

# SPUR

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# The Bay Area Economy and the Regional Housing Needs Assessment

Ted Egan, Ph.D.

Chief Economist, Controller's Office

June 27<sup>th</sup>, 2017

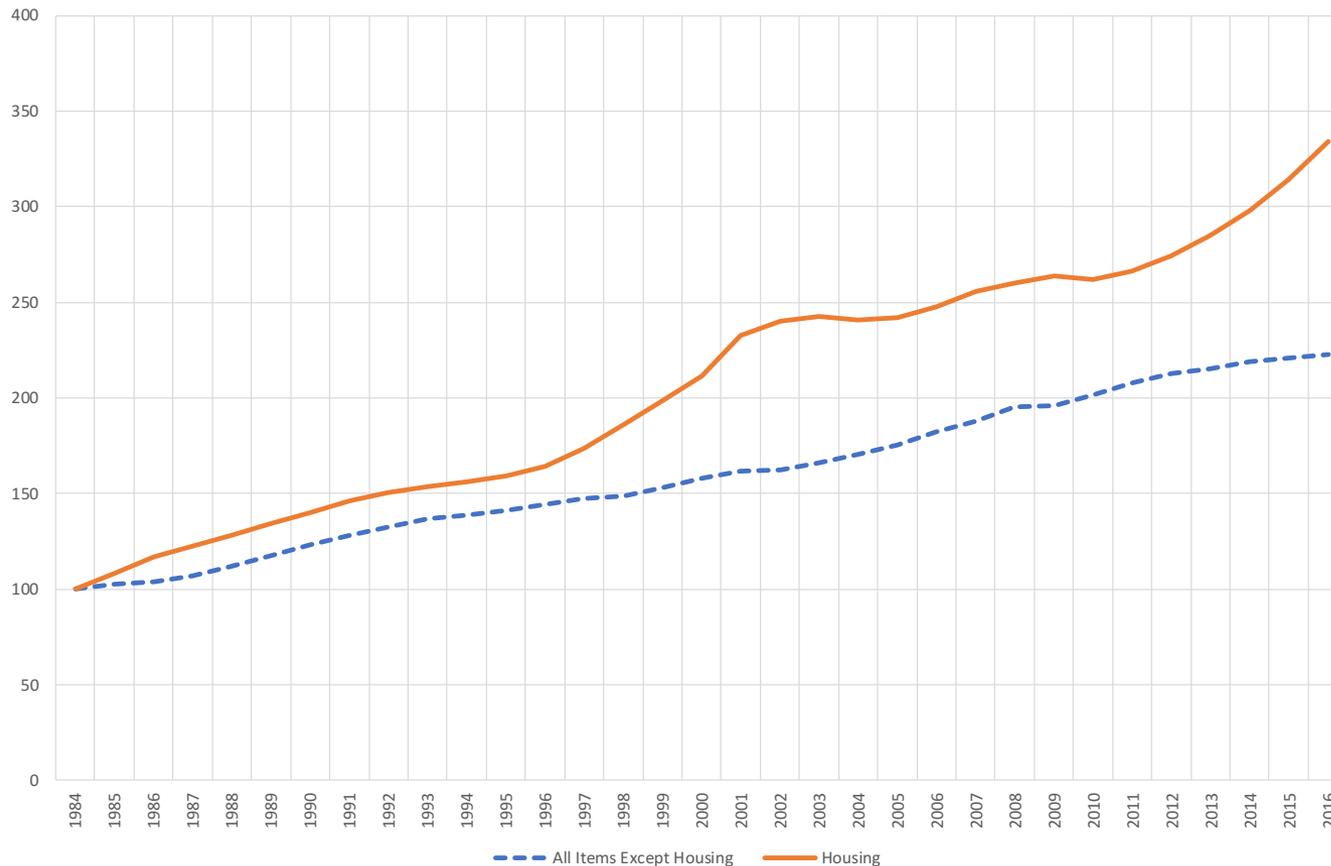
# How Much Housing Do We Need?

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- Some background...
- In 1980, the State Legislature has declared “the availability of housing is of vital statewide importance”.
- It recognized that “Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.”
- It created a process that mandated cities plan for their fair share of the regional housing need: the Regional Housing Needs Assessment.
- RHNA is the State’s answer to the question: how much housing do we need?

# Since the 1980s, Bay Area Housing Prices Have Risen at Twice the Rate of Inflation of Other Commodities, and the Gap Has Been Widening

Bay Area Price Inflation for Housing, and All Other Items, 1984-2016  
(1984=100)



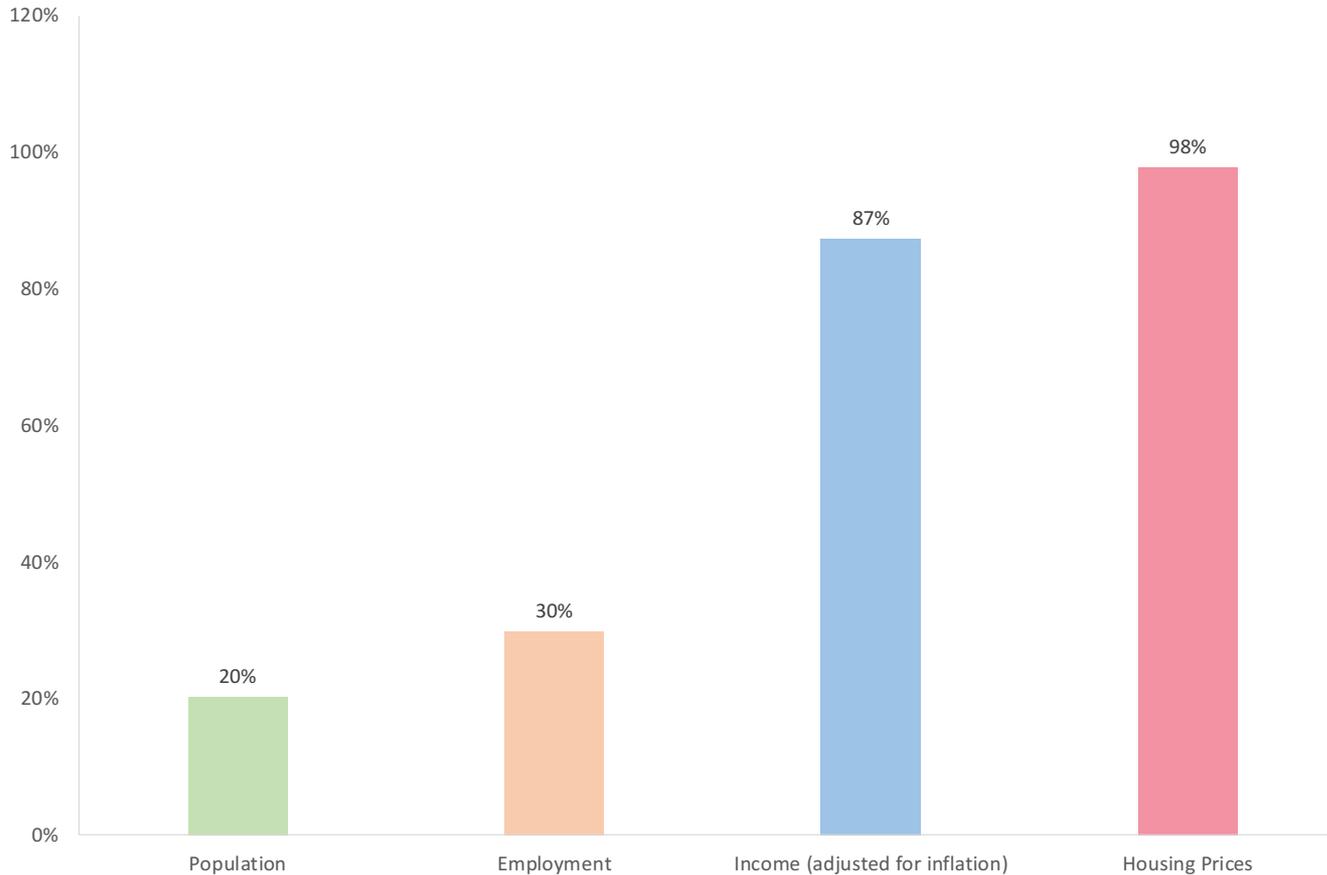
# The RHNA Process Establishes a Housing Target that Will Keep Housing Prices Stable....Most of the Time

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- Projecting population and households (based on past migration and household formation trends)
- Councils of Government allocate the regional need to cities and counties.
- Population, Income, and Housing Demand.
- When is Regional Population is a Good Proxy for Regional Income?
- Missing the Target: Self-Correction, or Vicious Cycle?

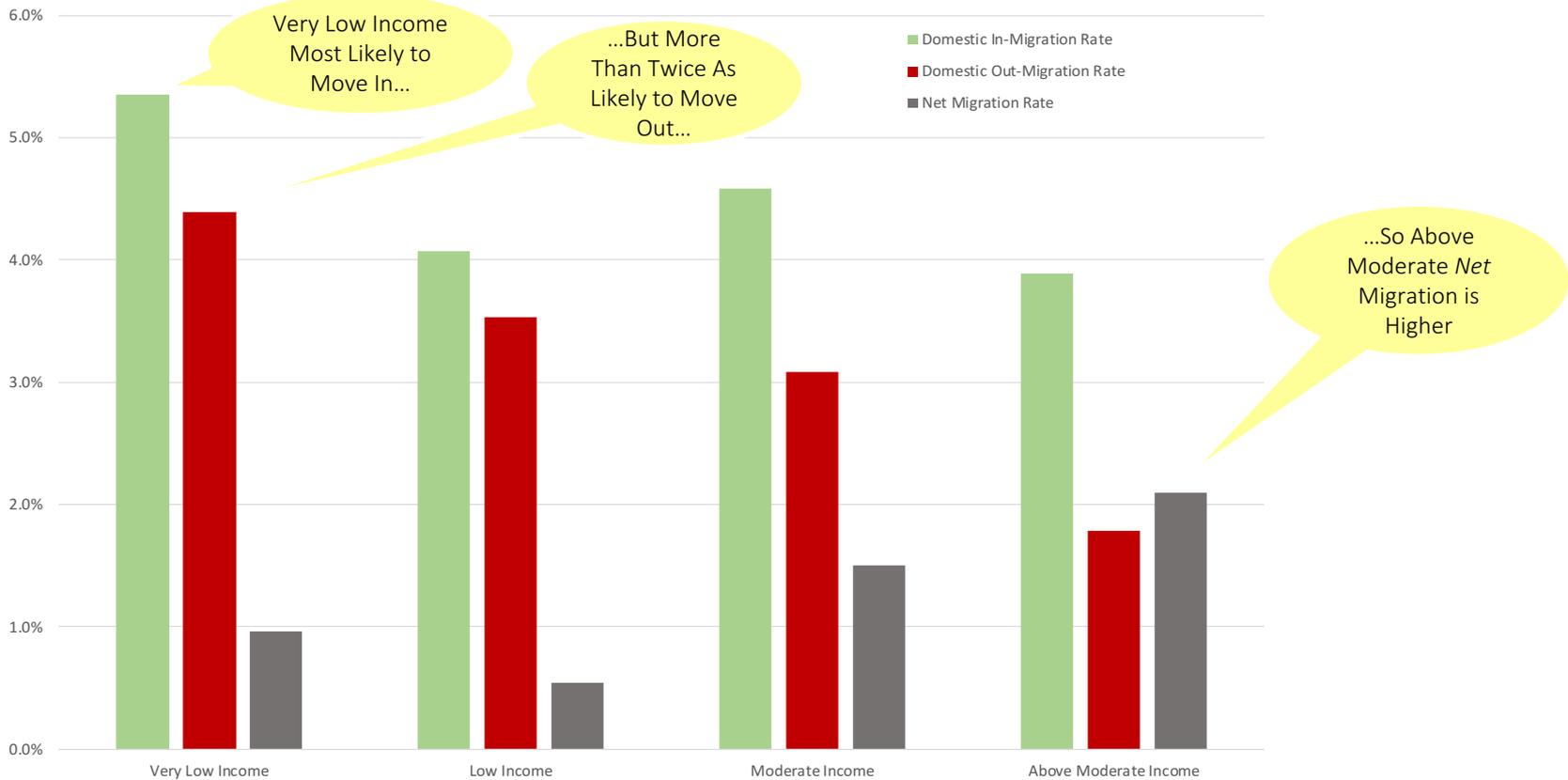
# In the Bay Area, Personal Income (Adjusted for Inflation) Have Grown Four Times Faster than Population from 1995 to 2015.

Percentage Change in Bay Area Population, Employment, Income, and Housing Prices, 1995-2015

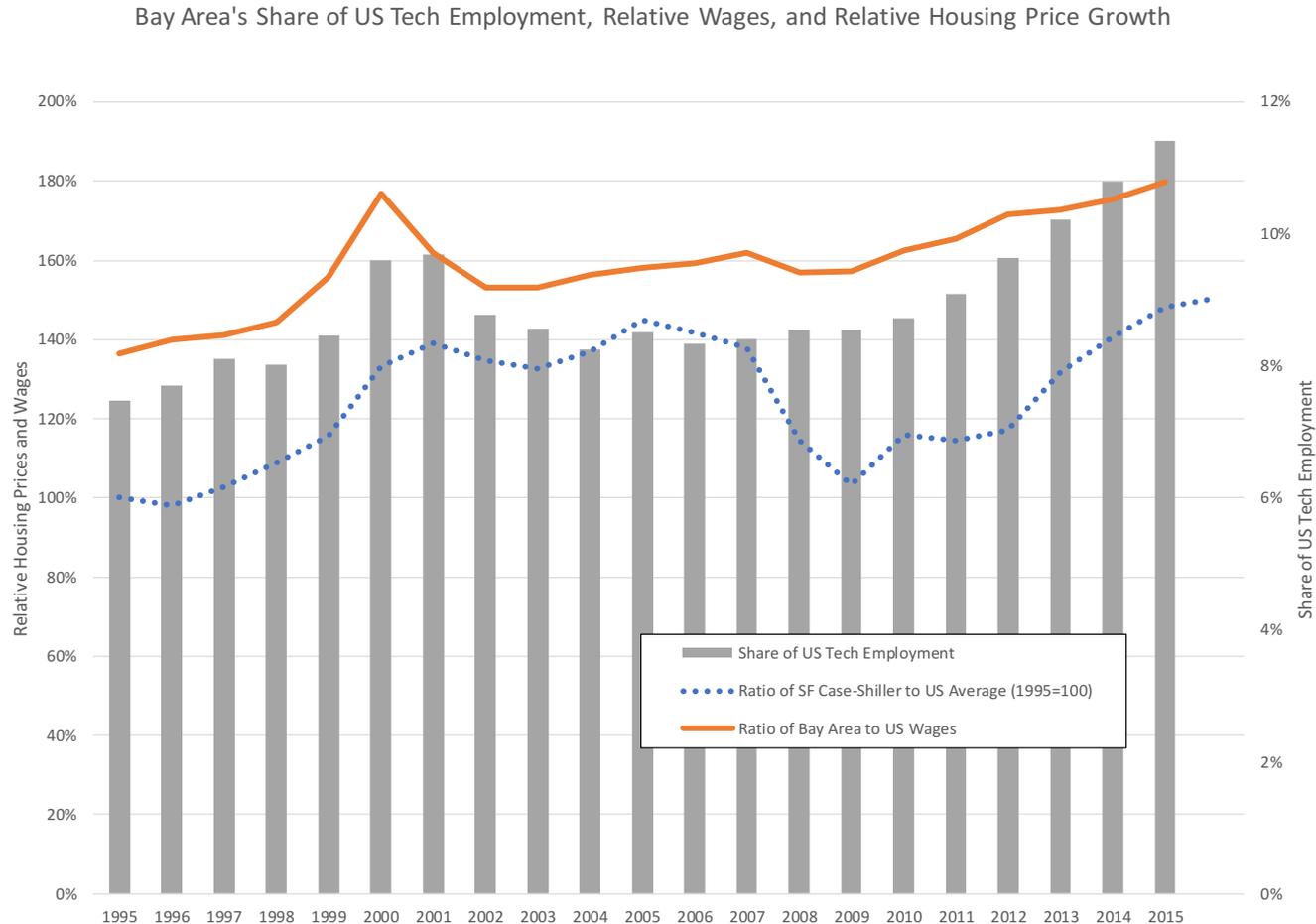


# Household Income Shapes Migration Patterns in the Bay Area

Annual Domestic Migration Rates by Household Income,  
San Jose-San Francisco-Oakland CSA, 2011-15



