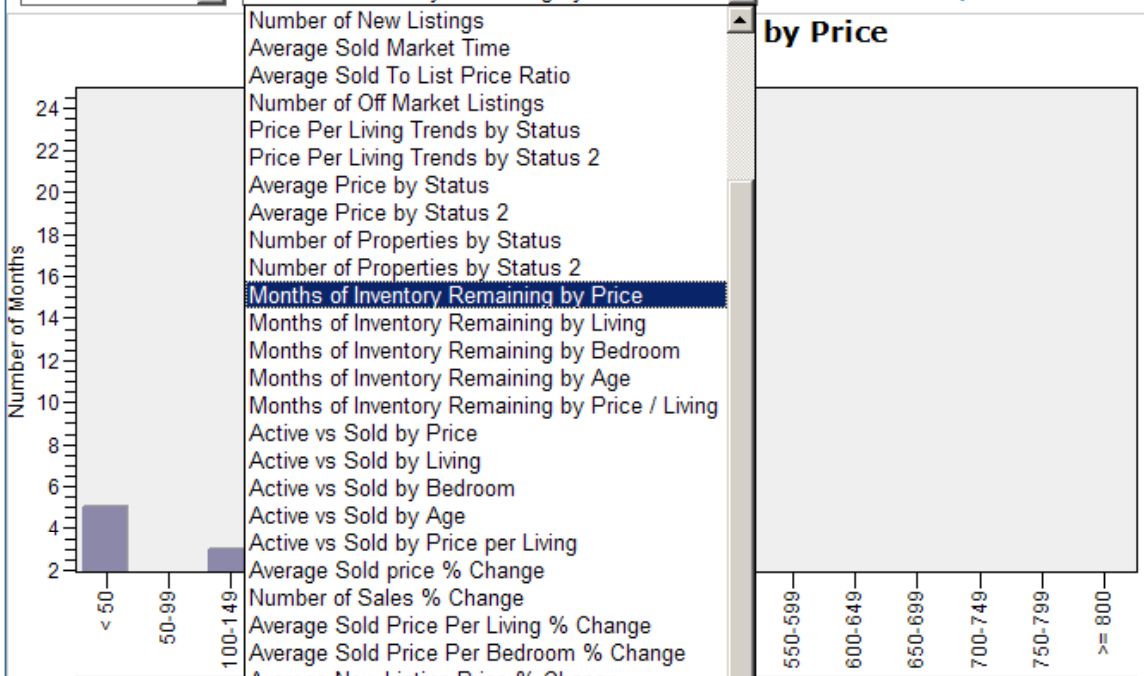
**Query By Address Proximity (Show Details...)**

Data Source : Local MKT Data

Select Chart Type : Months of Inventory Remaining by Price

Download comps  Download Data

- Number of New Listings
- Average Sold Market Time
- Average Sold To List Price Ratio
- Number of Off Market Listings
- Price Per Living Trends by Status
- Price Per Living Trends by Status 2
- Average Price by Status
- Average Price by Status 2
- Number of Properties by Status
- Number of Properties by Status 2
- Months of Inventory Remaining by Price
- Months of Inventory Remaining by Living
- Months of Inventory Remaining by Bedroom
- Months of Inventory Remaining by Age
- Months of Inventory Remaining by Price / Living
- Active vs Sold by Price
- Active vs Sold by Living
- Active vs Sold by Bedroom
- Active vs Sold by Age
- Active vs Sold by Price per Living
- Average Sold price % Change
- Number of Sales % Change
- Average Sold Price Per Living % Change
- Average Sold Price Per Bedroom % Change
- Average New Listing Price % Change
- Number of New Listings % Change
- Average New Listing Price Per Living
- Average New Listing Price Per Bedroom
- Average New Listing Price Per Living % Change
- Average New Listing Price Per Bed % Change




State: TX; County: 4842

**Define Query (optional)**

| | Minimum | Maximum |
|---|---|---|
| Living Area | | |
| Bedrooms | | |
| Bathrooms | | |
| Year Built | | |
| Land Area | | |
| Years Range | 2005 | 2009 |
| Data Increment | Month | |
| Property Type | Single-Family | |

