

»»»» Next Gen Freeways



PLAN BAY AREA 2050



STRATEGY T5
FREEWAY TOLLING



METROPOLITAN
TRANSPORTATION
COMMISSION

Next Generation Bay Area Freeways Study: Kick-Off

*Exploring Pricing Strategies to Advance Equity, Climate,
and Mobility Goals*

Joint MTC Planning Committee with the ABAG Administrative Committee
February 2022



BAY AREA'S BIG BOTTLENECKS

By Frank Herbert

IF YOU DRIVE one of the 376,000 cars flooding into San Francisco every workday, you know about the commuter traffic jams shown on these pages. You know the problem from the inside and your "no man's lands" have definite names:

- Bay Bridge Toll Plaza.
- San Bruno Overpass.
- Alemaný Interchange.
- Hospital Curve.
- Waldo Grade.

These are some of the worst bottlenecks on the arteries into The City. Six out of every ten workers in San Francisco run these gamuts daily, most of the 734,000 commuters.

Let's put the problem into perspective: If you arranged these cars bumper to bumper, they'd make a mechanical ribbon 2000 miles long, creeping into a city with only 900 miles of streets.

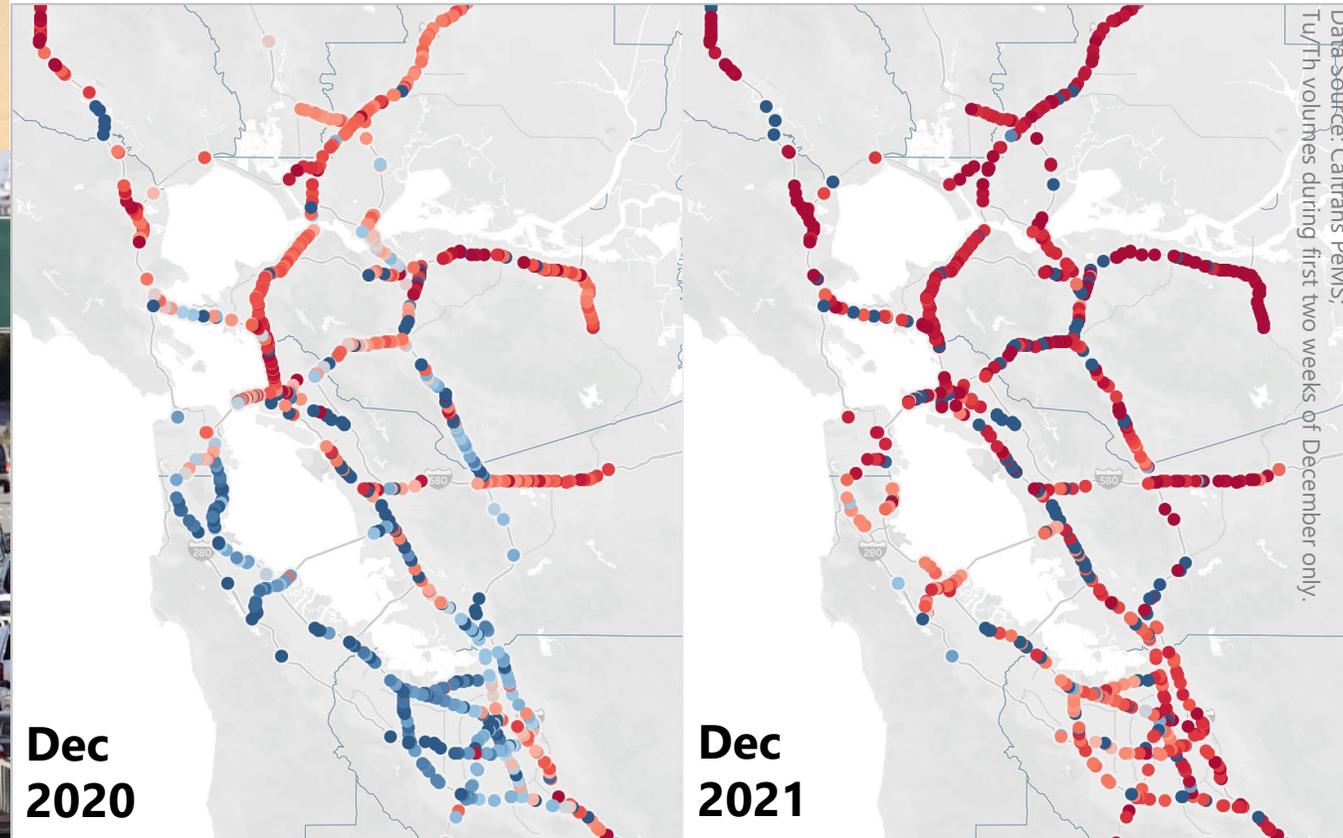
continued



HOSPITAL CURVE, bending around the west slope of Potrero Hill, is jammed with traffic slowed miles ahead at The City's offramps.



