

# Meeting Agenda

## Regional Advisory Working Group

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Tuesday, October 8, 2019

9:30 AM

Yerba Buena - 1st Floor

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This meeting is scheduled to be webcast live on the Metropolitan Transportation Commission's Website: <http://mtc.ca.gov/whats-happening/meetings>

This meeting can also be accessed via Zoom Meeting:

Launch Link: <https://zoom.us/j/753969525>

Dial-in Number: 720-707-2699

Meeting ID: 753 969 525

### 9:30 a.m.

1. [19-0965](#) Welcome, Introductions

**Presenter:** Matt Maloney

### 9:35 a.m.

2. [19-0967](#) Horizon: Futures Final Report

Presentation on findings from the second and final round of Futures Planning, including recommendations of Horizon strategies resilient to future uncertainty which should be advanced into Plan Bay Area 2050.

**Action:** Information

**Presenter:** Michael Germeraad

**Attachments:** [02i\\_Horizon\\_Futures Round 2- Futures Final Report.pdf](#)

[02ii\\_HANDOUT\\_FuturesItem\\_RAWG\\_Only\\_Scorecard.pdf](#)

**10:20 a.m.**

**3.     [19-0888](#)     Transit Update: Rail Synthesis and Crossings**

Highlights of the progress on regional rail over the past decade, including identification of potential next steps to improve the region's transit system and discussion of tradeoffs associated with a new Transbay Crossing.

**Action:**             Information

**Presenter:**       Adam Noelting and Anup Tapase

**Attachments:**     [03 Regional Rail Planning Update.pdf](#)

**10:50 a.m.**

**4.     [19-1023](#)     Vital Signs: Economy Update**

Summary of findings from recent updates to Vital Signs economy indicators.

**Action:**             Information

**Presenter:**       Raleigh McCoy

**Attachments:**     [04 Vital Signs Economy Update Oct 2019.pdf](#)

**11:10 a.m.**

**5. Next Steps / Other Business / Public Comments**

**11:15 a.m.**

**6. Adjournment / Next Meeting**

**A next meeting of the Regional Advisory Working Group will be Tuesday, November 5, 2019 at 9:30 a.m. at the Bay Area Metro Center, 375 Beale Street, San Francisco, CA.**

**Public Comment:** The public is encouraged to comment on agenda items at Committee meetings by completing a request-to-speak card (available from staff) and passing it to the Committee secretary. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

**Meeting Conduct:** If this meeting is willfully interrupted or disrupted by one or more persons rendering orderly conduct of the meeting unfeasible, the Chair may order the removal of individuals who are willfully disrupting the meeting. Such individuals may be arrested. If order cannot be restored by such removal, the members of the Committee may direct that the meeting room be cleared (except for representatives of the press or other news media not participating in the disturbance), and the session may continue.

**Record of Meeting:** Committee meetings are recorded. Copies of recordings are available at a nominal charge, or recordings may be listened to at MTC offices by appointment. Audiocasts are maintained on MTC's Web site ([mtc.ca.gov](http://mtc.ca.gov)) for public review for at least one year.

**Accessibility and Title VI:** MTC provides services/accommodations upon request to persons with disabilities and individuals who are limited-English proficient who wish to address Commission matters. For accommodations or translations assistance, please call 415.778.6757 or 415.778.6769 for TDD/TTY. We require three working days' notice to accommodate your request.

**可及性和法令第六章:** MTC 根據要求向希望來委員會討論有關事宜的殘疾人士及英語有限者提供服務/方便。需要便利設施或翻譯協助者, 請致電 415.778.6757 或 415.778.6769 TDD / TTY。我們要求您在三個工作日前告知, 以滿足您的要求。

**Acceso y el Titulo VI:** La MTC puede proveer asistencia/facilitar la comunicación a las personas discapacitadas y los individuos con conocimiento limitado del inglés quienes quieran dirigirse a la Comisión. Para solicitar asistencia, por favor llame al número 415.778.6757 o al 415.778.6769 para TDD/TTY. Requerimos que solicite asistencia con tres días hábiles de anticipación para poderle proveer asistencia.

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Attachments are sent to Committee members, key staff and others as appropriate. Copies will be available at the meeting.

All items on the agenda are subject to action and/or change by the Committee. Actions recommended by staff are subject to change by the Committee.

# Metropolitan Transportation Commission

## Legislation Details (With Text)

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**File #:** 19-0965      **Version:** 1      **Name:**

**Type:** Report      **Status:** Informational

**File created:** 8/22/2019      **In control:** Regional Advisory Working Group

**On agenda:** 10/8/2019      **Final action:**

**Title:** Welcome, Introductions

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:**

Date	Ver.	Action By	Action	Result
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**Subject:**  
Welcome, Introductions

**Presenter:**  
Matt Maloney



# Metropolitan Transportation Commission

## Legislation Details (With Text)

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<b>File #:</b>	19-0967	<b>Version:</b>	1	<b>Name:</b>	
<b>Type:</b>	Report	<b>Status:</b>		Informational	
<b>File created:</b>	8/22/2019	<b>In control:</b>		Regional Advisory Working Group	
<b>On agenda:</b>	10/8/2019	<b>Final action:</b>			
<b>Title:</b>	Horizon: Futures Final Report				

Presentation on findings from the second and final round of Futures Planning, including recommendations of Horizon strategies resilient to future uncertainty which should be advanced into Plan Bay Area 2050.

**Sponsors:****Indexes:****Code sections:**

**Attachments:** [02i\\_Horizon\\_Futures\\_Round\\_2- Futures Final Report.pdf](#)  
[02ii\\_HANDOUT\\_FuturesItem\\_RAWG\\_Only\\_Scorecard.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**

Horizon: Futures Final Report

Presentation on findings from the second and final round of Futures Planning, including recommendations of Horizon strategies resilient to future uncertainty which should be advanced into Plan Bay Area 2050.

**Presenter:**

Michael Germeraad

**Recommended Action:**

Information

**Attachments:**

**Metropolitan Transportation Commission and the Association of Bay Area Governments  
Regional Advisory Working Group**

**October 8, 2019**

**Agenda Item 2**

**Horizon: Futures Final Report**

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- Subject:** Presentation on findings from the second and final round of Futures Planning, including recommendations of Horizon strategies resilient to future uncertainty which should be advanced into Plan Bay Area 2050.
- Background:** Regional Advisory Working Group Agenda Item 2, Horizon: Futures Final Report, is attached. Staff will seek input on Horizon: Futures Final Report at the October 12, 2019 Joint MTC Planning Committee with the ABAG Administrative Committee.
- Staff will be at your October 8 meeting to discuss this report. The Working Group's input is requested.
- Attachments:** Agenda Item 5a from the October 2019 Joint MTC Planning Committee with the ABAG Administrative Committee

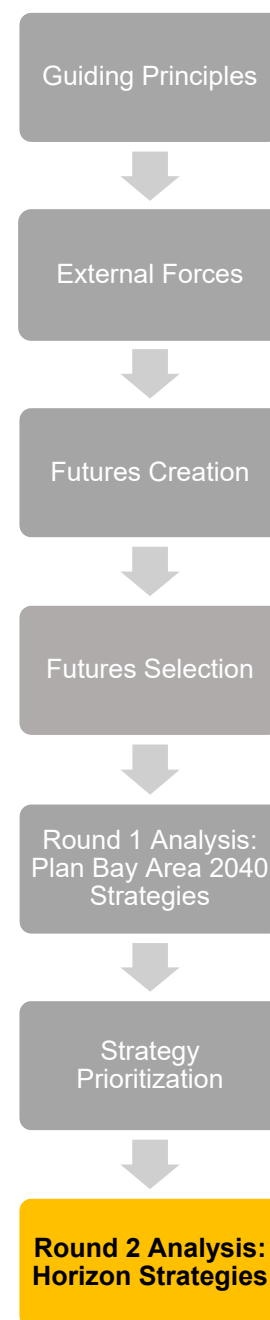
# Metropolitan Transportation Commission and the Association of Bay Area Governments Joint MTC Planning Committee with the ABAG Administrative Committee

October 11, 2019

Agenda Item 5a

## Horizon: Futures Final Report

<b>Subject:</b>	Presentation on findings from the second and final round of Futures Planning, including recommendations of Horizon strategies resilient to future uncertainty which should be advanced into Plan Bay Area 2050.
<b>Background:</b>	<p>In early 2018, MTC/ABAG launched the Horizon initiative, focused on preparing the Bay Area for an uncertain future. Through four main work elements – Public Engagement, Perspective Papers, Project Performance, and Futures Planning – Horizon sought to identify transformative solutions to make the Bay Area more resilient and equitable in the coming decades. Each element was crafted to help build a stronger foundation for the next-generation regional plan, Plan Bay Area 2050.</p> <p>Over the past 18 months, the Futures Planning process has advanced from identifying Futures to testing strategies to study in each of the them. Along the way, staff explored how Plan Bay Area 2040 strategies performed under a wide range of divergent external forces. In short, many of the prior Plan’s strategies struggled to perform when exposed to a greater variety of political, technological, economic and environmental challenges that could impact the lives of Bay Area residents. These were discussed in detail in the <a href="#">Futures Interim Report – Opportunities and Challenges</a> (published March 2019).</p> <p>Most recently, staff held public workshops and stakeholder meetings in spring 2019 to identify a set of roughly 30 strategies to study in the second round of Futures Planning. These strategies were designed to be both resilient and equitable, targeting the specific challenges laid out in the Futures Interim Report. Over summer 2019, staff have been conducting extensive quantitative and qualitative analysis of the strategies, simulating their impacts to provide an informed recommendation about which should be considered for inclusion in Plan Bay Area 2050.</p>
<b>Issues:</b>	<p>In advance of the Futures Final Report publication later this month, staff is providing a summary of preliminary findings from the Futures Round 2 analysis. These findings are high-level, focusing on the “top 10” key takeaways from our work so far; the report will delve into the specifics in greater detail, serving as an initial staff recommendation for the Draft Blueprint phase of Plan Bay Area 2050.</p>



**Figure 1:** Primary steps of the Futures element of *Horizon*.

As detailed in **Attachment A**, our work to date has generated ten high-level findings based on the strategies studied in Futures Round 2:

1. New growth areas enable more growth near transit and near opportunity.
2. A mix of strategies to retain and expand affordable housing made progress in addressing the current affordable housing gap.
3. Shifts in transportation mode choice were most pronounced for active transportation, driven in part by micromobility strategies.
4. While still present, transit overcrowding was partially alleviated, with new bus rapid transit (BRT) lines as well as a new Transbay Rail Crossing playing a key role.
5. Road pricing reduced roadway congestion, but equity concerns need to be addressed before advancing this strategy further.
6. Economic development strategies evaluated were insufficient to slow the decline of the middle class.
7. Adaptation and retrofit strategies boosted our region's resilience.
8. Urban growth boundaries led to minimal greenfield development in both Round 1 and Round 2.
9. A VMT-based fee on office development was effective in focusing office growth, but not in shifting jobs to the East and North Bay.
10. A large tax package focused on higher-income individuals and businesses, contemplated to underwrite the cost of strategy projects and subsidies, did not have significant adverse impacts on the economy.

In addition to high-level findings, the final report will provide a breakdown of findings for each individual strategy, focusing on its resilience to a range of uncertain future conditions as well as its implications for social equity.

The Futures Planning work – in particular, the Futures Final Report – will serve as a helpful foundation for staff, committees, and board members as key Plan Bay Area 2050 decisions must be made over the coming months. Through the Blueprint planning process, the subset of Horizon strategies that proved resilient and equitable under a wide range of future conditions can be refined, improved on, and when needed, supplemented.

Starting this month, staff will hold “pop-up” workshops across the region, highlighting the most effective strategies from the Futures Final Report; this will allow us to better understand which strategies resonate with the public. Staff will also host Plan Bay Area 2050 Blueprint half-day stakeholder workshops focused on the four topical areas of the plan: Transportation, Housing, the Environment, and the Economy. Feedback at these events will inform refinements to the strategies to study in the Blueprint phase.

**Recommendation:** None

**Attachments:** Attachment A: PowerPoint Presentation

  
Therese W. McMillan



H O R I Z O N



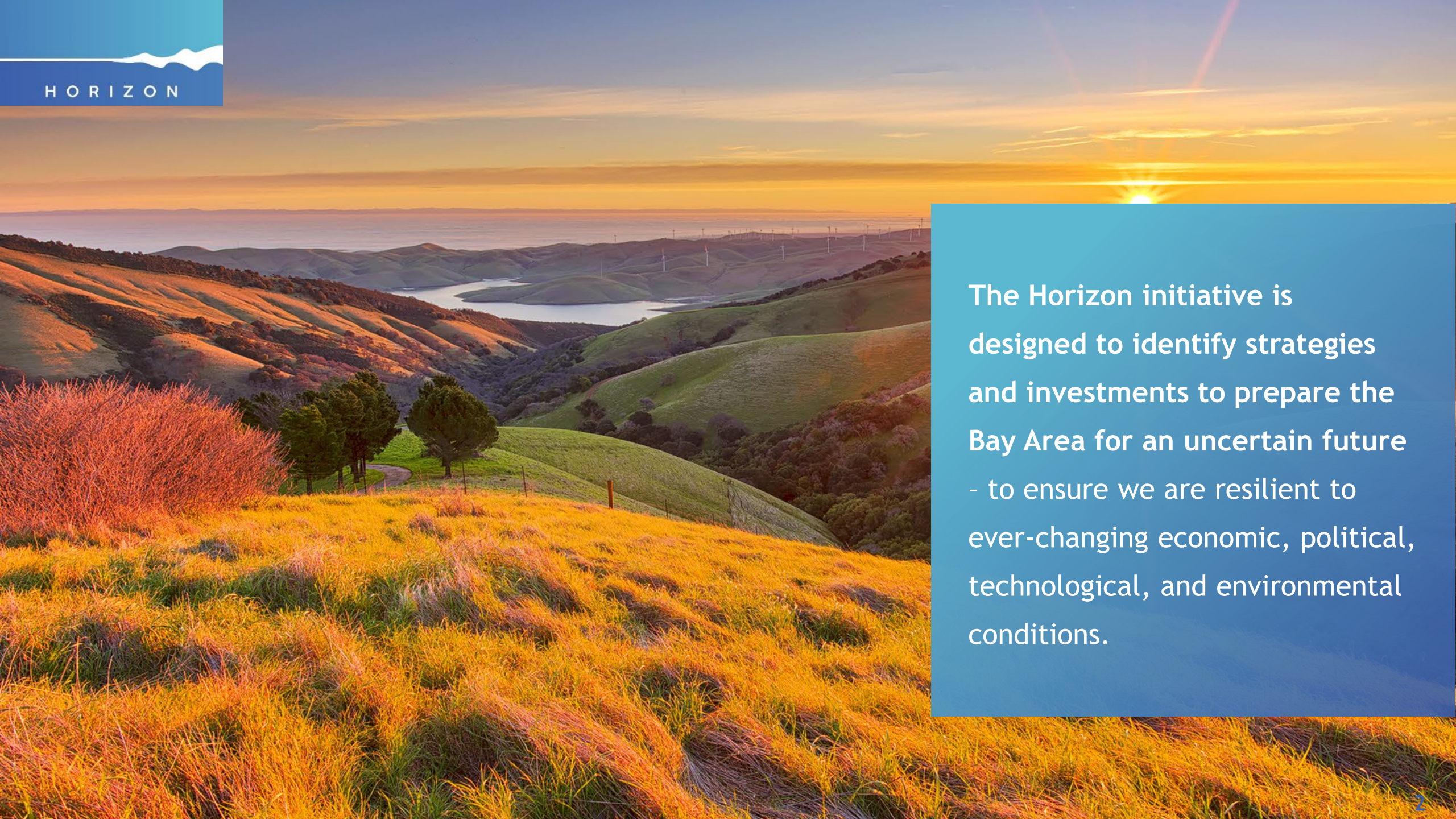
# Futures Final Report

Preliminary Findings on Horizon Strategies  
in Advance of Plan Bay Area 2050

MTC Planning Committee with the ABAG Administrative Committee

October 11, 2019 - Michael Germeraad



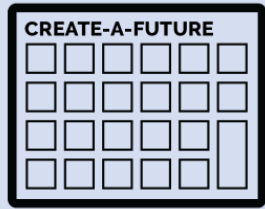
The background is a wide-angle landscape photograph taken during the "golden hour" of sunset or sunrise. The sky is a gradient of orange, yellow, and light blue, with the sun visible as a bright orb on the horizon. The foreground is a grassy hillside with tall, dry, golden-brown grass. In the middle ground, there are rolling green hills, a small body of water (likely a reservoir or lake) nestled in a valley, and several wind turbines visible on the distant hills. The overall mood is serene and expansive.

The Horizon initiative is designed to identify strategies and investments to prepare the Bay Area for an uncertain future - to ensure we are resilient to ever-changing economic, political, technological, and environmental conditions.



# Futures Process

## OUTREACH



## ROUND 1 ANALYSIS

*Current Strategies*



## REPORT



## OUTREACH



## ROUND 2 ANALYSIS

*New Strategies*



## REPORT



# Three Futures - “What If?” Scenarios

A



Rising Tides,  
Falling  
Fortunes

**What if...** the federal government cuts spending and reduces regulations, leaving more policy decisions to states and regions?

B



Clean  
and Green

**What if...** new technologies and a national carbon tax enabled greater telecommuting and distributed job centers?







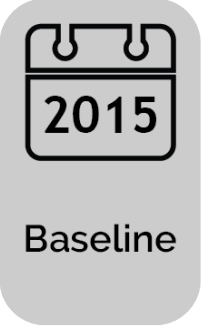


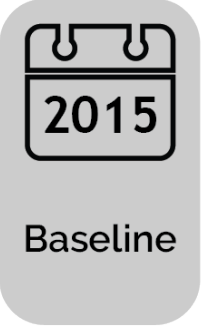


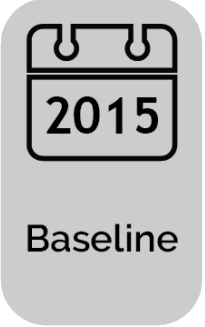


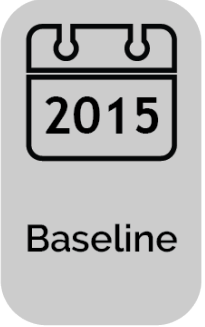


C






Back to  
the Future

**What if...** an economic boom and new transportation options spur a new wave of development?



	<b>Round 1 Analysis</b> <i>Comparing the three Futures, how does Plan Bay Area 2040 fare in an era of uncertainty?</i>	<b>Round 2 Analysis</b> <i>Comparing against Round 1 results, how do new strategies improve each Future?</i>
<b>Rising Tides, Falling Fortunes</b> <i>(RTFF)</i>	   Baseline + External Forces (RTFF) + Strategies (PBA 2040)	   Baseline + External Forces (RTFF) + Strategies (Horizon <sub>\$</sub> )
<b>Clean and Green</b> <i>(CAG)</i>	   Baseline + External Forces (CAG) + Strategies (PBA 2040)	   Baseline + External Forces (CAG) + Strategies (Horizon <sub>\$\$</sub> )
<b>Back to the Future</b> <i>(BTTF)</i>	   Baseline + External Forces (BTTF) + Strategies (PBA 2040)	   Baseline + External Forces (BTTF) + Strategies (Horizon <sub>\$\$</sub> )

# Refresher: External Forces for Each Future

FUTURE NAME	IMMIGRATION AND TRADE	NATIONAL TAXES AND FUNDING	NATIONAL GROWTH	LAND USE PREFERENCES	NATIONAL ENVIRONMENTAL POLICY	NEW TECHNOLOGIES	NATURAL DISASTERS
 <b>Rising Tides, Falling Fortunes</b>	<b>Reduced</b>	<b>Lower funding</b> due to tax cuts	<b>Limited</b>	Housing: more <b>urban</b>	<b>Relaxed regulations</b> (3' SLR)	More <b>limited</b>	Magnitude 7.0 Hayward Fault earthquake
				Similar to today			
 <b>Clean and Green</b>	Similar to today	<b>Higher funding</b> via carbon tax	Similar to today	Housing: more <b>urban</b>	<b>Stricter regulations</b> (1' SLR)	<b>Widespread</b>	Magnitude 7.0 Hayward Fault earthquake
				Jobs: more <b>dispersed</b>			
 <b>Back to the Future</b>	<b>Increased</b>	Similar to today	<b>Rapid</b>	Housing: more <b>dispersed</b>	Similar to today (2' SLR)	<b>Widespread</b>	Magnitude 7.0 Hayward Fault earthquake
				Jobs: more <b>urban</b>			



# Refresher: How Did We Integrate the Megaregion?



Rising  
Tides,  
Falling  
Fortunes

*Status quo* Future - interregional travel **continues to grow at current rate**, including in-commuting



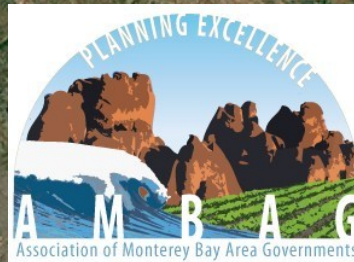
Clean  
and Green

Federal policy **minimizes further growth in interregional travel**, with new taxes making it much less affordable for mega-commuters



Back to  
the Future

Low cost of driving allows the megaregion to blossom - with **much more rapid interregional growth than today** overwhelming existing regional gateways



# Refresher: 35 Strategies Analyzed

*Strategies were designed to support these nine priority areas, based on the Futures Interim Report findings. While new revenues were assumed in all Futures, fiscal constraint did mean that some strategies were omitted from Rising Tides, Falling Fortunes.*



**Improve Economic Mobility**



**Shift the Location of Jobs**



**Spur Housing Production**



**Retain & Expand Affordable Housing**



**Improve Access, Speed, and Reliability of Transportation**



**Prioritize Active Modes**



**Price Transportation Services**



**Reduce the Environment's Impact on Us**



**Reduce Our Impact on the Environment**



H O R I Z O N

# Refresher: Five Challenges from Round 1 Analysis

In the Futures Interim Report (March 2019), a set of key challenges were identified. The challenges focused on how Plan Bay Area 2040 strategies might fare under previously-unstudied external forces like sea level rise, autonomous vehicles, and federal policy shifts.