# “Non-Self-Correcting” Growth of the Tech Industry, Despite Rising Wages / Incomes



# An Alternative Approach, Based on Long-Term Real Income Growth in the Bay Area

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- The *income elasticity of demand* for housing, which reflects how much of real personal income growth gets spent on housing, can be estimated econometrically.
- In order to prevent new income from driving up housing prices faster than inflation, housing supply must increase at least as much as this demand.
- An illustration is shown below:

Annual % change in inflation-adjusted personal income (1995-2015)	3.2%
x Income elasticity of demand for housing	0.59
<hr/>	
Annual % increase in housing demand = Required % increase in housing supply	1.9%
x Current number of housing units in the Bay Area (2015)	2,727,042
<hr/>	
Annual number of new units needed to meet demand	51,847

# How Many Homes Should We Have?

SFHAC-SPUR Lunchtime Panel

June 27, 2017

**Pedro Galvao**

**Regional Planning and Policy Manager**

**Non-Profit Housing Association of Northern California**



NON-PROFIT HOUSING ASSOCIATION  
OF NORTHERN CALIFORNIA

**The Voice of  
Affordable Housing**

Since 1988,  
the Bay Area met  
**87% of luxury**  
**housing needs,**  
**but only 42%**  
**of the area's**  
**low income**  
**housing needs.**

 **87%**  
**Luxury Housing**



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The Voice of  
Affordable Housing

In three 2016 polls commissioned by NPH covering Alameda, Santa Clara, and San Mateo Counties,

**voters identified the cost of housing as their #1 concern**

above traffic, health, safety, and education



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The Voice of  
Affordable Housing

# MAJOR funding cuts

- Major cuts to HUD budget (sequestration)
- State housing bonds (Measure 46, Prop 1C) fully spent: **\$4.95 billion**
- Redevelopment was dissolved: **\$220 million** in the Bay Area, **\$1 billion** in the state
- **2008-2014: The State of California lost \$1.74 billion** in annual funding for affordable housing



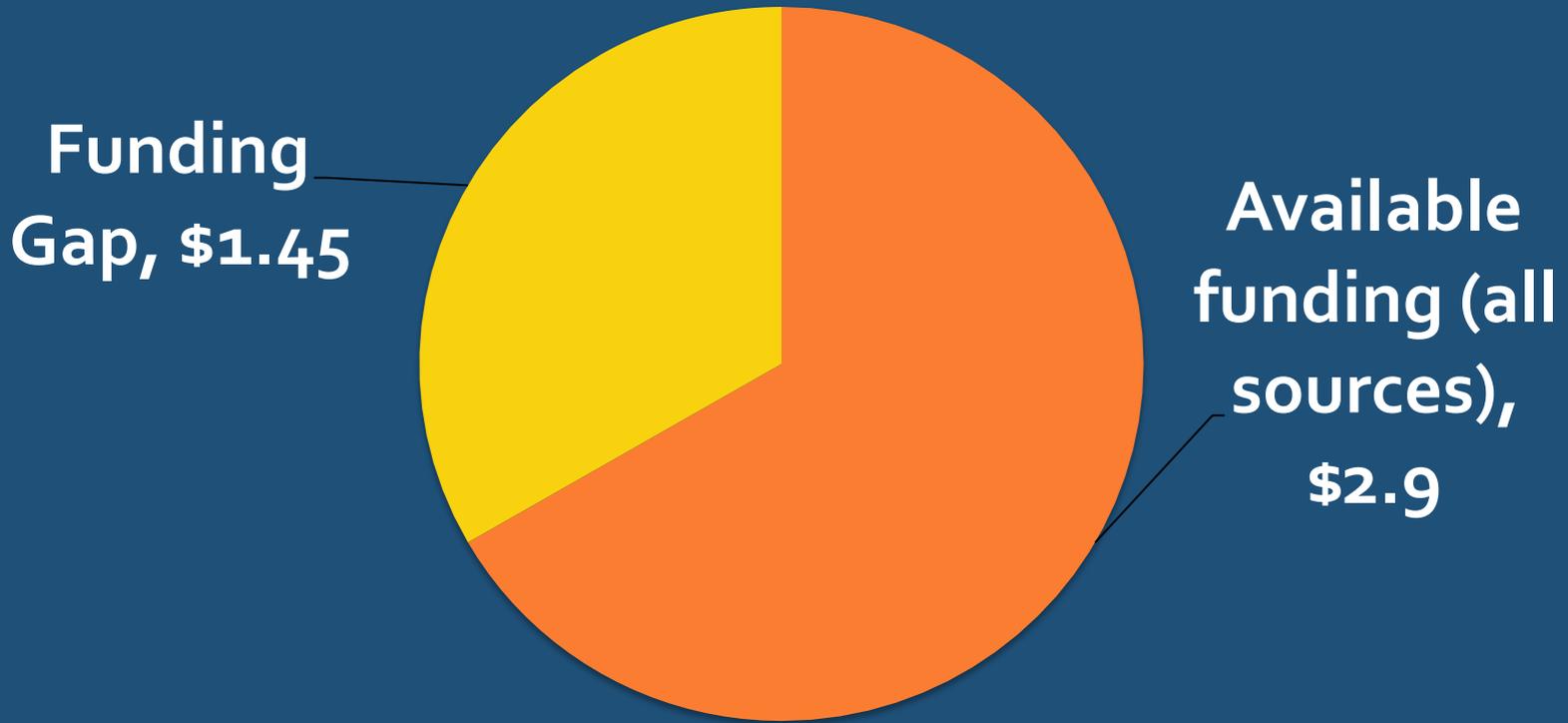
NON-PROFIT HOUSING ASSOCIATION  
OF NORTHERN CALIFORNIA

The Voice of  
Affordable Housing

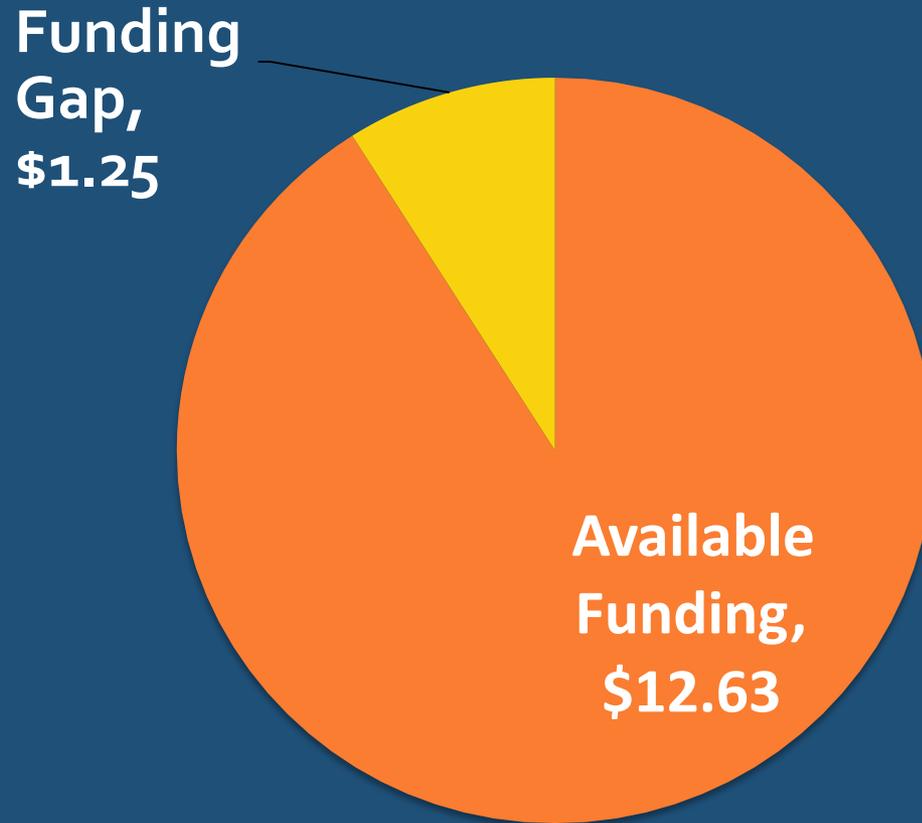
Plan Bay Area's success  
will hinge on successfully  
accommodating  
the Bay Area's  
**future population  
growth of 2.3 million  
more people by 2040**



# Available Annualized Affordable Housing Funding and Gap for RHNA in the Bay Area (billions)



# Available Annualized Transportation Funding and Gap for “State of Good Repair” (billions)



# Incentivizing Better Housing Outcomes

- **One Bay Area Grant program** tied regional transportation funding to affordable housing outcomes. **28 jurisdictions adopted housing elements.**



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Affordable Housing

# Near Term Opportunities for Action

- Use a portion of proposed bridge toll increases (**Regional Measure 3**) to directly fund TOD Affordable Housing and related infrastructure
- Subsidize infill development (I-bank, bridge tolls)
- Use all existing and future regional transportation funding to incentivize better housing outcomes



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# The Bay Area is at a Unique Moment for Action

- **June 28<sup>th</sup> 2017:** CASA kickoff meeting
- **July 1<sup>st</sup> 2017:** ABAG staff is consolidated into MTC
- **Mid-July 2017:** Plan Bay Area adopted



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The Voice of  
Affordable Housing

# THANK YOU!

**Pedro Galvao**

**Regional Planning and Policy Manager, NPH**

**[Pedro@nonprofithousing.org](mailto:Pedro@nonprofithousing.org)**

**Check out our report:**

**[www.nonprofithousing.org/ontracktogether](http://www.nonprofithousing.org/ontracktogether)**



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OF NORTHERN CALIFORNIA

**The Voice of  
Affordable Housing**

How many homes should we have?  
*(More than everyone might think we need!)*



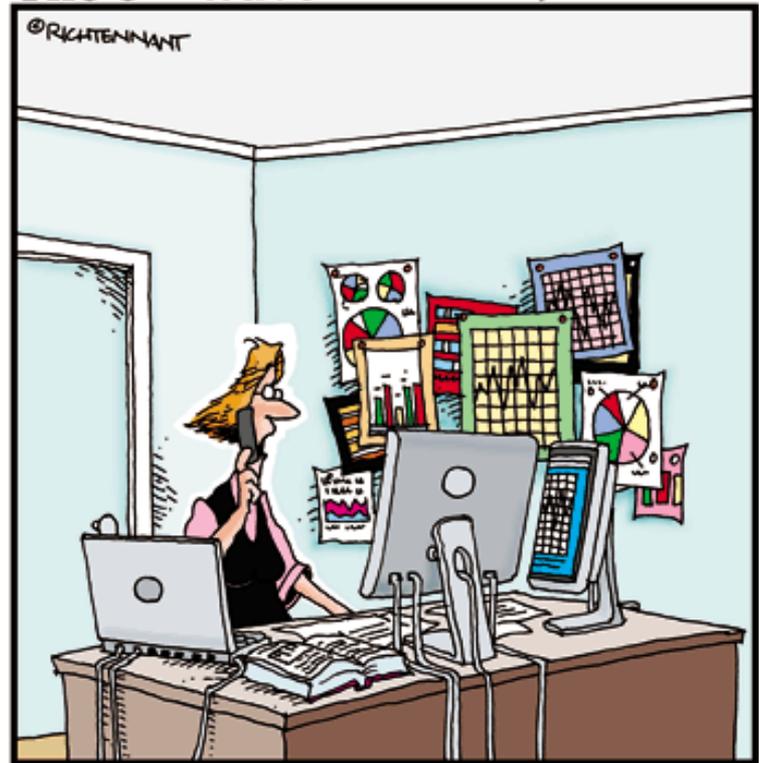
SPUR  
June 27, 2017



Why do we need  
more, more  
and even more  
housing than we  
might think?

## The 5th Wave

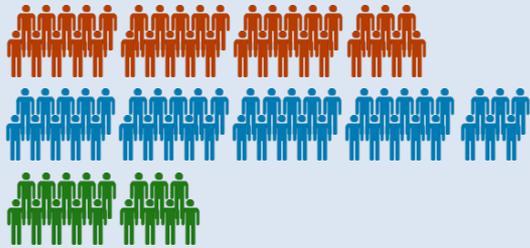
By Rich Tennant



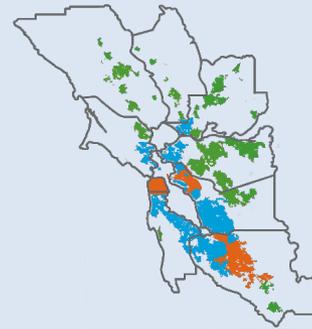
"Oh sure, I've used historical data analysis in the past, but lately it's been pretty much hysterical data analysis at work."