Total number of properties for the past 12 months : 47

Clear Criteria

Re-Produce Chart

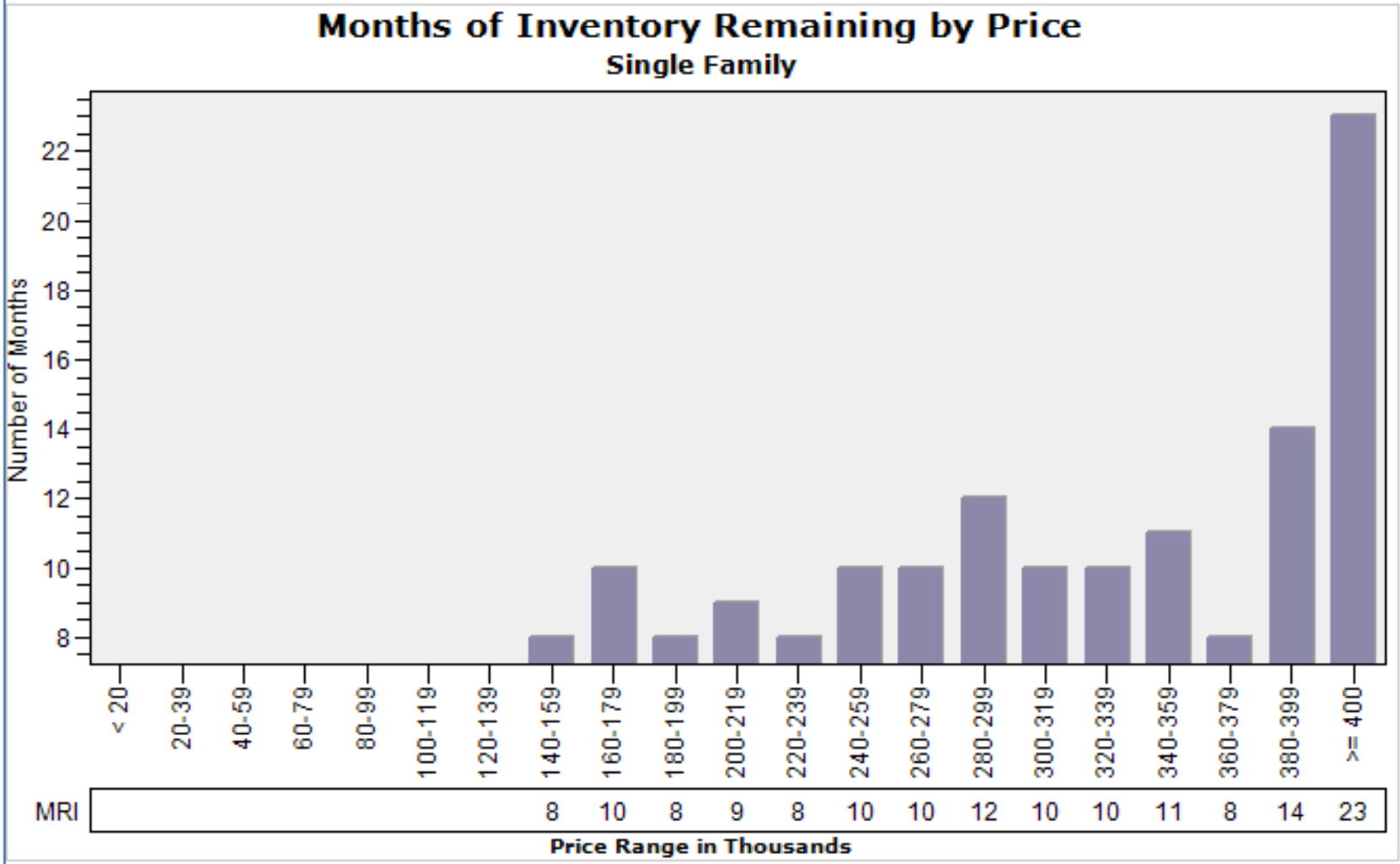
City and State OR Zip FORT WORTH, TX Sub Area

Query By Address Proximity (Show Details...)

Data Source : Local MKT Data

Select Chart Type : Months of Inventory Remaining by Price

Download comps Download Data




State: TX; County: 48439; City: FORT WORTH

# Collateral Intelligence Desktop Valuation Analytic Model

The spread between asking prices and sold tends to be narrow in strong markets and wide in soft or declining markets. Here we see it improving but still wide.

**Query By City-Zip (Hide Details...)**

City and State OR Zip: SAN DIEGO, CA

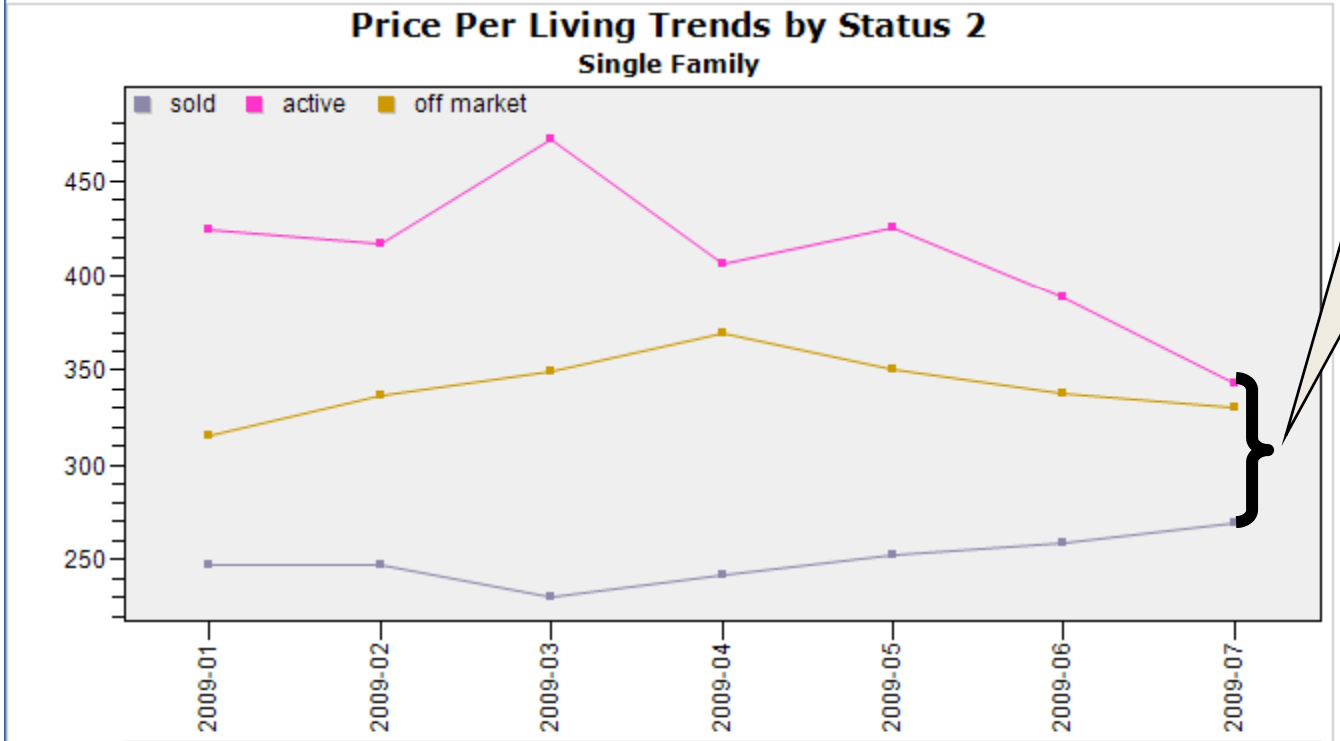
Sub Area

**Query By Address Proximity (Show Details...)**

Data Source : Local MKT Data

Select Chart Type : Price Per Living Trends by Status 2

Download comps Download Data




| | 2009-01 | 2009-02 | 2009-03 | 2009-04 | 2009-05 | 2009-06 | 2009-07 |
|---|---|---|---|---|---|---|---|
| sold | 247 | 247 | 230 | 242 | 252 | 259 | 269 |
| active | 424 | 417 | 472 | 406 | 425 | 388 | 343 |
| off market | 316 | 337 | 349 | 369 | 350 | 338 | 330 |

