



PLAN BAY AREA 2050

# Key Questions: Transportation Element of the Draft Blueprint

MTC Commission and ABAG Executive Board Workshop  
January 31, 2020

Strategies under consideration have been informed by robust analysis in the predecessor *Horizon* initiative.



### Futures Final Report (available now)

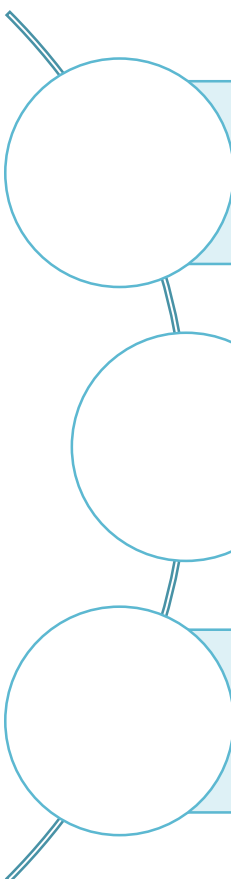
Identifies which strategies are resilient across multiple Futures and makes recommendations for strategies to advance into Blueprint.



### Final Project Performance Assessment Findings (available next week)

Identifies which infrastructure projects are resilient across multiple Futures and provides insights into equity, accessibility, and GHG impacts of individual projects. We'll be announcing the winner of the Transformative Projects competition in February!

# The transportation element of the Draft Blueprint will face three primary challenges.



High cost of maintaining or improving existing transportation assets

Limited revenue available to improve or expand the system

Ambitious SB 375 GHG reduction target



Maintaining the region's transit assets in today's condition will cost an estimated **\$392 billion** over the next 30 years. Improving to a state of good repair would require **\$423 billion**.



Local  
Streets &  
Roads

43,500 lane  
miles  
+  
associated  
ped./bike  
facilities



State  
Highways

50,652 lane  
miles



Local  
Bridges

2,000  
bridges



Regional  
Bridges

7 BATA  
bridges  
  
Golden  
Gate Bridge



Transit  
Capital

3,000+  
buses  
  
1,100+ rail  
cars  
  
22  
ferries



Transit  
Operations

16.8  
million  
hours  
of transit  
service

# Compared to Plan Bay Area 2040, operations and maintenance costs have increased.



33%



in transit service hours (12.6 million hr/year to 16.8 million hr/year)



Annualized capital need for local streets 6%  , PCI now 68 (prev. 66)  
(Increase in annual need mostly due to higher costs for maintenance materials and labor)