The Bay Area's freeway network suffers from chronic traffic congestion that continues to adversely impact the region even as travel patterns change post-COVID-19.



Data Source: Caltrans PEWS; Tu/Th volumes during first two weeks of December only.

Dec 2020

Dec 2021

Traffic Volumes Relative to Dec 2019

60% 100%

We have sought to address congestion with a range of strategies.

New lanes. New interchanges.
Direct connectors.
HOV lanes. Express lanes.
Express buses.
Bus lanes. Bus on shoulder.
Transit signal priority.
Trains. Ferries.
Improvements to trains and ferries.
Carpools. Vanpools.
Electronic tolling.
Ramp metering.
Intelligent transportation systems.
Commuter parking lots.
Commuter benefits.
Transit oriented development.



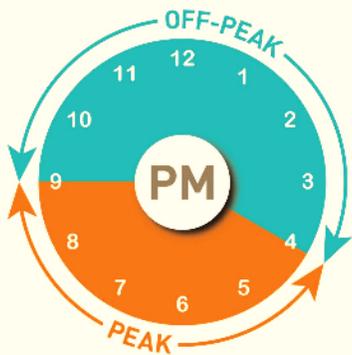
But we are not addressing the elephant in the room: People want to, or need to drive alone, and the freeway is a valuable public good.

A fundamental shift is needed to transform our freeways.



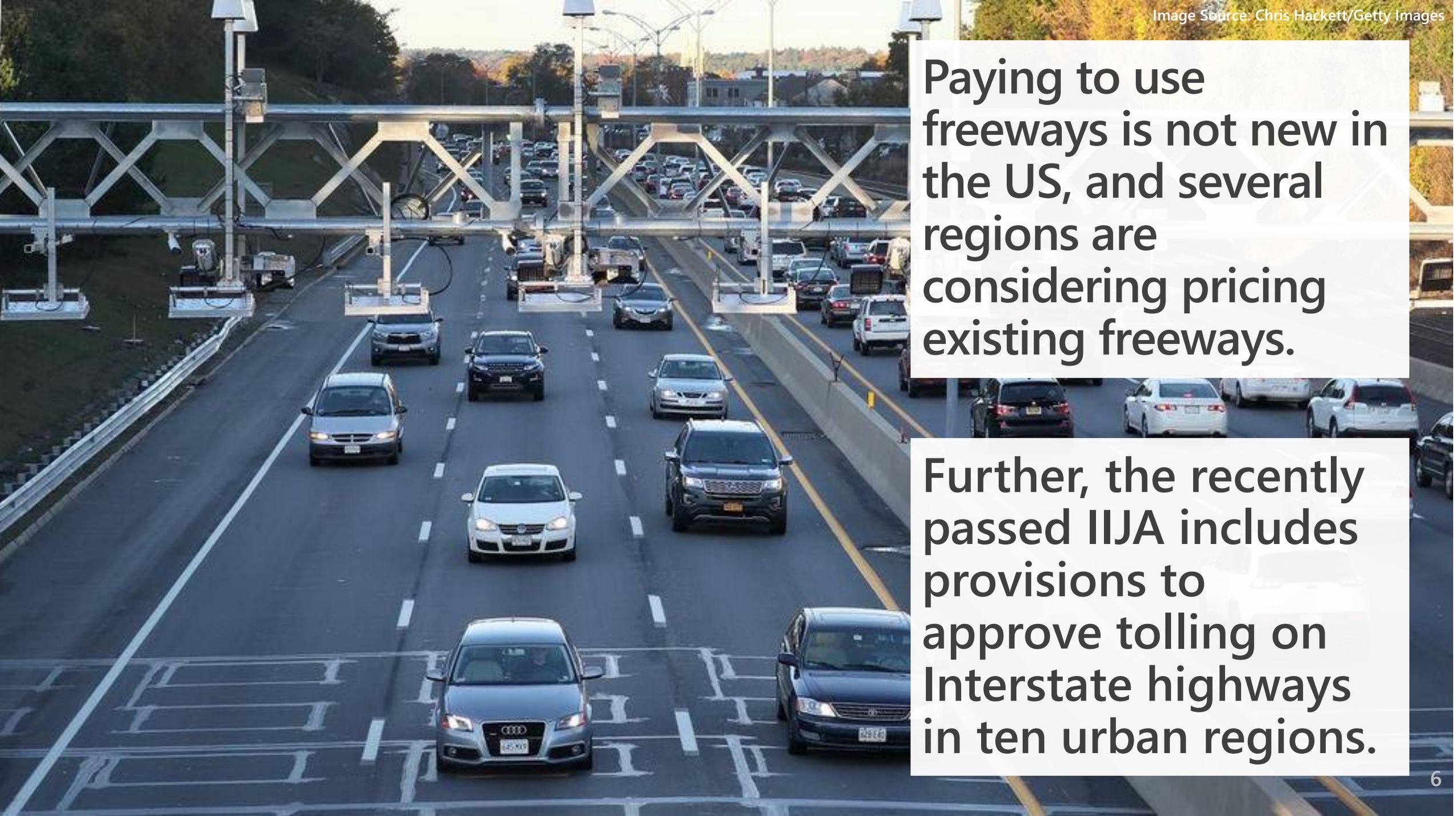
Pricing based on use, and even demand-responsive pricing, is quite common across other public utility networks.