State: CA; County: 06073; City: SAN DIEGO

D y (optional)

| | Minimum | Maximum |
|---|---|---|
| ea | | |
| oms | | |
| rooms | | |
| ear Built | | |
| Land Area | | |
| Years Range | 2009 | 2009 |
| Data Increment | Month | |
| Property Type | Single-Family | |

Total number of properties for the past 12 months : 10393

Clear Criteria

Re-Produce Chart

# Collateral Intelligence Desktop Valuation Analytic Model

**Query By City-Zip (Hide Details...)**

City and State OR Zip: LAS VEGAS, NV

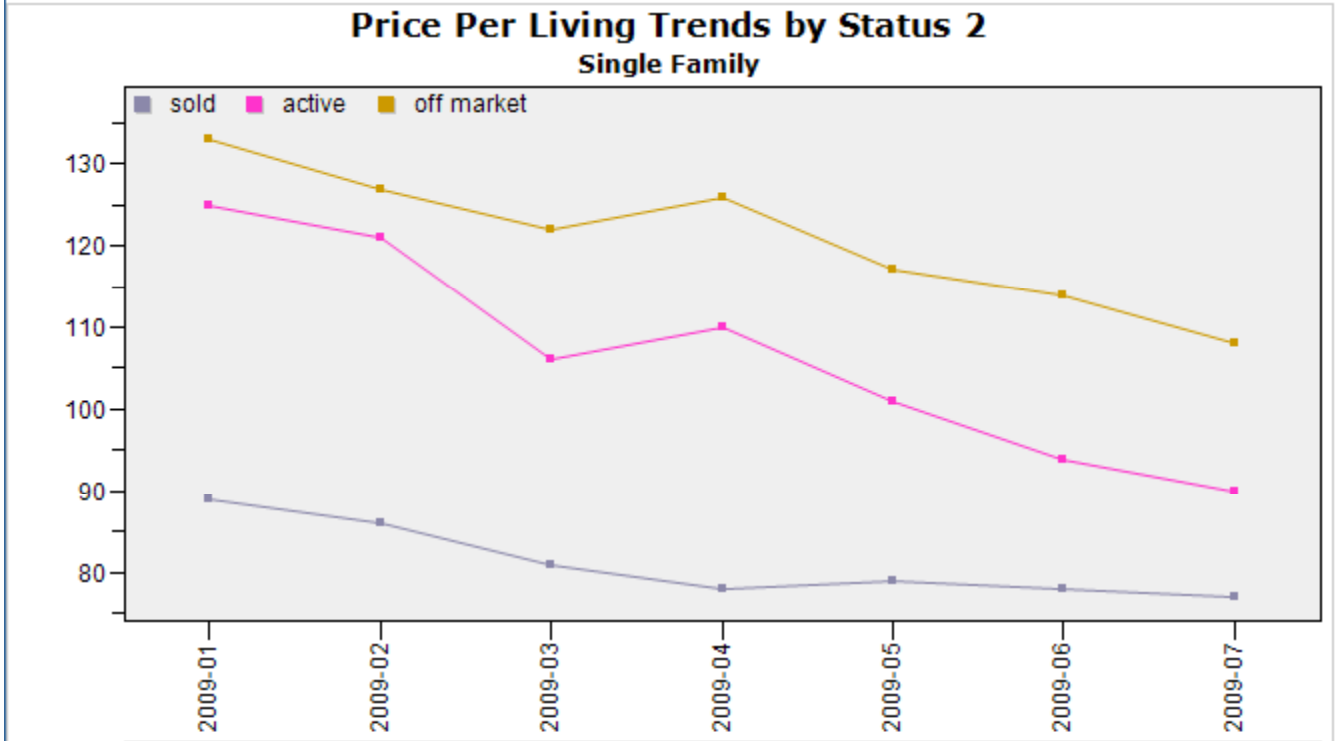
Sub Area: 89101, 89102, 89103, 89104, 89105

**Query By Address Proximity (Show Details...)**

Data Source : Local MKT Data

Select Chart Type : Price Per Living Trends by Status 2

Download comps  Download Data




| | 2009-01 | 2009-02 | 2009-03 | 2009-04 | 2009-05 | 2009-06 | 2009-07 |
|---|---|---|---|---|---|---|---|
| sold | 89 | 86 | 81 | 78 | 79 | 78 | 77 |
| active | 125 | 121 | 106 | 110 | 101 | 94 | 90 |
| off market | 133 | 127 | 122 | 126 | 117 | 114 | 108 |

State: NV; County: 32003; City: LAS VEGAS

**Define Query (optional)**

| | Minimum | Maximum |
|---|---|---|
| Living Area | | |
| Bedrooms | | |
| Bathrooms | | |
| Year Built | | |
| Land Area | | |
| Years Range | 2009 | 2009 |
| Data Increment | Month | |
| Property Type | Single-Family | |

