Faster Freeways: Exploring the Potential of Pricing

Next Generation Bay Area Freeways Study
Public Webinar | November 2023
Agenda

- Welcome & Icebreaker 15 minutes
- Presentation: Why We’re Exploring Freeway Pricing 15 minutes
- Presentation: 2035 Freeway Pricing Scenario and Projections 10 minutes
- Clarifying Questions 10 minutes
- Interactive Presentation: 2035 Pricing vs. No Pricing Scenario 35 minutes
- Wrap up 5 minutes
Housekeeping

• Today’s public input will be collected using an online survey tool called Mentimeter, which will require the use of your smartphone or internet browser.

• Those who are unable to participate in the survey will have the option to submit feedback via email after the webinar.

• There will be an opportunity for questions using Zoom’s Q&A function.
  
  o You may use the chat function for technical support questions.
  o Please keep all content-related questions to the Q&A function.
Icebreaker
Where we are today

Congestion costs us every day and freeway travel demand is growing fast.

This contributes to multiple challenges in the Bay Area:

Freeways Are Over Capacity
Bay Area drivers spend nearly 100 hours per year sitting in traffic.

Economic Costs
Workers lose time (and earnings) driving to job sites; slower moving freight raises cost of goods.

Inequity
Lower income people moving further away from jobs due to rising housing costs have longer, more expensive commutes.

Climate Goals
Urgent need to meet aggressive greenhouse gas reduction targets.
Why we’re here today

Exploring the potential of all-lane freeway tolling + equity-oriented strategies for:

- Low income drivers
- Super commuting drivers
- Freeway dependent drivers
- Freeway adjacent communities
Where we forecast to be in 2035 without major long-term strategies

Even with planned short-term strategies, driving will get worse for future generations.

- Population Growth: +15%
  - More cars

- Miles driven: +9%
  - More cost

- Travel time: +13%
  - More stress
  - Less reliability
  - Less time spent with family

- Road fatalities: +7%
  - Less safe streets
Plan Bay Area 2050

A 30-year plan with a vision for a more resilient and equitable Bay Area.

The plan focuses on 4 topics...

- Housing
- Economy
- Transportation
- Environment
This study supports the plan’s broader vision for the Bay Area.

Freeway Tolling is 1 of 35 interconnected strategies in Plan Bay Area 2050.
The long game plan

Work is already being done and is planned to continue in the upcoming years.

Short-Term Strategies

- Freeway Tolling Policy Development
- Roadway Maintenance
- Highway Interchange Improvements
- Safe Streets
- Safer and Cleaner Transit
- Timed Transfers & Station Hub Improvements
- Coordinated Transit Fares
- Bus Transit Priority Corridors
- Transit-Oriented Land Use
- Regional Rail Expansion and Modernization

Long-Term Strategies

- Freeway Tolling
- Boosting Frequencies of Local & Regional Transit
- Additional Safe Streets Investments
- Other Strategies
Meeting California’s ambitious climate goals

Progress toward mandated climate emissions target is critical

With No Strategies

Plan Bay Area 2050 Strategies (Without Freeway Pricing)

-17%

With Pricing Strategy

-20%

SB 375 (2009) emissions target:
-19% per capita reduction by 2035

2005

2035
How freeway pricing works

**Pricing Strategies**

- Per-mile, all-lane tolling on freeways with frequent parallel transit

**Direct Outcomes**

- **Shift Driving Patterns:** Incentivize more efficient, healthy, and sustainable ways to get around.
- **Enhance Transportation System:** Fund improvements to transportation for equity priority users and the population at large.
- **Advance Climate Goals:** Reduce carbon emissions by lowering overall miles driven and miles in congested conditions.