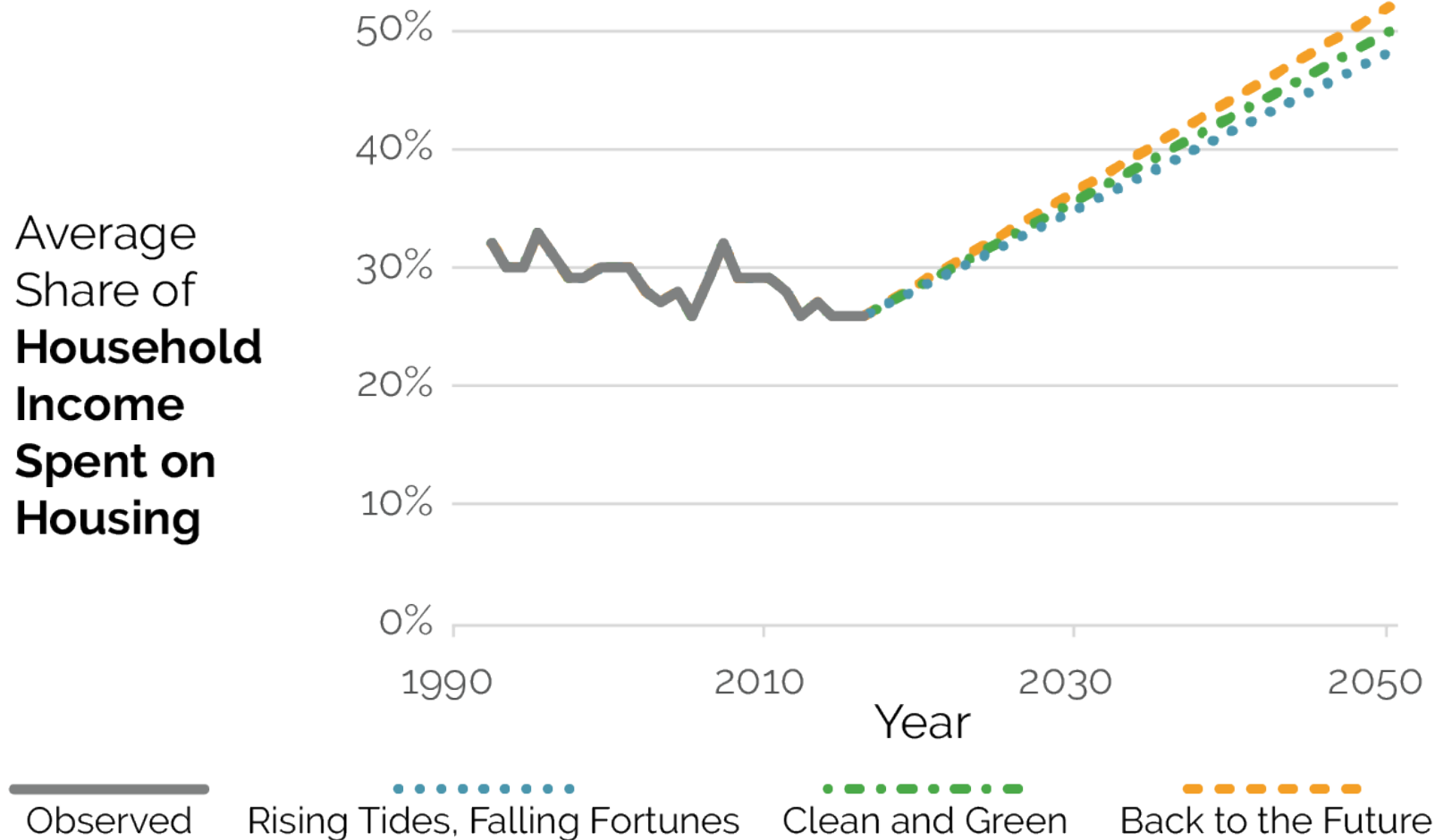


# Challenge



AFFORDABLE

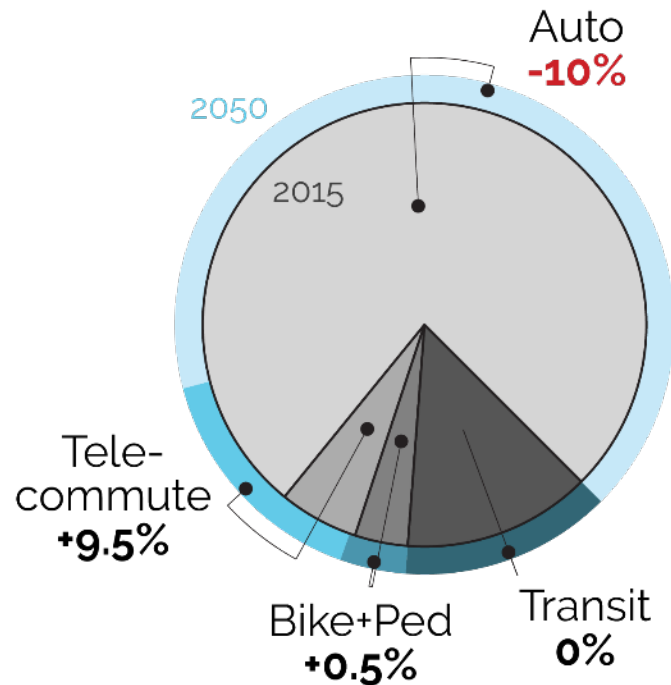
Without new strategies in place, Bay Area housing affordability continued to get worse.



Public transit, walking, and bicycling saw limited gains in mode share compared to 2015 conditions.

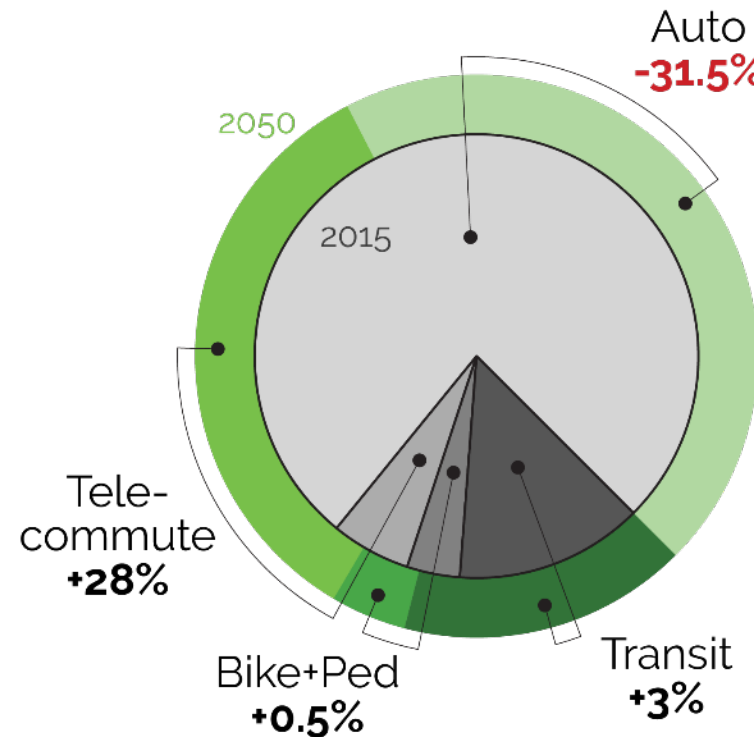
## Rising Tides, Falling Fortunes

In 2050, 67% of commuters use autos.



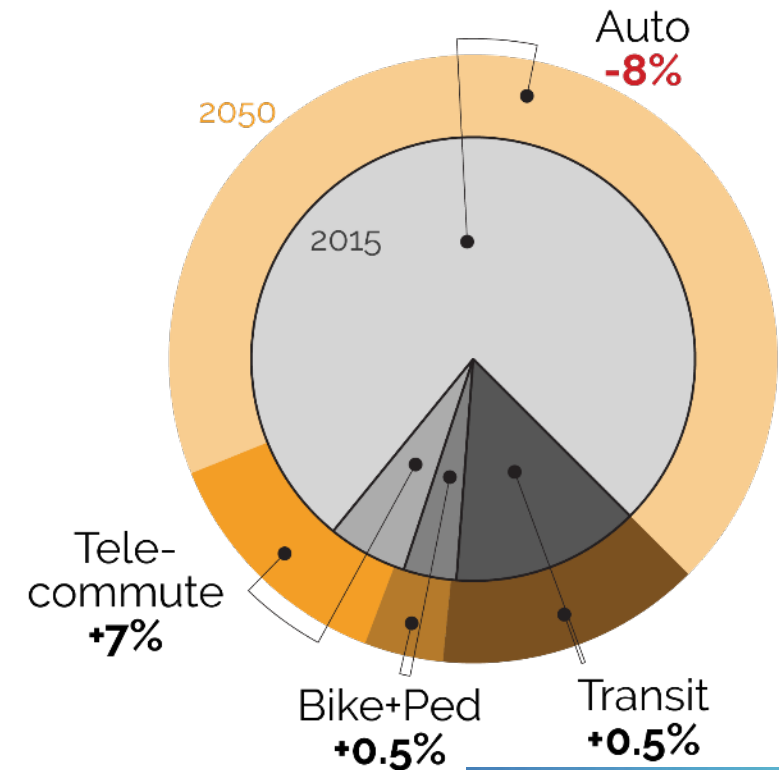
## Clean and Green

In 2050, 45% of commuters use autos.



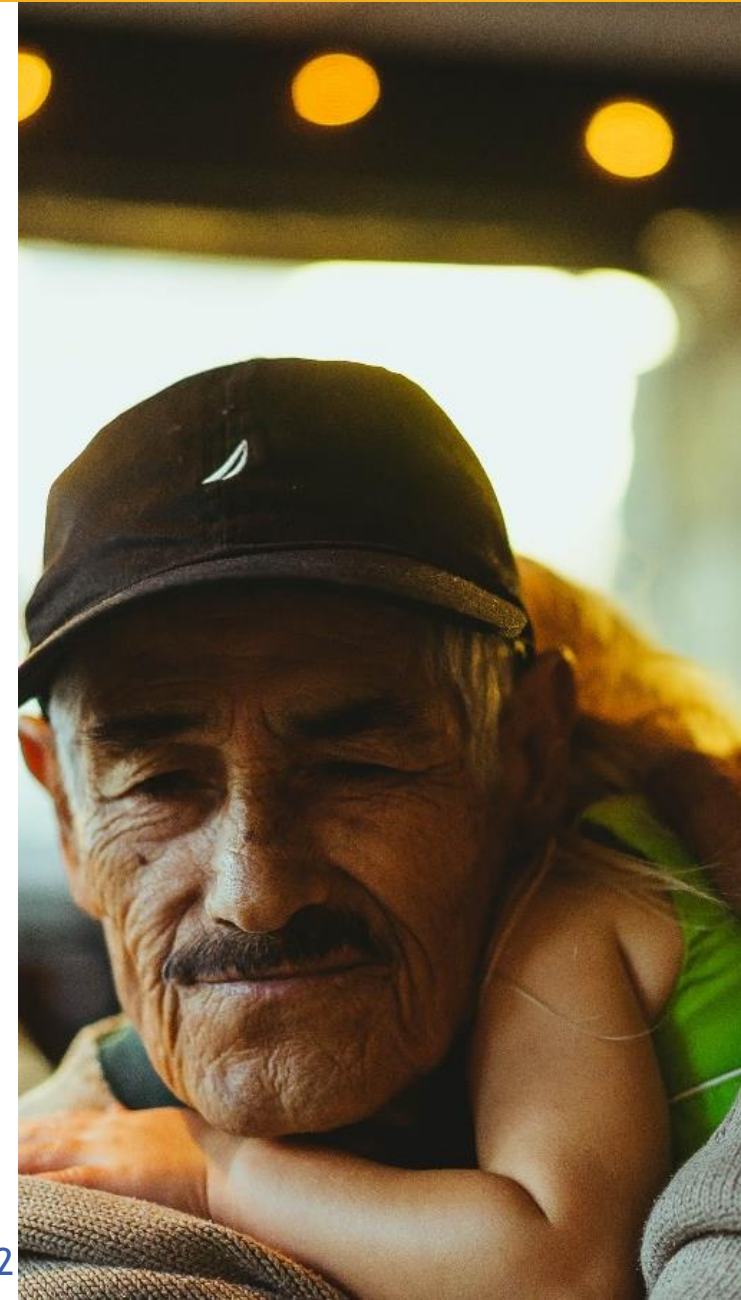
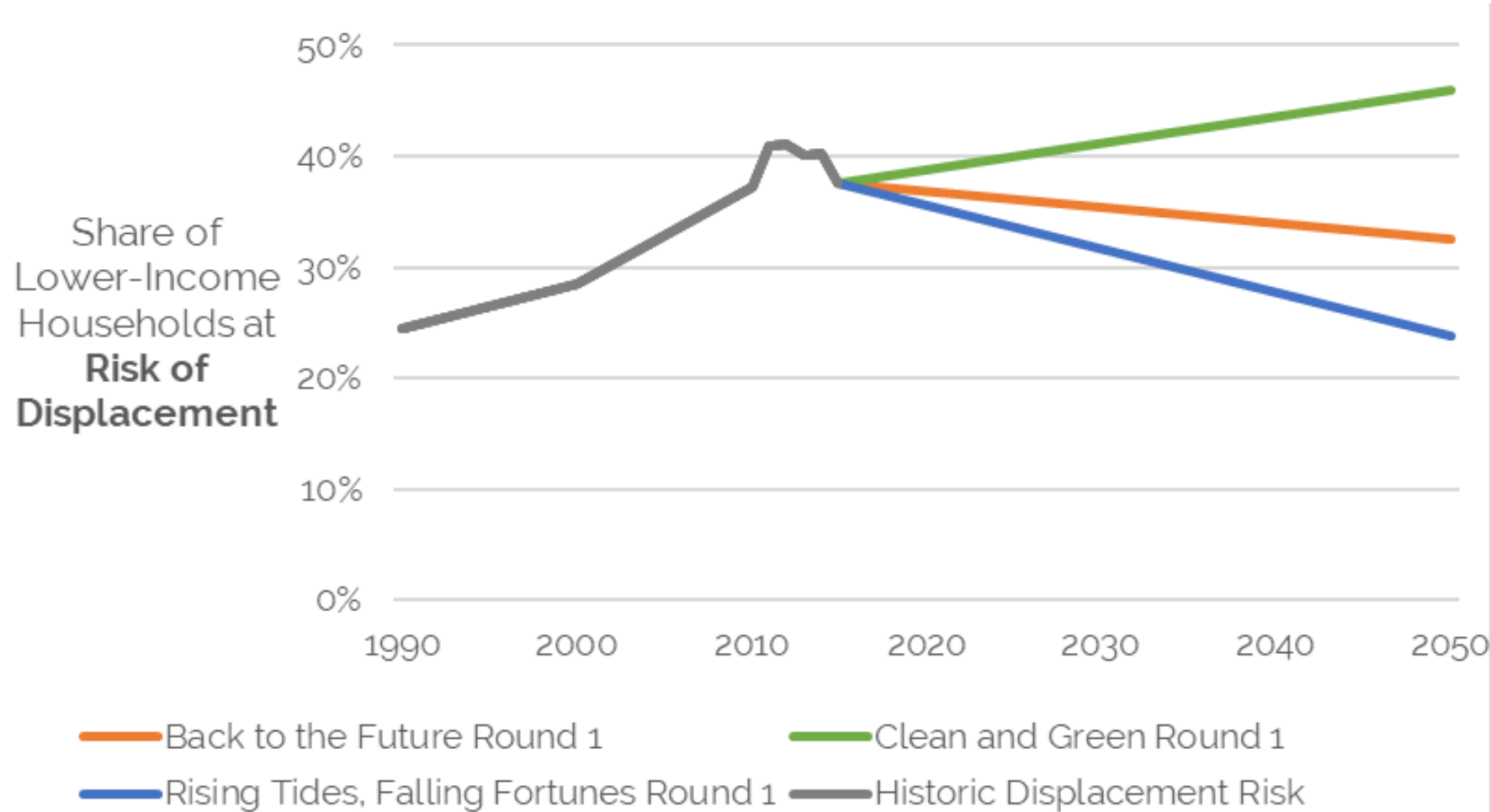
## Back to the Future

In 2050, 69% of commuters use autos.



# Challenge

A significant share of lower-income households remained at risk of displacement in each Future.





Unmitigated impacts from sea level rise and natural disasters resulted in significant damage across the region.

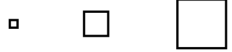
**Rising Tides, Falling Fortunes**  
3 feet of sea level rise

**Clean and Green**  
1 foot of sea level rise

**Back to the Future**  
2 feet of sea level rise

## Homes Affected by Hazards





1k 10k 40k

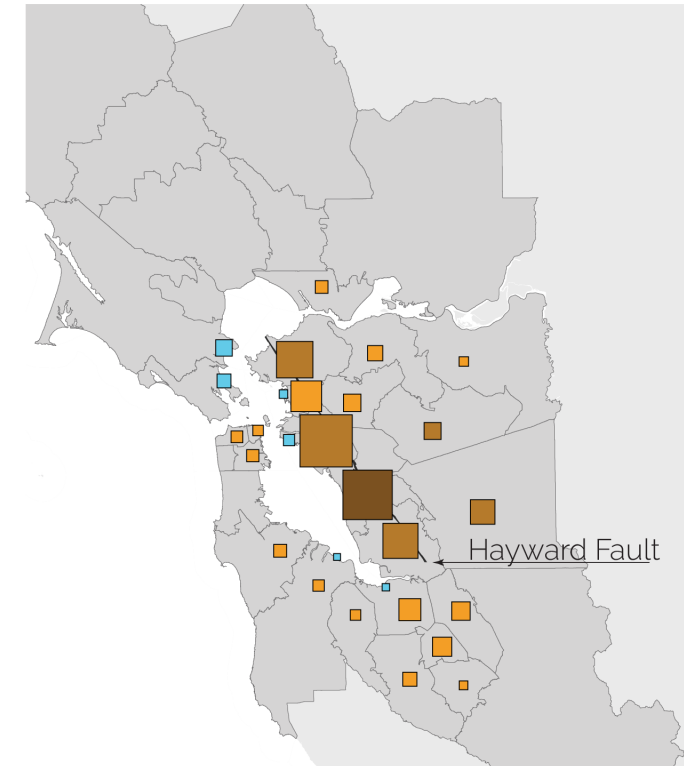
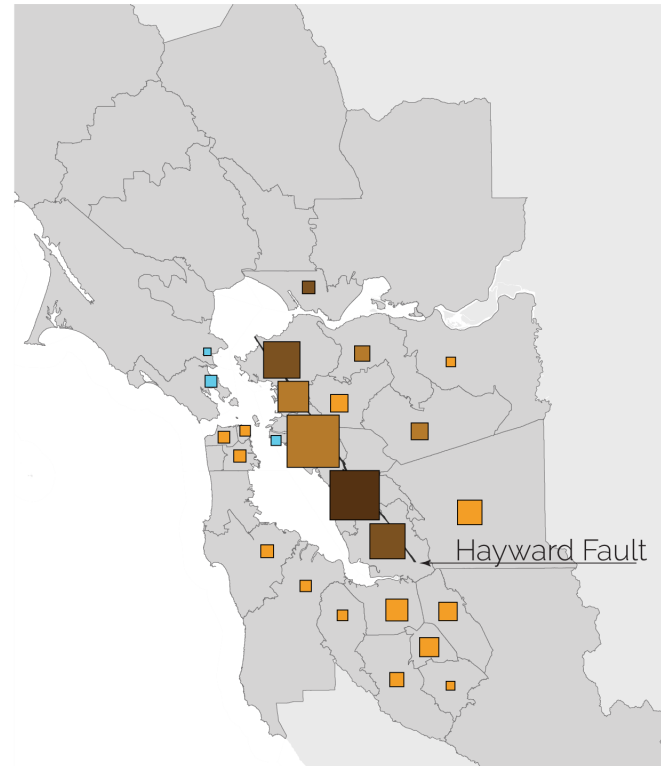
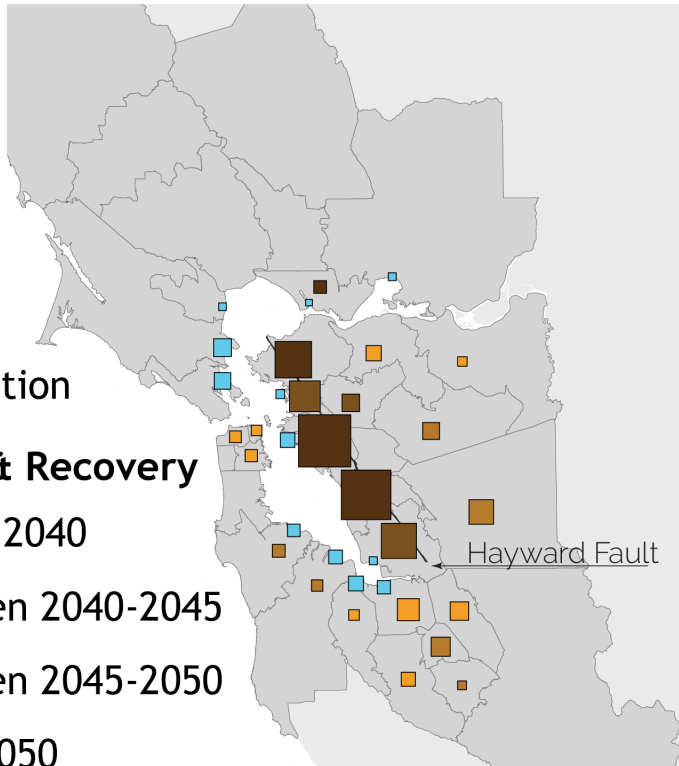


## Sea Level Rise

 Permanent Inundation

## Earthquake Damage & Recovery

 Recovered before 2040  
 Recovered between 2040-2045  
 Recovered between 2045-2050  
 Recovered after 2050



Land use strategies included in *Plan Bay Area 2040* were insufficient to address the region's longstanding jobs-housing imbalance.

