



HORIZON

Overview & Progress to Date

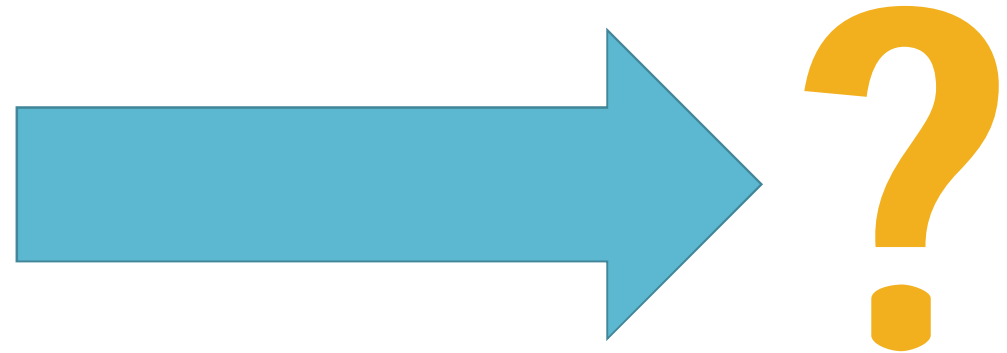
Horizon & Plan Bay Area 2050

Michael Germeraad, Associate Planner - MTC/ABAG

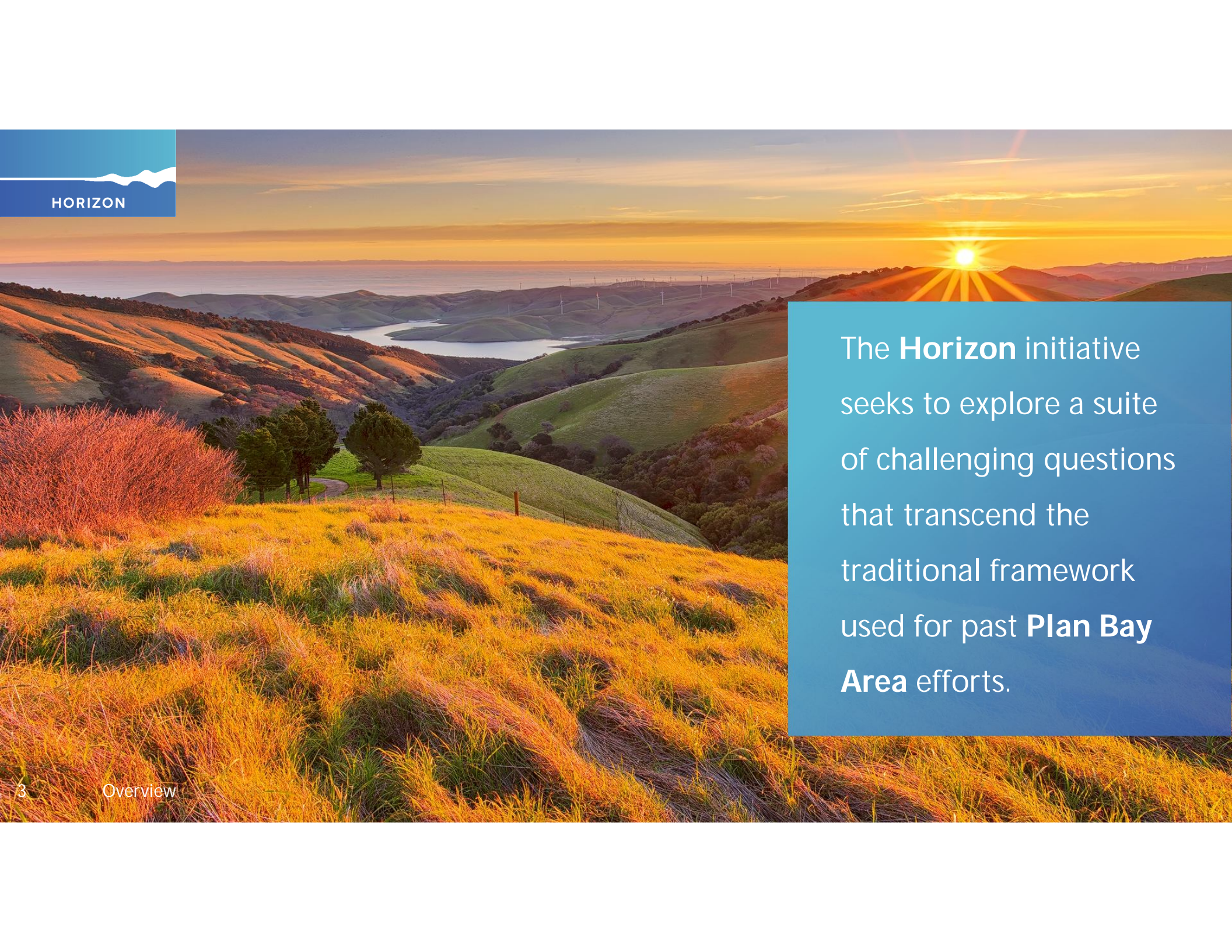
SFEP Implementation Committee – November 7, 2018



