

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

June 4, 2019

Agenda Item 3

**Horizon – Futures Round 2: Final Strategies for Round 2 Analysis**

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**Subject:** Presentation on proposed set of final Horizon strategies to study in the second round of Futures analysis.

**Background:** In March 2019, MTC/ABAG released the Futures Interim Report, which summarized the results of Futures Round 1 analysis. This work sought to understand how existing regional strategies – those from Plan Bay Area 2040 – would fare under three different Futures developed collaboratively with stakeholders in 2018. The report identified key opportunities and challenges for the Bay Area in an uncertain future – highlighting both existing issues like affordability, traffic congestion, and inequities as well as potential future risks from sea level rise, earthquakes, autonomous vehicles, economic shifts, and more.

Between March and May, staff have collected feedback on strategies to address the challenges identified in the Futures Round 1 analysis. At the May RAWG meeting, staff presented an earlier iteration of **Attachment A**, which illustrates which strategies are recommended for inclusion in Futures Round 2. Staff received feedback on the strategies recommended for inclusion via written comments, the May RAWG, and the May Policy Advisory Council. Staff have incorporated this feedback to develop a final list of strategies for Futures Round 2.

**Strategy Package:** Over the past month, staff have worked to develop a final strategy proposal that integrates strategies to address key challenges in each Future while incorporating critical public and stakeholder feedback. Strategies were chosen not only to test their individual contribution in improving outcomes in each Future, but also to study how a package of strategies may achieve synergies that yield outcomes greater than a sum of its parts. The strategies advancing into Future Round 2 are organized under the following nine goals:

1. **Improve economic mobility**, helping to promote the growth of the middle class in an era of automation and income inequality.
2. **Shift the location of jobs** by encouraging new employment centers to locate in transit-served housing-rich communities.
3. **Spur housing production** in areas beyond today's PDAs, making it easier to build a broader array of housing types.
4. **Retain and expand affordable housing** by advancing suite of policies to ensure greater equity and affordability.
5. **Improve access, reliability, and speed of transportation services**, building a next-generation transit network for the 21<sup>st</sup> century.
6. **Prioritize active transportation modes** by making walking, cycling, and emerging active modes safer and more accessible.
7. **Price transportation services** to drive different mode choices and advance equitable outcomes.
8. **Reduce our impact on the environment**, protecting greenfields and parks while retrofitting existing buildings.
9. **Reduce the environment's impact on us** by protecting communities from sea level rise and improving readiness for other natural disasters.

In Clean and Green and in Back to the Future, 28 strategies will be added to those from Plan Bay Area 2040 (which were included in Futures Round 1); these Futures feature higher-growth and higher-resource conditions. Underlying all of the strategies will be a combination of new revenues that would prioritize non-regressive revenue sources to ensure fiscal constraint across all four topic areas (economic development, housing, transportation, and resilience). **Attachment A** has two summary tables, one for Rising Tides, Falling Fortunes and one for the two higher-resource Futures, identifying which specific strategies will be tested in the second round of Futures analysis.

**June Revisions:** Staff have updated the May strategy proposal for Futures Round 2 to reflect stakeholder input. Feedback led to adjustments in which strategies were studied, the scale of certain strategies, and more detailed definitions of individual strategies. Additional updated detail on each strategy, building upon the March 2019 Horizon Strategy Booklet, is available in **Attachment B**. Formal letters and emails received are available in **Attachment D**.

The general structure of the strategies remains similar to the May draft proposal, but two additional strategies have been added for study in Futures Round 2 analysis: (i) ***Repurpose Public Land to Build Housing***, and (ii) ***Implement Vision Zero Speed Reduction Measures***. In addition to incorporating these additional strategies, five other significant changes were made since the May draft strategies proposal:

- **Tripled the amount of planned investment towards active transportation infrastructure.** The original proposal included two active transportation strategies: Strategy C-3 (*Build a Complete Micromobility Network*) was originally written to focus on completion of the Regional Bike Network. The latest version more than triples the amount of planned investment, constructing just under 10,000 miles of new bicycle facilities from cycletracks to neighborhood greenways across the Bay Area; paired with this strategy is Strategy D-4 (*Invest in Free Short-Trip Service*) which provides free short trips by bikeshare and autonomous shuttles across much of the urbanized Bay Area. Finally, staff have incorporated a new strategy from the Autonomous Vehicle Perspective Paper – *Implement Vision Zero Speed Reduction Measures* – to further advance safety for active modes as well as motorists.
- **Aligned affordable housing dollars toward only lowest-income households.** Strategy A-8 (*Fund Affordable Housing Preservation & Production*) was originally intended to provide subsidies to a broad range of housing types. Several stakeholders expressed the need for these resources to be focused on housing for homeless and the lowest-income residents in the region, as well as funding preservation of existing deed-restricted affordable housing before building new units. In response, staff modified this strategy to focus all revenue on housing that will support households in the lowest-income quantile and earmarked a share of funds to preserve existing affordable units. The strategies under the Spur Housing Production goal are designed to address housing production for other income levels.

- **Modified pricing strategies to promote carpooling and social equity.** Strategy C-6 (*Apply Time-of-Day Tolls on All Freeways*) was refined to include higher per-mile tolls for solo drivers and a significant carpool discount for vehicles with more than three occupants to incentivize sharing. Additionally, Strategy A-3 (*Provide Free Transit for Lower-Income Riders*) was expanded from the lowest quantile of household income to all households below the median income to improve equity and affordability outcomes.
- **Ensured greater equity in Environment and Resilience strategies.** In May, none of the strategies for Environment and Resilience included the tags indicating a strong equity nexus. In developing the package of sea level rise adaptation strategies, staff ensured vulnerable communities were the first selection tool for adaptation action. Additionally, as the funding for Strategy H-9 (*Expand Existing Building Improvements*) was reduced to right-size the overall strategy package, the funding was redesigned to focus support for lower-income homeowners as well as rental properties with a high proportion of lower-income households. These improvements would improve habitability standards, reduce operating costs for residents, and reduce risks.
- **Incorporated non-regressive revenues to balance the budget in each future.** Nearly \$225 billion (year of expenditure dollars) in new revenue is needed to support the strategies in Clean and Green and Back to the Future. The initial strategy was to spread the cost of these new investments equally between shoppers (sales tax), businesses (gross receipts tax), property owners (property tax), developers (commercial linkage fee), and residents (state income tax). Given the regressive nature of freeway tolling, staff have altered the tax revenue generation to include neither sales tax nor state income tax increases on lower-income brackets. In 2020 the tax collected from Bay Area residents would come out to roughly \$30.00 per month, with higher income residents paying more, and lower income residents paying less.

**Next Steps:** Throughout the summer staff will analyze the three Futures with the new sets of strategies incorporated, documenting how the strategies improve outcomes in each Future. Strategies will first be explored in the aggregate by comparing the performance metrics from Futures Round 1 with those from Futures Round 2. Model outputs will also be used to further explore individual strategies' efficacy, combined with the results of the ongoing Project Performance Assessment (being conducted in parallel). The results and findings of the analysis will be presented in a Final Futures Report – slated for release in September 2019 to inform development of the Preferred Plan Bay Area 2050.

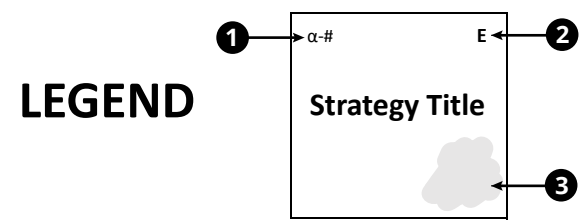
**Attachments:**  
**Attachment A:** Futures Round 2 Strategies Summary Table (June 2019)  
**Attachment B:** Futures Round 2 Strategy Details (June 2019)  
**Attachment C:** Presentation  
**Attachment D:** Comment Letters on Draft Futures Round 2 Table (May 2019)



Economic Development Strategies		Housing Strategies		Transportation Strategies				Environment & Resilience Strategies	
<p><b>Improve Economic Mobility</b> Help promote middle class growth in an era of automation and income inequality.</p> <p>V-6 <b>Provide Portable Benefits for Part-Time and Freelance Workers</b> E</p> <p>V-5* <b>Create Incubator Programs in Economically Challenged Communities</b></p> <p>D-2* <b>Expand Childcare Support for Low-Income Families</b> E</p> <p>V-1 <b>Expand Construction Workforce Programs</b></p>	<p><b>Shift the Location of Jobs</b> Encourage new employment centers to locate in transit-served, housing-rich communities.</p> <p>PBA-8* <b>Apply VMT-Based Commercial Development Fee</b></p> <p>V-7 <b>Place Office Caps in Job-Rich Housing-Poor Locations</b></p>	<p><b>Spur Housing Production</b> Expand the regional growth footprint beyond today's PDAs and make it easier to build a broader array of housing types.</p> <p>PBA-1* <b>Assign Higher Densities to Priority Development Areas</b></p> <p>A-7 <b>Allow Diverse Housing Around all Major Transit Stops</b></p> <p>A-4 <b>Transform Aging Malls and Office Parks into Neighborhoods</b></p>	<p><b>Retain and Expand Affordable Housing</b> Advance a suite of policies to ensure greater equity and affordability.</p> <p>D-7 <b>Require 20 Percent of All New Housing to be Affordable</b> E</p> <p>D-6 <b>Increase Renter Protections</b> E</p> <p>A-8* <b>Fund Affordable Housing Preservation &amp; Production</b> E</p>	<p><b>Improve Access, Reliability and Speed of Transportation Services</b> Build a next-generation transit network for the 21st century.</p> <p>PBA-6 <b>Operate and Maintain the Existing System</b></p> <p>PBA-4 <b>Make Strategic Modernization &amp; Expansion Investments for Public Transit</b></p> <p>C-7 <b>Build a New Transbay Rail Crossing</b></p> <p>C-9 <b>Extend the Regional Rail Network</b></p>	<p><b>Prioritize Active Modes</b> Make walking, cycling, and emerging active modes safer and more accessible.</p> <p>D-4* <b>Invest in Free Short-Trip Service</b> E</p> <p>NEW! <b>Implement Vision Zero Speed Reduction Measures</b></p> <p>C-3* <b>Build a Complete Micromobility Network</b></p>	<p><b>Price Transportation Services</b> Price freeways to drive different mode choices and advance equitable outcomes.</p> <p>C-1* <b>Develop a Single Platform to Access and Pay for All Mobility Options</b></p> <p>C-6* <b>Apply Time-of-Day Tolls on All Freeways</b></p> <p>A-3* <b>Provide Free Transit to Lower-Income Riders</b> E</p>	<p><b>Reduce Our Impact on the Environment</b> Protect greenfields and parks while retrofitting existing buildings.</p> <p>PBA-7 <b>Keep Current Urban Growth Boundaries in Place</b></p> <p>V-3 / H-2* <b>Expand Parks, Trails and Greenways and Preserve Agriculture Lands</b></p> <p>H-9* <b>Expand Existing Building Improvements (Energy, Water, Seismic, Fire and Accessibility)</b> E</p>	<p><b>Reduce the Environment's Impact on Us</b> Protect communities from sea level rise, and improve disaster readiness.</p> <p>H-4* <b>Purchase Disaster Recovery Financing to Speed Recovery</b></p> <p>H-7 <b>Partially Adapt to Sea Level Rise</b> E</p> <p>H-8 <b>Fully Adapt to Sea Level Rise</b> E</p> <p>H-3 <b>Adapt Highway 37 to Sea Level Rise</b></p>	

**New Revenues**

To support this expansive set of strategies nearly \$225B in new revenues is needed over the next three decades. Staff are exploring a progressive tax structure that spreads the impact evenly on businesses, property owners, and higher income residents.



- 1 Alpha-Numeric Strategy Code**  
A - Affordable  
C - Connected  
D - Diverse  
H - Healthy  
V - Vibrant  
PBA - Plan Bay Area 2040  
*\* indicates strategy modifications have been made since March.*
- 2 Equity Tag**  
Indicates strategies with a strong equity nexus

- 3 Strategy Source**  
 Existing PBA 2040 Strategies  
 New Horizon Strategies

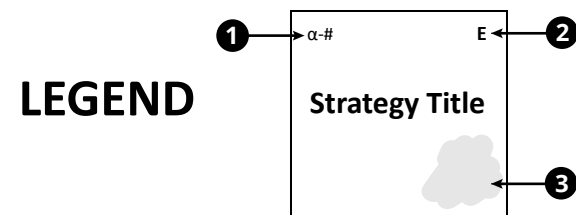




Economic Development Strategies		Housing Strategies		Transportation Strategies				Environment & Resilience Strategies		
<p><b>Improve Economic Mobility</b> Help promote middle class growth in an era of automation and income inequality.</p> <p>V-6 <b>Provide Portable Benefits for Part-Time and Freelance Workers</b> E</p> <p>V-5* <b>Create Incubator Programs in Economically Challenged Communities</b></p> <p>D-2* <b>Expand Childcare Support for Low-Income Families</b> E</p> <p>V-1 <b>Expand Construction Workforce Programs</b></p>	<p><b>Shift the Location of Jobs</b> Encourage new employment centers to locate in transit-served, housing-rich communities.</p> <p>PBA-8* <b>Apply VMT-Based Commercial Development Fee</b></p> <p>V-7 <b>Place Office Caps in Job-Rich Housing-Poor Locations</b></p>	<p><b>Spur Housing Production</b> Expand the regional growth footprint beyond today's PDAs and make it easier to build a broader array of housing types.</p> <p>PBA-1* <b>Assign Higher Densities to Priority Development Areas</b></p> <p>A-7 <b>Allow Diverse Housing Around all Major Transit Stops</b></p> <p>A-4 <b>Transform Aging Malls and Office Parks into Neighborhoods</b></p>	<p><b>Streamline Development in all Growth Areas</b> PBA-2*</p> <p>D-9 <b>Allow Affordable Housing in Areas of High Opportunity</b> E</p> <p>A-2 <b>Repurpose Public Land to Build Housing</b></p>	<p><b>Retain and Expand Affordable Housing</b> Advance a suite of policies to ensure greater equity and affordability.</p> <p>D-7 <b>Require 20 Percent of All New Housing to be Affordable</b> E</p> <p>D-6 <b>Increase Renter Protections</b> E</p> <p>A-8* <b>Fund Affordable Housing Preservation &amp; Production</b> E</p>	<p><b>Improve Access, Reliability and Speed of Transportation Services</b> Build a next-generation transit network for the 21st century.</p> <p>PBA-6 <b>Operate and Maintain the Existing System</b></p> <p>PBA-4 <b>Make Strategic Modernization &amp; Expansion Investments for Public Transit</b></p> <p>C-7 <b>Build a New Transbay Rail Crossing</b></p> <p>C-9 <b>Extend the Regional Rail Network</b></p>	<p><b>Build Carpool Lanes &amp; Address Interchange Bottlenecks</b> PBA-5*</p> <p>C-4 <b>Build a Next Generation Bus Rapid Transit Network</b> E</p> <p>C-10 <b>Increase Existing Rail Capacity and Frequency by Modernizing the Network</b></p>	<p><b>Prioritize Active Modes</b> Make walking, cycling, and emerging active modes safer and more accessible.</p> <p>D-4* <b>Invest in Free Short-Trip Service</b> E</p> <p>NEW! <b>Implement Vision Zero Speed Reduction Measures</b></p> <p>C-3* <b>Build a Complete Micromobility Network</b></p>	<p><b>Price Transportation Services</b> Price freeways to drive different mode choices and advance equitable outcomes.</p> <p>C-1* <b>Develop a Single Platform to Access and Pay for All Mobility Options</b></p> <p>C-6* <b>Apply Time-of-Day Tolls on All Freeways</b></p> <p>A-3* <b>Provide Free Transit to Lower-Income Riders</b> E</p>	<p><b>Reduce Our Impact on the Environment</b> Protect greenfields and parks while retrofitting existing buildings.</p> <p>PBA-7 <b>Keep Current Urban Growth Boundaries in Place</b></p> <p>V-3 / H-2* <b>Expand Parks, Trails and Greenways and Preserve Agriculture Lands</b></p> <p>H-9* <b>Expand Existing Building Improvements (Energy, Water, Seismic, Fire and Accessibility)</b> E</p>	<p><b>Reduce the Environment's Impact on Us</b> Protect communities from sea level rise, and improve disaster readiness.</p> <p>H-4* <b>Purchase Disaster Recovery Financing to Speed Recovery</b></p> <p>H-7 <b>Partially Adapt to Sea Level Rise</b> E</p> <p>H-8 <b>Fully Adapt to Sea Level Rise</b> E</p> <p>H-3 <b>Adapt Highway 37 to Sea Level Rise</b></p>

**New Revenues**

To support this limited set of strategies, \$20B in new revenues is needed over the next three decades. Staff are exploring a progressive tax structure that spreads the impact evenly on businesses, property owners, and higher income residents.