**Rising Tides, Falling Fortunes**  
+0.5M Homes, +0.5M Jobs

**Clean and Green**  
+1.3M Homes, +1.1M Jobs

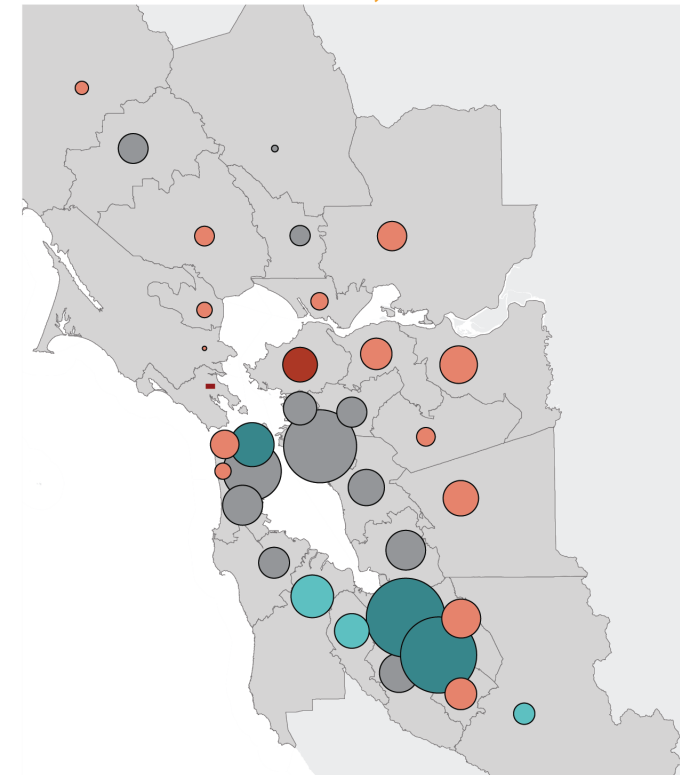
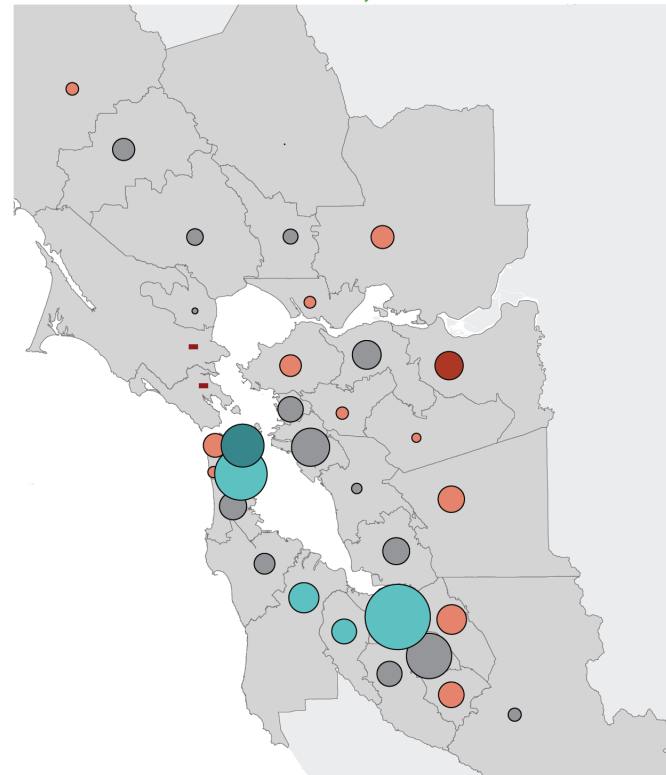
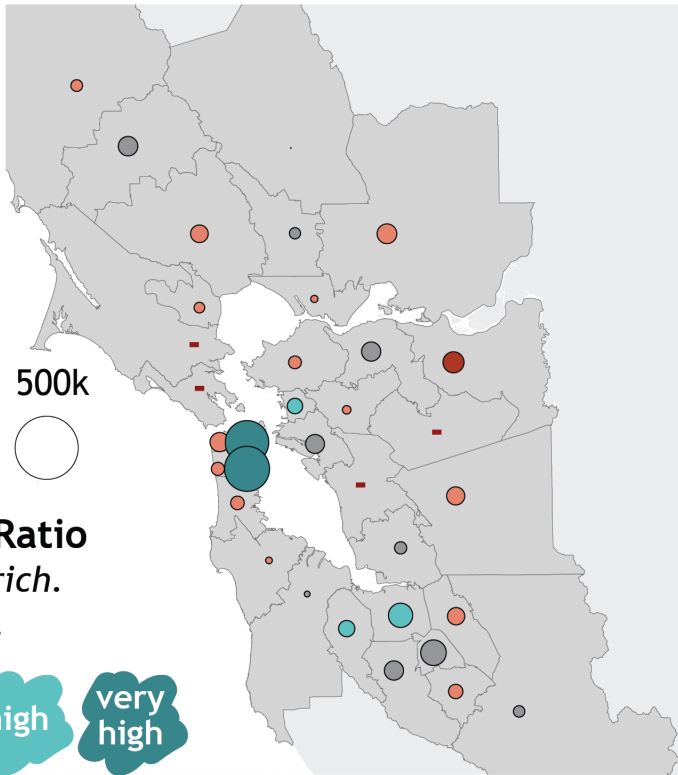
**Back to the Future**  
+2.1M Homes, +2.7M Jobs

**Overall Growth**  
Circle area represents combined job & housing growth from 2015 to 2050.

negative growth   10k   100k   500k

**2050 Jobs/Housing Ratio**  
Red areas are housing rich.  
Blue areas are job rich.

very low   low   avg.   high   very high





H O R I Z O N

# Top 10: Horizon Strategy Findings

We have explored the effectiveness of over 30 strategies to improve the region's economic, housing, transportation, and environmental challenges.

# New growth areas enable more growth near transit and near opportunity.



## Allow Diverse Housing Around Transit



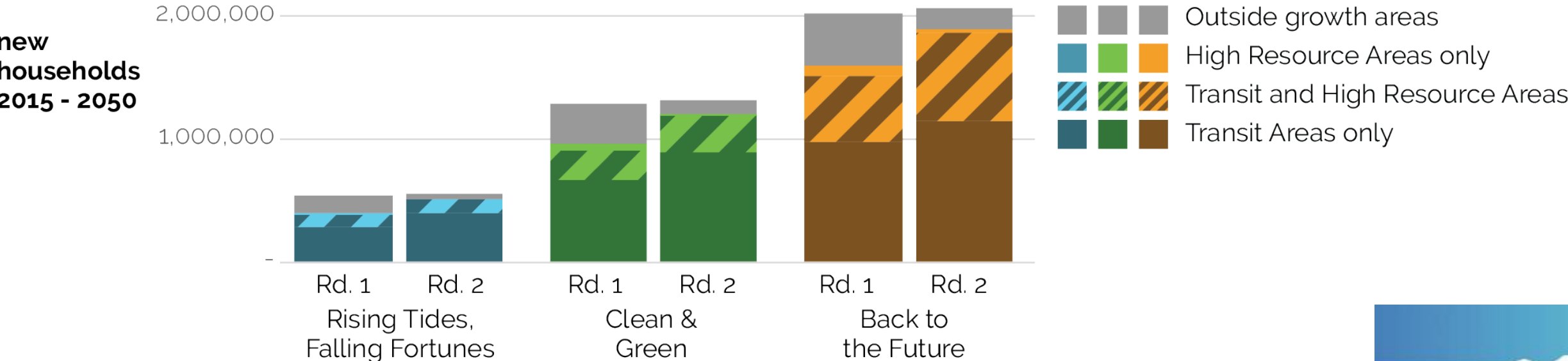
Allow more diverse housing growth around areas with high frequency transit. Expand the growth footprint beyond the current list of PDAs.

## Allow Diverse Housing in High-Resource Areas



Allow more diverse housing growth in areas of high opportunity that also have moderate transit service. Expand the growth footprint beyond the current list of PDAs.

Location of households added between 2015-2050 relative to growth geography



# A mix of strategies to retain and expand affordable housing made progress in addressing the current affordable housing gap.



## Pass Inclusionary Zoning Policies



Strategies  
(Horizon<sub>\$</sub>)

Require 10% to 20% of all new development to be deed-restricted affordable, expanding off the Plan Bay Area 2040 inclusionary strategy.

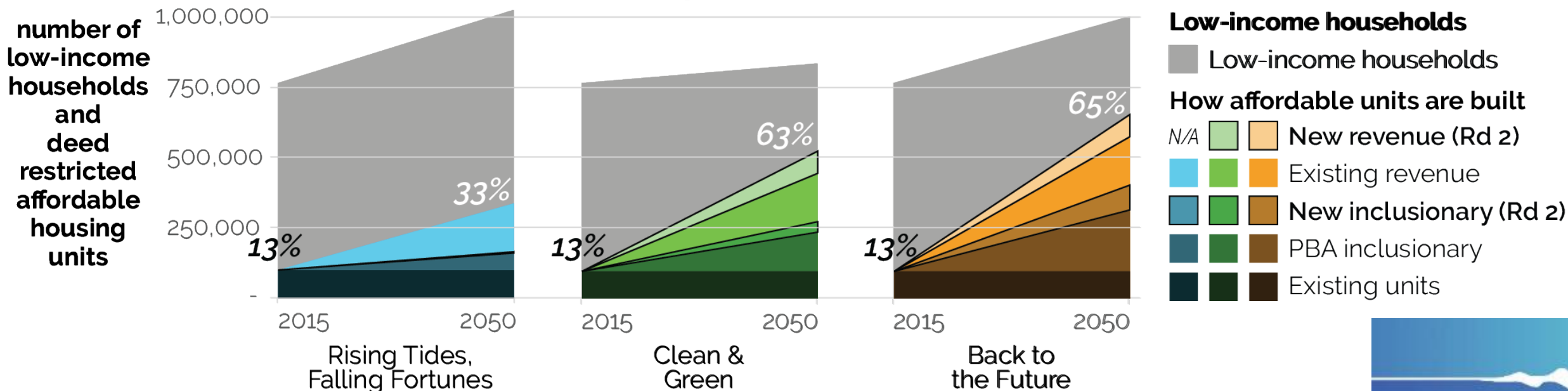
## Fund Affordable Housing



Strategies  
(Horizon<sub>\$\$</sub>)

Raise \$1.5 billion in new annual revenue to build and preserve affordable housing, complementing existing federal, state, and local affordable housing funds.

## Number of deed restricted affordable housing units and the number of low-income households



# Shifts in transportation mode choice were most pronounced for active transportation, driven in part by micromobility strategies.



## Strategies that prioritized active modes.



Strategies  
(Horizon)

### Implement Vision Zero Speed Reductions

Reduce speed limits to 25 mph on local roads within three miles of transit, in addition to reducing speeds on highways.



Strategies  
(Horizon)

### Build a Micromobility Network

Build nearly 10,000 miles of micromobility infrastructure, including protected lanes and trails.



Strategies  
(Horizon)

### Invest in Free Short-Trip Service

Fund shared personal mobility, including scooters and electric bikes, within 3 miles of transit.

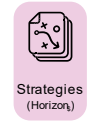
## Other strategies that contributed to modal shift.



Strategies  
(Horizon)

### Suite of Growth Pattern Strategies

By changing the growth pattern in Round 2 analysis, more households and jobs are in areas where the active transportation investments were focused.

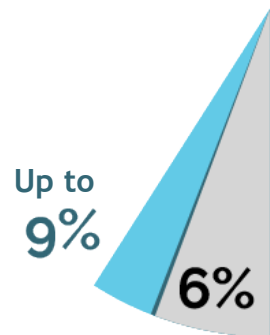


Strategies  
(Horizon)

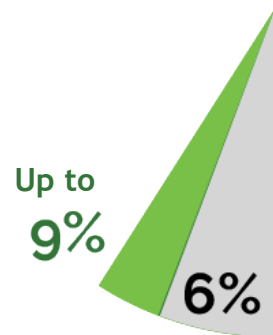
### Apply Time-of-Day Tolls on All Freeways

Toll vehicles on highways based on the time of day and the number of occupants in the vehicle.

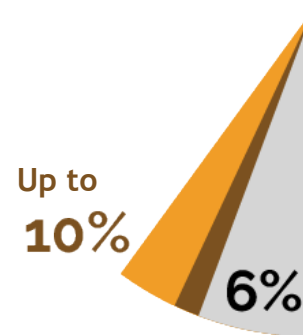
## Active (walk & bike) mode share in 2015, and Futures round 1 and round 2 analysis



Rising Tides,  
Falling Fortunes

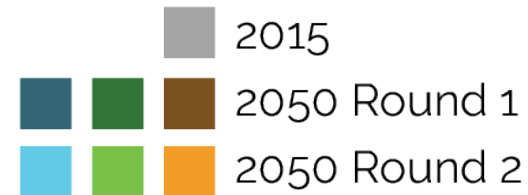


Clean &  
Green



Back to  
the Future

### active (walk+bike) mode share



While still present, transit overcrowding was partially alleviated, with new Bus Rapid Transit (BRT) lines as well as a new Transbay Rail Crossing playing a key role.



### Make Strategic Transit Investments



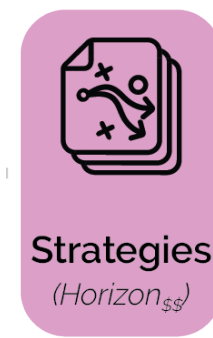
Build major PBA2050 transit investments, such as BART to Silicon Valley Phase 2 and Caltrain DTX.

### Build a Next-Generation BRT Network



Create a fast and frequent regional bus network, providing redundancy for rail lines and connecting underserved areas.

### Build a New Transbay Rail Crossing



Build a new rail crossing from the East Bay to the West Bay to provide greater transit capacity across the Bay.

*Final analysis of transit overcrowding still under development.*



# Road pricing reduced roadway congestion, but equity concerns need to be addressed before advancing this strategy further. (part 1)



**We were able to explore how congestion was affected by external forces & strategies.**

*The next slide will show the difference in Round 2.*

## Rising Tides Falling Fortunes

2050: 10% autonomous vehicle market share  
2050: \$0.20 per mile vehicle operating cost

### Round 1 Highway Congestion corridors near max capacity

- major highways
- 2050, congestion
- 2050, closure from hazards

## Clean and Green

2050: 95% autonomous vehicle market share  
2050: \$0.40 per mile vehicle operating cost

### Round 1 Highway Congestion corridors near max capacity

- major highways
- 2050, congestion
- 2050, closure from hazards

## Back to the Future

2050: 75% autonomous vehicle market share  
2050: \$0.10 per mile vehicle operating cost

### Round 1 Highway Congestion corridors near max capacity

- major highways
- 2050, congestion
- 2050, closure from hazards



# Road pricing reduced roadway congestion, but equity concerns need to be addressed before advancing this strategy further. (part 2)

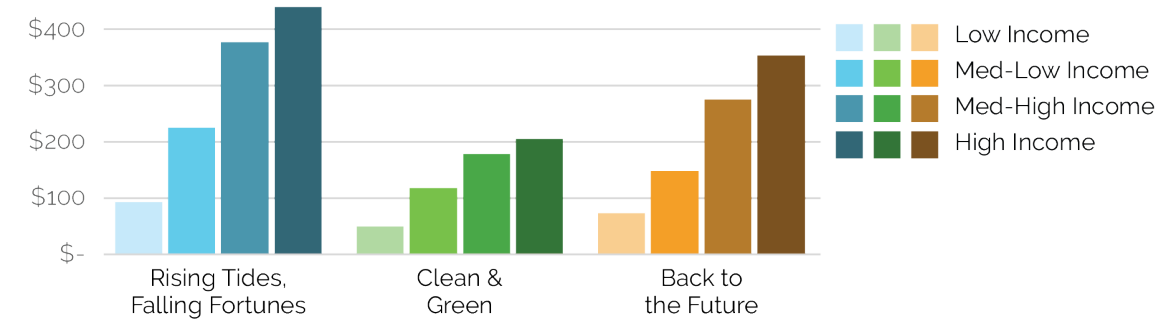


## Apply Time-of-Day Tolls on All Freeways



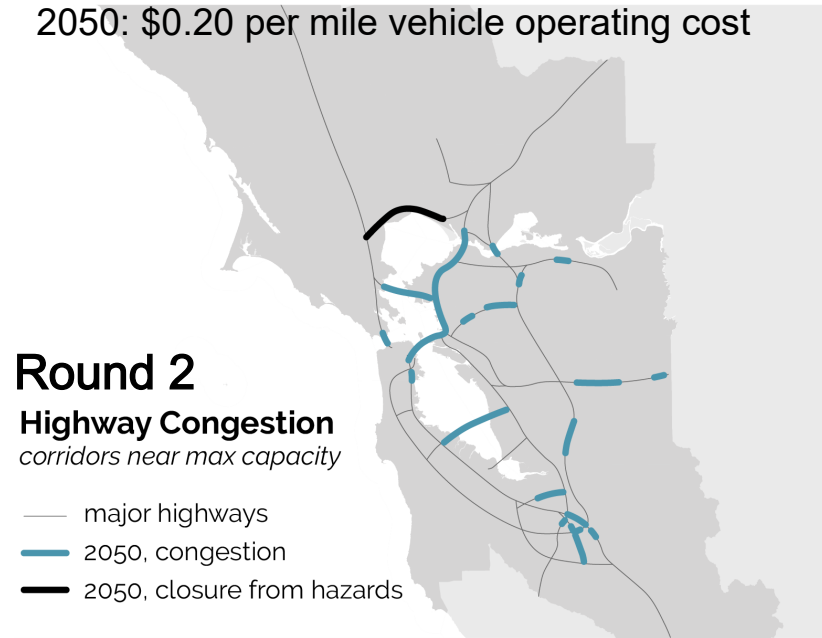
Apply a \$0.05 - \$0.15 per mile toll on all freeways depending on vehicle occupancy and time of day.

Average Annual Time-of-Day Toll Revenue per Household by Income in 2050 (2019 dollars)



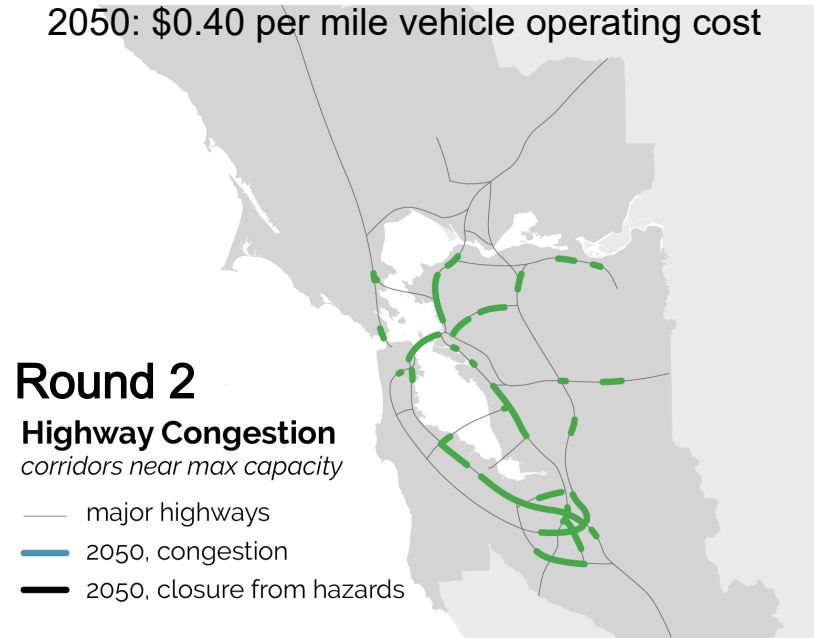
### Rising Tides Falling Fortunes

2050: 10% autonomous vehicle market share  
2050: \$0.20 per mile vehicle operating cost



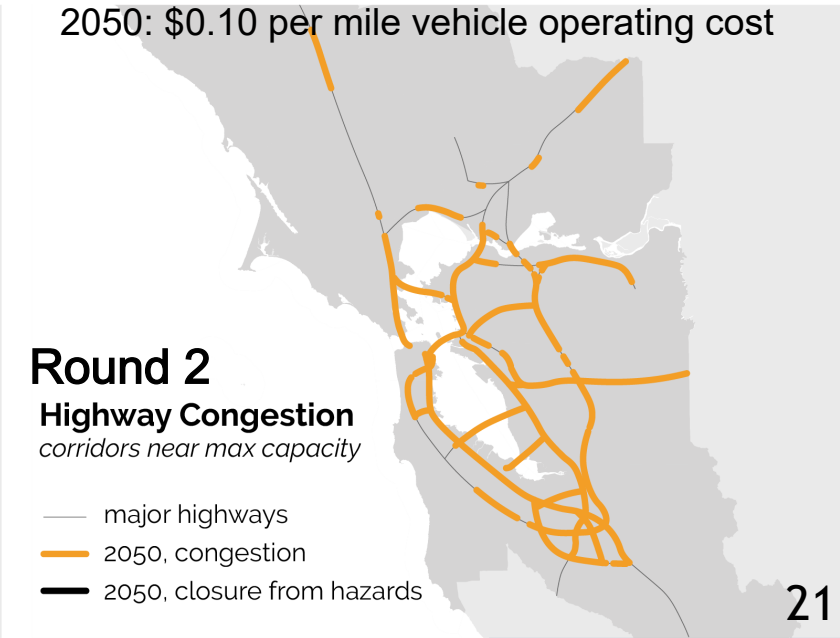
### Clean and Green

2050: 95% autonomous vehicle market share  
2050: \$0.40 per mile vehicle operating cost



### Back to the Future

2050: 75% autonomous vehicle market share  
2050: \$0.10 per mile vehicle operating cost



# Economic development strategies evaluated were insufficient to slow the decline of the middle class.



## Create Incubator Programs



Strategies  
(Horizon<sub>\$</sub>)

Expand and create new job incubator programs in economically-challenged communities.

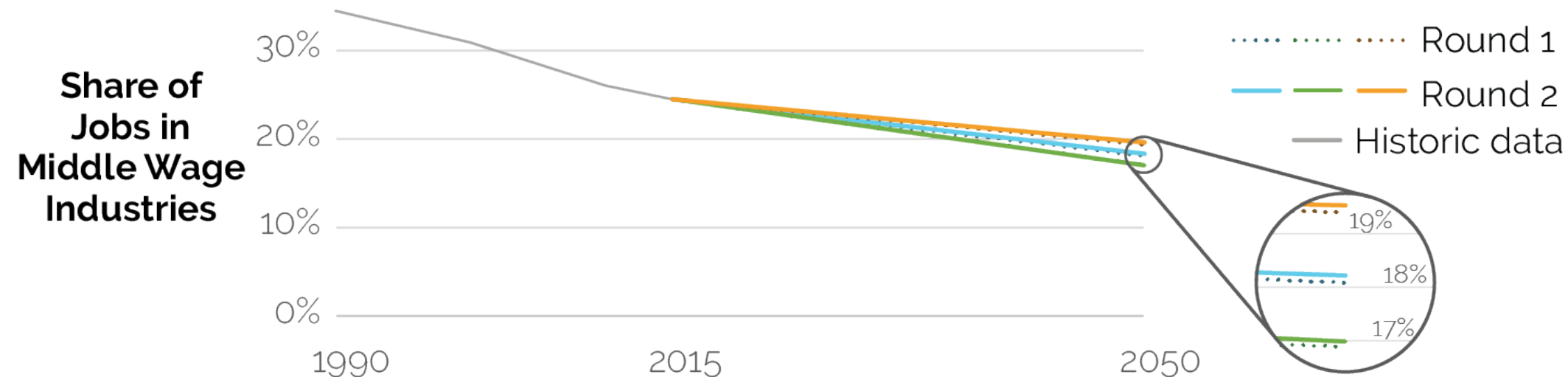
## Expand Construction Workforce Programs



Strategies  
(Horizon<sub>\$</sub>)

Expand construction workforce development and training programs. Support early construction professionals in early apprenticeship years.

## Share of regional jobs in middle wage industries - historic and projected



# Adaptation and retrofit strategies boosted our region's resilience.



## Adapt to Sea Level Rise



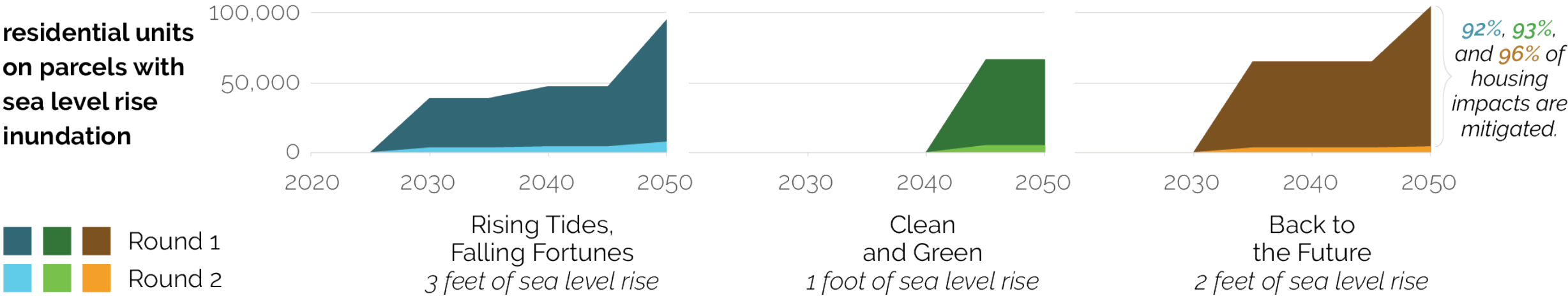
Leverages existing and new revenues to fund a hybrid set of gray and green infrastructure systems to adapt the region.

## Retrofit Older Existing Buildings



Provides 50% subsidies for older buildings built before current codes to support common earthquake, wildfire, energy, and water retrofit strategies.