Total number of properties for the past 12 months : 55187

Clear Criteria

Re-Produce Chart

# Collateral Intelligence Desktop Valuation Analytic Model

**Query By City-Zip (Hide Details...)**

City and State OR Zip: LAS VEGAS, NV

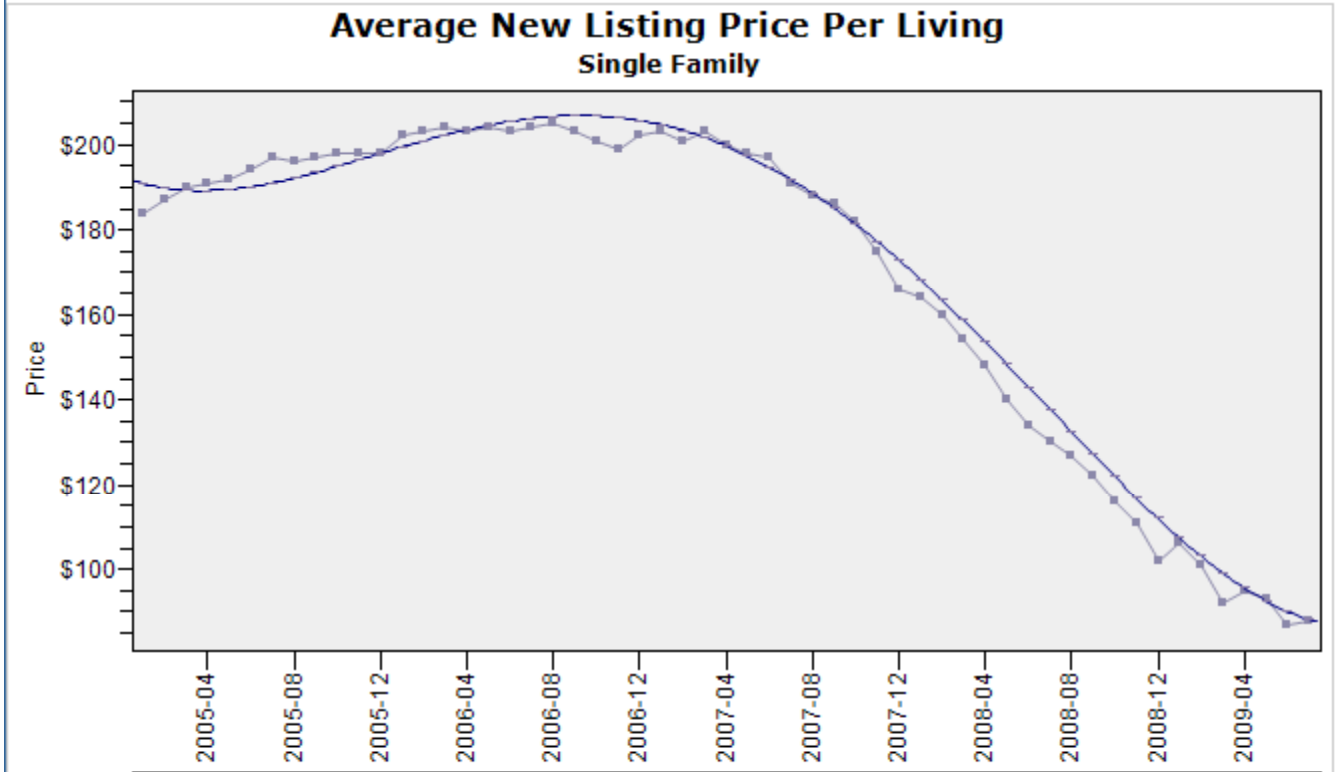
Sub Area: 89101, 89102, 89103, 89104, 89105

**Query By Address Proximity (Show Details...)**

Data Source : Local MKT Data

Select Chart Type : Average New Listing Price Per Living

Download comps  Download Data




| | 2005-04 | 2005-08 | 2005-12 | 2006-04 | 2006-08 | 2006-12 | 2007-04 | 2007-08 | 2007-12 | 2008-04 | 2008-08 | 2008-12 | 2009-04 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| price/living | 191 | 196 | 198 | 203 | 205 | 202 | 200 | 188 | 166 | 148 | 127 | 102 | 95 |
| best-fit | 189 | 192 | 198 | 203 | 207 | 206 | 200 | 189 | 173 | 154 | 132 | 112 | 96 |

State: NV; County: 32003; City: LAS VEGAS

**Define Query (optional)**

| | Minimum | Maximum |
|---|---|---|
| Living Area | | |
| Bedrooms | | |
| Bathrooms | | |
| Year Built | | |
| Land Area | | |
| Years Range | 2005 | 2009 |
| Data Increment | Month | |
| Property Type | Single-Family | |

Total number of properties for the past 12 months : 39226

Clear Criteria

Re-Produce Chart

# Collateral Intelligence Desktop Valuation Analytic Model

**Query By City-Zip (Hide Details...)**

City and State OR Zip: SAN ANTONIO, TX

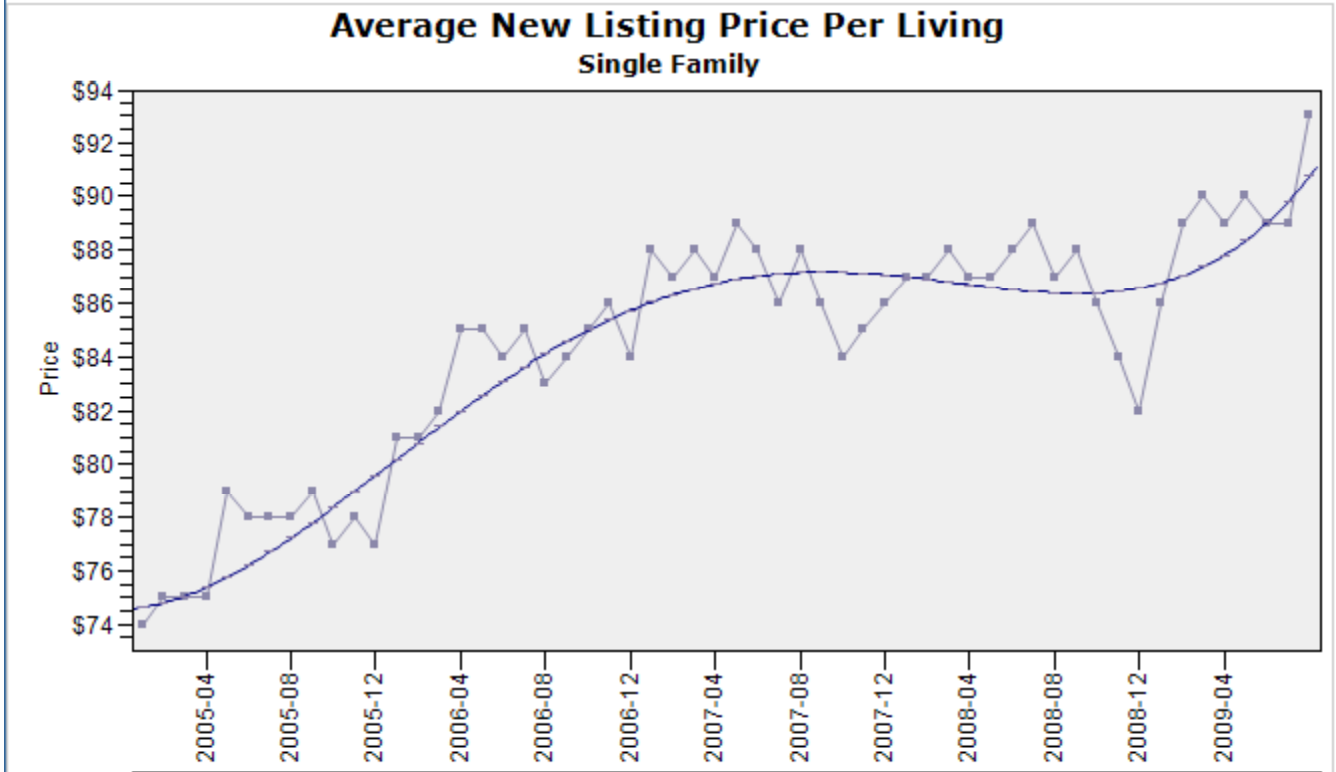
Sub Area: 78201, 78202, 78203, 78204, 78205

