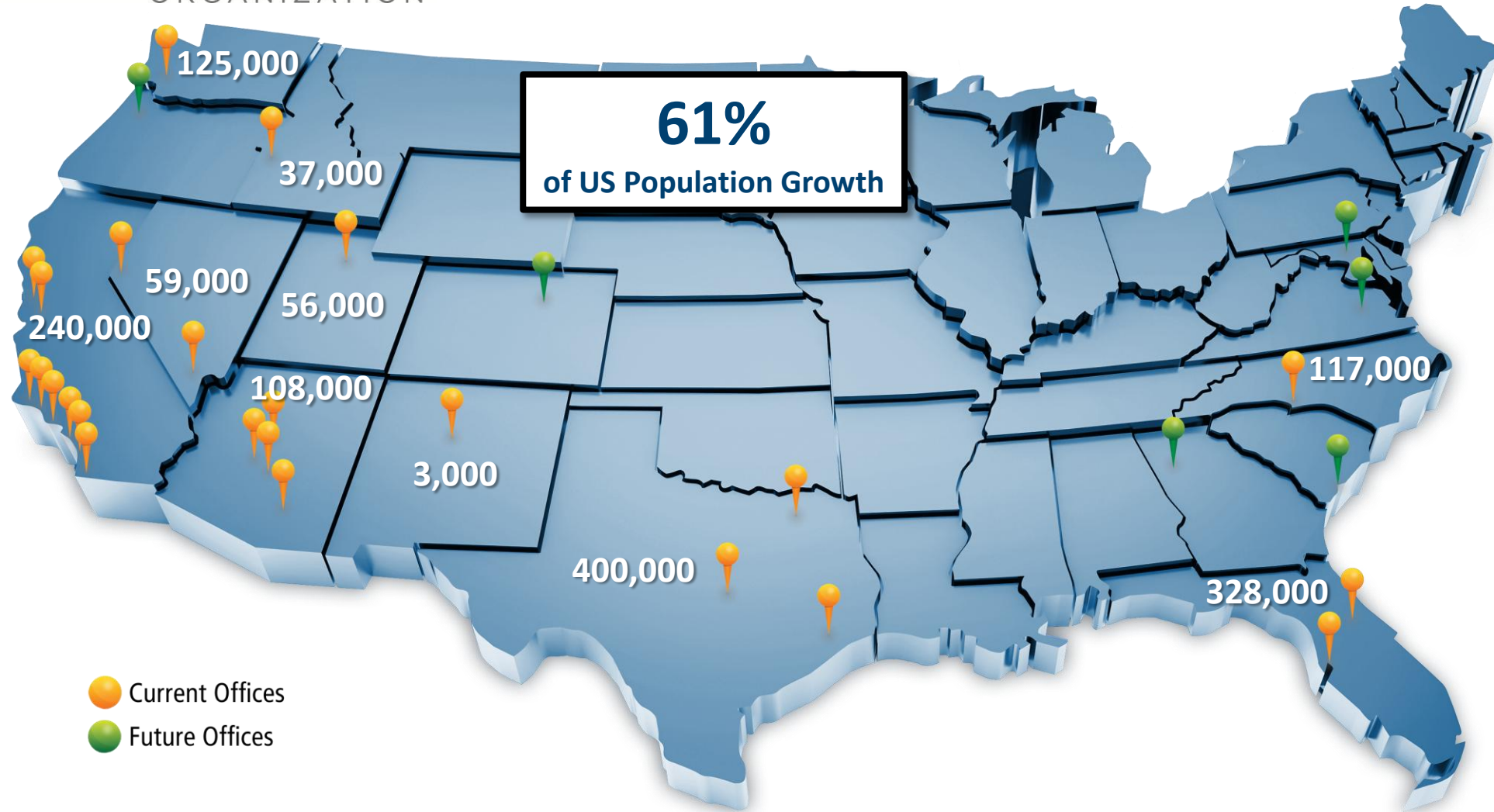

23rd Annual Spring Ag Forum

February 22, 2019



* State population growth 2016 to 2017.

Affiliate Companies



Specializes in establishing strategic capital relationships between landowners, homebuilders, developers and capital providers.

Institutional capital firms • Hedge funds • Opportunity funds • Private equity firms • Mezzanine providers • Traditional/non-traditional debt providers



Assists the development and home building communities with the construction of projects using district financing structures (e.g. SID, CFD, DID, PID etc.) and other financing mechanisms designed to meet the unique characteristics and financing goals of our clients.

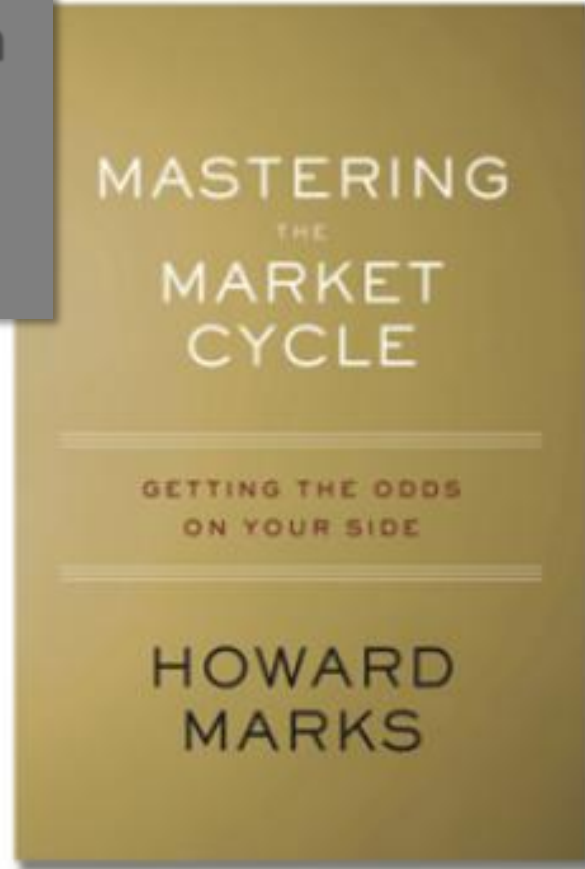


State and local tax consulting firm specializing in real and personal property tax reductions.

Specialized areas of expertise involve all real estate asset classes.

Mastering the Market Cycles

“We cannot predict the future, we can only better understand the present.”



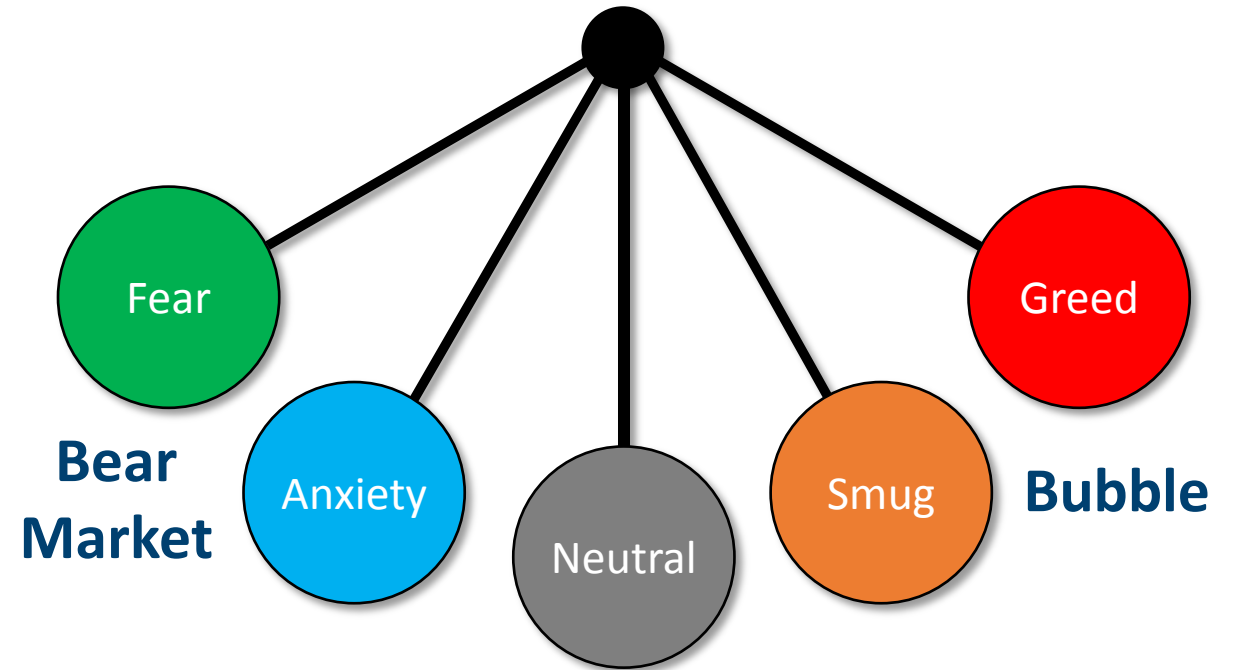
Howard Marks
Co-founder Oaktree Capital
\$122 Billion Under Management

The Pendulum Swings of Psychology

Exaggerated Swings Between

- **Fear & Greed**
- **Optimism and Pessimism**
- **Risk Tolerance and Risk Aversion**
- **Faith in Value and Insistence in Concrete Valuation**
- **Urgency to Buy and Panic to Sell**

The Market Pendulum

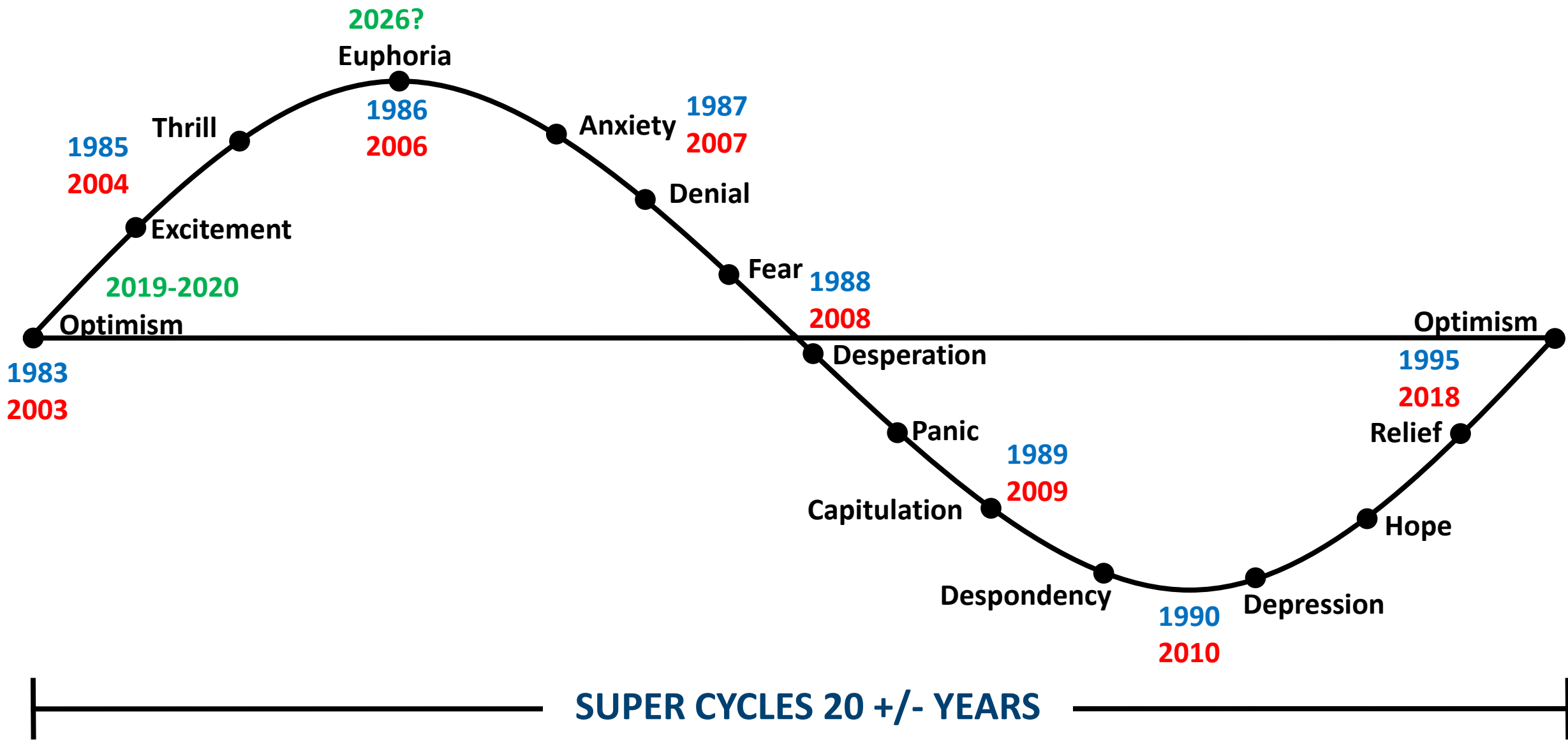


“Extreme Brevity of the Financial Memory”

- Keeps people from recognizing the recurring nature of these patterns, and thus their inevitability.**
- We have two classes of forecasters: Those who don't know – And those who don't know they don't know.**

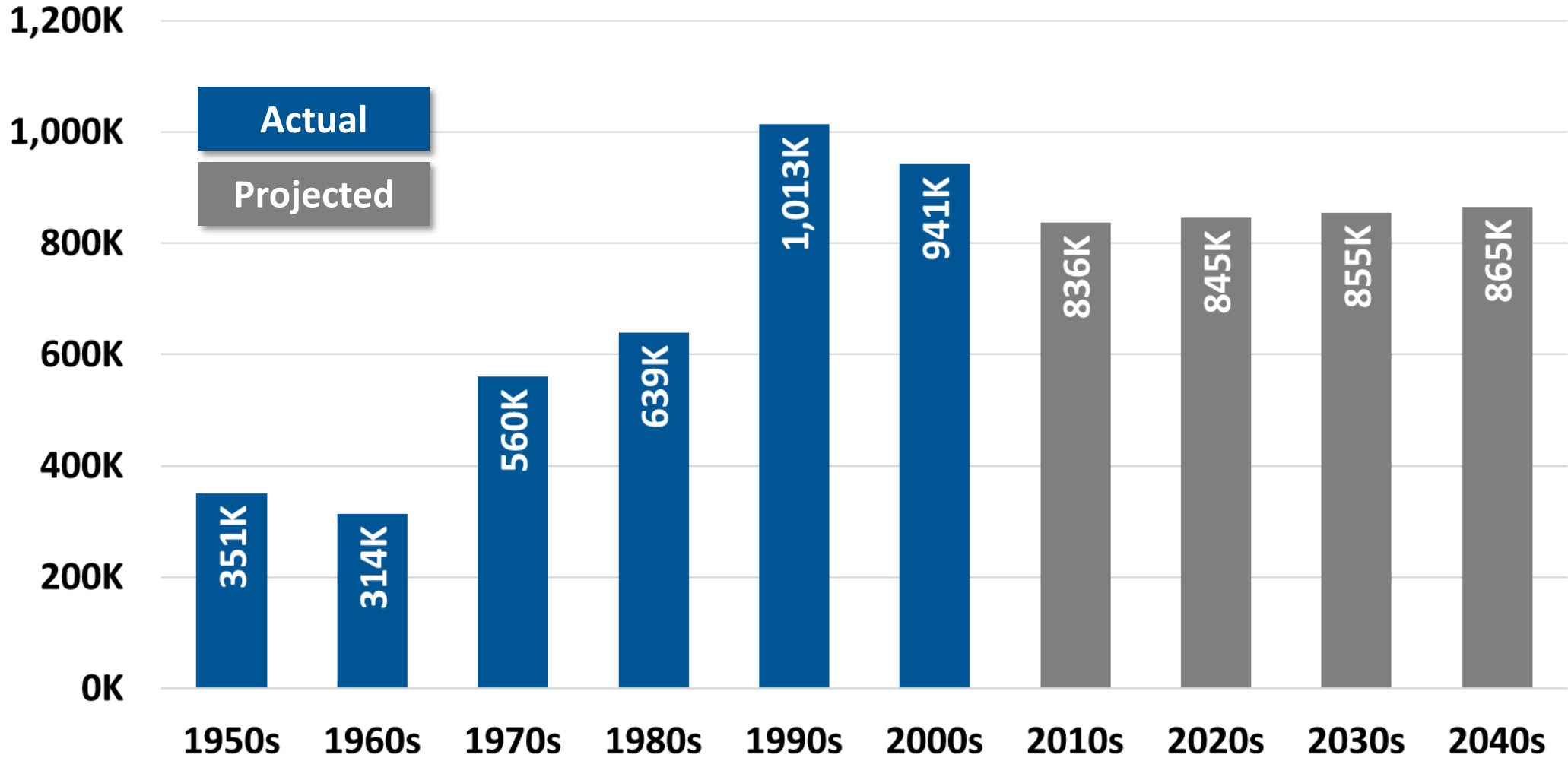
- John Kenneth Galbraith

Cycle of Market Emotions



Decennial Population Growth

2018 PHOENIX MSA POPULATION ESTIMATE : 4,837,000



Annual Population Growth

Year over year population change

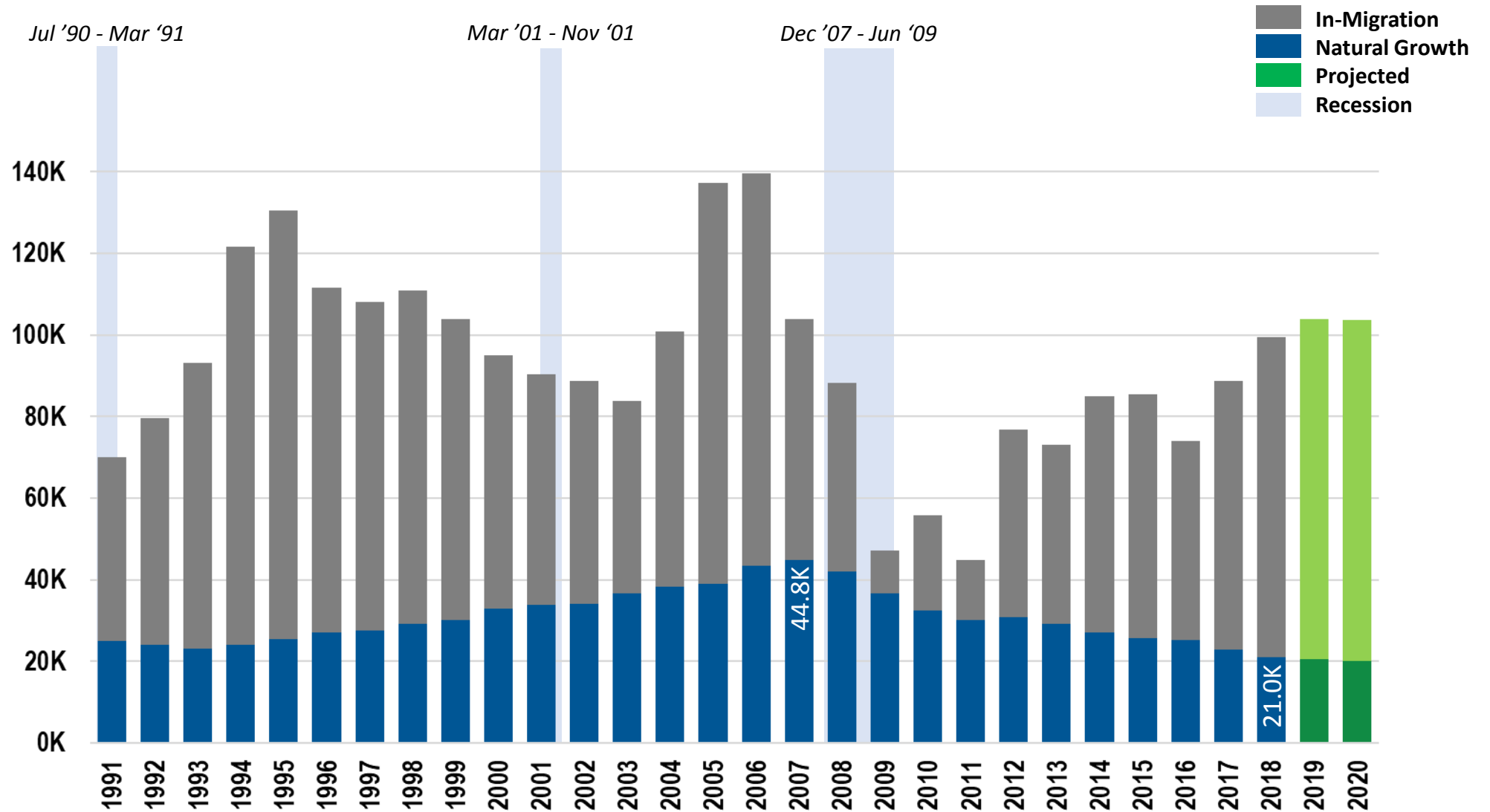
Population Growth

1990's: 1,013,000
 2000's: 941,000
 2010's: 836,000
 2020's: 845,400
 2030's: 855,000

Natural Growth

2007 Peak: 44,800
 2018: 21,000
 Change: -23,700

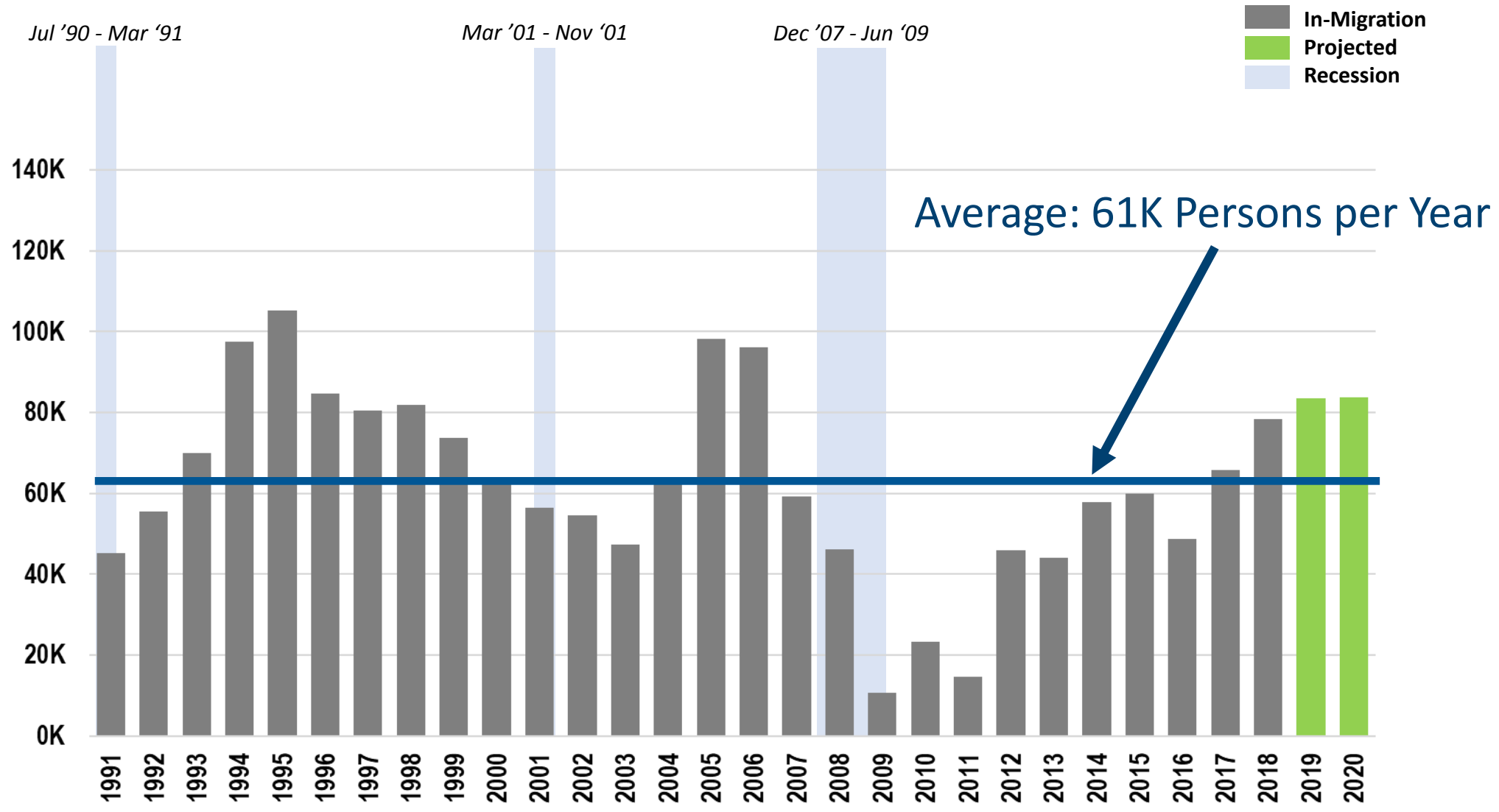
Lowest natural growth rate since 1991



Annual Net Migration

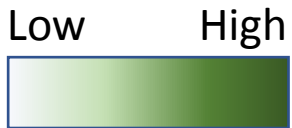
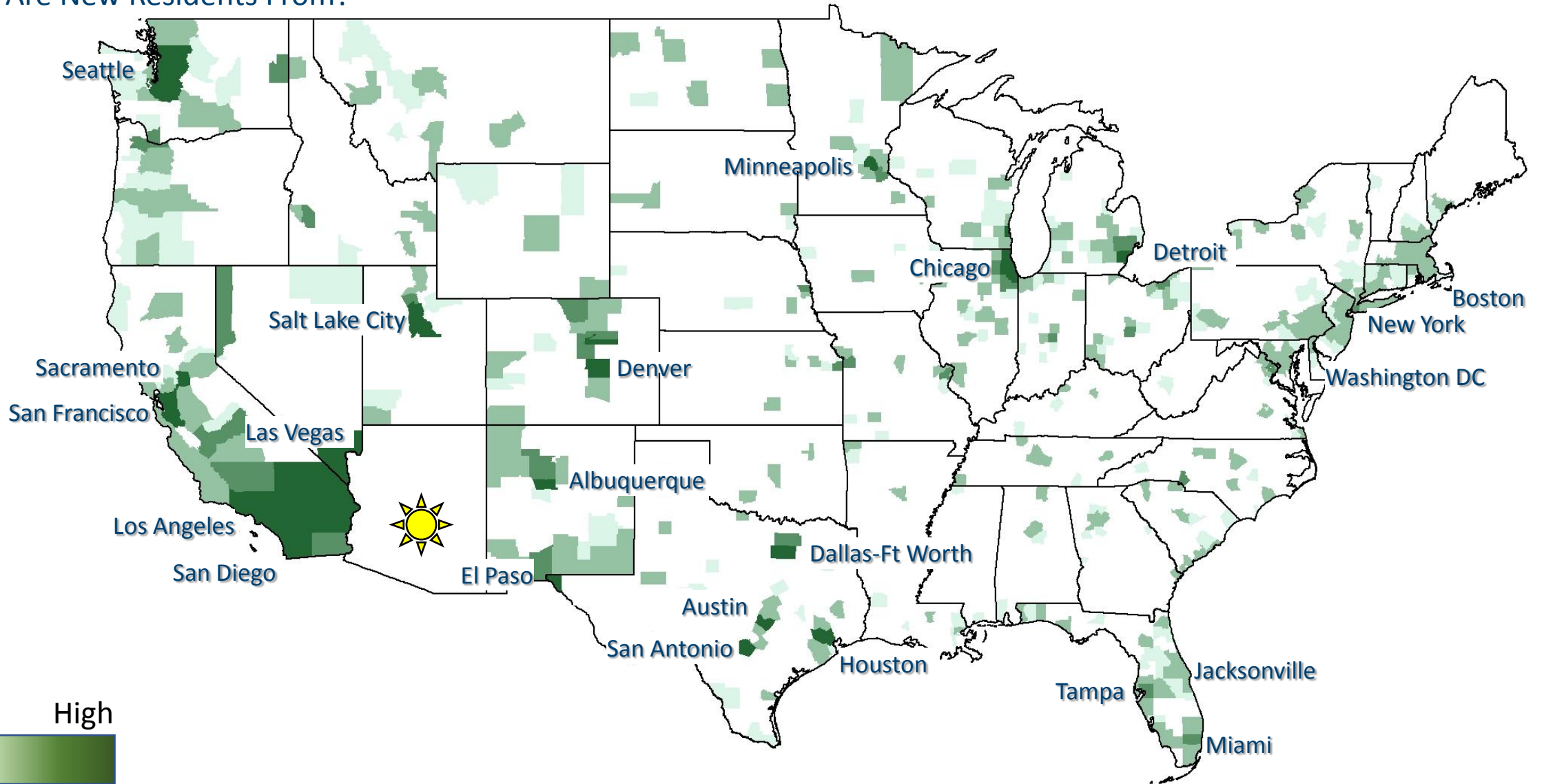
Year over year population change not including natural growth.