CHECK THE HOUR BEFORE USING POWER



The Time-of-Use (Peak Pricing 4-9 p.m. Every Day) rate plan has two periods:

- \$ OFF-PEAK:**
19 hours each day
- \$\$ PEAK:**
5 hours each day

A high-angle photograph of a multi-lane highway during the day. The road is filled with various cars and SUVs. Overhead, there are several large metal gantries supported by tall poles, likely for toll collection or traffic monitoring. The sky is clear, and the overall scene depicts a busy urban roadway.

Paying to use
freeways is not new in
the US, and several
regions are
considering pricing
existing freeways.

Further, the recently
passed IIJA includes
provisions to
approve tolling on
Interstate highways
in ten urban regions.



Building on our experience with Express Lanes and the recently adopted strategic plan, we can plan for the next generation.

Can we imagine a priced freeway network where people who need to use the freeway are able to do so reliably without undue burdens?



Image Source: Eric Risberg / AP

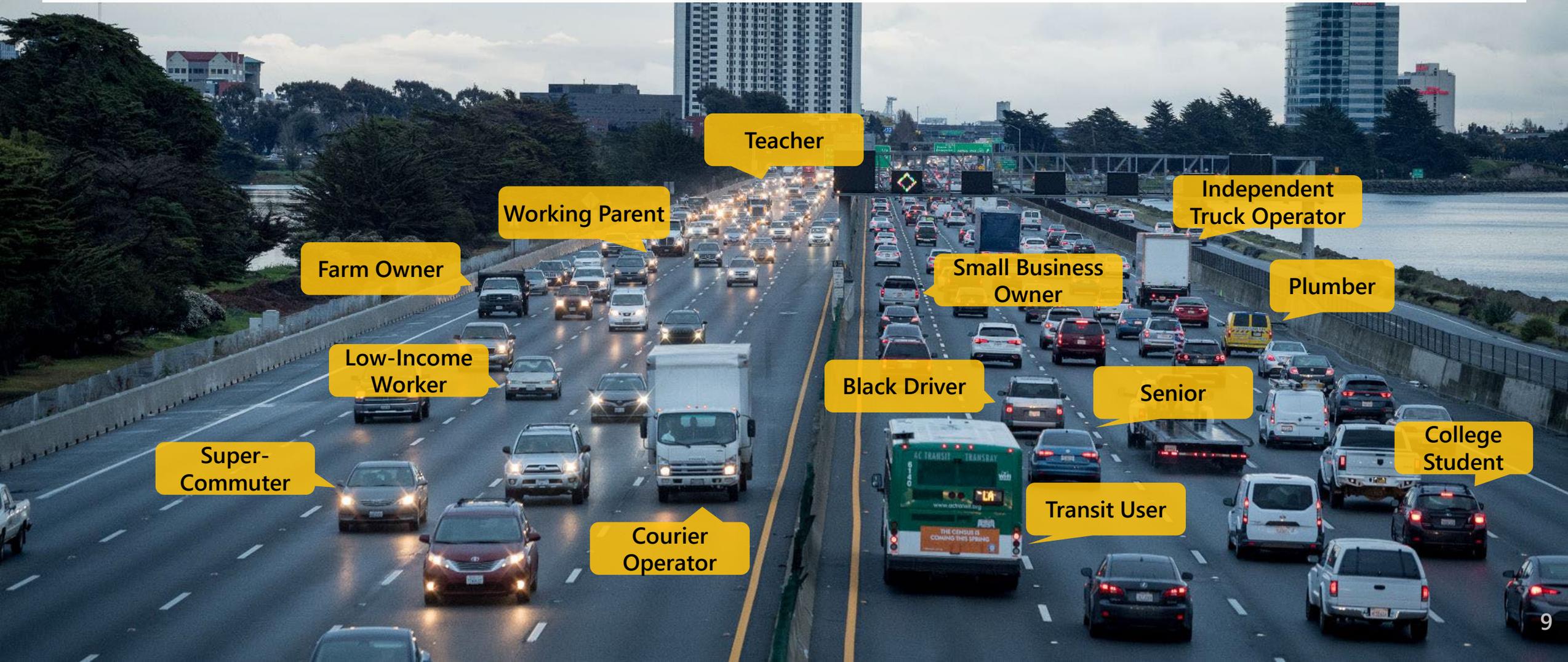
Can we transform our freeways into a modern and multimodal network that is prepared for the ongoing generational shift in the transportation landscape?

Can we envision a freeway network that generates new revenues to support investments in communities that were once divided by those freeways?



Image Source: Karl Nielsen

Pricing strategies may offer potential to transform our freeways, but the more critical question is whether there is an equitable and politically acceptable pathway toward doing so.



Teacher

Working Parent

Farm Owner

Low-Income Worker

Super-Commuter

Courier Operator

Black Driver

Small Business Owner

Independent Truck Operator

Plumber

Senior

College Student

Transit User

Pricing strategies cannot be one-size-fits-all and must be complemented by strategies that enable win-win outcomes.