**Query By Address Proximity (Show Details...)**

Data Source : Local MKT Data

Select Chart Type : Average New Listing Price Per Living

Download comps  Download Data




| | 2005-04 | 2005-08 | 2005-12 | 2006-04 | 2006-08 | 2006-12 | 2007-04 | 2007-08 | 2007-12 | 2008-04 | 2008-08 | 2008-12 | 2009-04 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| price/living | 75 | 78 | 77 | 85 | 83 | 84 | 87 | 88 | 86 | 87 | 87 | 82 | 89 |
| best-fit | 75 | 77 | 80 | 82 | 84 | 86 | 87 | 87 | 87 | 87 | 86 | 87 | 88 |

State: TX; City: SAN ANTONIO

**Define Query (optional)**

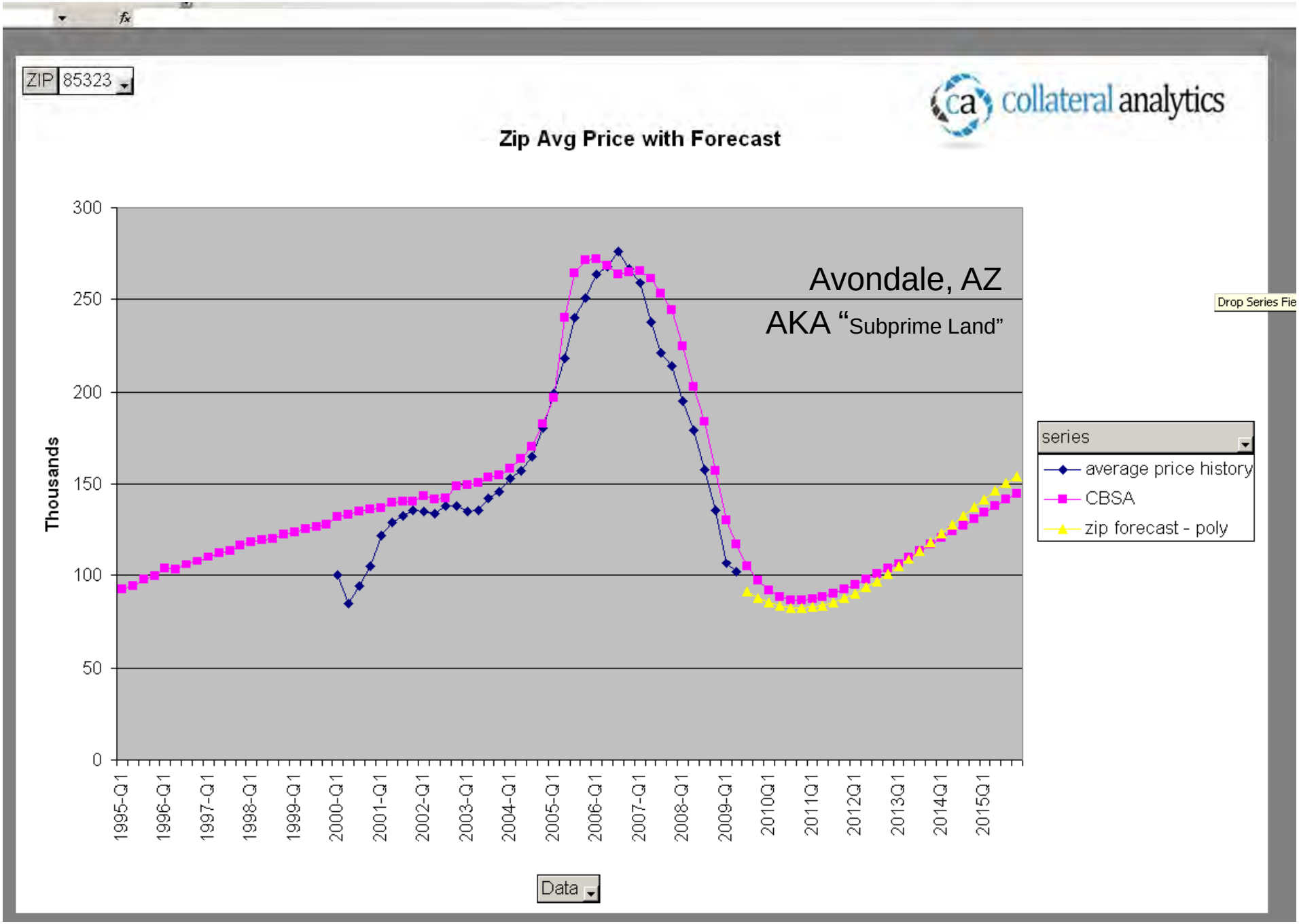
| | Minimum | Maximum |
|---|---|---|
| Living Area | | |
| Bedrooms | | |
| Bathrooms | | |
| Year Built | | |
| Land Area | | |
| Years Range | 2005 | 2009 |
| Data Increment | Month | |
| Property Type | Single-Family | |