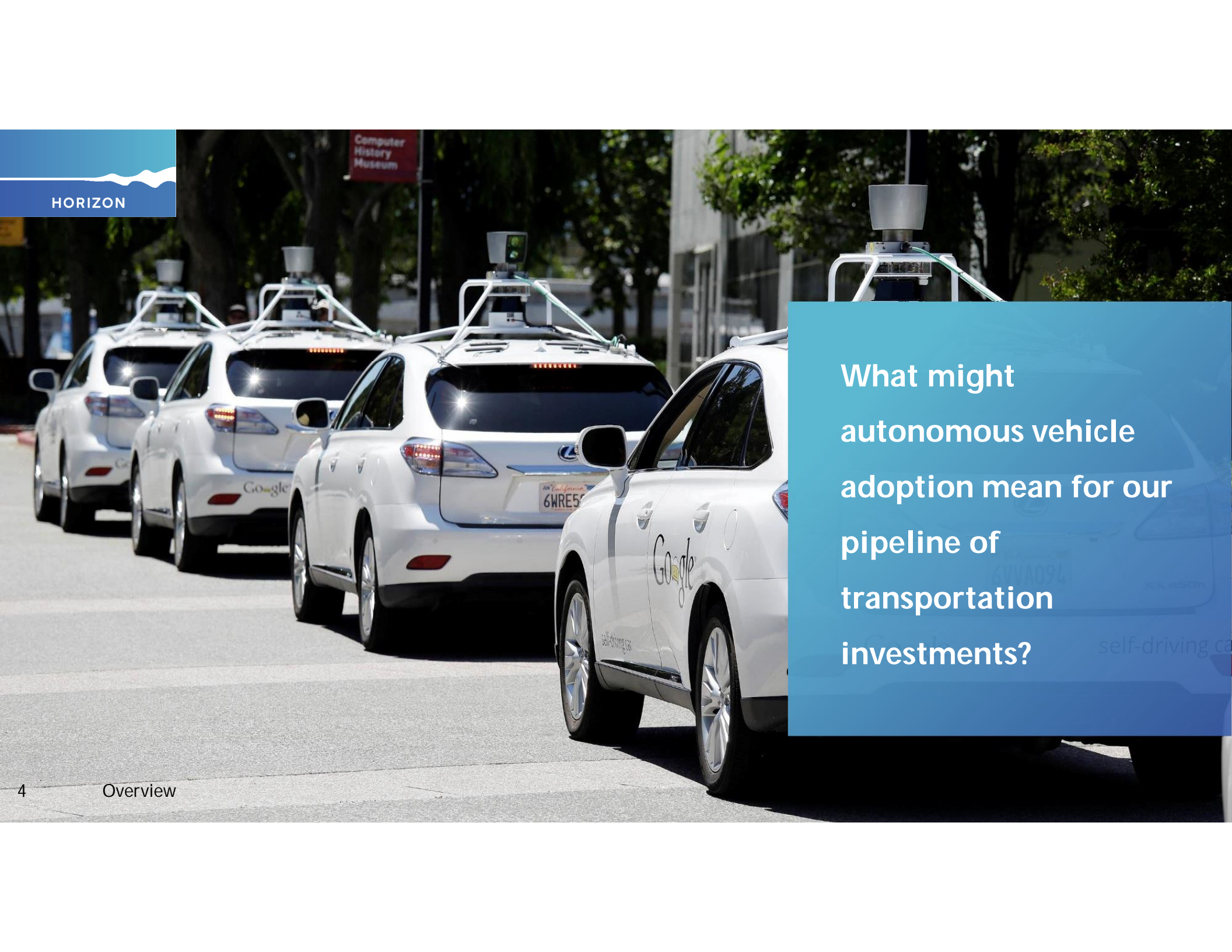
We live in a time of incredible uncertainty. **And our regional plans need to acknowledge this reality.**



