In Case You Missed It
Futures - Interim Report

Plan Bay Area 2050 Summer Webinar Series

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7/30/2019
Today’s Webinar

Quick Introduction to Plan Bay Area 2050

Futures Process Overview

Early Futures Findings (Round 1)

Current Futures Analysis (Round 2)

Q&A + Upcoming Webinars
What is Plan Bay Area?

- The regional plan is a blueprint for growth and infrastructure for the next 30 years.
- The regional plan is updated every four years, with this major update due in 2021.
- The regional plan is a reflection of the shared priorities of the diverse nine-county San Francisco Bay Area.
- The regional plan is fiscally-constrained, even as it aspires to tackle the Bay Area’s big challenges with specific strategies.
- The regional plan is not an expenditure plan; it is focused on setting priorities and over the long term and looking holistically across “silos”.

Overview

Meets federal & state requirements

Identifies local and regional strategies

Establishes a long-range regional vision across multiple topic areas
High-performing strategies and projects from Horizon - those that are resilient to uncertainties - will be recommended for inclusion in the Preferred Plan Bay Area 2050 (RTP/SCS).
What Topic Areas Do These Efforts Tackle?

Horizon and Plan Bay Area 2050 are addressing four core topic areas, as we work to create a long-range integrated regional vision for the next 30 years.

- Transportation
- Housing
- Economic Development
- Environment
Plan Bay Area 2050: Summertime Webinar Series

Growth Framework Update
- June 26, July 1 & July 10
- New Criteria and Submitting Letters of Interest/Letters of Confirmation

Preparing for Plan Bay Area 2050
- July 9
  - Public Engagement Process Overview
- August 6
  - Bay Area Spatial Information System (BASIS)
- To Be Scheduled
  - Horizon Perspective Paper 5: Bay Crossings
  - Looking Ahead: The Vision for Plan Bay Area 2050

In Case You Missed It! (ICYMI)
- July 30
  - ICYMI: Horizon Futures Round 1 Analysis
- August 14
  - ICYMI: Horizon Perspective Paper 1 - Autonomous Vehicles

Target audience:
- Growth Framework Update: Cities, counties, and CTAs
- Preparing for Plan Bay Area 2050: Stakeholders & interested public
- In Case You Missed It! (ICYMI): New stakeholders/public

More information available at:
In Case You Missed It
Futures - Interim Report

Opportunities and Challenges

July 30, 2019 | Webinar
Futures Process
Futures Process

OUTREACH

CREATE-A-FUTURE

ROUND 1
ANALYSIS
Current Strategies

REPORT

OPPORTUNITIES
& CHALLENGES
Futures Interim Report: Opportunities and Challenges

The full report highlights a broader suite of opportunities and challenges, delving into specifics for each future.

Go to: mtc.ca.gov/our-work/plans-projects/horizon/futures-planning
Futures Process

OUTREACH

ROUND 1
ANALYSIS
Current Strategies

REPORT

OUTREACH
Futures Process

ROUND 1
ANALYSIS
Current Strategies

REPORT
OPPORTUNITIES & CHALLENGES

ROUND 2
ANALYSIS
New Strategies

REPORT
WIN-WIN SOLUTIONS
Futures Analysis

Plan Bay Area 2040
Adopted in July 2017

Horizon Futures Round 1 Analysis

• How does the region’s currently-adopted Plan fare in an era of uncertainty?
• What are the opportunities and challenges the region may face?

Horizon Futures Round 2 Analysis

• How might new strategies result in improved outcomes in each future?
• Which strategies are effective across many futures?
Refresher: What is a Strategy?

A **strategy** is a policy (such as upzoning around transit stations or pricing all freeways) or investment (such as a short list of major rail extensions, or a package of sea level rise infrastructure) that can be advanced and implemented by local, regional, or state government.