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 Indicates strategies with a strong equity nexus

**3 Strategy Source**  
 Existing PBA 2040 Strategies  
 New Horizon Strategies

**Masked Strategies**  
 Indicates strategies that don't have the necessary funding to implement in this low-resource, low-growth Future.



## A T T A C H M E N T B

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### FUTURES ROUND 2 STRATEGY DETAILS (June 2019)

**Attachment A** highlights a suite of strategies that will be advanced for further analysis in Futures Round 2. This attachment provides additional details on each strategy as we move into the second round of Futures, where we go beyond Plan Bay Area 2040 strategies to address the region's major challenges in an era of uncertainty.

In Clean and Green and in Back to the Future, 28 strategies will be added to those from Plan Bay Area 2040 (which were included in Futures Round 1); these Futures feature higher-growth and higher-resource conditions. Underlying all the strategies will be a combination of new revenues that would prioritize non-regressive revenue sources to ensure fiscal constraint across all four topic areas (economic development, housing, transportation, and resilience).

A subset of these strategies (16 in total) will also be explored in Rising Tides, Falling Fortunes - where economic conditions are significantly weaker. To help keep track of which strategies are left out of Rising Tides, Falling Fortunes, the ‡ symbol is used to represent strategies that are only being incorporated into Clean and Green and Back to the Future.

The remainder of this document includes:

- Strategy Descriptions
- Sketch-Level Budgets
- Select Strategy Maps

### Strategy Descriptions

#### **Economic Development: Improve Economic Mobility**

In the first round of Futures analysis, all three Futures saw the middle class continue to shrink. A set of four economic development strategies are aimed at increasing the upward mobility opportunities and providing greater support for low-income households. Despite the Rising Tides, Falling Fortunes Future having the greatest economic challenges of the three, only two of the four strategies (as marked by the ‡ symbol) are included in that Future due to the high cost of the remaining strategies.

#### **V-6 Provide Portable Benefits for Part-Time and Freelance Workers**

Given that many freelance ("gig economy") workers do not have traditional employment benefits, this strategy emulates existing regulations inside and outside the region that require businesses to provide benefit options to freelance workers. No significant public revenues are recommended to support the program; rather, the regulation would require businesses impacted to set up the necessary benefits to support workers. To model some of the impacts of the policy, staff plan to apply an increased cost to businesses in sectors that have a greater share of freelance workers to reflect the cost in complying with this strategy. The economic model also has an employer benefit contribution input that can be adjusted higher to reflect the strategy.



**V-5 Create Incubator Programs in Economically Challenged Communities**

Incubator programs would promote the creation of businesses by low- and moderate-income people in communities with fewer job opportunities. New revenues would support technical assistance for establishing the foundation of new businesses, including access to workspaces, mentorship, and financing. Staff are exploring ways to use the economic and land use models to study the strategy, but off model research and calculations will likely be used to understand the benefits of the strategy.

**D-2 ‡ Expand Childcare Support for Low-Income Families**

Childcare costs in the Bay Area continue to increase, with the cost of childcare increasing from \$1,000 per month in 2014 to \$1,500 per month in 2018. To offset this financial burden and open career growth opportunities for low-income households, a 50 percent childcare subsidy will be studied for low-income households. To model the strategy, staff will include the cost of strategy in the form of new taxes (described in more detail toward the end of the attachment) and apply financial benefits to low-income households. Additionally, the labor force participation will increase to reflect the observed effect of childcare cost reductions resulting in higher rates of maternal employment.

**V-1 ‡ Expand Construction Workforce Programs**

There are many existing apprenticeship and certificate programs to expand the region's construction workforce - a critical need in higher-growth Futures. This strategy uses new revenue to expand these programs and provide a subsidy for new construction workers who work in the region for the first three years of their career, as they increase their base salary with additional experience. The strategy is sized to support the addition of 1,000 new construction workers annually. Staff will add these new jobs on an annual basis and expect to see a 30,000 increase in the construction sector labor by the year 2050. Staff are still exploring if this strategy will have any significant impact on construction labor costs in the region, but initial research does not show a significant change.

**Economic Development: Shift the Location of Jobs**

Many stakeholders are interested in understanding how strategies can be used to move more jobs closer to transit and into housing-rich communities. In Plan Bay Area 2040, a VMT-based commercial development fee was used to discourage new commercial construction outside of transit-rich areas and commercial development caps were placed in two Bay Area cities. The new approach builds off these two policies but goes further to study the effect of heightened strategies.

**PBA-8 Apply VMT-Based Commercial Development Fee**

The vehicle mile traveled (VMT) based commercial development fee remains in effect to shift new employment centers toward transit-rich locations, potentially with minor modifications to the fee levels. Plan Bay Area 2040 and Futures Round 1 analysis have shown this fee to be effective in directing new employment development near transit. The policy charges a fee on new commercial development in areas that have high employment related VMT and in areas that are not near transit.

**V-7 Place Office Caps in Job-Rich Locations**

Plan Bay Area 2040 and Futures Round 1 analysis included an office space cap in two Bay Area cities. The strategy was ineffective in moving jobs to low-job areas in the region given its limited geographic implementation. To study the effect of a more expansive strategy, staff have developed a modified strategy to be applied in cities with jobs-to-housing ratios greater than or equal to 2.0. Cities affected by this strategy include: Colma, Brisbane, Menlo



Park, South San Francisco, and Burlingame in San Mateo County; Palo Alto, Santa Clara, Mountain View, Milpitas, and Cupertino in Santa Clara County; and Emeryville in Alameda County. The goal of the strategy is to see where jobs would choose to relocate if limitations would put in place in job-rich areas. Staff acknowledge the critique that an office space cap may have the unintended consequence of relocating jobs out of the region rather than to other Bay Area jurisdictions. While the land use modeling will not capture this potential, additional off-model research will be prioritized to understand this unintended consequence.

### **Housing: Spur Housing Production**

To improve the region's ability to meet its housing needs, the Priority Development Area (PDA) framework is being expanded to increase housing construction at all income levels around all major transit stops and in high-resource communities. Large catalyst sites, often aging malls or aging office parks, are also identified and offer additional locations for housing production in the region. Similar to how PDAs have been treated in past Plans, all of these growth geographies will be assigned higher densities, with transit-rich areas assigned higher densities than areas with more modest levels of transit service. Building upon the PDA strategy from Plan Bay Area 2040, all these growth areas will be eligible for development streamlining.

#### **PBA-1 Assign Higher Densities to Priority Development Areas (PDAs)**

This strategy will change slightly from Futures Round 1 analysis to reflect the recently adopted Regional Growth Framework Update, which established two PDA categories. The first PDA category, Transit Rich PDAs, includes area within a half mile of rail stations, ferry terminals, and frequent bus service (15-minute headways or less). The second, Connected Community PDAs, includes areas with basic bus service (30-minute headways). The PDA geographies are expanded by Strategies A-7 and D-9 which will include all PDA-eligible locations.

#### **PBA-2 Streamline Development in all Growth Areas**

A range of modeled incentive strategies - development subsidies, streamlining, reduced parking requirements - were included in Plan Bay Area 2040 to increase the feasibility of building in PDAs. Staff is proposing a revision for Futures Round 2 to eliminate market-rate development subsidies and to also expand the streamlining and reduced parking requirements to sites across the broader set of growth areas included below. The intent of this change is to be more consistent about incentives and streamlining across all geographies identified.

#### **A-7 Allow Diverse Housing around all Major Transit Stops**

This strategy allows a diverse range of housing within a half-mile (an approximately ten-minute walk) of all rail stations, ferry terminals, and bus stops with 15-minute peak period service - places eligible for designation as Transit-Rich PDAs. Specific density maximums will vary based on transit frequency and capacity. For many areas already designated PDAs, particularly those with recently adopted plans, this strategy will involve little to no change, while in others it will provide an opportunity to build a greater variety of housing at a higher intensity.

#### **D-9 Allow Affordable Housing in Areas of High Opportunity**

This strategy increases the variety and affordability of housing that can be built in High Resource Areas within a half-mile of bus stops with 30-minute peak period service. High Resource Areas are places defined by the California Department of Housing and Community Development (HCD) as providing the greatest opportunity for health and upward mobility.



The level of change will vary by community, with places that already allow multifamily housing and that actively incentivize affordable housing seeing more limited change. This strategy will be applied to areas eligible for designation as Connected Community/High Resource PDAs. For areas that are both Transit-Rich and High Resource Areas, the densities and land use mix in Strategy A-7 would be applied.

#### **A-4 Transform Aging Malls and Office Parks into Neighborhoods**

Older large malls and office parks have been identified across the region as potential regionally significant sites for transformation into mixed-income communities. In total, 130 sites, totaling 12,000 acres, have been identified by their age (built over 30 years ago) and size (at least 10 acres) for potential reuse. Staff are considering two approaches to model the redevelopment of these sites. The first approach would incrementally assign housing units and commercial square footage directly to the sites. The land use, density, and share of affordable housing of individual sites would vary based upon transit access and proximity to High Resource Areas. The second approach would simply rezone these areas for housing and commercial development, allowing the land use model to dictate whether the sites would be likely to be developed in the environments of the three Future conditions.

#### **A-2 Repurpose Public Land to Build Housing**

Building off the September 2018 MTC memo on public lands, this strategy will reduce development barriers on the previously identified 470 parcels (totaling 700 acres) using the same methodology to Strategy A-4 (refer to section above).

#### **Housing: Retain and Expand Affordable Housing**

To advance affordability and protection for lower-income households, a suite of three strategies are recommended, including a strategy that supersedes the prior 10 percent inclusionary housing policy from Plan Bay Area 2040. Together, these strategies are designed to protect and build more deed-restricted affordable housing and reduce the risk of displacement. In the two higher-resource Futures, new tax revenues are applied to large-scale affordable housing preservation and production.

#### **D-7 Require 20 Percent of New Housing to be Affordable**

This strategy builds off a Plan Bay Area 2040 strategy that required 10 percent of new units to be deed-restricted for affordable housing in jurisdictions with a PDA. This strategy expands the old strategy in two ways, by increasing the geographic extent of the strategy to all jurisdictions in the region and by doubling the share of deed-restricted affordable units required in new developments. The one concern associated with this strategy is the potential for the strategy to hinder housing production in markets that are deterred by the costs to subsidize affordable units. To address this concern, the inclusionary percentage will be applied differently across the region, likely ranging between 15 percent to 25 percent, prioritizing High Resource Areas and “strong housing market” areas with a high square-foot residential sale price for higher inclusionary requirements.

#### **D-6 Increase Renter Protections**

Through both CASA and Horizon outreach, there was robust support for a suite of renter protections including: (i) just cause evictions; (ii) anti-gouging cap; (iii) right to legal counsel; and (iv) no net loss. These policies are difficult to model, but to reflect their benefits, staff plan to reduce the rate at which lower income households move to reflect fewer evictions and more support for tenants to stay in their homes. Additionally, staff intends to integrate the effect of pushing rental increases further into the future to model





anti-gouging caps. The goal of this modeling approach is to delay when households feel the increase costs in the housing market and decrease the rate that lower-income households are forced to move. This will be the first time these assumptions will be made in the model.

#### **A-8 ‡ Fund Affordable Housing Preservation and Production**

The preservation and production of deed-restricted affordable housing is supported by \$1.5 billion in new housing revenue. A portion of the funds would be used to preserve existing affordable units that otherwise would become market-rate, with most of the funds going to the production of new affordable units in the region. The funds will be applied starting in 2020 and will be used to house low-income households. This strategy is supported by new revenue generated by new taxes described in greater detail toward the end of the attachment.

#### **Transportation: Improve Access, Reliability and Speed of Transportation Services**

This suite of strategies has the largest difference between Rising Tides, Falling Fortunes and the other two higher-growth, higher-resource Futures. Despite the additional funds from freeway pricing (refer to Strategy C-6), funding remains tight in Rising Tides, Falling Fortunes - meaning that only low-cost strategies are proposed to be advanced alongside key investments from Plan Bay Area 2040 (such as Fix It First). In addition to ushering in a next-generation transit network, the suite of upgrades also presents new opportunities for housing and job growth in transit-rich corridors. For all these strategies, refer to the Maps section for a list of investments included within.

#### **PBA-6 Operate and Maintain the Existing System**

This strategy continues to be in effect in all three Futures, reflecting the longstanding regional commitment to “Fix It First”. Around 55 percent of the budget in the two higher-growth Futures is dedicated operating and maintaining the existing system, while in Rising Tides, Falling Fortunes, operations and maintenance consume roughly 80 percent of the budget. Due to the high costs of reaching a state of good repair for our region’s roadway and transit infrastructure, this strategy continues to aim for maintaining current conditions, generally in line with the strategy from the previous Plan.

#### **PBA-5 Build Carpool Lanes and Address Interchange Bottlenecks**

This package of roadway strategies incorporates the Regional Express Lanes Network (as included in Plan Bay Area 2040) plus network gap closures to serve the BRT network proposed under Strategy C-4 below (relying on GP lane conversions); with all-lane roadway pricing in effect, these lanes are used as HOV3+ lanes through 2050 where lower tolls are charged. Complementary improvement projects include auxiliary lanes and interchange improvements as included in Plan Bay Area 2040, which in general were limited in nature.

#### **PBA-4 Make Strategic Modernization and Expansion Investments for Public Transit**

This package of transit strategies includes all the major transit investments from Plan Bay Area 2040, including but not limited to BART to Silicon Valley Phase 2, Caltrain Downtown Extension, and three bus rapid transit (BRT) lines in Oakland, San Francisco, and San Jose. It also includes congestion pricing zones in Downtown San Francisco and Treasure Island that pay for associated transit frequency increases.



**C-4 Build and Operate a Next Generation Bus Rapid Transit Network**

This strategy leverages a Transformative Project submitted to MTC/ABAG in 2018 by TransForm & SPUR, creating a network of frequent and fast bus lines that connect communities. Paired with the short-trip service discussed below - which addresses the last-mile problem for these corridors - this network would provide capacity relief to key rail lines while also connecting underserved communities (e.g. I-680 corridor).

**C-7 † Build A New Transbay Rail Crossing**

Given the core capacity demands of today and increased demand anticipated in the two higher-growth Futures, this strategy includes a new transbay rail crossing, associated infrastructure improvements in the West Bay and East Bay, and frequency boosts on the rail system. While Horizon Perspective Paper 5 on Bay Crossings will delve into the pros and cons of different options, staff will use Crossing #3 (BART New Markets) as a placeholder project for Futures Round 2, which will help highlight the potential synergies with housing and economic development from a Crossing investment and which will address transbay & metro crowding issues. To clarify, the inclusion of this project does not indicate that this specific Crossing will be carried forward into Plan Bay Area 2050, nor does it indicate that this Crossing is the highest-performing option in the corridor. Note that station locations and rail alignment are for illustrative purposes and are subject to change based on further design work.

**C-10 † Increase Existing Rail Capacity and Frequency by Modernizing the Network**

This strategy seeks to provide crowding relief on a suite of systems that are overcapacity by year 2050. Investments in a next-generation set of improvements to the Caltrain corridor enable even more frequent service; grade separation of VTA light rail allows for frequent automated service between communities identified for growth. In San Francisco, this strategy funds the Muni Southwest Subway that allows for more frequent and reliable service between Embarcadero & Parkmerced.

**C-9 † Extend the Regional Rail Network**

This strategy supplements the planned rail expansion detailed in Plan Bay Area 2040 with several new rail projects. The rail expansion strategy was shaped in part by the choice of the new transbay rail crossing, providing complementary service to regions that are expected to grow in transit demand. New extensions connect SMART to the BART system across a rebuilt Richmond-San Rafael Bridge, while Dumbarton Rail improves connectivity between BART and Caltrain in the South Bay. Extensions to Healdsburg, Brentwood, Livermore, and beyond would allow communities at the edge of the region to better access booming job centers.

**Transportation: Prioritize Active Modes**

After feedback from stakeholders in May, staff have significantly overhauled this package of strategies to significantly increase the level of planned investment and to incorporate a new strategy. Together, these three strategies - providing free short trips (including via bike share), reducing speeds to improve safety for all users, and building a transformative network of micromobility infrastructure - are designed to improve the attractiveness of biking, walking, scooting, etc.



#### **D-4 Invest in Free Short-Trip Service**

This strategy will provide free transportation options for trips that are no greater than three miles with origin or destination within growth areas identified for housing (refer to Map A). To reduce the number of vehicles on the region's roads, this strategy focuses on shared personal mobility, including scooters and electric bikes. Understanding that those with limited mobility may not be able to take full advantage of these services, autonomous shared shuttle services will be provided within this same geography.