Total number of properties for the past 12 months : 20012

Clear Criteria

Re-Produce Chart

# Some sample forecasts


ZIP 85323
collateral analytics
Zip Avg Price with Forecast
Avondale, AZ
AKA "Subprime Land"
Thousands
300
250
200
150
100
50
0
1995-Q1
1996-Q1
1997-Q1
1998-Q1
1999-Q1
2000-Q1
2001-Q1
2002-Q1
2003-Q1
2004-Q1
2005-Q1
2006-Q1
2007-Q1
2008-Q1
2009-Q1
2010Q1
2011Q1
2012Q1
2013Q1
2014Q1
2015Q1
Data
Drop Series Fie
series
average price history
CBSA
zip forecast - poly

ZIP 33954

collateral analytics

## Zip Avg Price with Forecast

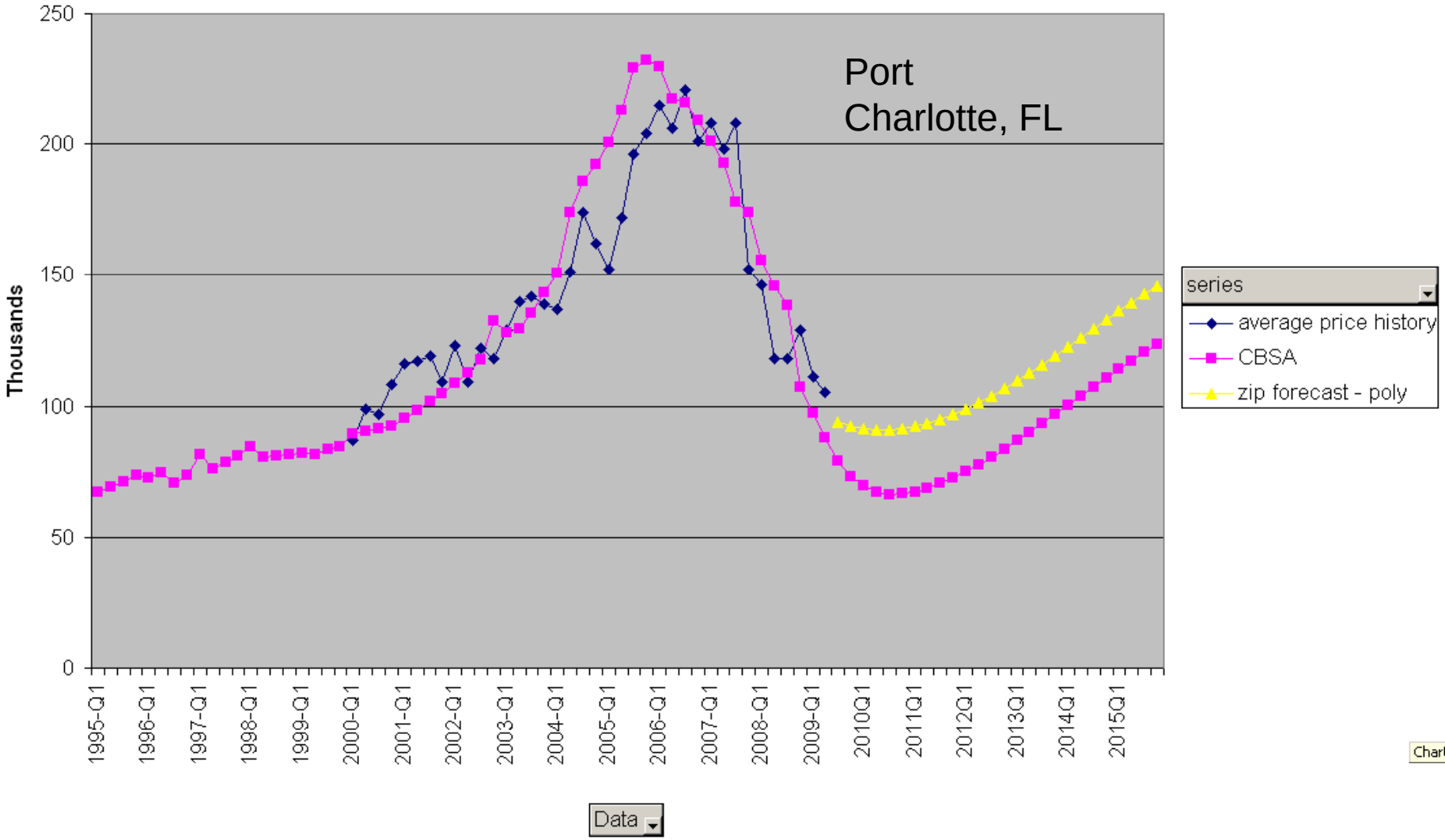



Chart Area

# Collateral Intelligence Desktop Valuation Analytic Model

**Query By City-Zip (Hide Details...)**

City and State OR Zip: 33954

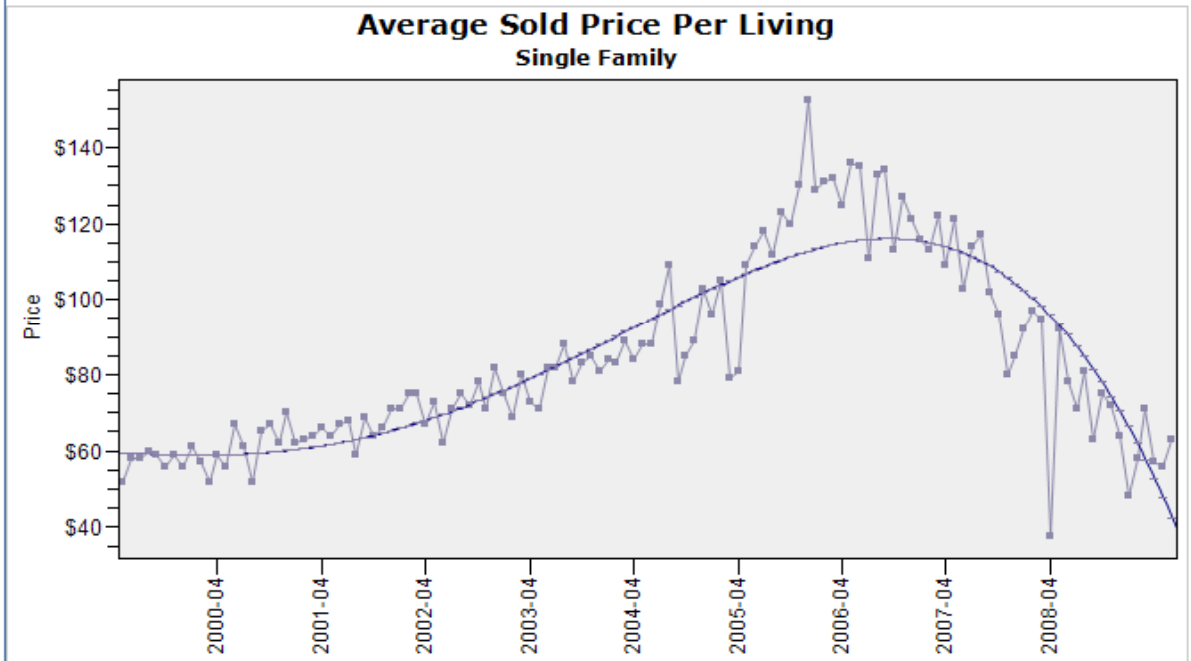
Sub Area:

**Query By Address Proximity (Show Details...)**

Data Source : Public Records

Select Chart Type : Average Sold Price Per Living

Download comps  Download Data




| | 2000-04 | 2001-04 | 2002-04 | 2003-04 | 2004-04 | 2005-04 | 2006-04 | 2007-04 | 2008-04 |
|---|---|---|---|---|---|---|---|---|---|
| price/living | 59 | 66 | 67 | 73 | 84 | 81 | 125 | 109 | 38 |
| best-fit | 59 | 61 | 68 | 79 | 93 | 106 | 115 | 114 | 96 |

State: FL; County: 12015; City: PORT CHARLOTTE; Zip: 33954

**Define Query (optional)**

| | Minimum | Maximum |
|---|---|---|
| Living Area | | |
| Bedrooms | | |
| Bathrooms | | |
| Year Built | | |
| Land Area | | |
| Years Range | 1995 | 2009 |
| Data Increment | Month | |
| Property Type | Single-Family | |