This study will explore “pathways” that combine pricing and complementary strategies, first at a region-wide scale across all congested corridors, and then refined at the corridor level.



- Pricing type (e.g., per mile, corridor, zone)
- Location/Extent
- Pricing levels, by time of day
- Interaction with other pricing schemes

Complementary Strategies

Funded by tolling revenues and alignment of existing or planned resources



The exploration of pathways must be guided by a clear equity framework, which will be refined with stakeholder input.

Preliminary Equity Framework Considerations

Clear goals, objectives, and measurable outcomes that affirmatively address racial and social inequities.

Metrics to evaluate success, including quantitative and qualitative community, program, and policy data.

Criteria/guiding questions to assess who will benefit or be burdened by different activities, including consideration of unintended consequences.

Focus on **two specific areas of concern**:

- 1. Assess past harms arising from freeway investment decisions** that have disproportionately impacted black and brown neighborhoods – and how to avoid/redress going forward.
- 2. Address proactively economic burden of pricing strategies on vulnerable drivers**, especially where structural racial impacts are already at play.



Our Study

- Advances implementation of Plan Bay Area 2050
- Duration: ~2 years, Jan 2022 – Nov 2023
- Partially funded by Caltrans Strategic Partnerships Grant

Three Main Components



Stakeholder
and Public
Engagement
(two rounds)



In-Depth
Technical
Analysis
(two rounds)



Exploration of
Operational
Deployment

Study Objective

Collaboratively develop equitable pathways toward a priced, modern and multimodal next-generation freeway network.

Potential Outcomes

One or more pathways prioritized for the region.

A corridor with most promising potential recommended for further studies and pilot implementation.

Ten-year roadmap for implementation across the region's congested corridors.