**Long-Term Goals**

- Reliable
- Efficient
- Affordable
- Reparative
- Safe
Potential timeline

We are here 2021

Potential Implementation by 2035

Contingent on study recommending equitable pathways that advance goals

This study
- Round 1 Engagement
- Round 1 Analysis
- Round 2 Engagement
- Round 2 Analysis
- Summary Report

Potential Planning Studies
- Corridor-Scale Assessments
- Pilot Framework Studies

Potential Operations Development
- Concept of Operations
- Preliminary Systems Design
- Final Systems Design

Potential Implementation Efforts
- Transportation System Improvements
- Legislative Approvals
- Public Information
- Pilot
- Earliest Implementation

2021 2022 2024 2035
Common Questions

- Why not add more freeway lanes to reduce congestion?
- Don’t we already have enough transportation funding?
- Is this another money grab?
- How would pricing reduce congestion?
- How would the money be spent?
- How would this affect low-income drivers?
More lanes don’t fix congestion; they just invite more cars.
Easier and faster freeway travel makes them more attractive for more drivers.

1946
6 lanes

Today
10 lanes
Don’t we already have enough transportation funding?

Current funding levels support the Bay Area transportation system's operations, maintenance and capital projects.

- Local Road Maintenance
- 19th Ave Roadway Rehab
- Highway 35 Reconstruction
- Route 1 Bike Improvements
Don’t we already have enough transportation funding?

Current funding levels support the Bay Area transportation system’s operations, maintenance and capital projects.

Bridge Tolls

Gas Taxes

BART Extension Projects

Bay Bridge East Span

AC Transit Tempo Service

Caldecott Tunnel 4th Bore
Don’t we already have enough transportation funding?

Current funding levels support the Bay Area transportation system’s operations, maintenance and capital projects.

- Caltrain Electrification
- Bike/Pedestrian Safety
- Transit Operations
- Road/Freeway Maintenance
Don’t we already have enough transportation funding?

Current funding levels support the Bay Area transportation system’s operations, maintenance and capital projects.

- DMV Fees
- Local Sales Taxes
- Bridge Tolls
- Gas Taxes

California Highway Patrol
Caltrans
Local Road Maintenance
Freeway Service Patrol
Investing in expanded freeway capacity is unsustainable.

We are studying freeway pricing because our current strategies are not working. Without managing congestion, it gets worse. Pricing can help manage congestion the times of the day when the roads are busiest.

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2001 to 2019

- 28% Traffic Delay per Driver
- 13% Bay Area Population

2019 to now

- Commuting is down but...
- 5x more people work from home
- ...congestion is up

Back to pre-pandemic levels
Is this another money grab?

Pricing can help fund a better transportation system and reduce freeway congestion long term.
The Big Question

How would it work?
2035 Freeway Pricing Scenario and Projected Outcomes
How would tolling work?

The study explored a 2035 scenario with the following framework:

- Congested freeways with parallel transit service
- Toll costs ranging from 10¢ to 30¢ per mile, depending on the level of congestion
- Lower tolls in off-peak hours and no tolls on nights and weekends
How would tolling work?

The study explored a 2035 scenario with the following framework:

With 50% discounts made available to:

- Very low-income drivers (annual household income <$55,000)
- 3+ carpoolers
- People living with disabilities
**Initial Projected Outcomes of Freeway Pricing in 2035**

<table>
<thead>
<tr>
<th>Freeway Commutes</th>
<th>2035* Drive Time w/ No Tolling</th>
<th>2035* Drive Time w/ Tolling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vallejo to San Francisco</td>
<td>70 min</td>
<td>58 min (-12 min)</td>
</tr>
<tr>
<td>Antioch to Oakland</td>
<td>61 min</td>
<td>46 min (-15 min)</td>
</tr>
<tr>
<td>Oakland to San Francisco</td>
<td>34 min</td>
<td>31 min (-3 min)</td>
</tr>
<tr>
<td>San Jose to Oakland</td>
<td>70 min</td>
<td>55 min (-15 min)</td>
</tr>
<tr>
<td>San Jose to San Francisco</td>
<td>73 min</td>
<td>66 min (-6 min)</td>
</tr>
</tbody>
</table>

*2035 travel time forecasts account for additional Plan Bay Area 2050 adopted strategies

- **Fewer Freeway Trips**
  20-40% decrease during peak commute

- **Reduced Freeway Travel Time**
  Up to 25% reduction on busiest freeways

- **More Transit Ridership**
  5% increase

- **Slower Travel Time on Local Streets due to Diversion**
  8% increase
**How would the revenue be spent?**

Revenues generated would be over $1 billion annually and could fund...