Our region's history inspired our thought process on how to prepare for ever-changing circumstances.

A wide-angle landscape photograph of a sunset over a coastal area. The sun is a bright yellow circle on the horizon, casting long, golden rays across the sky. The foreground is a grassy hill with tall, dry, golden-brown grass. In the middle ground, there are rolling green hills with some trees and a small body of water. In the background, the ocean is visible with several wind turbines on the horizon.

The **Horizon** initiative seeks to explore a suite of challenging questions that transcend the traditional framework used for past **Plan Bay Area** efforts.

A line of white Google self-driving cars is parked on a city street. The cars are equipped with roof-mounted sensor arrays. The Google logo and 'self-driving car' text are visible on the side of the cars. In the background, a red sign for the 'Computer History Museum' is visible. A blue text box is overlaid on the right side of the image.

What might
autonomous vehicle
adoption mean for our
pipeline of
transportation
investments?

What strategies should we consider to prepare for increasingly-frequent disasters?

How should the region respond if economic output, population, and employment suddenly boom or bust?

What role should government play to ensure that everyone benefits in tomorrow's economy?



Spring 2015 to
July 2017



February 2018
to June 2019



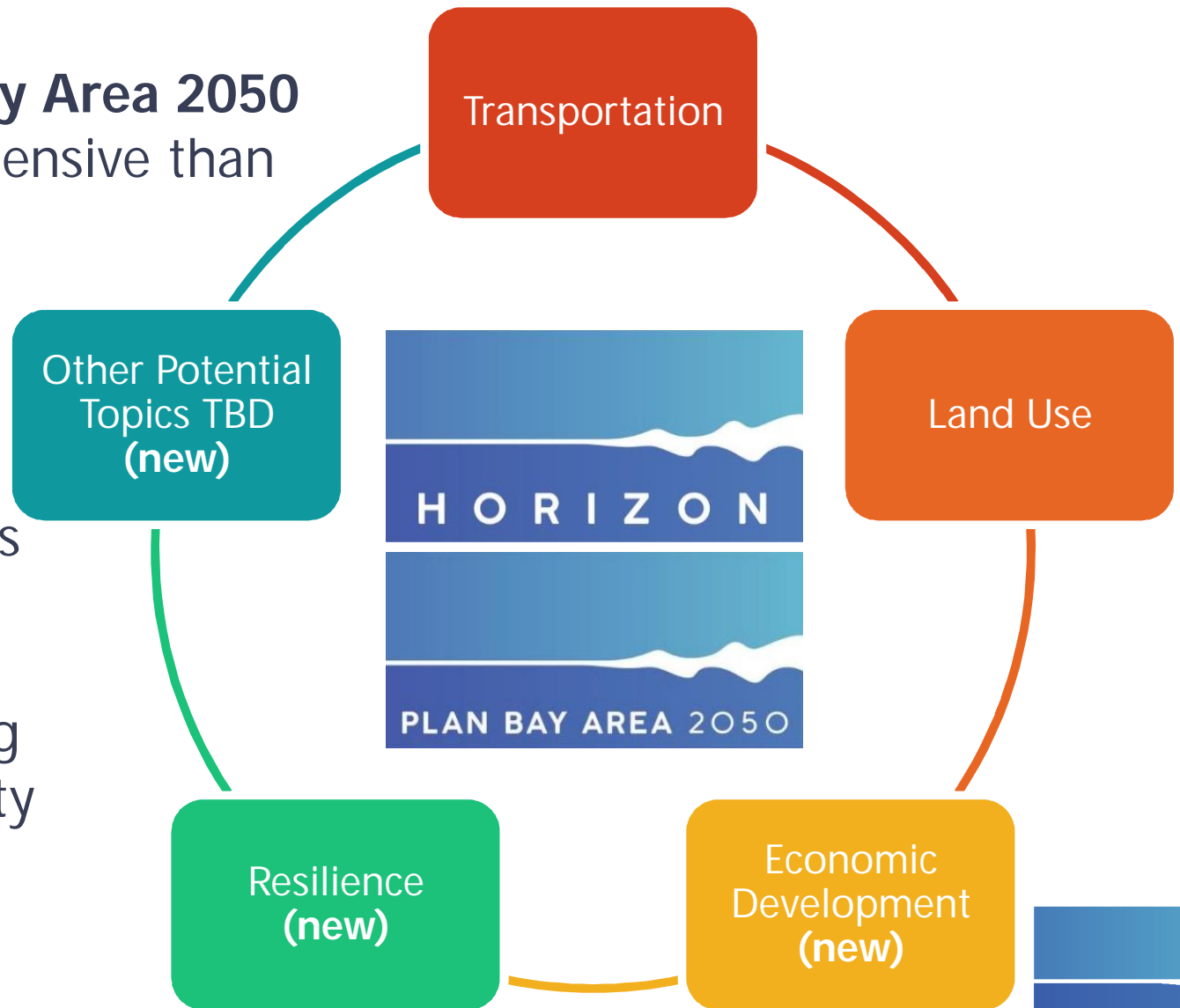
July 2019 to
June 2021

High-performing strategies and projects from *Horizon* – those that are resilient to uncertainties – **will be recommended for inclusion in the Preferred Plan Bay Area 2050 (RTP/SCS).**



Horizon and **Plan Bay Area 2050** will be more comprehensive than past RTP/SCS cycles.

Horizon's Guiding Principles and **Plan Bay Area 2050's** goals & targets will guide decision-making and integrate cross-cutting issues, including equity and sustainability.