#### **NEW! Implement Vision Zero Speed Reduction Measures**

The first Horizon Perspective Paper, which focused on Autonomous Vehicles, introduced Vision Zero 2.0 as a lens to making streets safer for active modes even as vehicles may become autonomous. Focusing primarily on reducing speed limits within three miles of the growth areas (refer to Map A), this strategy is proposed for inclusion in all three Futures by including the adoption of a regional Vision Zero policy that would require changes on the state level. These changes necessitate changes to local speed limits in growth areas to 25 mph and changing freeway & highway speed limits to no greater than 55 mph. While the true monetary cost of achieving Vision Zero in our region is difficult to know, the strategy sets aside a dedicated pot of money for enforcement, education, and targeted infrastructure investments, such as speed bumps or pedestrian crossings on high-injury corridors. Investments in Strategy C-3 would help to implement more wide-ranging streetscape improvements to supplement the Vision Zero policy changes.

#### **C-3 ‡ Build a Complete Micromobility Network**

This newly expanded strategy combines a suite of investments to transform the active transportation landscape in the Bay Area - ultimately building out nearly 10,000 miles of new infrastructure. First, this strategy would advance two Transformative Project submissions from members of the public or non-governmental organizations: completing the Bay Trail and building Bicycle Superhighways in separated facilities running parallel to freeways. Furthermore, this strategy would fund thousands more miles of ambitious investments in dedicated space for micromobility along arterials and on designated low-traffic streets. The strategy calls for equipping every arterial in the region with a Class IV protected bikeway. It also incorporates Class III shared streets/neighborhood bikeways on 25 percent of all low-volume local streets. This strategy assumes that new dedicated facilities will be installed by replacing on-street parking (which will become less important in an autonomous future) and by narrowing lanes on wider suburban streets that will now feature lower speed limits under the strategy listed above. The revised strategy title reflects the broader array of modes that could use these facilities and acknowledges that the greater investment level would support both short-distance local trips and longer-distance regional trips.

#### **Transportation: Price Transportation Services**

A suite of strategies would price transportation services to incentivize non-auto trips and reduce the cost barrier of transit for lower-income residents. To enable better decision-making based on costs of different modes, a single platform application for the region would also be implemented to help residents navigate their travel options. Freeway tolls would not only help to shift travel behavior but also to fund associated transportation priorities, including free transit for lower-income households.





**C-1 Develop a Single Platform to Access and Pay For All Mobility Options**

Under this strategy, MTC will support the development and public adoption of a Mobility as a Service (MaaS) platform. These platforms, currently available through pilot programs in select cities, allow residents to view all their transportation options and pay for them using a fare payment card or smartphone. Through this platform, transit, bike share, e-scooters, and ridehailing services will all be at users' fingertips, providing a more seamless customer experience and potentially enabling a reduction in single-occupancy vehicle trips. Payment through the application could be done via debit or credit card, and users would also have the option to load cash into an e-wallet, making the service more accessible to the unbanked. Services included within the platform would include trip planning, fare payment, discounted & free fare program enrollment, bike share, bike parking, scooter share, car share, ridehailing, and parking payment.

**C-6 Apply Time-of-Day Tolls on All Freeways**

Originally a proposal for a flat 10 cents per mile charge on all freeway travel, this strategy now envisions rates that vary between peak and off-peak periods based on vehicle occupancy to encourage carpooling. During peak periods, freeway rates would vary from 15 cents per mile for vehicles with two or fewer occupants during peak periods to 5 cents per mile for 3+ person carpools during peak periods. During off-peak periods, freeway rates would be 5 cents per mile for all vehicles. Bridge tolls would remain in effect in addition to the pricing strategy, as would state taxes on gasoline and diesel. As highlighted above, funds from this road user fee would be used to fund alternatives to driving.

**A-3 ‡ Provide Free Transit to Lower-Income Riders**

This strategy originally called for a 50 percent discount on transit fares for low-income riders, but it has since been modified based on feedback from community members and stakeholders. This strategy now provides free transit for all households earning the lower two quantiles of the income spectrum (approx. less than the median income). Existing discounted fare programs, including those serving youth, senior citizens, and people with disabilities, would remain in effect. This strategy interfaces with Strategy C-1, where a single platform to access and pay for all mobility options would allow users to apply for the free transit fare program and redeem their benefits when boarding transit.

**Environment and Resilience: Reduce Our Impact on the Environment**

The environment and resilience strategies are designed to continue the region's commitment to reducing human impact on the environment. Urban growth boundaries are preserved to limit the rate of greenfield development in all three Futures. For the two higher-resource Futures, new revenues are relied upon to expand protected open space resources and to complete additional recreation trails and parks. New funding tools are also envisioned to upgrade a portion of the nearly 1.2 million pre-1970 residential buildings in the region that were built before modern safety, energy, and water codes.

**PBA-7 Keep Current Urban Growth Boundaries in Place**

In Futures Round 1 analysis, Urban Growth Boundaries from Plan Bay Area 2040 were effective in reducing and nearly eliminating greenfield development in the region. In addition to the success of the strategy, stakeholders at outreach events reiterated their disapproval with strategies that would expand new development into greenfield locations for new housing. Given the success of the strategy in Futures Round 1 and broad agreement from the public and from stakeholders to continue this strategy as-is, staff have preserved this strategy for Futures Round 2.



**V-3/ Expand Parks, Trails and Greenways and Preserve Agricultural Lands**

**H-2 ‡** Merging together two strategies from public and stakeholder outreach, this strategy relies on new revenues to protect open space and agricultural lands, expanding habitat and recreation resources in the region. Staff has proposed the integration of two strategies to reflect the overlap in preserving rangelands in foothills and mountains. This strategy complements the urban growth boundary which uses policy to protect agriculture and open space lands. The strategy also creates new funding for continued development of new park and trail options in a growing region. The benefits of this strategy will be estimated using off-model research.

**H-9 ‡ Expand Existing Building Improvements (Energy, Water, Seismic, Fire and Accessibility)**

With the addition of this strategy, buildings that were previously identified as possible seismically fragile buildings are assumed to have been retrofit between 2020 and 2035. A portion of single-family homes with a crawl space, and all soft story multi-family buildings are retrofit using a quarter of the strategy cost. The effect of this strategy will be a reduction of earthquake destroyed buildings in the year 2035 in the two higher resource futures. The Futures Round 1 analysis did not explore the impact of wildfire, and drought on the region, nor the greenhouse gas emissions from building operations (heating, cooling, lighting, etc.). Off-model calculations may be used to study the impact of energy efficiency, water efficiency, and fire safety improvements to existing buildings in the region.

**Environment and Resilience: Reduce the Environment's Impact on Us**

Without mitigation strategies, the impacts of sea level rise combined with the simulated year 2035 Hayward Fault earthquake would hundreds of thousands housing units in the first round of Futures analysis. The impacts also damaged major segments of the region's transportation system. To reduce hazard & climate impacts and speed recovery of the region following acute events, funding is dedicated to mitigate impacts and finance the rebuilding of the region after a disaster. These strategies would be supported by new revenues described in the final section.

**H-4 Purchase Disaster Recovery Financing to Speed Recovery**

In the Rising Tides, Falling Fortunes Future, the federal government has reduced its role in rebuilding public infrastructure after disasters. To ensure repairs to damaged infrastructure are made, this strategy would fund the replacement of destroyed transportation infrastructure (segments of BART and the highway network). For the other two Futures, it assumed that the federal government would continue to support repairs and replacement of damaged public infrastructure. For these Futures, the fund would support transformative investments in the region's infrastructure - particularly those in the high damaged portions of Alameda County where earthquake damage is greatest. Catastrophe bonds are used in other regions to manage risks from hurricanes and flooding and have much greater flexibility than traditional insurance. It is assumed that the region would purchase coverage that would be triggered by the 2035 earthquake, creating \$5 billion for the region to spend to rebuild and advance transformative projects.

**H-3 ‡ Adapt to Sea Level Rise (Partial, Full, SR-37)**

**H-7** Adaptation measures like marsh restoration, horizontal levees, traditional levees, sea walls and



**H-8 †** tidal gates at creeks, are used to protect the most affected portions of the bay shoreline. In *Rising Tides, Falling Fortunes* only a subset of areas are protected due to resource limitations. The other two Futures include a broader set of protection. In Futures Round 1, homes and businesses were displaced by rising seas, and portions of the transportation system were closed from permanent inundation. In Futures Round 2, areas of shoreline that are protected will enable homes and businesses to remain and for travel corridors to stay open. The SR-37 adaptation (strategy H-3) is included in the two high-resource Futures but is omitted because of budget restrictions in *Rising Tides, Falling Fortunes*. Table 4 and Map C highlight which portions of shoreline are prioritized for adaptation. Table 5 highlights what percent of various regional impacts would be protected by the package of adaptation measures in each future. Reducing impacts to vulnerable communities was the primary goal in both adaptation packages.

### **Horizon Strategy Estimated Expenditures and Revenues**

The package of Horizon strategies require more public money than is currently collected with existing revenue sources. Staff plan to use a simplistic yet progressive package of new taxes, fees, and tolls to study some of the potential direct and cascading impacts of large tax packages on the region. While more elegant funding and financing tools may lessen the financial burden on Bay Area residents and businesses, or may focus impacts at different rates or in different areas, a general set of taxes were applied to recognize the challenges associated with placing financial burdens on Bay Area household incomes and business bottom lines. The new financial expenditures are described first, followed by the new revenues needed to pay for the strategies.

### **Strategy Package Financial Expenditures**

Staff have calculated preliminary costs for each strategy. These preliminary estimates are subject to change as staff continue to add strategy details and develop costing estimates for the wide-range of strategies. Many strategies do not cost anything for local, regional, or state governments to implement, or have implementation or administrative costs that are less than one billion dollars over a 30-year period. Table 1 provides a line item strategy cost for each Horizon strategy for both *Rising Tides, Falling Fortunes*, as well as *Clean and Green and Back to the Future*. The two high resource futures, which are supported by additional revenues from new and existing sources have a nearly \$300B increased cost to implement the set of transformative economic development, housing, transportation, environment, and resilience strategies.

### **New Revenue Needed to Support Strategy Package**

For transportation revenue sources, MTC is building upon previous analysis of existing revenue sources, adding in estimated revenue generated by the implementation of freeway tolls. Note that the estimated revenues from Strategy C-6, *Time of Day Tolls on Freeways*, support most of the transportation strategy costs. For the purposes of Horizon, staff are assuming there are no existing fund sources to support the new economic development, housing, and the environment and resilience strategies. Table 2 below shows the forecasted revenue for transportation investments, as well as the significant new revenue needed to support the broader set of strategies.

To generate the new revenue, staff plan to apply three equal revenue generating measures to the economic model: (i) property tax, (ii) state income tax, and a (iii) business tax. Together these new revenues will complement calculated transportation revenues for each Future over the next 30 years. The economic model will study the tax burden on both households and businesses and will apply sector and household income specific benefits based on how the revenues will be spent. Based on the nature of the strategies, many of the benefits will accrue in the economic model for low-income households, the construction sector, and the public administration sector.



**Table 1: Sketch-Level Budgets - DRAFT Estimate of Strategy Costs by Horizon Topic Areas**

		Strategy Cost <sup>1</sup>	
		RTFF <sup>2</sup>	CAG & BTTF <sup>3</sup>
<b>ECONOMIC DEVELOPMENT SECTION</b>			
PBA-8	Apply VMT-Based Commercial Development Fee	\$0	\$0
V-7	Place Office Caps in Job-Rich Locations	\$0	\$0
V-6	Provide Portable Benefits for Part-Time and Freelance Workers	\$0	\$0
V-5	Create Incubator Program in Economically Challenged Communities	\$5	\$5
V-1	Expand Construction Workforce Programs	-	\$5
D-2	Expand Childcare Support for Low-Income Families	-	\$35
<b>Economic Development Subtotal</b>		<b>\$5</b>	<b>\$45</b>
<b>HOUSING SECTION</b>			
PBA-1	Assign Higher Densities to Priority Development Areas	\$0	\$0
PBA-2	Streamline Development in all Growth Areas	\$0	\$0
A-7	Allow Diverse Housing Around all Major Transit Stops	\$0	\$0
D-9	Allow Affordable Housing in Areas of High Opportunity	\$0	\$0
A-4	Transform Aging Malls and Office Parks Into Neighborhoods	\$0	\$0
A-2	Repurpose Public Land to Build Housing	\$0	\$0
D-7	Require 20 Percent of all new Housing to be Affordable	\$0	\$0
D-6	Increase Renter Protections	\$4	\$4
A-8	Fund Affordable Housing Preservation & Production	-	\$74
<b>Housing Subtotal</b>		<b>\$4</b>	<b>\$78</b>
<b>TRANSPORTATION SECTION</b>			
PBA-6	Operate and Maintain the Existing System	\$311	\$315
PBA-4	Make Strategic Modernization & Expansion Investments for Public Transit	\$26	\$26
PBA-5	Build Carpool Lanes & Address Interchange Bottlenecks	\$5	\$5
C-4	Build and Operate a Next Generation Bus Rapid Transit Network	\$15	\$15
D-4	Invest in Free Short-Trip Service	\$8	\$8
NEW	Implement Vision Zero Speed Reduction Measures	\$2	\$2
C-3	Build a Complete Micromobility Network	\$10	\$10
C-1	Develop a Single Platform to Access and Pay for All Mobility Options	\$1	\$1
C-6	Apply Time-of-Day Tolls on All Freeways	\$6	\$6
C-7	Build a New Transbay Rail Crossing	-	\$66
C-10	Increase Existing Rail Capacity and Frequency by Modernizing the Network	-	\$45
C-9	Extend the Regional Rail Network	-	\$45
A-3	Provide Free Transit for Lower-Income Riders	-	\$15
<b>Transportation Subtotal</b>		<b>\$384</b>	<b>\$559</b>



<b>ENVIRONMENT &amp; RESILIENCE SECTION</b>			
PBA-7	Keep Urban Growth Boundaries in Place	\$0	\$0
H-4	Purchase Disaster Recovery Financing to Fast-Lane PDA Implementation	\$6	\$6
H-7	Partially Adapt to Sea Level Rise	\$5	\$5
V-3/H-2	Expand Parks, Trails and Greenways and Preserve Agriculture Lands	-	\$15
H-9	Expand Existing Building Improvements	-	\$30
H-8	Fully Adapt to Sea Level Rise	-	\$5
H-3	Adapt the Highway 37 Corridor to Sea Level Rise <sup>4</sup>	-	\$9
<b>Environment &amp; Resilience Subtotal</b>		<b>\$11</b>	<b>\$70</b>
<b>TOTAL</b>			
Economic Development Subtotal		\$5	\$45
Housing Subtotal		\$4	\$78
Transportation Subtotal		\$384	\$559
Environment & Resilience Subtotal		\$11	\$70
<b>Expenditures Total</b>		<b>\$404</b>	<b>\$752</b>

<sup>1</sup> Strategy cost is in billions of dollars, in year of expenditure (YOE).

<sup>2</sup> RTFF is shorthand for Rising Tides, Falling Fortunes, the lower-resource, lower-growth Future.

<sup>3</sup> CAG & BTFF is shorthand for Clean and Green & Back to the Future, the higher-resource, and higher-growth Futures.