This differs from an **external force**, introduced in Futures Round 1 and carried over into Futures Round 2, which occurs on a national or global level and remains firmly outside the control of Bay Area residents, businesses, or local elected officials.
# External Forces

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

- Trend **reduced, lower, limited** than today.
- Trend **similar** to today.
- Trend **increased, higher, more rapid** than today.
Plan Bay Area 2040 Policies

Land Use

• Assign higher density than currently allowed by cities in select PDAs.

• Keep urban growth boundaries in place.

• Preserve and incorporate office space caps in some job-rich cities.

• Assume 10% inclusionary zoning for all for-profit housing development.

• Assume eased parking minimums, streamlined process, and subsidies stimulate development in PDAs.

Transportation

• Operate and Maintain - Fix-it-First; Ongoing Operations

• Modernize - Caltrain Electrification, BART Core Capacity, New BRT Lines, Bay Area Forward, etc.

• Expand - BART to Silicon Valley, Caltrain DTX, Express Lanes Network, etc.
Three Futures

By imagining three different futures for the Bay Area, we can begin to explore the impacts associated with each path forward.
Rising Tides, Falling Fortunes

Imagine a future where the federal government cuts spending and reduces regulations, leaving decisions to states & regions.
Imagine a future where new technologies and a national carbon tax enabled telecommuting and distributed job centers.
Back to the Future

Imagine a future where an economic boom and new transportation options spur a new wave of development.

Photo Credit: Paulo Philippidis, Bus Through Sonic Runway
https://www.flickr.com/photos/canorus/40642623862
Population Growth

Rising Tides, Falling Fortunes
+1.0 million residents in 2050

Clean and Green
+3.1 million residents in 2050

Back to the Future
+6.0 million residents in 2050

11,000k
11,500k
12,500k

■ = 50,000 residents.
a single line represents 1 million residents
Housing Growth

Rising Tides, Falling Fortunes
+0.5 million units by 2050

Clean and Green
+1.3 million units by 2050

Back to the Future
+2.1 million units by 2050

Circle color is representative of year.

Circle area is representative of the number of homes.

- 50k
- 100k
- 500k
Job Growth

Rising Tides, Falling Fortunes
+0.5 million jobs by 2050

Clean and Green
+1.1 million jobs by 2050

Back to the Future
+2.7 million jobs by 2050

Circle color is representative of year.

Circle area is representative of the number of jobs.

- 50k
- 100k
- 500k
Opportunities & Challenges: Top 10 Findings

We have explored the opportunities and challenges associated with each future across the five Guiding Principles of Horizon.
Priority Development Areas (PDAs) thrive in all three futures, putting a greater share of residents close to higher-quality affordable transit.

**Rising Tides, Falling Fortunes**

- **14%** single family inside PDAs
- **86%** multi family inside PDAs
- **101%** inside PDAs
- **-1%** outside PDAs

**Clean and Green**

- **19%** single family inside PDAs
- **81%** multi family inside PDAs
- **88%** inside PDAs
- **12%** outside PDAs

**Back to the Future**

- **24%** single family inside PDAs
- **76%** multi family inside PDAs
- **80%** inside PDAs
- **20%** outside PDAs
Without new strategies in place, Bay Area housing affordability is likely to continue to get worse.
With growing demand for telecommuting and transit, a smaller percentage of residents may need to depend on automobiles to get around.

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.

Opportunity
With growing demand for telecommuting and transit, a smaller percentage of residents may need to depend on automobiles to get around.

In 2015, 77% of commuters use an automobile to get to work.
Without new strategies like roadway pricing, changing conditions will result in even higher levels of traffic congestion.

**Rising Tides, Falling Fortunes**
- Limited AV, Similar cost to drive, Similar ownership model

**Clean and Green**
- Significant AV, High cost to drive, Shared ownership model

**Back to the Future**
- Significant AV, Low cost to drive, Individual ownership model

2050 Highway Conditions
- major highways
- 2050 congestion (less than 35mph speeds)
- 2050 closure from hazards
The Bay Area is likely to become more racially diverse over time, driven primarily by immigration from abroad.