There are several questions that the study must tackle...

What does this mean for HOV/express lanes?

What will toll revenues be used for?

What is the burden on essential workers who must drive to work?

What is the impact on local streets parallel to freeways?

What technologies should we consider, and how would they integrate with FasTrak/Clipper?

Will drivers into Downtown SF pay three separate fees with SF congestion pricing?

How could transit improvements be in place prior to start of tolling?

Will exemptions and discounts reduce effectiveness of pricing?

Will freeway pricing use same systems as the Caltrans road user charge?

What is the cost of implementation, including back-office elements?

and so many more questions!



...and while we may not address all questions in the next two years, we step toward the Plan Bay Area 2050 vision.

2022

2023

Winter

Spring / Summer / Fall

Fall / Winter / Spring

Summer / Fall

Phase 1
Defining the Problem

Phase 2
Goals and Pathways Development

Phase 3
Refining Pathways

Phase 4
Planning for Next Steps

Future Efforts
toward
Implementation

 Engagement Round 1

 Engagement Round 2

 Analysis Round 1

 Analysis Round 2

 Exploration of Operational Deployment

Key Milestones

- 1 Spring 2022 Preliminary pricing concepts defined.
- 2 Summer 2022 (post Round 1 Engagement) Collaboratively identified goals for a next-generation network.
- 3 Fall 2022 3-4 pathways defined at the region-wide scale for analysis.

- 4 Winter 2023 (post Round 1 Analysis) One or two pathways prioritized, and 2-3 specific corridors identified for further refinement of pathways.
- 5 Spring 2023 Developed understanding of potential operational deployment options.

- 6 Summer 2023 (post Round 2) Recommendation of a pathway for a corridor with most promising potential for implementation.
- 7 Fall 2023 10-year implementation plan developed.

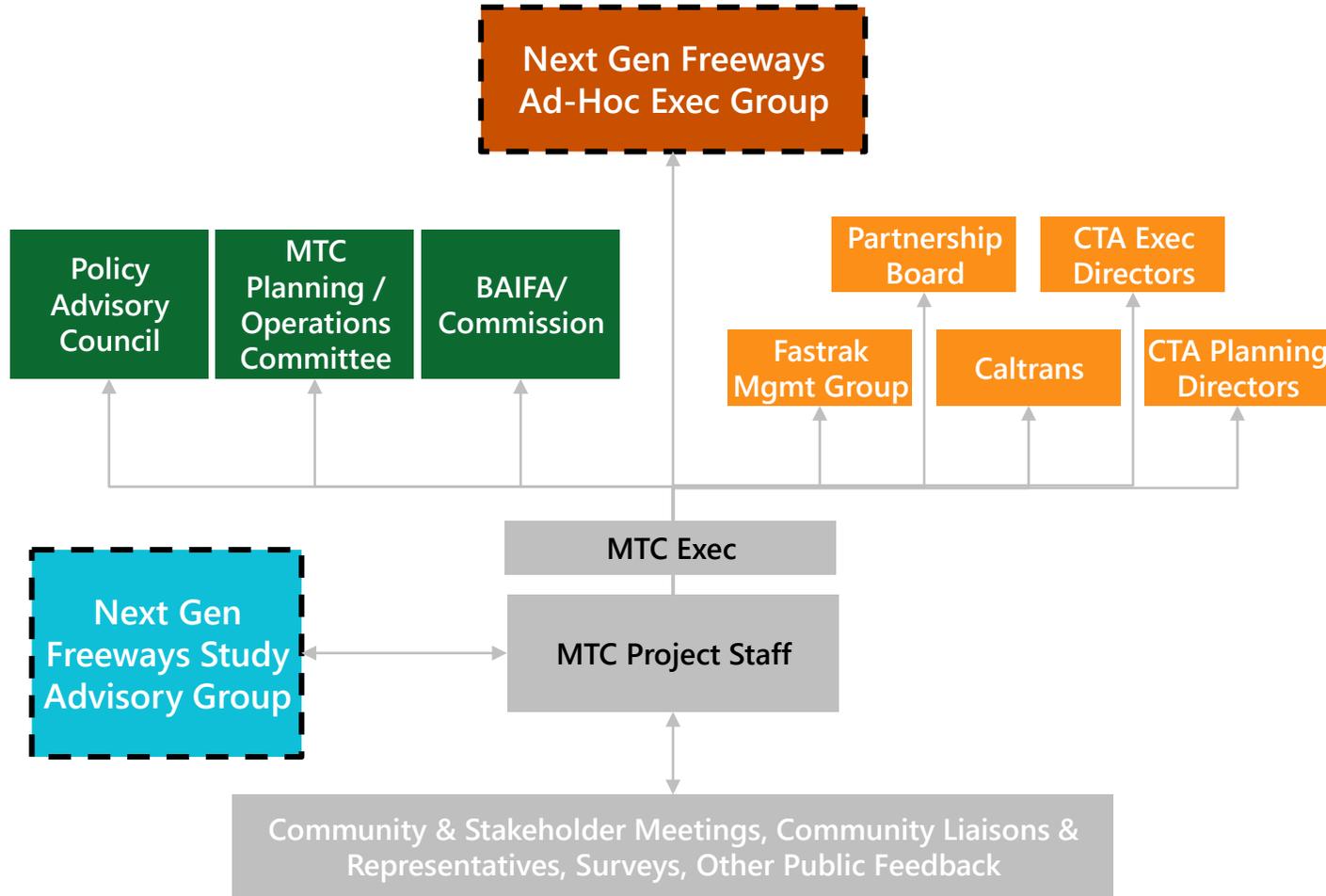
- Corridor-scale alternatives assessment
- Other planning studies to-be-determined
- Pricing systems design
- Pilot framework studies
- Potential pilot implementation