Total Net Migration
1991 – 2018
1.72 Million



Phoenix In Migration

Where Are New Residents From?

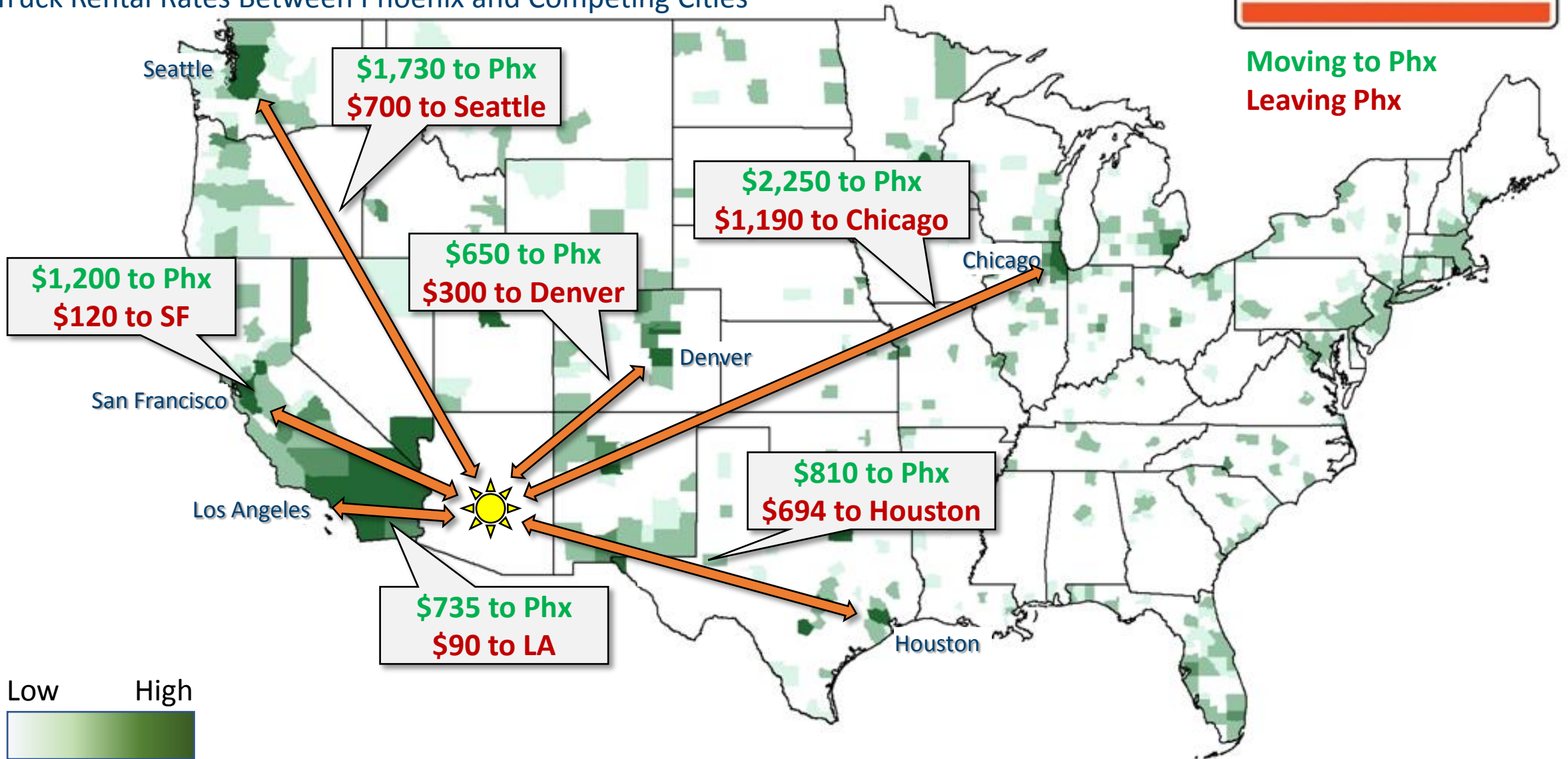


Phoenix In Migration

Truck Rental Rates Between Phoenix and Competing Cities



Moving to Phx
Leaving Phx

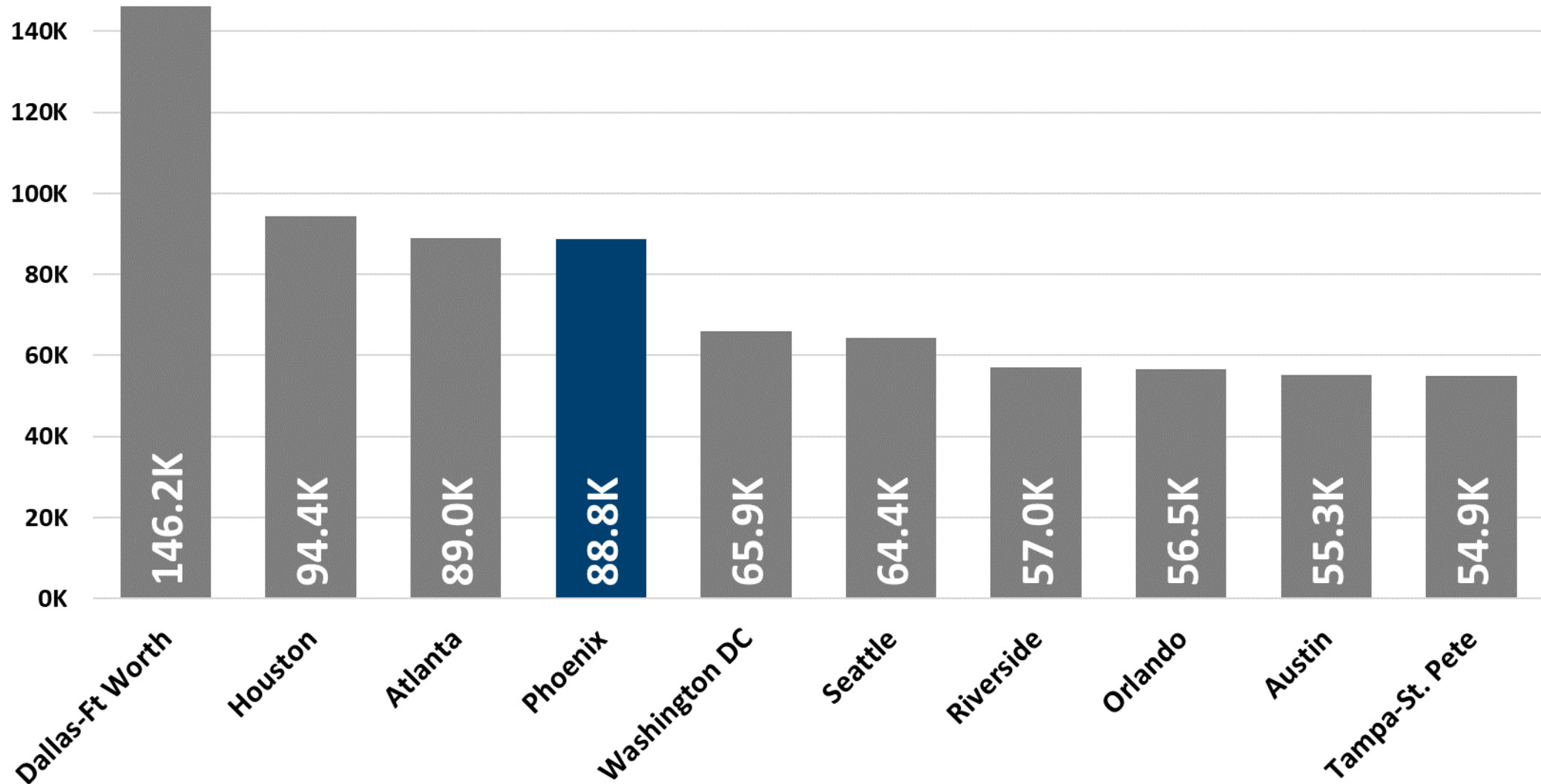


Low High



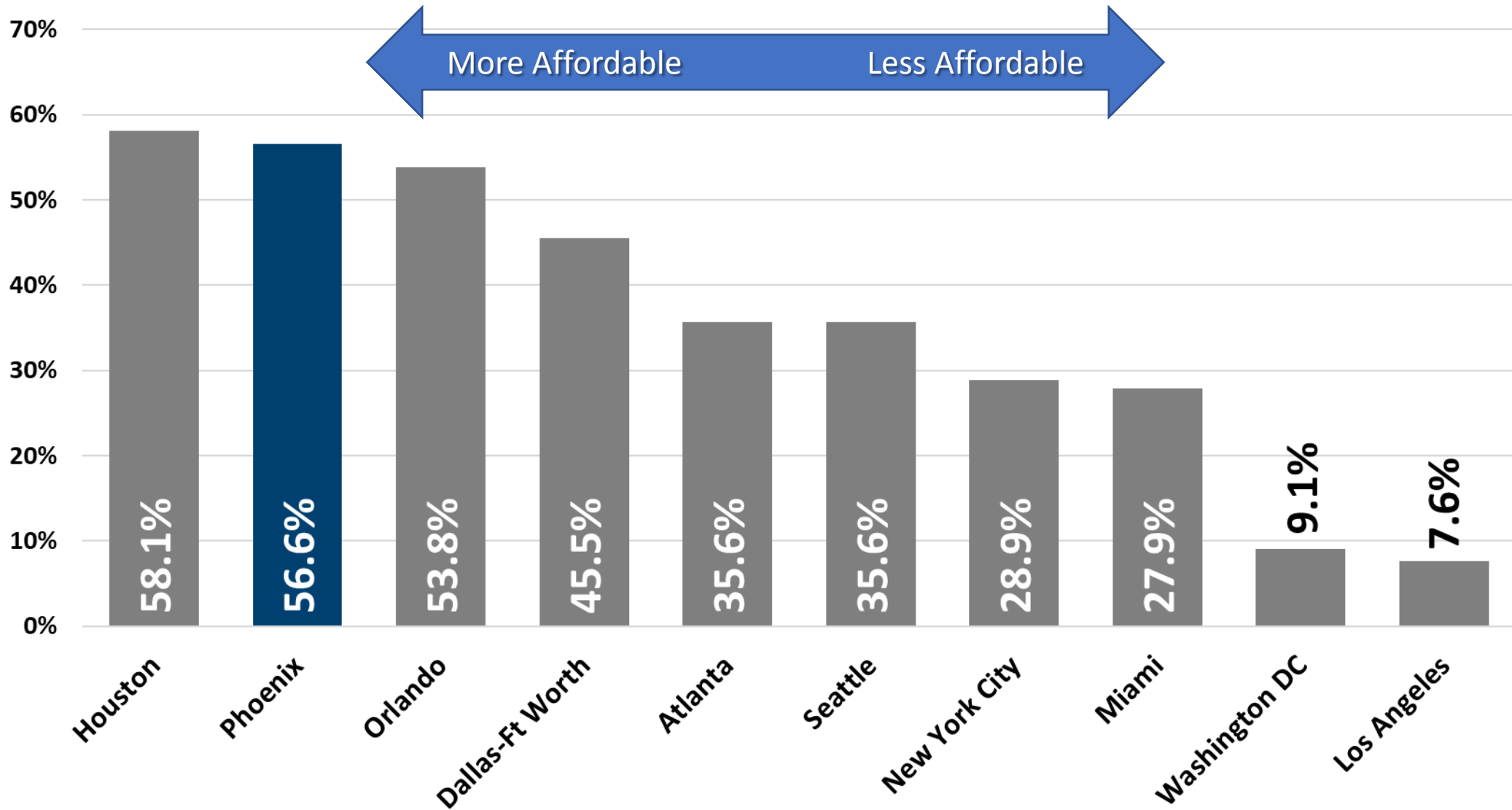
Population Growth - Top 10 Metro Areas

2016 to 2017



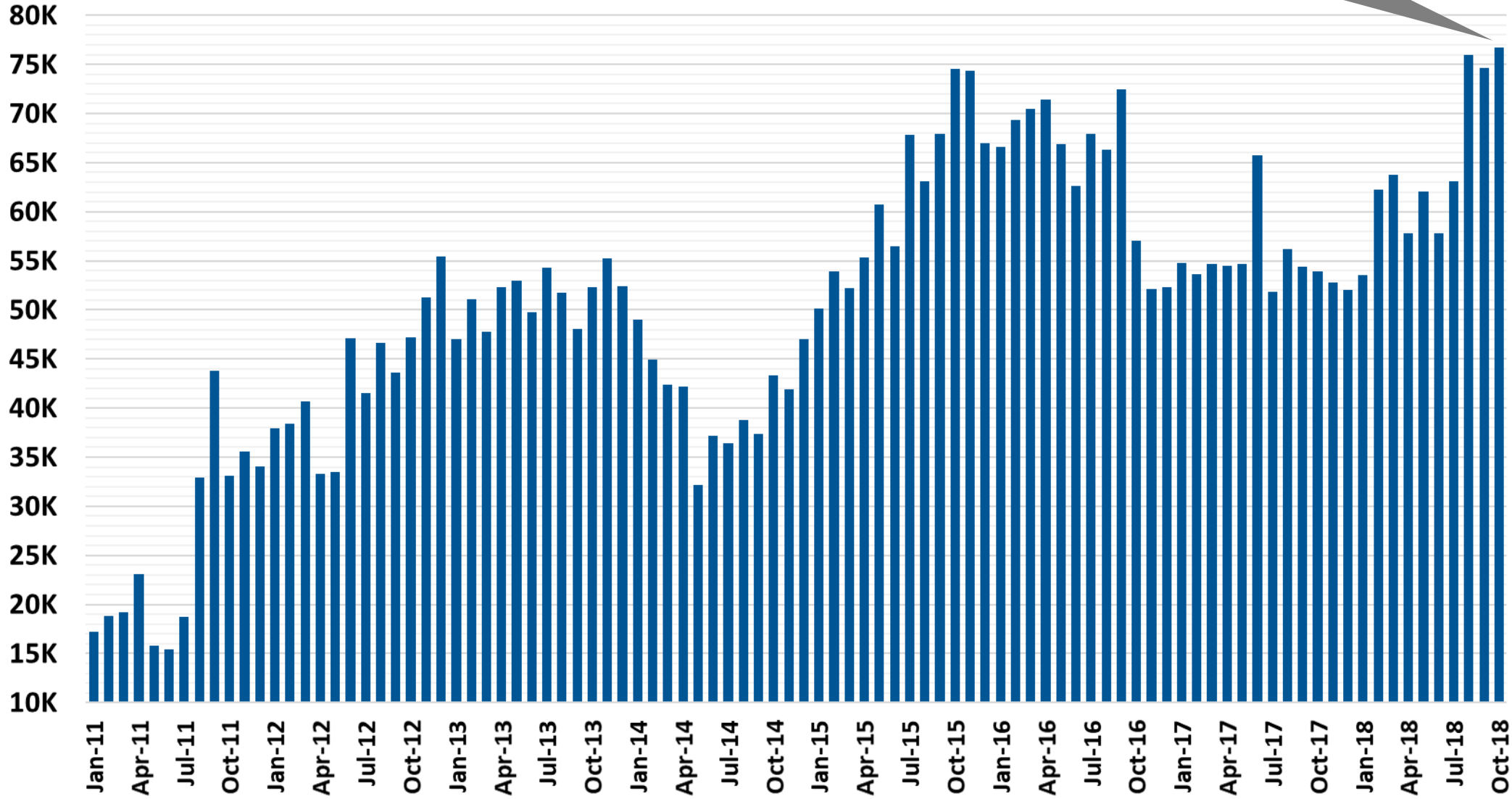
Housing Opportunity Index of Top 10 Population Growth Markets

Share of Homes Sold Affordable to the Median Family Income



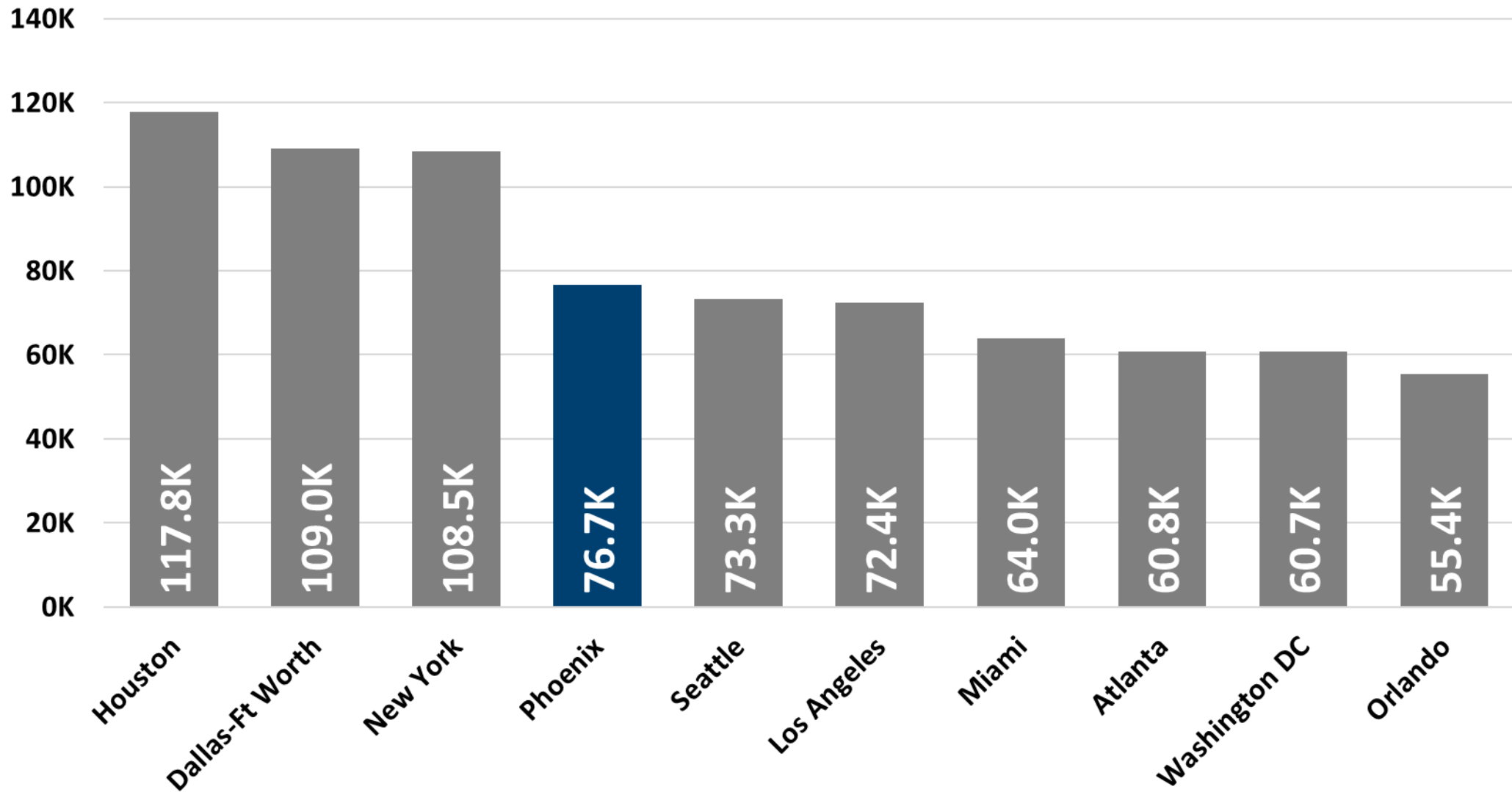
Year Over Year Monthly Employment Change

76,700 Jobs Added
Oct. 2017 to Oct. 2018



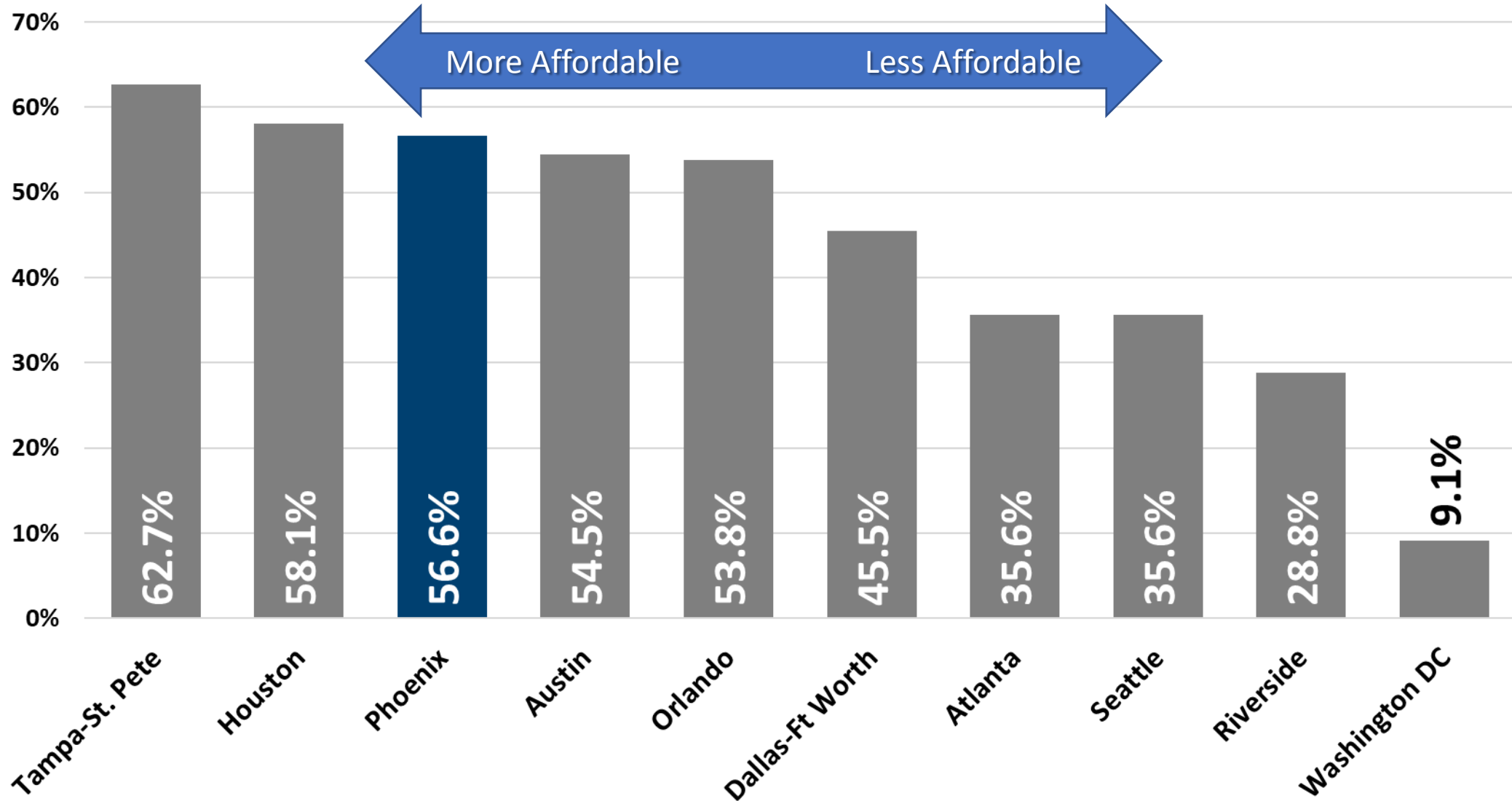
Employment Growth - Top 10 Metro Areas

Oct. 2017 to Oct 2018



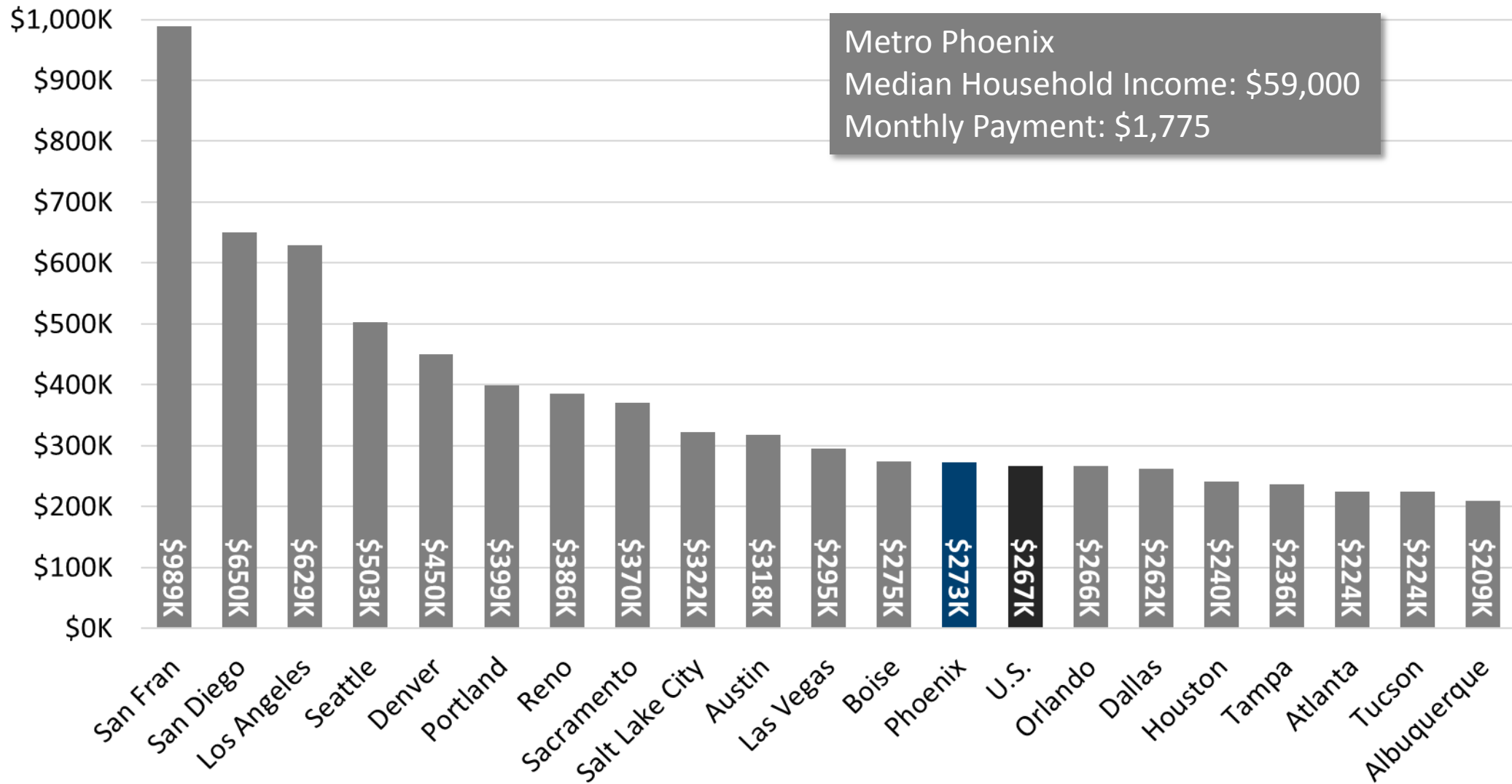
Housing Opportunity Index of Top 10 Employment Growth Markets