# Our economy is booming – but we’re not building enough housing.

Jobs added from 2011 through 2015: 501,000



Housing units built from 2011 through 2015: 65,000



**Big 3 Cities:**

1 housing unit built for every 7 jobs created

**Bayside Cities and Towns:**

1 housing unit built for every 15 jobs created

**Inland, Coastal, Delta Cities and Towns:**

1 housing unit built for every 3 jobs created

Regionally: 1 house was built for every 8 jobs created

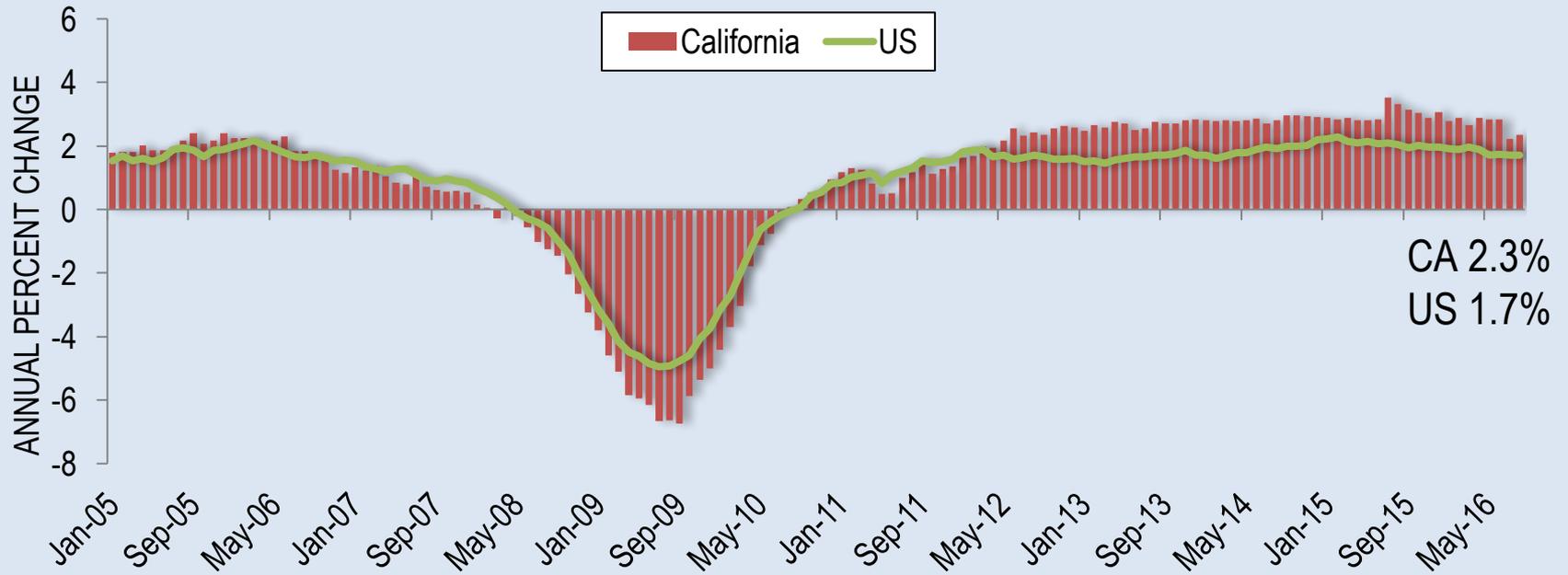
<http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php>



Source: MTC, 2017

Image Source: <https://www.flickr.com/photos/tyrone/15970508005/>

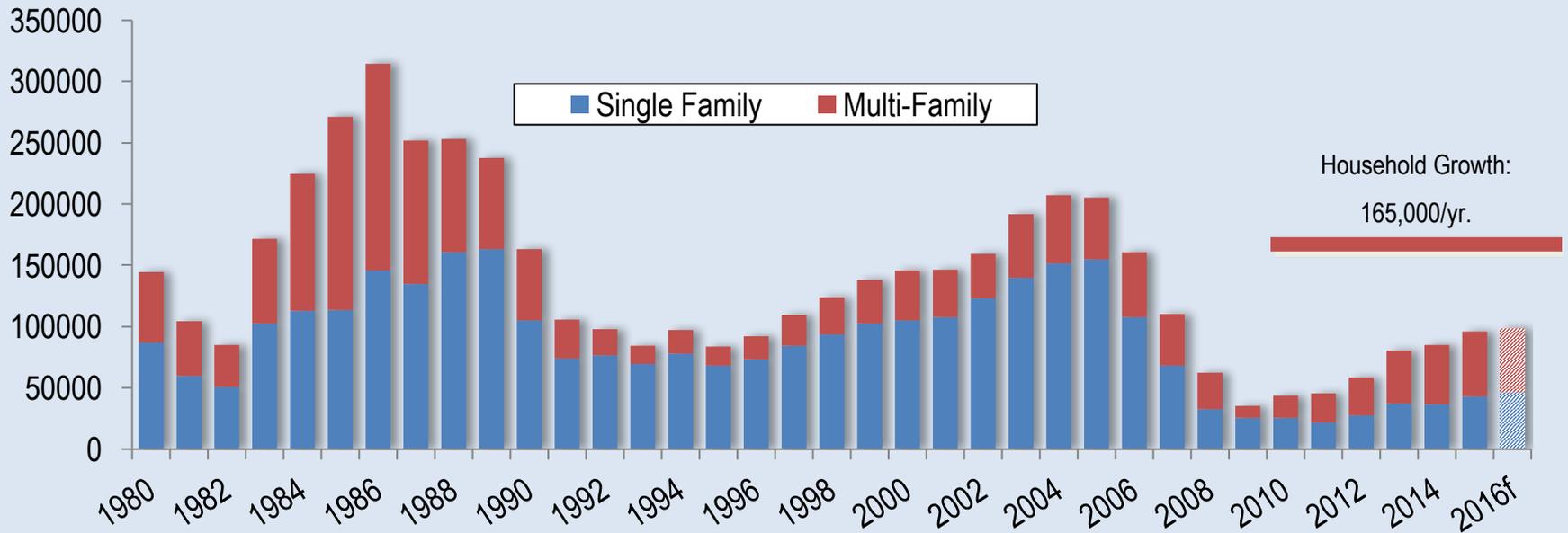
# CA Jobs Growing Faster Than Nation



SERIES: Total Nonfarm Employment  
SOURCE: US Bureau of Labor Statistics, CA Employment Development Division

Source: CAR 2016

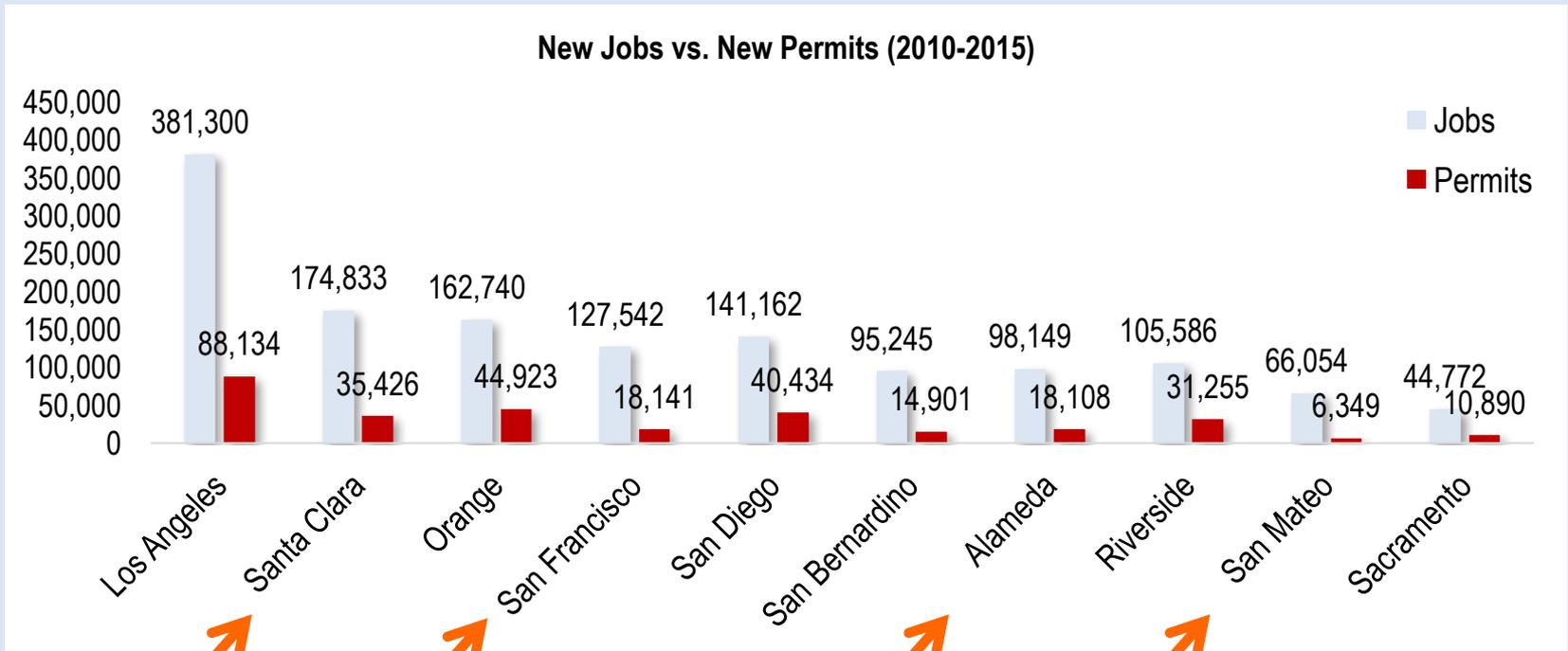
# “Missing” 65,000 New Units Annually



SERIES: California New Housing Permits  
SOURCE: Construction Industry Research Board

Source: CAR 2016

# Most Underbuilt Counties in California

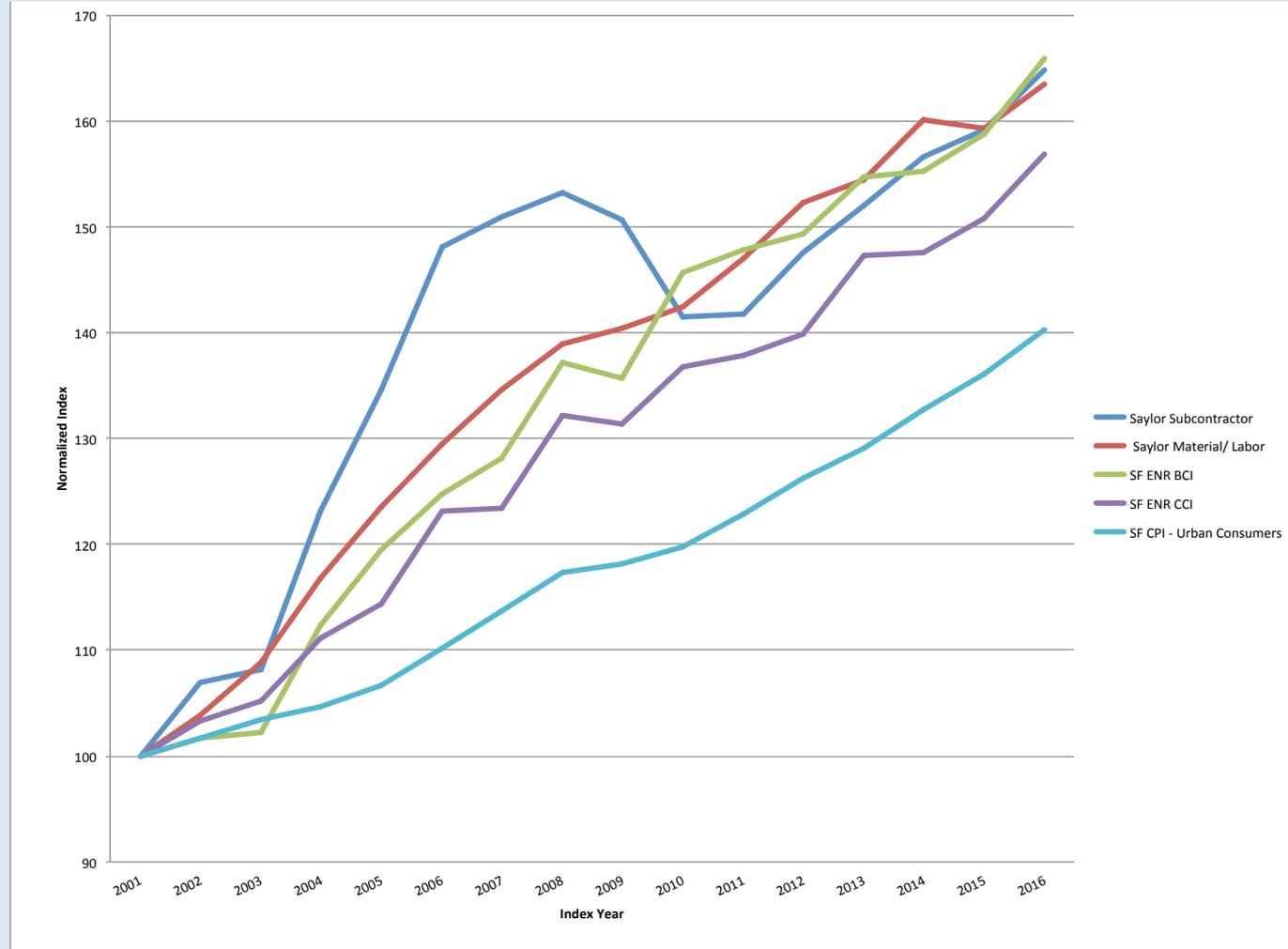


SOURCE: CAR 2016, California Employment Development Department, Construction Industry Research Board.

Why do we need to allow more housing to be built much faster?



**Construction costs continue to increase faster than inflation.**



## Pre-development often expensive and time consuming

Item	Cost
Land Purchase Option Payment/Deposit or Upfront Land Purchase	<b>Thousands of dollars</b> (up to 10% of purchase cost) or could cost <b>millions of dollars</b>
Development Consultants/Overhead	3-5% of construction cost
Project design (upfront)	2%-5% of project cost
Environmental analysis and entitlement process	Depends on project scope and time <b>(thousands or millions of dollars?)</b>
Pre-construction services	Depends on project scope and time <b>(thousands of dollars?)</b>

**As pre-development is most risky phase,  
capital is most expensive.**

Project Risk

High Cost Equity



What can go wrong with acquisition, design,  
entitlement?

Streamlining  
reduces costs,  
especially  
given “time  
value of  
money”



“ Yes, you are a developer and yes, you’re agile but that doesn’t necessarily make you an agile developer. ”

Density  
is not a  
four letter  
word....

**D**ynamic

Walkable**E**

Efficie**N**t

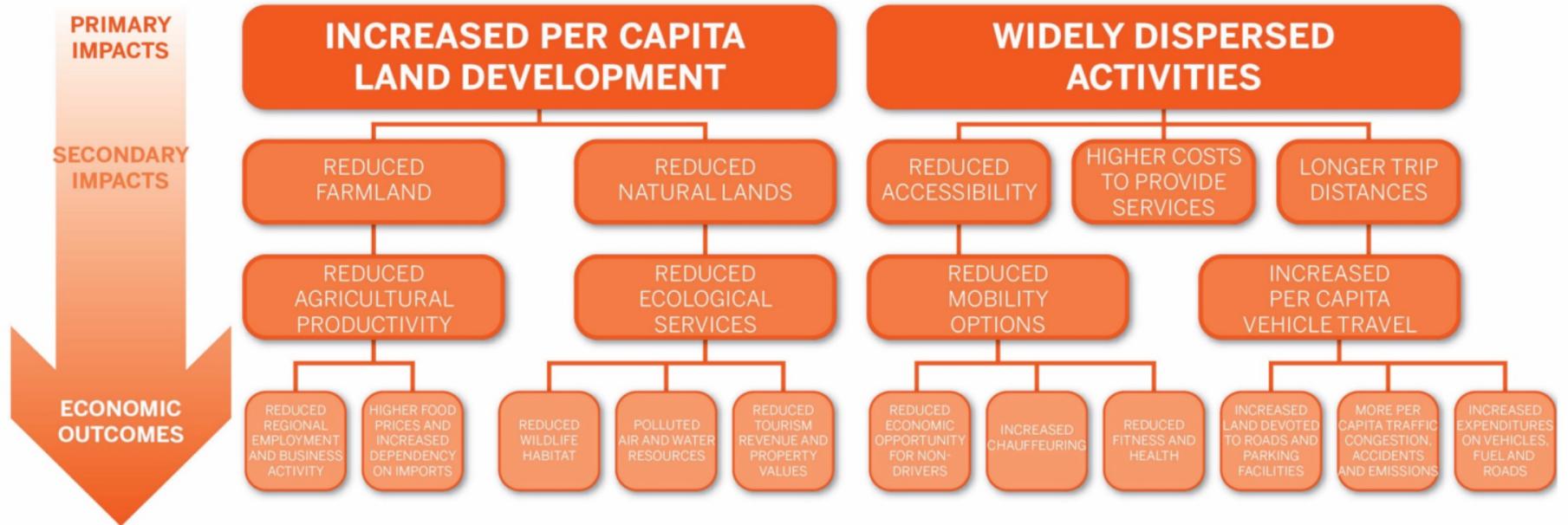
**S**ustainable

**D**iverse

**T**ransit Supportive

Communit**Y**

# REALIZING THE COSTS OF SPRAWL



SPRAWL COSTS THE UNITED STATES MORE THAN **\$1 TRILLION** ANNUALLY.

