Caltrain Fare Study Update

Board of Directors

May 3, 2018

Agenda Item 8

Overview

- Fare Study Update
- Update on MTC's Regional Means-Based Fare Study

Study Overview

Study Overview

- Currently, Caltrain has no fare policy in place
- Fare Study objectives:
  - Identify potential opportunities to maximize revenue;
  - Enhance ridership; and
  - Safeguard social and geographic equity
- Explore the trade-offs with Caltrain's current funding structure
- Promulgate policy

Estimated Elasticity of Demand for Caltrain's System

Price Elasticity of Demand

- Demand elasticity is the relationship between the price of a good and the quantity of the good that is consumed
  - How price sensitive is a good?
- Elastic = a small change in price results in large changes in consumption (high price sensitivity)
- Inelastic = price changes have little effect on consumption (low price sensitivity)
- Best understood as a range of values, because demand elasticities generally increase as prices increase

Caltrain System's Demand Elasticity

- Calculated using Caltrain's new fare elasticity model.
- **Ridership demand for Caltrain is inelastic.**
  - Caltrain's estimated range of demand elasticity: -0.1 to -0.3
  - Overall system elasticity: estimated to be -0.2

Caltrain System’s Demand Elasticity, cont.

- Caltrain’s higher income riders are estimated to have *more* elastic demand than lower income riders
- Explained by difference between types of riders:
  - Transit-dependent riders (usually lower income riders in the US) have more inelastic demand for transit because they may not have mobility alternatives
  - “Choice” riders have other transportation options and have more elastic demand for transit
- Finding is consistent with trends observed in other transit systems, especially commuter rail

Caltrain System’s Demand Elasticity, cont.

- Fare increases are unlikely to result in steep drops in ridership on Caltrain and should be revenue positive
- Equity implications of inelastic demand from lower income riders: riders with the least means to pay for Caltrain are *more likely* to stick with the system and absorb higher fares
- Resulting policy question: how much revenue *should* Caltrain generate from its fares?

Testing and Analysis of Potential Fare Changes

Goals for Caltrain's fares

Goal	Metrics
Enhance Ridership	- Average weekday ridership - Total annual ridership
Increase Operating Revenue	- Total annual revenue - Total annual revenue per passenger
Safeguard Social and Geographic Equity	- Percentage of low income riders projected vs. percentage of low income riders in Caltrain-serving counties - Caltrain's average fare per mile vs. other transit agencies' average fare per mile

Note: Title VI analysis would be updated/performed for any future proposed fare changes

Testing and Analysis of Five Scenarios of Potential Fare Changes

- Scenario 1: Increase the base fare by $0.25
- Scenario 2: Increase the zone fare by $0.25
- Scenario 3: Reduce the Clipper Card discount to $0.20, instead of current $0.55 discount
- Scenario 4: Remove the Clipper Card discount
- Scenario 5: Introduce a 25% discount off of the base fare for off-peak travel

Ridership Results

- All scenarios resulted in ridership declines compared to the baseline of September 2017
  - Due to highly inelastic demand, ridership losses are not expected to be substantial
  - Ridership is strongest under the lowest fare prices
- Results related to total annual ridership and average weekday ridership:
  - Highest: Scenario 5 – Off Peak Discount
  - Lowest: Scenario 4 – Removing Clipper Discount

Revenue Results

- All scenarios resulted in revenue increases compared to the baseline of September 2017
  - Due to highly inelastic demand, increased fares are expected to result in increased fare revenue for Caltrain (even with some ridership losses)
- Results related to total annual revenue and average annual revenue per passenger:
  - Highest: Scenario 2 – Increasing Zone Upgrade Fare and Scenario 4 – Removing Clipper Discount
  - Lowest: Scenario 5 – Off-Peak Discount

Social and Geographic Equity Results

- Social equity: Majority of scenarios resulted in very slight declines for social equity indicators compared to the baseline of September 2017
    - Only Scenario 5 – Off-Peak Discount resulted in ridership growth of low income passengers, thus resulting in positive social equity results
- Geographic equity: All scenarios resulted in similar performance and were slightly worse than the September 2017 baseline
    - Compared to other scenarios, Scenario 2 – Increase Zone Upgrade Fare resulted in slightly worse results

Summary of Analysis of Results

- Increased prices are expected to result in increased fare revenue for Caltrain
- At the same time, increased fares are expected to have ridership and equity impacts
  - Ridership is strongest under the lowest fare prices
  - Lower income riders are best served with lower income fares and off-peak discounts
  - Geographic equity is best served with low fares

Next Step Recommendations

Phase 2 Recommended Next Steps

1. Development of a foundational Caltrain Fare Policy:
   - Study peer agencies' best practices for setting or changing fare policy
   - Draft a Caltrain Fare Policy for Board adoption, which would likely include the following:
     - Establishing goals and principles for Caltrain's fares (ridership, revenue, equity), to guide decision-making
     - Determining frequency of fare increases
     - Establishing procedures for fare increases
     - Developing a multi-year plan for Caltrain fares
   - Timing: Fall 2018