Share of Homes Sold Affordable to the Median Family Income

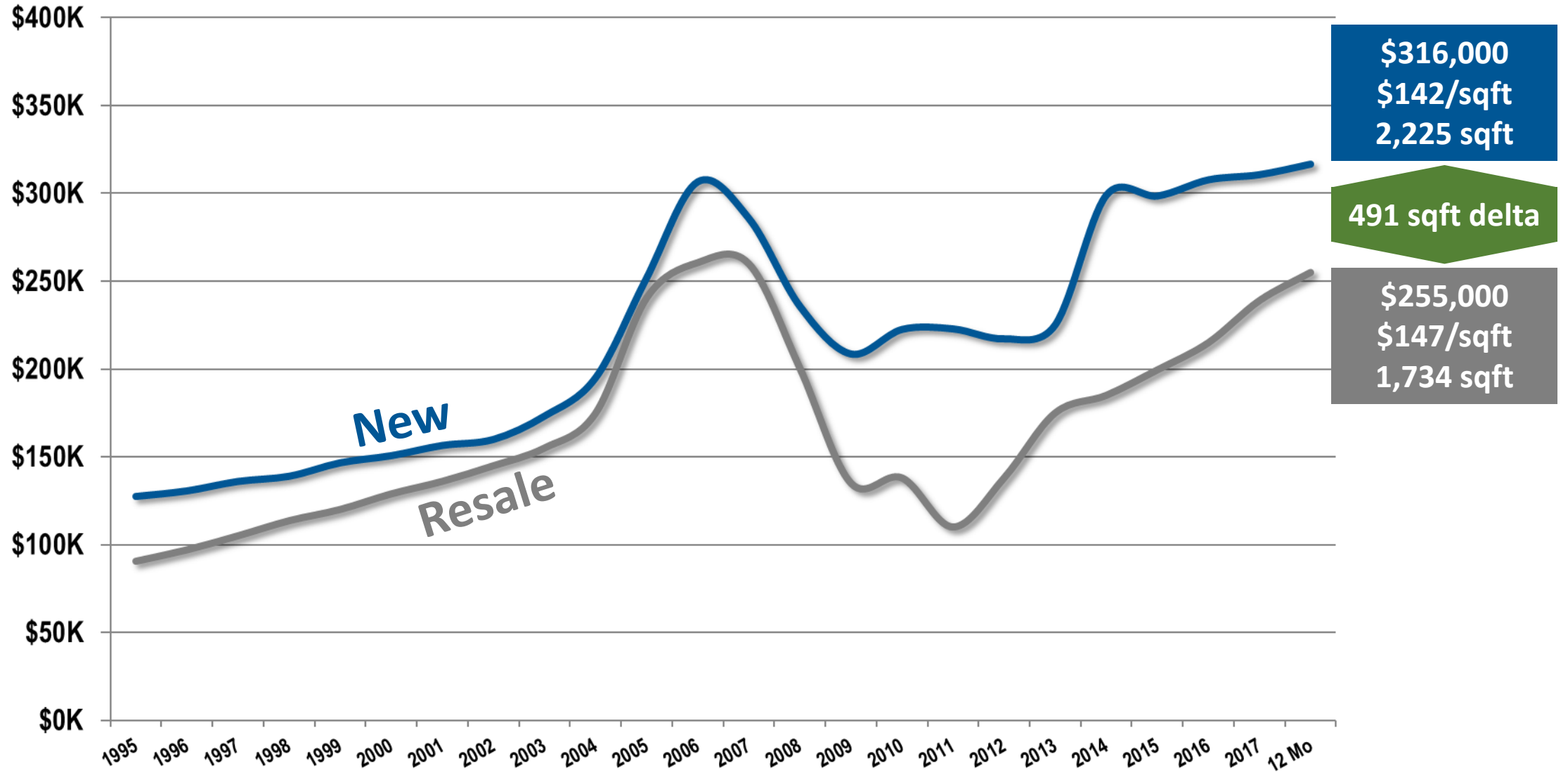


Median Home Sales Price in Selected Markets

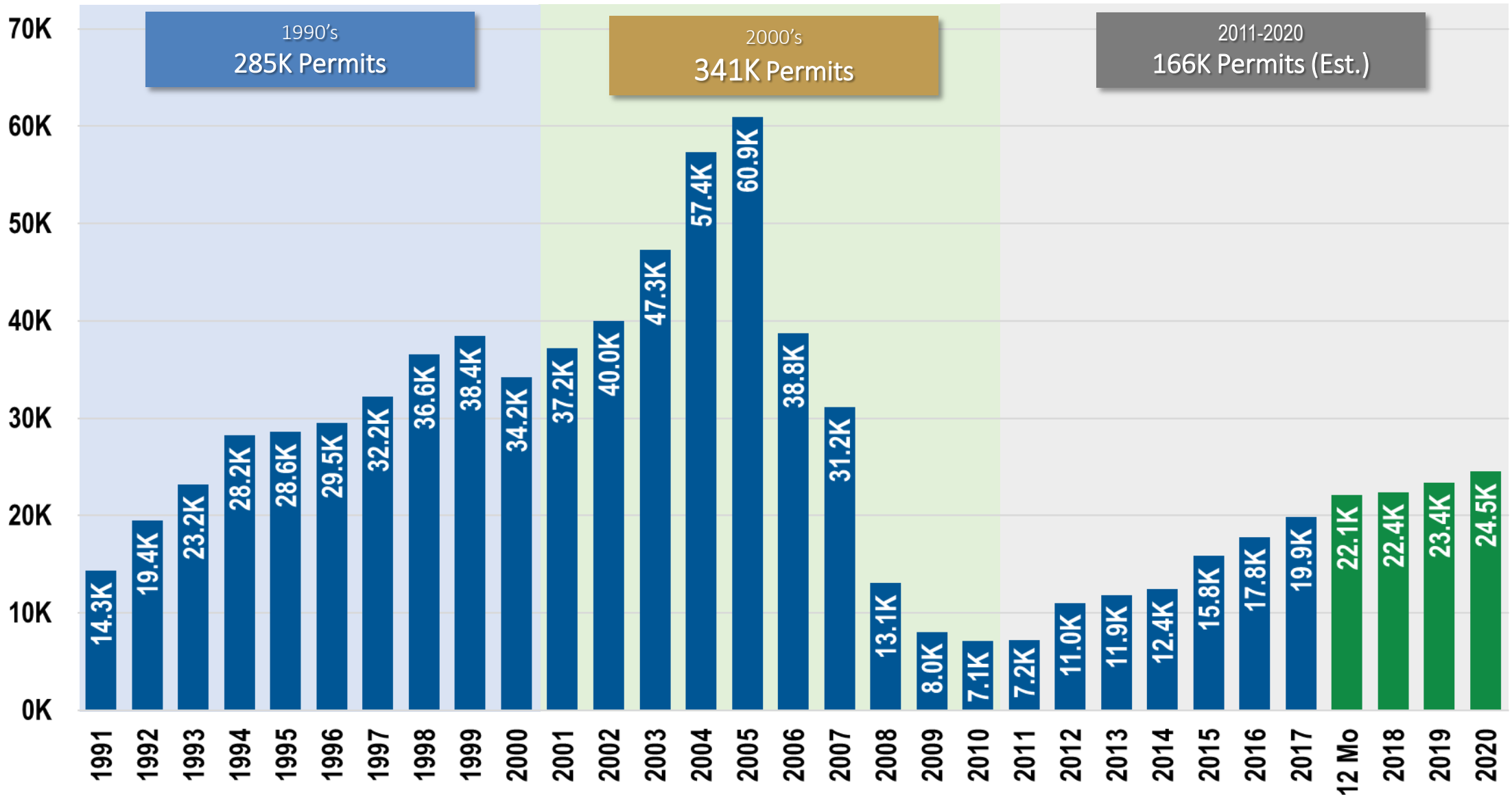
3rd Quarter 2018



New & Resale Median Home Price

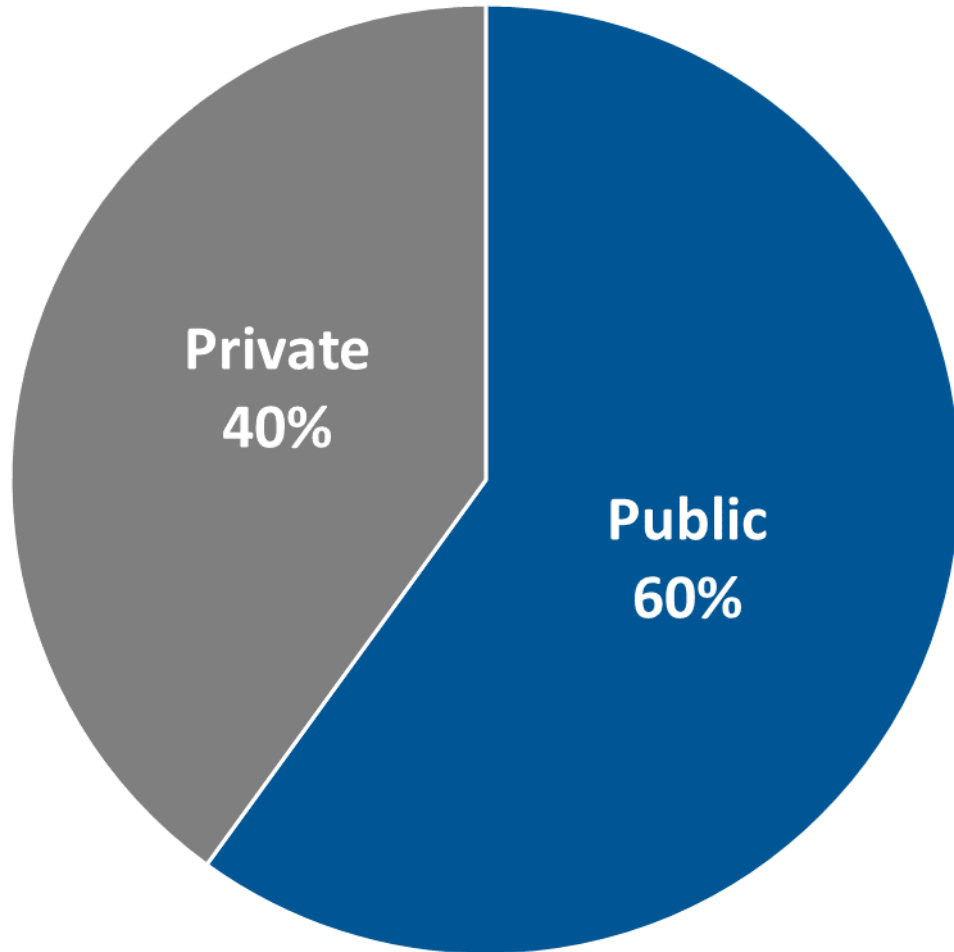


Phoenix Metro - Single Family Permits

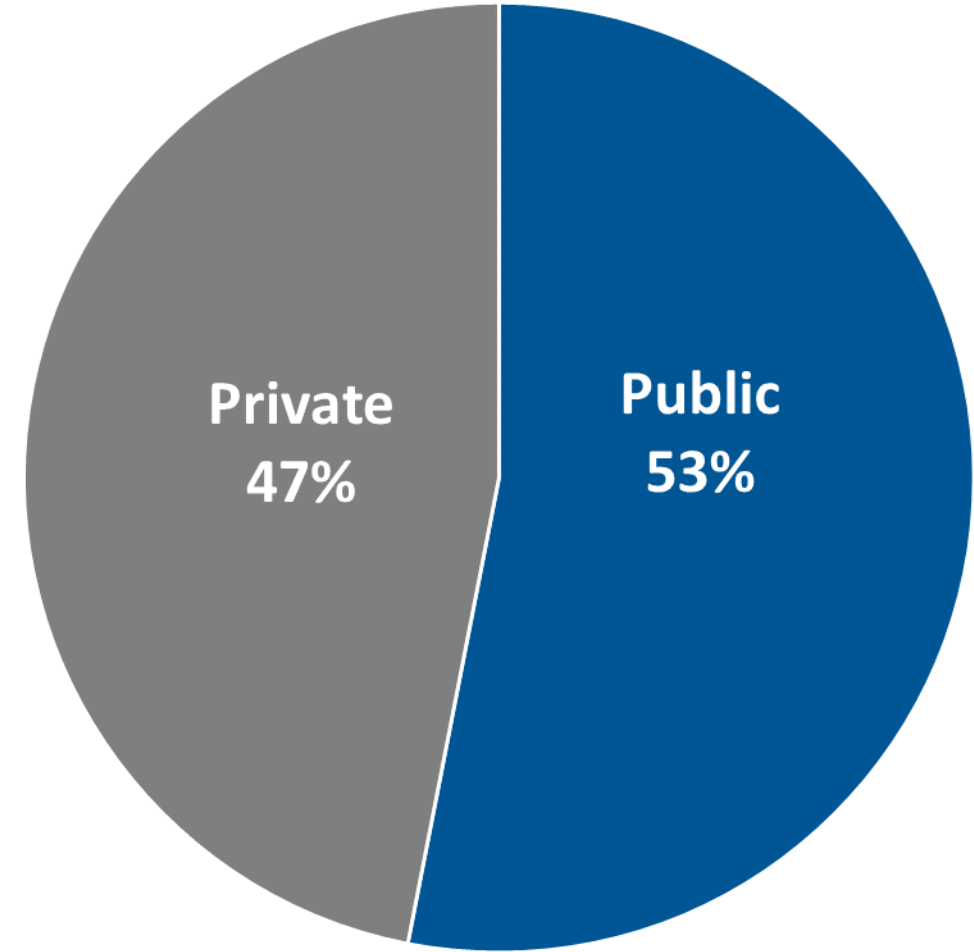


Public vs. Private Homebuilder's Permits

2015

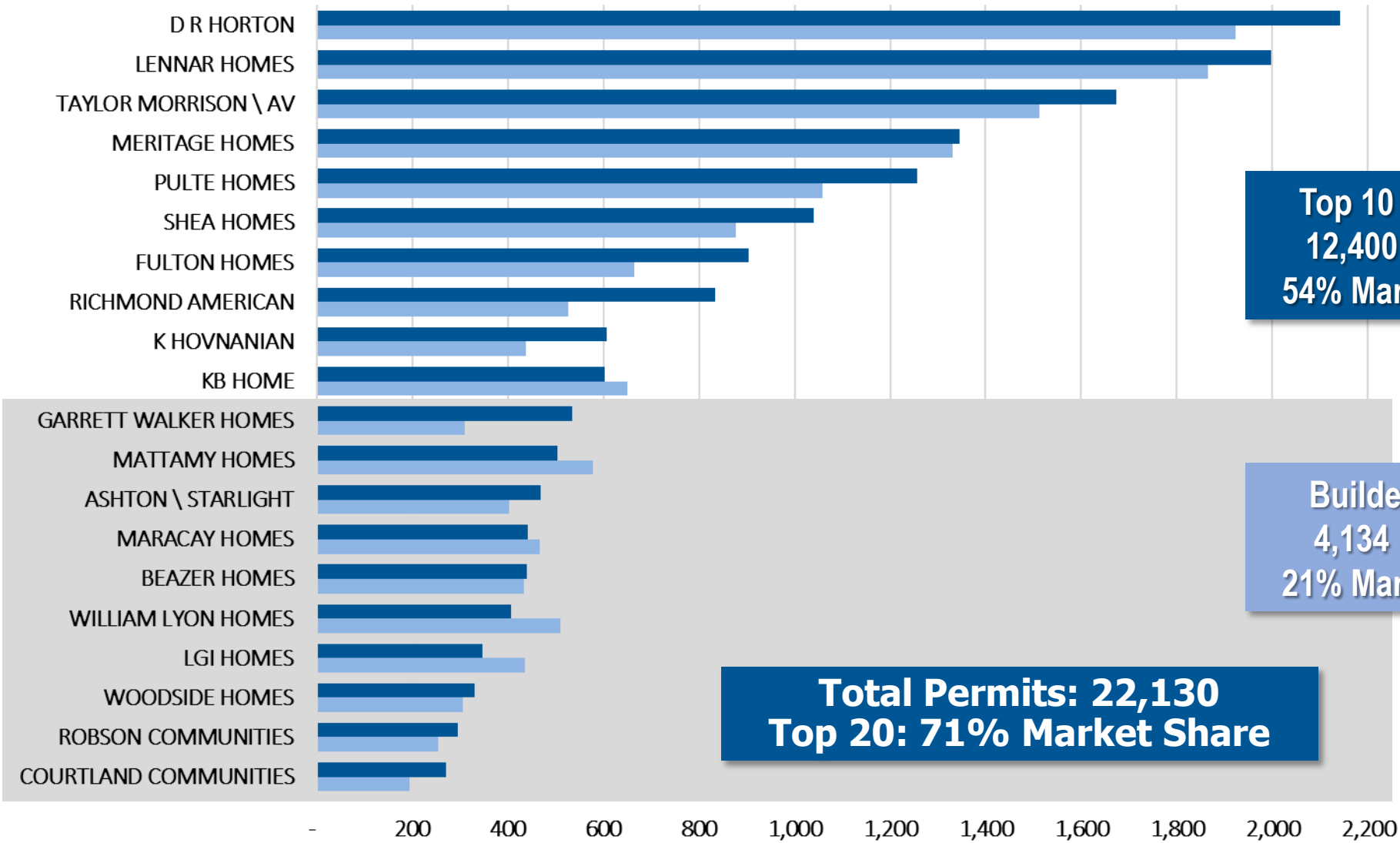


2018



Top 20 Homebuilders by Permits

3Q 2018 █
 3Q 2017 █



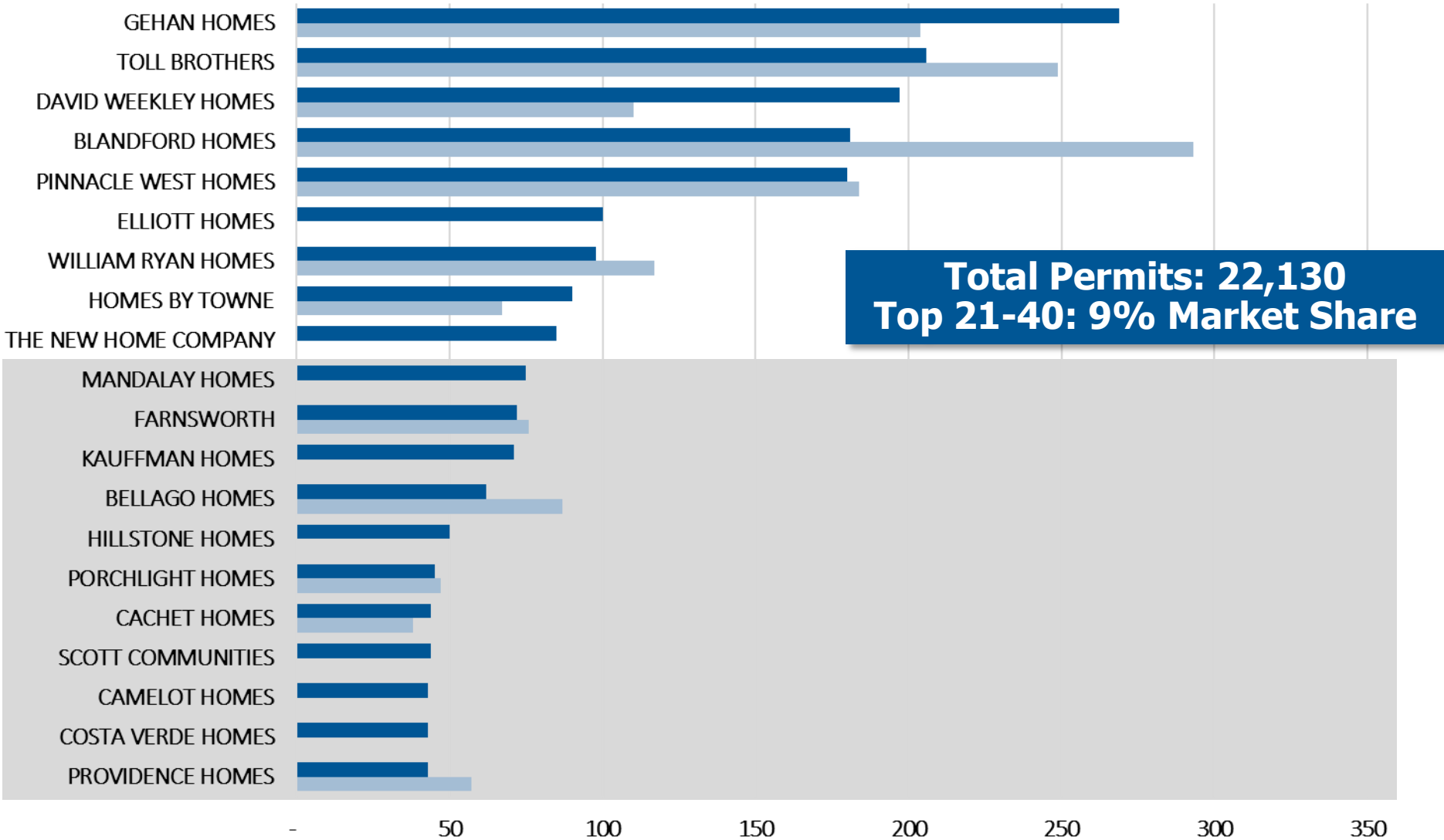
Top 10 Builders
 12,400 Permits
 54% Market Share

Builders 11-20
 4,134 Permits
 21% Market Share

Total Permits: 22,130
Top 20: 71% Market Share

Top 21 to 40 Homebuilders by Permits

3Q 2018 ■
 3Q 2017 ■



Top Builders Average Home Price SPLIT INTO TWO WHERE IS TOLL BROS

\$0K \$100K \$200K \$300K \$400K \$500K \$600K \$700K \$800K \$900K \$1,000K

**FHA Limit
\$294K**

LGI HOMES	\$208K	412
D R HORTON	\$228K	2,366
BROWN HOMES	\$232K	36
MANDALAY HOMES	\$261K	47
PINNACLE WEST HOMES	\$264K	182
GARRETT WALKER HOMES	\$266K	408
PROVIDENCE HOMES	\$270K	60
KB HOME	\$271K	751
BEAZER HOMES	\$287K	471
COURTLAND COMMUNITIES	\$291K	244

**\$294K to
\$350K**

BELLAGO HOMES	\$296K	80
HOMES BY TOWNE	\$303K	138
SIERRA PRIETA PARTNERS	\$307K	39
FARNSWORTH	\$310K	107
WILLIAM LYON HOMES	\$314K	478
ELLIOTT HOMES	\$316K	110
K HOVNIANIAN	\$326K	450
LENINAR HOMES	\$326K	2,018
MERITAGE HOMES	\$329K	1,188
WATT COMMUNITIES	\$342K	51
FULTON HOMES	\$349K	656

**Total Sales: \$6.91B
Avg. Price: \$378K**

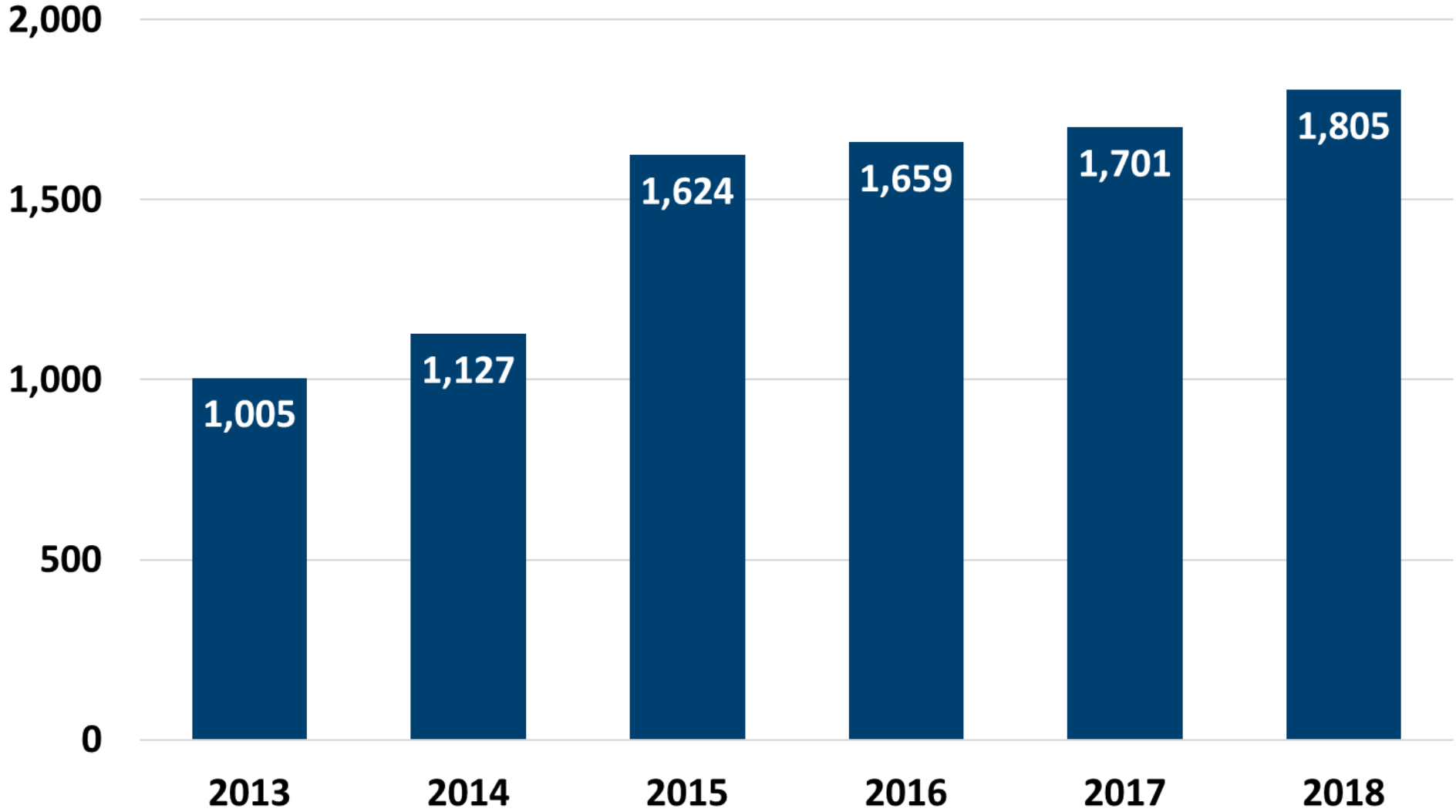
**\$350K to
\$500K**

GEHAN HOMES	\$360K	194
RICHMOND AMERICAN	\$364K	563
WILLIAM RYAN HOMES	\$366K	125
PULTE HOMES	\$367K	1,202
CRESLEIGH HOMES	\$371K	58
ASHTON \ STARLIGHT	\$374K	482
WOODSIDE HOMES	\$387K	308
MATTAMY HOMES	\$403K	596
ROBSON COMMUNITIES	\$403K	303
TAYLOR MORRISON \ AV	\$412K	1,541
SHEA HOMES	\$479K	940
BLANDFORD HOMES	\$495K	276
MARACAY HOMES	\$498K	445

**Over
\$500K**

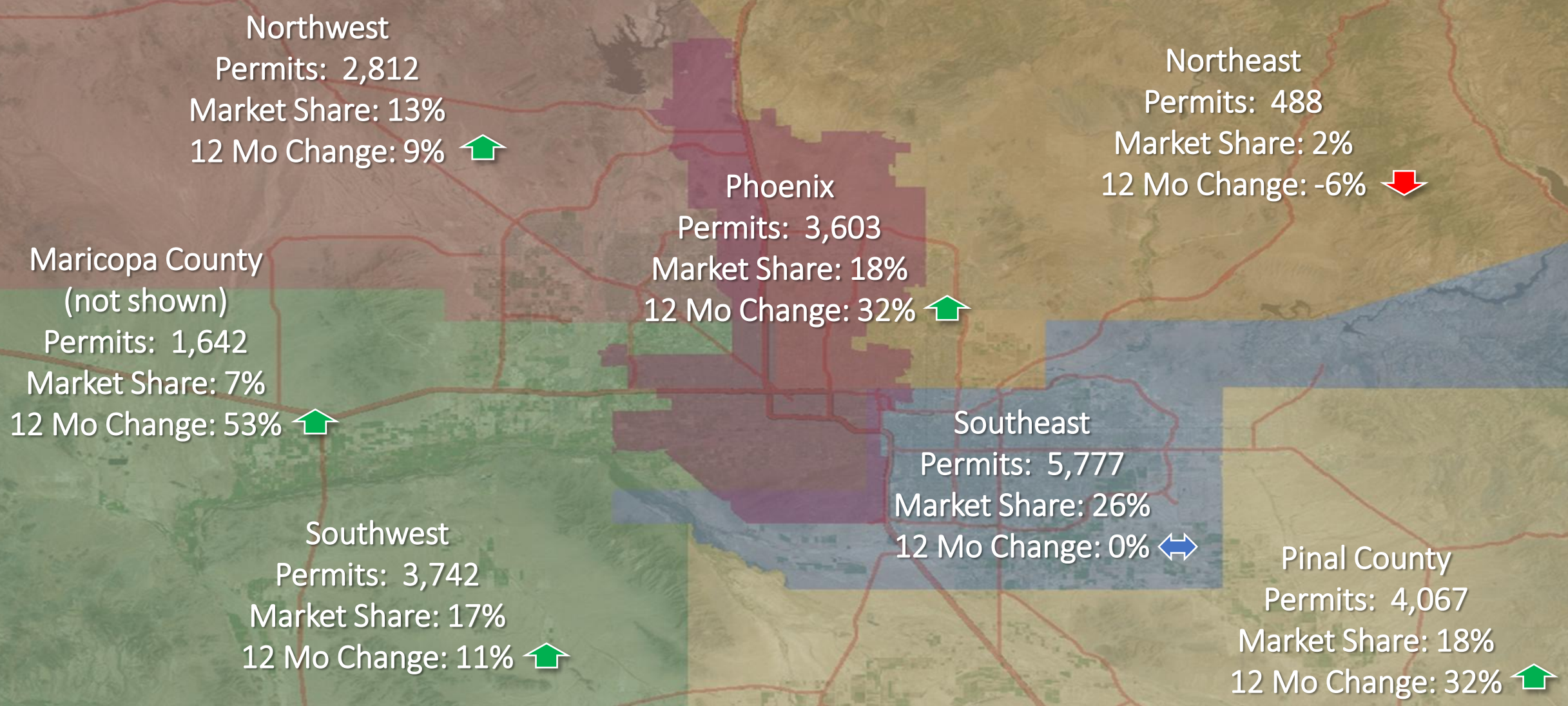
PORCHLIGHT HOMES	\$548K	31
CACHET HOMES	\$565K	49
DAVID WEEKLEY HOMES	\$615K	151
VIP HOMES	\$622K	28
ROSEWOOD HOMES	\$746K	44
TOLL BROTHERS	\$938K	255