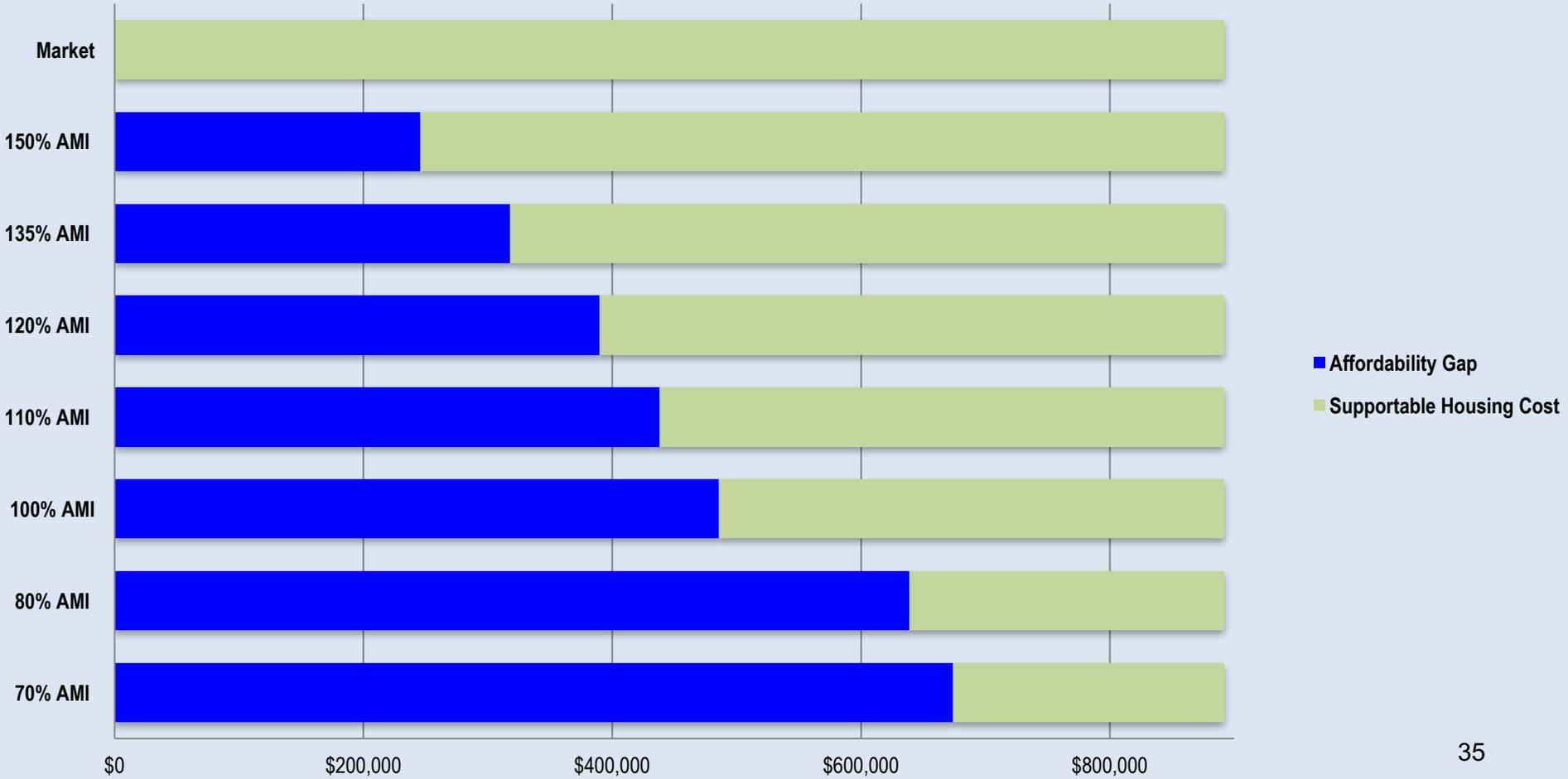
Source: Litman, Todd (2015). "Analysis of Public Policies That Unintentionally Encourage and Subsidize Urban Sprawl," Victoria Transport Policy Institute

# Filtering Debate is hereby resolved!

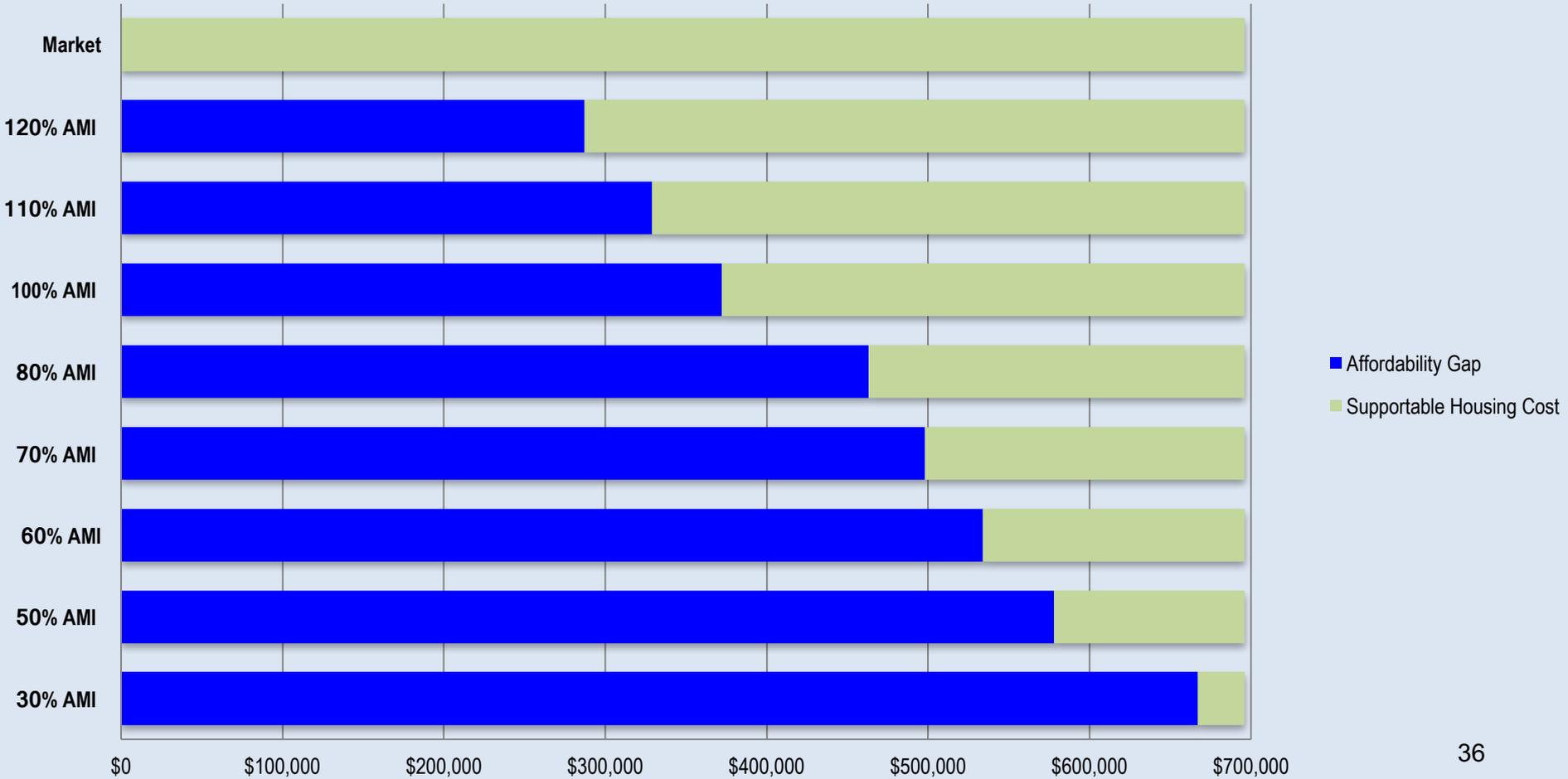
*The answer:  
We need market rate and  
affordable (inclusionary and  
subsidized) housing.*



## Illustrative Condominium Affordability Gap



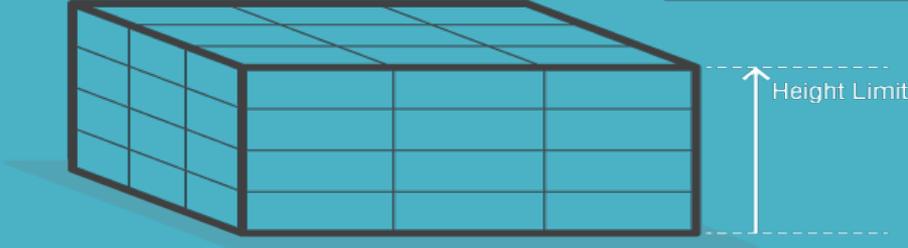
## Illustrative Apartment Affordability Gap



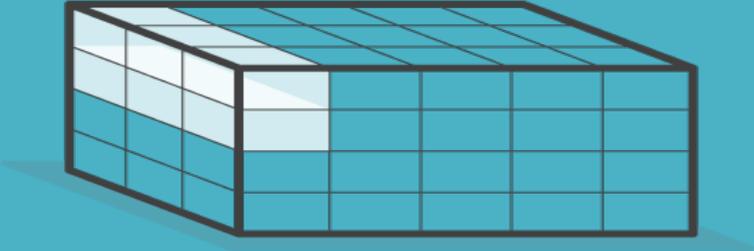
# WHAT IS A DENSITY BONUS?