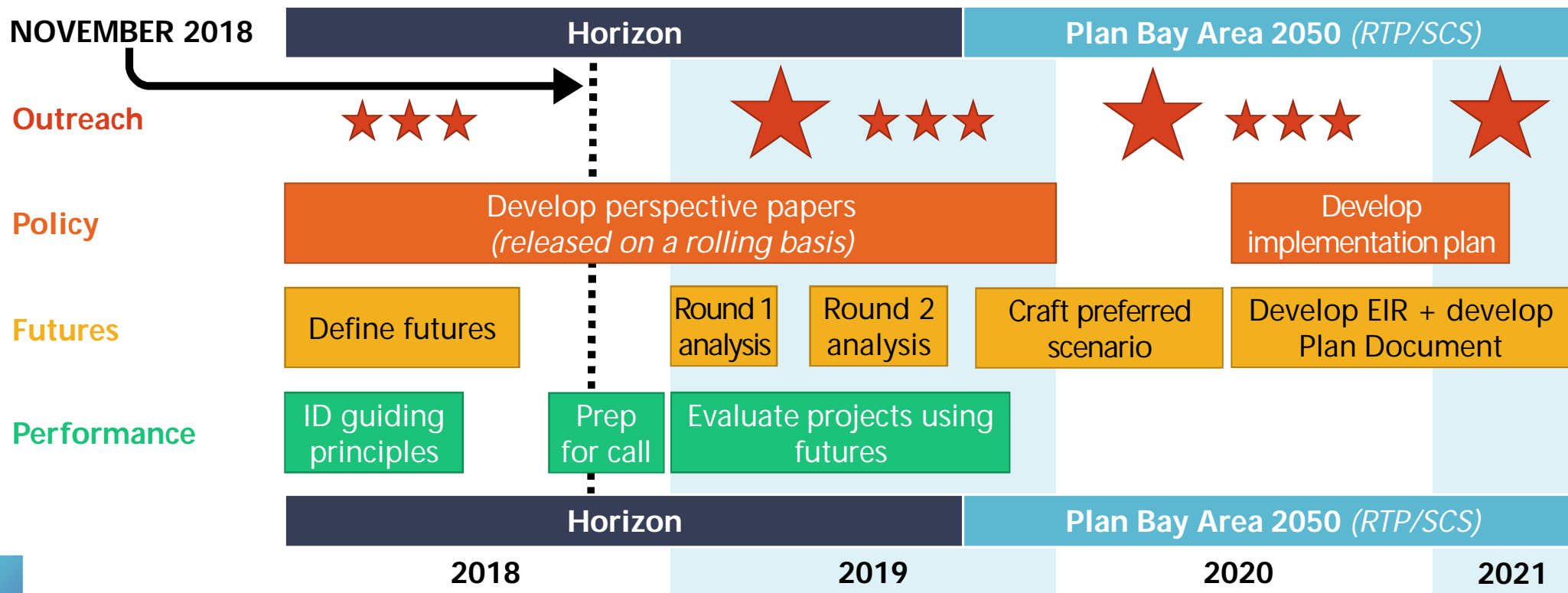
HORIZON

Progress to Date

Horizon Update: June 2018



Latest Schedule for Horizon/PBA 2050



What's Happening with **Horizon**?



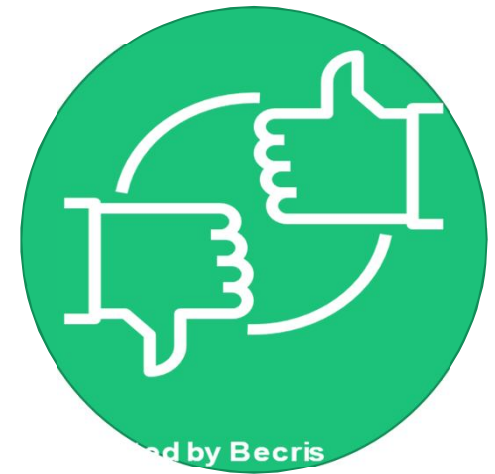
Outreach



**Perspective
Papers**



Futures



**Project
Performance**

What's Happening with **Horizon**?



Outreach



Perspective
Papers



Futures



Project
Performance

Three Potential Futures – “What If?” Scenarios



**Clean
and Green**

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



**Rising Tides,
Falling
Fortunes**

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



**Back to
the Future**

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

NEW TECHNOLOGIES

Clean and Green and **Back to the Future** explore two very different potential outcomes of an automated future, while **Rising Tides, Falling Fortunes** considers what happens if new technologies fizzle.



CLIMATE CHANGE

Each of the futures explores different global outcomes, with **Clean and Green** envisioning a world where the goals of the Paris Climate Accord are met and **Rising Tides, Falling Fortunes** explores a worst-case scenario of climate impacts for 2050.

1 ft ←————→ 3 ft
Sea Level Rise

FEDERAL FUNDING

Clean and Green examines the economic and environmental impacts of an expanded and activist federal government, while **Rising Tides, Falling Fortunes** looks at what devolution might mean for the Bay Area.




\$0.5B ← Bay Area Annual Federal Transportation Funding → **\$2.5B**

IMMIGRATION POLICY

Back to the Future imagines how the Bay Area might grow with a more open immigration policy than today, while **Rising Tides**, **Falling Fortunes** considers a more nationalist United States in the years ahead and the implications of an aging populace.