Active Adult Community Permits

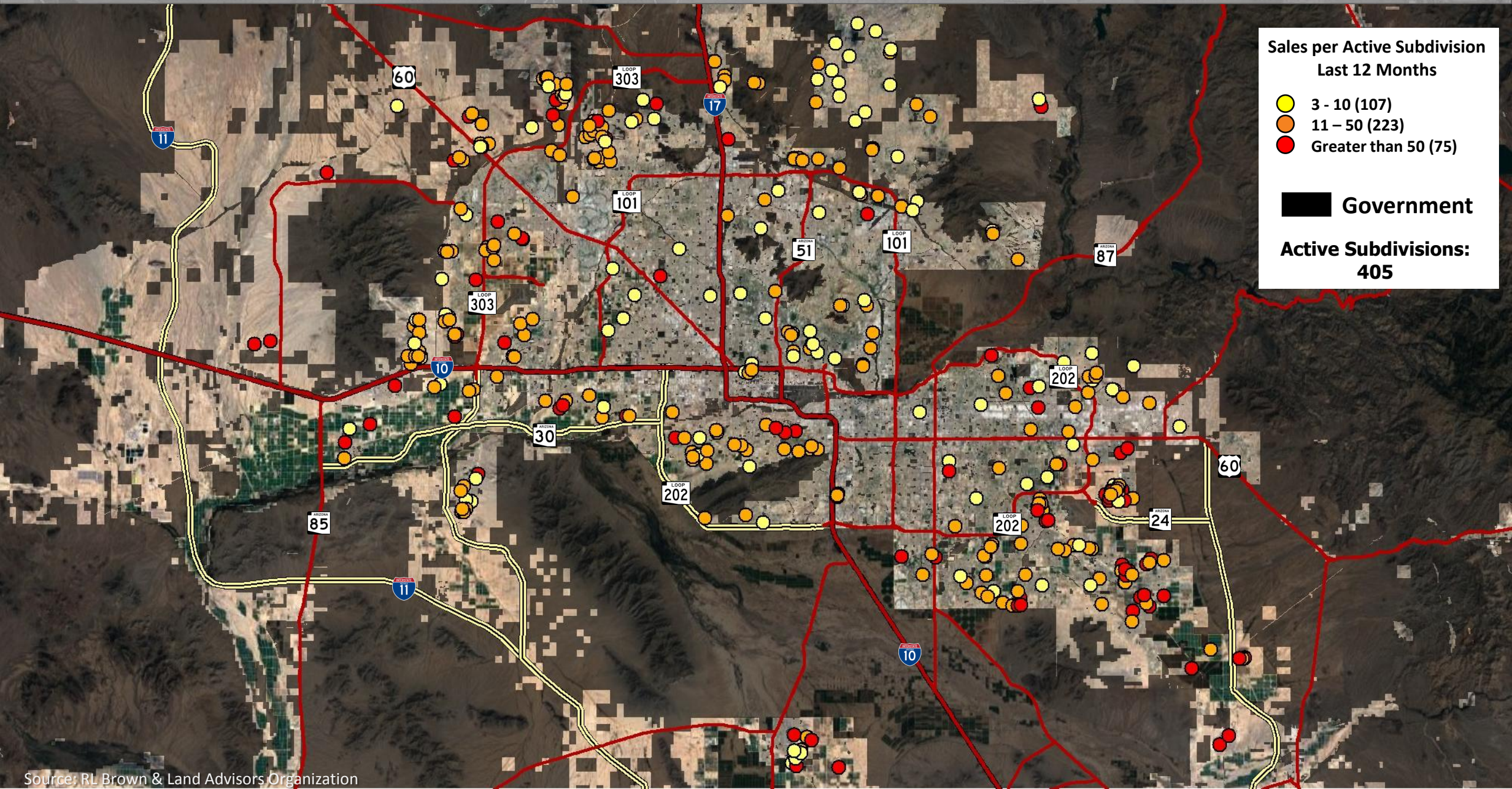


Permits by Submarket

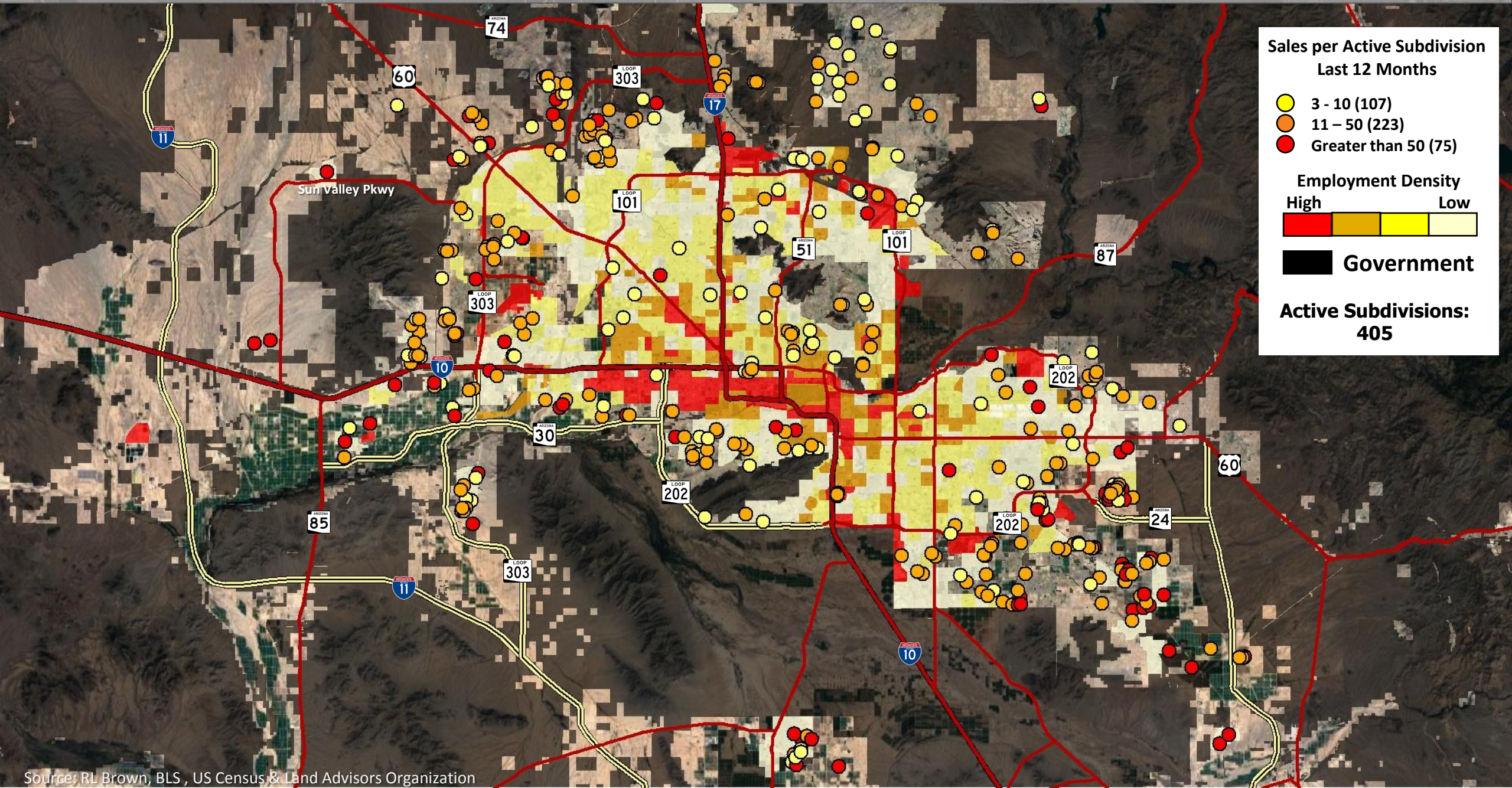
Single Family Permits Issued in the Last 12 Months



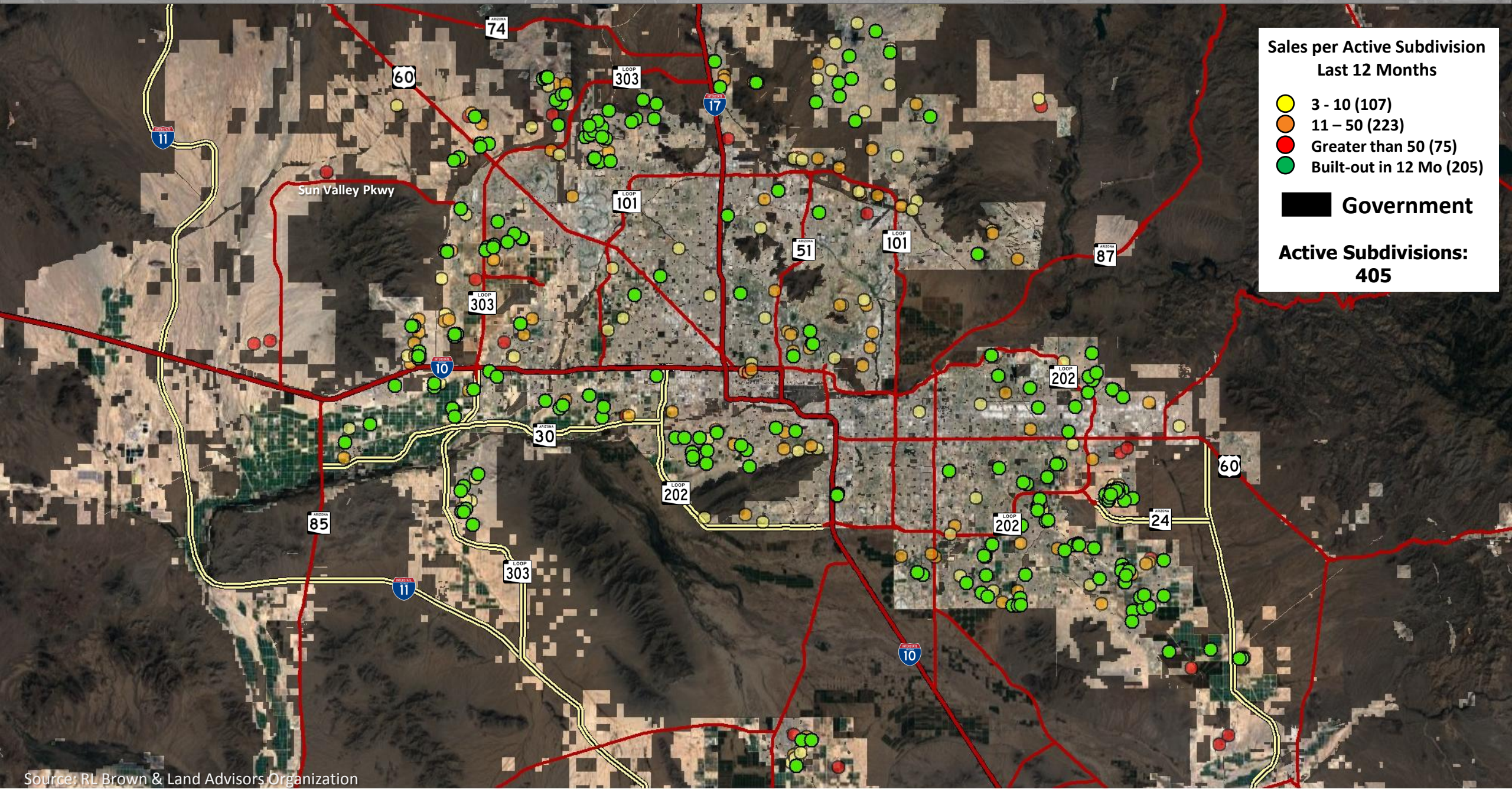
Active Subdivisions & Sales Velocity



Active Subdivisions Over Employment



Built-out Subdivisions Over Next 12 Months



Sales per Active Subdivision Last 12 Months

- 3 - 10 (107)
- 11 - 50 (223)
- Greater than 50 (75)
- Built-out in 12 Mo (205)

