

PLANNING FOR AN UNCERTAIN FUTURE

Using Exploratory Scenario Planning to Create a More Resilient Regional Plan

David Vautin, Principal Planner/Analyst
Metropolitan Transportation Commission &
Association of Bay Area Governments
SPUR Lunchtime Forum – February 19, 2019



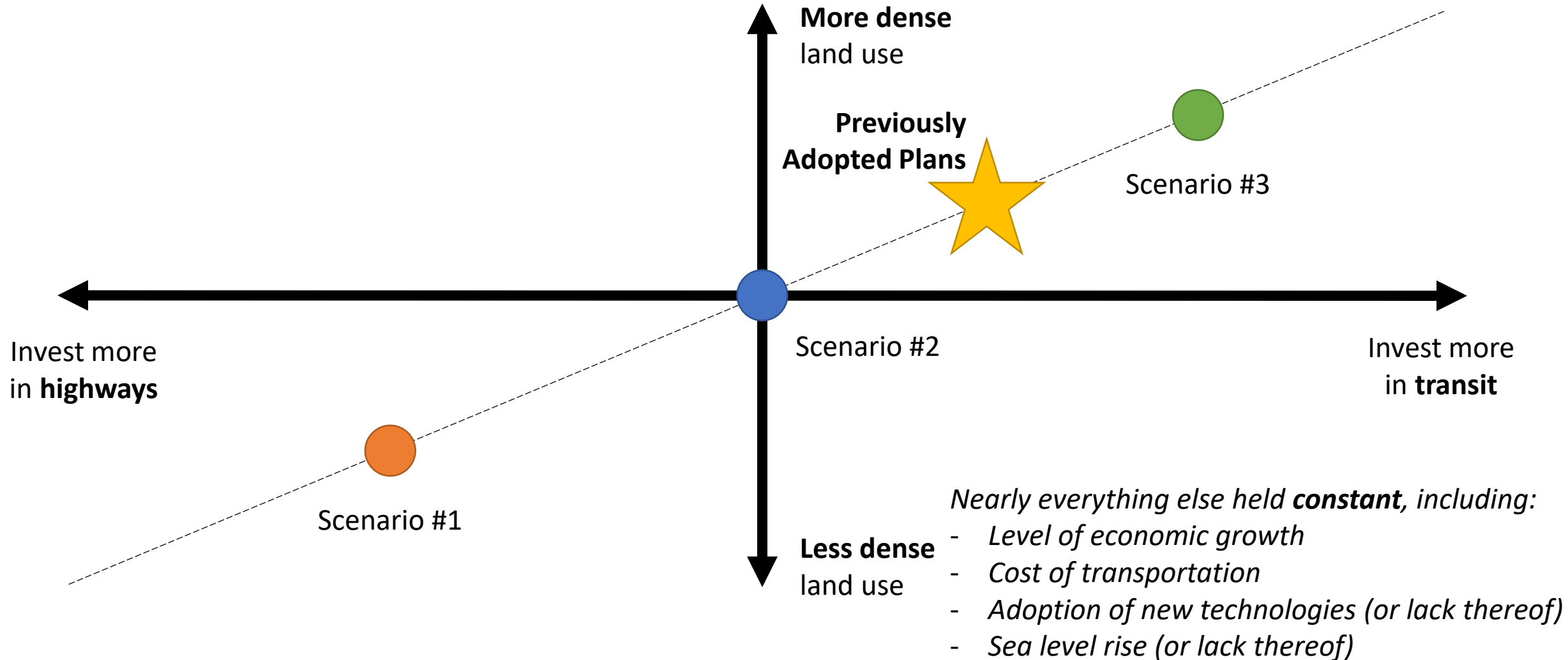
It's not easy to predict the future...
you never know what will happen next.