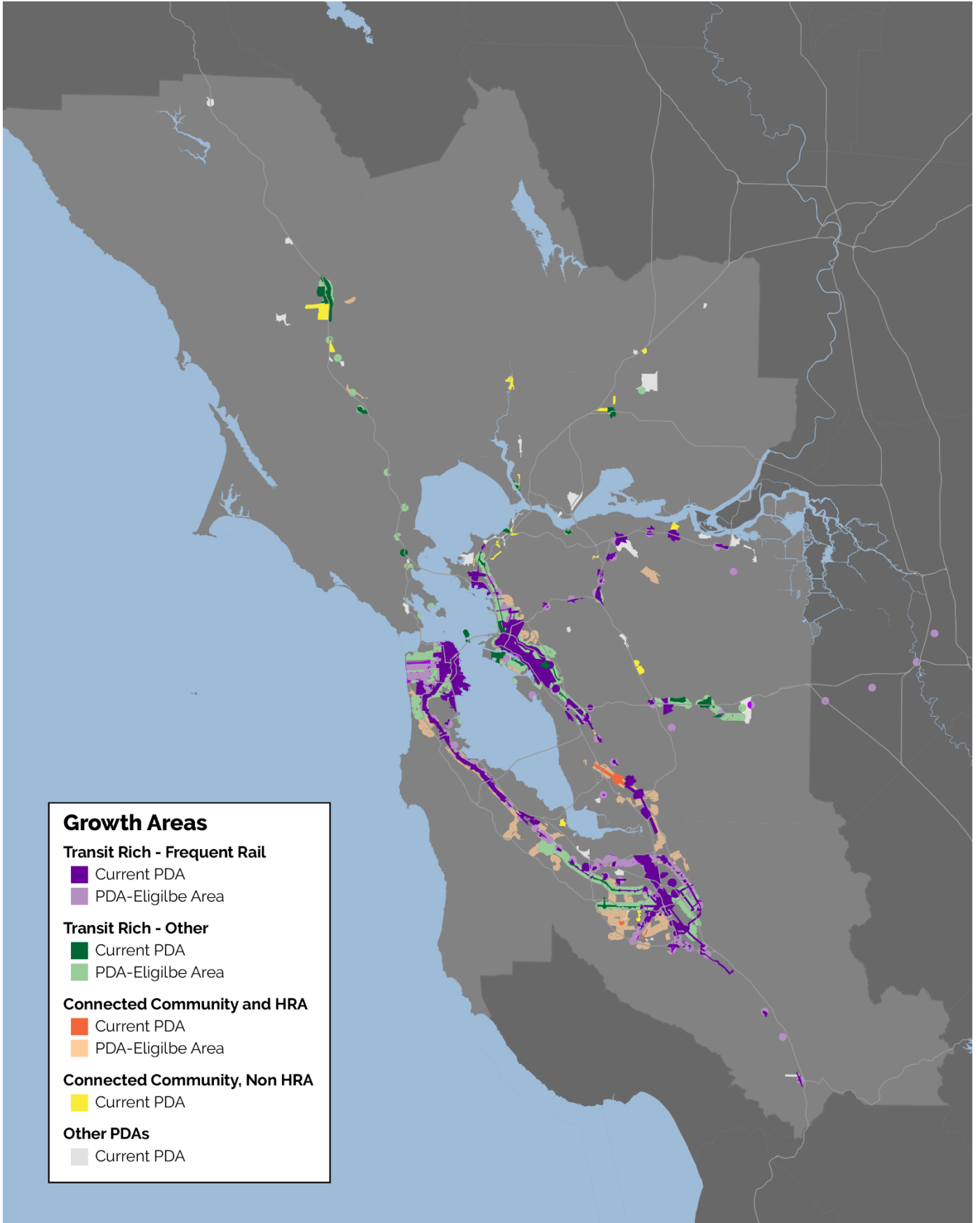
<sup>4</sup> The Highway 37 costs include not just the highway costs but also additional natural resource adaptation work throughout the North Bay OLU.

**Table 2: Sketch-Level Budgets - DRAFT Estimate of Existing and New Revenues to Support Horizon Strategy Costs**

	Revenue Forecast <sup>1</sup>	
	RTFF	CAG & BTFF
<b>REVENUE SECTION</b>		
New Revenue from Tax Package (Economic Development)	\$5	\$45
New Revenue from Tax Package (Housing)	\$4	\$78
New Revenue from Tax Package (Transportation)	\$0	\$30
Existing Forecasted Transportation Revenues	\$305	\$440
Additional Transit Fare Revenue from Transit Expansions	\$7	\$20
C-6 Highway Toll Revenue	\$83	\$83
H-4 Disaster Recovery Financing	\$5	\$5
New Revenue from Tax Package (Environment & Resilience)	\$6	\$65
<b>Revenue Total</b>	<b>\$415</b>	<b>\$766</b>
<b>New Tax Package Total</b>	<b>\$20</b>	<b>\$223</b>

<sup>1</sup> Revenue forecast is in billions of dollars, in year of expenditure (YOE).

**Map A: Growth Areas for Futures Round 2**



Map B: Frequent Transit Map for Futures Round 2



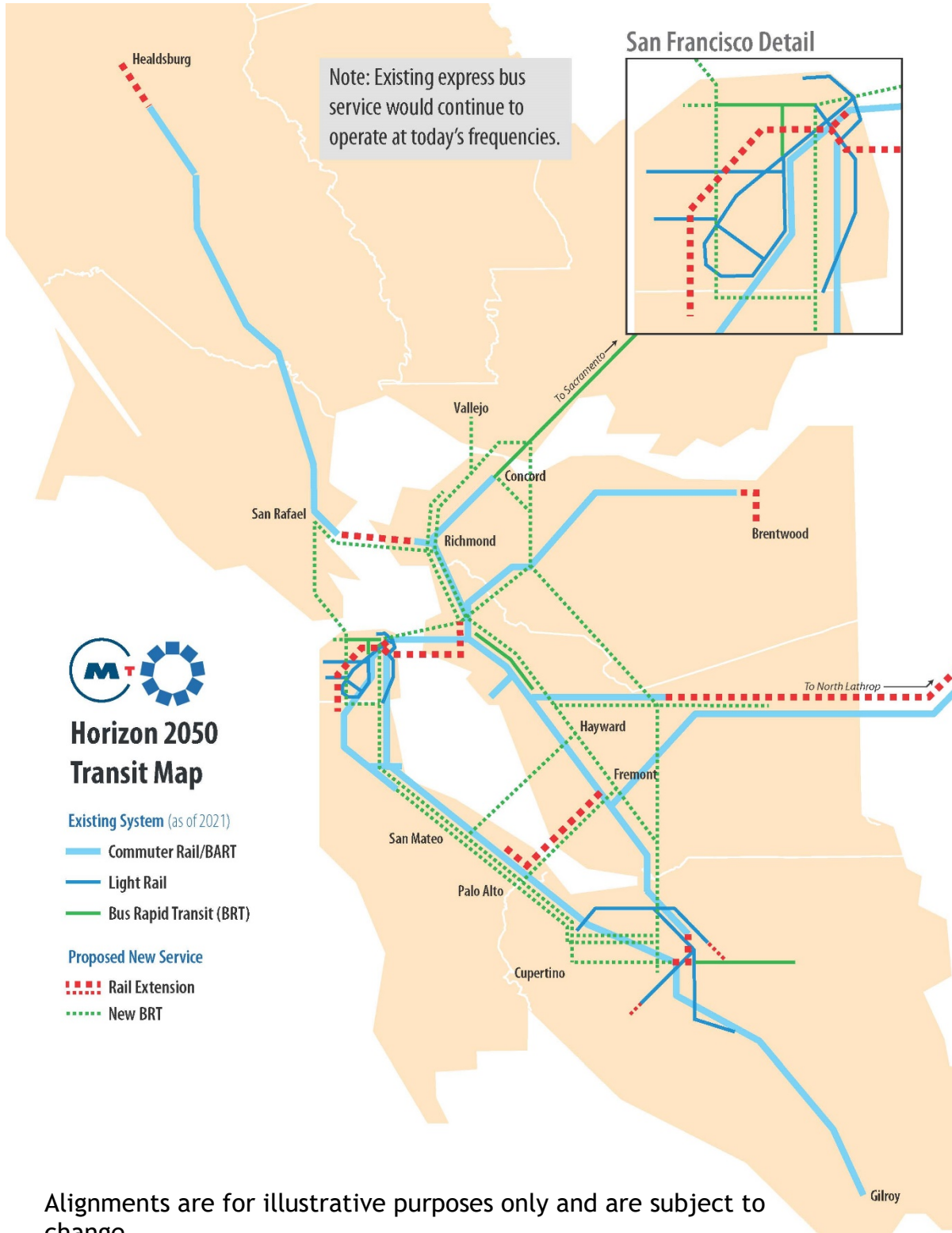


Table 3: Transportation Project List for Capacity-Increasing Investments



Strategy	Strategy Title	Project Title <i>(for strategies with multiple projects)</i>
PBA-4	Make Strategic Modernization & Expansion Investments for Public Transit	AC Transit Local Service Frequency Increase Sonoma Countywide Service Frequency Increase Muni Forward + Service Frequency Increase New BRT Lines: San Pablo, Geary (Phase 2), El Camino Real BART Core Capacity BART to Silicon Valley (Phase 2) Caltrain Downtown Extension Vasona LRT (Phase 2) Eastridge LRT Extension WETA Service Frequency Increase WETA Ferry Network Expansion Downtown San Francisco & Treasure Island Congestion Pricing Bay Area Forward (Phase 1) Better Market Street
PBA-5	Build Carpool Lanes and Address Interchange Bottlenecks	Regional Express Lanes <i>(converted to carpool lanes w/pricing)</i> I-680/SR-4 Interchange + Widening (Phases 3-5) SR-4 Operational Improvements I-80/I-680/SR-12 Interchange + Widening (Phases 2B-7)
PBA-6	Operate and Maintain the Existing System	
C-1	Develop a Single Platform to Access and Pay for All Mobility Options	
C-3	Build a Complete Micromobility Network	Bay Trail Completion Bicycle Superhighways Feeder Network on Local Streets
C-4	Build a Next-Generation Bus Rapid Transit Network	Regional Express Bus Network Optimized Express Lane Network Gap Closures
C-6	Apply Time-of-Day Tolls on All Highways	
D-4	Invest in Free Short-Trip Service	Bike Share System Expansion and Free Bike Share Autonomous Shared Shuttle Service
NEW	Implement Vision Zero Speed Reduction Measures	
C-7	Build a New Transbay Rail Crossing	
C-9	Extend the Regional Rail Network	BART DMU to Brentwood SMART to Healdsburg Dumbarton Rail Valley Link (Tri-Valley to San Joaquin Valley) SMART to Richmond via New Richmond-San Rafael Bridge
C-10	Increase Existing Rail Capacity and Frequency by Modernizing the Network	VTA LRT Automation and Grade Separation Caltrain Frequency Increase (10 Trains per Hour) Muni Metro Southwest Subway
A-3	Provide Free Transit to Low-Income Riders	

**Map C: Operational Landscape Units (OLUs) Prioritized for Early Adaptation in Futures Round 2**





**Note:** Adaptation measures do not typically span the entire length of an OLU shoreline. Often the adaptation measure is just for a small segment (e.g., less than 5 miles) of shoreline where impacts are greatest. In *Rising Tides, Falling Fortunes*, only the light blue sections are adapted. In *Clean and Green* and *Back to the Future* both the light and dark blue sections are adapted. The dark grey sections are not included for adaptation because with three feet of sea level rise the impacts are less than in other areas.



**Table 4: Operational Landscape Units (OLU) Prioritized for Early Adaptation**

	OLU #	OLU Name <sup>1</sup>	Major Reasons for Adapting <sup>2</sup>
Rising Tides, Falling Fortunes	1	Richardson Bay	Housing
	2	Corte Madera	Housing, Transportation
	3	San Rafael	Housing, Vulnerable Communities, Jobs, Transportation
	9	Suisun Slough	Vulnerable Communities, Natural Lands
	18	San Leandro	Housing, Vulnerable Communities, Jobs
	20	Alameda	Housing, Vulnerable Communities, Natural Lands
	22	Santa Clara Valley	Jobs, Natural Lands, Transportation
	23	Stevens	Housing, Jobs
	24	San Francisquito	Housing, Vulnerable Communities, Transportation
	25	Belmont-Redwood	Vulnerable Communities, Jobs, Transportation
	26	San Mateo	Housing, Vulnerable Communities, Transportation
	27	Colma-San Bruno	Jobs, Transportation
Clean & Green and Back to the Future	4	Gallinas	Housing
	5	Novato	Housing, Transportation
	6	Petaluma	Natural Lands, Transportation
	7	Napa-Sonoma	Natural Lands, Transportation
	10	Montezuma Slough	Natural Lands
	21	Mowry	Natural Lands

<sup>1</sup> Note that OLUs are named by landscape features (e.g. rivers, wetlands, watersheds) not government boundaries. For example, OLU 18 San Leandro is named for San Leandro Bay -- It only includes a portion of the City of San Leandro, but includes all of City of Alameda, and a major portion of the City of Oakland.

<sup>2</sup> Using GIS analysis of flooding impacts across the shoreline, staff have identified OLUs that have major impacts to housing, vulnerable communities, jobs, natural lands, and transportation systems. This tagging highlights the primary reasons an OLU has been prioritized for adaptation.

**Table 5: Percent Housing, Vulnerable Community, Job, and Natural Lands Impacts Addressed with Adaptation Package**

Impact Category	Impact Category				
	Housing	Vulnerable Communities	Jobs	Natural Lands	Transportation
Rising Tides, Falling Fortunes	84%	93%	94%	32%	All except SR-37
Clean & Green, and Back to the Future	94%	96%	96%	95%	All



H O R I Z O N



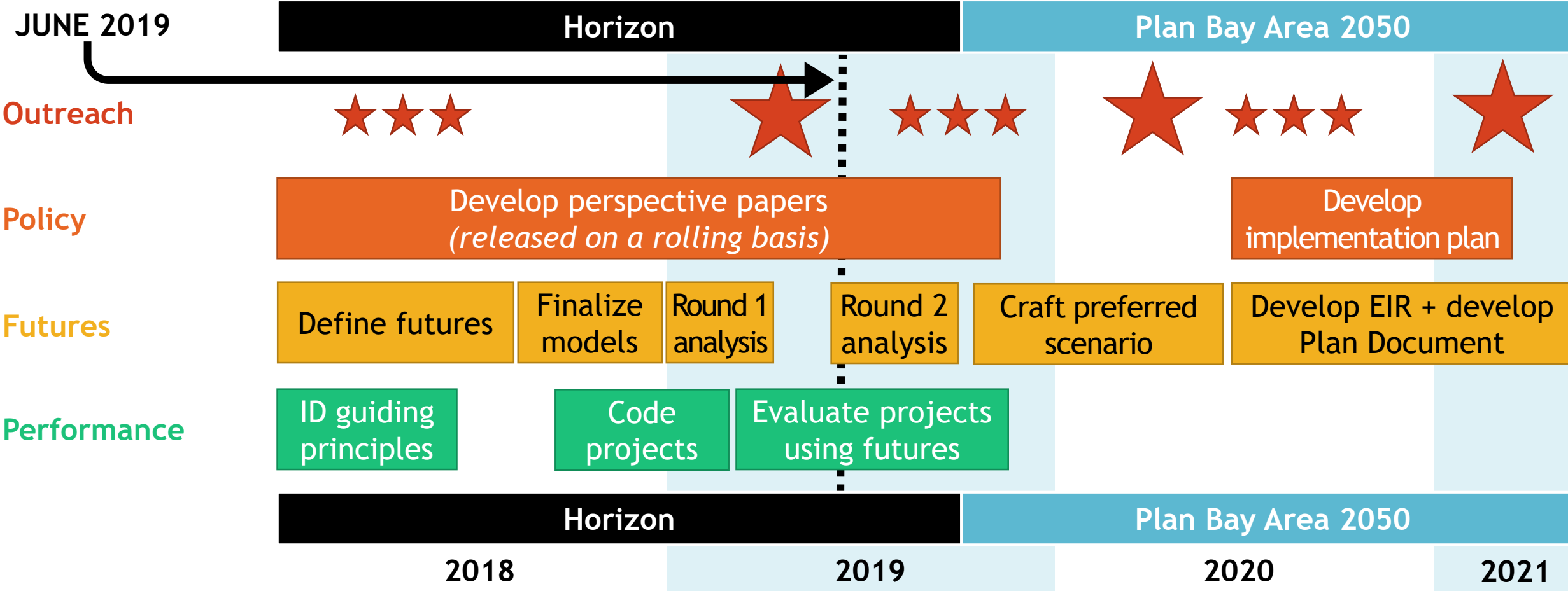
## Futures Round 2

Finalizing Strategies for Analysis

Michael Germeraad, Associate Planner

Regional Advisory Working Group | June 4, 2019 | San Francisco, CA

# Schedule for Horizon and Plan Bay Area 2050





# Reminder about Futures Analysis

**Futures Planning** is a “blue sky” scenario planning exercise to better understand how new regional strategies to improve affordability, connectedness, diversity, environmental health, and economic vibrancy could fare in an uncertain future.

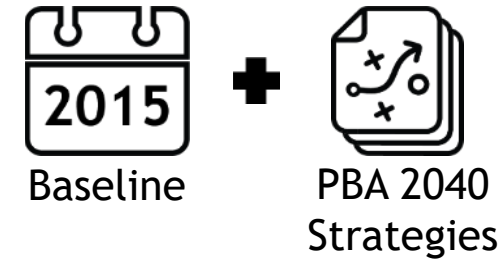
In fall 2019, the different elements of *Horizon*, including **Futures**, will be used to help policymakers prioritize strategies for advancement into the Preferred Plan Bay Area 2050.