### Residential sea level rise impacts in Futures round 1 (without adaptation) and round 2 (with adaptation)



# Urban growth boundaries led to minimal greenfield development in both Round 1 and Round 2.



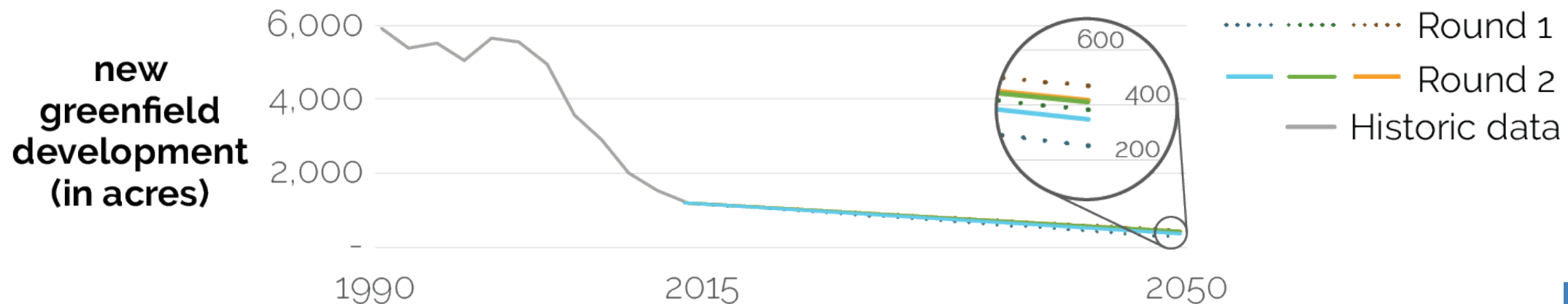
## Maintain Urban Growth Boundaries



Strategies  
(PBA 2040)

Restrict urban development on greenfield lands, continuing the region's recent commitment to reducing sprawl outward.

## Acres of greenfield development annually - historic and projected



# A VMT-based fee on office development was effective in focusing office growth, but not in shifting jobs to the East and North Bay.



## Apply a VMT-Based Fee on Office Development



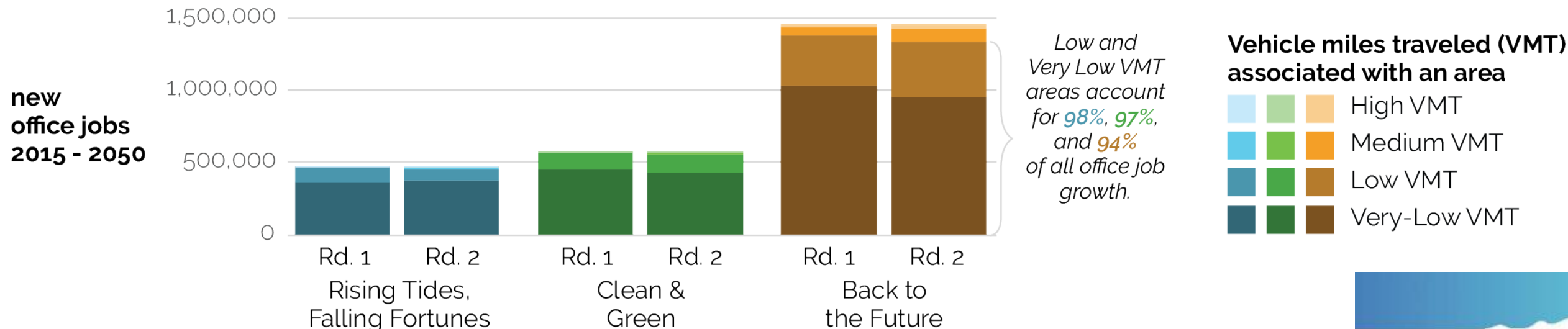
Strategies  
(PBA 2040)

Apply a fee on new office development in areas that have high employment-related vehicle miles traveled (VMT), expanding upon a Plan Bay Area 2040 strategy.

*Given that this strategy was included in Plan Bay Area 2040, it was studied in both Futures Round 1 and Futures Round 2 - and was very effective in focusing growth in low-VMT places in both analyses.*

*Further refinements could focus on better tailoring this strategy to reflect county-level conditions - rather than “one size fits all”.*

## Location of new office-related job growth relative to an area's associated VMT level



A large tax package (to fund subsidies / projects) focused on higher-income individuals and businesses did not have significant adverse impacts on the economy.



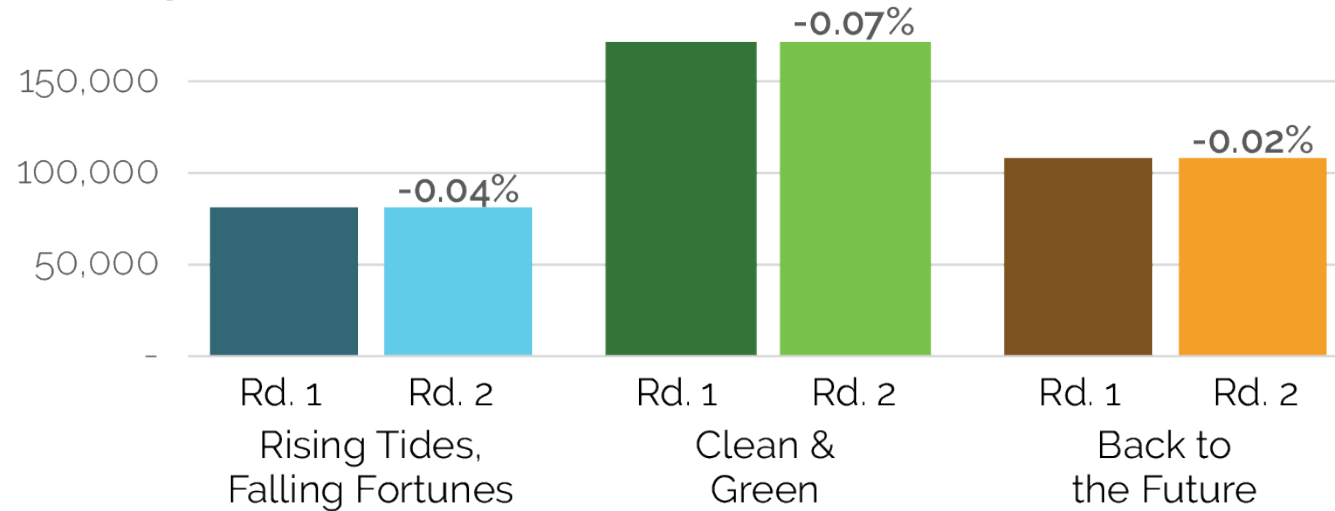
## Raise New Revenues



Place a balanced tax increase on businesses, parcels (building and home owners), and high-income earners.

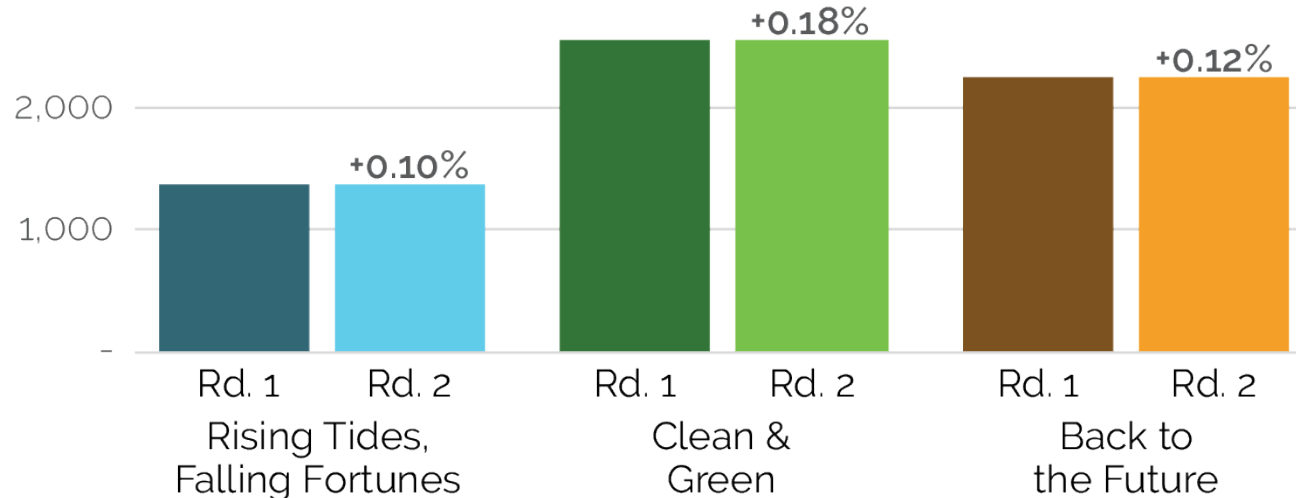
## Projected Average Household Income in 2050

**2050  
Average  
Household  
Income**  
(in 2018  
dollars)



## Projected Annual Gross Regional Product in 2050

**2050  
Gross  
Regional  
Product**  
(in billions of  
2018 dollars)



*Initial economic analysis indicates that impacts would be relatively limited; however, further refinements could potentially better reflect the broader suite of benefits from infrastructure investments.*



H O R I Z O N




# Rating Strategies

Staff have selected one of three ratings for each strategy, based on its resilience and efficacy in the Futures analysis as well as its support for equitable outcomes.



# Futures Round 2: Strategy Recommendations

## Economy

 Recommended to move forward into Plan Bay Area 2050 Blueprint.	<i>No economic strategies received this rating.</i>
 Recommended to move forward <i>with minor revisions.</i>	<div>Assess a VMT-Based Fee on Office Development</div> <div>Create Incubator Programs in Economically-Challenged Areas</div> <div>Expand Childcare Support for Low-Income Families</div>
 Not recommended to move forward <i>unless major revisions are made.</i>	<div>Expand Construction Workforce Programs</div> <div>Place Office Caps in Job-Rich Cities</div>
Already advancing into implementation due to state legislative action in 2019.	<div>Provide Portable Benefits for Part-Time/Freelance Workers</div>
Not explored as part of Futures Round 2 analysis, but will be explored as part of Plan Bay Area 2050 Blueprint.	<div>Establish Priority Production Areas to Protect Industrial Lands</div>





# Futures Round 2: Strategy Recommendations

## *Housing*



Recommended to move forward into Plan Bay Area 2050 Blueprint.

Allow Diverse Housing in Priority Development Areas (PDAs)

Streamline Development in All Growth Areas



Recommended to move forward *with minor revisions.*

Allow Diverse Housing around Major Transit Stops (TPAs)

Allow Diverse Housing in High-Resource Areas (HRAs)

Transform Aging Malls and Office Parks into Neighborhoods

Fund Affordable Housing Preservation & Production

Require 10 to 20 Percent of All New Housing to be Affordable



Not recommended to move forward *unless major revisions are made.*

*No housing strategies received this rating.*

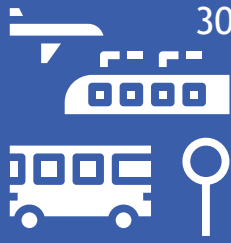
Already advancing into implementation due to state legislative action in 2019.




Repurpose Public Land to Build Housing

Increase Renter Protections

# Futures Round 2: Strategy Recommendations

## Transportation






 Recommended to move forward into Plan Bay Area 2050 Blueprint.	Operate and Maintain the Existing System
	Advance a Complete Micromobility Network
	Develop a Single Platform to Access and Pay for All Mobility
 Recommended to move forward <i>with minor revisions.</i>	Advance a New Transbay Rail Crossing
	Invest in Free Short-Trip Service
	Implement Vision Zero Speed Reduction Measures
 Not recommended to move forward <i>unless major revisions are made.</i>	Apply Time-of-Day Tolls on All Freeways
Ratings pending release of Draft Project Performance results.	Provide Free Transit to Lower-Income Riders
	Make Strategic Transit Modernization/Expansion Investments
	Build a Next-Generation Bus Rapid Transit Network
	Build Carpool Lanes & Address Interchange Bottlenecks
	Advance Next-Generation Rail Modernization
	Extend the Regional Rail Network

# Futures Round 2: Strategy Recommendations

## *Environment*



 Recommended to move forward into Plan Bay Area 2050 Blueprint.	<div>Keep Current Urban Growth Boundaries in Place</div> <div>Partially Adapt to Sea Level Rise</div>
 Recommended to move forward <i>with minor revisions.</i>	<div>Retrofit Older Existing Buildings (Energy, Water, Seismic, Fire, etc.)</div> <div>Fully Adapt to Sea Level Rise</div>
 Not recommended to move forward <i>unless major revisions are made.</i>	<div>Purchase Disaster Recovery Financing</div>
Rating pending release of Draft Project Performance results.	<div>Adapt SR-37 to Sea Level Rise</div>

## Futures Final Report:

Resilient and Equitable Strategies  
for the Bay Area's Future

*The full report will highlight the full suite of strategies studied and describes to what extent the region performs better with these strategies.*

The report is expected to be posted on the MTC website later this month.

### FUTURES FINAL REPORT

RESILIENT AND EQUITABLE  
STRATEGIES FOR  
THE BAY AREA'S FUTURE

OCTOBER 2019

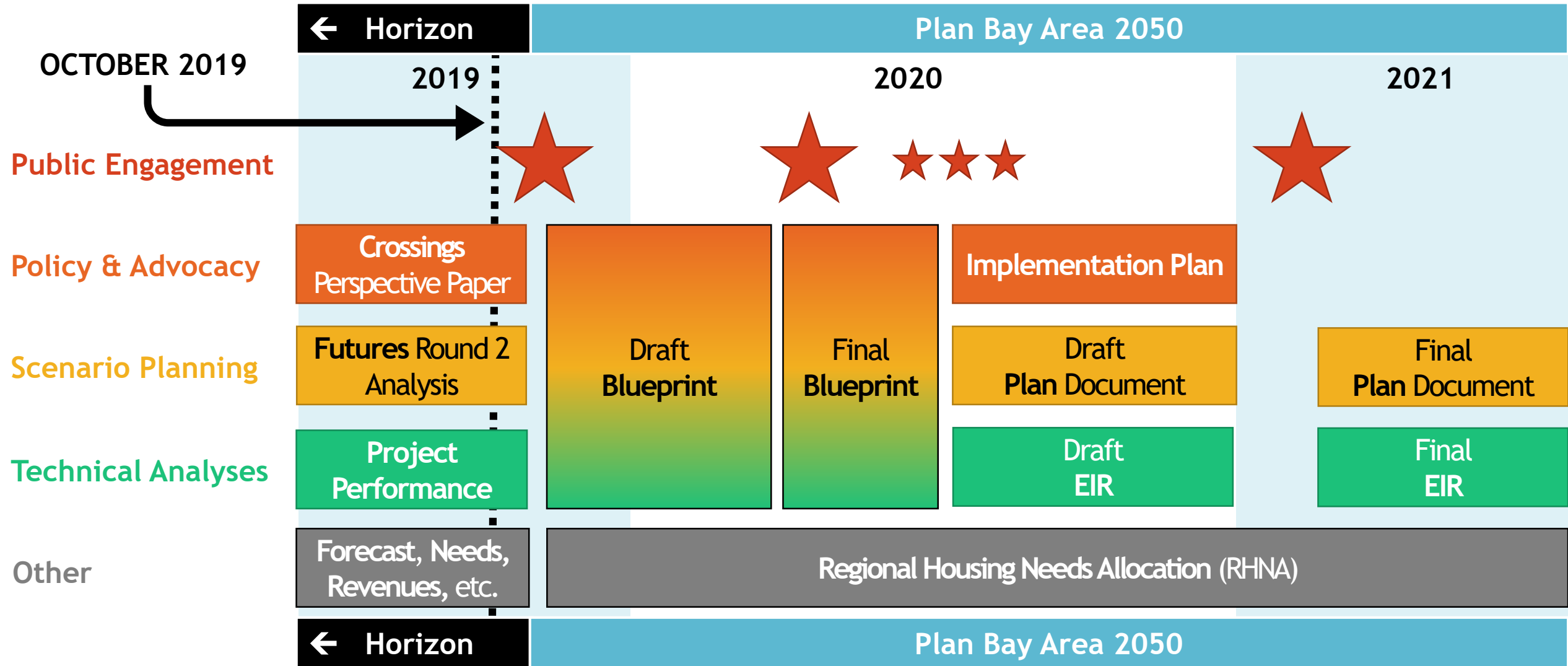
# What's Next?

Horizon provided an opportunity to “stress test” key strategies in advance of Plan Bay Area 2050. Input from elected officials, stakeholders, and the general public will help inform further refinements to make the shortlist of strategies included in the Plan Bay Area 2050 Draft Blueprint as resilient and equitable as possible.

The final decision on what strategies to include will occur in early 2020 and will be made by the MTC Commission and ABAG Executive Board.



# Plan Bay Area 2050 Schedule





# Metropolitan Transportation Commission

## Legislation Details (With Text)

---

**File #:** 19-0888      **Version:** 1      **Name:**  
**Type:** Report      **Status:** Informational  
**File created:** 7/31/2019      **In control:** Regional Advisory Working Group  
**On agenda:** 9/10/2019      **Final action:**  
**Title:** Transit Update: Rail Synthesis and Crossings

Highlights of the progress on regional rail over the past decade, including identification of potential next steps to improve the region's transit system and discussion of tradeoffs associated with a new Transbay Crossing.

**Sponsors:****Indexes:****Code sections:**

**Attachments:** [03\\_Regional\\_Rail\\_Planning\\_Update.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**

Transit Update: Rail Synthesis and Crossings

Highlights of the progress on regional rail over the past decade, including identification of potential next steps to improve the region's transit system and discussion of tradeoffs associated with a new Transbay Crossing.

**Presenter:**

Adam Noelting and Anup Tapase

**Recommended Action:**

Information

**Attachments:**

**Metropolitan Transportation Commission and the Association of Bay Area Governments  
Regional Advisory Working Group**

**October 8, 2019**

**Agenda Item 3**

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**Transit Update: Rail Synthesis and Crossings**

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- Subject:** Highlights of the progress on regional rail over the past decade, including identification of potential next steps to improve the region's transit system and discussion of tradeoffs associated with a new Transbay Crossing.
- Background:** Regional Advisory Working Group Agenda Item 3, Transit Update: Rail Synthesis and Crossings, is attached. Staff will seek input on the Transit Update: Rail Synthesis and Crossings at the October 12, 2019, Joint MTC Planning Committee with the ABAG Administrative Committee.
- Staff will be at your October 8, 2019, meeting to discuss this item. The Working Group's input is requested.
- Attachments:** Agenda Item 5b from the October 2019 Joint MTC Planning Committee with the ABAG Administrative Committee

# Metropolitan Transportation Commission and the Association of Bay Area Governments Joint MTC Planning Committee with the ABAG Administrative

October 11, 2019

Agenda Item 5b

## Transit Update: Rail Synthesis and Crossings

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- Subject:** Highlights of the progress on regional rail over the past decade, including identification of potential next steps to improve the region's transit system and discussion of tradeoffs associated with a new Transbay Crossing.
- Background:** Over ten years ago, MTC partnered with the Peninsula Corridor Joint Powers Board (Caltrain), the Bay Area Rapid Transit District (BART), and the California High-Speed Rail Authority (CHSRA) for a two-year planning effort to develop a long-range vision for improving the passenger rail system in the San Francisco Bay Area as well as the wider Northern California megaregion. The Regional Rail Plan for the San Francisco Bay Area (2007 RRP) identified more than 50 capital improvement projects organized by a series of corridors. The 2007 RRP also recognized that success depended on more than the delivery of capital improvements, noting the need for bold policy changes to reform land use, transit governance, and transportation funding.
- The Bay Area has delivered on a number of the 2007 RRP's ready-to-go capital improvement projects, and project development phases continue for a number of other key projects. However, the region has fallen short on many of the policy recommendations, particularly the bold policy changes to reform governance and project delivery.
- Issues:** Current passenger rail trends are creating challenges for the region. Rail services are expensive to operate and maintain – accounting for a significant share of the long-range regional plan – yet at the same time regional ridership peaked in 2016 and continues to become more commute-focused. Trunk lines serving San Francisco (Transbay BART & Caltrain) are over-crowded, and the delivery of major capital projects has been slow.
- Meanwhile, project development and planning studies are underway for a next-generation of regional rail investments, including the Second Transbay Rail Crossing, Caltrain Business Plan, Caltrain Downtown Extension (DTX), Diridon Integrated Station Concept (DISC) Plan, Dumbarton Rail, San Jose Rail Corridor Plan, Southern Alameda County Integrated Rail Analysis, and Valley Link efforts. Only some of these projects are currently included in the region's adopted fiscally constrained long-range plan, Plan Bay Area 2040.
- Strategic choices related to governance and organizational structure are required to successfully deliver the next-generation regional rail investments. As part of their project development activities, several projects identified above— Second Transbay Rail Crossing , Caltrain Business Plan, DTX, DISC, and Valley Link— are engaged in discussions about optimal governance and organizational structures for their respective corridors or systems. Tying together these governance, capital project funding plans, and delivery options will be a key and significant effort throughout the region.



### **Evolving the Regional Role**

Beginning with Resolution No. 1876 (in 1988) and evolving to Resolution No. 3434 (in 2001), MTC has a legacy of regional collaboration to develop transit expansion programs.

MTC is in the midst of developing Plan Bay Area 2050—the Bay Area’s long-range fiscally-constrained plan. It is not feasible to include all of the proposed next generation of regional rail investments using the region’s forecasted revenues, even if new revenues become available. Fiscal constraint necessitates prioritization of investment priorities, which will be informed by MTC’s ongoing Project Performance Assessment. This effort estimates project-level benefits of the region’s most costly and transformative capital projects. MTC is currently evaluating approximately 100 project proposals with costs greater than \$250 million, and a significant share of these projects are regional rail investments. In total, the Project Performance Assessment is conducting evaluations for more than \$340 billion in project capital costs (2019\$). Draft results will be released November 2019 in time for the development of the Plan Bay Area 2050 Blueprint.

MTC must evolve its regional role to ensure customer-focused and fiscally responsible project implementation. **Attachment A** details three core areas where MTC can evolve to support the advancement of passenger rail service in the Bay Area.

1. **Prioritize Investments.** Leverage work from the Project Performance Assessment to understand which projects are most effective and most equitable, given financial constraints. Advance a successor to Resolution 3434.
2. **Promote supportive land use.** Building upon the Horizon land use strategies, consider which strategies can best support future rail projects, while reimagining and revamping the TOD policy in 2020.
3. **Optimize organization and governance.** Develop partnership/organizational options for more efficient and coordinated project delivery of the next generation regional rail investments.

### **Crossings**

Included as part of the Project Performance Assessment framework are seven Transbay Crossing concepts. The idea of a new Transbay Crossing has captured the imagination of Bay Area residents for more than 70 years. Over the last 30 years, there have been three Bay Crossing studies, which were most recently supplemented by the 2017 Core Capacity Transit Study.

As part of the ongoing Horizon initiative, observations on the performance of these seven Transbay Crossing concepts will be profiled in an upcoming Perspective Paper to inform how Plan Bay Area 2050 might incorporate an investment of this magnitude. Highlights from the Crossings Perspective Paper findings are included in **Attachment A**. In the months ahead, BART and Capitol Corridor will embark on another second crossing study by taking an even deeper

dive into the feasibility of a new Transbay Crossing for BART and/or commuter rail.