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express bus</td>
<td>50%</td>
</tr>
<tr>
<td>Local streets</td>
<td>25%</td>
</tr>
<tr>
<td>Discounts for low-income drivers</td>
<td>12.5%</td>
</tr>
<tr>
<td>Reparative investments in freeway-adjacent low-income communities</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

**Express bus**
- 10-15 minute frequency in peak hours
- New frequent regional routes in high demand corridors not served by BART/Caltrain

**Local bus**
- 10-minute frequency on major feeder buses to BART/Caltrain

**Local streets**
- Safety Improvements
- Sidewalk and bike lane upgrades
- Bus priority infrastructure

**Contiguous freeway carpool lanes**

- Reparative investments in freeway-adjacent low-income communities
  - Urban greening
  - Pedestrian crossings

- Discounts for low-income drivers
  - Tolls
  - Transit fares
How would this affect low-income drivers?

Lower income drivers projected to pay a lower share of tolls relative to their share of population and peak hour drivers. Presents an opportunity for targeted cost burden relief.

Higher income drivers projected to pay a higher share of tolls.

Share of Bay Area Population by Income Group
- Very low income (<$55K): 25%
- Low income ($55K-110K): 24%
- Moderate Income ($110-190K): 19%
- High Income (> $190K): 32%

Share of Peak Hour Freeway Drivers by Income Group (2019)
- Very low income (<$55K): 13%
- Low income ($55K-110K): 16%
- Moderate Income ($110-190K): 38%
- High Income (> $190K): 32%

Share of Projected Freeway Toll Revenue by Income Group (2035)
- Very low income (<$55K): 6%
- Low income ($55K-110K): 17%
- Moderate Income ($110-190K): 25%
- High Income (> $190K): 52%

Higher income drivers represent a larger share of peak hour freeway drivers.
How would this affect low-income drivers?

Typical Monthly Toll Expenditure

<table>
<thead>
<tr>
<th>Freeway Use in Peak Hours</th>
<th>Full Rate</th>
<th>Discounted Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off Peak / Weekend Only</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>10 miles 2 days/week</td>
<td>$10/month</td>
<td>$5/month</td>
</tr>
<tr>
<td>low-congestion corridor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 miles 5 days/week</td>
<td>$90/month</td>
<td>$45/month</td>
</tr>
<tr>
<td>medium-congestion corridor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 miles 5 days/week</td>
<td>$270/month</td>
<td>$135/month</td>
</tr>
<tr>
<td>high-congestion corridor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discounted rate would apply to the following:

- Drivers with household income <$55,000
- People with disabilities
- 3+ carpool drivers

Key Analysis Findings

- Over half of all Bay Area households are not projected to use tolled freeways on weekdays.
- 93% of households would see their transportation budget increase by less than 1% from tolls.

Who would be most burdened?

Lower income drivers who use freeways frequently and drive long distances, and:

- Cannot avoid driving
- Cannot carpool
- Cannot switch to transit

Approx. 6% of lower income drivers (~90,000 households) may see monthly toll expenses over $25.

Opportunity for further targeted cost burden relief
Clarifying Questions
We want to hear from you.