# 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.

# Seven Most Significant Revisions Made in Response to Stakeholder Feedback

## We are:

1. Adding the **Repurpose Public Land to Build Housing** strategy.
2. Adding a new **Implement Vision Zero Speed Reduction Measures** strategy.
3. Aligning affordable housing revenue toward the **lowest-income households**.
4. Tripling **planned investment in active transportation** to build a complete micromobility network.
5. Modifying **pricing strategies** to promote both carpooling and social equity.
6. Ensuring **greater equity** in environment and resilience strategies.
7. Incorporating **non-regressive revenues** to balance the budget in each future.



# The 4 Focus Areas of Horizon + 9 Strategy Package Goals for Futures Round 2

Economic  
Development

Housing

Transportation

Environment  
& Resilience

Improve  
Economic  
Mobility

Shift the  
Location of  
Jobs

Spur Housing  
Production

Retain and  
Expand  
Affordable  
Housing

Improve  
Access,  
Reliability and  
Speed

Prioritize  
Active Modes

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

# Table: Office Cap Locations

(Strategy V-7)

**Definition:** Place office development caps in eleven cities with many more jobs than residents - most of which are located in above-average VMT per worker locations.

**Coordinated with:** VMT Commercial Development Fee (Strategy PBA-8), which charges a fee on commercial development outside of transit-rich areas.

## Bay Area Cities with Jobs-Housing Ratio $\geq 2.0$

1	<i>San Mateo County</i>	Colma	6.8
2	<i>Santa Clara County</i>	Palo Alto	3.5
3	<i>Alameda County</i>	Emeryville	3.2
4	<i>San Mateo County</i>	Brisbane	3.1
5	<i>San Mateo County</i>	Menlo Park	2.9
6	<i>Santa Clara County</i>	Santa Clara	2.5
7	<i>Santa Clara County</i>	Mountain View	2.4
8	<i>San Mateo County</i>	South San Francisco	2.2
9	<i>Santa Clara County</i>	Milpitas	2.1
10	<i>Santa Clara County</i>	Cupertino	2.0
11	<i>San Mateo County</i>	Burlingame	2.0

Source: California DOF; LEHD WAC (2016)

# 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.*

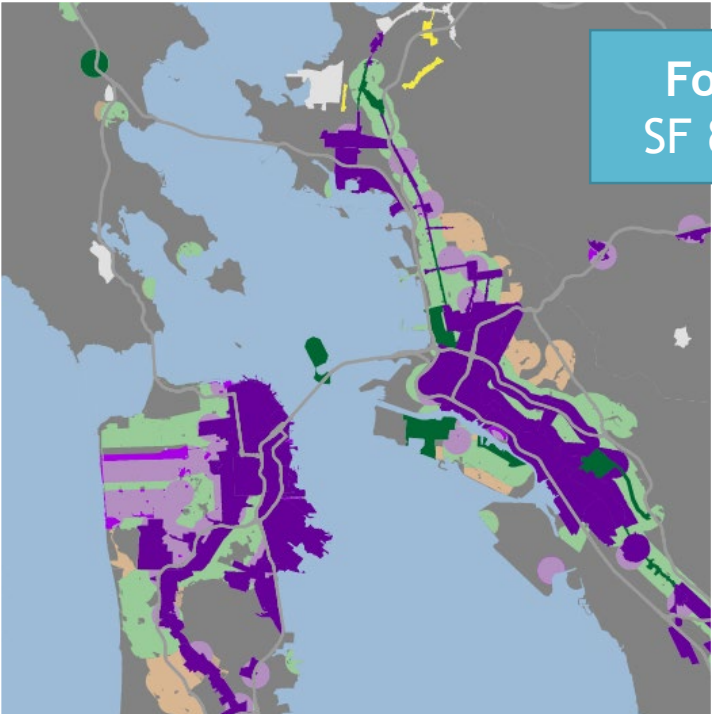
- D-7 Require 20 Percent of All New Housing to be Affordable
- D-6 Increase Renter Protections
- A-8\*\* Fund Affordable Housing Preservation & Production

# Map: Housing Growth Areas

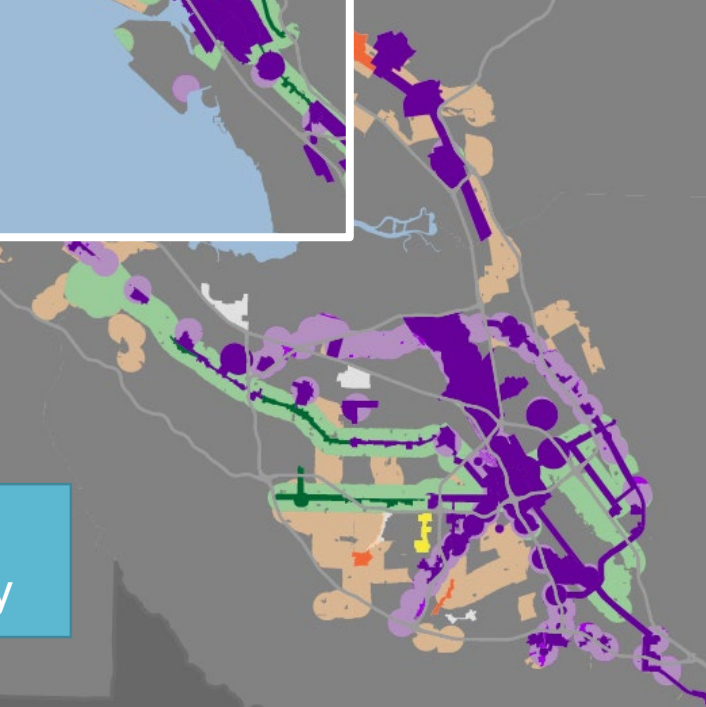
(Strategies PBA-1, PBA-2, A-7, D-9)

Regional Map

Focus Map:  
SF & East Bay



Focus Map:  
Silicon Valley



**Growth Areas**

**Transit Rich - Frequent Rail**

- Current PDA (Dark Purple)
- PDA-Eligible Area (Light Purple)

**Transit Rich - Other**

- Current PDA (Dark Green)
- PDA-Eligible Area (Light Green)

**Connected Community and HRA**

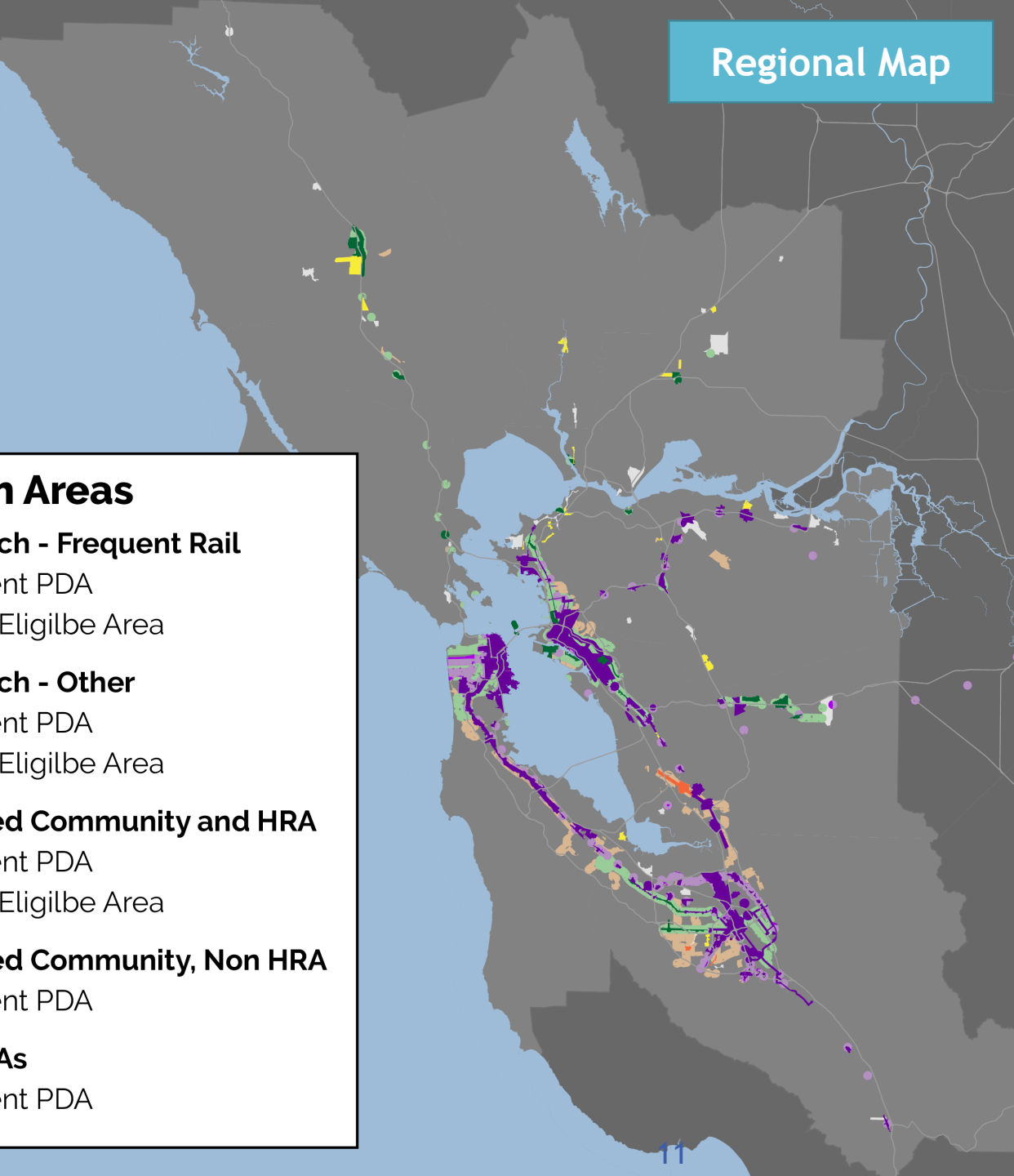
- Current PDA (Dark Orange)
- PDA-Eligible Area (Light Orange)

**Connected Community, Non HRA**

- Current PDA (Yellow)

**Other PDAs**

- Current PDA (Grey)



# Futures Round 2: Transportation Strategies



## Improve Access, Speed, and Reliability of Transportation



## Prioritize Active Modes



## Price Transportation Services

*Build a next-generation transit network for the 21<sup>st</sup> century.*

- 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

*Make active modes safer and more accessible.*

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

*Price freeways to drive different mode choices and advance equitable outcomes.*

- 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

\* = modifications have been made to Plan Bay Area 2040 strategy

\*\* = included only in two higher-growth, higher-resource Futures

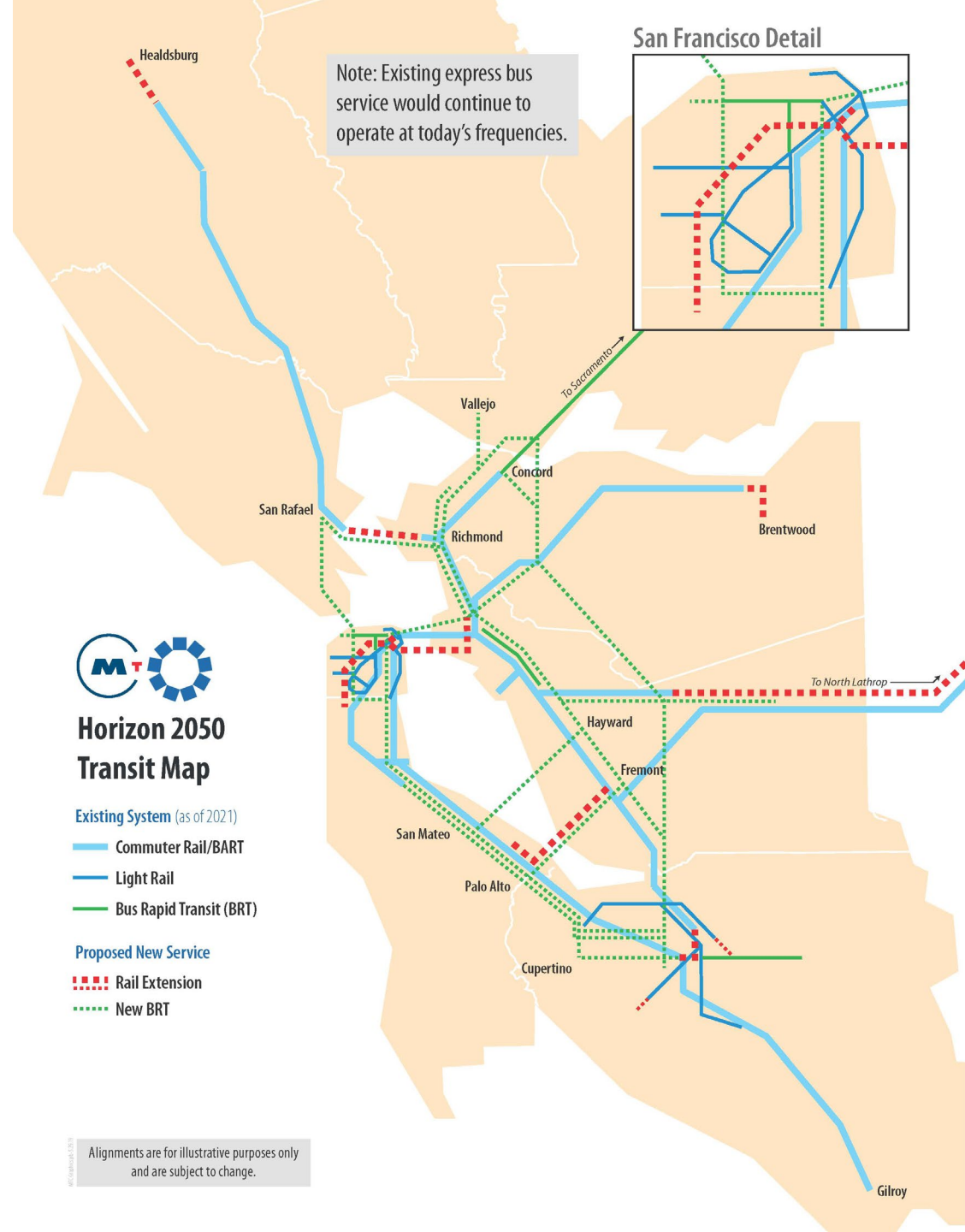


# Map: Next-Gen Transit

(Strategies PBA-4, C-4, C-7, C-9, C-10)

## Key investments *beyond Plan Bay Area 2040* include:

- Next-Generation BRT Network
- Second Transbay Tube + Systemwide Frequency Boost
- Rail Extensions
  - BART DMU to Brentwood
  - Valley Link
  - Dumbarton Rail
  - SMART to Healdsburg
- Rail Modernization
  - Muni Southwest Subway
  - Caltrain Frequency Boost
  - VTA LRT Elevation & Automation



# Graphic: Micromobility Network

(Strategy C-3)

**Definition:** Allocate funding to install nearly 10,000 miles of continuous and connected bike infrastructure, including completion of the Bay Trail, the addition of Bike Superhighways with cycle tracks along major freeways, and a network of cycle tracks, bike lanes, and shared use streets concentrated within 3 miles of growth areas.

**Cost:** \$10 billion

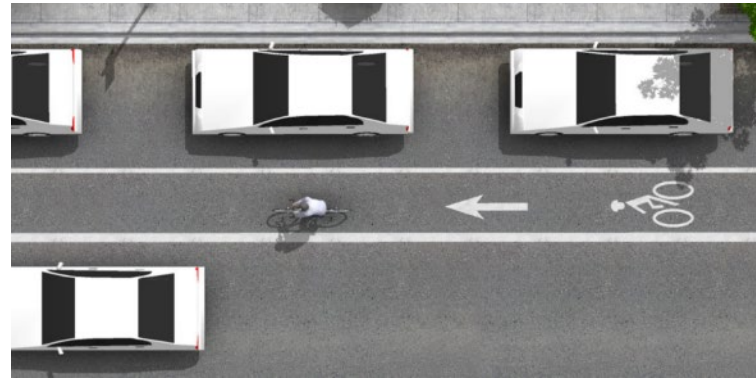
**Coordinated with:**

- Free Short-Trip Service (Strategy D-4)
- Implement Vision Zero Speed Reduction Measures (NEW Strategy)



## Protected Bikeways

- Bicycle Superhighways: 300 miles
- 100% of Minor Arterials: 2,400 miles
- 50% of Major Collectors: 1,900 miles



## Bike Lanes

- 50% of Minor Collectors: 600 miles



## Shared Use Streets

- 25% of Local Streets: 4,600 miles



# 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

# Map: SLR Adaptation

(Strategies H-3, H-7, H-8)

## Shoreline Adaptation included in:

### Rising Tides, Falling Fortunes

*The measures would protect<sup>1</sup>:*

- 84% of Housing
- 93% of Vulnerable Communities
- 94% of Jobs
- 32% of Natural Lands

*\*Most major regional transportation impacts addressed, excluding SR-37.*

### + Clean and Green, & Back to the Future

*The measures would protect<sup>1</sup>:*

- 94% of Housing
- 96% of Vulnerable Communities
- 96% of Jobs
- 95% of Natural Lands

*\*All major regional transportation impacts addressed.*



<sup>1</sup> Using GIS exposure analysis of 3-foot inundation layer.