Building Envelope

**MAX DEVELOPMENT POTENTIAL**

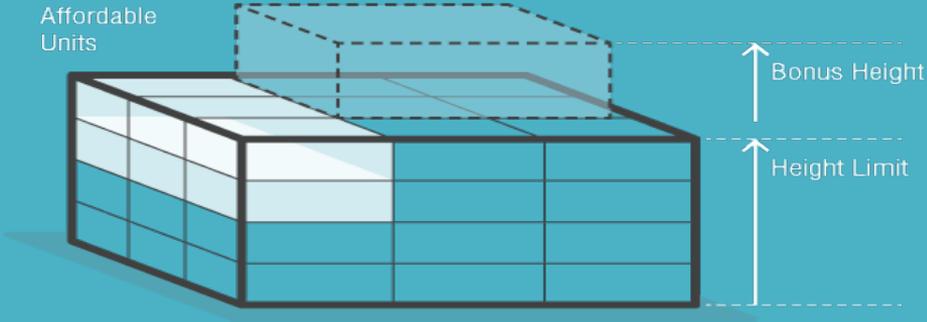


Affordable Units



**DENSITY BONUS - WITHIN ENVELOPE**

Affordable Units



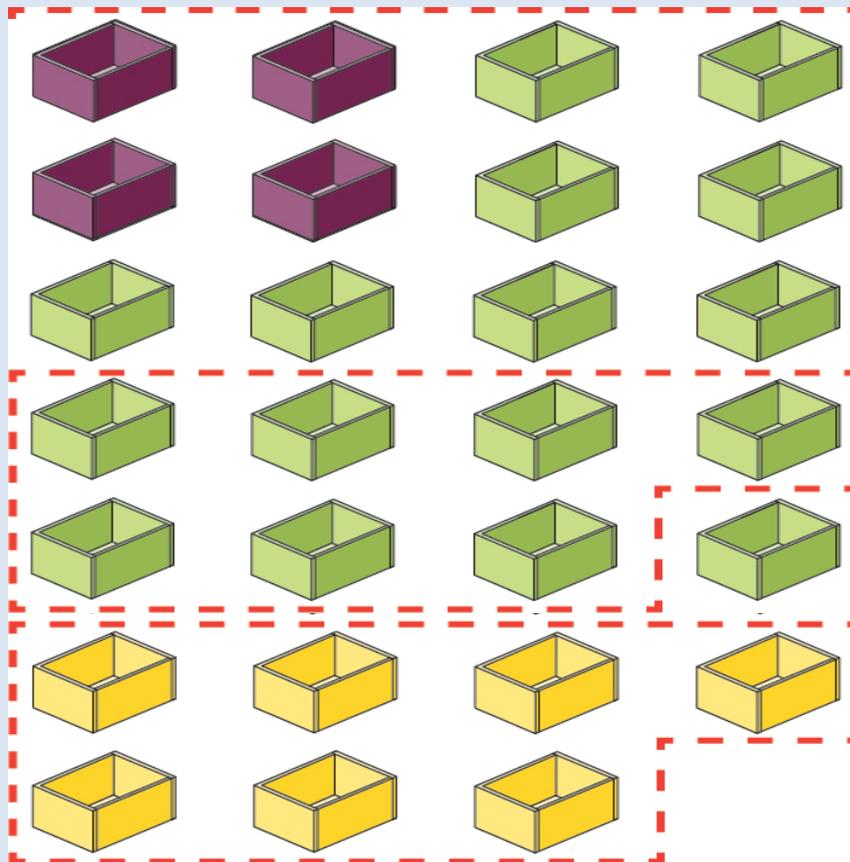
**DENSITY BONUS - HEIGHT**

# Illustrative State Density Bonus Calculation

4 Affordable Units = **20%**  
(for low income households)

% Granted for  
Density Bonus =  
**35%**

Density Bonus Units  
= 7



Total  
Possible  
Units:  
**27**

Source: City of Berkeley, November 13, 2014 Presentation on State Density Bonus



# HOME-SF

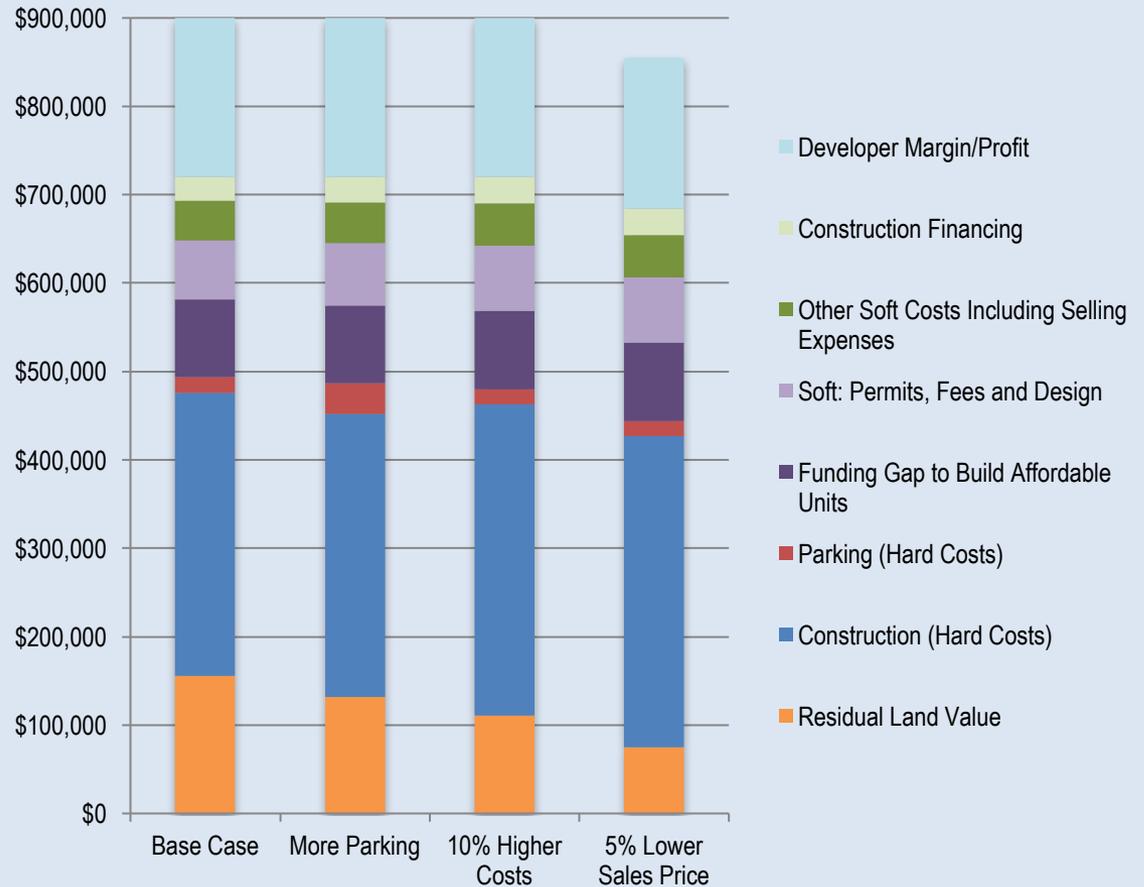
EVERYBODY DESERVES A HOME



# Land Costs – Based on Current Income Generation and Allowable Use



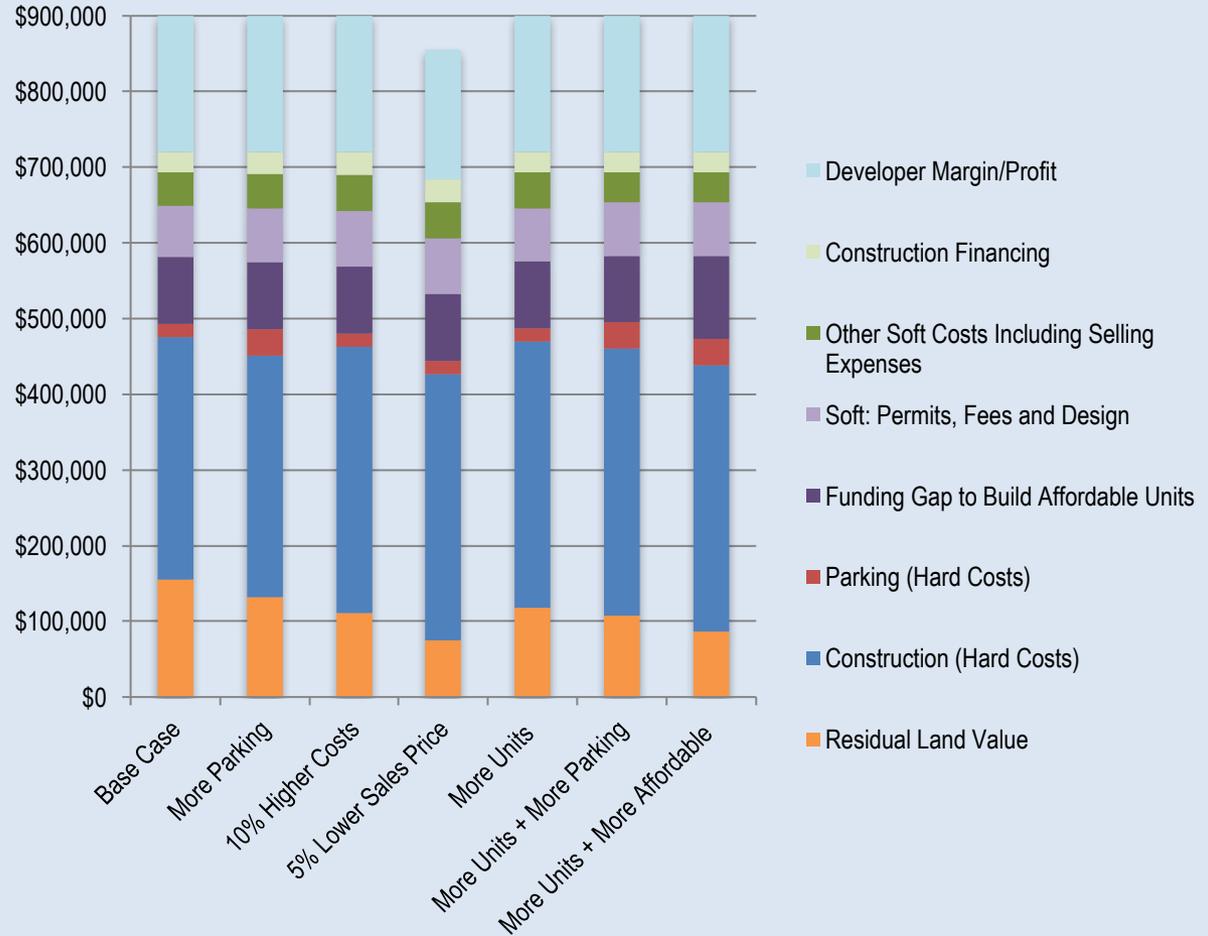
# Residual Land Value (What a Developer Can Pay)



# Density Bonus

## Financial Considerations

- Height?
- Construction type?
- How many more units?
- Less or more parking?
- Will it be faster to process?
- Will design costs decrease?
- Will other costs decrease?
- How much more affordable housing will be required and at what target incomes?

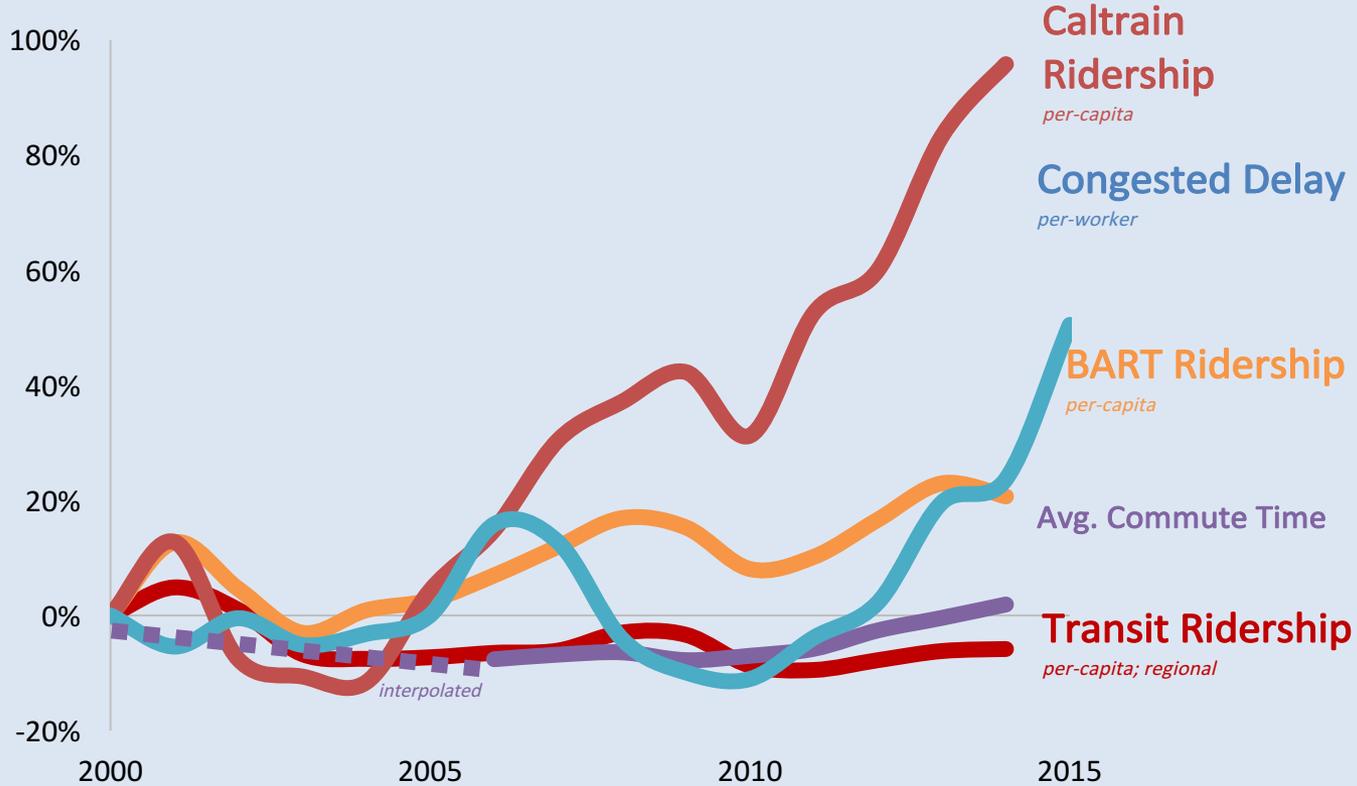


Why do we need to build more densely along transit corridors?



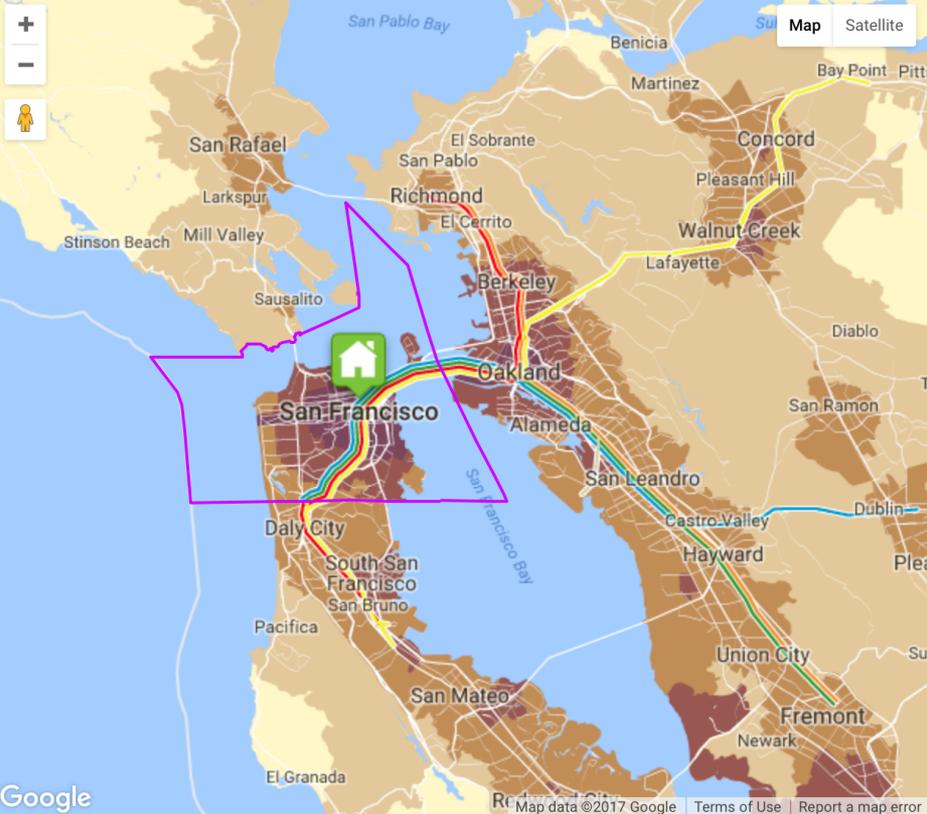
This current boom is translating into new pressures on our transportation system – even worse than the “dot com” boom.

**% CHANGE SINCE 2000**



Source: Vital Signs (MTC 2015; ACS 2014; NTD 2014)

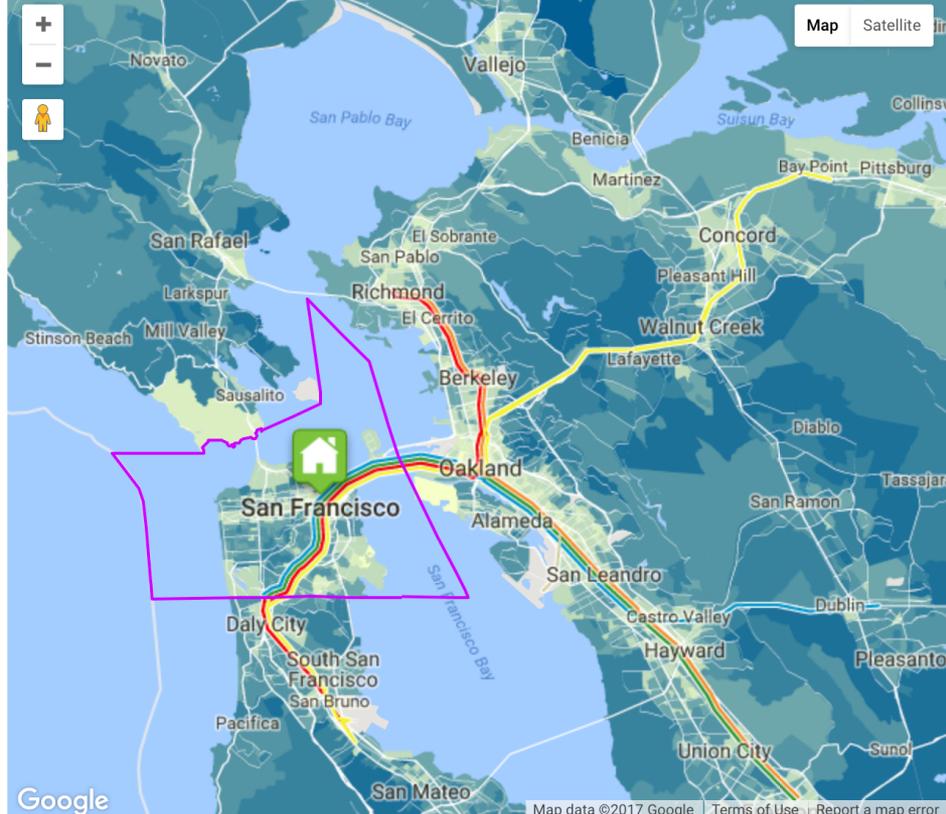
### Employment Access Index



Employment Access Index **176,839 Jobs/mi<sup>2</sup>**



### Housing + Transportation Costs % Income



Housing + Transportation Costs % Income **44%**



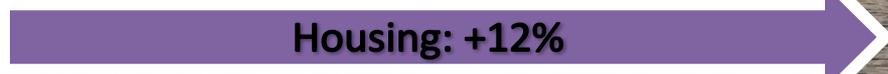
# Plan BayArea 2040

If we really want to address affordability and equity challenges, action is needed by an engaged public and by all levels of government. Only the most aggressive policies will be sufficient to deal with our housing crisis.