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Proposed Advisory Structure & Ad-Hoc Exec Group



Next Gen Freeways Ad-Hoc Exec Group

Purpose: To provide strategic direction for the study and endorse staff and advisory group recommendations in prioritizing strategies and corridors for analysis.

Proposed Composition:

- (1) Policy Advisory Council Chair / Vice-Chair
- (5) Government Exec: MTC, CTA 1, CTA 2, Partnership Board (Transit), Caltrans
- (4) Non-Government Exec: TransForm, SPUR, Labor, Business

Meetings:

Proposal to convene 3-4 times at key decision points over two-year period.
First meeting tentatively in April/May 2022.



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Elected/Appointed Officials

Partner Agency Executives

New Groups

Proposed Advisory Group to Engage Key Stakeholders

Purpose: To advise the project team on an equitable engagement process, co-create equitable pathways toward a next-generation freeway network, and collaboratively prioritize high potential pathways and corridors for analysis and recommendations.

Government (6)		Non-Government (15)		
State	County/Transit	Business	Equity Populations	Interest Groups
Caltrans Ops	CTA 1	Business Group 1	Council* Member / Low-Income	Freight
Caltrans Road Charge Program	CTA 2	Business Group 2	Council* Member / Senior	Rural / Agricultural
CalSTA	CTA 3/Transit	Non-Profit	Community-Based Organization	Labor – Middle Income
		TransForm	*Council: Policy Advisory Council	Labor – Low Income
		SPUR	Academic / Economic	Small Business
		Greenlining Institute	TBD	Student

Next Gen Freeways Study Advisory Group

Representation

- Seeking equitable representation
- ~1:2 government vs. non-government



Community Engagement: Focused and Meaningful

Round 1 Engagement Tactics



Focused Discussions

led by community liaisons
(with Consultant Support)



Pop-Ups

to meet people where they are,
prioritized in Equity Priority
Communities



One-on-One Meetings

with community representatives



Survey

with targeted distribution

Population Subgroups for Focused Engagement [Preliminary]

- People of color with low/middle incomes
- Seniors
- Persons with Disabilities
- Low-income workers (janitors, retail, food service, domestic services, other)
- Middle-income workers (construction building service workers with vans/trucks, teachers that commute, health service workers, other)
- Super commuters/commuters from outside the region
- Working parents with school-aged children
- College students that commute via automobile to school
- Small business owners
- Rural residents





What's Next?

Advisory Group Formation	February 2022
First Advisory Group Meeting	March 2022
Public Engagement Consultant Procurement	February/March 2022
Equity Framework	Winter/Spring 2022
Preliminary Goals & Concept Development	Spring 2022
Community Engagement Round 1	Late Spring/Summer 2022

Questions?

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