**Recommendation:** None

**Attachments:** Attachment A: PowerPoint Presentation: Regional Rail Planning Update



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Therese W. McMillan

# Regional Rail Planning Update

**Evolving the Regional Role via  
Prioritization, Supportive Land Use, and Governance**

**Joint MTC Planning Committee with  
the ABAG Administrative Committee**

October 11, 2019



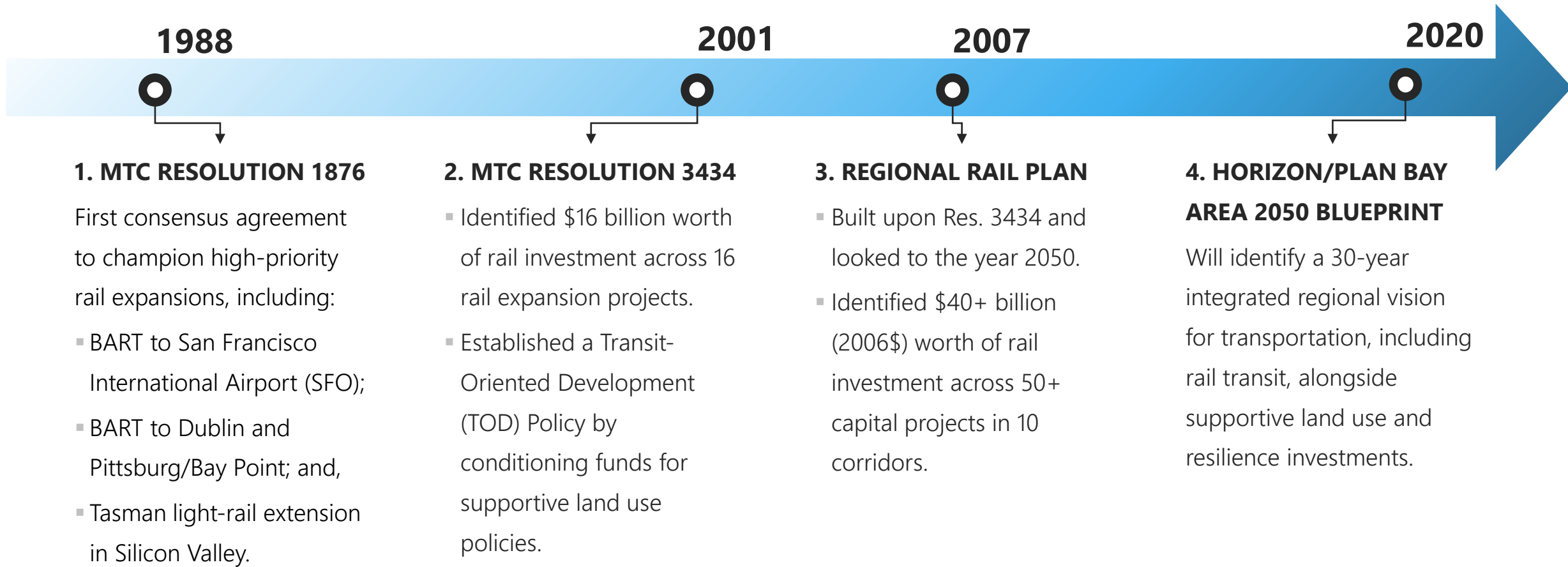


# Crowded Field, A lot Going On

- **CALTRAIN BUSINESS PLAN** : Caltrain is preparing a long-term business strategy for the future of its system
- **CALTRAIN DOWNTOWN EXTENSION (DTX)**: SFCTA is conducting a governance and delivery review
- **DIRIDON INTEGRATED STATION CONCEPT (DISC) PLAN**: collaborative planning effort of future hub station and surrounding area
- **DUMBARTON RAIL**: A consortium called “Crossbay Transit Partners,” comprising Facebook and Plenary Group, working with Caltrain staff, is exploring options for a new Dumbarton Rail crossing
- **SECOND TRANSBAY RAIL CROSSING**: BART and Capitol Corridor staff are beginning planning work related to a potential future new Bay rail crossing
- **VALLEY LINK**: The recently-created Tri Valley, San Joaquin Valley Regional Rail Authority (TVSJVRRA) is currently conducting a feasibility study and environmental review process for a for a potential future “Valley Link” rail project



# Legacy of Regional Rail Expansion Programs





# 2007 Regional Rail Plan (“RRP”) Vision



## PRIORITIZE

- Ring the Bay With Rail
- The Right Technology Should Be Used With the Right Corridor
- The BART & Caltrain Systems are the Backbone
- The BART System’s Outward Expansion is Nearly Complete
- Rail Infrastructure Must Be Expanded to Accommodate Growth In Passenger and Freight Traffic



## LAND USE

- Rail Transit and Focused Transit-Oriented Developments Must Go Hand in Hand



## ORGANIZATION & GOVERNANCE

- The Bay Area Needs a Regional Rail Network
- High-Speed Rail Provides Opportunities to Enhance and Accelerate Regional Rail Improvements
- Institute a New Governance Structure for Delivery of Rail Services
- Successor to Resolution 3434 Needed to Advocate for Rail Funding

# Rail **Implementation** Recent Highlights

## CAPITAL PROJECTS HIGHLIGHTS

- ✓ 1. Addition of a 4th daily round trip on ACE service (2012)
- ✓ 2. Inauguration of the BART Oakland Airport Connector (2014)
- ✓ 3. Inauguration of SMART from Santa Rosa to San Rafael (2017)
- ✓ 4. Opening of BART to Warm Springs/South Fremont (2017)
- ✓ 5. Opening of the Fairfield-Vacaville Capitol Corridor Station (2017)
- ✓ 6. Inauguration of BART to Antioch (2018)
- ✓ 7. Opening of the Salesforce Transit Center (2018)
- ☐ 8. Opening of BART to Berryessa (under testing)
- ☐ 9. Opening of SMART to Larkspur Ferry (under testing)
- ☐ 10. Modernization and Electrification of Caltrain (under construction)



SUMMARY OF COMPLETED  
**REGIONAL RAIL**  
IMPROVEMENT PROJECTS

# Current **Trends** for the Rail Network

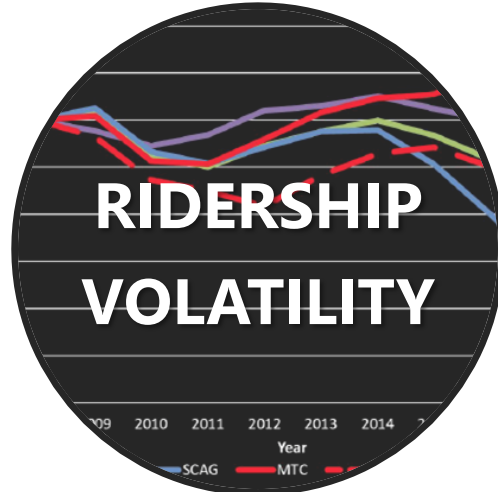


**\$108 BILLION**

total Plan investment thru 2040

**RAIL INVESTMENTS:**

26% of Plan (\$78b) to operate & maintain  
10% of Plan (\$30b) to modernize & expand



**2016**

recent peak of ridership

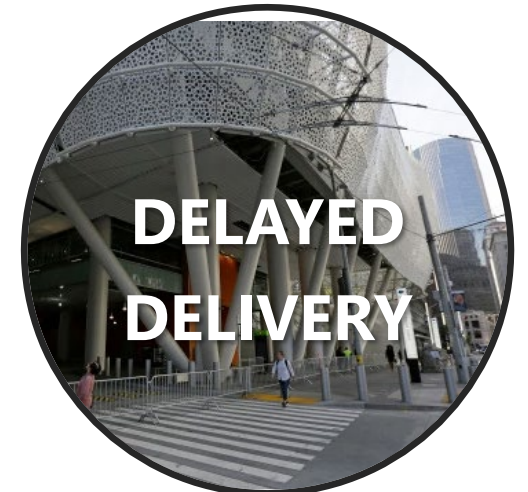
ridership is becoming more  
commute-focused,  
propped up by BART's  
Transbay service and  
Caltrain's Baby Bullet



**120%**

of Transbay capacity in 2018

in the Transbay corridor,  
demand on BART exceeds capacity  
during peak periods



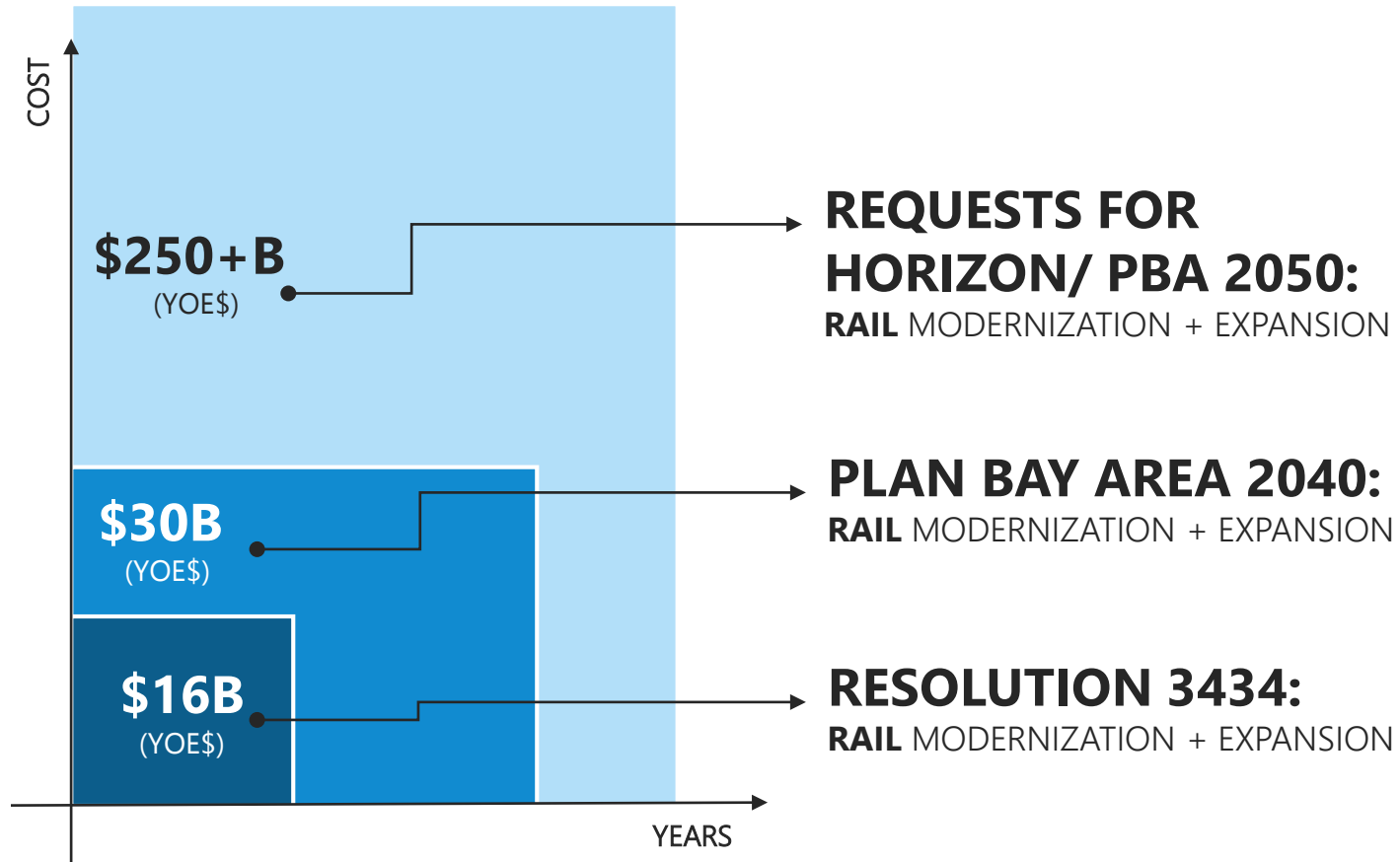
**DECADES**

to design, fund & build megaprojects

delays occur in all phases:  
development, environmental,  
design/engineering, right-of-way  
acquisition, & construction

# Growing Demands to Modernize + Expand

SUMMARY OF RAIL NETWORK IMPROVEMENT PROJECTS



# Opportunities to Evolve **Regional Role**

Use  
Performance to



**PRIORITIZE**

Promote  
Supportive



**LAND USE**

Optimize



**ORGANIZATION  
& GOVERNANCE**





# Project Prioritization Framework

- Past **REGIONAL CONSENSUS AGREEMENTS** have championed high-priority rail expansions.
- A **PROJECT PERFORMANCE ASSESSMENT** is used to inform priorities and includes: 1) Benefit-cost ratio; 2) Guiding Principles assessment; and, 3) Equity score.
- The **INVESTMENT STRATEGY** for the regional plan establishes long-term priorities.

$$\text{BENEFITS} = \Sigma$$



ACCESSIBILITY



TRANSIT  
CROWDING



ENVIRONMENT



HEALTH



SAFETY



FREEWAY  
RELIABILITY



AUTO  
OWNERSHIP

SUMMARY OF  
**SOCIETAL BENEFIT CATEGORIES**

# Project Prioritization — What's Next



## PRIORITIZATION

- MTC is conducting a **PROJECT PERFORMANCE ASSESSMENT** for nearly 100 projects to inform the next long-range regional plan, **PLAN BAY AREA 2050**. Results of the assessment are anticipated to be shared beginning in **NOVEMBER 2019**.
- In **WINTER 2019/2020**, MTC will develop the draft Plan Bay Area 2050 Blueprint—resulting in a 30-year fiscally-constrained transportation investment strategy of projects and programs.
- In **SPRING 2020**, PBA 2050 will set a framework for a successor to Resolution 3434.



# Supportive Land Use

## GROWTH FRAMEWORK (PLAN BAY AREA):

- Consists of self-nominated Priority Development Areas (PDAs) & Priority Conservation Areas (PCAs)
- PDAs** = Frequent Transit & Planned for Housing
- PDAs account for <5% of the region's land area but take on more than 80%+ of the region's projected long-term growth

## TOD POLICY (RESOLUTION # 3434):

- Conditions regional funding for transit expansion projects on having enough people living near the proposed new stations to support ridership.
- Sets minimums for the # of existing and/or permitted housing units within ½ mile of each station along the expansion corridor based on the project type.
- This policy currently only applies to BART, Light Rail, Bus Rapid Transit, Commuter Rail, and Ferry expansion projects.

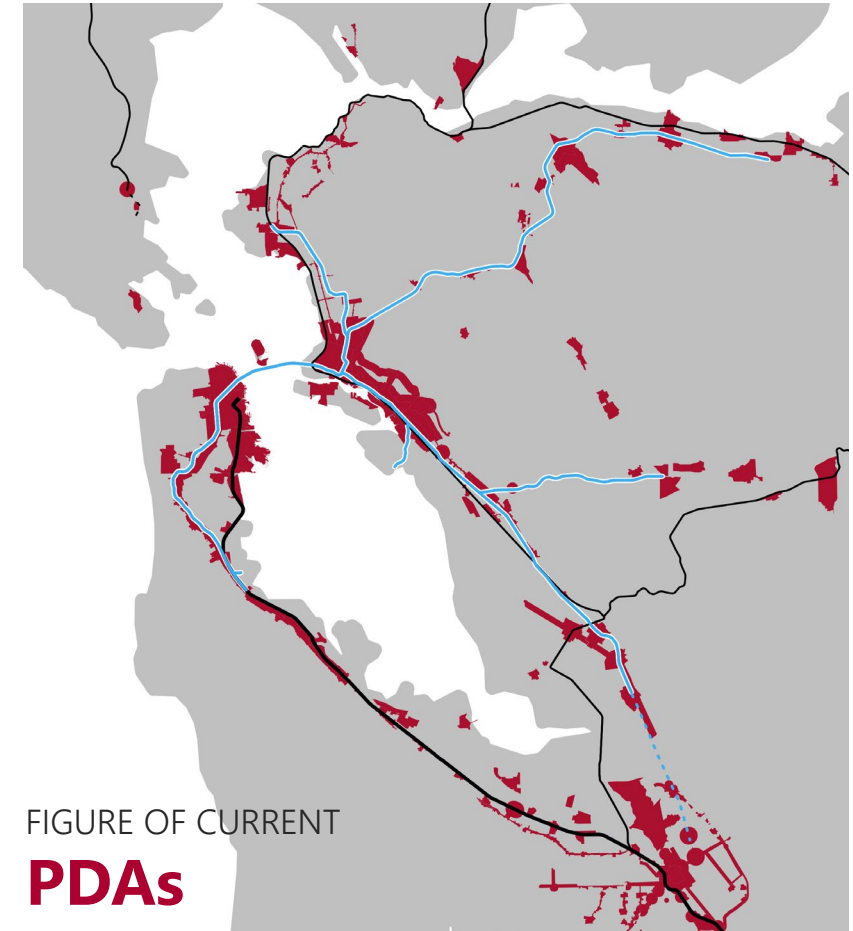


FIGURE OF CURRENT  
**PDAs**

# Supportive Land Use — What's Next



## LAND USE

- In **OCTOBER 2019**, staff will share findings from Horizon's Futures Planning Round 2—which is testing strategies for consideration into Plan Bay Area 2050, including intensifying development near transit and in high-resource areas.
- In **NOVEMBER 2019**, staff will begin sharing the letters of intent for the regional growth framework of PDAs, PCAs and PPAs.
- In **WINTER 2019/2020**, MTC will develop the draft Plan Bay Area 2050 Blueprint to accommodate the region's forecasted 30-year growth.
- In **2020**, reimagine and revamp TOD policy in light of recent housing legislation, growth framework, and insights of RHNA process.



# Optimize Organization & Governance

## ORGANIZATION:

- More than **two dozen** agencies provide transit service in the Bay Area.
- **Five** rail services are operating within the region and **one** is under planning\*,
  - COMMUTER RAIL: BART + Caltrain + SMART + Dumbarton Rail\*
  - LIGHT RAIL: Muni + VTA
- Another **Five** rail services are operating within the mega-region and **two** are under planning\*,
  - INTERCITY RAIL: ACE + Capitol Corridor + San Joaquins + High Speed Rail\* + Valley Link\*
  - INTERSTATE RAIL: California Zephyr + Coast Starlight

## COORDINATION:

- Challenges integrating service, schedules, and fares.
- Challenges delivering projects in major corridors.

- Service Planning
- Fares & Information Systems
- Stations
- Major Capital Projects
- Infrastructure Maintenance
- Train Operations
- Access & Egress
- Commercial Activities
- General Admin. Services

## SUMMARY OF CORE RAILWAY FUNCTIONS

# Organization & Governance — What's Next



## ORGANIZATION & GOVERNANCE

- In **2019/2020**, Project development and Organization/Governance activities are underway for the following projects/corridors
  - CALTRAIN CORRIDOR
  - DIRIDON STATION
  - DOWNTOWN EXTENSION
  - TRANSBAY CROSSING
  - VALLEY LINK
- In **JANUARY 2020**, staff will convene a Commission workshop to discuss partnership/organizational challenges related to efficient and coordinated project delivery of the next generation regional rail investments.



# Summary of Upcoming Activities



## PRIORITIZATION

- **NOVEMBER 2019:** staff will release and discuss the Project Performance Assessment results for nearly 100 projects.
- **WINTER 2019/2020:** MTC will develop the Blueprint for Plan Bay Area 2050, including a Transportation Element with a fiscally-constrained list of transportation projects.



## LAND USE

- **NOVEMBER 2019:** staff will begin share information on the letters of intent submitted for new PDAs, PCAs and Priority Production Areas (PPAs).
- **WINTER 2020:** ABAG/MTC will develop the Blueprint for Plan Bay Area 2050, including the Housing and Economy Elements to accommodate the region's forecasted 30-year growth.
- **2020:** review and revamp TOD Policy.










## ORGANIZATION & GOVERNANCE

- **JANUARY 2020:** staff will convene a Commission workshop to explore more efficient and coordinated project delivery.

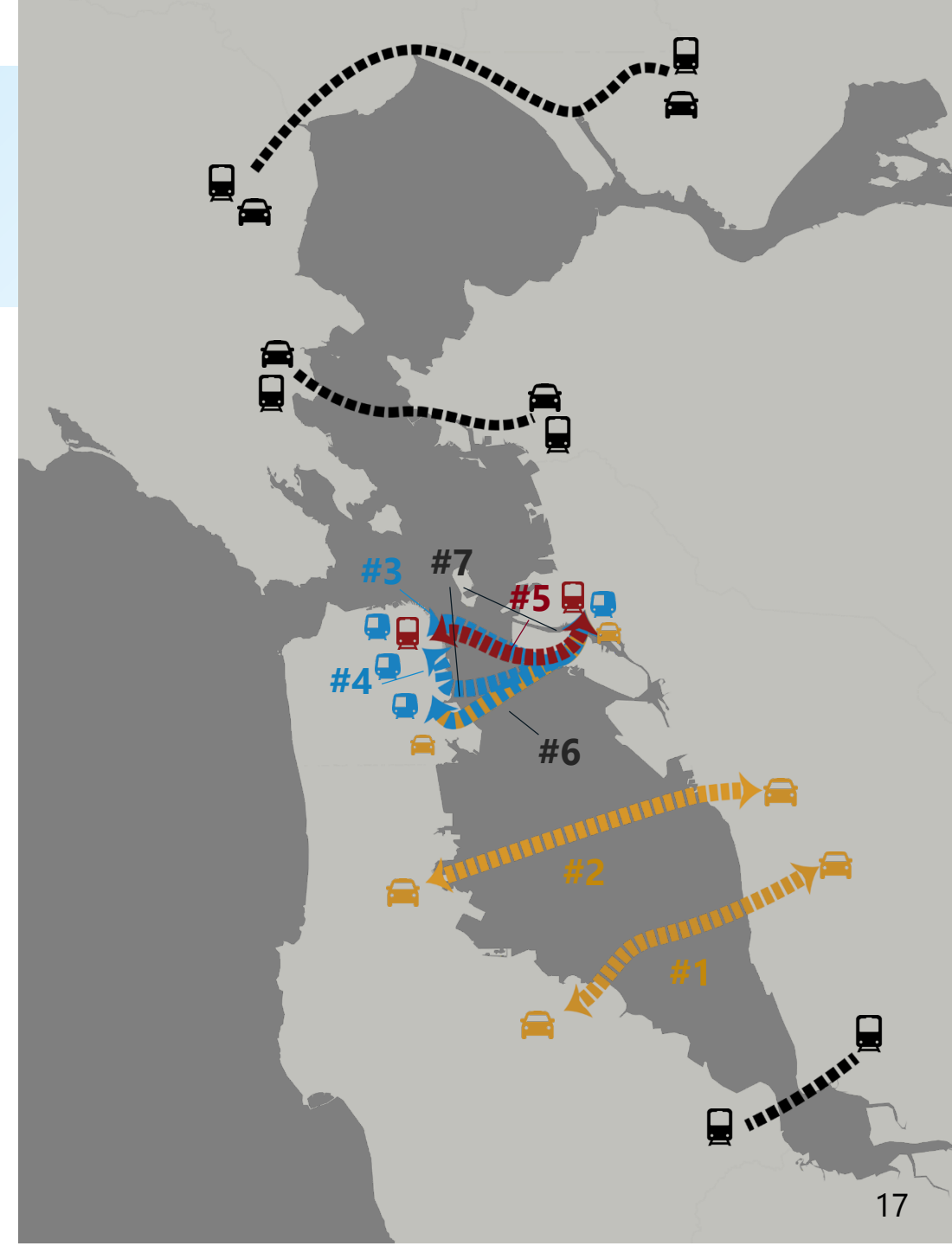
# CASE STUDY → Perspective Paper #5: CROSSINGS

- An analysis of conceptual Transbay Crossing—"CROSSINGS"—is an initial effort of assessing transformative projects through the lens of uncertainty to inform Plan Bay Area 2050.
- To begin the Crossings assessment, MTC engaged partner agencies to develop multi-modal Crossing concepts that:
  - Built upon previous efforts, including the CORE CAPACITY TRANSIT STUDY (2017); and,
  - Considered Transformative Project ideas submitted via Horizon's open request.