We invite your feedback on the tradeoffs between a future with and without freeway pricing.
**2035**

No Pricing

**Driving**
- 100 min
- $24
  - $8 bridge toll
  - $16 fuel & maintenance

**Transit**
- 90 min
- $9

**Today**

<table>
<thead>
<tr>
<th></th>
<th>Driving</th>
<th>Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>90 min</td>
<td>90 min</td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$7</td>
<td>$8</td>
<td></td>
</tr>
</tbody>
</table>

**2035 Pricing**

**Driving**
- 80 min (-20%)
- $35
  - $8 bridge + $11 highway tolls
  - $16 fuel & maintenance

**Transit**
- 90 min
- same fare

**Commuting from Antioch to San Francisco**

- Total Distance ~ 46 miles
- Driving Route: 2035
- 🌟 Transit Route: 2035 (BART)
- ○ Transfer Point

**Safety Investment**

**Low Income Discounts**

**Reparative Investment**
2035
No Pricing

Driving
50 min
$17
$8 bridge toll
$9 fuel & maintenance

Transit
70 min
$8

2035
Pricing

Driving
40 min (-20%)
$22
$8 bridge + $5 highway tolls
$9 fuel & maintenance

Transit
60 min (-14%)
same fare

Today

Driving
45 min
$22
$8 bridge + $5 highway tolls
$9 fuel & maintenance

Transit
75 min
$8 fare

Commuting from Vallejo to Oakland
Total Distance ~ 26 miles
Driving Route: 2035
Transit Route: 2035 (Express Bus & BART)

Transit Investment
Safety Investment
Low Income Discounts
Reparative Investment
Commuting from Oakland to Palo Alto

Total Distance ~ 31 miles

- Driving Route: 2035
- Existing Transit (BART & Express Bus)
- Transit Route: 2035 (New Express Bus)
- Transfer Points

Pricing:

**2035**

- No Pricing

**Driving**

- 66 min
- $19
- $8 bridge toll
- $11 fuel & maintenance

**Transit**

- 90 min
- $10

**Today**

**Driving**

- 65 min
- $7 toll

**Transit**

- 90 min
- $10 fare

**2035**

- Pricing

**Driving**

- 64 min (-3%)
- $23
- $8 bridge + $4 highway tolls
- $11 fuel & maintenance

**Transit**

- 65 min (-27%)
- same fare

Investment:

- Safety Investment
- Reparative Investment
- Low Income Discounts
- Reparative Investment
Commuting from San Carlos to San Jose
Total Distance ~ 27 miles

- **Driving Route: 2035**
- **Transit Route: 2035**
  - (Caltrain & Local Bus)

**2035**
- No Pricing
- **Driving**
  - 45 min
  - $9
  - no toll
  - $9 fuel & maintenance
- **Transit**
  - 75 min
  - $8

**Today**
- **Driving**
  - 35 min
  - no toll
  - $9 fuel & maintenance
- **Transit**
  - 75 min
  - $8 fare

**2035 Pricing**
- **Driving**
  - 35 min (-20%)
  - $15
  - $6 highway toll
  - $9 fuel & maintenance
- **Transit**
  - 70 min (-7%)
  - same fare

**Safety Investment**
**Transit Investment**
**Low Income Discounts**
**Reparative Investment**
Refresher: “How would the revenue be spent?”

Revenues generated would be over $1 billion annually and could fund...

Express bus
- 10-15 minute frequency in peak hours
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Reparative investments in freeway-adjacent low-income communities
- Urban greening
- Pedestrian crossings
We want to hear from you
Next Steps

Round 1 Engagement
Round 1 Analysis

Round 2 Engagement
• Learnings from engagement will be used to refine scenarios to study in the next round of analysis.

Round 2 Analysis
• Staff will re-analyze scenarios and forecast travel outcomes, benefits and burdens.

Summary Report
• Staff will share recommendations that will help narrow future efforts and inform the next regional long-range plan, known as Plan Bay Area 2050+, currently under development.

A recording of this webinar will be posted to www.mtc.ca.gov/FasterFreeways

Additional comments and questions can be submitted via email to info@bayareametro.gov
Thank you

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