Rising Tides, Falling Fortunes
+20,000 immigrants annually

Clean and Green
+80,000 immigrants annually

Back to the Future
+240,000 immigrants annually

Above is the change in regional share. In Rising Tides, a future with slower growth, the absolute number of white residents decreases. In Back to the Future, a future with faster growth, the absolute number of white residents increases, but as a share of the regional population it decreases.
Rapid housing growth - or an economy cool-off - could both help ease displacement pressures.
Opportunity

Electrification and urban growth boundaries could reduce human impacts on the environment.

Annual Per-Capita Greenhouse Gas Emissions from Transportation *(in metric tons)*
Acute impacts from sea level rise and natural disasters will be more difficult to recover from if the region’s economy is weak.
Land use strategies included in *Plan Bay Area 2040* are 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
Challenge #2

Middle-wage jobs continue to disappear in all three futures.

Share of Jobs in Middle Wage Industries

- 1990: 40%
- 2010: 20%
- 2050: 10%

Year

Observed  Rising Tides, Falling Fortunes  Clean and Green  Back to the Future
# Futures Scorecard - Guiding Principles (1)

<table>
<thead>
<tr>
<th>Selected Indicators from</th>
<th>2015</th>
<th>2050</th>
<th>2050</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFFORDABLE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing costs (share of income)</td>
<td>26%</td>
<td>48%</td>
<td>50%</td>
<td>52%</td>
</tr>
<tr>
<td>Housing production (net new units annually)</td>
<td>16,000</td>
<td>14,000</td>
<td>38,000</td>
<td>60,000</td>
</tr>
<tr>
<td><strong>CONNECTED</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-auto commute mode share</td>
<td>25%</td>
<td>33%</td>
<td>55%</td>
<td>31%</td>
</tr>
<tr>
<td>Average commute time (minutes)</td>
<td>31</td>
<td>34</td>
<td>36</td>
<td>40</td>
</tr>
<tr>
<td><strong>DIVERSE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk of displacement (share of lower-income HHs)</td>
<td>38%</td>
<td>14%</td>
<td>60%</td>
<td>28%</td>
</tr>
<tr>
<td>VITAL SIGNS</td>
<td>2015</td>
<td>Rising Tides, Falling Fortunes</td>
<td>Clean and Green</td>
<td>Back to the Future</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>Lower-income population (share of overall population)</td>
<td>50%</td>
<td>54%</td>
<td>37%</td>
<td>39%</td>
</tr>
<tr>
<td>Greenhouse gas emissions (per-capita)</td>
<td>3.0</td>
<td>1.9</td>
<td>0.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Annual greenfield development (acres)</td>
<td>1,200</td>
<td>300</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Jobs in middle-wage industries (share of all jobs)</td>
<td>21%</td>
<td>18%</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Gross regional product (inflation-adjusted)</td>
<td>$0.7 trillion</td>
<td>$1.1 trillion</td>
<td>$2.1 trillion</td>
<td>$1.9 trillion</td>
</tr>
</tbody>
</table>
Summer Analysis

Using input received in the spring, staff are studying the impact of new strategies in the second round of analysis. Findings will be shared in a final report, released in October.
Futures Analysis

Plan Bay Area 2040
Adopted in July 2017

Horizon Futures Round 1 Analysis

• How does the region’s currently-adopted Plan fare in an era of uncertainty?
• What are the opportunities and challenges the region may face?