# Next Steps

- Conduct the analysis for Futures Round 2.
- Develop the Final Futures Report.



# Timeline for Futures Round 2

## June 2019 - August 2019

- **Futures Round 2 Analysis** - Rerun Futures modeling, incorporating new strategies and summarizing findings in Final Futures Report.

## September 2019 and Beyond

- **Plan Bay Area 2050 Kickoff** - Findings will be used to help policymakers select final projects and strategies for the preferred scenario.



March 15, 2019

Metropolitan Transportation Commission  
375 Beale Street  
San Francisco, CA 94105

Dear MTC Commissioners:

Bay Area 2050 must include a bolder strategy for active transportation.

Now is the moment to dramatically increase participation in active transportation in our region. Many factors are expanding the geography and demographic reach of active transportation modes. Localities around the region are promoting development patterns that support walking and cycling, reducing parking requirements, and thinking more creatively about how walking, biking, and transit can work together. At the same time, there is an explosion of new options including expansive bike sharing networks, as well as electric assist bicycles, scooters, and a host of other new modes. Jurisdictions that are investing in active transportation infrastructure are seeing results. For example, the bicycling rate in San Francisco has increased 3-fold since 2006. Finally, Horizon's proposed investments in a modern regional rail express bus networks will compliment more robust active transportation infrastructure that feeds transit trunklines. As part of Plan Bay Area 2050, we must plan and deliver infrastructure to support the immense potential for active transportation modes.

In Plan Bay Area 2040, the region set goals that demand a new scale of active transportation investment, including:

- increasing sustainable mode share by 10%;
- reducing per-capita GHG emissions from cars and light trucks by 15%;
- reducing per-capita delay on the regional rail network by 20%;
- reduce adverse health impacts associated with air quality, road safety and physical inactivity by 10%; and
- decreasing the share of low-income residents' household income consumed by transportation and housing by 10%.

Plan Bay Area 2040 projected that it would not meet many of these targets. If our region is serious about the principles of Affordability, Connectivity, Diversity, Environmental Health & Economic Vibrancy set out as part of the Horizons Process, we need a bold strategy that will take advantage of this unique opportunity to expand active transportation.

Thus far, the MTC's Horizons Process is falling far short on active transportation strategies. This process is intended to surface big ideas that address our greatest challenges. MTC's primary active transportation strategy ("Strategy C-9") only provides for \$100m / year investment in active transportation with no meaningful policy changes.<sup>1</sup> That is less than 2% of the funds dedicated to transit; and only about 6% of what is contemplated for modernizing regional rail networks. Yet MTC asserts that the region could achieve up to a 20% active transportation mode share with investments to complete the regional bike network and provide connecting facilities.<sup>2</sup> A 20% active transportation mode share is exactly the sort of ambition needed to achieve our equity and sustainability goals. MTC cannot expect the region's 101 jurisdictions to act independently to connect to this regional active transportation network.

To achieve a more healthy, safe, and equitable region and get on track to meet congestion mitigation and greenhouse gas emissions reduction goals, we call on MTC to develop and evaluate, through its Horizons Process, a much bolder active transportation strategy. This should include infrastructure investments and policy changes of the scope and scale that can expand active transportation mode share to 20%. We stand ready to assist MTC with developing such an active transportation strategy.

Our cities and counties are immensely diverse, but all of our residents deserve to be able to walk or bike to jobs, schools, services, friends, and regional transportation.

Sincerely,

Clarrissa Cabansagan  
New Mobility Policy Director  
TransForm

Dave Campbell  
Advocacy Director  
Bike East Bay

Janice Li  
Advocacy Director  
San Francisco Bicycle Coalition

CC: Therese McMillan, Executive Director, MTC

---

<sup>1</sup> MTC's Strategy D-4: "Invest in Free Short Trip Service" also supports bike share expansion, but is predominantly focused on a regional autonomous shuttle network.

<sup>2</sup> MTC "Transform-the-Future Strategy Booklet", March 2019, page C-3.



**From:** [Martha Silver](#)  
**To:** [Martha Silver](#)  
**Subject:** comments on Horizon strategies / interim futures report  
**Date:** Thursday, May 30, 2019 08:03:31

---

**From:** Michelle Beaulieu [REDACTED]  
**Sent:** Friday, April 5, 2019 12:04 PM  
**To:** Dave Vautin <[DVautin@bayareametro.gov](mailto:DVautin@bayareametro.gov)>; Matt Maloney <[mmaloney@bayareametro.gov](mailto:mmaloney@bayareametro.gov)>  
**Cc:** [REDACTED]; Maria Lombardo [REDACTED]; Linda Meckel  
[REDACTED]  
**Subject:** comments on Horizon strategies / interim futures report

**\*External Email\***

Hi Dave and Matt,

It was good to hear the process for developing the strategies for the futures round 2 analysis in BACTA planning directors this morning. We have a few comments we wanted to share on the strategies and interim futures report--it sounds like some of these are already moving forward (and some are not) which is great. We collaborated on the comments below with SFMTA and SF Planning staff as well.

Let me know if you have any questions,

Cheers, -michelle

### **Comments on Horizon Interim Futures Report**

- 
- This report is overall very
- helpful to understand the process that MTC has been going through, and lays out a lot of forecasts and assumptions about each future which will certainly spark "robust" conversations.
- 
- 
- 
- Is it possible to see all
- the data that informs each opportunity or challenge across all three futures? The maps are helpful but we'd like the underlying information as well.
- 
- 
- 
- In addition to that information,
- do you have a VMT report for each of the futures in addition to the share of auto commutes?

- 

## Comments on Horizon Strategies

- 

- Overall,
- the Transform the Future game was an engaging exercise that led to
- a lot of interesting conversations. We appreciate that the facilitation
- was well thought-out and that MTC staff put some tough issues front and center. We also appreciate that the groups were set up to have diverse perspectives at each table.

- 

- 

- 

- One
- common theme from many of the representatives in the room was that **the**
- **devil is in the details.** Many of these strategies are broad and do
- not have much information about implementation. We hope that as the final plan is developed, these strategies are refined in consultation with the RAWG stakeholders and the BACTA Directors and Planning Directors groups. Specifically, we'd appreciate receiving
- drafts of the detailed strategies and ultimate recommendations to the commission in advance of publication, and have sufficient time to provide comments.

- 

- 

- 

- For example, what is the
- Extend the Regional Rail Network "strategy"? Aren't certain individual components being studied individually as projects? How will this strategy be compared to the individual projects being studied in the project performance assessment?

- 

- 

- **How**
- **will these strategies be ranked or scored?** It sounds like they will
- be looked at for consistency with the Guiding Principles--will they also receive B/C scores? And how will they be integrated, if at all, into PBA 2050?

- 

-

- 
- Will this evaluation be
- conducted individually or will they be bundled? If certain strategies only make sense together, such as congestion pricing and associated transit/alternative investments, they should be grouped in the analysis.
- 
- 
- 
- **We strongly support evaluation**
- **of the following strategies:**
- - 
  - A3:
    - Provide 50 Percent Fare Discount for Low-Income Transit Riders
    - 
    -
  - C4:
    - Build and Operate a Next Generation Bus Rapid Transit Network (Question: is this just on
    - freeways or arterials? Description sounds like just AC Transit on SFOBB. We would be happy to work with you on specifics. Is this where highway BRT/express bus will be studied? If so we would strongly encourage that those projects be paired with the managed
    - lanes/expressways projects in your modeling and testing).
    - 
    -
  - C7:
    - Build a New Transbay Rail Crossing (Question: How will this analysis complement the Crossings
    - paper?)
    - 
    -
  - C10:
    - Increase Capacity and Frequency by Modernizing Existing Rail Network (Can we see the details
    - and provide input on the assumptions?)
    - 
    -
  - H1:
    - Establish Vehicle Trip Reduction Requirements for all New Development
    - 
    -

H5:

- Implement Parking Fees
- 
- 

•

- **There were a few strategies**
- **we'd like to propose revisions or clarifications for:**
- 

- 
- D4:
  - Invest in Free last mile service: as we commented on for the TDM perspective paper itself,
  - we have a concern with this free service, particularly the AV service. It begs the question of why free transit itself isn't a strategy? This could directly compete with active modes of transportation and feeder bus services. Importantly, how is this paid
  - for? Why does it need to be free when people already pay to ride feeder bus service? Transit service has a high cost associated with it, and we would not support re-directing funding to a free service.
- 
- 
- 
- C6:
  - 10 cent per mile peak period pricing on freeways: we support studying this, but does this
  - replace dynamic express lane fees or supplement? Dynamic pricing seems like a more efficient way of managing demand, and is a more appropriate and effective tool to shift travel behavior.
- 
- 
- 
- C5:
  - Increase Freeway Capacity and Build Express Lanes to Sacramento and Tracy: We feel that
  - the “cost” for this project is too low. We also feel that this strategy is counterintuitive considering the Guiding Principles of Horizon.
- 
- 
- C8:
  - Build a New Transbay Highway Crossing: We would like to ensure that this crossing will
  - not touchdown in San Francisco. What is the relationship between this

“strategy” and the Crossings paper, and the project performance evaluation process?

- o
- o
- o
- o C9:
  - o Extend the Regional Rail Network: Why is this strategy 3 points “more affordable” than
  - o C10? C10 seems to include the operating costs while C9 does not. We recommend increasing the cost of this strategy to be commensurate with C10.
- o
- o
- o
- o C3:
  - o Complete regional bike network: How is this the same/different from the 2 transformative
  - o bicycle projects (complete the bay trail and bicycle superhighways)?
- o

•

• **And lastly, we'd like to**

• **recommend a few additional strategies to be considered:**

•

- o
- o Tolling
  - o all highways and bridges: (from TDM perspective paper) this would be variable, demand-based
  - o pricing on all regional corridors. We feel this has stronger potential to shift behavior than a flat per-mile fee.
- o
- o
- o
- o Cordon
  - o Pricing in the Oakland, SF, and SJ: (from TDM perspective paper) potentially paired with
  - o the freeway pricing strategy.
- o
- o
- o Include

- at least one road safety strategy,
- to help the region achieve Vision Zero: During previous RAWG meetings, several stakeholders noted the importance of road safety, and were assured that this would be included in the Healthy principle. One option might be capping speed limits, which is a strategy
- included in the AV perspective paper. If the particulars of this are too difficult, we suggest that MTC acknowledge the importance of Vision Zero and that it wasn't addressed in this exercise. Will it be later in PBA 2050? This is a topic of increasing importance
- to our policy makers.
- 
- 



**Michelle Beaulieu**

Senior Transportation Planner, Policy and Programming  
San Francisco County Transportation Authority  
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San Francisco, CA 94103  
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April 19, 2019

### BY ELECTRONIC MAIL:

[dvautin@bayareametro.gov](mailto:dvautin@bayareametro.gov), [mshorett@bayareametro.gov](mailto:mshorett@bayareametro.gov)  
Dave Vautin, Horizon/Plan Bay Area 2050 Project Manager  
Mark Shorett, Principal Planner  
Bay Area Metro  
375 Beale Street, Suite 800  
San Francisco, CA 94105-2066

### Re: **Horizon Initiative (Transform-the-Future Strategies)/Plan Bay Area 2040**

Dear Mr. Vautin and Mr. Shorett:

Urban Habitat, Public Advocates, Community Legal Services of East Palo Alto, Center for Sustainable Neighborhoods, and North Bay Organizing Project thank you for inviting comments on the proposed “Transform-the-Future” strategies, and the opportunity to propose additional strategies for inclusion in Plan Bay Area 2040.

The focus on strategies is particularly timely in light of the updated SCS Program and Evaluation Guidelines that the California Air Resources Board issued last month in final draft form. As you know, those Guidelines respond to the direction of CARB’s Board “to place greater attention on the strategies, key actions, and investments committed by the MPOs and the jurisdictions they represent” when making the determination whether the adopted RTP/SCS, if implemented, will achieve the region’s greenhouse gas reduction targets. Specifically, CARB is “moving from a modeling-focused SCS evaluation process to a more strategy-based approach.” The updated Guidelines also respond to the Board’s request “that SCSs contain a ‘robust social equity analysis.’”

With that context in mind, we are pleased to propose two additional strategies for consideration, and to offer comment on a few of those already under consideration.

### 1. Proposed New Strategies

**Mobility, Jobs and Climate Fund:** *Create a Mobility, Jobs and Climate Fund to invest only in those projects or programs that achieve a triple*

*bottom line by simultaneously (1) connecting residents, especially those most in need of access, to important destinations, (2) creating good-paying local jobs, and (3) reducing carbon emissions. All projects and programs funded would be required to avoid any adverse impact (such as increased displacement risk, or exposure to health risk) on a community of concern.*

**Rationale:** To our knowledge, there is no transportation funding source that achieves the three outcomes of mobility, creation of good-paying jobs, and climate protection with each dollar spent. By creating such a fund within Plan Bay Area, the region would break new ground. By tying funding eligibility to the creation of good-paying jobs, the Fund would help solve the region's housing affordability crisis which, as CASA co-chair Fred Blackwell has noted, is a function of both rents and wages. And by tying eligibility to reduced carbon emissions, the Fund would help ensure that CARB will find in Plan Bay Area 2050 a strategy squarely aimed at achieving our region's GHG-reduction target.

We suggest the Fund be resourced with a substantial investment, e.g., \$1 billion a year in regional discretionary funds. This investment could be leveraged, bringing an even greater share of regional transportation revenues in line with the delivery of multiple benefits for each dollar spent.

**Condition Regional Transportation Funding:** *Build on the existing One Bay Area Grant (OBAG) program by infusing it with significant additional regional funds, and tying local eligibility for a share of those revenues to a specific set of local actions that promote the "3Ps" of affordable housing: production, preservation of existing affordable housing, and protection of tenants.*

**Rationale:** Conditioning transportation funding would achieve the "3Ps," while helping the region reduce driving and GHG emissions. This game-changing policy would articulate the relationship between land use, housing, and transportation planning and help create good outcomes across policy areas. Specifically, additional regional funds should be conditioned to incentivize the following local actions:

- Protection: local adoption of strong anti-displacement policies (from a menu of options including but not limited to rent control, just-cause eviction, and renter relocation assistance);
- Preservation: local adoption of housing preservation ordinances and provision of local funding to preservation efforts, supported by a regional preservation database to identify preservation opportunities for non-profit developers, cooperatives, and community land trusts across the region, especially within ½ a mile of high-quality transit;
- Production: Condition transportation funds to incentivize jurisdictions and transportation agencies to establish minimum baseline inclusionary housing for new and existing station areas, dedicate local funding towards affordable housing production, and pass disposition ordinances/policies that prioritize affordable housing development on publicly owned sites. For competitive grant funding, additional points would be given to jurisdictions with a low jobs-housing ratio or jurisdictions that have made the most progress in decreasing their jobs-housing ratio.



## 2. Strategies We Support

We are in full support of two strategies, as written, and believe they should be incorporated into the Plan Bay Area 2050 process:

**A-3 Provide 50% Fare Discount for Low-Income Transit Riders.** The evidence demonstrates clearly that reducing fares can lead to significant increases in ridership, and hence in GHG reduction. This is a win-win strategy: it will both help the next Plan Bay Area meet its emission-reduction targets and will provide a significant benefit to low-income residents of the Bay Area, who are burdened by high and increasing transit fares that restrict their mobility and their access to opportunity.

**D-9 Allow Affordable Housing in Areas of High Opportunity.** We are excited to see that MTC has highlighted this strategy, which was included in the “Equity, Environment and Jobs” scenario that the 6 Wins Network proposed in the process leading up to the adoption of the first Plan Bay Area in 2013, and performed very well on a range of metrics.

Finally, we are in conceptual support with strategy **D-6 Increase Renter Protections**. However, that strategy, as written, refers to state policy, which is not within the purview of the regional planning process. We support, instead, a strategy by which the region will act to increase renter protections. We believe that the strategy we proposed, above, to **Condition Regional Transportation Funding**, is the best route the region has available for achieving the important goals of strategy D-6.