Housing +  
Transportation  
Costs  
(as a share of  
income)\*



2005

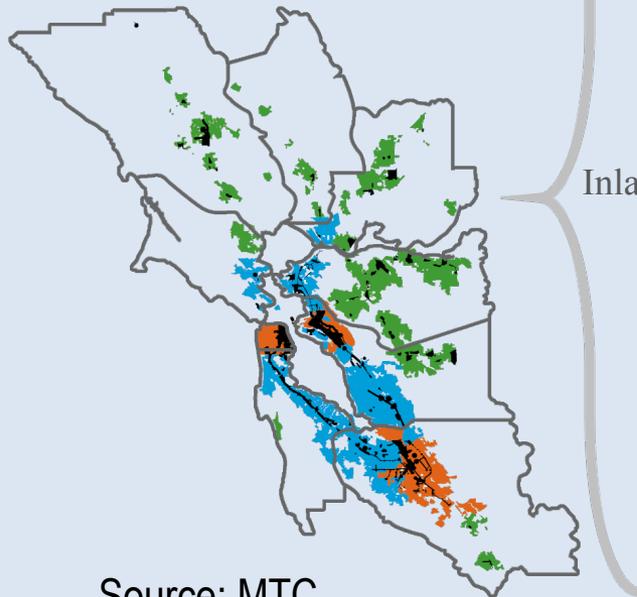


2040

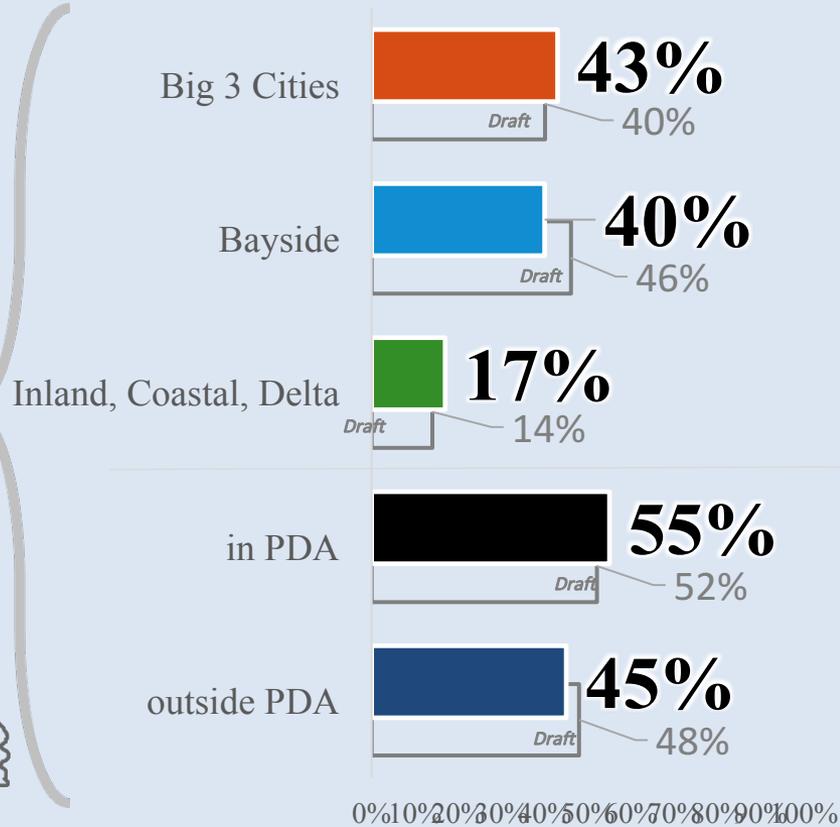
\* = for lower-income households

New strategies included in the Final Preferred Scenario shifted some job growth away from Bayside communities.

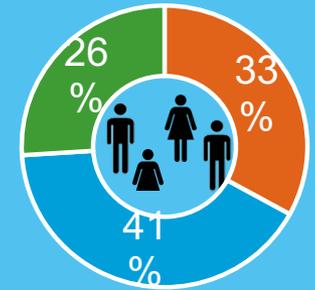
Where will the region plan for the **1.3 million** new jobs?



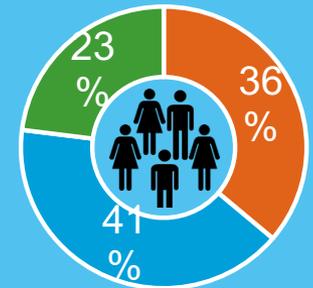
Source: MTC



2010: 3.4 million jobs

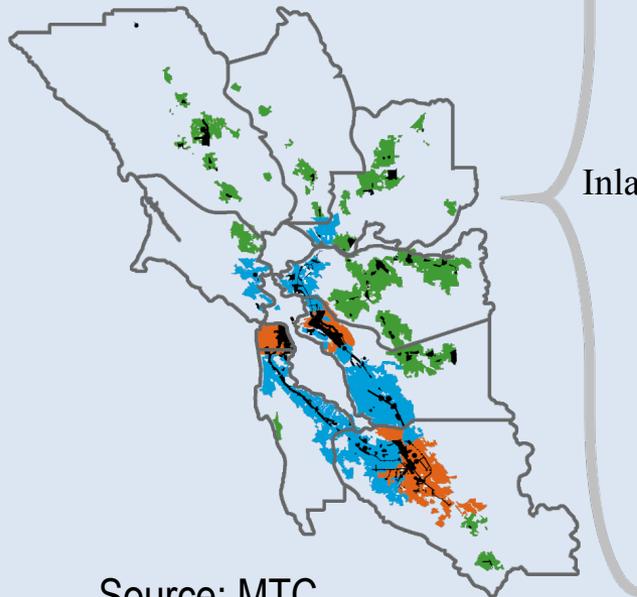


2040: 4.7 million jobs

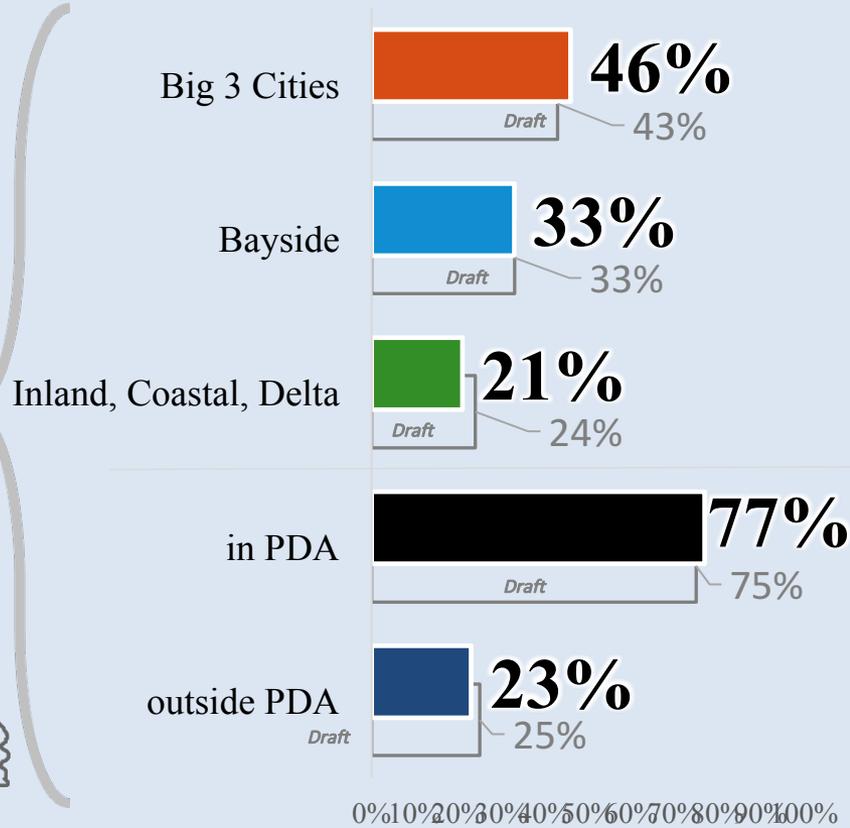


Compared to the Draft Preferred Scenario, the Final Preferred Scenario boosts housing growth in the “Big 3” cities.

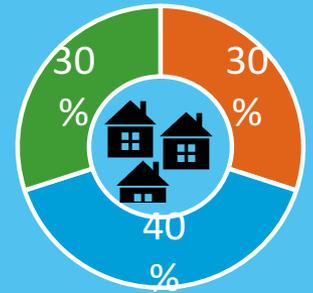
Where will the region plan for the **820,000** new households?



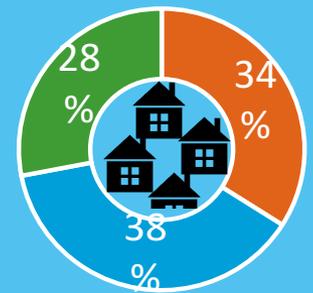
Source: MTC



2010: 2.6 million households

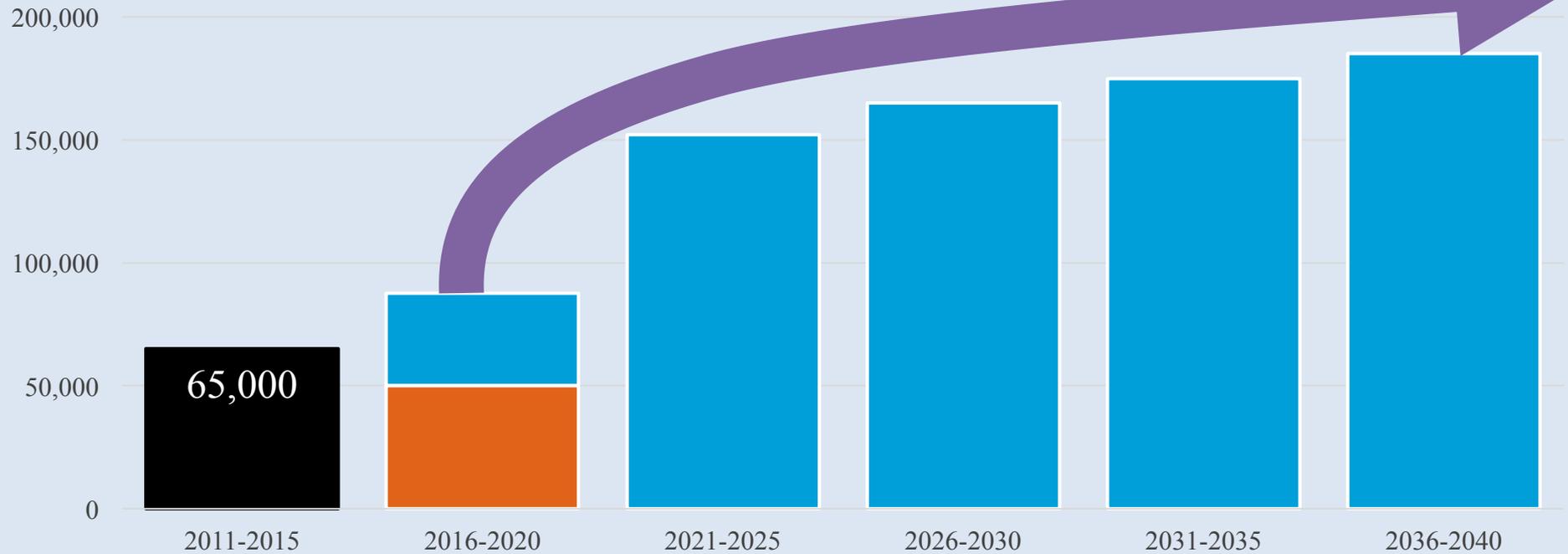


2040: 3.4 million households



Accelerating housing production is critical to achieve this vision.

## Plan Bay Area 2040 – Housing Trends



Source: MTC

■ Actual Production    ■ Under Construction    ■ Forecasted Increment

# Special Thanks to Data Sources

- California Association of Realtors (CAR)
- Center for Neighborhood Technology (CNT)
- City of Berkeley
- City of San Francisco
- Metropolitan Transportation Commission (MTC)
- Victoria Transport Policy Institute



***Traffic congestion  
is caused  
by vehicles,  
not by people  
in themselves.***

***Jane Jacobs***



**Elizabeth (Libby) Seifel**  
Seifel Consulting Inc.  
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# How Many Homes Should We Have?