Horizon Futures Round 2 Analysis

• How might new strategies result in improved outcomes in each future?
• Which strategies are effective across many futures?
The 4 Focus Areas of Horizon + 9 Strategy Package Goals for Futures Round 2

**Economic Development**
- Improve Economic Mobility
- Shift the Location of Jobs

**Housing**
- Spur Housing Production
- Retain and Expand Affordable Housing

**Transportation**
- Improve Access, Reliability and Speed
- Prioritize Active Modes

**Environment & Resilience**
- Price Transportation Services
- Reduce Our Impact on the Environment
- Reduce the Environment's Impact on Us
Futures Round 2: Economic Development Strategies

**Improve Economic Mobility**

*Help promote the growth of the middle class in an era of automation and growing income inequality.*

- **V-6** Provide Portable Benefits for Part-Time/Freelance Workers
- **D-2** Expand Childcare Support for Low-Income Families
- **V-1** Expand Construction Workforce Programs

**Shift the Location of Jobs**

*Encourage new employment centers to locate in transit-served, housing-rich communities.*

- **PBA-8** Preserve Office Space Caps in Job-Rich Cities & Assess VMT-Based Commercial Development Fee
- **V-5** Create Incubator Programs in Econ.-Challenged Areas
- **V-7** Implement Incentives & Disincentives to Locate Jobs in Housing-Rich Locations

* = modifications have been made to Plan Bay Area 2040 strategy
** = included only in two higher-growth, higher-resource Futures
Futures Round 2: Housing Strategies

**Spur Housing Production**

*Expand the regional growth footprint beyond today’s PDAs, and make it easier to build a broader array of housing types.*

- PBA-1* Assign Higher Densities to PDAs
- PBA-2* Streamline Development in all Growth Areas
- A-7 Allow Diverse Housing around all Major Transit Stops
- D-9 Allow Affordable Housing in Areas of High Opportunity
- A-4 Transform Aging Malls and Office Parks into Neighborhoods
- A-2 Repurpose Public Land to Build Housing

**Retain & Expand Affordable Housing**

*Advance a suite of policies to ensure greater equity and affordability.*

- D-7 Require 20 Percent of All New Housing to be Affordable
- D-6 Increase Renter Protections
- A-8** Fund Affordable Housing Preservation & Production

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Futures Round 2: Transportation Strategies

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

- PBA-6 Operate and Maintain the Existing System
- PBA-5* Build Carpool Lanes & Address Interchange Bottlenecks
- PBA-4 Make Strategic Transit Modernization/Expansion Investments
- C-4 Build a Next-Generation Bus Rapid Transit Network
- C-10** Increase Capacity/Frequency by Modernizing Existing Rail
- C-9** Extend the Regional Rail Network
- C-7** Build a New Transbay Rail Crossing

**Prioritize Active Modes**

- D-4 Invest in Free Short-Trip Service
- **NEW!** Implement Vision Zero Speed Reduction Measures
- C-3 Build a Complete Micromobility Network

**Price Transportation Services**

- C-1 Develop a Single Platform to Access & Pay for all Mobility
- C-6 Apply Time-of-Day Tolls on All Freeways
- A-3** Provide Free Transit to Lower-Income Riders

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Build a next-generation transit network for the 21st century.

Make active modes safer and more accessible.

Price freeways to drive different mode choices and advance equitable outcomes.
Futures Round 2:
Environment & Resilience Strategies

Reduce Our Impact on the Environment

Protect greenfields and parks while retrofitting existing buildings.

PBA-7  Keep Current Urban Growth Boundaries in Place
V-3/H-2** Expand Park, Trails, Greenways; Preserve Ag. Lands
H-9**  Expand Existing Building Improvements
         (Energy, Water, Seismic, Fire, Accessibility)

Reduce the Environment’s Impact on Us

Protect communities from sea level rise, and improve readiness for other natural disasters.

H-4    Purchase Disaster Recovery Financing
H-7    Partially Adapt to Sea Level Rise
H-8**  Fully Adapt to Sea Level Rise
H-3**  Adapt SR-37 to Sea Level Rise

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How Will Horizon Be Integrated Into Plan Bay Area 2050?

The purpose of Horizon is to identify strategies and projects that perform well under a wide range of conditions - and to prioritize these resilient strategies in the fiscally-constrained Plan Bay Area 2050.
Thanks for attending today’s webinar!

Michael Germeraad
mgermeraad@bayareametro.gov
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