Very truly yours,



Ruby Acevedo, Staff Attorney  
**Public Advocates Inc.**

Bob Allen, Director of Policy and Advocacy Campaigns  
**Urban Habitat**

Phil Hwang, Executive Director  
**Community Legal Services of East Palo Alto**

Tim Frank, Director  
**Center for Sustainable Neighborhoods**

Paul Robbins, President  
**North Bay Organizing Project**

**From:** [Martha Silver](#)  
**To:** [Martha Silver](#)  
**Subject:** Comments on Horizons Future Strategy C-1 - Platform to pay for Mobility Options  
**Date:** Thursday, May 30, 2019 08:01:39

---

**From:** Adina Levin <[alevin@alevin.com](mailto:alevin@alevin.com)>  
**Sent:** Saturday, May 11, 2019 2:36 PM  
**To:** Dave Vautin <[DVautin@bayareametro.gov](mailto:DVautin@bayareametro.gov)>  
**Cc:** Marti Paschal <[mpaschal@bayareametro.gov](mailto:mpaschal@bayareametro.gov)>  
**Subject:** Comments on Horizons Future Strategy C-1 - Platform to pay for Mobility Options

**\*External Email\***

Hi, Dave,

I am following up to the question that I asked last week at the MTC Policy Advisory Council regarding Horizons Future Strategy C1 - Develop a Single Platform to Access and Pay For all Mobility Options.

For this project, I would strongly encourage the MTC to consider the levels of the technology architecture that will be needed.

- 1) End user facing applications. The private sector is providing a variety of competing end-user services from vendors including Google, Apple, Uber, Lyft, Moovit, Transit, and more. It is not clear that it would be beneficial or competitive for the Bay Area to create a new end-user facing application, although it may be beneficial to private label a commercial application.
- 2) Application Programming Interfaces. New third party mobility options are continuing to emerge. It would be essential to provide application programming interfaces for third party applications to be able to submit data about their mobility option and its pricing, for these services to plug into the overall system.
- 3) Payment is separate from product selection. When purchasing products from the Amazon store, the product selection process is decoupled from the payment process. You search and choose the products you want, and then have a choice of payment methods. Similarly, an app to purchase transportation should decouple product selection from payment method.
- 4) Transit Fare policy. It would be beneficial to have integrated transit fare policy, to make it easy for customers to choose public transit as the core of their transportation diet. High capacity transit modes (bus, rail) are the most space-efficient, affordable, environmentally friendly options. If transit fare policy remains uncoordinated and confusing, it will be harder to compete with less space-efficient, more congesting, and less equitable modes.
- 5) Eligibility policy. It may be valuable to have a "terms of service" for mobility services that wish to participate in the regional mobility platform. Services that cause problems with safety, pollution, congestion, etc. would lose eligibility to participate in the platform.

In summary, for this program to deliver easy-to-use mobility, while furthering the region's safety, environmental and equity goals, the architecture of the program, and the policies underlying it, need to be carefully thought through.

Thank you for your consideration,

- Adina

Adina Levin

Member, Policy Advisory Council

[alevin@alevin.com](mailto:alevin@alevin.com)

650-646-4344



May 15, 2019

Metropolitan Transportation Commission  
375 Beale Street #800  
San Francisco, CA 94105

Dear MTC Commissioners and Ms. McMillan:

This letter calls your attention to the need for bolder and more creative strategies on carpooling and travel demand management (TDM) for Plan Bay Area 2050. Our next long-range transportation plan must keep our region on course to meet congestion mitigation and greenhouse gas emissions reduction goals. Travel demand management tools will need to play a central role in this effort. Success requires bold ideas that recognize the essential role that TDM has played in the past, and that leverage new technology and policy levers to deliver much more.

Our region has invested heavily in transit and will continue to do so. For example, Plan Bay Area 2040 devotes roughly \$180 Billion to transit over the plan period, more than 60% of total investments. Nonetheless, the plan still fails to meet targets for non-auto mode share, equitable access, and transit maintenance funding. Some of this can be improved by making smarter transit investments, but we must do more to leverage other strategies.

There are a number of reasons to expect that carpooling and other TDM strategies can deliver a much larger share of our sustainable mobility goals:

1. Carpool trips already comprise a significant proportion of overall trips. Over the past several decades, carpool trips have been roughly equal to the number of transit trips.[1] In recent years, the share of trips by carpool has grown, while the share by transit has shrunk. Meanwhile, work from home trips represents more than half of transit trips.
2. Technology is rapidly changing the landscape for carpooling, e.g., apps that allow carpools to form more efficiently and provide more reliable enforcement tools for qualifying carpools; ridesharing companies are increasingly focused on groups rides; and growing numbers of cities and large companies are demonstrating that TDM policies such as parking management, and flexible telecommute policies can have dramatic impacts.
3. MTC's commitment to delivering a functioning network of managed lanes and carpool lanes will dramatically change the benefit of carpooling. Uncongested travel across the region will become the major attraction for carpool and shuttle trips.



At present, Horizon anticipates that these tools cannot deliver a growing part of the solution. For example, the latest Horizon strategies include only minimal investment in the strategy to “provide commuters with incentives to carpool.” It is a grave error to give up on the potential for carpooling when it is evolving so quickly and has represented such a large portion of our success in the past.

Rather than give in, MTC needs to step up. We need to explore an entirely different scale of policy and financial incentives for these strategies. Spending even 1/10<sup>th</sup> of what we spend on transit would be open an entirely new way of thinking about TDM strategies and cannot be written-off without any further analysis. We call for MTC, through the Horizon process, to deliver a strategy to double the share of commuters who carpool in the region.

Sincerely,

Jim Wunderman  
CEO and President  
Bay Area Council

Matt Vander Sluis  
Deputy Director  
Greenbelt Alliance

James Paxson  
General Manager  
Hacienda

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[1] 10.2% carpool vs 11.9% transit in 2016.

**From:** [Martha Silver](#)  
**To:** [Martha Silver](#)  
**Subject:** Comments on Horizon Strategies  
**Date:** Thursday, May 30, 2019 08:03:00

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**From:** Nicholas Josefowitz <[nicholas@getsfmoving.com](mailto:nicholas@getsfmoving.com)>  
**Sent:** Wednesday, May 15, 2019 10:13 PM  
**To:** Therese W. McMillan <[tmcmillan@bayareametro.gov](mailto:tmcmillan@bayareametro.gov)>  
**Cc:** Alix Bockelman <[ABockelman@bayareametro.gov](mailto:ABockelman@bayareametro.gov)>; Dave Vautin <[DVautin@bayareametro.gov](mailto:DVautin@bayareametro.gov)>;  
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Maloney <[mmaloney@bayareametro.gov](mailto:mmaloney@bayareametro.gov)>  
**Subject:** Comments on Horizon Strategies

**\*External Email\***

Dear Therese and Horizon Team,

I am submitting this request for additional development of Horizon strategies as part of the public comment period, which I believe ends tonight at midnight.

I strongly support the general approach that the Horizon process has taken. In order to harness the fast-evolving transportation sector to deliver on our goals for an equitable and sustainable region, our region's next long-range transportation plan must be truly visionary and transformative. The Horizon process has offered an great opportunity to consider strategies that can deliver on our region's goals. I think the MTC team has done incredible work framing and communicating the strategies and challenges for Plan Bay Area. Staff should be applauded for an open process that has led to some suitably bold strategies on, for example, modernizing our regional rail network, expanding express lanes, and improving land use coordination. Well done.

There are three areas, though, where I believe we need stronger strategies in order to enter the Plan Bay Area process with an appropriate set of policy tools and perspectives.

First, the Horizon Process should include a bold strategy to reduce crashes on our roadways by half (eliminating deaths and serious injuries). This not only saves lives, it also tackles one of the biggest sources of roadway delay, namely non-recurring incident delay. Incident delay produces significant congestion; but more importantly, the unpredictability of roadway incident delay means it is far more disruptive to peoples daily routines, far more frustrating, and more economically costly than expected regular delays.

Some take the view that a transition to autonomous vehicles will dramatically reduce

the frequency of vehicle crashes, but this remains speculative. Even in high-AV penetration scenarios, if our country takes the same approach to regulating autonomous vehicle safety as it has to regulating the safety of our existing transportation systems - prioritizing speed and throughput - then there could be no safety improvements from AVs at all. With the uncertain approach and timing for autonomous vehicle implementation, and the aggregate safety impacts still impossible to predict, it is essential that MTC develop a strategy that focuses on the investments, policies, technologies and infrastructure to halve vehicle crashes and their impacts.

Second, carpool and TDM strategies will need to play a much bigger role in our transportation system. Technology and infrastructure improvements create a new set of opportunities for carpooling, and both TDM and carpooling can greatly benefit from many of the pricing strategies included in Horizon to date. The Horizon Process should develop a strategy that focuses on a combination of existing tools, technology, policies, subsidies, and infrastructure that could double existing carpool rates to a 20% mode share.

Finally, Horizon requires a more transformative strategy on active transportation. The advent of hybrid-electric and shared micromobility, and emerging increasing land use densities and parking reduction, create the preconditions for an unprecedented boom in active transportation. Current strategies that call for a regional bicycle network and expanded bike sharing are helpful, but MTC cannot rely on individual jurisdictions to deliver on their own all the connecting infrastructure and policies that will facilitate safe active transportation across the region. In addition, MTC cannot rely on the the widespread adoption of hybrid-electric bicycles and cargo-bikes as car replacements given their high upfront cost. With MTC's leadership and the ongoing explosion of active transportation modes, this region could achieve a 20% active transportation mode share. Horizon must identify the set of investments, subsidies and policies that would make this aspiration a reality.

I know it is somewhat late on in the process and there is not that much time to develop the bold strategies that would help us hit potentially transformative goals on halving crashes, doubling carpooling and quadrupling active transportation. But the Horizon process is exactly the place where our region should be developing these bold strategies, and there is no one better suited to developing these bold strategies than the incredible planners, thinkers and modelers at MTC.

I stand ready to support your bold leadership in these areas and look forward to working together to complete the Horizon Process.

Best regards,

Nick



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May 15, 2019

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Dave Vautin, Horizon/Plan Bay Area 2050 Project Manager

Mark Shorett, Principal Planner

Bay Area Metro

375 Beale Street, Suite 800

San Francisco, CA 94105-2066

**Re: Horizon Initiative (Transform-the-Future Strategies Round 2)/Plan Bay Area 2050**

Dear Mr. Vautin and Mr. Shorett:

Urban Habitat and Public Advocates thank you for inviting comments on the proposed “Transform-the-Future” strategies “Round 2.” On April 19, 2019, we submitted a letter where we proposed two new strategies for your consideration. On May 7, 2019, we met to discuss our letter with your staff. During this conversation, we discussed the Horizon Initiative and the focus and intent of the strategies that were initially proposed and their role within Plan Bay Area 2050.

From that meeting, we understood that you are not using the word “strategy” in its usual sense. Rather, as you explained afterward at the RAWG meeting, by a “strategy” you mean the outcome of “a policy (such as up zoning around transit stations or pricing all freeways) or investment (such as a short list of major rail extensions, or a package of sea level infrastructure) that can be advanced and implemented by local, regional, or state government.” As we mentioned in our meeting, we do not believe that Plan Bay Area may rely on strategies that the plan itself does not implement; however, we understand that the public discussion about how to achieve the Horizons “strategies” will come in the fall, and we look forward to engaging in that process.

In our April 2019 letter, we also expressed our support for A-3 which is a proposed strategy related to discounted services for low-income transit riders.

We are happy to see that strategies A-3 and D-9 have both been prioritized for Round 2. Specifically, we are pleased to see the changes that have been adopted for A-3, which include the expansion from discounted to free

services for all low-income transit riders. Making all public transportation more accessible for transit-dependent riders is a key strategy in both reducing greenhouse gas emissions and achieving social equity.

Strategy D-9, “Allow Diverse Housing in All Areas of High Opportunity,” is a good example of an outcome that will not be achieved unless Plan Bay Area ultimately includes actions to incentivize the desired outcome, in this case, rezoning. We appreciated that in our meeting, you indicated that our proposed strategy of conditioning regional transportation funds on local promotion of the “3 Ps” would be an appropriate area of discussion in connection with Plan Bay Area, and the concurrent development of the third generation of the One Bay Area Grant (OBAG) policy.

**We strongly support the following strategies, some with specific modifications:**

D-7, “Require 20% of Housing to be Affordable”: We support this strategy as written, but do not support its merging with strategy D-9. The two strategies accomplish different goals. Developing affordable housing in areas of requires a highly specific and targeted strategy. Strategy D-7 is a commendable, but general, strategy.

C-4, “Build and Operate a Next Generation Rapid Transit Network”: We support the development of a bus rapid transit network (BRT) that meets the needs of transit-dependent riders and is maintained with adequate operating funds. This strategy should be paired with the adequate funding of existing, local bus service, which would enhance the performance of the BRT network and help achieve social equity goals.

A-8, “Raise Taxes to Spur Affordable Housing Production & Preservation”: This strategy intends to generate \$1.5 billion a year to build a broad range of permanently affordable housing — from supportive housing for the homeless to owner-occupied homes for moderate-income buyers. It should focus more narrowly on truly affordable housing and use progressive taxes to spread the impact of new taxes and fees among the region’s developers, homeowners, and employers, without burdening small businesses, low-income residents, and consumers.

**We do not support the following strategies and do not recommend that they move into Round 2 analysis:**

A-7, “Allow Diverse Housing Around All Major Transit Stops”: This strategy would increase gentrification and displacement pressures in urban areas on communities of concern. Any state legislation requiring areas within a half-mile, or a 10-minute walk, of rail stations in the region to be rezoned to allow for more diverse housing should focus on exclusionary communities that have refused to build their fair share of affordable housing and exempt communities of concern. We support moving forward with strategy A-8, not this strategy.

C-9, “Extend the Regional Rail Network”: This strategy includes a suite of rail extensions across the region. These extensions are unnecessarily expensive, construction times are often prolonged, and fares are too high. Existing gaps in service should be filled with express and BRT bus service (see C-4 above).



**The following strategy was not prioritized and we would like to see it move forward, with modifications, to Round 2:**

A-2, “Repurpose Public Land to Build Housing”: Consistent with the [Public Lands & Workforce Housing Action Plan](#) published by MTC in September 2018, this strategy should move into Round 2. The proposed strategy, however, aims to pass state legislation to reduce development barriers for housing on vacant and underused public land without specifying public benefits. Public land is a public asset and must support residents whose housing needs will not be met by the private housing market. We recommend that public land within a quarter-mile of transit should stay in public ownership, through ground leasing, or be transferred to community land trusts to ensure permanent affordability. Jurisdictions can work with community land trusts, non-profit developers, and cooperatives to prioritize the construction of deeply affordable housing for those making 60% or less of AMI.

We would also like to reiterate an important point that we have communicated to you on various occasions, both in person and through other communications. Meaningful public engagement is important in this early stages in order to ensure that you truly respond to the needs of bay area residents. You must ensure that all future public engagement provides the public with sufficient and accessible information both about the substance but also about your process to allow for the most informed public participation.

Very truly yours,



Ruby Acevedo  
Staff Attorney,  
Public Advocates

**From:** [Martha Silver](#)  
**To:** [Martha Silver](#)  
**Subject:** BART Comments on Horizon – Futures Round 2: Finalizing Strategies for Analysis  
**Date:** Thursday, May 30, 2019 08:02:31

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**From:** Val Menotti <[vmenott@bart.gov](mailto:vmenott@bart.gov)>  
**Sent:** Thursday, May 16, 2019 6:09 PM  
**To:** Dave Vautin <[DVautin@bayareametro.gov](mailto:DVautin@bayareametro.gov)>  
**Cc:** Adam Noelting <[ANoelting@bayareametro.gov](mailto:ANoelting@bayareametro.gov)>; Sadie Graham [REDACTED]; Richard Fuentes [REDACTED]  
**Subject:** BART Comments on Horizon – Futures Round 2: Finalizing Strategies for Analysis

**\*External Email\***

Hi Dave,

On behalf of the San Francisco Bay Area Rapid Transit District (BART) we would like to thank you for the opportunity to comment on the proposed strategies to be analyzed as part of Horizon Futures Round 2. BART appreciates the opportunity to participate in developing the potential strategies and applauds the intense outreach process MTC/ABAG have performed to come up with proposed bundled priority strategies.

As a Region our communities have identified the Guiding Principles of Affordable, Connected, Diverse, Healthy and Vibrant to address the most pressing issues in Plan Bay Area 2050. BART's Vision to "support a sustainable and prosperous Bay Area by connecting communities with seamless mobility" supports these guiding principles and Plan Bay Area. Acknowledging transit's role in the Region, BART is supportive of the Horizon Strategies related to transit and has taken the opportunity to comment on land use and housing, environment and resiliency, and economic development, especially as they related to transit.