*So instead of planning for the most likely
outcome, it can be worth preparing for a
wider array of potential outcomes.*



How We Used to Use Scenario Planning



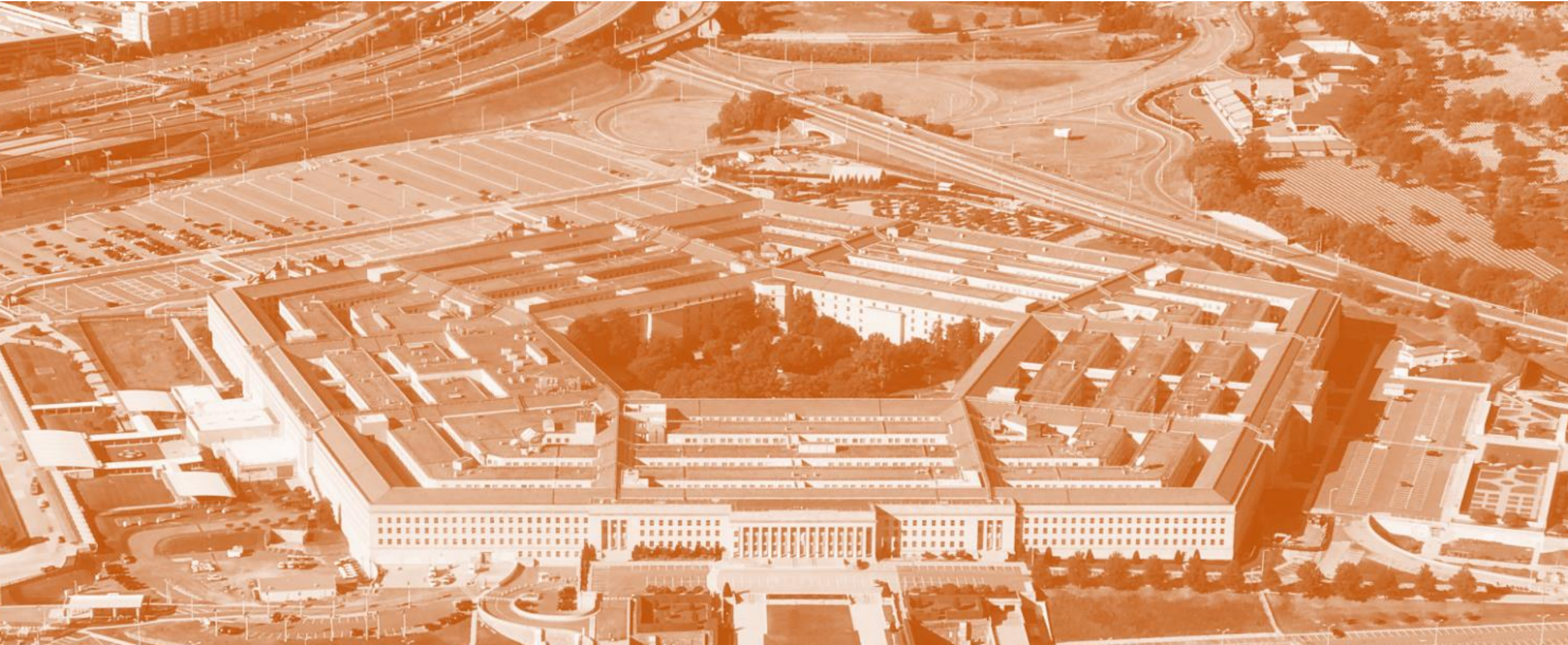
Conundrum: How Could We Plan Differently to Account for Deep Uncertainty?



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Exploratory Scenario Planning is **Not New...** But It's Being Applied in New Ways





Project Goal:

To prepare for an uncertain future by identifying resilient strategies and investments.

Building a **Better Foundation** for the Next Plan



Spring 2015 to
July 2017



February 2018 to
September 2019



August 2019 to
June 2021

Building a Better Foundation for the Next Plan

Plan
BayArea
2040



Outreach



Futures



Perspective
Papers



Project
Evaluation

PLAN BAY AREA 2050

Spring 2015 to
July 2017

August 2019 to
June 2021

First Step – What are Our Guiding Principles?



AFFORDABLE

All Bay Area residents and workers have sufficient housing options they can afford – households are economically secure.



CONNECTED

An expanded, well-functioning transportation system connects the Bay Area – fast, frequent and efficient intercity trips are complemented by a suite of local transportation options, connecting communities and creating a cohesive region.