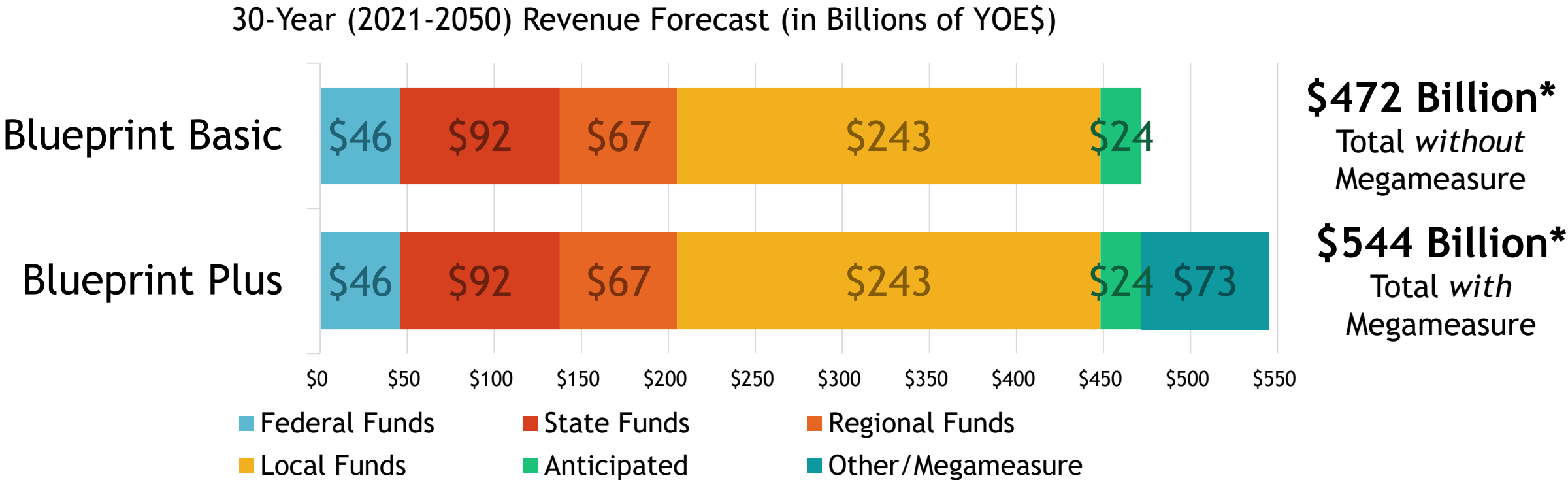


Both plans assume replacement of the Richmond-San Rafael Bridge



Up to \$10 billion (YOE\$) in additional transit capital assets added to the regional inventory since PBA 2040

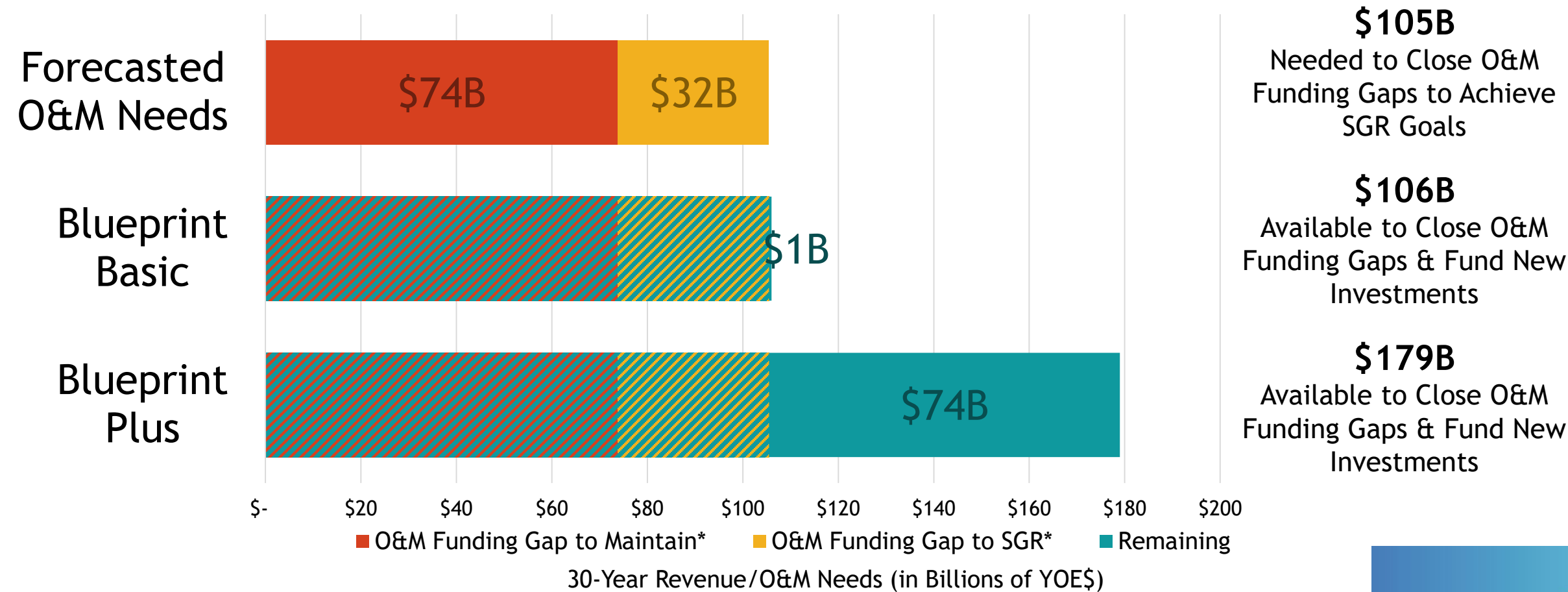
# Plan Bay Area 2050 must be fiscally constrained.