Total number of properties for the past 12 months : 137

Clear Criteria

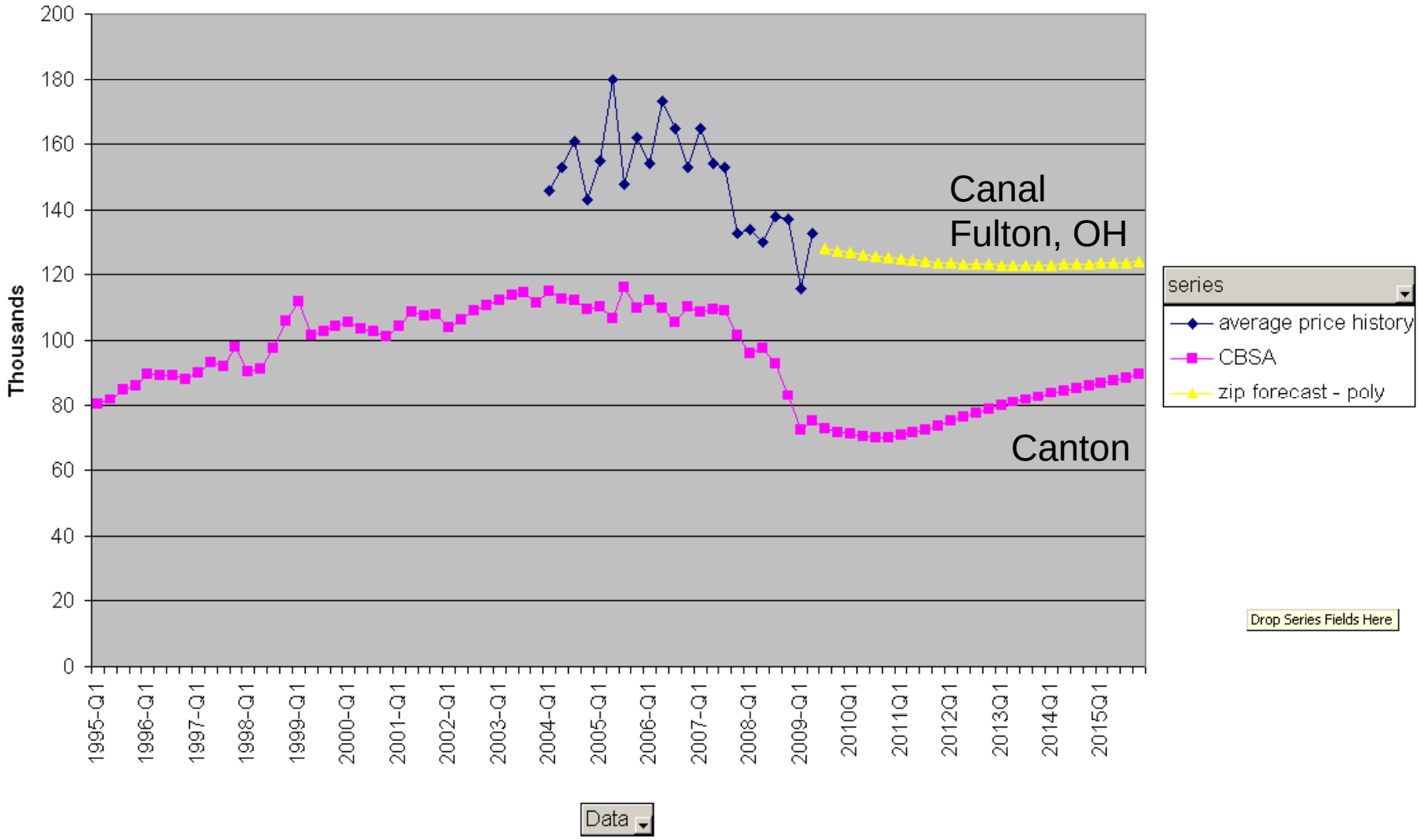
Re-Produce Chart

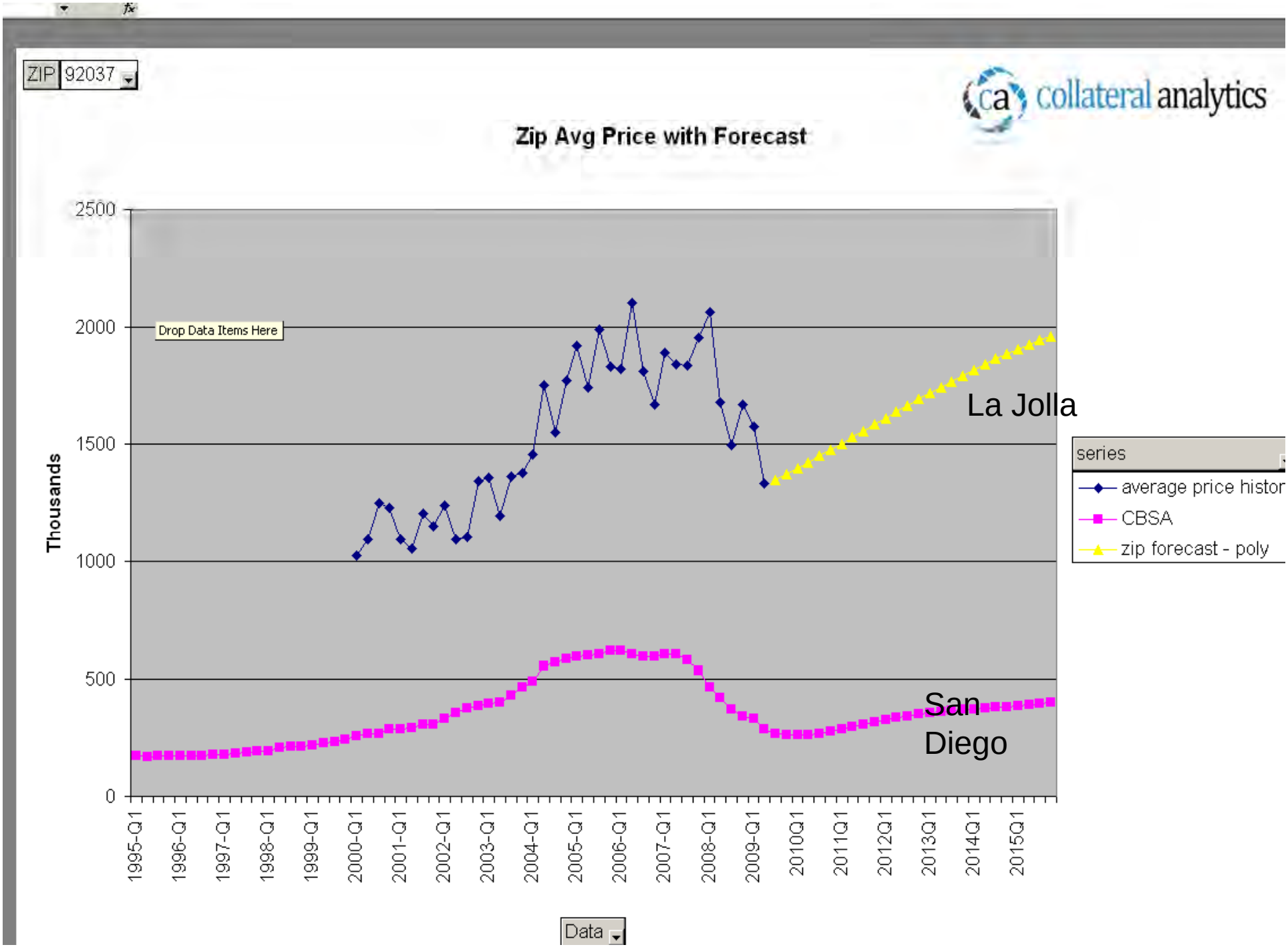
Office Live | Open | Save

ZIP 44614

collateral analytics

## Zip Avg Price with Forecast




ZIP 92037
collateral analytics
Zip Avg Price with Forecast
Drop Data Items Here
Thousands
2500
2000
1500
1000
500
0
1995-Q1
1996-Q1
1997-Q1
1998-Q1
1999-Q1
2000-Q1
2001-Q1
2002-Q1
2003-Q1
2004-Q1
2005-Q1
2006-Q1
2007-Q1
2008-Q1
2009-Q1
2010Q1
2011Q1
2012Q1
2013Q1
2014Q1
2015Q1
La Jolla
San Diego
series
average price histor
CBSA
zip forecast - poly
Data

# Summary

- Foreclosures are highly concentrated by state, by county and by zip code
- Local market price changes are not well represented by the Case Shiller Index
- There are several methods to isolate contagion effects, REOs Versus Non-REOs and other indicators of the pricing gap.
- Distressed asset pricing depends on local market conditions.
- We can forecast price trends reasonably well for the next several quarters when using both technical (Broker based-MLS Type) and fundamental data.

Questions?

Or More Infor?

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Msklarz@collateralanalytics.com