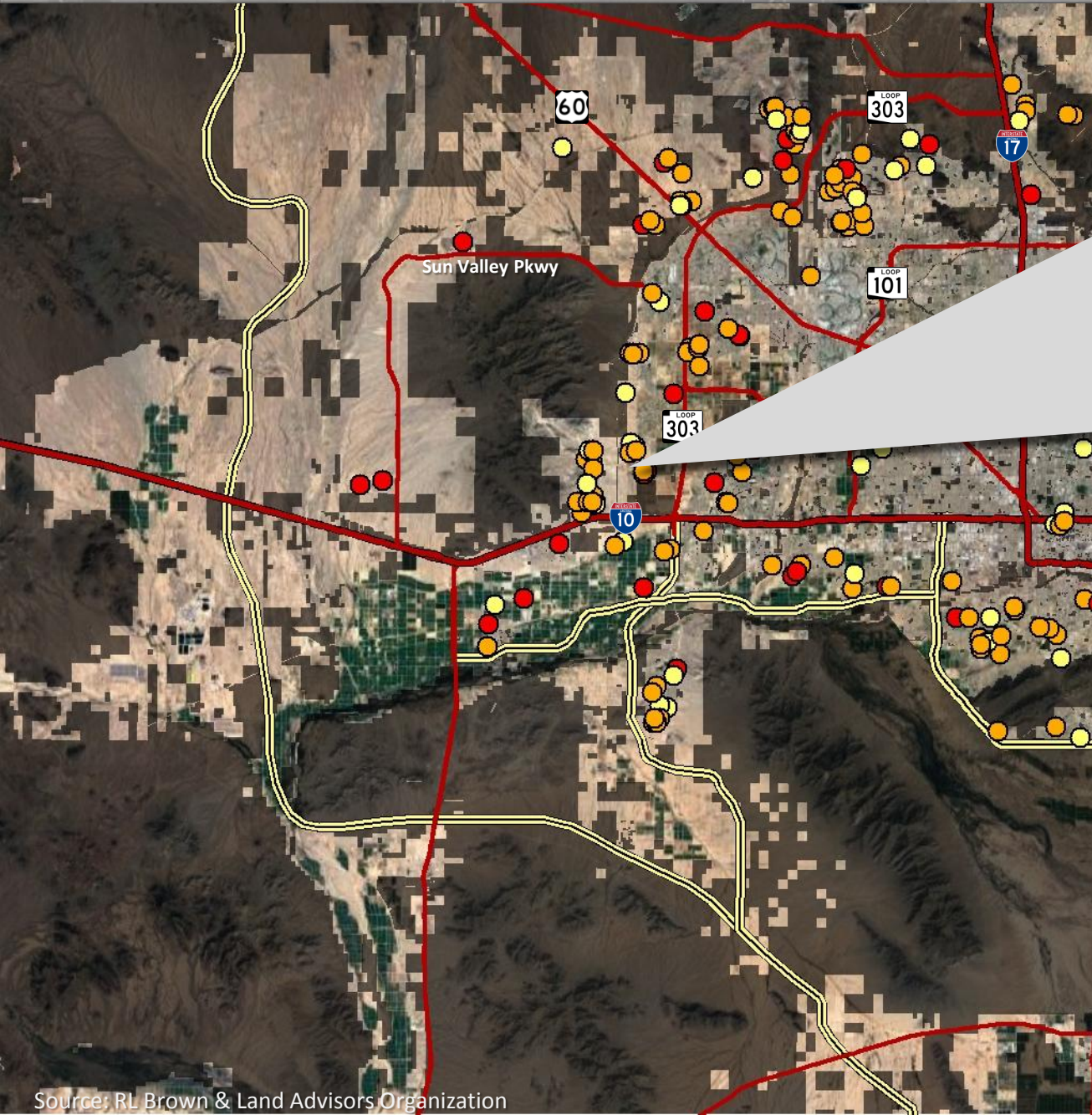
Government

Active Subdivisions:
405

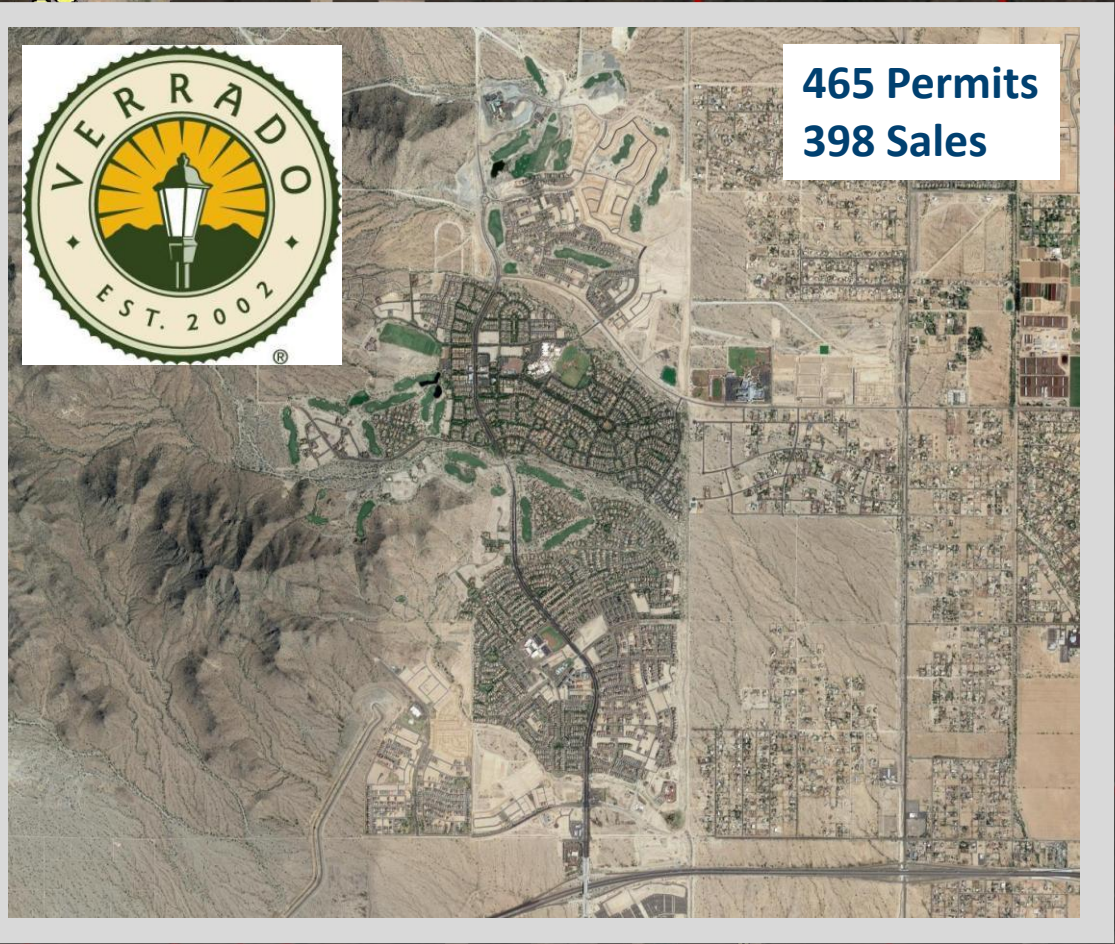
Top Master Plans - Eastmark



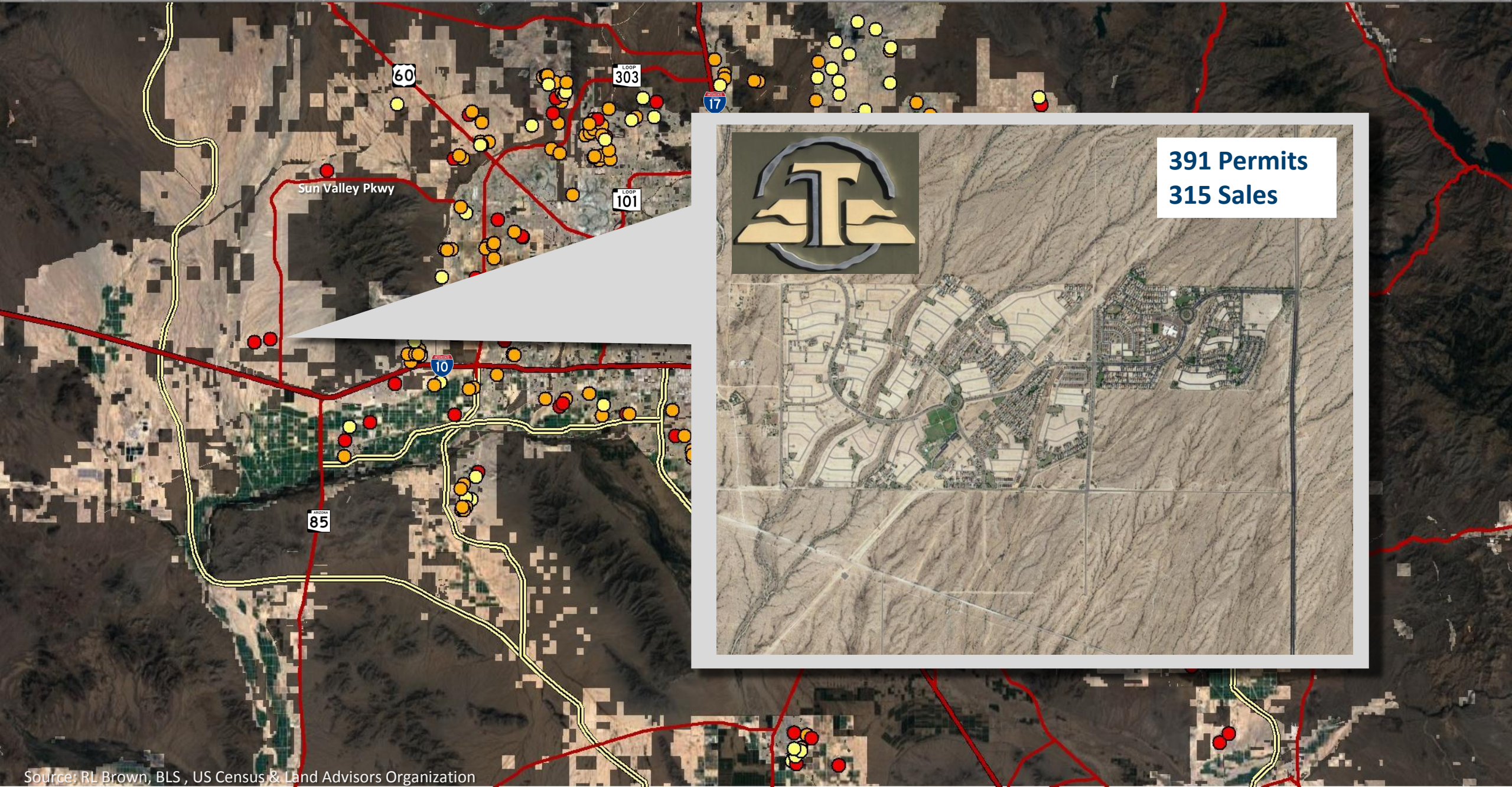
Top Master Plans – Verrado/Victory



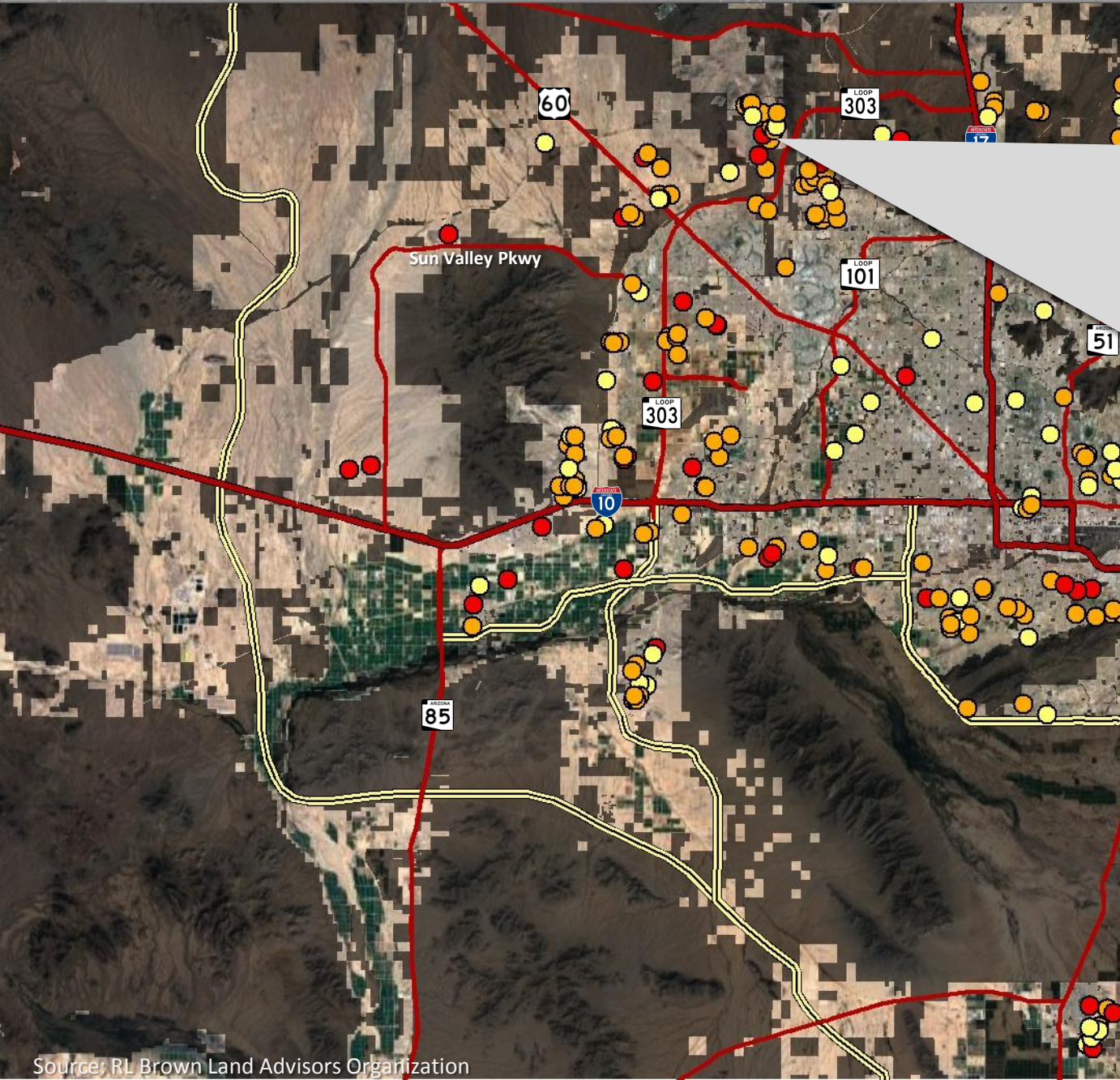
465 Permits
398 Sales



Top Master Plans - Tartesso



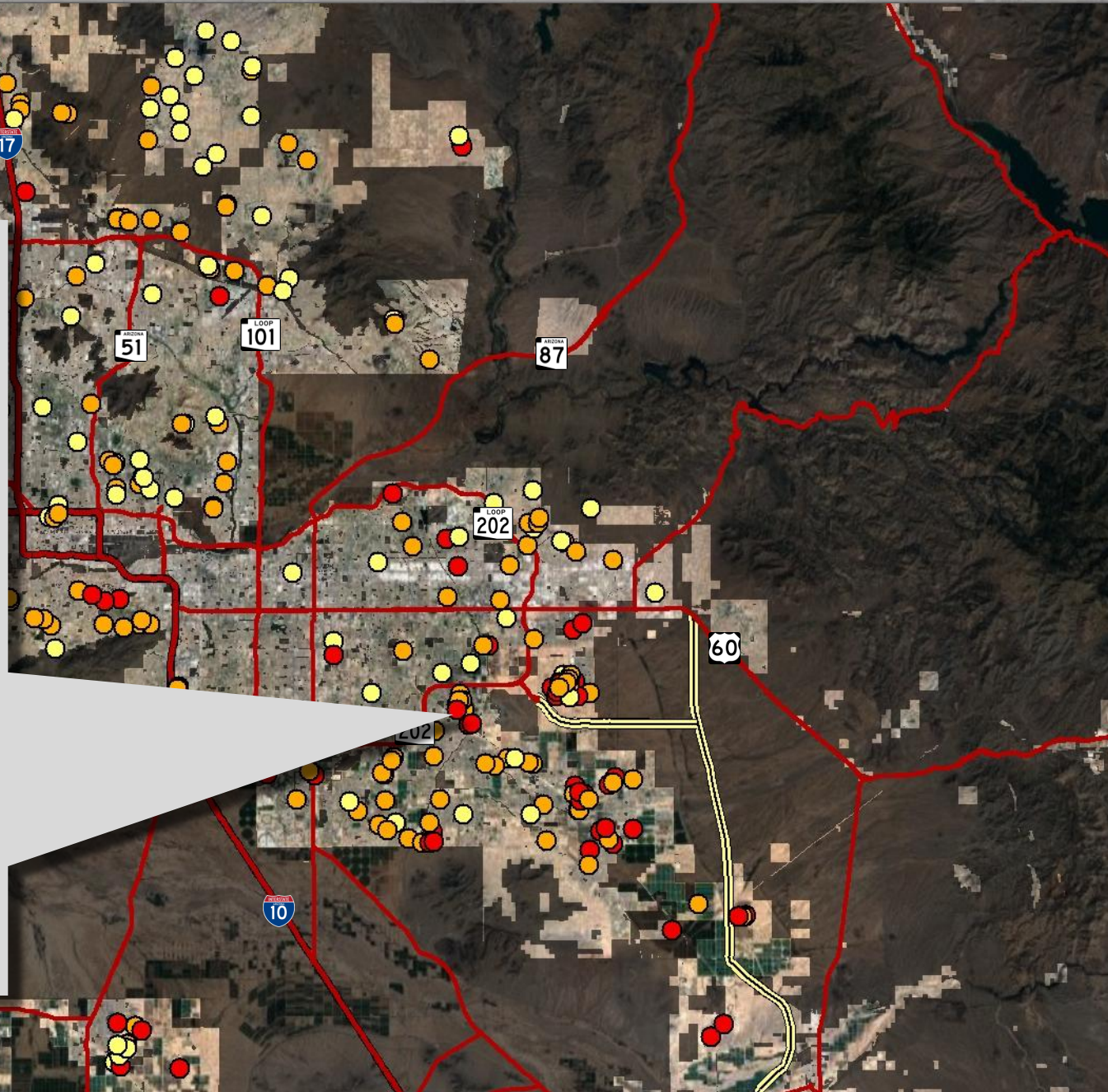
Top Master Plans - Vistancia



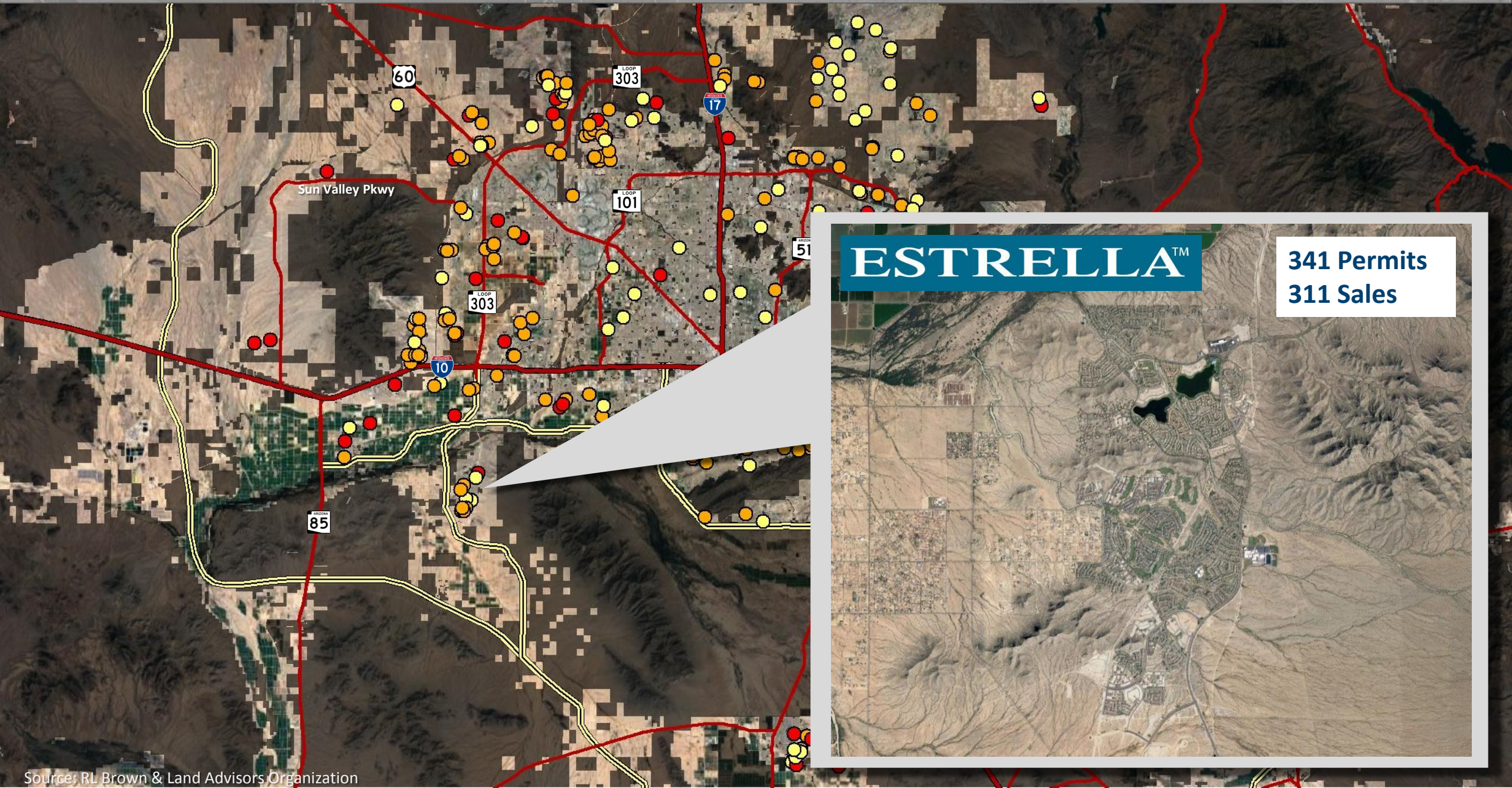
Top Master Plans – Cooley Station



342 Permits
341 Sales



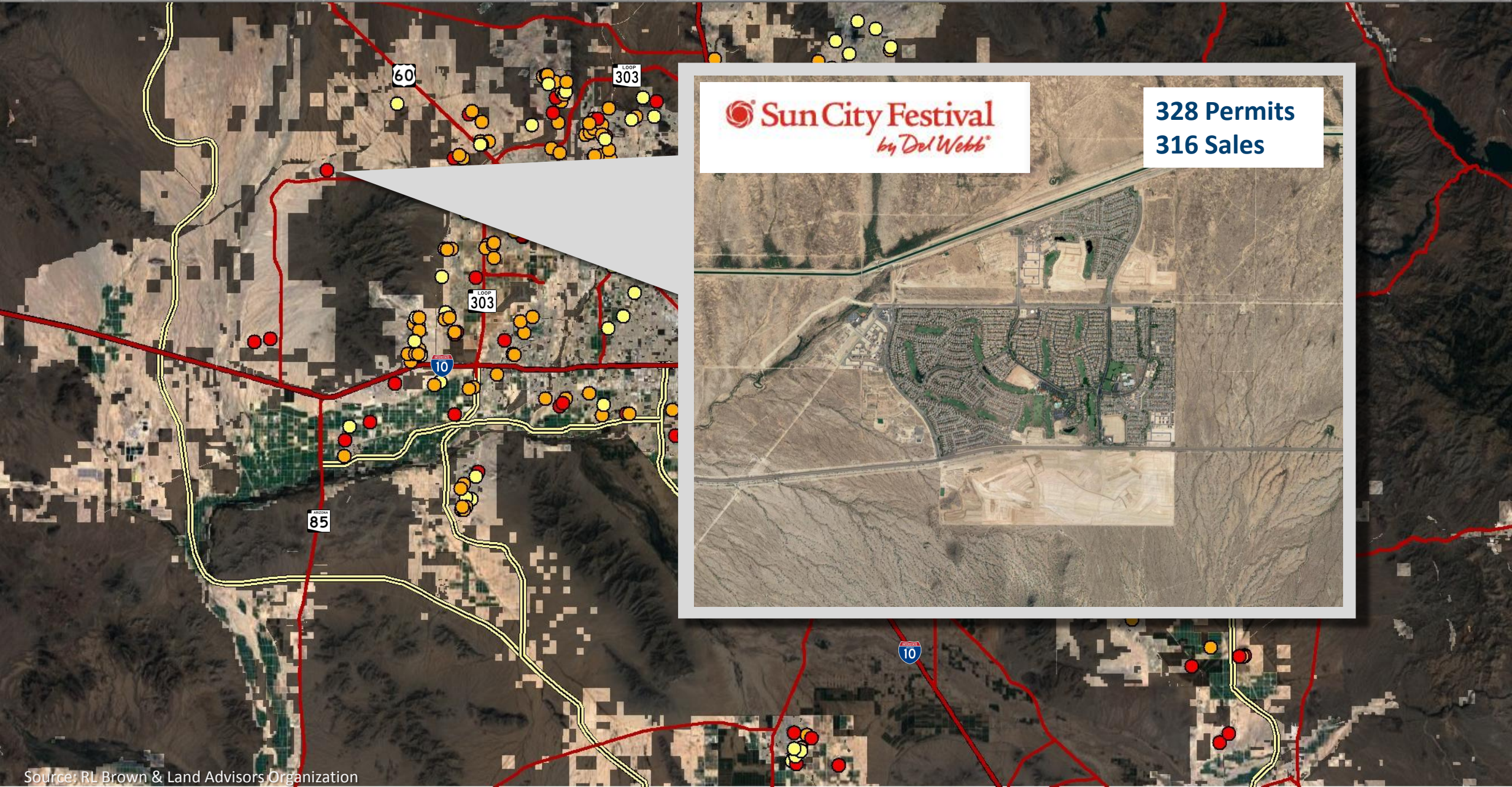
Top Master Plans – Estrella Mountain Ranch



ESTRELLA™

**341 Permits
311 Sales**

Top Master Plans – Sun City Festival/Festival Foothills



This inset map provides a detailed view of a residential development within the Sun City Festival area. It shows a grid of streets and numerous small residential units. The map is framed by a white border.

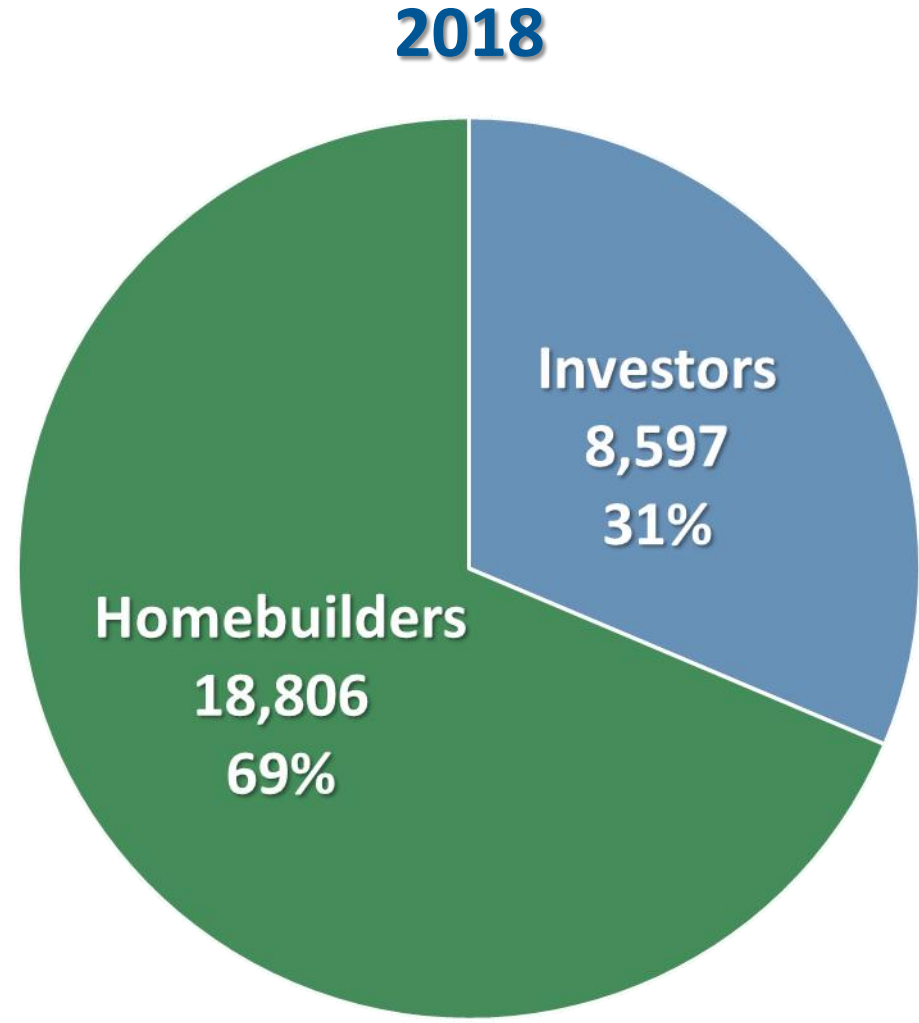
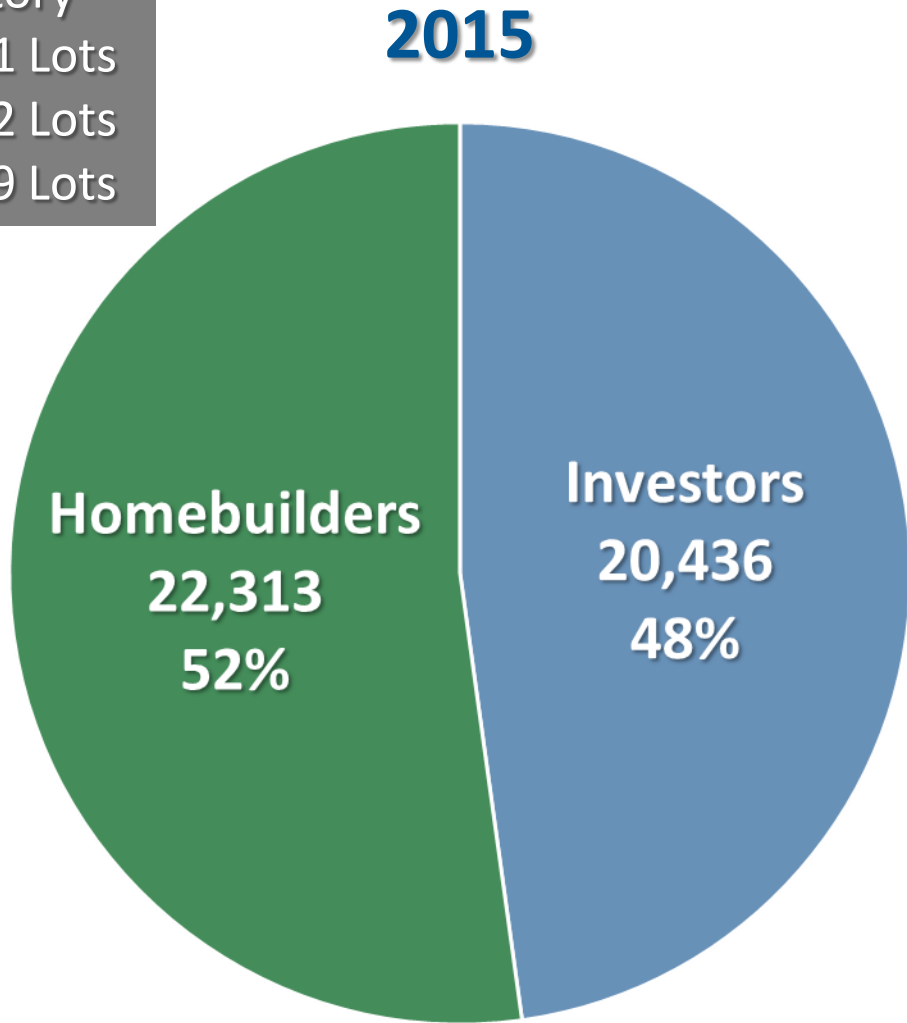
Sun City Festival
by Del Webb

328 Permits
316 Sales

Finished Lot Inventory

Conventional* Finished Lots Active/Inactive & Owner Type

Total Inventory
2015: 51,221 Lots
2018: 37,982 Lots
Delta: -13,239 Lots

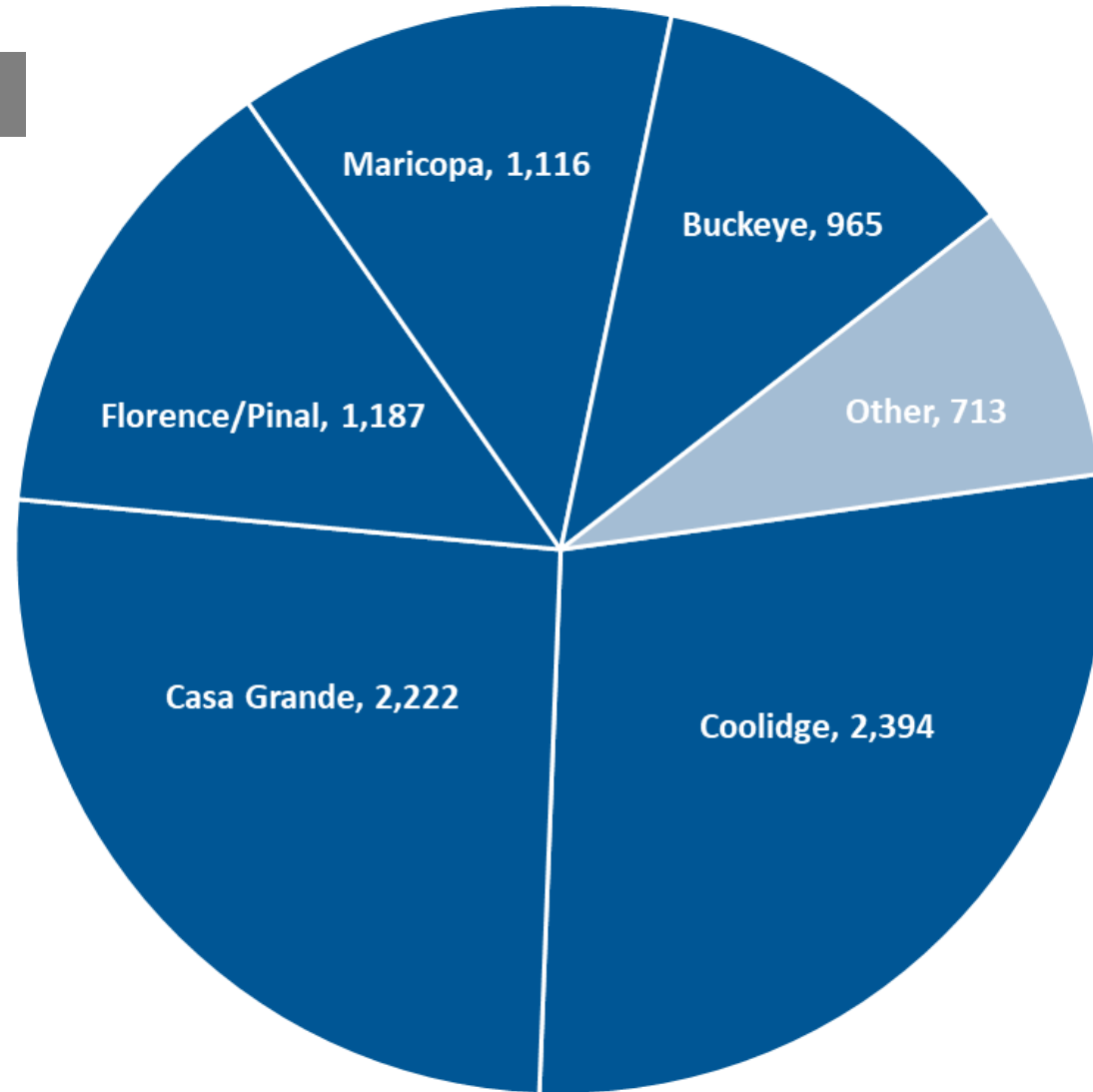


* Conventional lot width is between 40 and 94 feet.

Investor Finished Lot Inventory by Location

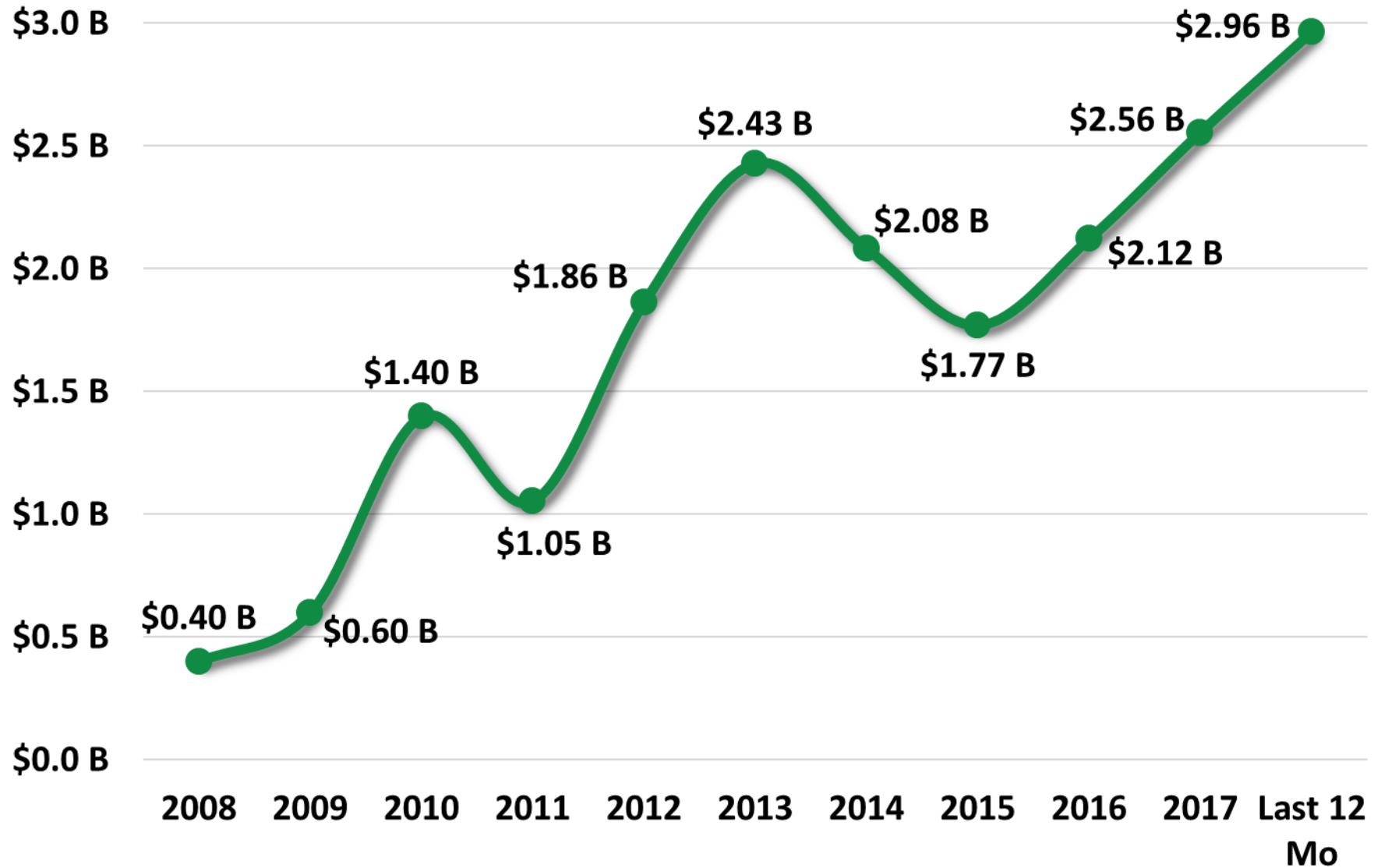
Conventional* Finished Lots

Total Inventory: 8,597 Lots



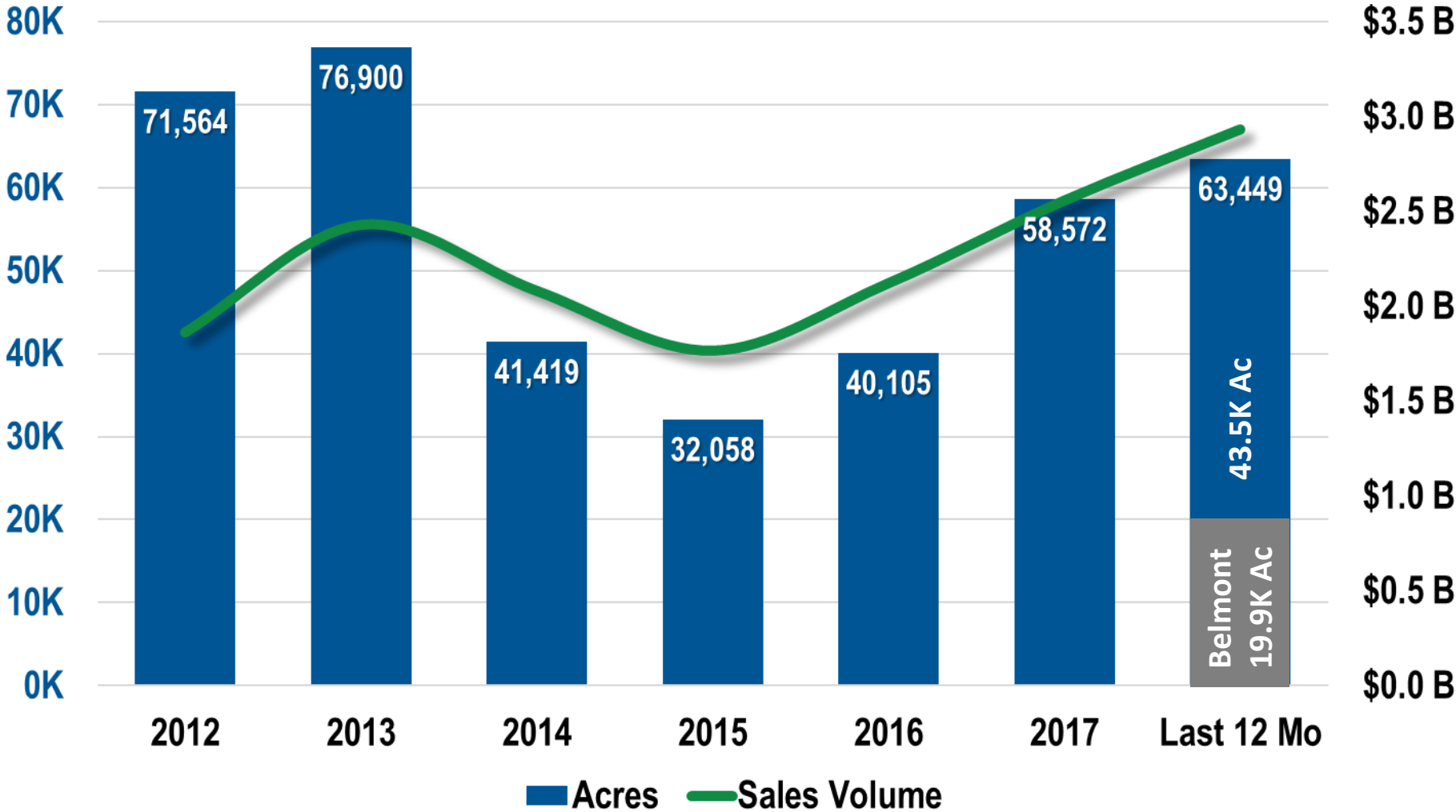
* Conventional lot width is between 40 and 94 feet.