DIVERSE

The Bay Area is an inclusive region where people from all backgrounds, abilities, and ages can remain in place – with access to the region's assets and resources.



HEALTHY

The region's natural resources, open space, clean water and clean air are conserved – the region actively reduces its environmental footprint and protects residents from environmental impacts.

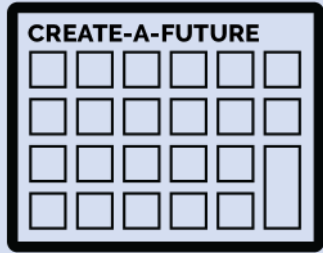


VIBRANT

The Bay Area region is an innovation leader, creating quality job opportunities for all and ample fiscal resources for communities.

OUTREACH

Create-a-Future



ANALYSIS

Current Policies

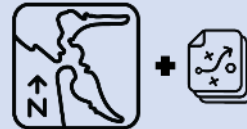


REPORT



OUTREACH

Improve-a-Future



ANALYSIS

New Strategies



REPORT





15 Greater preference for dispersed workplaces

15 Greater preference for urban job centers

15 Similar workplace preferences to today

OSI/PA
Jon Brad
MPL/ABG
Tech Consultant

Joshua
Tech Consultant



HORIZON CREATE-A-FUTURE

Multiple Superpowers	Higher Tax Rates More Graduated	Current Expenditures Similar Metro S
0% annual national population growth	+1.0% annual national job growth	20% increase to ... annually
50% e-commerce market share	Greater preference for walkable mixed-use	Greater preference for urban job centers
Greater preference for sharing	Faster growth in interregional volumes	10% fully-autonomous market share
6 Wild Card ?	\$0.5B annual federal ...	25 Wild Card ?

ASSOCIATION OF BAY AREA GOVERNMENTS METROPOLITAN TRANSPORTATION COMMISSION



FUTURE # 5: The Rise of the City State

HORIZON CREATE-A-FUTURE

2 Feet of Sea Level Rise by 2050	M7.0 Hayward Fault Earthquake in 2035	Flawed Democracy	Decline of U.S. as Global Power	Lower Tax Rates Similar Structure	Lower Expenditures Lower Metro Share
2% tariff rates	Current Environmental Regulations	+0.5% annual national population growth	+0.5% annual national job growth	Education & Health 20% Finance 6% Government 10% Information 5% Manufacturing 4% Other (City) 9.5%	Professional & Business Services 11% Construction, Mining, Logging 5% Trade, Transport, Utilities 15% Leisure & Hospitality 15%
+4.0% annual national productivity growth	Greater preference for walkable mixed-use	Greater preference for urban job centers	15% telecommute share	50% e-commerce market share	Greater preference for sharing
Faster growth in interregional volumes	<ul style="list-style-type: none"> High Speed Rail Autonomous Rail Transit Autonomous Buses Hyperloop Freight Aerial Drones Lower-Cost Helicopter Transport Other: <input checked="" type="checkbox"/> None of the Above	10% fully-autonomous market share	50% electric vehicle market share	Greater preference for sharing	\$0.50 per-mile vehicle operating costs
6 Wild Card ?	\$0.5B annual federal ...	25 Wild Card ?	26 Wild Card ?		

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FUTURE # 6: COMBO PACK

HORIZON CREATE-A-FUTURE

2 Feet of Sea Level Rise by 2050	Flawed Democracy	Multiple Superpowers	Higher Tax Rates More Graduated	High Head Exp. Serv. D.
20,000 immigrants to the Bay Area annually	Increased Environmental Regulations	+0.5% annual national population growth	+0.5% annual national job growth	Education & Health ↑22% Finance ↑2% Government ↓12% Information ↑2% Manufacturing ↓6% Other ↓3%
+1.0% annual national productivity growth	Greater preference for urban job centers	telecommuting 10%	e-retail 30%	Information ↑2% Manufacturing ↓6% Other ↓3%
Conf. growth info. vol.	50% preference for urban job centers	95% electric vehicle market share	Greater preference for sharing	\$0.50 per-mile operating costs
\$1.1B annual federal funding for transporta	legalized marijuana	26 Wild Card ?		