30-Year (2021-2050) Revenue Forecast (in Billions of YOES\$)\*

\*Does not include potential revenues from new tolling strategy

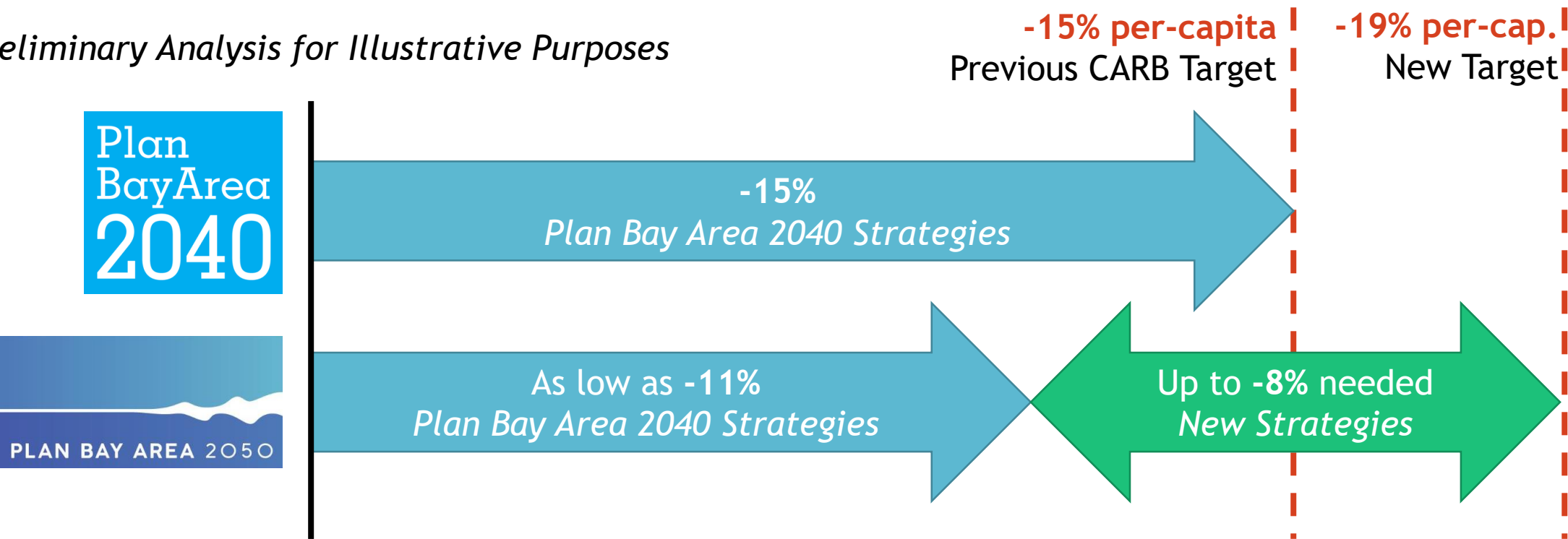
# After closing the forecasted gap in O&M needs, limited funds remain to improve and/or expand the system.



\*O&M Funding Gaps Subject to Change.

# Plan Bay Area 2050 must meet a more ambitious greenhouse gas reduction target under SB 375.

*Preliminary Analysis for Illustrative Purposes*

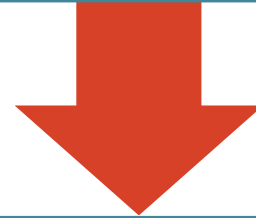




# What are the consequences of not meeting the GHG target requirement?



Plan not approved by federal or state agencies



Transportation funding sources jeopardized (*e.g. SB1 Solutions for Congested Corridors*)



Achieving the SB 375 emissions reduction target will require strategies that challenge the status quo.