20K ← Bay Area Immigration (annual) → 240K

Summary: External Forces

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

COLOR LEGEND

Lower value



Higher value

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Futures: Summary Table *(draft)*

#	FUTURE NAME	2050 POPULATION	2050 JOBS	2050 INCOME DISTRIBUTION	2050 RACIAL DISTRIBUTION	2050 AGE DISTRIBUTION
A	 Clean and Green	10.7 million	5.5 million	24% low-income	73% minority	38 median age
B	 Rising Tides, Falling Fortunes	8.6 million	4.3 million	31% low-income	71% minority	43 median age
C	 Back to the Future	13.6 million	6.7 million	22% low-income	77% minority	38 median age

Why do economists provide detailed forecasts out 30 years?
To prove they have a sense of humor...

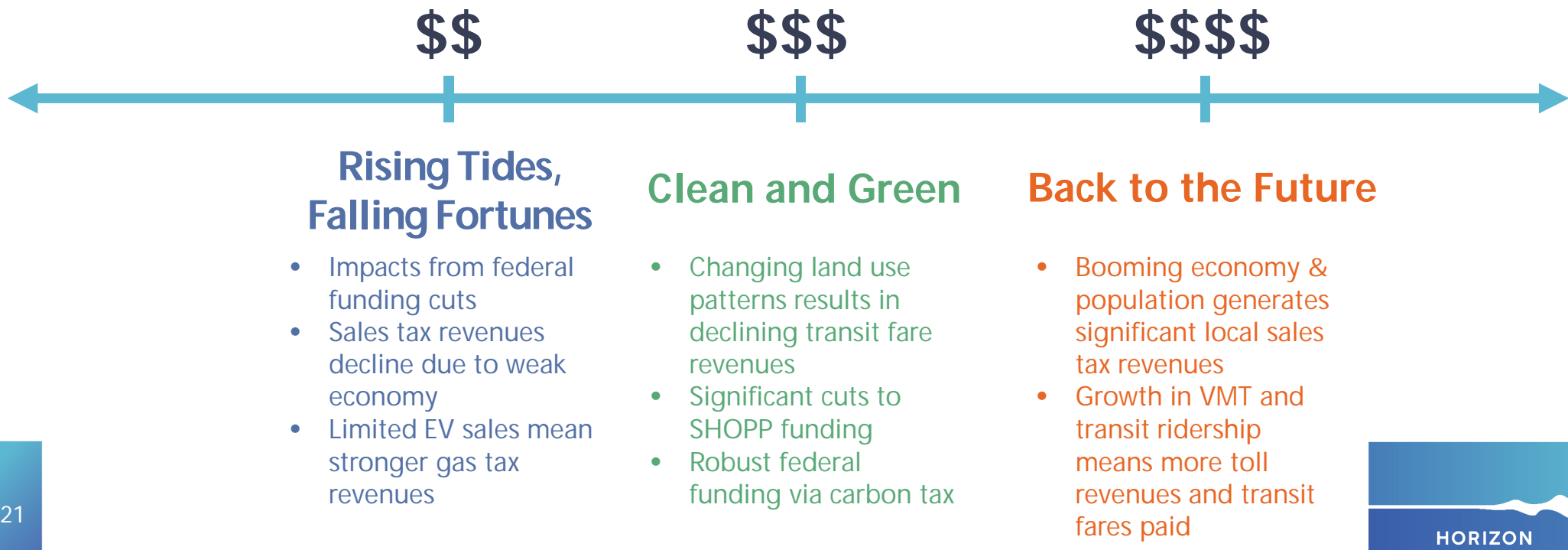
Plan
BayArea
2040

Year 2040 Forecasts *(for reference)*
9.6 million residents and **4.7 million** jobs