**Transportation Strategies**

- *C-1: Develop a Single Platform to Access and Pay for all Mobility Options* – BART supports this Strategy and suggests that consideration be given to the subsequent need for the Region's various transit agencies to assess schedules and headways comprehensively to provide a more seamless ride to the user.
- *A-3: Provide Free Transit to Low-Income Riders* – BART supports a low-income fare subsidy and is working towards participating in MTC's Means-base fare pilot program. BART suggests changing this strategy from a free fare back to providing a 50 percent fare discount for low-income riders.
- *PBA-4: Make Strategic Modernization & Expansion Investments for Public Transit* – BART suggests that the following projects be included in a modified PBA-4 Strategy.
  - *BART Core Capacity* – BART's set of Transbay Core Capacity Projects are required to allow BART to increase the Transbay peak hour person capacity by 45 percent.
  - *Bay Fair Connector*
  - *Irvington BART Station*

- *Strategy C-7: Build a New Transbay Rail Crossing* - BART and Capitol Corridor Joint Powers Authority (JPA) are supportive of this Project and are anticipating the findings of the Horizon Perspective Paper on Bay Crossings.
- *Strategy C-9: Extend the Regional Rail Network – As part of this strategy* Capitol Corridor JPA is evaluating the shift of the Capitol Corridor service from the Niles

subdivision to the Coast Subdivision between Oakland and Newark with a new intermodal station at Ardenwood. Future planned service would increase from 7 round trips per day to 15. (same as below)

- *Strategy C-10: Increase Capacity and Frequency by Modernizing Existing Rail Network – As Part of this Strategy* BART recommends including the Regionally-Significant Core Capacity Project; and the Programmatic Investments included in the BART Railcar Procurement Program, BART Metro Program, BART's System Capacity Expansion, and Transit Operations Facility.

Capitol Corridor JPA is evaluating the shift of the Capitol Corridor service from the Niles subdivision to the Coast Subdivision between Oakland and Newark with a new intermodal station at Ardenwood. Future planned service would increase from 7 round trips per day to 15.

### **Land Use & Housing Strategies**

These strategies reflect the current housing crisis the Bay Area is experiencing. BART supports the goals of creating more housing and retaining and expanding affordable housing. BART is a signatory of the CASA compact and supports the proposed Compact Elements and Calls to Action.

For all CASA-related Strategies, BART recommends working to ensure 1:1 alignment with the CASA compact or clarifying if/when strategies are not fully aligned with CASA. This is particularly important for strategies that seem unworkable without the greater detail that is in the compact. For example:

- *A-7: Allow Diverse Housing Around all Major Transit Stops* - BART supports the strategies that increase the densities and reduce the costs of construction in Priority Development Areas. Given BART's own engagement for its Transit-Oriented Development program of late, two critical concerns with increasing development near transit are (1) ensuring transit capacity exists to accommodate this additional growth, and (2) ensuring adequate access through improved first-last mile connections and for communities with auto-oriented street networks. As such, any recommendations to increase density and accelerate development in PDA's and near transit must be accompanied by parallel strategies to invest in core capacity and access.
- *PBA-2: Reduce Cost of Building in PDAs* - Revise (or clarify) to be consistent with the goals of CASA Compact Element #7 – Expedited Approvals and Financial Incentives for Select Housing.
- *D-7: Require 20 Percent of Housing to be Affordable* – Clarify how this goal is aligned with CASA, and if this is for all public or private development or if it is a regional goal that could be fulfilled via averaging out 100% affordable projects with market projects. An inclusionary requirement of 20% could render all development infeasible in some communities but should be a minimum requirement of housing on public land (as it is for BART properties). Further, if this is a regional goal, it would fall short of the Regional Housing Needs for serving low income communities and the net gap in housing would need to be reconciled.
- *A-2: Repurpose Public Land to Build Housing* – The articulation of this strategy is inconsistent

with its more nuanced wording in CASA, which may be why it did not rank highly in MTC's engagement.

### **Environmental and Resilience Strategies**

- *H-9: Expand Financing for Energy, Water, Seismic, Fire and Accessibility Improvements.* BART recommends including the Caldecott Tunnel Resilience Project as part of this Strategy. Investing in the retrofit of the tunnel in advance of a seismic event will help to prepare the region and allow BART Yellow Line service (along the SR-24 corridor) to continue after a major seismic event. This will help the Bay Area to more quickly rebound after an earthquake and have major financial returns.

### **Economic Development Strategies**

- *PBA-8: Preserve Office Space Caps in Job-Rich Cities and Assesses VMT-Based Commercial Development Fee* – BART supports the need to balance the location of jobs throughout the region to address the jobs/housing imbalance especially in the East Bay. BART's TOD ridership policy supports growing ridership especially in times and locations where the BART system has capacity.
- *Homelessness Strategy* – Homelessness is a regional crisis that will require coordination with all agencies and jurisdictions within the Bay Area and a variety of interventions. The Bay Area Council report on Bay Area homelessness surmises that solving the Bay Area's homelessness crisis will require interventions across all stages of homelessness - 1) preventing homelessness, 2) providing temporary accommodations, and 3) maximizing the number of units and housing programs. Homelessness is a complex issue that will not be solved solely by providing more affordable housing.

BART recommends that a Plan Bay Area includes a Regional Homelessness Strategy to supplement the affordable housing strategies. The strategy should provide for the additional interventions aimed at preventing homelessness across all stages of homelessness, such as mental health services, addiction treatment, transitional housing, emergency shelters, counseling and other social services.

We look forward to working with you to finalize the prioritized list and to reviewing the impacts the strategies have on the Futures.

Regards,

Val Joseph Menotti  
Chief Planning & Development Officer  
BART Planning, Development & Construction  
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**SPUR**

San Francisco | San Jose | Oakland

May 17, 2019

Metropolitan Transportation Commission  
375 Beale St, Suite 800  
San Francisco, CA 94105

Dear MTC Commissioners and Ms. McMillan:

SPUR is a member-supported nonprofit organization that promotes good planning and good government in the San Francisco Bay Area through research, education and advocacy. We are located in the three largest cities of the Bay Area and work to drive local and regional change.

SPUR commends MTC and ABAG for undertaking the Horizon effort and for seeking input on the strategies to include in the Futures Round 2 analysis. The approach — considering the cumulative impact of the various projects and policies and using reports and papers as inputs to define and determine the strategies — offers the potential for Plan Bay Area 2050 to better address the issues and challenges facing our region.

To address the challenges posed by the various futures, the Futures Round 2 analysis needs to include bold, aggressive strategies. Indeed, many of the strategies slated for inclusion — invest in free last mile service, apply tolls to all freeways — are just that. At the same time, SPUR believes there are opportunities to think bolder and more strategically.

The following letter includes several overarching comments about the Futures Round 2 analysis as well as specific comments related to several of the proposed strategies.

**1. While we strongly support the public outreach process, additional criteria should be used to inform the Futures Round 2 strategy selection.**

MTC/ABAG staff pulled together 44 strategies for potential inclusion in the Futures Round 2 analysis from the Perspective Papers, the project performance assessment, stakeholder feedback, and other ongoing regional initiatives that might address or mitigate the challenges facing the region. The selection criteria are unclear. Staff should clarify how the 44 strategies were selected and provide the methodology.

The main metric used to winnow the list from 44 to 26 was stakeholder feedback. Public accountability is essential; but so too is performance accountability. We appreciate that MTC engaged in a robust outreach process, but other metrics should be used to determine the strategies to include in the Futures Round 2 analysis. What is palatable now to the public and policymakers may change over time; just a handful of years ago tolls on freeways was a non-starter. What we know from research, performance-based analyses and from the implementation of strategies in other places should be used as inputs to inform the strategy selection process. For example, the Horizons analysis opted not to include as a strategy “implement parking fees” because it



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performed poorly in the outreach, but pricing parking is a proven best practice for reducing solo driving.<sup>1</sup>

We cannot lose sight of the vision of what we want the future our region to be; this future may be challenging to achieve and will certainly require trade-offs. We need to assess strategies that have the potential to get us there, rather than accept current trends.

## **2. Include bolder and more creative strategies on carpooling and travel demand management.**

Making smarter transit investments is important, but we must do more to leverage other strategies. Carpooling and other TDM strategies can deliver a much larger share of our congestion and emissions reduction. MTC's commitment to delivering a functioning network of managed lanes and carpool lanes will dramatically change the benefit of carpooling. Technology is rapidly changing the landscape for carpooling: apps allow carpools to form more efficiently and provide more reliable enforcement tools for qualifying carpools. Horizon anticipates that these tools cannot deliver a growing part of the solution, but explored at a different scale of policy and financial incentives, we think they can.

TDM and carpooling strategies MTC/ABAG could study as part of the Futures Round 2 analysis include:

- Parking cash-out programs, which offer employees the cash equivalent of their parking space if they choose not to drive;
- Discounted transit passes that employers can buy in bulk, passing the savings on to employees;
- Priority carpool parking at transit stations;
- Pricing parking, with discount for carpools, to incentivize commuters to drive less and encourage transit ridership; and
- State legislative changes to eliminate parking minimums and establish parking maximums in particular transit-served locations.

Establishing vehicle trip reduction requirements for all new development is another TDM strategy that was not selected as a finalist for the Futures Round 2 analysis even though it is a proven best practice for reducing solo driving.<sup>2</sup>

## **3. Develop and evaluate a much bolder active transportation strategy.**

Now is the moment to dramatically increase participation in active transportation in our region. Localities around the region are promoting development patterns that support walking and cycling, reducing parking requirements, and thinking more creatively about how walking, biking, and transit can work together. At the same time, there is an explosion of new options including expansive bike sharing networks, as well as electric assist bicycles, scooters, and a host of other

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<sup>1</sup> TDM programs that include paid parking have been shown to reduce auto trips by 15-30 percent depending on the availability of transit. See: National Evidence on TDM Program Impacts Vehicle Trip Reduction from Background Conditions Source: Cambridge Systematics, 2010 (Fairfax County, VA)

<sup>2</sup> For example, see the San Francisco Department of Planning's Transportation Demand Management Program, which was designed explicitly to reduce vehicle miles traveled generated by new development projects, <https://sfplanning.org/transportation-demand-management-program>





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new modes. Jurisdictions that are investing in active transportation infrastructure are seeing results. As part of Plan Bay Area 2050, we must plan and deliver infrastructure to support the immense potential for active transportation modes.

The Futures Round 2 analysis should include infrastructure investments and policy changes of the scope and scale that can expand active transportation mode share to 20%. These investments and policy changes should prioritize safety; the region should strive to fully eliminate traffic-related fatalities and serious injuries. Policy changes that could be included in the analysis include automated speed enforcement and lowering speed limits by removing the 85th percentile rule which requires that traffic speeds be set to the speed at which 85 percent of drivers drive at or below.

#### **4. Prioritize investments in the regional rail network that add reliability, availability, speed and move towards greater interoperability.**

We can get more capacity on the rail network by adding more service to the existing systems and stitching them together into a network. We can get farther by fully utilizing our existing assets and investments.

The state is encouraging the Bay Area to move to a pulsed- hub network that links together great places with frequent, reliable service. Our capital investments should focus on what it takes to establish reliable travel times and to create timed transfers at stations, which are pleasant and easy to navigate. As we move towards a networked system, the transition will be hard. MTC can support the transition not just through capital projects but by programs that help make our institutions more capable of delivering transformative change. To that end, we recommend MTC:

- review all proposed or previously planned investments with this goal in mind to determine if they work towards this or not;
- leave flexibility to adjust projects included in C-9 and C-10 until MTC completes its own regional rail studies, including the forthcoming update to the regional rail plan and southern alameda county rail study;
- create a regionwide transit map, unified marketing, integrated fare structures, stations with amenities and public spaces, and pursue other improvements that enhance the transit customer experience;
- work with operators to rethink how transit is planned and delivered. Only then can we really maximize the benefits from any new investments in the regions rail and bus systems. We encourage MTC to incorporate funding programs in Plan Bay Area that support the transition. These should include:
  - funding for user experience designers, funding for fare integration;
  - funding for change management professionals and training; and
  - funding for salary levels and benefits that attract transportation professionals in a competitive market.



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**5. Include an express lane network and regional express bus network in Strategy C-4.**

We can use our highways to move many more people efficiently, sustainably and equitably. It is expensive to build new transportation infrastructure; at the same time, our highways are approaching the end of their useful life as currently designed and operated, and are ready for thoughtful repurposing. Thus far, the region’s partial implementation of Express Lanes has been clunky, expensive, and incomplete — and the results to date don’t really work for transit.

A truly regional, frequent, and rapid express bus network supported primarily by the conversion of existing carpool or general-purpose lanes to Express Lanes has the potential to not only alleviate capacity constraints on highways and existing rapid transit systems (such as BART and Caltrain), but offer new access: a network of buses (private and public), shuttles, and jitneys that uses highways can go where trains don’t, especially suburban neighborhoods, corporate campuses and office parks, shopping and entertainment complexes, centers of higher education and major medical facilities. A well-designed express bus network can significantly reduce the need to transfer between systems and could speed travel times, make buses time-competitive with or even superior to driving. For these reasons we believe the Futures Round 2 analysis should include an analysis of an optimized express lane and regional express bus network.

**6. Include fare integration in the “Price Transportation Services” column.**

The project performance assessment includes as a strategy integrating the region’s transit fare system but this strategy is not included as a “Price Transportation Service” column for the Futures Round 2 analysis. While we commend MTC/ABAG for including the strategy “Provide free transit to low-income riders,” this should not preclude an analysis of fare integration which also has equity and behavior change benefits. Disparate and disjointed fares create customer confusion, inhibit people from using more than one transit service and undermine the benefits the region should derive from the significant investments it is making in new transit infrastructure and fare payment technology. The region’s fragmented approach to fares pushes people to make inefficient and often costly transit decisions — or to get behind the wheel and drive themselves, adding to traffic congestion, pollution and carbon emissions. SPUR’s research shows that streamlining and integrating fares could help grow transit ridership and support the seamless use of multiple operators, which in turn supports the ways that Bay Area cities plan to grow.

The “Price Transportation Service” column also includes as a strategy for the region to develop a single platform to access all mobility options, commonly referred to as a “Mobility as a Service” or MaaS. MaaS is a nascent concept and many of its core assumptions have been proven in only a few markets. Moreover, its success is highly contingent on the underlying fare policies: if the region’s transit fare policies remain uncoordinated and confusing, it will be harder to compete with less-space efficient and more congesting modes.

**7. Work with non-transportation stakeholders to identify a broader suite of options to model under the “Environmental and Resilience strategies” column, and include a strategy to rapidly scale up Sustainable Streets in the Bay Area.**

The list of strategies under “Environment and Resilience” addresses only two regional environmental issues: the protection of land and open space from sprawl, and the impacts of sea level rise. While these two issues are very important, environmental protection, restoration, climate mitigation, and even climate adaptation are broader than these topics. More engagement



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of stakeholders in the Bay's wetland, environmental protection and quality, and public health communities could yield additional ideas that could be modeled in the next round of Horizon Futures. For example, heat wave stress, smoky air emergencies, creek flooding and extreme rainfall, and other events could be mitigated by making various investments in the region's resilience. As the Bay Area is home to several cities that have prepared Resilience Strategies as part of the 100RC program, a census of key strategies from city resilience plans could identify additional investments to model, that resources eventually devoted to Plan Bay Area could help support.

The Futures Round 2 Analysis should include a strategy to significantly invest in restoring the Bay's wetlands as both an environmental protection AND an adaptation strategy; as we know from the regional scientific consensus in the Baylands Ecosystem Habitat Goals Climate Change Update (2016), we have only until about 2030 to prepare marshes for accelerating levels of sea level rise, or they will drown within years or decades following, and we will lose the chance to do significant nature-based adaptation based on the region's historical ecology.

Finally, regional stakeholders have been engaged with the SF Estuary Partnership, the City and County Association of Governments of San Mateo County, the Bay Area Stormwater Management Agencies Association (BASMAA) and others, to identify ways to significantly scale up sustainable, green streets throughout the region. Many cities are preparing Green Infrastructure Plans by the end of 2019, as required by the Regional Water Quality Control Board. However, funding to build out these plans deeply lags the cities' planning ambitions. Under the category of "Reduce our Impact on the Environment", MTC should include a Horizon strategy for fully building out green infrastructure plans and sustainable streets in cities around the region. These plans will likely yield multiple community benefits for climate mitigation, local environmental improvement, and adaptation/resilience.

In closing, we encourage MTC/ABAG to make opportunities and deadlines for input more prevalent on the Horizons website. Information regarding the Futures Round 2 analysis, including the deadline for feedback, can only be found in the RAWG packet which is not linked to on the Horizon webpage.

We appreciate the opportunity to provide comments on the Futures Round 2 analysis. We look forward to your responses and ongoing collaboration.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Fleisher", with a stylized, wavy line extending to the right.

Arielle Fleisher  
Senior Transportation Policy Associate