# The proposed Draft Blueprint strategies are clustered under four themes.

Operate and Maintain the Existing System



Create Safe & Healthy Streets



Optimize Existing Infrastructure

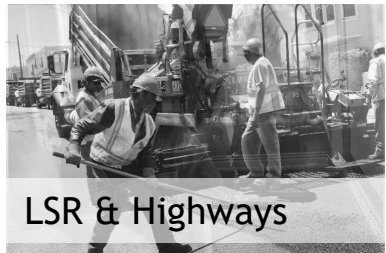


Enhance Regional & Local Transit



# Today’s discussion will focus on four key strategies.

Operate and Maintain the Existing System



Create Safe & Healthy Streets



Optimize Existing Infrastructure



Enhance Regional & Local Transit



In this section,  
we are seeking  
your direction  
in the following  
four strategy  
areas.

## **SAFETY**

1. Should the Blueprint incorporate a strategy to redesign streets to be safer for all users and to reduce speeds?

## **TRANSIT FARE POLICY**

2. How should the Blueprint leverage means-based fares and fare integration to reduce transit costs?

## **PRICING**

3. To what extent should the Blueprint explore all-lane tolling as an evolution of Express Lanes?
4. How should the Blueprint address the cost burden of road pricing?

## **TRANSBAY**

5. Should a new Transbay rail crossing megaproject be included in Blueprint Plus?



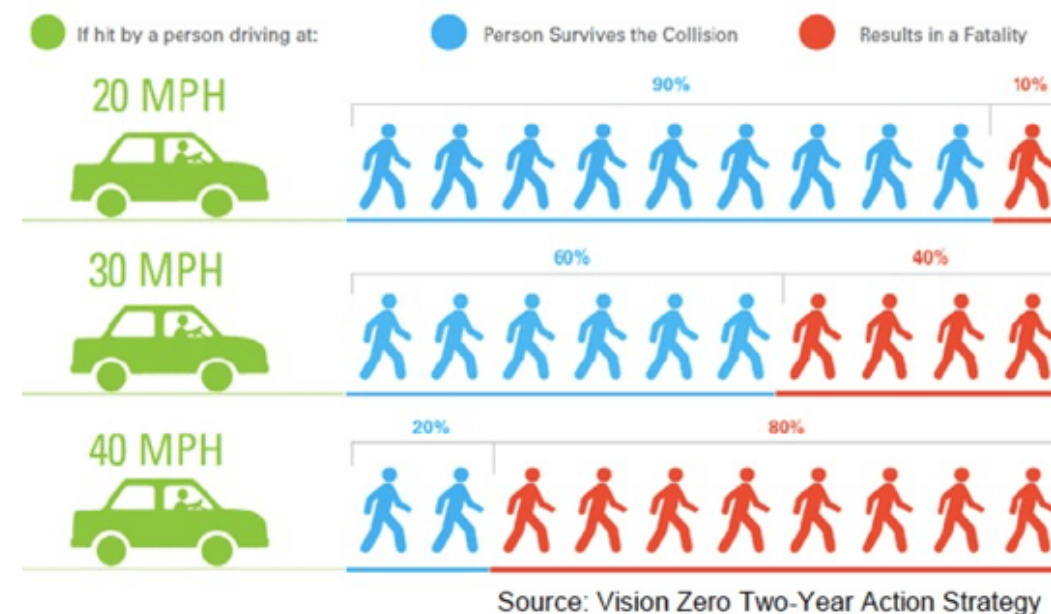
## SAFETY: Street Redesigns, Traffic Enforcement, and Speed Limits



**1** To reduce traffic fatalities and injuries, should the Blueprint incorporate a strategy to create safer streets and reduce speeds on Bay Area highways?