Land Transactions Annual Volume

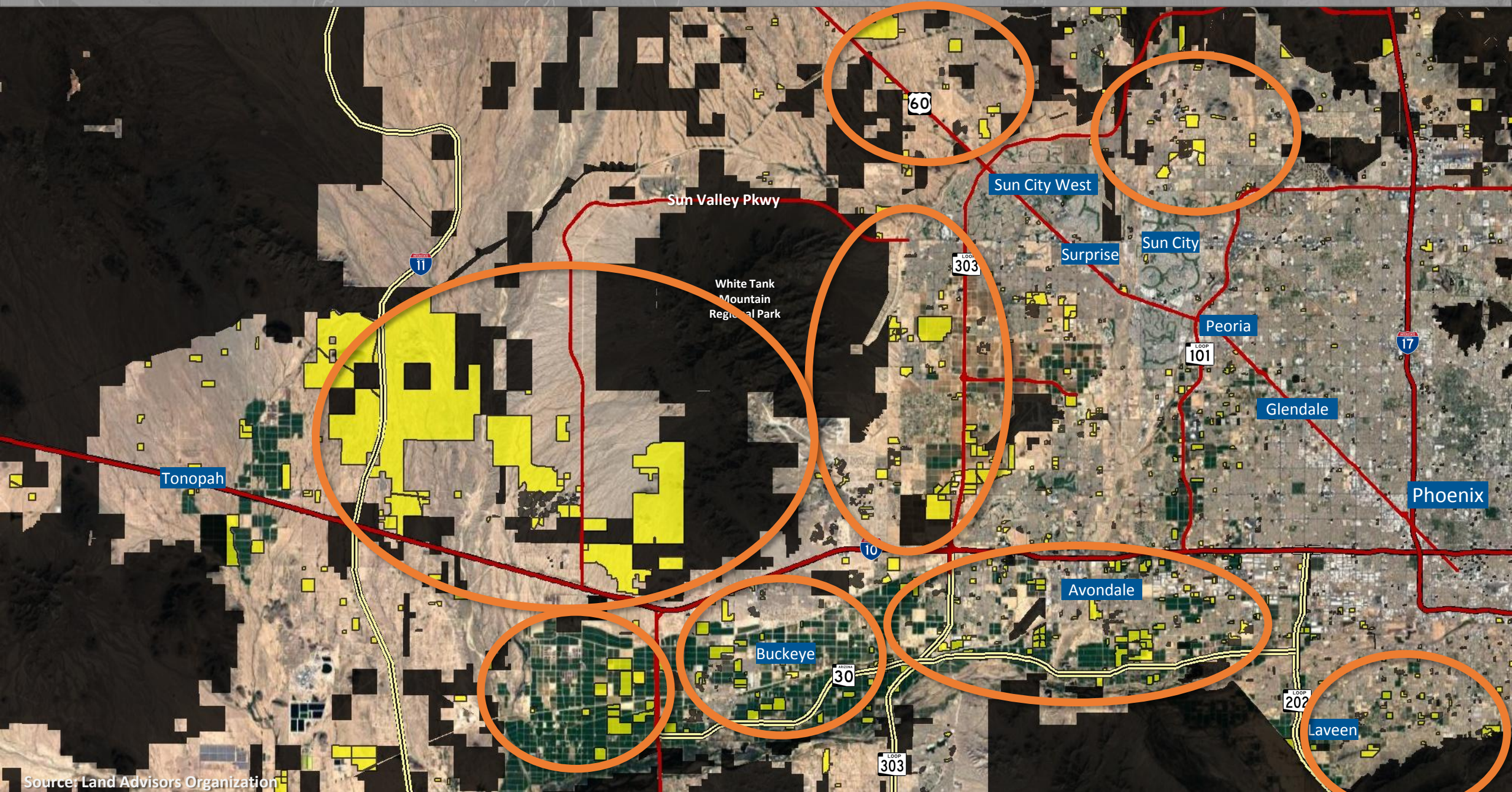


Total Land

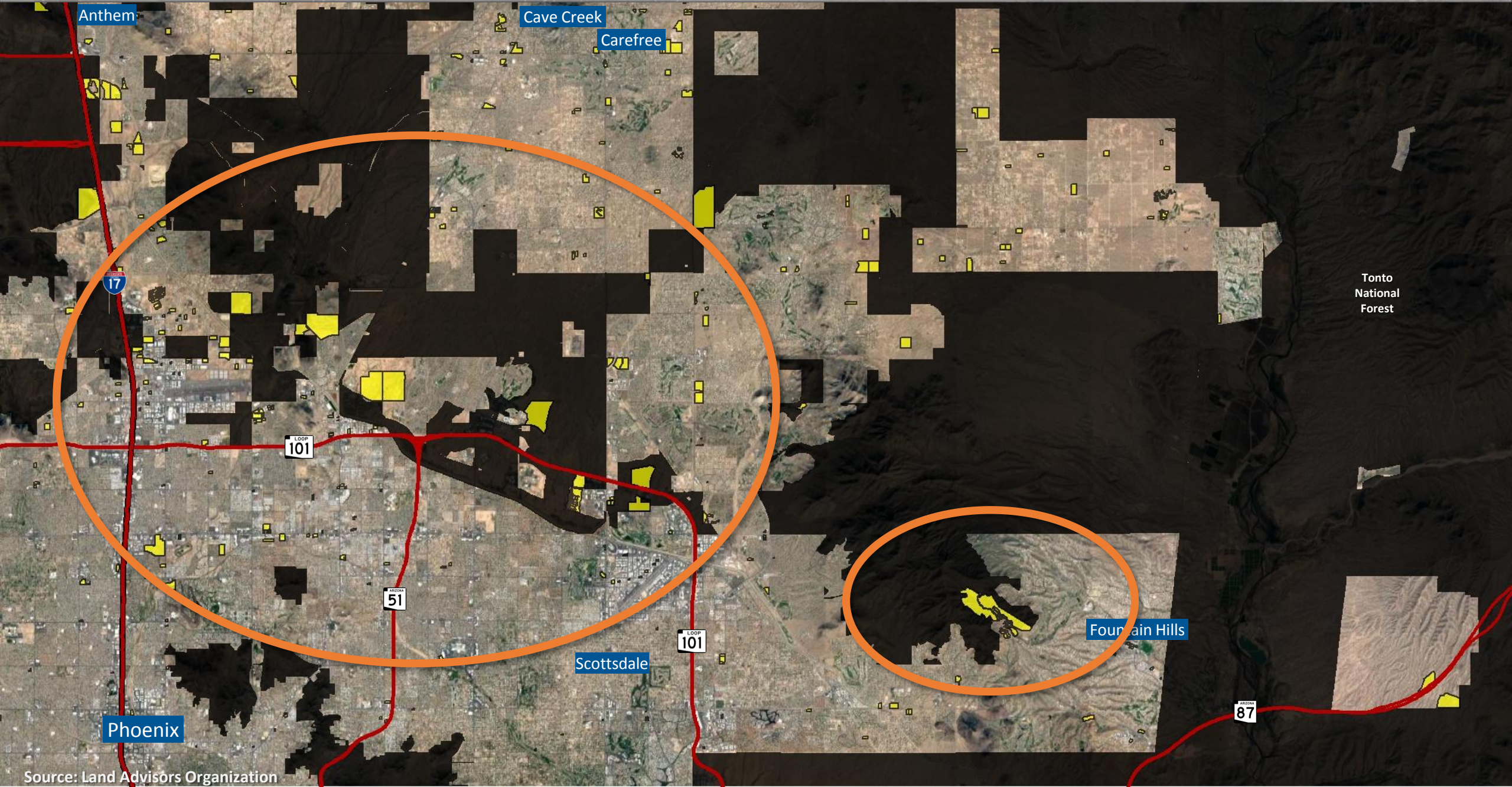
Acres & Sales Volume



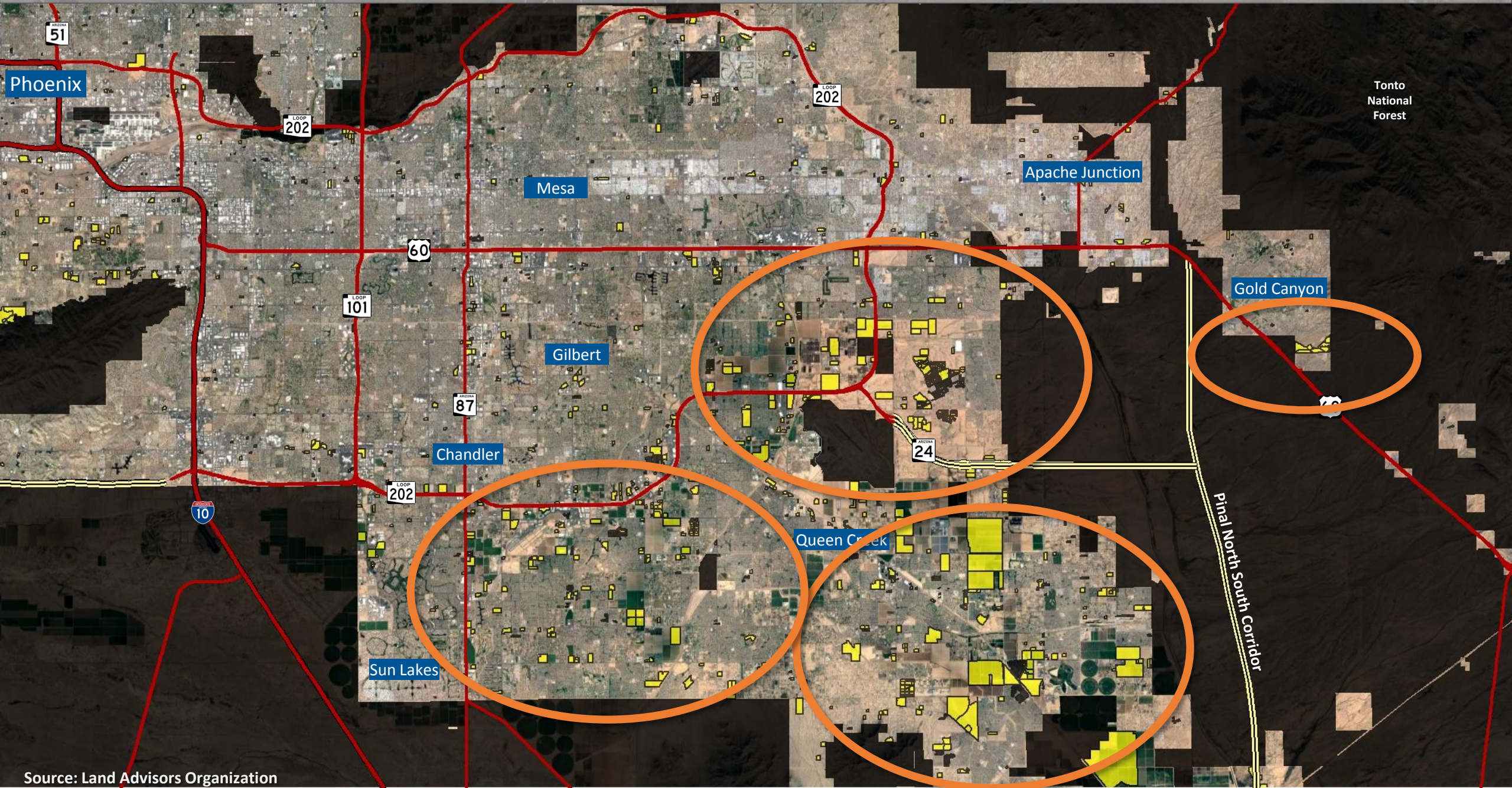
West Valley Land Transactions 2015 to Present



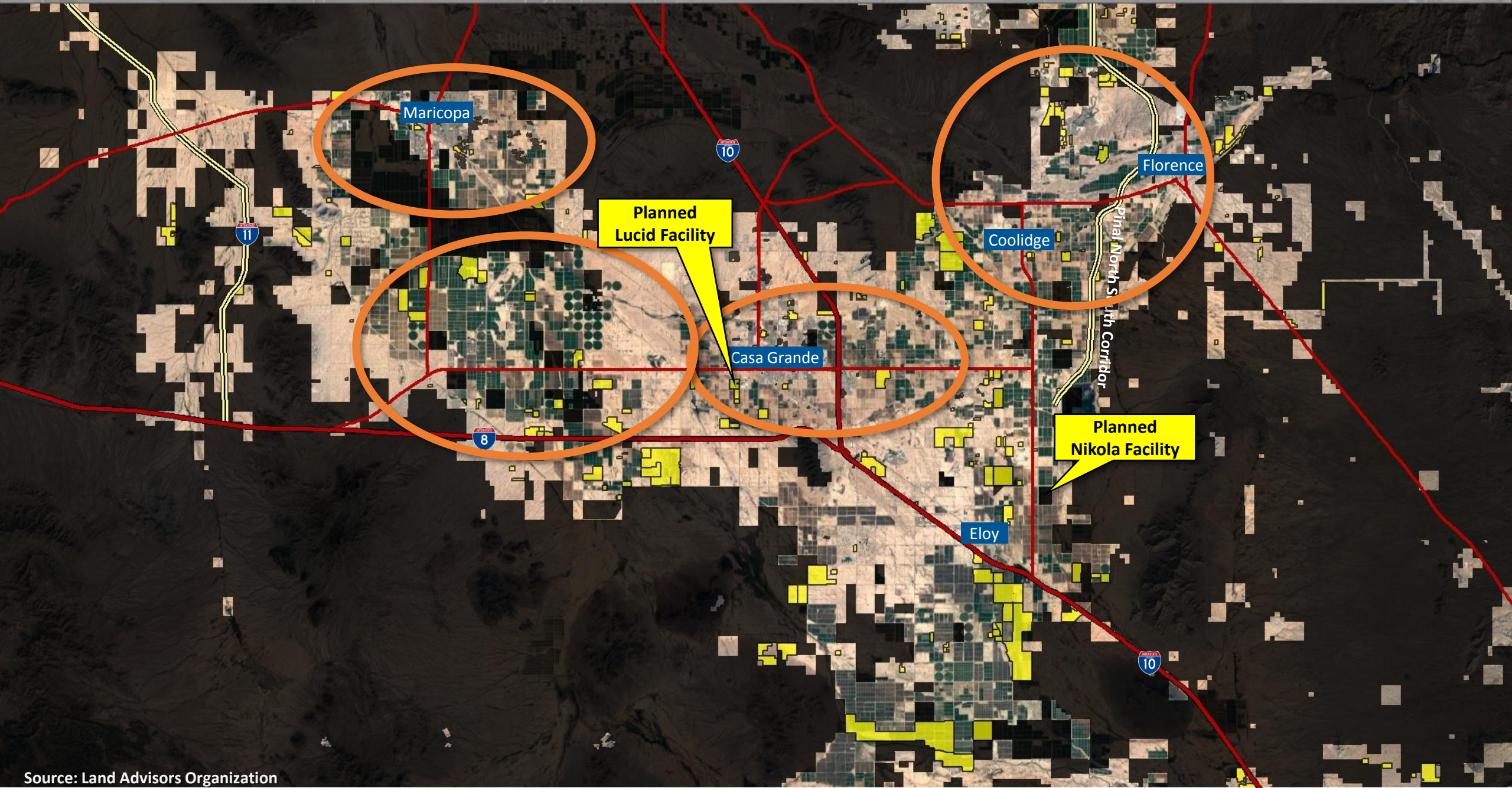
Northeast Valley Land Transactions 2015 to Present



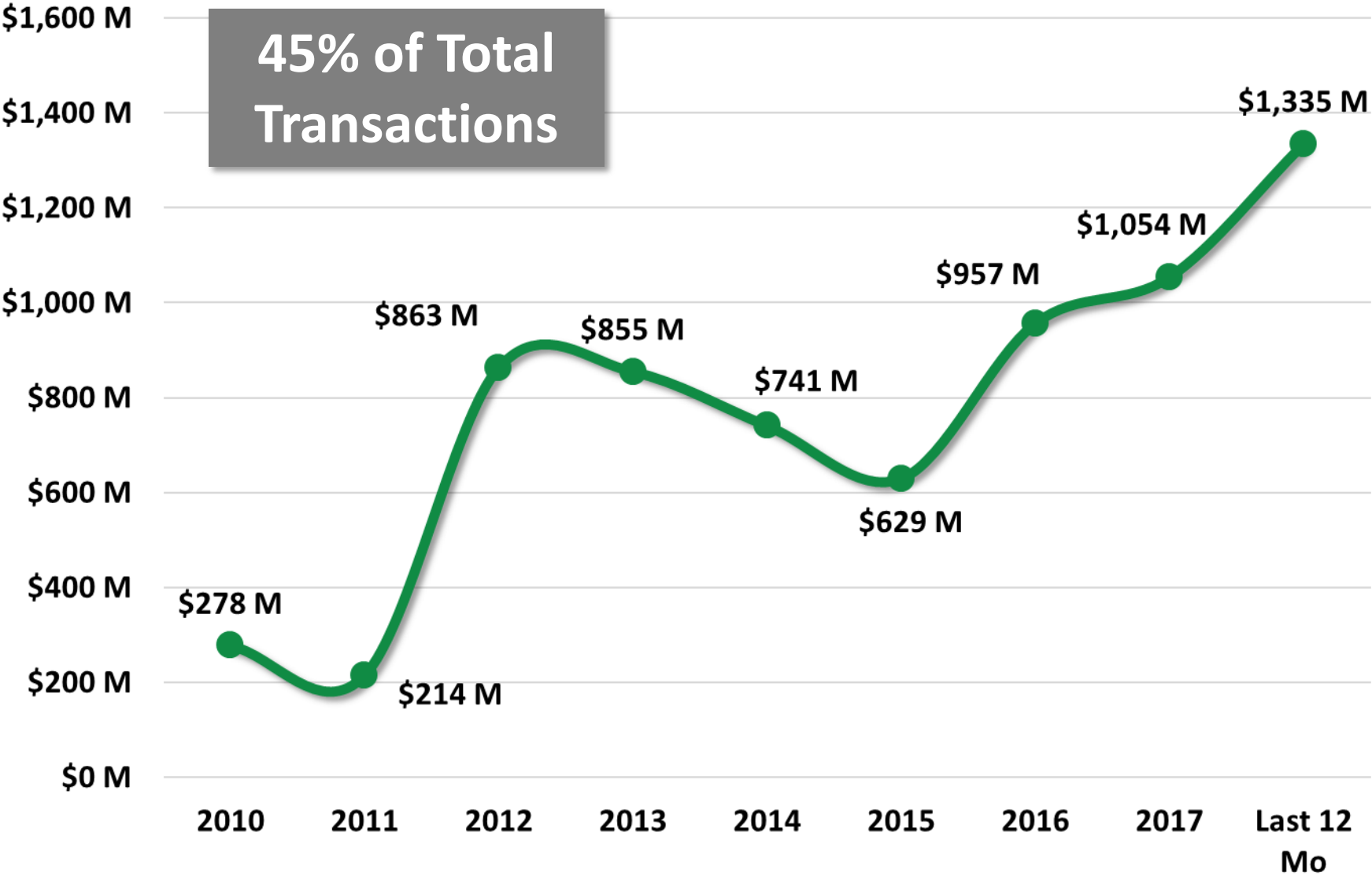
Southeast Valley Land Transactions 2015 to Present



Pinal County Land Transactions 2015 to Present

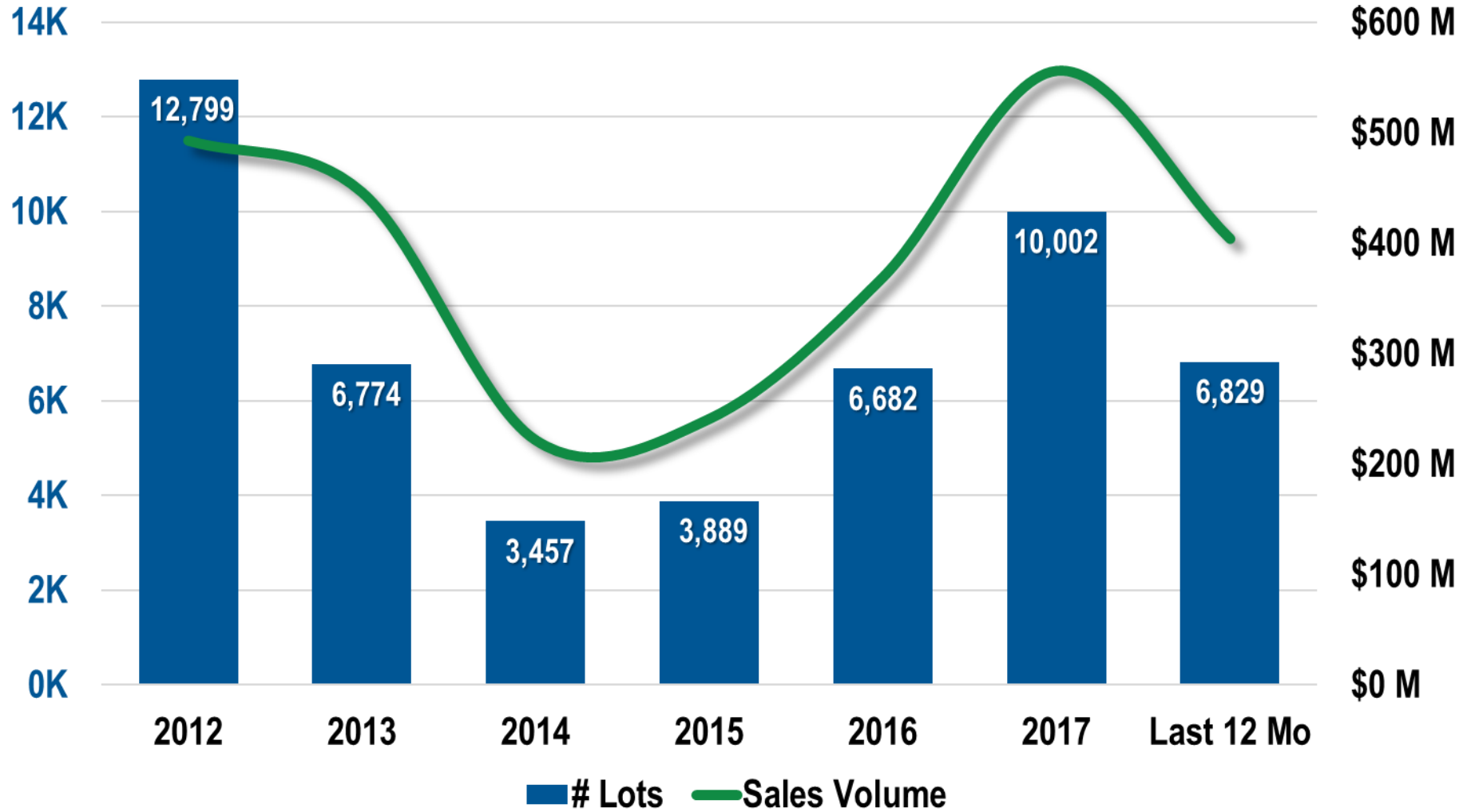


Homebuilder's Annual Land & Lot Spend

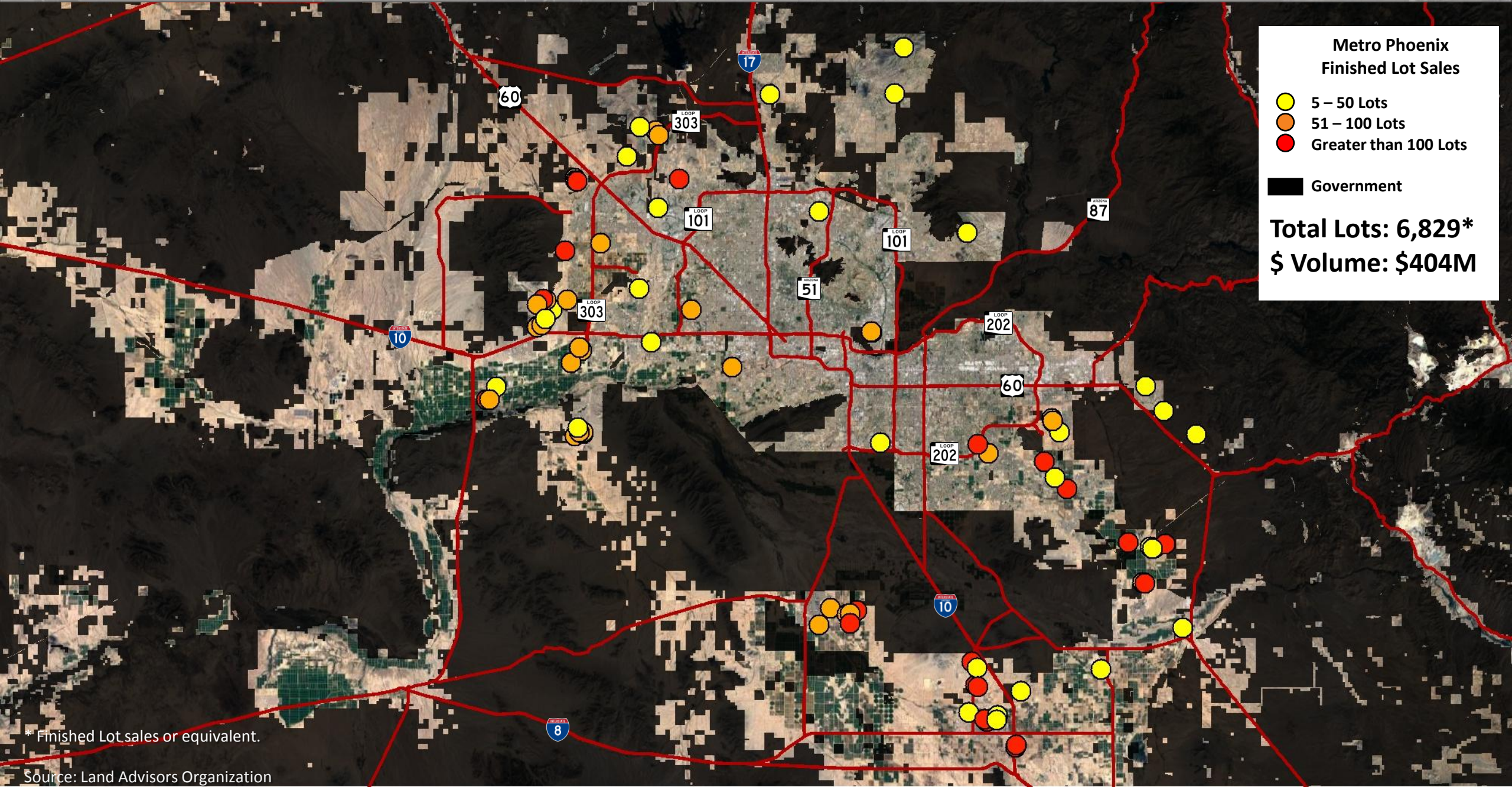


Finished Lots

Number of Lots & Sales Volume



Single Family Residential Finished Lot Sales Last 12 Months



**Metro Phoenix
Finished Lot Sales**

- 5 – 50 Lots
- 51 – 100 Lots
- Greater than 100 Lots

Government

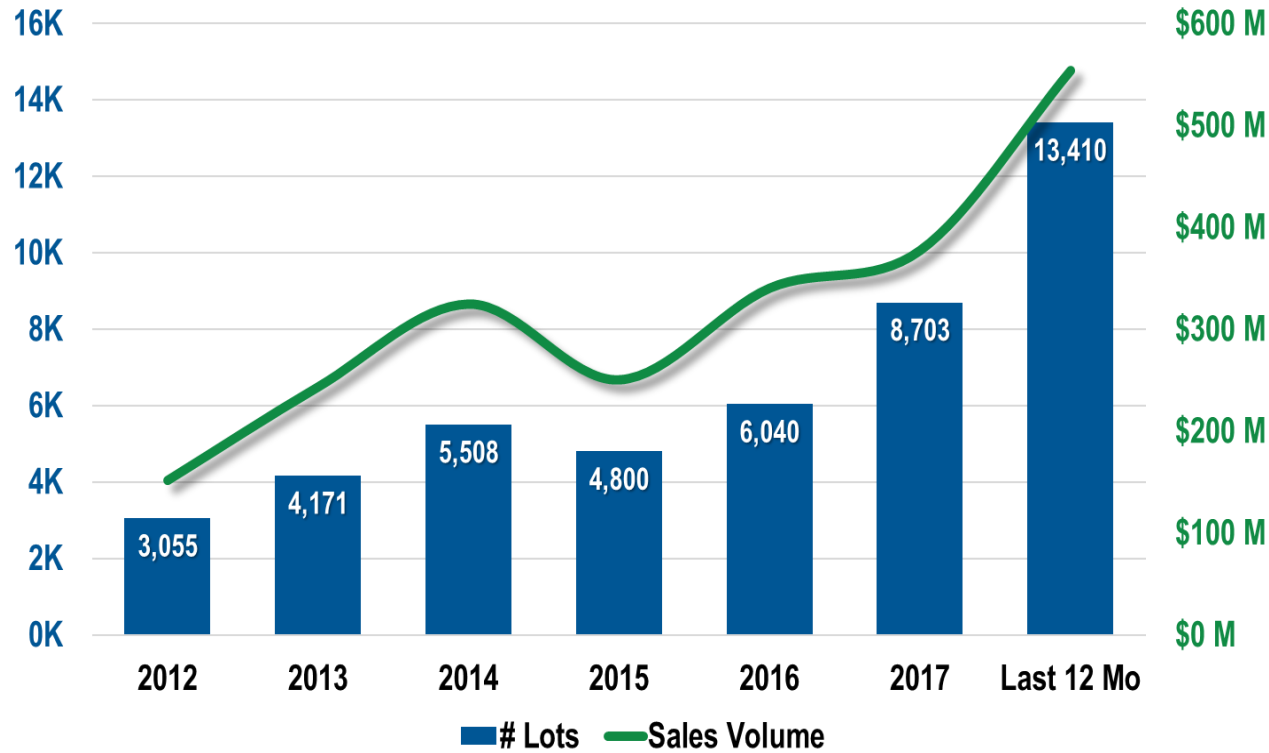
Total Lots: 6,829*
\$ Volume: \$404M

* Finished Lot sales or equivalent.