# Crossings Concepts Map

- 2x  auto only concepts
- 2x  BART only concepts
- 1x  conventional rail only concept
- 1x  +  combined auto + BART concept
- 1x  +  combined BART + rail concept

Other crossings (Dumbarton Rail Corridor, Richmond-San Rafael Bridge, SR-37) as well as ferry and Transbay bus service improvements will be assessed **as part of Plan Bay Area 2050 using the same methodology.**



# Crossings Key Questions

**Q1:** Do Crossings accommodate Transbay demand?

**Q2:** Are Crossings resilient to uncertain future conditions?






**Q3:** Do Crossings align with the Horizon/Plan Bay Area 2050 Guiding Principles?

**Q4:** Do Crossings improve accessibility for low-income populations?

**Q5:** Do Crossing benefits outweigh their costs?

# Crossings Guiding Principles Assessment

Alignment with the five Guiding Principles using specific project-focused criteria

MODE	CROSSING	AFFORDABLE	CONNECTED	DIVERSE	HEALTHY	VIBRANT
	Concept #1	-	-	-	X	
	Concept #2	-	-	-	X	X
	Concept #3	-	-	-	-	-
	Concept #4	-	-	-	-	-
	Concept #5	-	-	-	-	-
	Concept #6	-	-	X	-	-
	Concept #7	-	-	-	-	-

X Does Not Support Principle






## FINDINGS:

1. Transit-only crossing concepts align with all of the Horizon/Plan Bay Area 2050 Guiding Principles.

2. Auto crossing concepts do not align with all of the Guiding Principles since they increase overall regional emissions and/or create barriers through existing communities.

# Crossings Equity Scores

Measuring distributive impacts of accessibility benefits across income groups

MODE	CROSSING	RISING TIDES, FALLING FORTUNES	CLEAN AND GREEN	BACK TO THE FUTURE
	Concept #1	<b>Impedes</b>	<b>Impedes</b>	<b>Even</b>
	Concept #2	<b>Even</b>	<b>Impedes</b>	<b>Even</b>
	Concept #3	<b>Even</b>	<b>Even</b>	<b>Even</b>
	Concept #4	<b>Even</b>	<b>Even</b>	<b>Even</b>
	Concept #5	<b>Even</b>	<b>Even</b>	<b>Even</b>
	Concept #6	<b>Even</b>	<b>Even</b>	<b>Even</b>
	Concept #7	<b>Even</b>	<b>Even</b>	<b>Even</b>

Equity Score: **Impedes** equity: <40% | **Even** distribution: 40-60% | **Advances** equity: >60%






## FINDINGS:

1. While no concept advances equity, most concepts provide benefits evenly to all population groups.
2. Companion policies would need to be considered to advance equity.



# Crossings Benefit-Cost Ratios

Compares societal benefits against anticipated project costs

MODE	CROSSING	RISING TIDES, FALLING FORTUNES	CLEAN AND GREEN	BACK TO THE FUTURE
	Concept #1	● ○ ○ ○	● ○ ○ ○	● ○ ○ ○
	Concept #2	● ○ ○ ○	● ○ ○ ○	● ● ● ○
	Concept #3	● ● ○ ○	● ● ● ○	● ● ● ○
	Concept #4	● ● ○ ○	● ● ● ○	● ● ● ○
	Concept #5	● ● ○ ○	● ● ● ○	● ● ● ●
	Concept #6	● ● ○ ○	● ● ● ○	● ● ● ○
	Concept #7	● ● ○ ○	● ● ● ○	● ● ● ○

Notes:

- Benefit-Cost ratios over the time period: 2025-2080
- Discount rate: 3%, Time to Implement: 10 years
- Costs include a residual value of investment at 2080

Color Range: < 0.5 | 0.5 – 0.9 | 1.0 – 1.9 | > 1.9

## FINDINGS:

1. Crossings benefits do not substantiate costs in a low-growth future.
2. Auto only crossing concepts perform poorly relative to transit crossing concepts.
3. Concept 5 has a slightly higher B/C ratio than Concepts 3 & 4, tied to high housing and job growth development forecasted in the corridor.

# Crossing Conclusions



## PRIORITIZATION

**A. TRANSIT CROSSING CONCEPTS SHOULD BE ADVANCED FOR FURTHER ANALYSIS.**

Opportunities to improve B/C ratios should be studied, e.g. land use and economic impacts. Auto-only Crossing concepts should not be advanced.

**B. NEITHER BART NOR CONVENTIONAL RAIL SIGNIFICANTLY OUTPERFORMED THE OTHER.**

This decision will require more detailed analysis of modal tradeoffs.



## LAND USE

**C. ALL FUTURE CROSSINGS ANALYSES MUST ASSESS DEVELOPMENT AND RIDERSHIP POTENTIAL.**

More thorough analysis of development feasibility in station areas is needed in future Bay Crossings analyses.



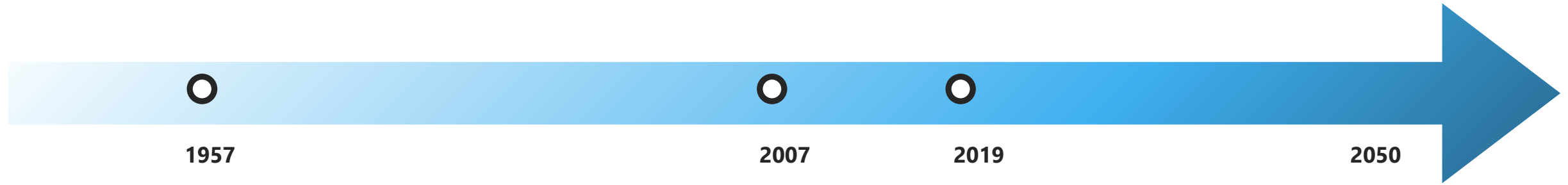
## ORGANIZATION & GOVERNANCE

**D. THE REGION NEEDS TO WORK TOWARDS A NEW CROSSING BY DELIVERING SIGNIFICANT FOUNDATIONAL INFRASTRUCTURE IN PHASES.**

There are planned and proposed transit investments that are vital to a Bay Crossing's success.

“If the Bay Area is to be preserved as a fine place to live and work, a regional rapid transit system is essential... A satisfactory solution to the Bay Area’s traffic problem cannot be reached by building freeways alone. The solution can be reached only through a system of mass rapid transit developed on the premise of moving people-not automobiles.”

—1957 RAIL PLAN FOR THE BAY AREA



# Metropolitan Transportation Commission

## Legislation Details (With Text)

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**File #:** 19-1023      **Version:** 1      **Name:**  
**Type:** Report      **Status:** Informational  
**File created:** 8/29/2019      **In control:** Regional Advisory Working Group  
**On agenda:** 10/8/2019      **Final action:**  
**Title:** Vital Signs: Economy Update

Summary of findings from recent updates to Vital Signs economy indicators.

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** [04\\_Vital Signs Economy Update Oct 2019.pdf](#)

Date	Ver.	Action By	Action	Result
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**Subject:**

Vital Signs: Economy Update

Summary of findings from recent updates to Vital Signs economy indicators.

**Presenter:**

Raleigh McCoy

**Recommended Action:**

Information

**Attachments:**

# Metropolitan Transportation Commission and the Association of Bay Area Governments Regional Advisory Working Group

October 8, 2019

Agenda Item 4

## Vital Signs: Economy Update

**Subject:** Summary of findings from recent updates to Vital Signs economy indicators.

**Background:** The Vital Signs performance monitoring initiative was a key implementation action of *Plan Bay Area*, allowing residents to view and interact with data for 41 indicators across the themes of transportation, land & people, the economy, the environment, and equity. Data are available over time and across geographies, allowing users to view historical trends and compare conditions across Bay Area counties, cities, and even neighborhoods, depending on the geographic specificity of the data available. Since the site was launched in 2015, over 100,000 users have visited the Vital Signs website, with traffic increasing by over 25 percent between Fiscal Years 2018 and 2019.

In August and September 2019, updated data for eight of the nine economy indicators were published on the Vital Signs website. The ninth economy indicator, list rents, will be updated upon the identification of a replacement data source, as the data source previously analyzed on Vital Signs is now defunct.

### Key Findings

*The Bay Area economy is performing better than ever by a number of metrics.* The latest data published on Vital Signs show historic highs for number of wage and salary jobs, per capita economic output, seaport traffic, and airport traffic. The Bay Area also hit a new low in unemployment rate. Not only did the region outperform its prior performance for these measures, but it also was the top performer among peer metro areas for unemployment and per capita economic output.

*However, economic prosperity is not equally distributed along geographic or socioeconomic lines.* While the region on the whole is experiencing a period of economic growth, not all counties or socioeconomic groups are benefitting equally. For example, the top 20 percent of earners in the region have seen their incomes grow four times faster than the bottom 20 percent, after adjusting for inflation. Disparities also exist along geographic lines, with Contra Costa and Solano counties seeing inflation-adjusted incomes decline between 2010 and 2017, while the rest of the region's counties saw incomes trending upward.

*The Bay Area economy has diversified in the past decade.* Economic output, or the value of goods and services produced by an economy, has historically been concentrated in the San Francisco Metropolitan Statistical Area (MSA), which includes San Francisco, San Mateo, Marin, Alameda and Contra Costa counties. However, between 2009 and 2017, the San Jose MSA, which includes San Jose and San Benito counties, has nearly doubled its economic output, reducing the concentration of economic activity that has existed within San Francisco and its immediate surroundings. The mix of industries in which Bay Area residents are employed has also been in flux, with information overtaking education and health services as the sector with the largest increase in jobs since 1990. Meanwhile, the manufacturing sector has reversed a decades-long trend of decline, adding just under 50,000 jobs between 2010 and 2017. The construction sector has also seen



growth following the end of the Great Recession, with employment numbers nearing pre-Recession levels.


*Housing costs for renters and homebuyers are at historic highs.* The median Bay Area home price was just under \$1 million in 2018, a new high for the region (after adjusting for inflation). Similarly, inflation-adjusted median rent payments were also at their highest point in 2017, with the median renter household paying \$1,800 per month. The Bay Area leads the nation's major metro areas in both median home price and median rent payments, with the gap between our region and its peers widening since 2010.

**Issues:** None

**Next Steps:** Staff are currently in the process of updating the Land & People indicators, and expect to publish updated data on the Vital Signs website later in 2019.

**Attachments:** **Attachment A:** Presentation

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**ECONOMY UPDATE**  
RALEIGH MCCOY, MTC/ABAG  
REGIONAL ADVISORY WORKING GROUP  
OCTOBER 13, 2019

**VITAL SIGNS**



MTC



ABAG



BAAQMD



BCDC



BARC<sub>1</sub>



**Vital Signs tracks 41 performance indicators to understand if the Bay Area is (or is not) making progress towards key regional goals.**



The interactive Vital Signs website allows residents to explore trends at the regional, county, city, and even neighborhood levels.

STREET PAVEMENT CONDITION Regional Performance Regional Distribution Local Focus

✓ UPDATED SEPTEMBER 2018

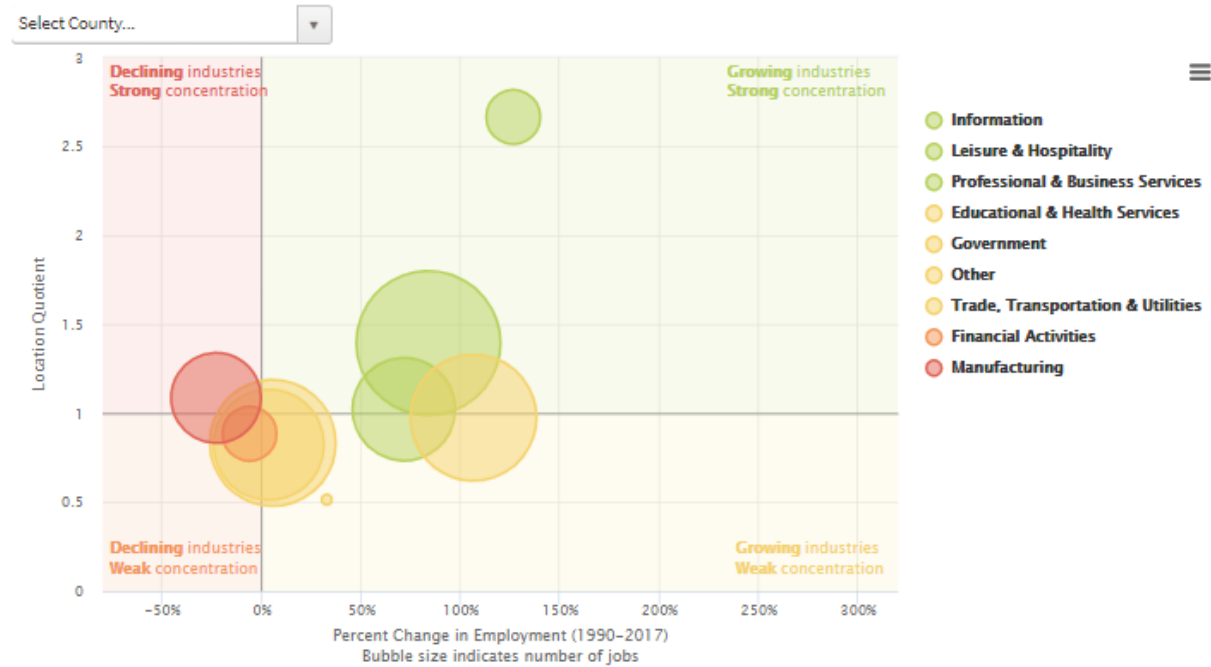
2017 Street Pavement Condition by City and by Street Segment



JOBS BY INDUSTRY Regional Performance Regional Distribution Local Focus National Context

✓ UPDATED AUGUST 2019

2017 Industry Specialization Breakdown — Bay Area



[vitalsigns.mtc.ca.gov](https://vitalsigns.mtc.ca.gov)

Today we present updates to eight Vital Signs indicators, ranging from unemployment to home prices.





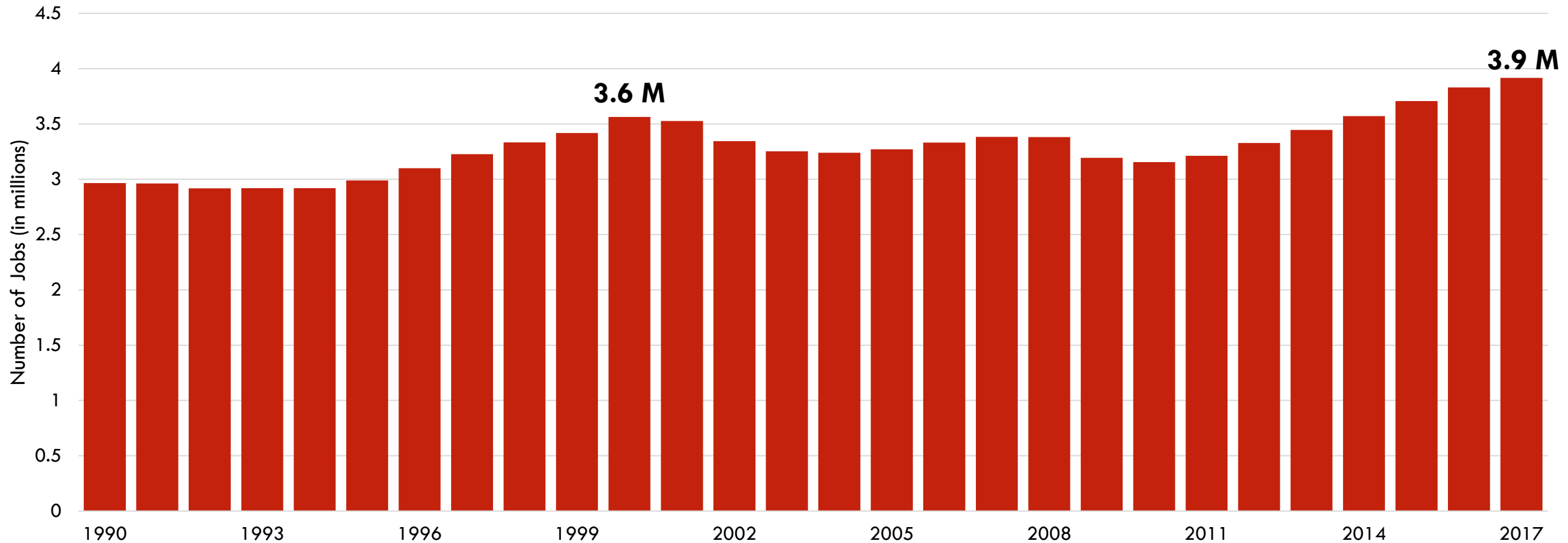
- ① **The Bay Area economy is performing better than ever by a number of metrics.**
- ② However, economic prosperity is not equally distributed along geographic or socioeconomic lines.
- ③ The Bay Area economy has diversified in the past decade.
- ④ Housing costs for renters and homebuyers are at historic highs.



REGIONAL PERFORMANCE

**There are more jobs in the Bay Area than ever before.**

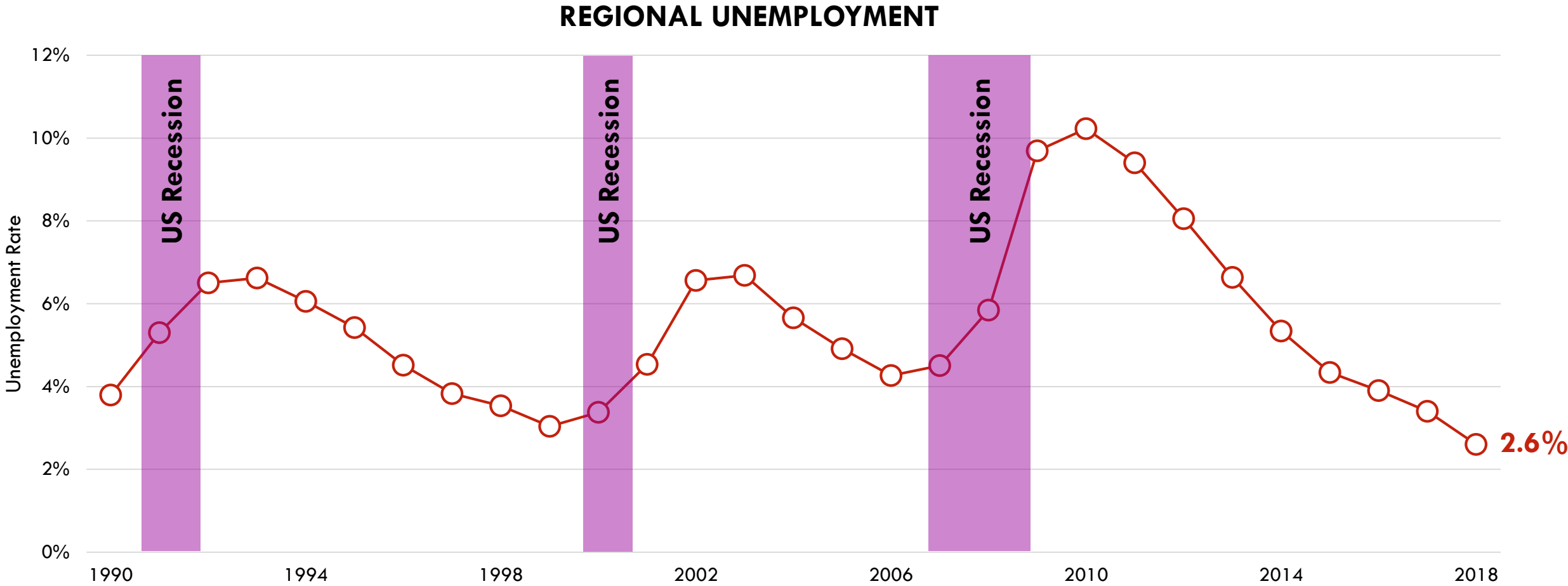
**TOTAL REGIONAL WAGE AND SALARY JOBS**





REGIONAL PERFORMANCE

The Bay Area's unemployment rate is at a 30-year low.