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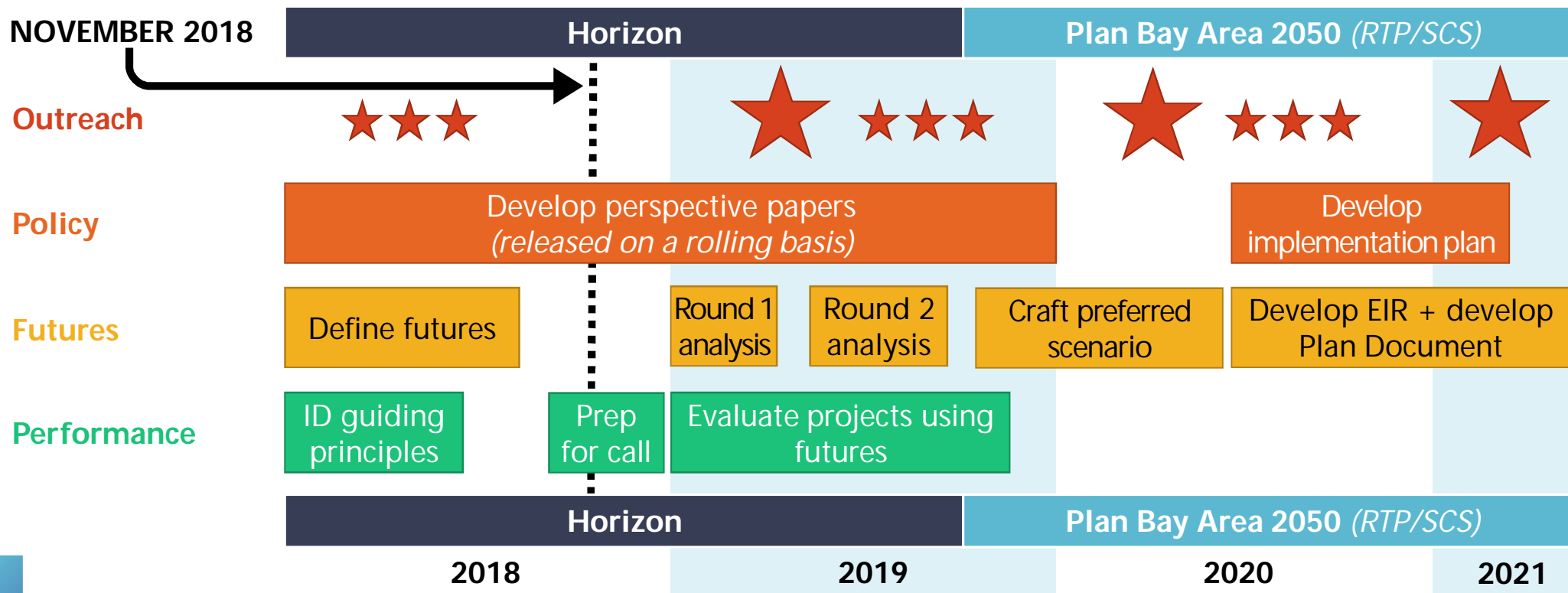
Futures: Bay Area Transport Revenues (*draft*)

Revenue forecasts for each future **will be finalized using travel & land use model outputs in January**, as revenues are driven by VMT, transit boardings, and other metrics forecasted by those models. Preliminary findings are shown below **for information purposes only**.