Phase 2 Recommended Next Steps

2. Parking Pricing Study
    - Market study of parking pricing at Caltrain stations
    - Consideration of variable, demand-based parking prices
3. Go Pass Program Study:
    - Value of Go Pass to companies, to Peninsula communities
    - Peer agencies' deep discount programs
    - Potential changes to Go Pass program, including program structure, pricing, and requirements

- Timing: Winter/Spring 2019

Other Recommended Next Steps

- Consider near-term opportunities to improve equity performance of Caltrain's fare system, including:
  - Mechanisms to improve equity through changes to the current fare structure and pricing
  - Participation in potential regional means-based fare program
- Consider introducing an off-peak discount in the future, but only after off-peak train service is adjusted
- Coordinate with the Caltrain Business Plan regarding longer-term fare policy issues:
  - Fare structure (zone-based vs. point-to-point)
  - Integration with regional and statewide ticketing innovations
  - Technological improvements to fares

MTC's Regional
Means-Based Fare Program

MTC Means-Based Fare Study

- MTC study for region commenced in 2015
  - Caltrain staff continues to participate in regional conversations with MTC and transit operators
- Study goals:
  - Make transit more affordable for low-income residents
  - Move toward a more consistent regional standard for fare discounts
  - Develop implementation options that are financially viable and administratively feasible

MTC/Operators' Current Proposed Program Framework

- Potential program is being developed, involving both MTC and transit operator staff
- Proposed as pilot program initially
- Agencies considering participation, pending Board adoption:
  - Bay Area Rapid Transit (BART)
  - Caltrain
  - Golden Gate Transit (Buses and Ferry)
  - San Francisco Municipal Transportation Agency (SFMTA)

MTC/Operators' Current Proposed Program Framework, continued

- Fare Discount: 20% per trip discount offered to eligible persons
- Eligibility: Adults earning less than 200% Federal Poverty Level (FPL)
  - No cap on participation proposed; all eligible could participate in program
- Implementation: Centrally administered on behalf of all participating operators; participants would use a special Clipper Card

MTC/Operators' Current Proposed Program Framework, continued

- Program Funding: SB 1 + LCTOP funds from MTC, estimated at $11 million per year
  - Funds from MTC would be used for administrative costs first, estimated at $3 million annually
  - Remaining funds from MTC would defray operators' revenue losses, estimated at a total of $8 million annually to be distributed among operators

MTC/Operators' Current Proposed Program Framework, continued

- Operators' revenue losses depend on:
  - The level of discount offered
  - The number of participating riders
  - The number of participating transit agencies
- Revenue reimbursement formula for operators in development currently
  - Likely will refund up to 50% of operators' revenue losses

MTC/Operators' Current Proposed Program Framework, continued

- Proposed timeline for implementation:

  2018:

  - MTC adopts program framework
  - **Transit agency boards consider means-based fare discount program participation**
    - Recognizes that Board actions occur in multiple steps and that final program participation is subject to Title VI analysis

  2019:

  - Program design and development
  - **Transit agency boards approve program participation and adopt new fare change for program**
  - FY20: pilot program start-up

Considerations for Caltrain

- Weigh trade-offs: equity gains vs. potential revenue losses
- Regional effort/coordination makes Caltrain's participation in program an actual option (Caltrain could not undertake this on its own)
- Equity benefits could be substantial for Caltrain:
  - Could provide a meaningful discount for Caltrain's low income riders
  - Could also help attract new riders and increase low income ridership on Caltrain
  - Could help address current equity issues with Caltrain's fare system

Considerations for Caltrain

- At the same time, need to consider Caltrain’s potential revenue losses, in light of recent fiscal issues
- Current estimated annual revenue loss for Caltrain from program with 20% discount:
  - With 100% participation: $1,750,000
  - With 50% participation: $875,000
  - With 25% participation: $437,000

Note: no participation cap is being considered; instead mechanism to limit revenue losses is the level of discount offered through the program. Pilot program would be implemented in FY20.

MTC's Programming & Allocations Committee (PAC)

- April 2018 Programming/Allocation Meeting:
  - MTC/Operators' Proposed Framework was presented to MTC Committee
  - Strong support for program conceptually
  - Commissioners requested MTC staff return to PAC in May 2018 with additional program options, including:
    - Considering which agencies participate
    - Level of discount offered

Caltrain Staff Recommendation

- MTC PAC in May, indicate support for program; an interest in participating; and support for continuing to develop and refine regional program framework
- Continue participating in program development with MTC and other operators
- Continue analysis of potential trade-offs for Caltrain regarding choice to participate or not participate
- Return to Board with additional information when program is further along in development and for consideration of adoption of fare program
- If appropriate, Board adoption of fare change to facilitate Caltrain's participation in program (likely spring 2019)

Questions?