Three Futures for the World and the U.S.

A



**Clean
and Green**

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

B



**Rising Tides,
Falling
Fortunes**

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

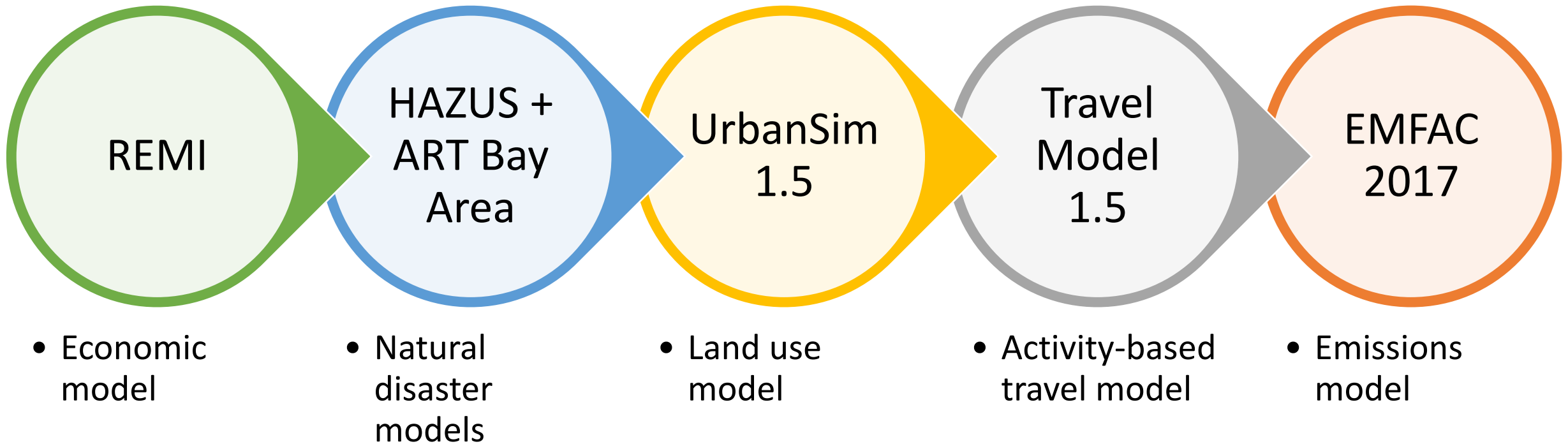
C



**Back to
the Future**

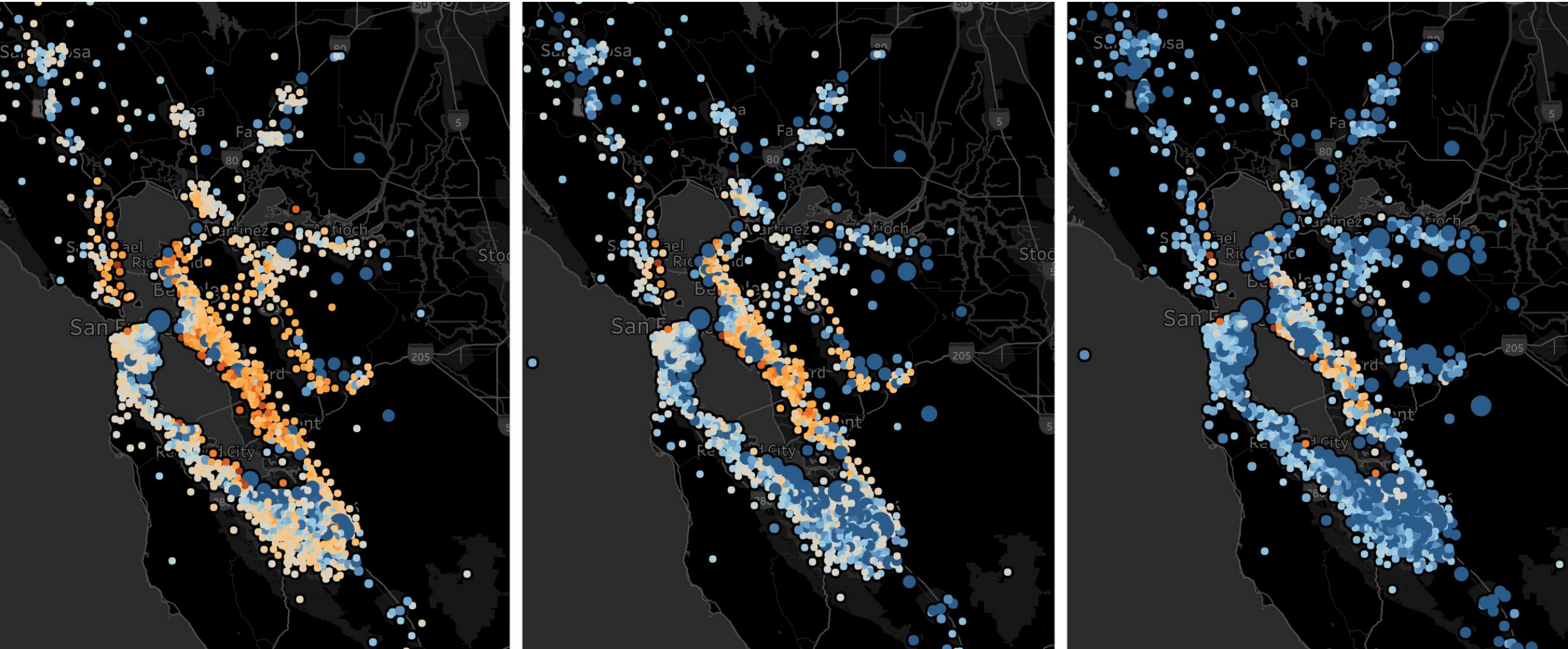
What if... an economic boom and new transportation options spur a new wave of development?

Futures Modeling – Round 1 Complete!



The modeling of the wide array of external forces – from earthquakes and sea level rise to immigration policy and autonomous vehicle adoption – is **complex**. But ultimately we believe it will provide valuable information about the **efficacy of strategies and projects**.

What Are Our Findings from Futures Modeling?

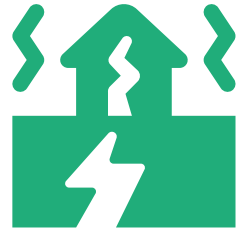


Come to our March 2019 workshops to find out!

Sneak Preview: Top 3 Challenges (DRAFT)



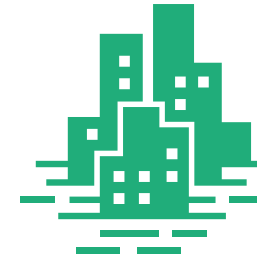
Rising Tides,
Falling
Fortunes



Slow recovery
from major
earthquake



Weak
economic
conditions



Significant
impacts from
sea level rise



Clean
and Green



Overcrowded
transit systems



Cost of
housing



Undue burdens
on low-income
populations



Back to
the Future



Extreme traffic
congestion



Drastic
neighborhood
changes &
overburdened
natural lands



Cost of housing



Get Involved in Planning
the Region's Future!

Stakeholder Workshop

San Francisco

3/11/19 - 8:30 AM to 1:30 PM

Public Workshops

Oakland

3/12/19 – 6:00 PM to 8:00 PM

San Jose

3/14/19 – 6:00 PM to 8:00 PM

Petaluma

3/16/19 – 10:00 AM to 12:00 PM

Vallejo

3/20/19 – 6:00 PM to 8:00 PM

Northern San Mateo Cty. (TBD)

TBD – 6:00 PM to 8:00 PM

The Road Ahead

Over the course of the spring and summer, we'll move into the second phase of Horizon – exploring how strategies and investments perform in each of the three futures. Ultimately, the recommendations from Horizon will advance into Plan Bay Area 2050.



Questions?



David Vautin

dvautin@bayareametro.gov

Metropolitan Transportation Commission
Association of Bay Area Governments



bayareametro.gov/horizon