# SAFETY: Street Redesigns, Traffic Enforcement, and Speed Limits

- **This strategy would:** integrate street redesigns, traffic enforcement, and speed limit changes to save lives
  - Change freeway speed limits to 55 mph
  - Change local street speed limits to 25-35 mph, depending on context
- Horizon estimated that this strategy would prevent **100 fatalities and 400 injuries per year** by 2050 (400 fatalities and 1,500 injuries occurred in 2016).
- This long-range strategy could build upon near-term local and regional Vision Zero\* initiatives.



*\* Vision Zero is a policy already adopted by some Bay Area cities, including San Francisco, San Jose, Fremont, and San Mateo, to eliminate traffic fatalities.*



2 To reduce transit costs and encourage transit use, should the Blueprint incorporate means-based fares and fare integration strategies?





# TRANSIT FARE POLICY: Integrated Transit Fares

- This strategy would: assume a flat fare for local transit and a distance-based fare for regional transit.
- Means-based fares, or discounts based on income, are another strategy to reduce transportation costs. **MTC currently runs a pilot means-based fare across several operators.**
- Fare integration was one of the highest-performing projects analyzed, greatly improving transit equity outcomes. Regional equity stakeholders emphasized fare integration over means-based fares.
- A fare integration business case is needed to inform implementation. **The Clipper Executive Board authorized a business case in September 2019.**

## Example: Integrated Transit Fare System



20-mile distance

$$\begin{array}{rcl} \$3.50 & + & \$1.00 = \$4.50 \\ \text{Base Fare} & & \text{Total Fare} \\ \text{(covers} & & \\ \text{trips up to} & & \\ \text{10 miles)} & & \text{\$0.10/} \\ & & \text{mile x 10} \\ & & \text{miles} \end{array}$$

## PRICING: Per-Mile Tolling



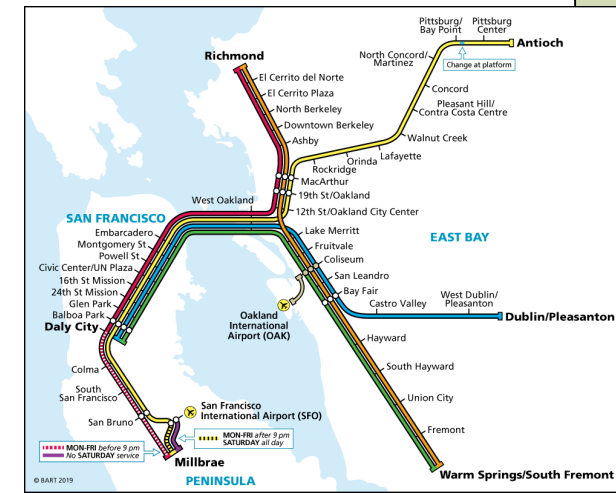
3 To manage freeway demand and reduce GHG emissions, should the Blueprint incorporate all-lane tolling as an evolution of Express Lanes?



# PRICING: Per-Mile Tolling

- This strategy would: assume implementation of a per-mile toll on all lanes of select congested corridors with meaningful transit alternatives, with discounts for carpools and off-peak travel.
- Horizon found road pricing to be a powerful tool to reduce congestion, close our GHG target gap, and generate revenues.
- Express Lanes offer an important time-saving alternative today. In thinking about the next 30 years, could Express Lanes evolve into an all-road tolling program?

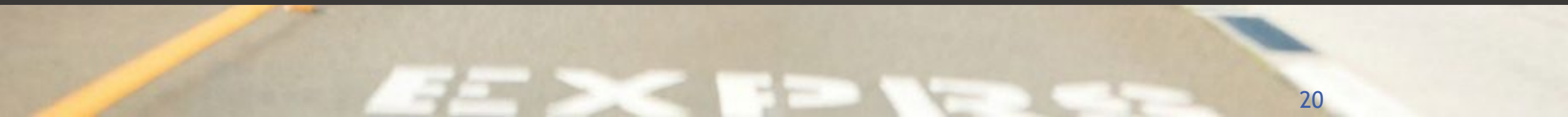
*Freeway corridors with meaningful transit alternatives paralleling: BART & Caltrain*



# PRICING: Means-Based Tolling



**4** To address the burden of roadway pricing, should the Blueprint incorporate a means-based pricing strategy?



# PRICING: Means-Based Tolling

- **This strategy would:** assume reductions in road pricing costs (Express Lane tolls or all-lane tolling) for low-income drivers.
- Means-based tolls, or discounts based on income, are another strategy to reduce transportation costs. **MTC is planning to leverage findings from the means-based transit fare pilot to inform a regional equity strategy.**
- Means-based pricing could be implemented as a percentage discount or a daily cap for low-income drivers.