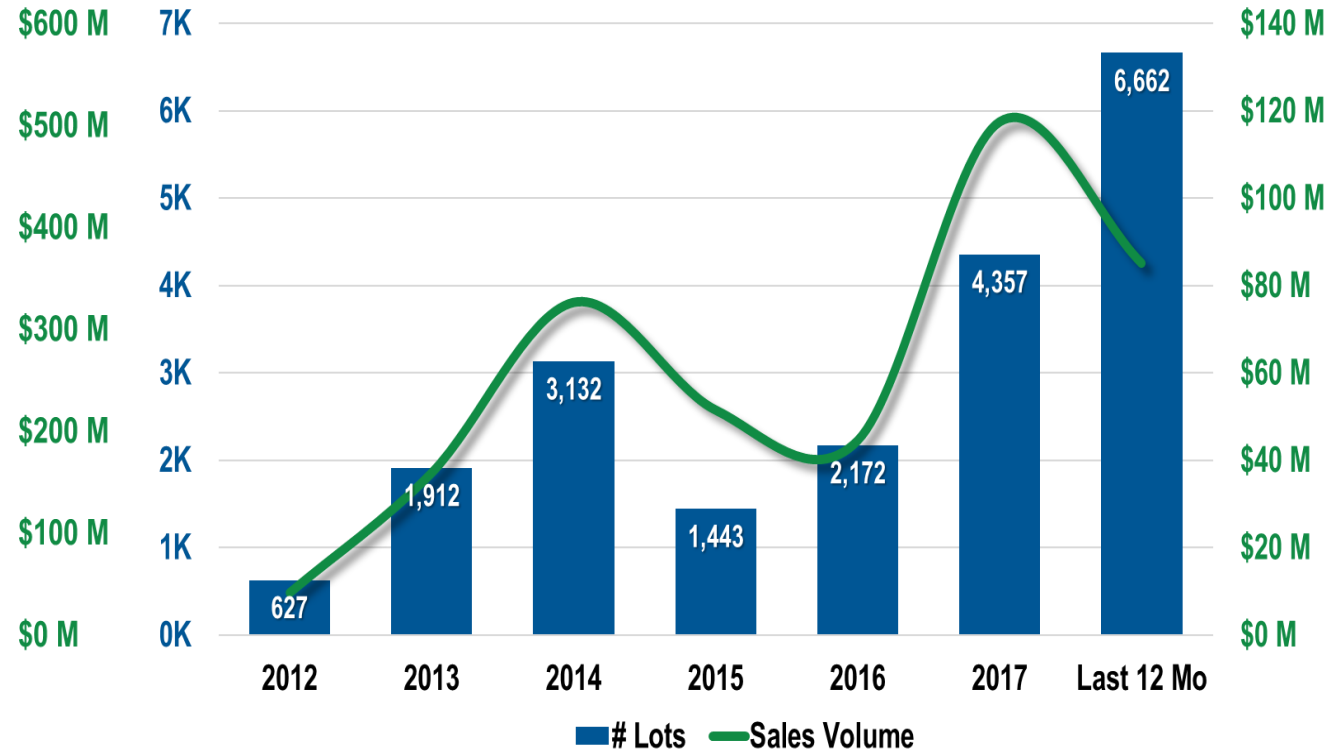
Platted & Engineered/Partially Improved Lots

Number of Lots & Sales Volume

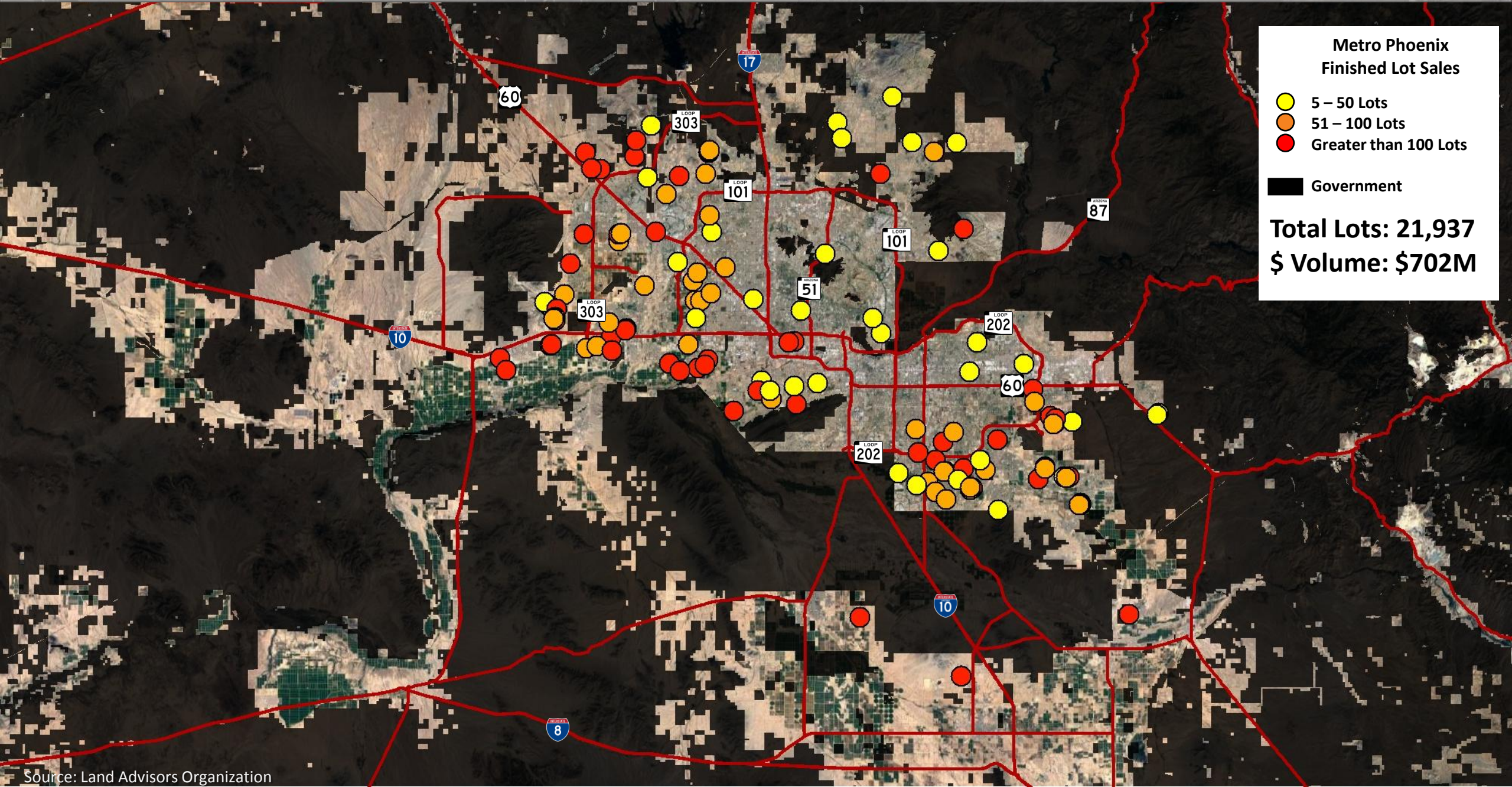
Homebuilders



Investors/Developers



Platted & Engineered/Partially Improved Lot Sales Last 12 Months



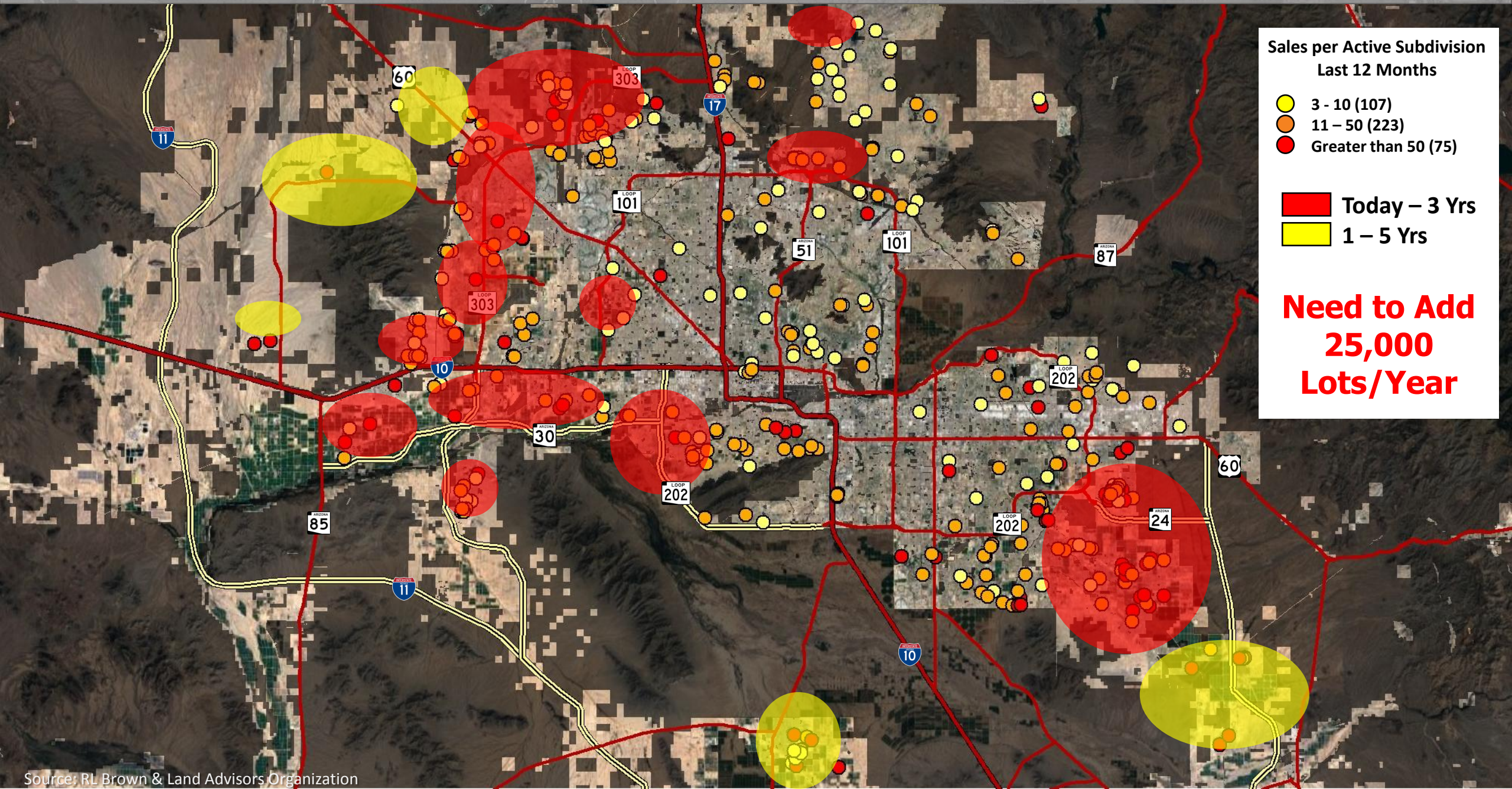
**Metro Phoenix
Finished Lot Sales**

- 5 – 50 Lots
- 51 – 100 Lots
- Greater than 100 Lots

Government

Total Lots: 21,937
\$ Volume: \$702M

Lot Development Demand Pressure



Sales per Active Subdivision Last 12 Months

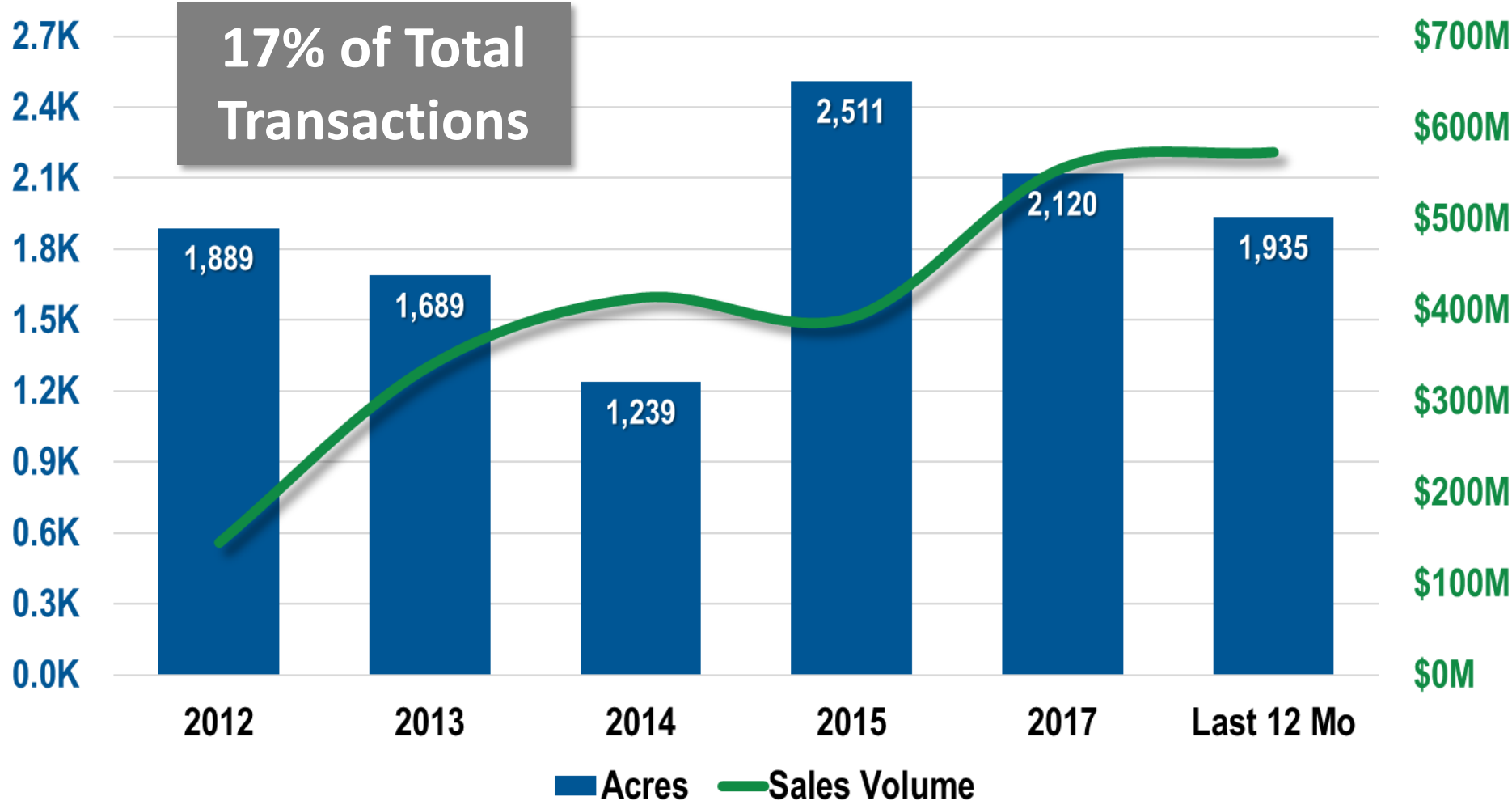
- 3 - 10 (107)
- 11 - 50 (223)
- Greater than 50 (75)