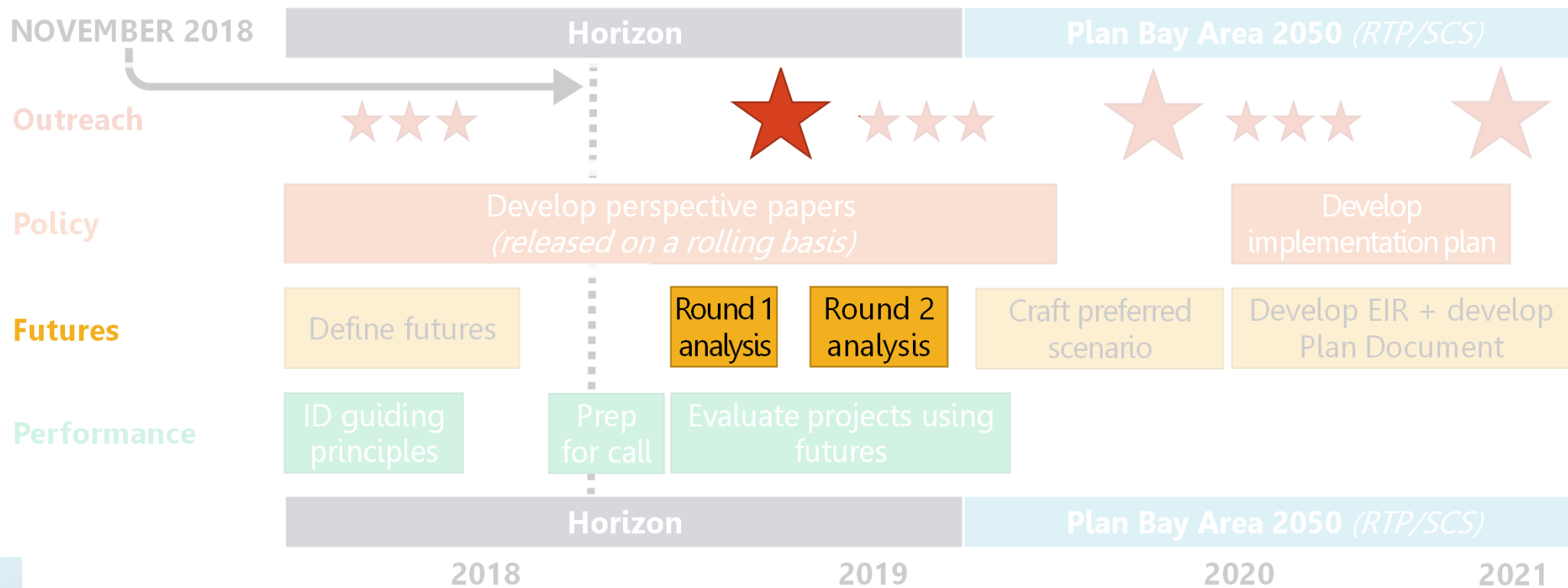


A reminder: it is important to have a range of divergent futures with unique challenges – rather than reflecting “the world as we would like it to be”. **None of the futures is likely to be selected in its entirety as the “preferred” for Plan Bay Area 2050.**

Latest Schedule for Horizon/PBA 2050



Latest Schedule for Horizon/PBA 2050



Futures: Sea Level Rise applied to models

The futures process is supported by robust models. **Urban Sim**, a parcel-level land use model, uses existing zoning and land values to forecast where new housing and jobs will develop in the future. **Travel Model**, a transportation model, uses Urban Sim outputs to estimate how people will travel. *Horizon* uses the models to study policy impacts (i.e. new zoning, new fees on driving) and projects (i.e. \$\$\$ for housing, BART to San Jose).



Horizon: **Urban Water** *draft approach*

Staff would like to include an urban water demand perspective for each future. Staff are considering a similar approach of studying water demands as the rest of futures, analyzing water demand for each future with current trends, seeking feedback on strategies, and then roughly analyzing the strategy impact.



Horizon: **Green Infrastructure** *draft approach*

Staff are exploring two possible synergies:

The opportunities and challenges of green infrastructure implementation in Priority Development Areas.

- Many PDAs will see significant levels of growth and development, which at times will present opportunities to make wholesale changes to street infrastructure. A set of best practices on integrating green infrastructure could streamline GI and development processes.

The opportunities in aligning local Green Infrastructure Plans with local streets and roads programs at MTC

- MTC estimates the resources needed to [maintain] or [improve] the current road condition 30 years into the future to support sufficient funding for maintenance. Pulling similar assessments from local Green Infrastructure Plans could provide a more complete picture of the resource needs for local streets.



HORIZON

Questions?

For more information, go to: bayareametro.gov/horizon.

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