## SPUR Lunchtime Forum

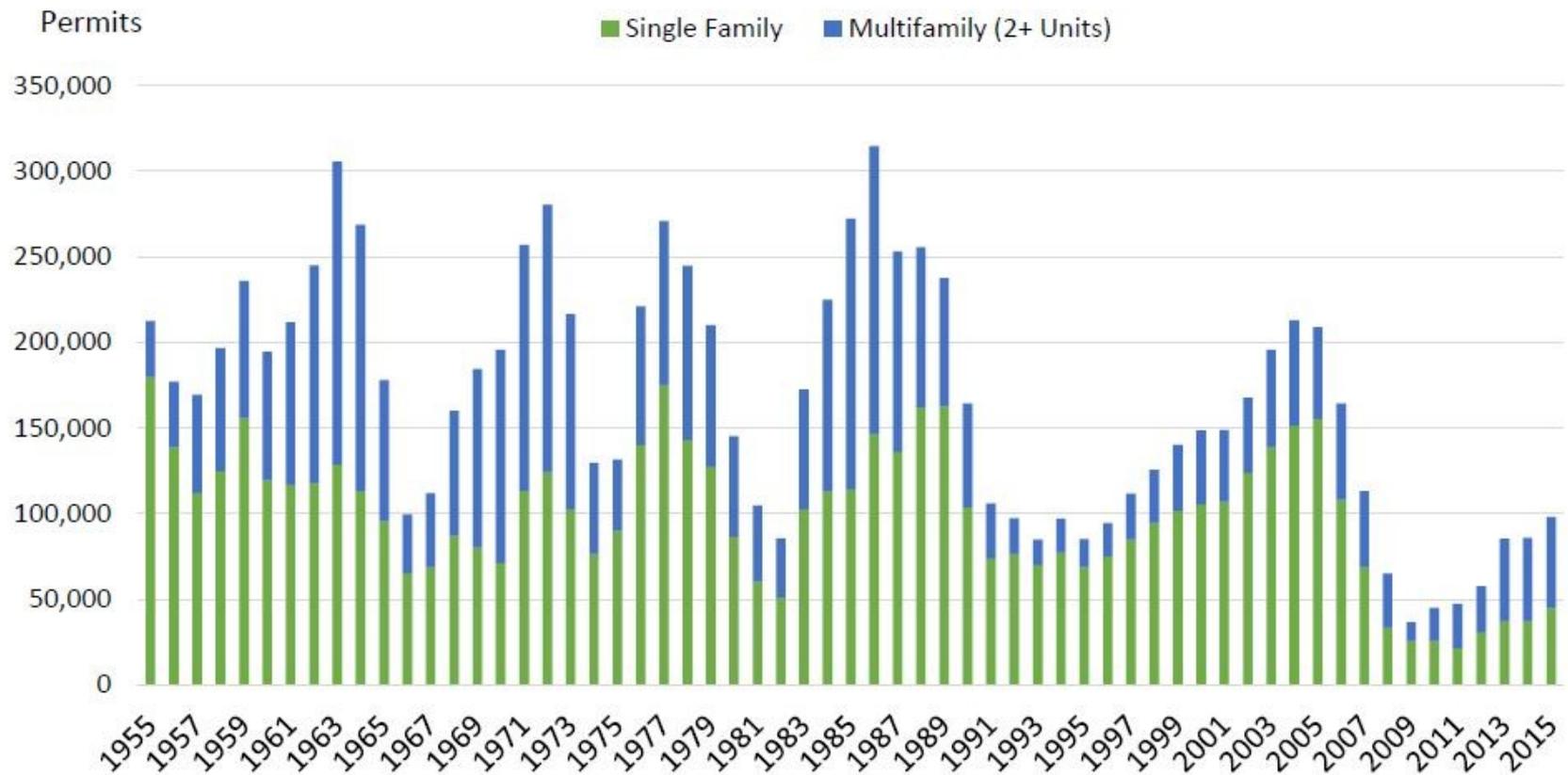


**James Pappas**  
**SF Planning Department**

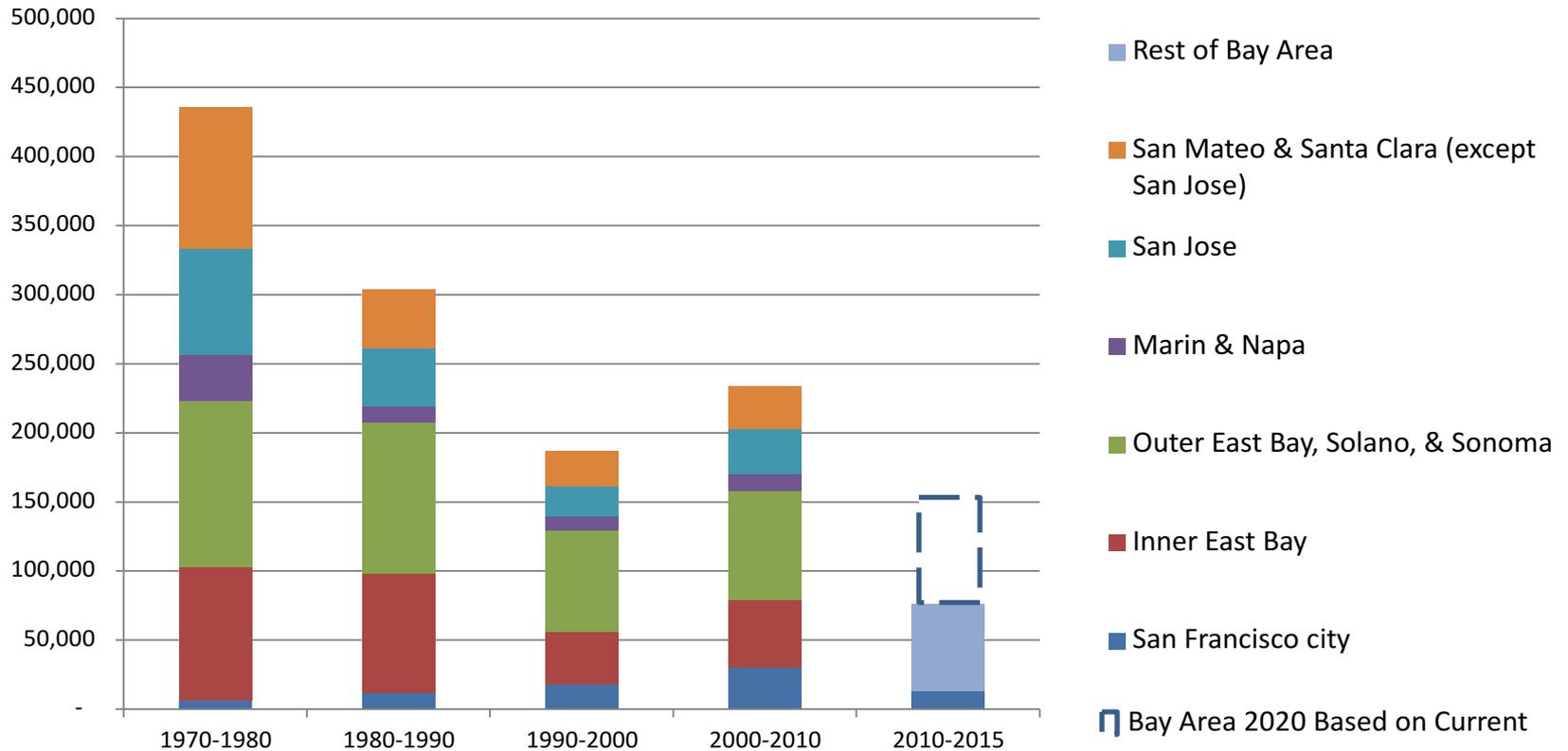
**Tuesday,**  
**June 27th, 2017**

# Statewide housing production has declined since the 1990s

Annual Production of Housing Units 1955-2015



# Housing production has also declined in the Bay Area



Source: SF Planning Analysis of US Census and ACS Data

# Some counties added far more jobs than housing units

Geography	Jobs Added per Housing Unit Added 1980-2015	Jobs Per Housing Unit	
		1980	2015
United States	1.08	1.01	1.03
California	1.31	1.09	1.16
San Mateo County	3.18	1.08	1.40
Marin County	2.06	0.77	0.99
Santa Clara County	1.82	1.43	1.54
San Francisco County	1.64	1.75	1.73
Alameda County	1.60	1.09	1.22
Contra Costa County	0.96	0.78	0.85
Bay Area (9 Counties)	1.55	1.18	1.28

Source: SF Planning Analysis of US Census and Bureau of Labor Statistics Data

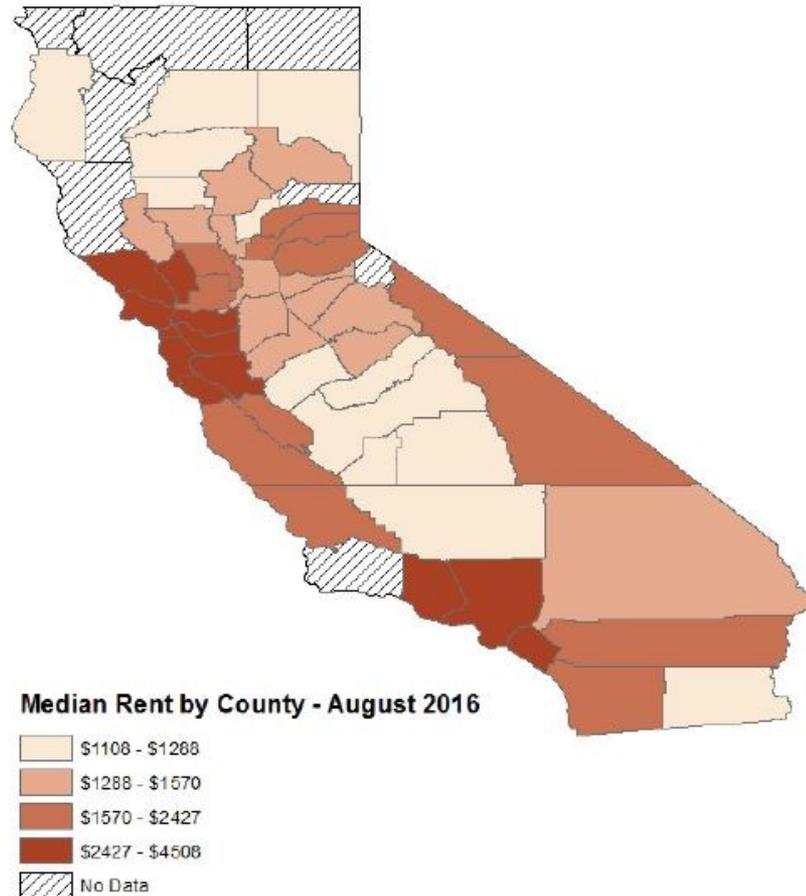
# Average wages have grown drastically in the Bay Area and San Francisco

<b>Change in Inflation Adjusted Average Wages 1980-2015</b>			
<b>Geography</b>	<b>1980</b>	<b>2015</b>	<b>% Change</b>
<b>United States</b>	\$ 41,406	\$ 52,942	<b>28%</b>
<b>California</b>	\$ 44,245	\$ 61,698	<b>39%</b>
<b>Santa Clara County</b>	\$ 48,514	\$ 113,390	<b>134%</b>
<b>San Mateo County</b>	\$ 49,689	\$ 102,776	<b>107%</b>
<b>San Francisco County</b>	\$ 50,273	\$ 97,067	<b>93%</b>
<b>Marin County</b>	\$ 40,006	\$ 64,906	<b>62%</b>
<b>Alameda County</b>	\$ 47,304	\$ 68,791	<b>45%</b>
<b>Contra Costa County</b>	\$ 44,150	\$ 63,792	<b>44%</b>
<b>Bay Area (9 Counties)</b>	\$ 47,518	\$ 87,368	<b>84%</b>

Source: SF Planning Analysis of US Bureau of Labor Statistics Data

# Job, wage, and population growth without sufficient housing means high rents

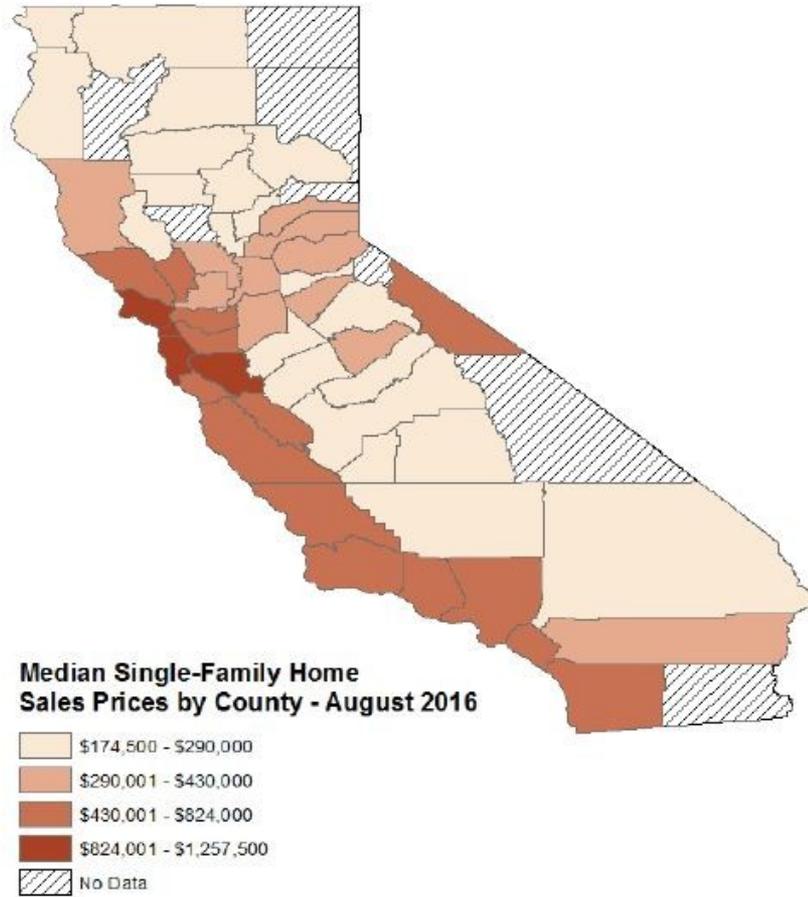
Median Rent by County, August 2016



Source: Zillow Median Rent Index (All Homes; Multifamily, Single Family Rental, Condo) by County. August 2016. Graphic by HCD. For more information on Zillow Median Rent Index methodology visit <http://www.zillow.com/research/zillow-rent-index-methodology-2393/>

# And high sale prices

Median Home Sale Prices by County, August 2016

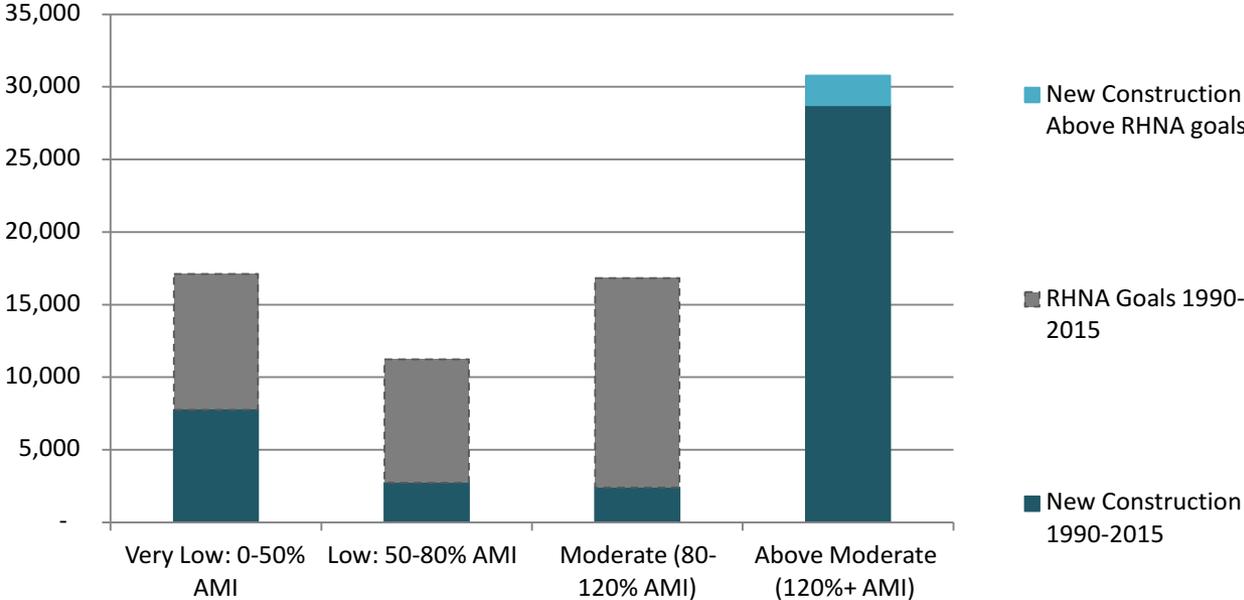


Source: California Association of Realtors, Historical Housing Data, Median Prices of Existing Detached Homes August 2016.