- Today - 3 Yrs
- 1 - 5 Yrs

**Need to Add
25,000
Lots/Year**

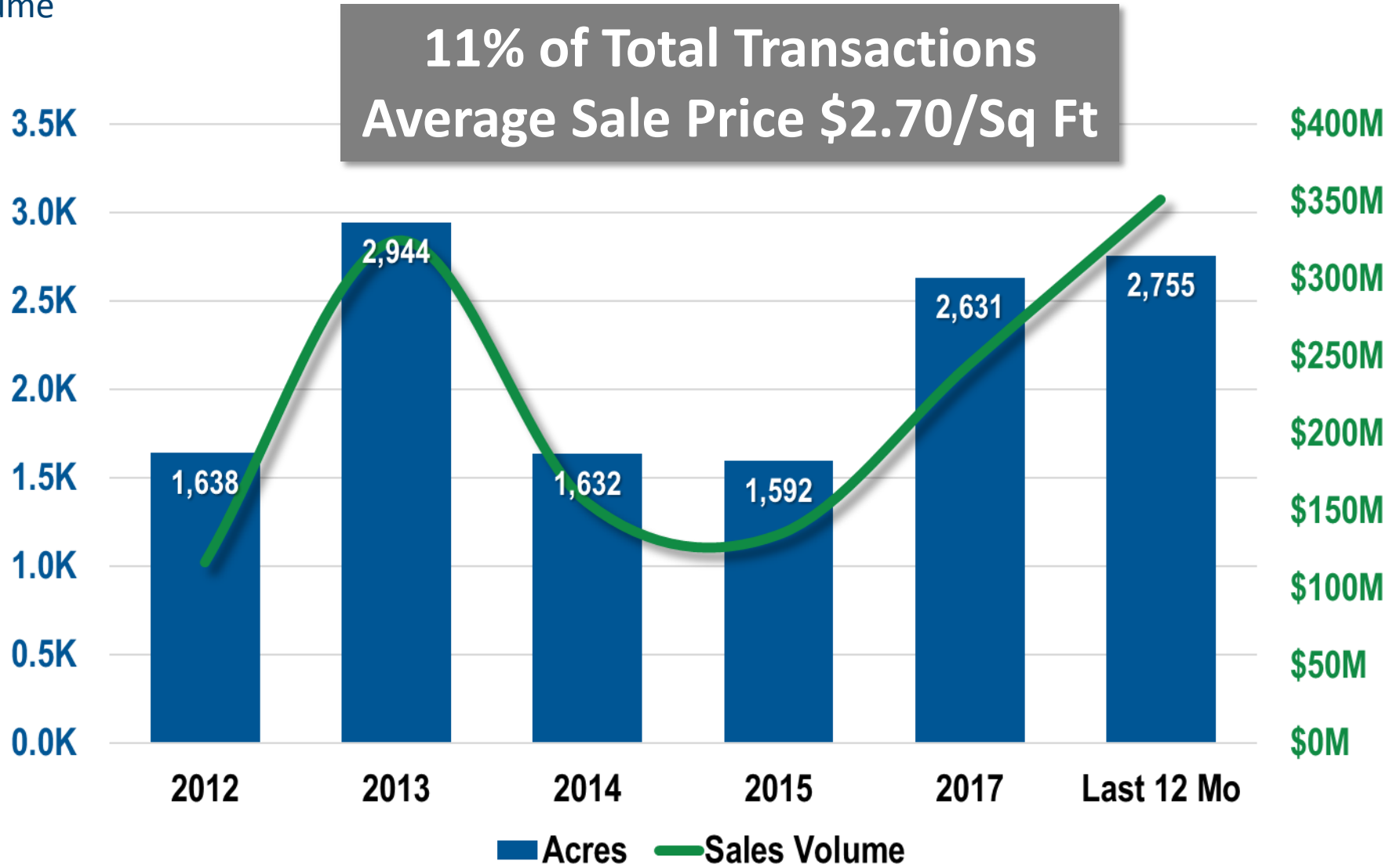
Commercial Land

Office, Retail, Mixed Use & Municipal



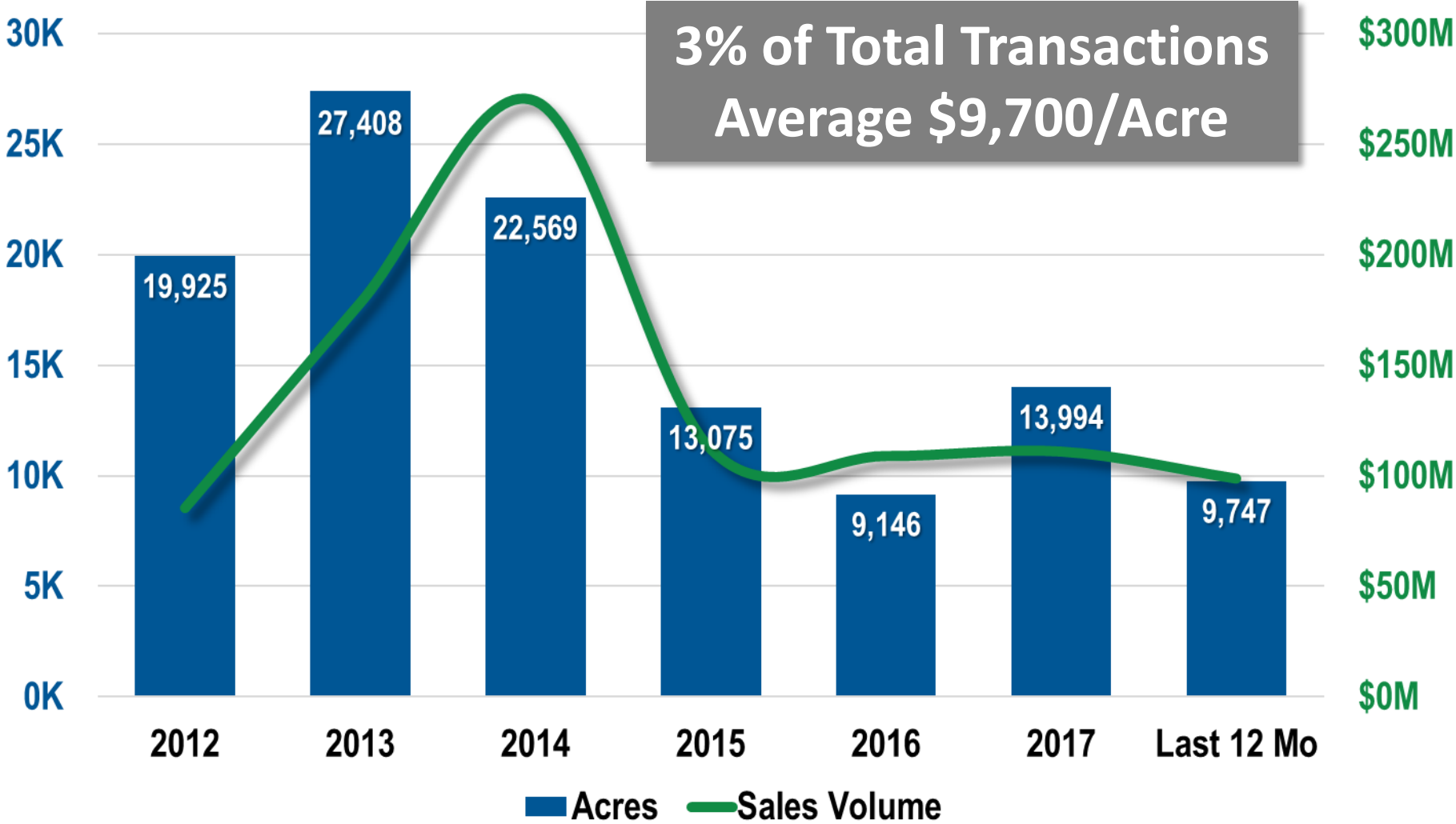
Industrial Land

Acres & Sales Volume



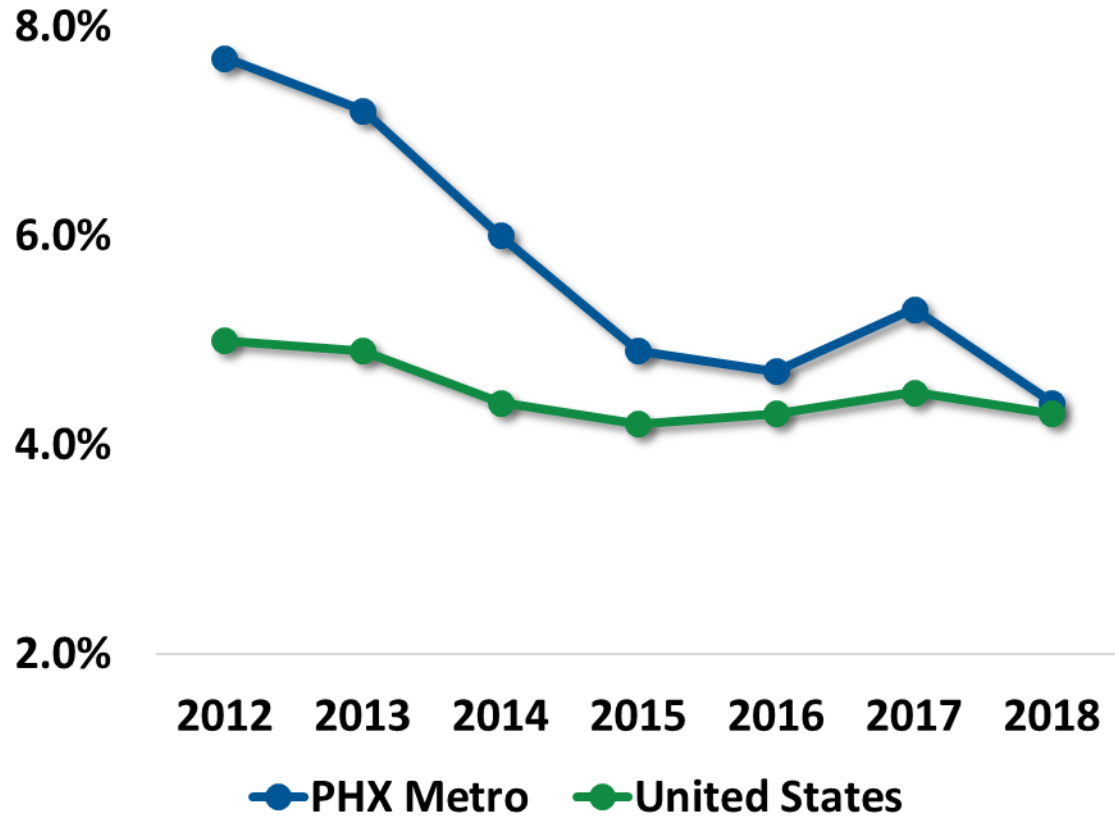
Agricultural Land

Acres & Sales Volume



Multifamily Trends

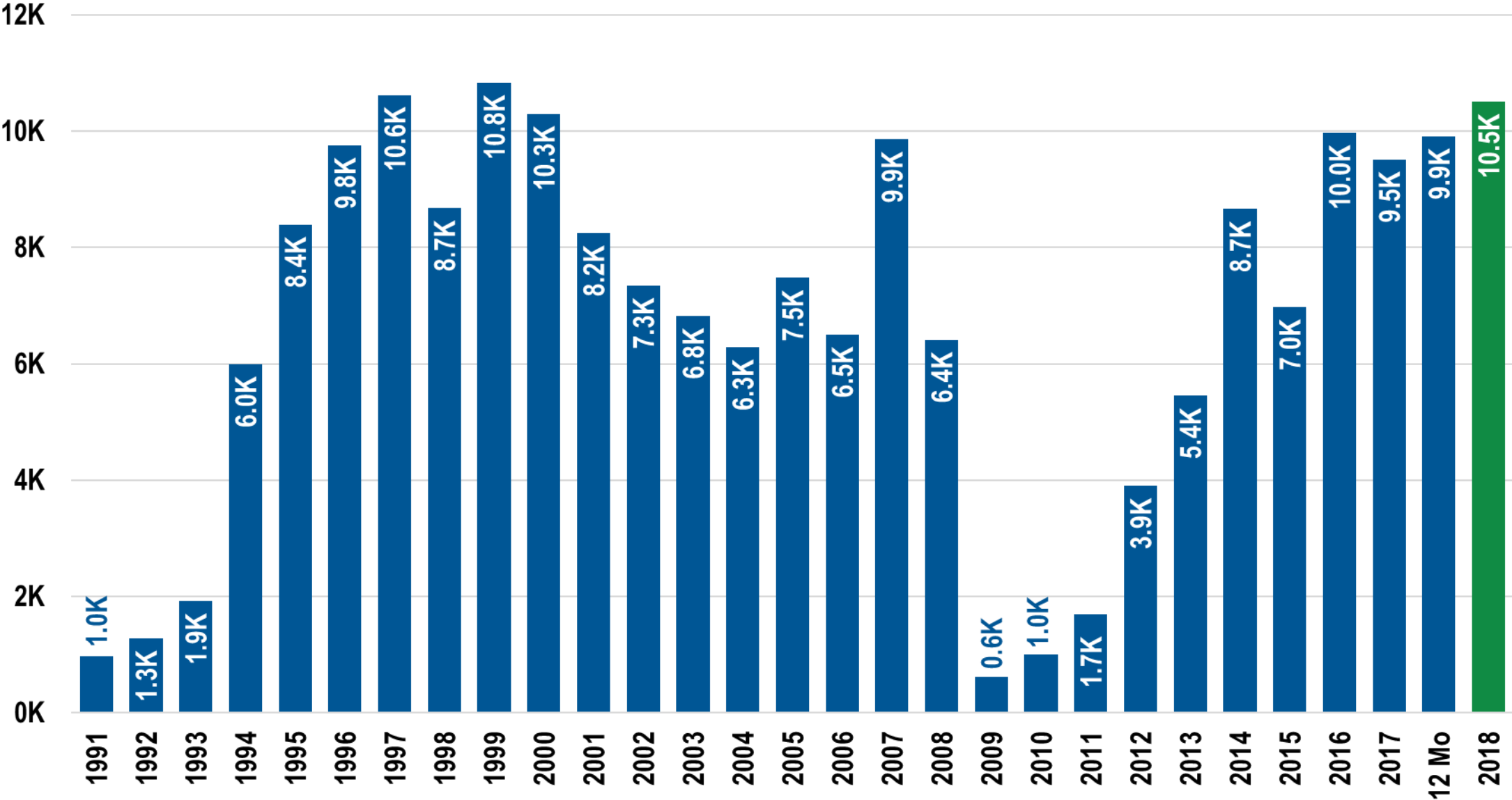
Vacancy Rates



Rents



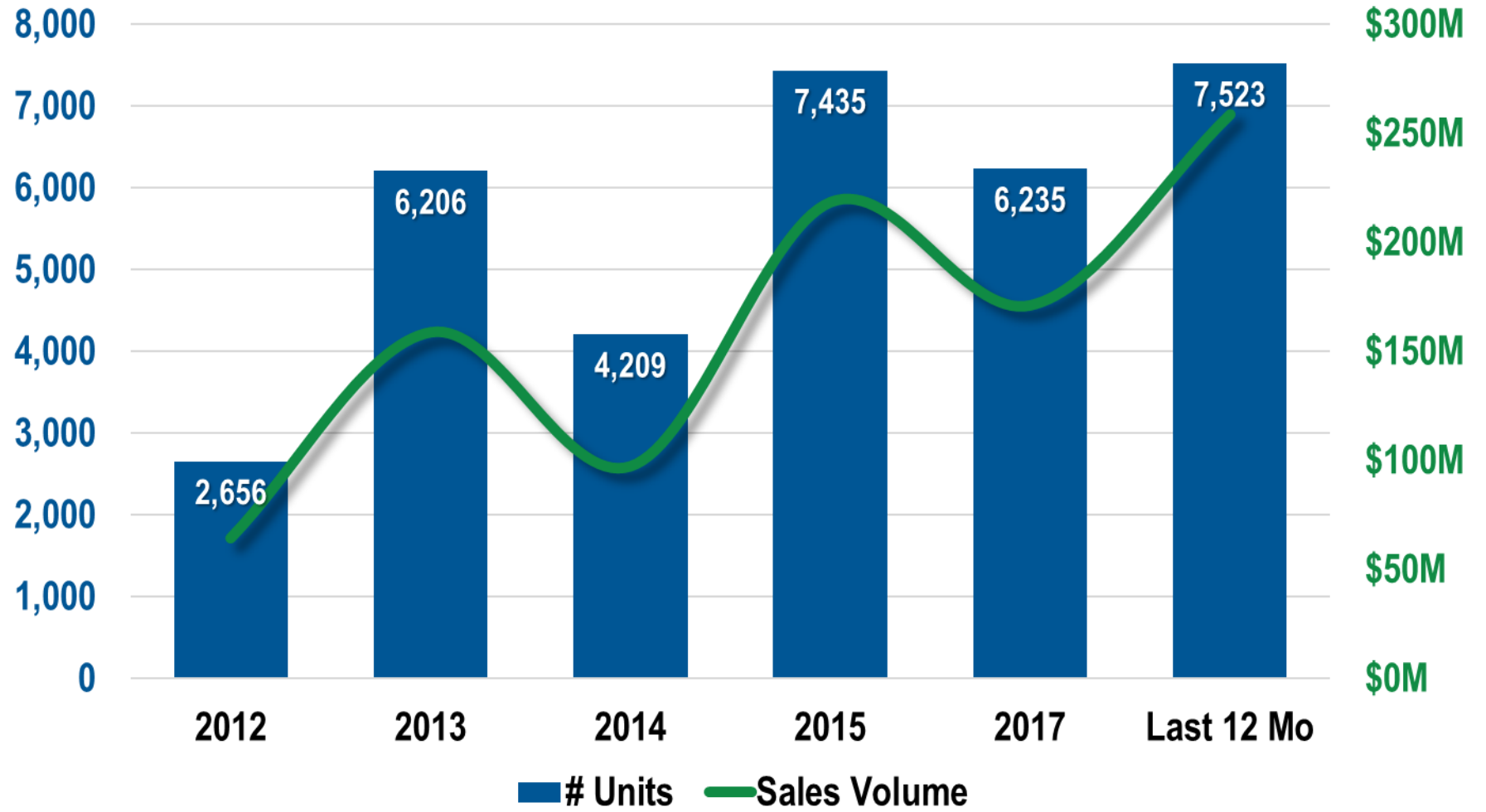
Multifamily Permits



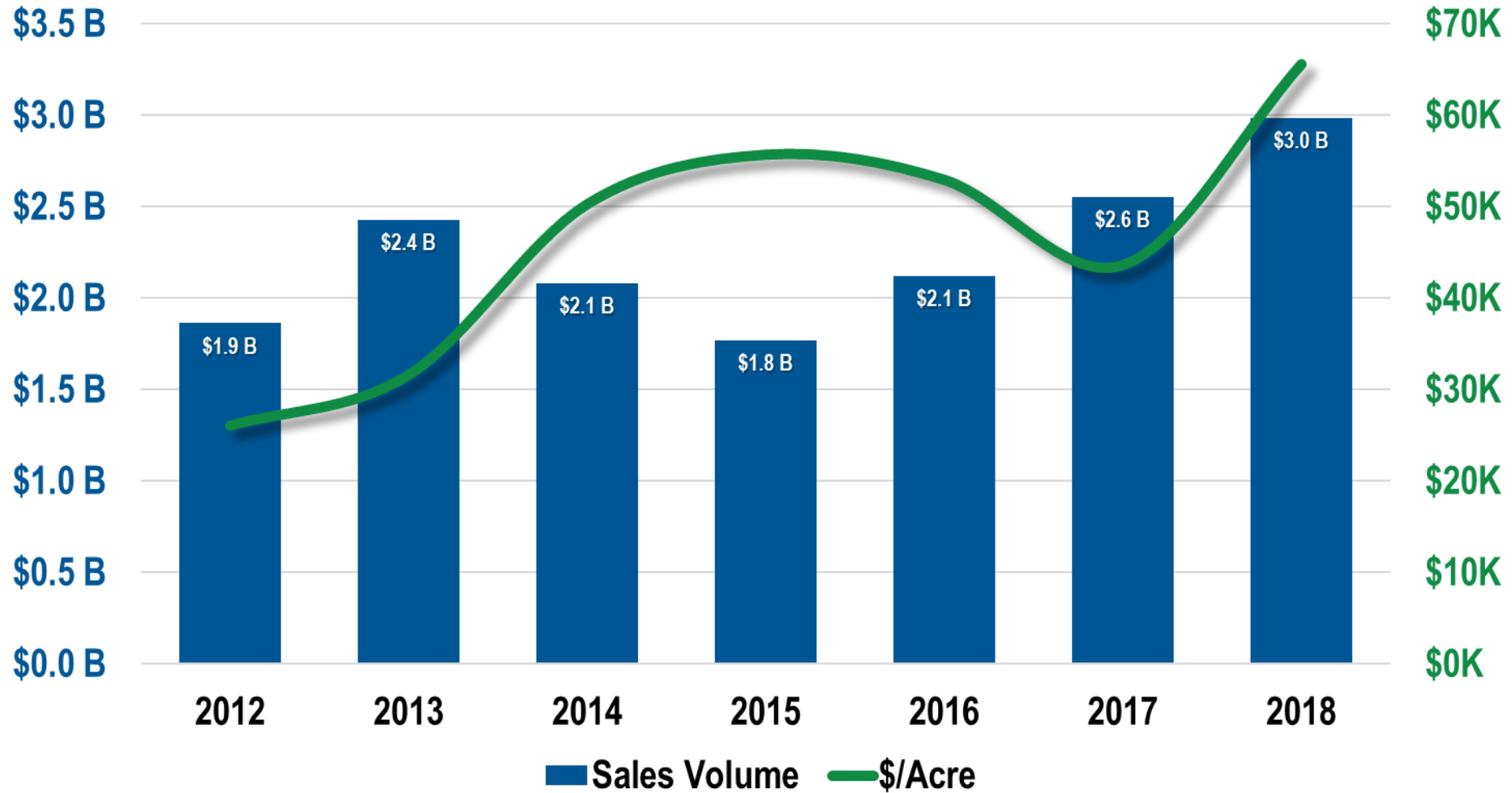
Apartment Land

Number of Units & Sales Volume

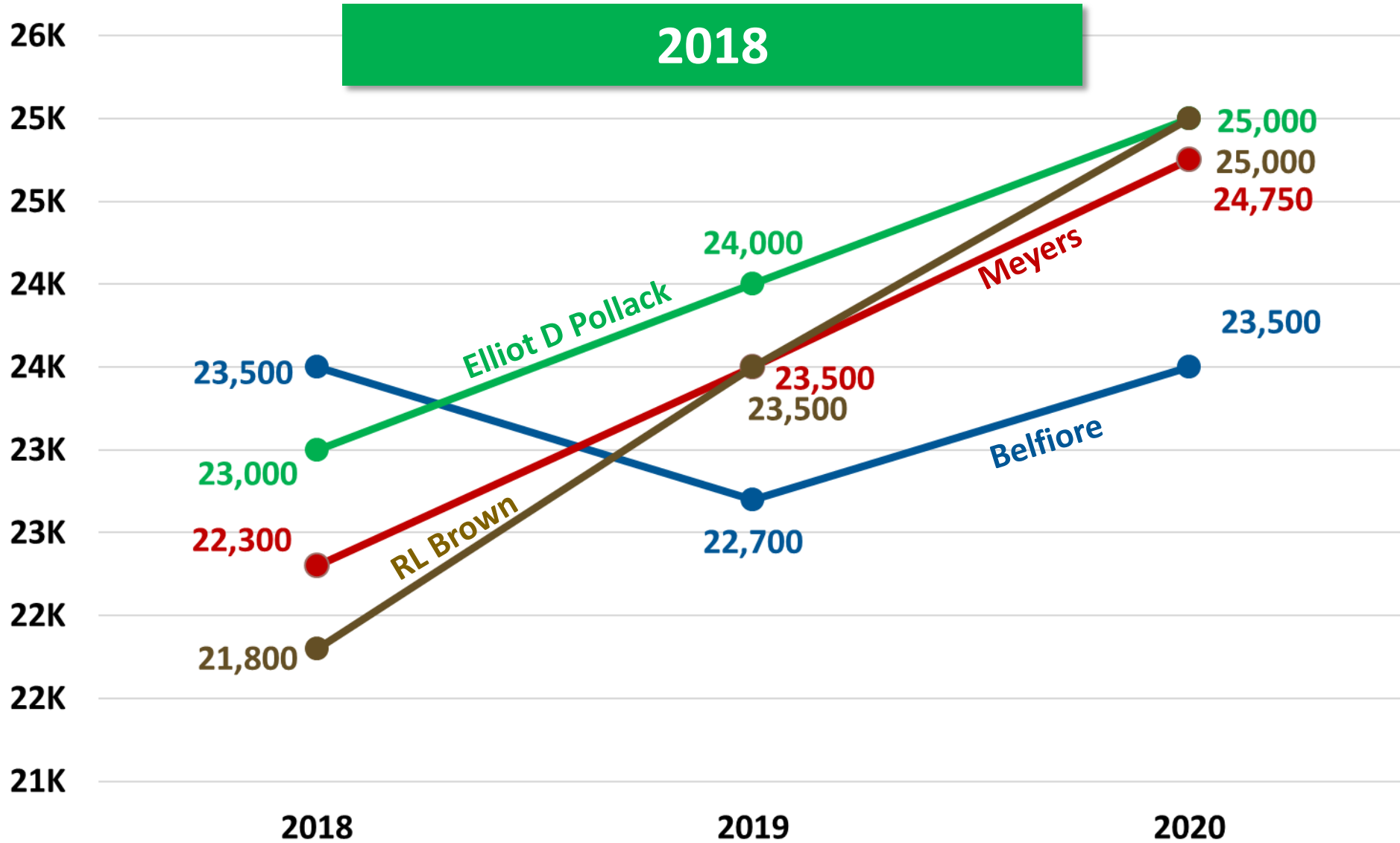
8% of Total Transactions
Vast Sum is "Luxury"



Total Land Sales Volume & Price per Acre



Expert Single Family Permit Projections

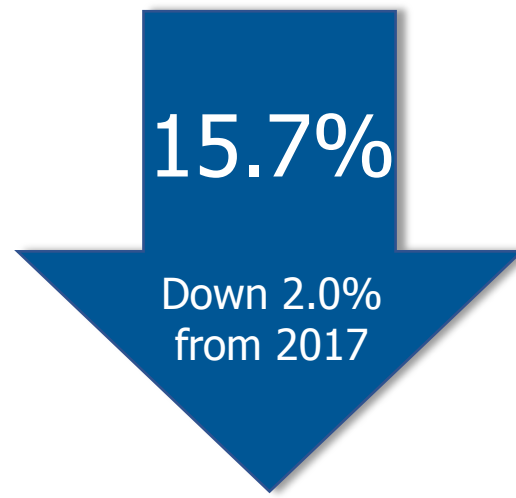


Retail Vacancy



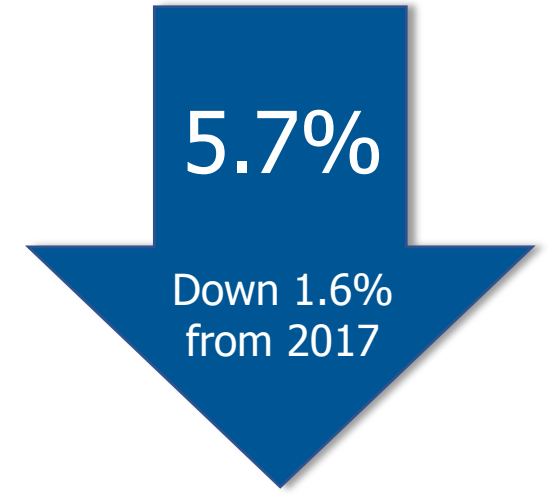
Rentable Area: 151.5M Sqft
YTD Net Absorption: 147.5K Sqft
Under Construction: 714.2K Sqft

Office Vacancy



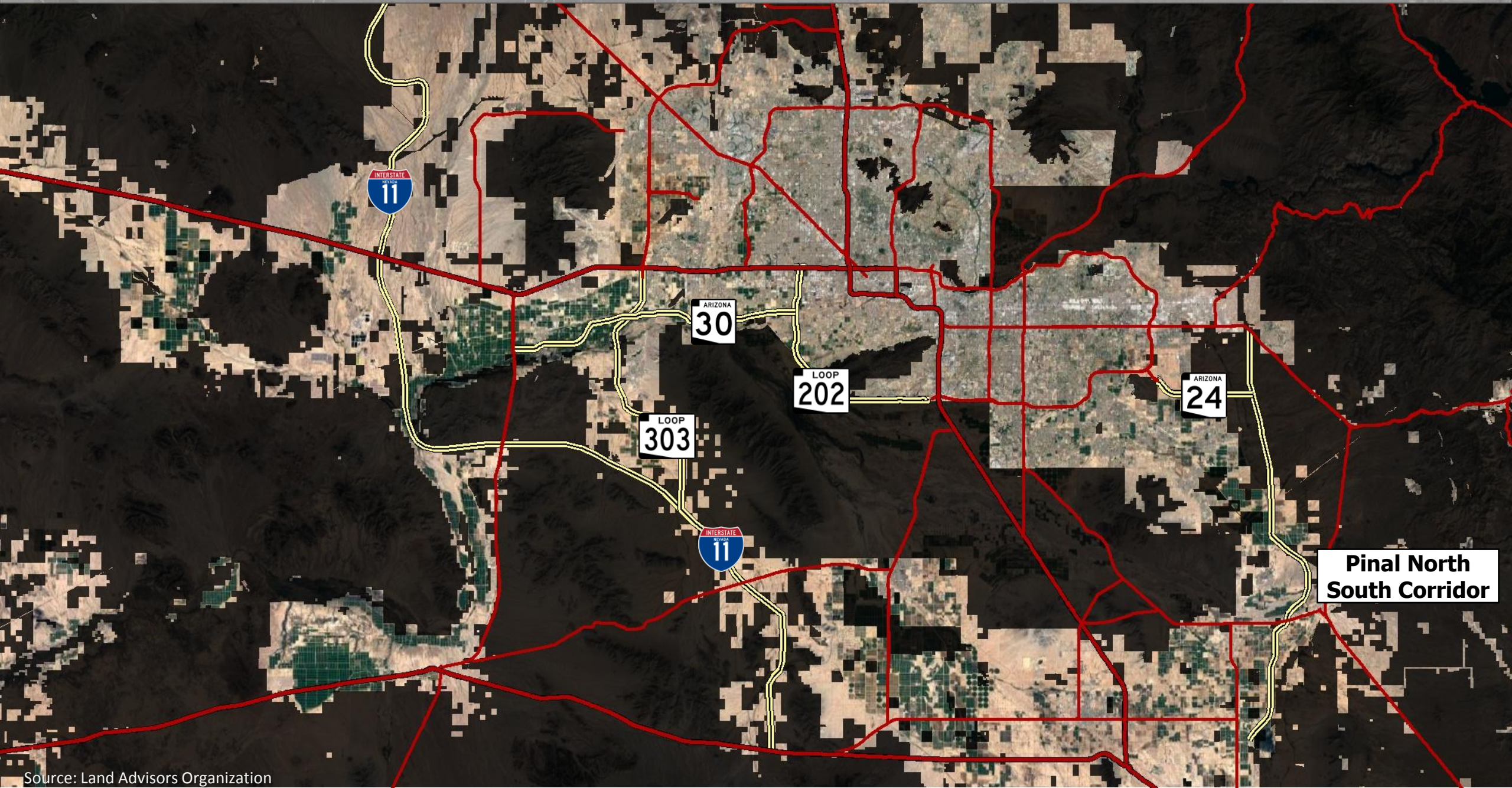
Rentable Area: 88.7M Sqft
YTD Net Absorption: 1.497M Sqft
Under Construction: 3.285M Sqft

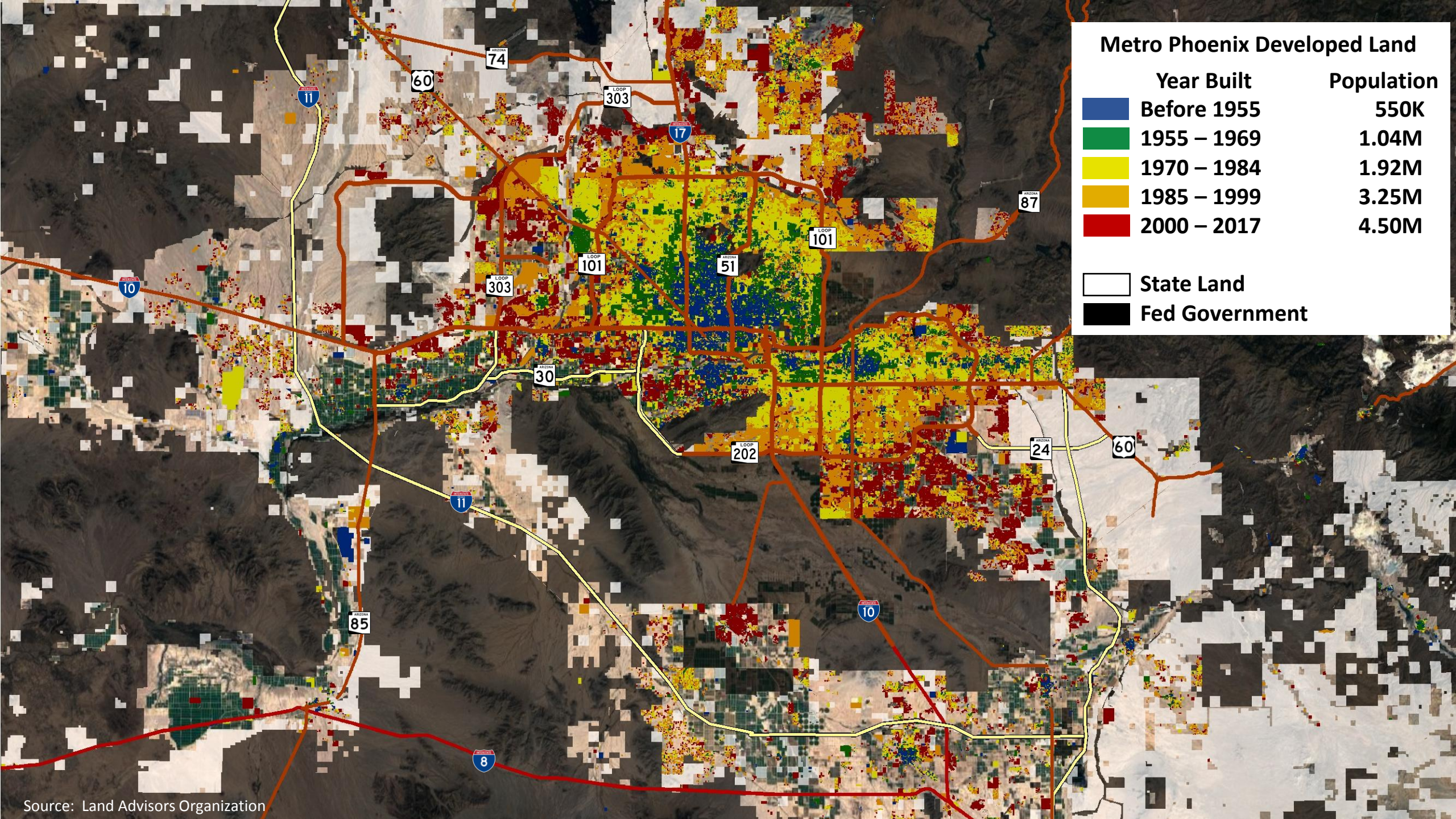
Industrial Vacancy



Rentable Area: 314.6M Sqft
YTD Net Absorption: 8.690M Sqft
Under Construction: 7.740M Sqft



Metro Phoenix Proposed Freeways

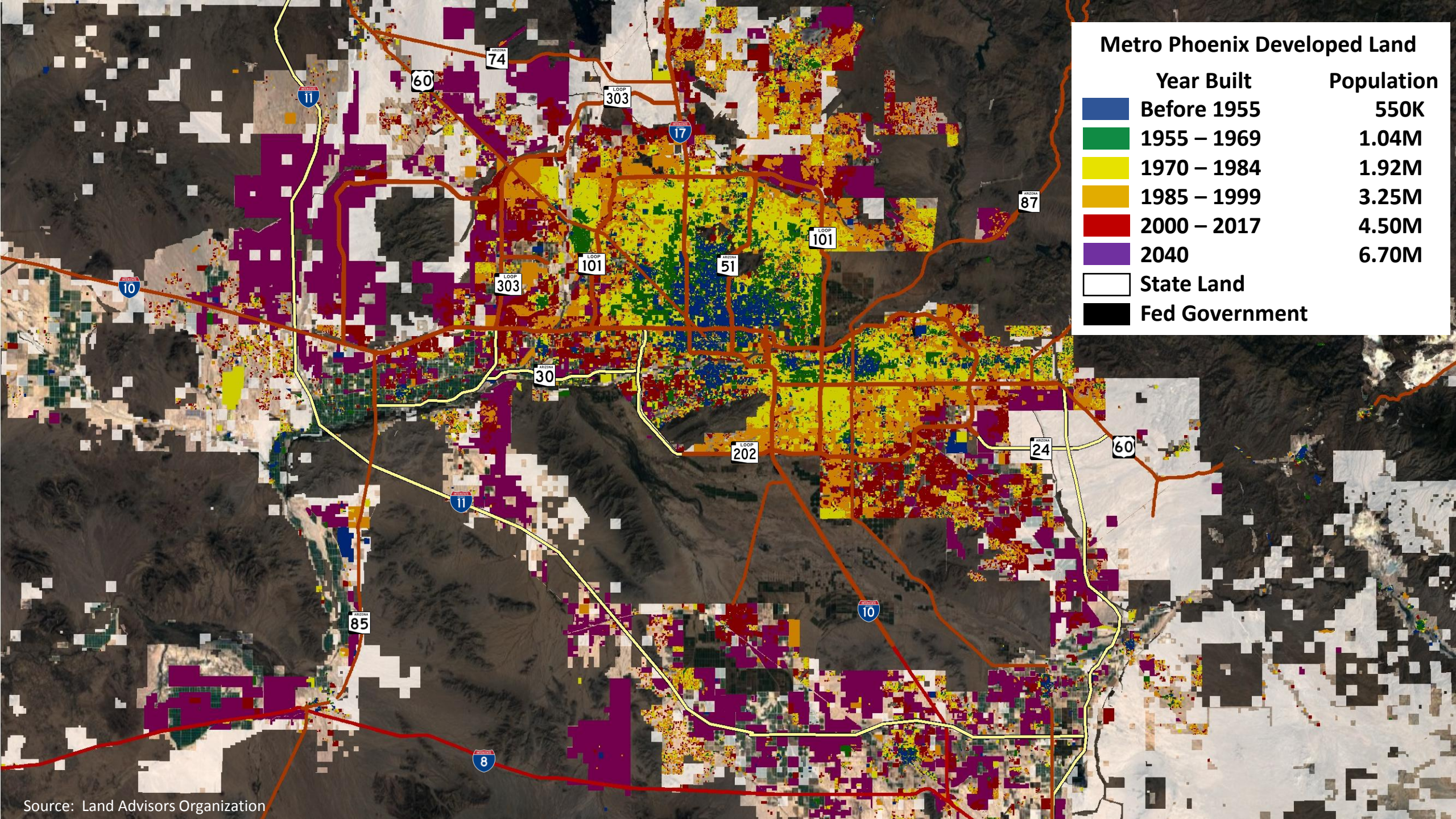




Metro Phoenix Developed Land

Year Built	Population
Before 1955	550K
1955 – 1969	1.04M
1970 – 1984	1.92M
1985 – 1999	3.25M
2000 – 2017	4.50M

	State Land
	Fed Government



Metro Phoenix Developed Land	
Year Built	Population
Before 1955	550K
1955 – 1969	1.04M
1970 – 1984	1.92M
1985 – 1999	3.25M
2000 – 2017	4.50M
2040	6.70M
State Land	
Fed Government	

Conclusions

- **“It’s Different this Time” – Observe Where We/You Are in the Cycle**
- **Population and Job Growth will Remain Very Strong – More Begets More**
- **Watch Affordability Metrics and Must Create Affordable Alternatives**
- **Rising of all Costs**
- **Continual State of Cautious Optimism**