## Example Approaches: Means-Based Pricing

**A. Percentage Based:** Low-income drivers receive a 20% discount on Express Lanes or all-road tolls

**B. Daily Cap:** A low-income driver with a short commute pays the full price, but a low-income driver with a long distance commute pays no more than the regional median



# TRANSBAY: New Transbay Rail Crossing



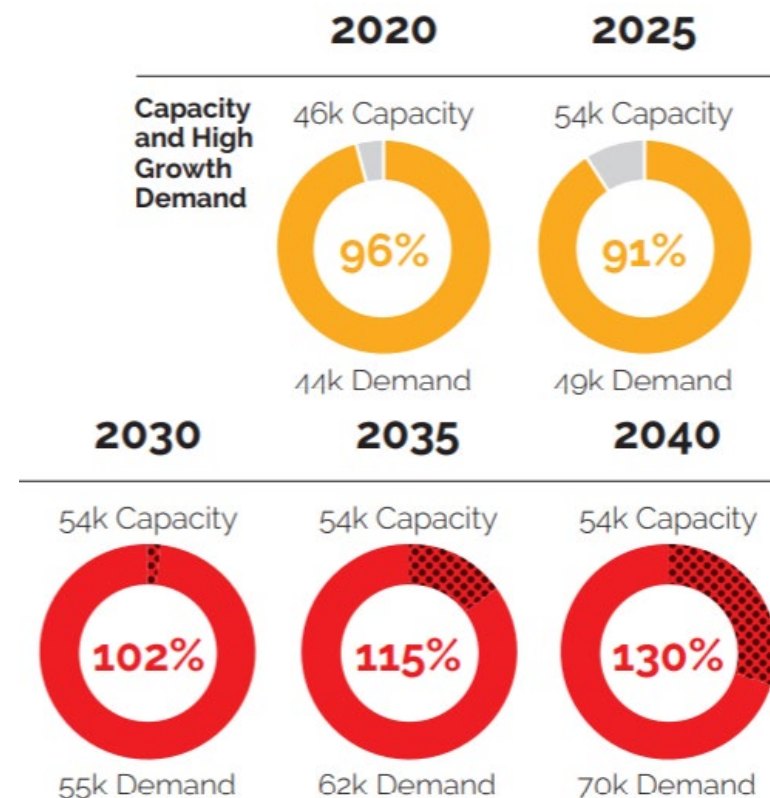
5 As the region contemplates a new regional funding measure, should Blueprint Plus incorporate a second Transbay rail crossing?



# TRANSBAY: New Transbay Rail Crossing

- This strategy would: add a project building a new Transbay rail crossing in Blueprint Plus.
- New rail crossings performed well across futures, suggesting resilience to uncertainty. Most other megaprojects were more challenged.
- Given the requirement for fiscal constraint, there is a tradeoff between funding the crossing and other projects elsewhere in the region.

*The Transbay Tube will have extreme capacity issues by the year 2050. Should we advance a New Transbay Rail Crossing to meet the expected demand?*





# Discussion

# More Opportunities for Strategy Refinements through Mid-2020

## Draft Blueprint



Analysis  
*Winter 2020*



Public & Stakeholder  
Engagement  
*Spring 2020*



Strategy Revisions for  
Final Blueprint  
*Spring 2020*



Action Item  
(MTC & ABAG)

## Final Blueprint



Analysis  
*Summer 2020*



Blueprint Approval &  
Advancement to EIR  
*Fall 2020*



Action Item  
(MTC & ABAG)

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of the Blueprint:

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