# RHNA goals based on estimated growth, but actual household growth can be different.

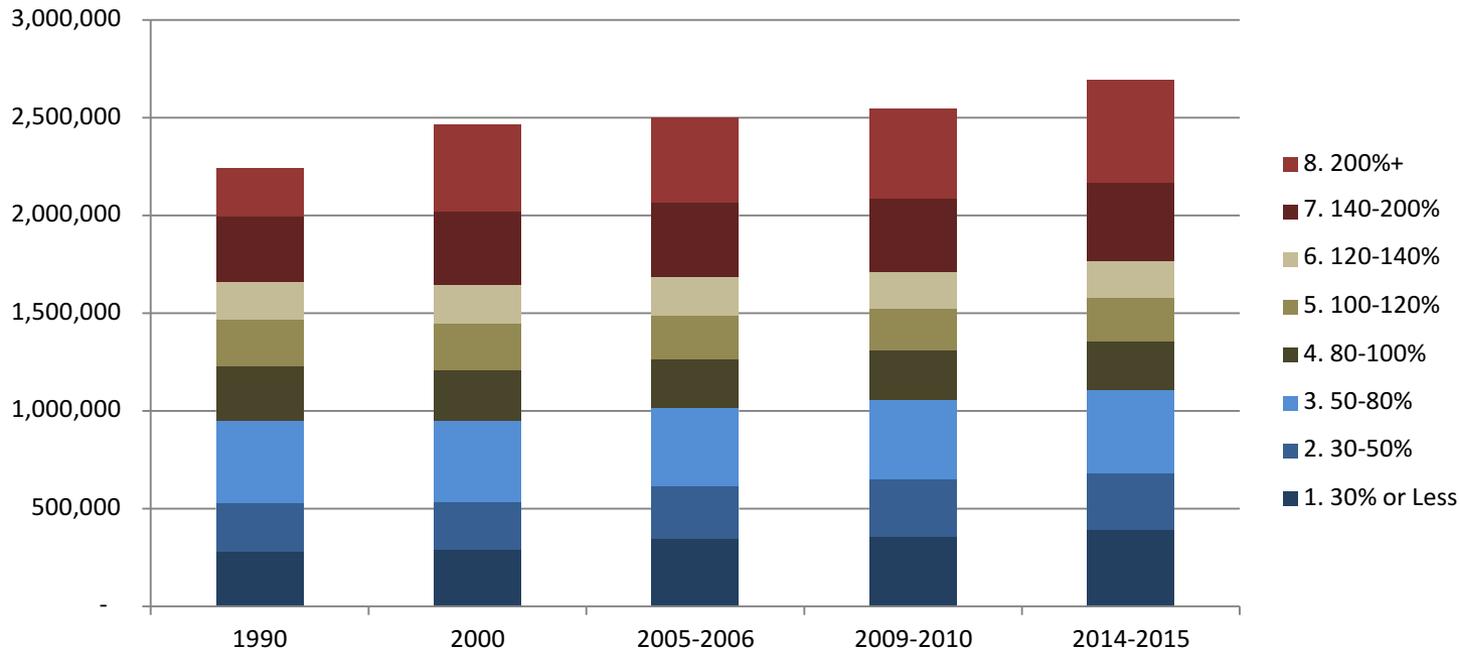
San Francisco appears to have met above moderate need in recent cycles- and a substantial portion of very low income need as well.

**RHNA Goals and New Construction 1990-2015**



Source: SF Planning Analysis of RHNA goals by period and housing construction data from Housing Inventory Reports

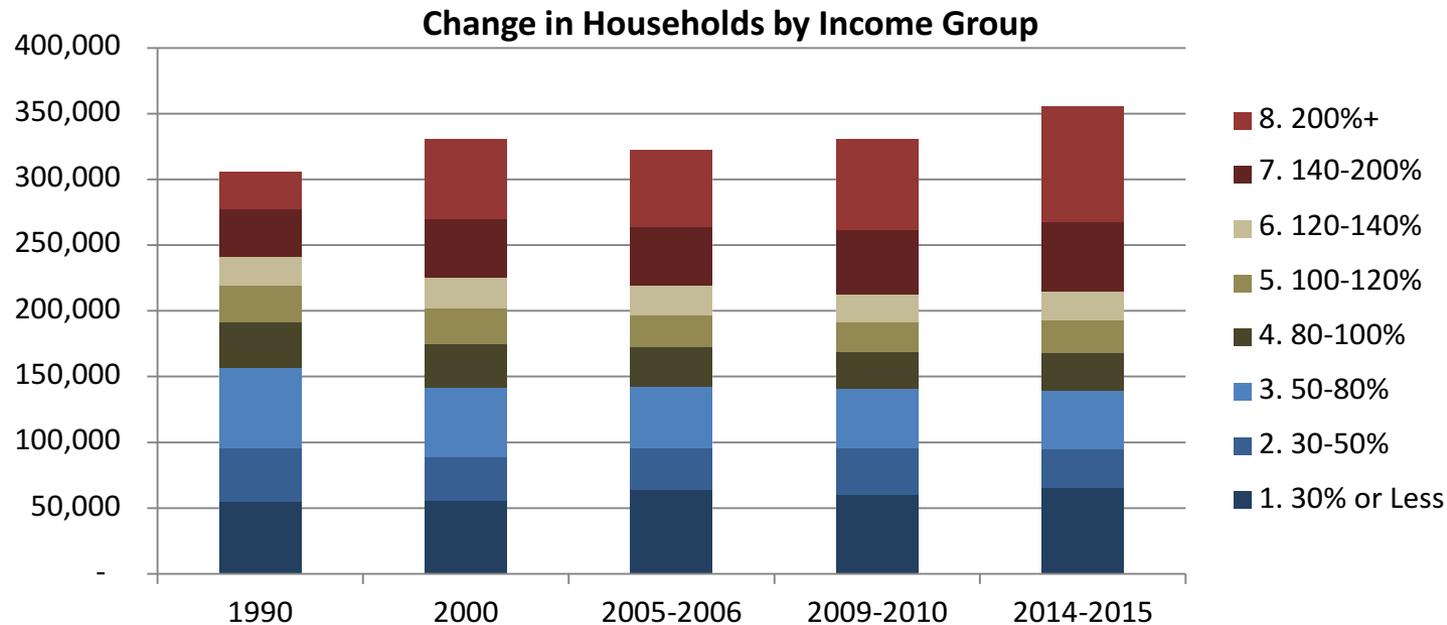
# The region added about 450K households since 1990- 340K (75%) were higher income



Source: SF Planning Analysis of IPUMS USA Data courtesy of IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org).

- Very low Income HHs, especially HHs earning 30% of AMI or less, increased
- Moderate and middle income HHs (80-140% of AMI) declined regionally
- The % of higher income HH growth exceeded the % of HH growth overall in SF and San Mateo

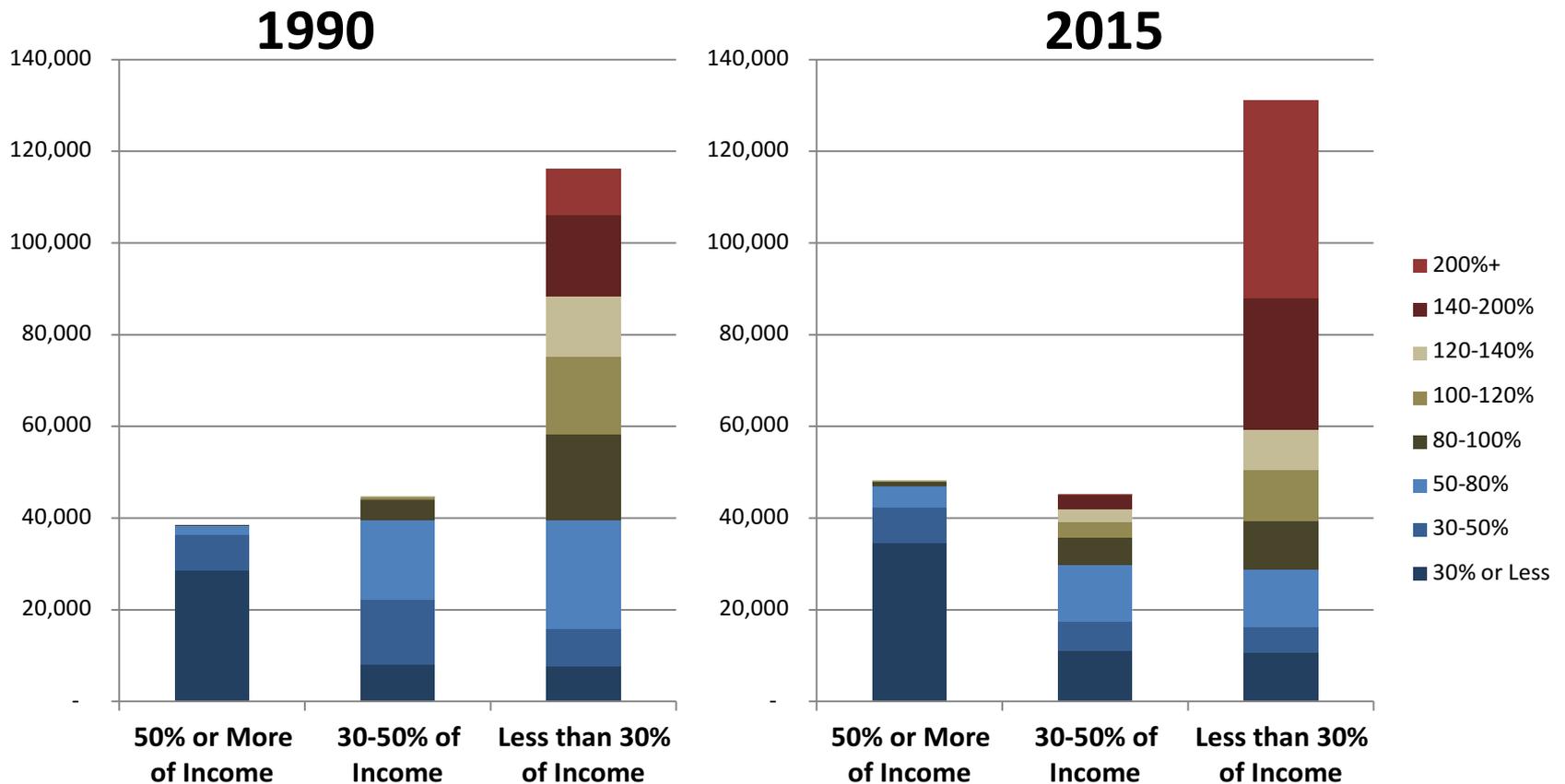
# From 1990-2015, SF gained 76K higher inc HHs but lost 26,500 Low & Middle inc HHs



Source: SF Planning Analysis of IPUMS USA Data courtesy of IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org).

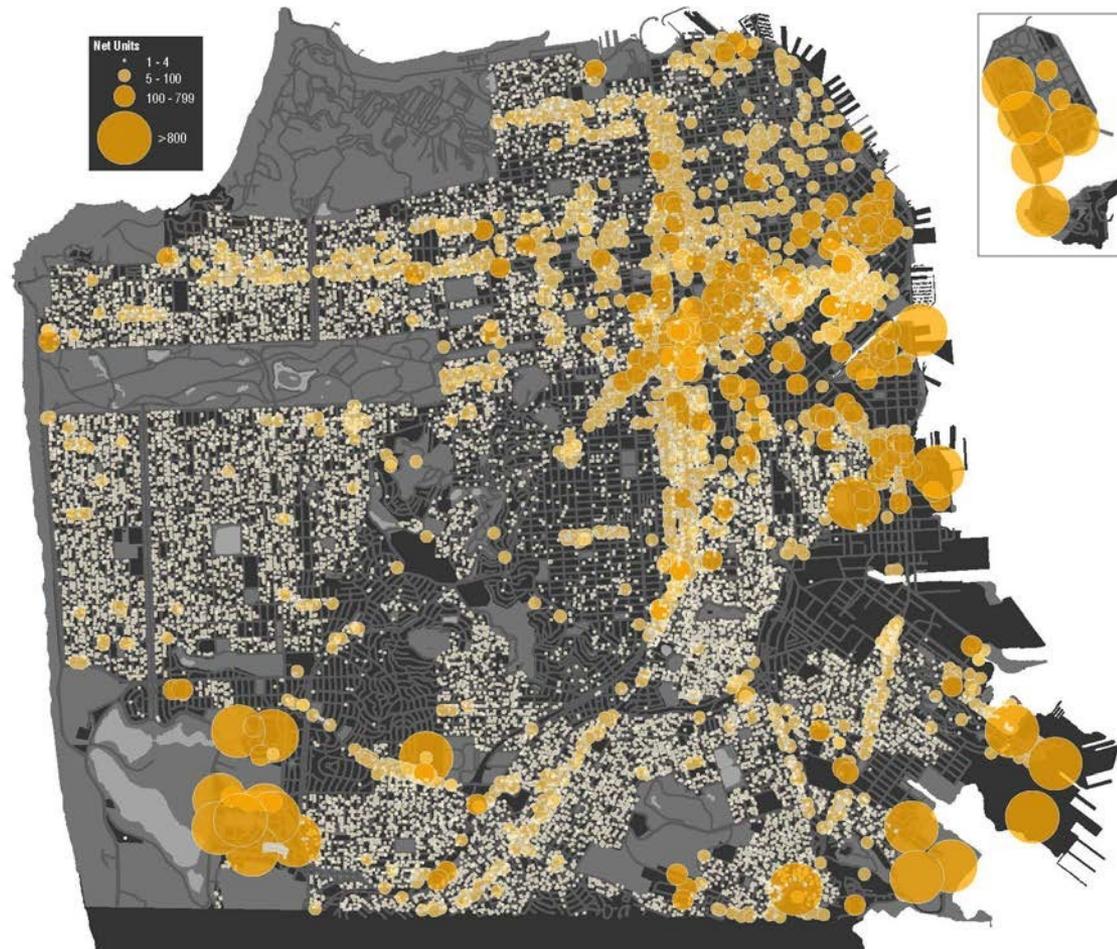
- Higher income household growth greatly exceed RHNA estimates and exceeded “above moderate” unit production
- More high income households housed in existing housing stock
- Low and middle income households declined with greatest loss from 30-80% of AMI

# The number of cost burdened households worsened over the last 25 years



Source: SF Planning Analysis of IPUMS USA Data courtesy of IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org).

# Housing Capacity: Under Existing Zoning and Plans Underway



**Approx.  
140,000 units  
(of which >100,000  
added since 1985)**

**=325,000 residents  
(@ 2.3 per  
household)**

**=185,000 workers  
(@ 1.3 per  
household)**

# Can we develop goals that:

- Help us respond to actual economic growth and increases in higher income households
- Address existing needs and deficits for low income households
- Identify the resources needed to achieve the housing affordability outcomes we want