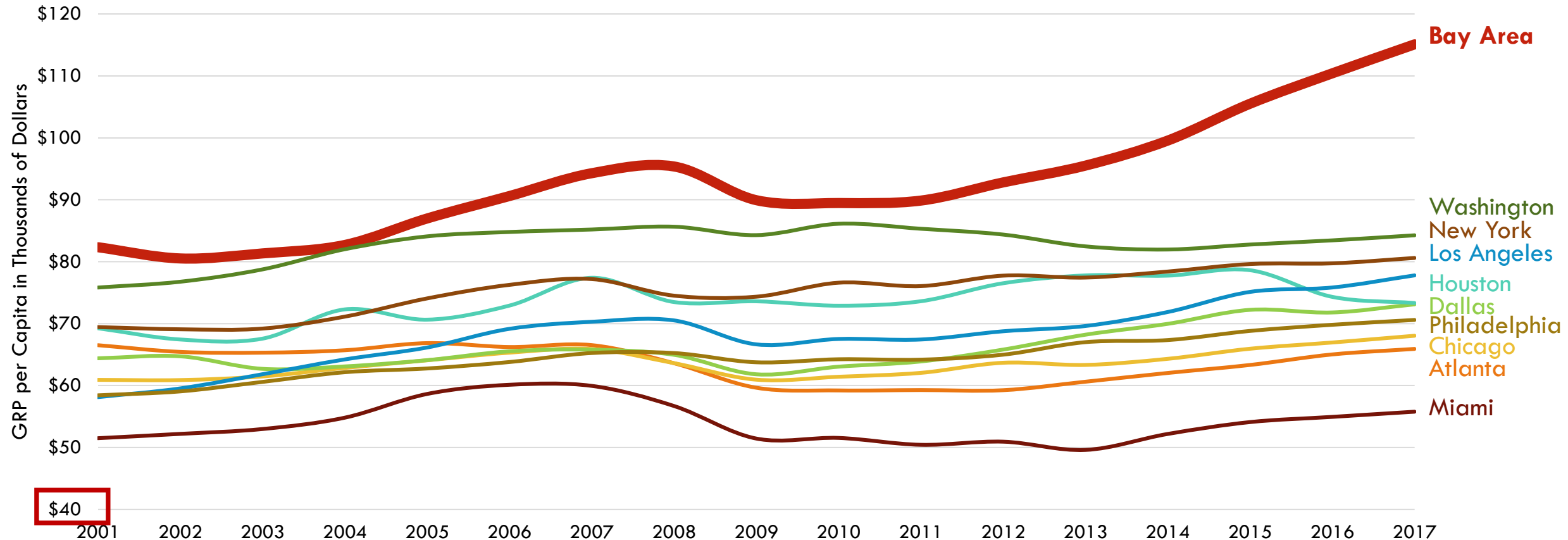


Source: California Employment Development Department

## NATIONAL CONTEXT

**The Bay Area has had the highest per capita GRP since 2001, with the gap widening each year since 2011.**

## GROSS REGIONAL PRODUCT PER CAPITA BY METRO AREA



Sources: Bureau of Economic Analysis (inflation-adjusted to 2017 dollars); Department of Finance; US Census Bureau

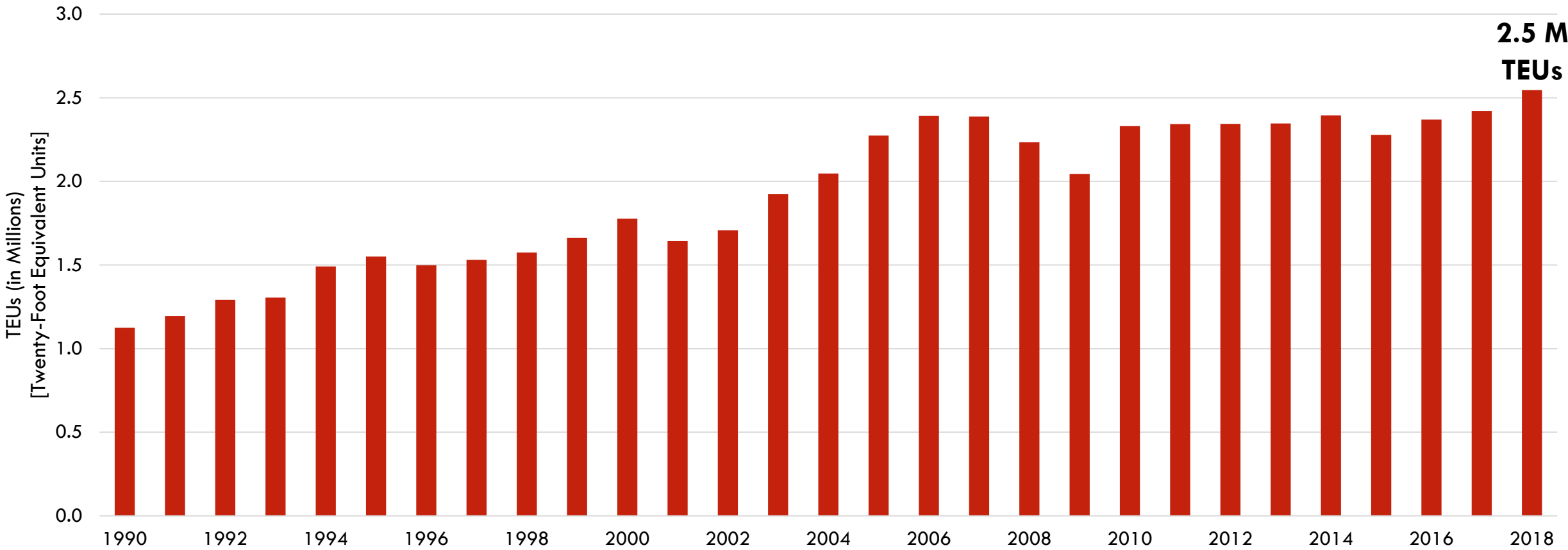
Note: GRP is reported at the MSA level; the San Jose MSA include Santa Clara County and San Benito County



REGIONAL PERFORMANCE

**Port of Oakland's cargo activity is at an all-time high, with container flows twice what was seen in the early 1990s.**

PORT OF OAKLAND CONTAINER FLOWS

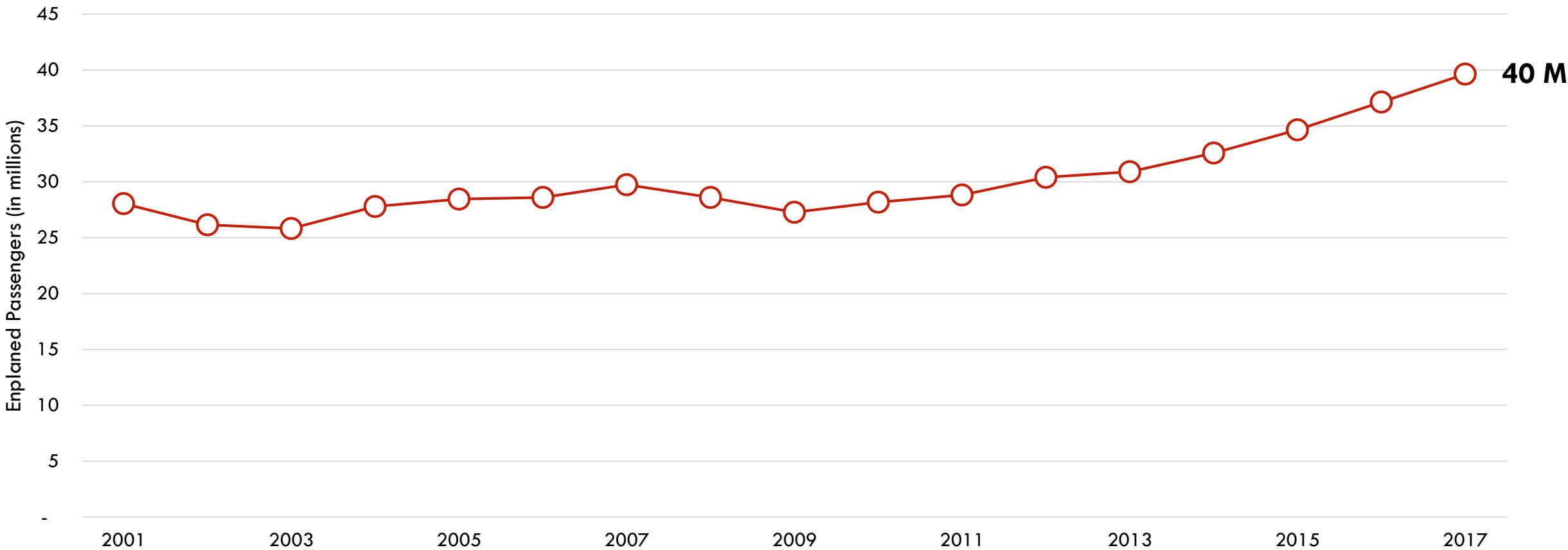




REGIONAL PERFORMANCE

More air passengers are using Bay Area airports than ever before.

REGIONAL AIR PASSENGER ENPLANEMENTS



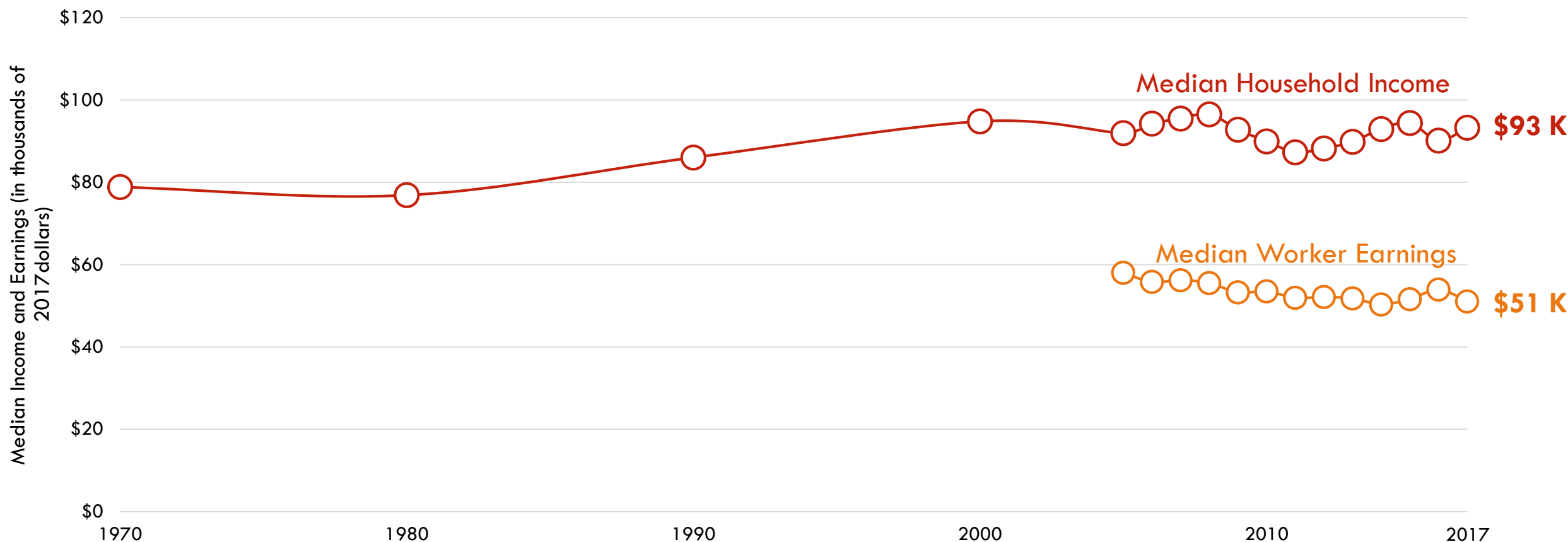


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## REGIONAL PERFORMANCE

**Median household income and worker earnings in the Bay Area have remained relatively constant since 2010.**

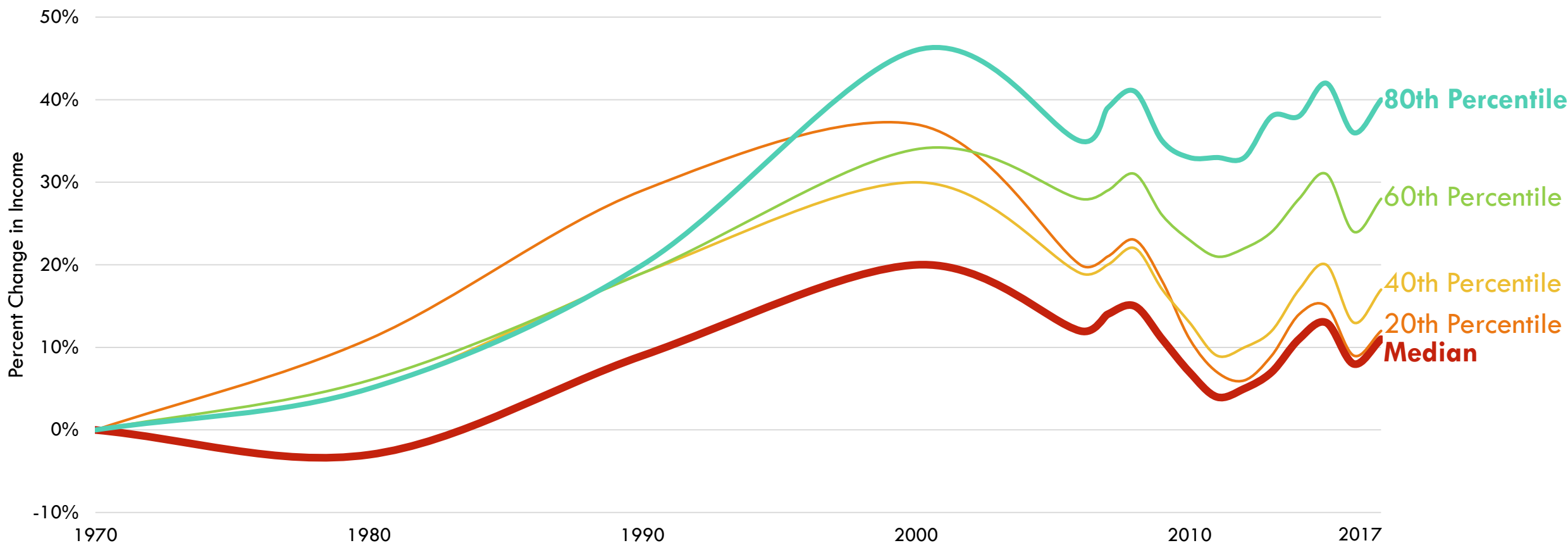
REGIONAL MEDIAN INCOME AND EARNINGS



## REGIONAL PERFORMANCE

**Higher-income households have seen their incomes grow four times faster than the regional median since 1970.**

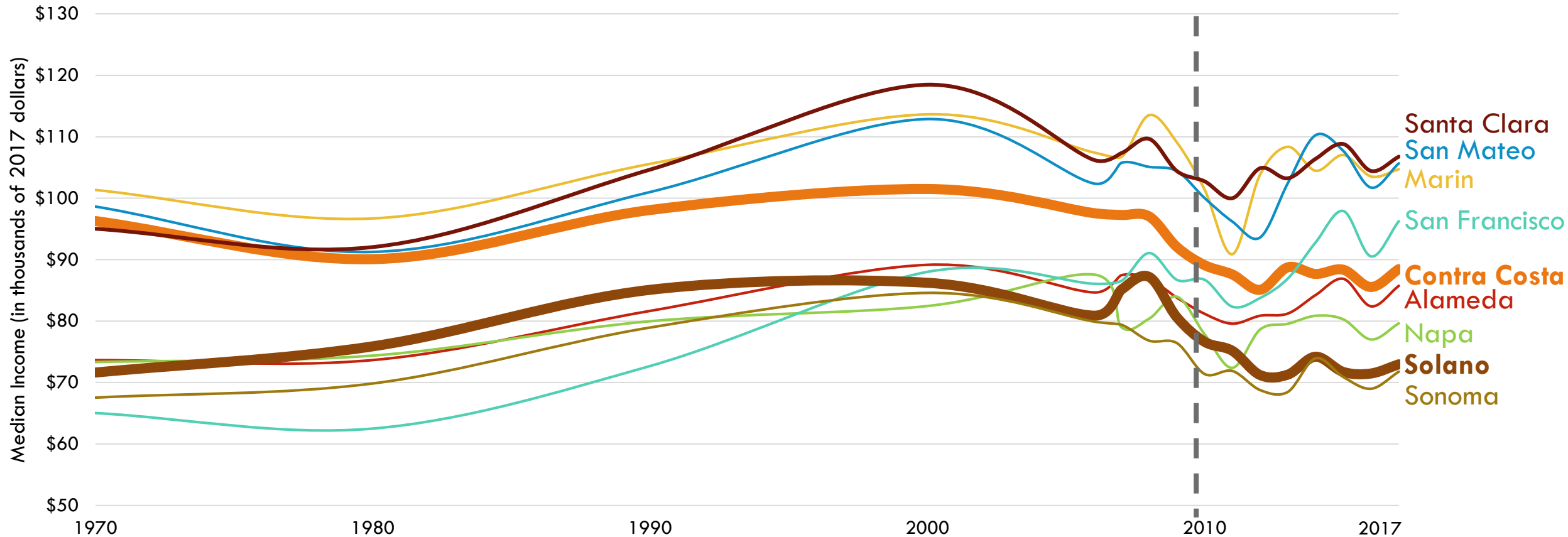
## PERCENT CHANGE IN HOUSEHOLD INCOME SINCE 1970



## LOCAL FOCUS

**Since 2010, median household income risen in every county except Contra Costa and Solano.**

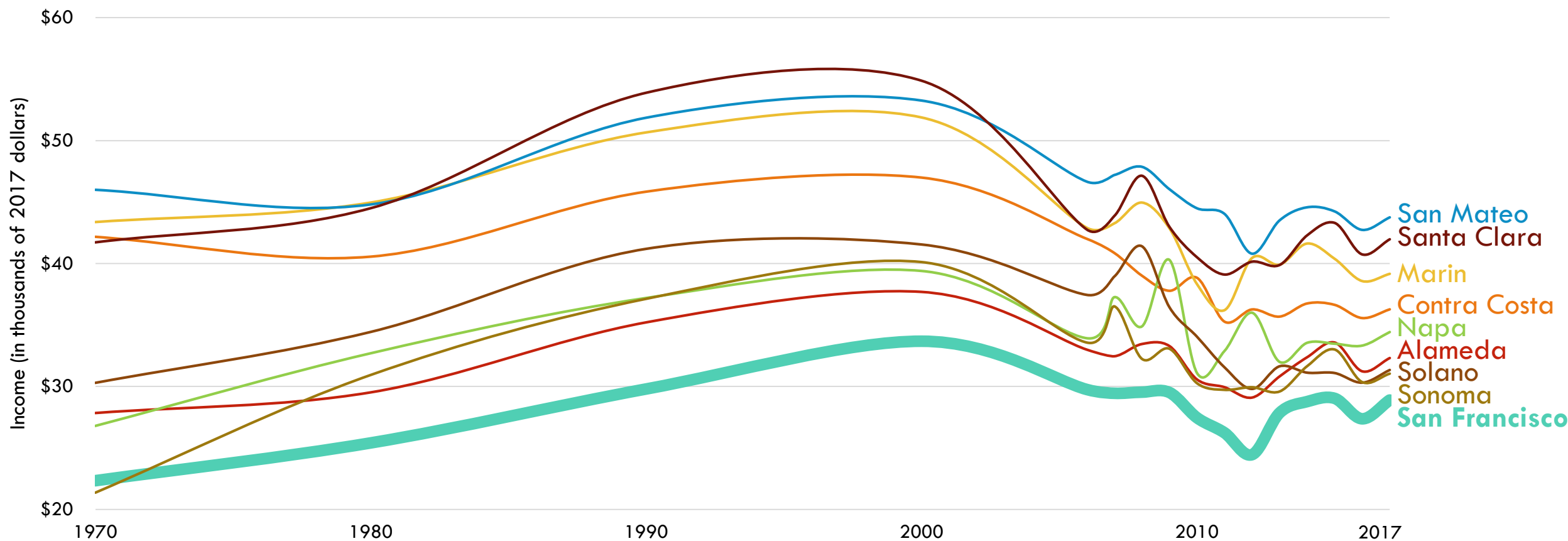
MEDIAN HOUSEHOLD INCOME BY COUNTY



## LOCAL FOCUS

**Despite having the fastest growing median household income, San Francisco has the lowest 20<sup>th</sup> percentile income.**

## 20TH PERCENTILE HOUSEHOLD INCOME BY COUNTY



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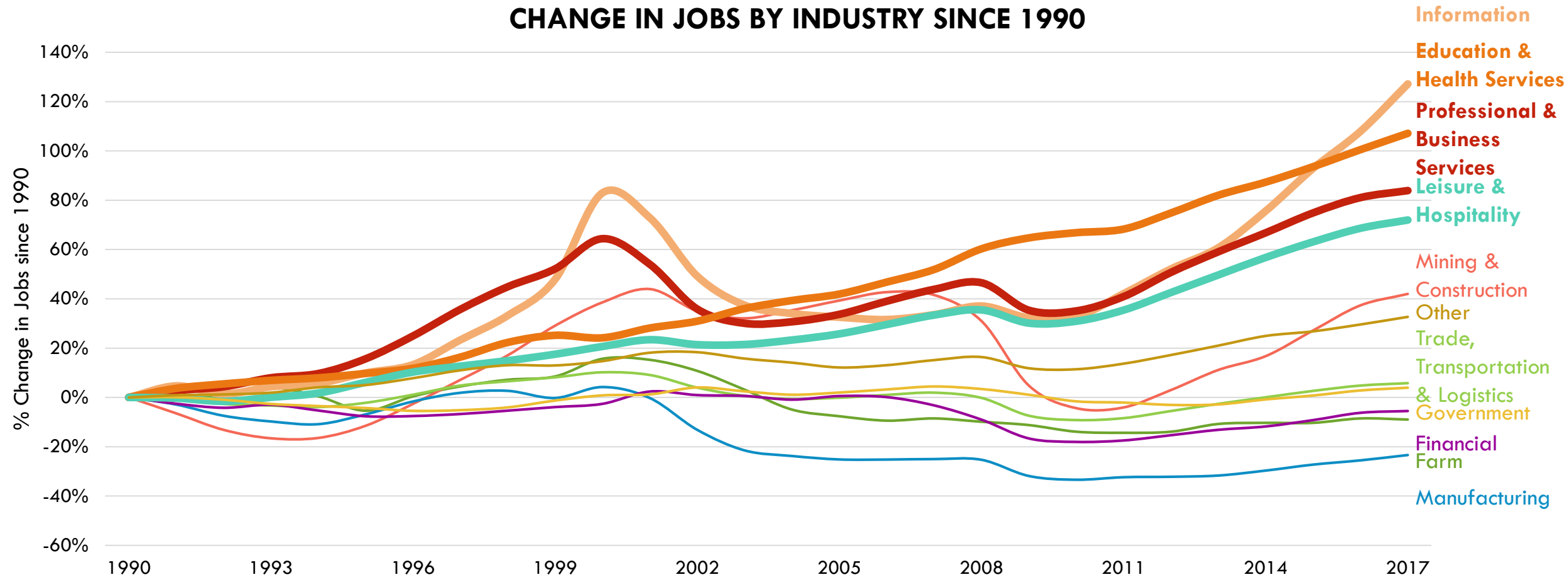




## REGIONAL PERFORMANCE

**In recent years, the information industry surpassed service-based industries as the fastest growing sector in the region.**

CHANGE IN JOBS BY INDUSTRY SINCE 1990

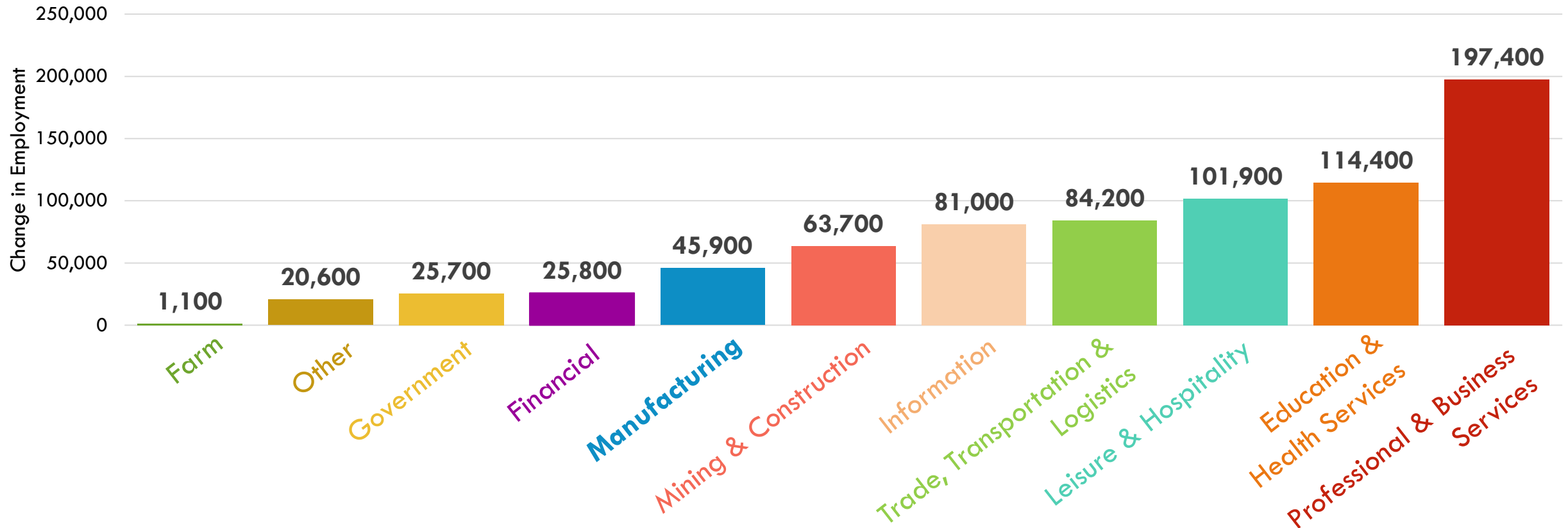




## REGIONAL PERFORMANCE

**The manufacturing sector has reversed a decades-long trend of declining employment since 2010.**

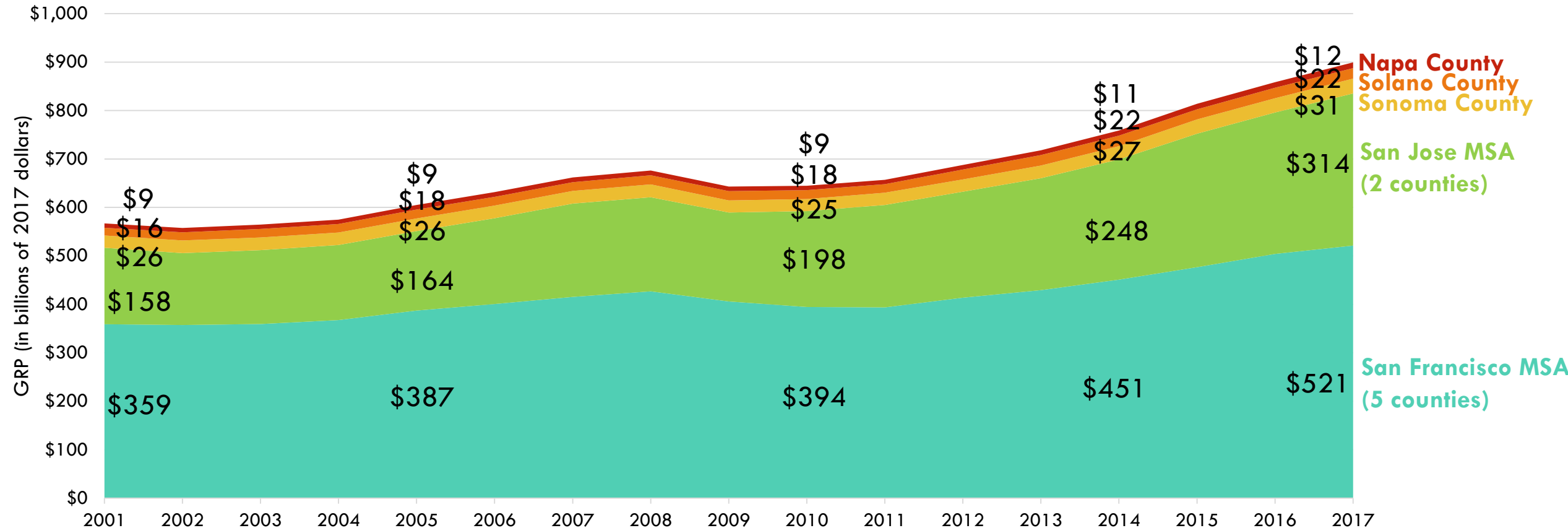
JOB GROWTH – 2010 to 2017



## LOCAL FOCUS

**The North Bay contributes a small but stable fraction of the region's economic output.**

## GROSS REGIONAL PRODUCT BY SUB-REGION

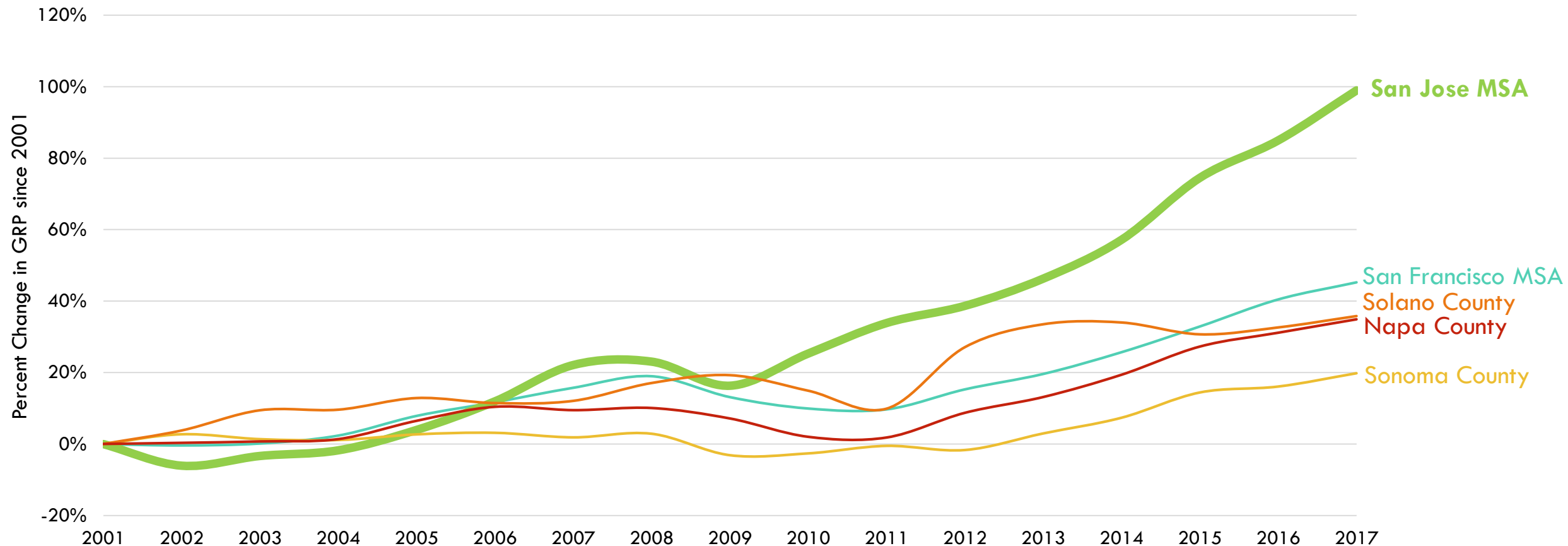


Source: Bureau of Economic Analysis (inflation-adjusted to 2017 dollars)

Note: GRP is reported at the MSA level; the San Jose MSA include Santa Clara County and San Benito County

## LOCAL FOCUS

**Silicon Valley's growth since 2009 has far outpaced growth in other sub-regions.**

**PERCENT CHANGE IN GROSS REGIONAL PRODUCT SINCE 2001**

Source: Bureau of Economic Analysis (inflation-adjusted to 2017 dollars)

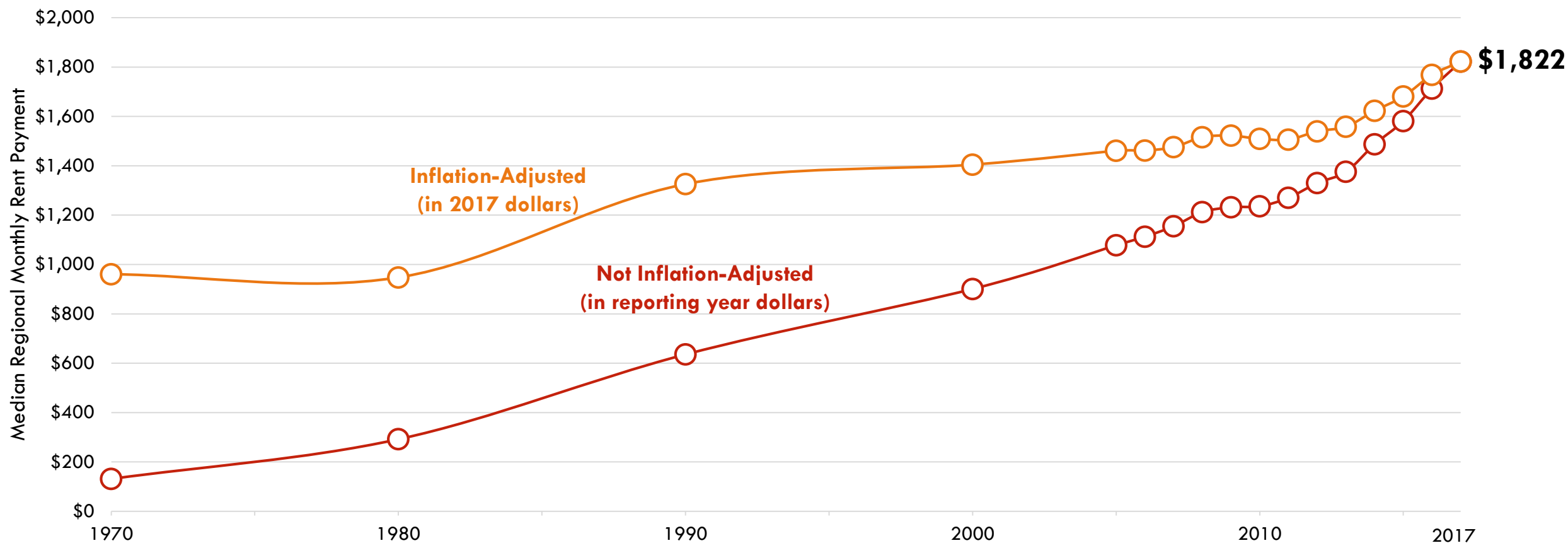
Note: GRP is reported at the MSA level; the San Jose MSA include Santa Clara County and San Benito County

- ① The Bay Area economy is performing better than ever by a number of metrics.
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- ③ The Bay Area economy has diversified in the past decade.
- ④ **Housing costs for renters and homebuyers are at historic highs.**

## REGIONAL PERFORMANCE

**Rents have gone up since 1970, but this trend accelerated starting in 2013.**

## BAY AREA MEDIAN RENT PAYMENTS

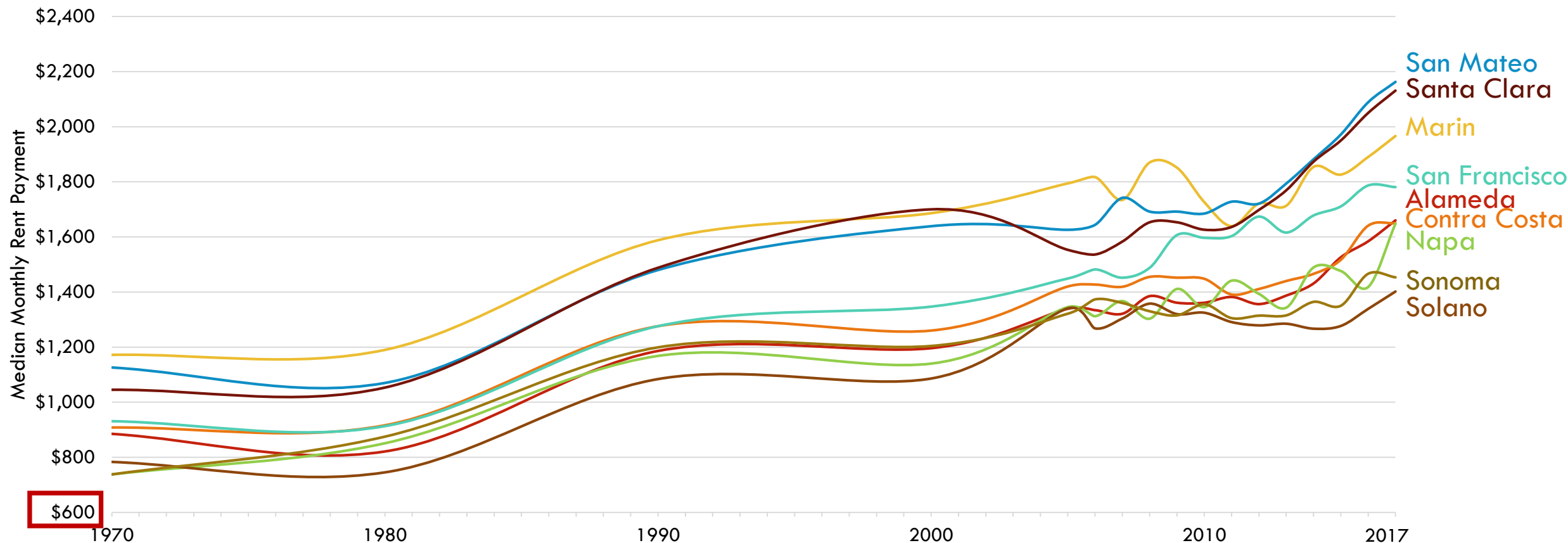




## LOCAL FOCUS

**Rents have risen in every Bay Area county since 1970, with San Mateo and Santa Clara still by far the most expensive.**

MEDIAN RENT PAYMENTS BY COUNTY

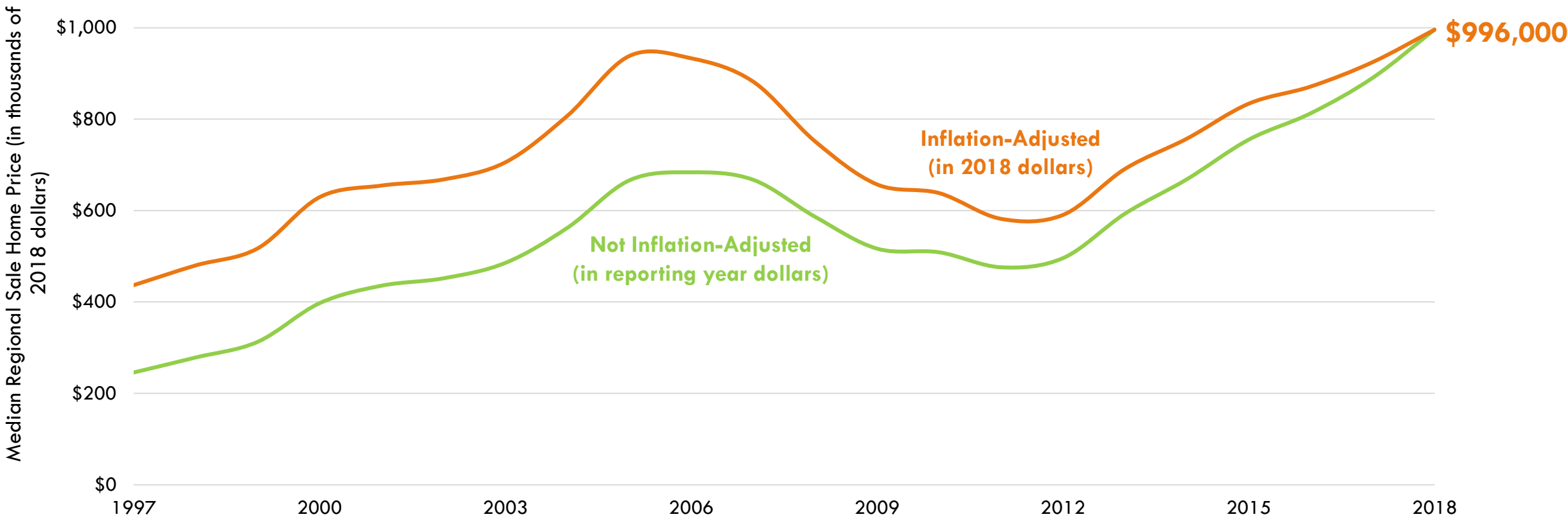




REGIONAL PERFORMANCE

**Bay Area home prices have risen and now exceed the pre-Recession peak.**

REGIONAL MEDIAN HOME SALE PRICE

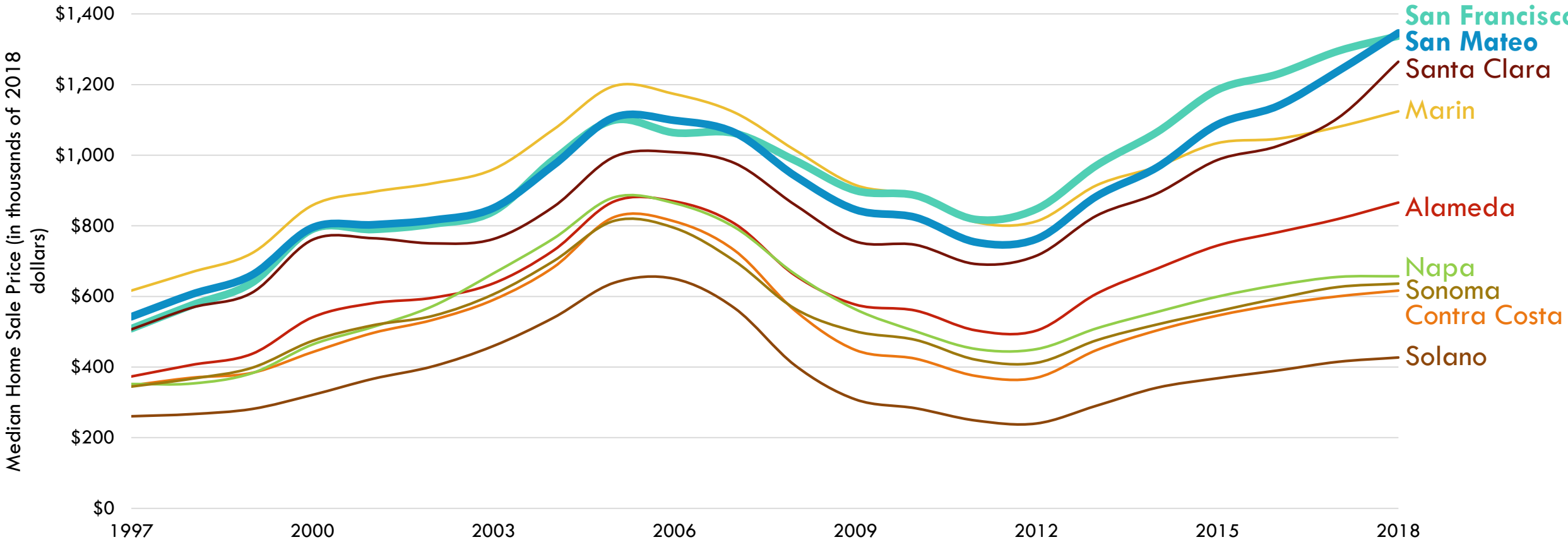




LOCAL FOCUS

**San Francisco and San Mateo counties are tied for the highest median home sale price at 1.3 million dollars.**

MEDIAN HOME SALE PRICE BY COUNTY

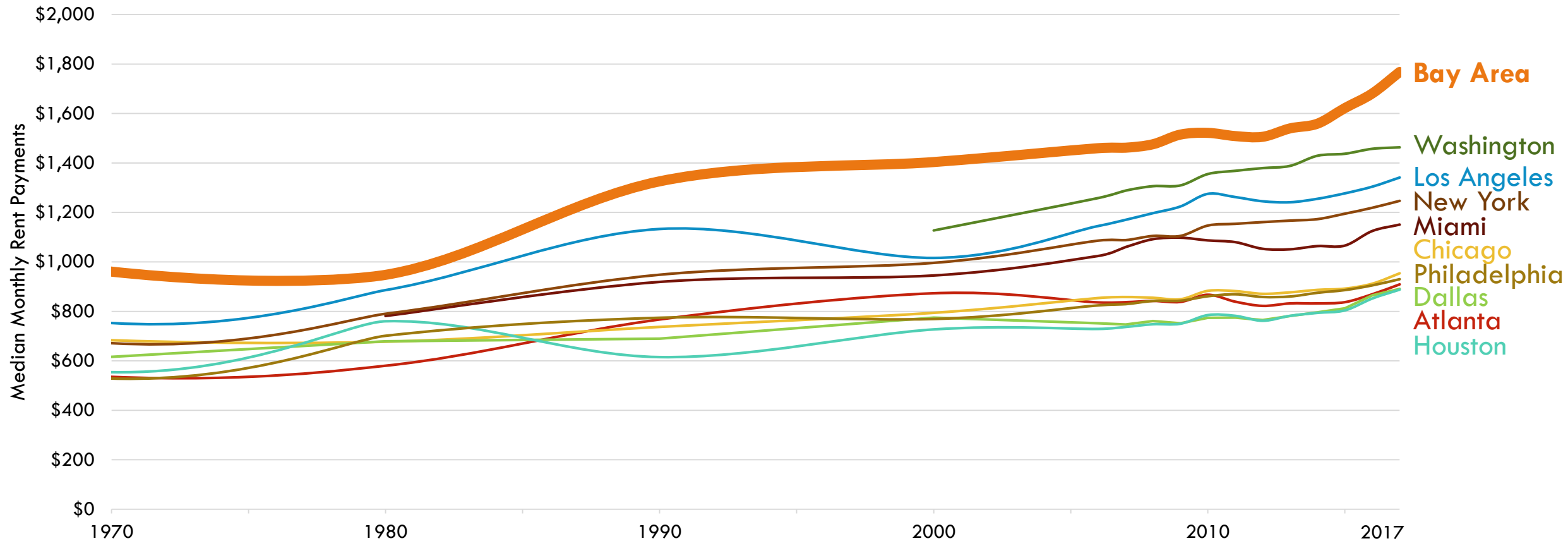


Sources: Zillow (inflation-adjusted to 2018 dollars)

## NATIONAL CONTEXT

**Since 1970, the Bay Area has consistently had the highest rents of any major metro area.**

MEDIAN RENT PAYMENTS BY METRO AREA

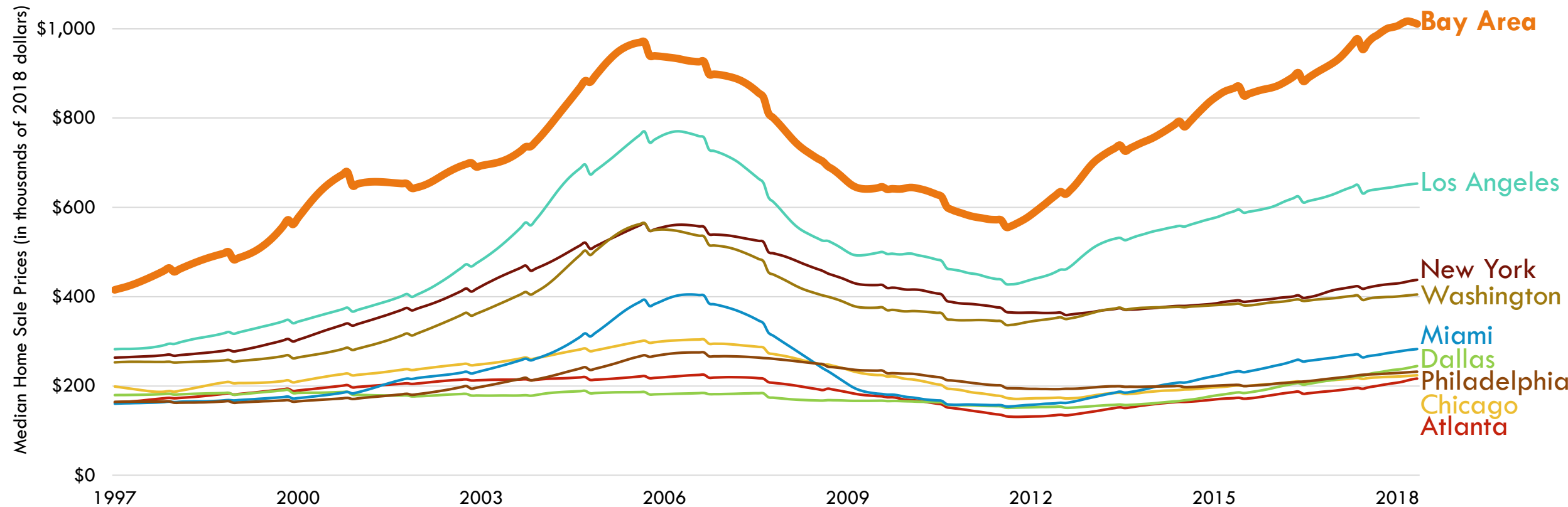




NATIONAL CONTEXT

**Bay Area median home sales prices are more than three times higher than five other major metro areas.**

MEDIAN HOME SALE PRICE BY METRO AREA



Sources: Zillow (inflation-adjusted to 2018 dollars)  
Note: No home price data available for Houston due to disclosure laws

# QUESTIONS?

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