Overview

• Study overview
• Key findings from Existing Conditions and Peer Comparison Reports
• Estimated elasticity of demand for Caltrain’s current system
• Update on MTC’s Regional Means-Based Fare Study
• Next steps
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
Key Questions for the Fare Study

• What is the current elasticity on the system?
• How much revenue can and should Caltrain generate from fares?
• Is the current fare and pass structure the right fit for Caltrain?
• How should Caltrain phase and implement changes to its fare system?
Key Findings from Existing Conditions and Peer Comparison Reports
Average Weekday Riders by Fare Product, 2007 – 2016

- Ridership has doubled since 2007
- Large growth in Go Pass and Clipper Card use in recent years

Source: 2016 Triennial Survey
Total Revenue by Fare Product, 2007 – 2016

- Fastest growing revenue source is One-Way tickets
- Monthly Pass revenue has also had high growth

Source: Caltrain Revenue, 2007 – 2016
# Fare Products by Annual Household Income

<table>
<thead>
<tr>
<th>Fare Product</th>
<th>Under $50,000</th>
<th>$50,000 - $100,000</th>
<th>$100,000 - $150,000</th>
<th>$150,000 - $200,000</th>
<th>$200,000 or more</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-way Ticket</td>
<td>38%</td>
<td>23%</td>
<td>16%</td>
<td>8%</td>
<td>15%</td>
<td>100%</td>
</tr>
<tr>
<td>Day Pass</td>
<td>29%</td>
<td>25%</td>
<td>15%</td>
<td>12%</td>
<td>19%</td>
<td>100%</td>
</tr>
<tr>
<td>Go Pass</td>
<td>5%</td>
<td>27%</td>
<td>25%</td>
<td>17%</td>
<td>26%</td>
<td>100%</td>
</tr>
<tr>
<td>Clipper Cash Value</td>
<td>17%</td>
<td>23%</td>
<td>21%</td>
<td>14%</td>
<td>25%</td>
<td>100%</td>
</tr>
<tr>
<td>Clipper 8-ride ticket</td>
<td>12%</td>
<td>19%</td>
<td>22%</td>
<td>18%</td>
<td>29%</td>
<td>100%</td>
</tr>
<tr>
<td>Monthly Pass</td>
<td>9%</td>
<td>24%</td>
<td>25%</td>
<td>18%</td>
<td>24%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>All Riders</strong></td>
<td><strong>16%</strong></td>
<td><strong>24%</strong></td>
<td><strong>22%</strong></td>
<td><strong>15%</strong></td>
<td><strong>23%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: 2016 Caltrain Triennial Survey*
Fare Product Use by Annual Household Income (2016)

- As annual household income increases, usage of high-value products like Go Pass or Monthly Pass increases.
- One-way tickets are most common in lowest income groups.

Sources: Caltrain Triennial Survey 2016
October 2016 Revenue Per Rider for Full Price Products

- Revenue per rider is highest for One-way TVM and Day Pass
- Revenue per rider is lowest for Go Pass

Sources: Caltrain Triennial Survey 2016; Caltrain Fare Media Sales Based Ridership, 2016; Caltrain Revenue 2016; Go Pass Fare Revenue, 2016
October 2016 Revenue Per Mile for Full Price Products

- Revenue per mile is highest for One-way TVM and Day Pass
- Revenue per mile is lowest for Go Pass

Sources: Caltrain Triennial Survey 2016; Caltrain Fare Media Sales Based Ridership, 2016; Caltrain Revenue 2016; Go Pass Fare Revenue, 2016
Peer System Characteristics

- Fare structure for 19 systems studied (including Caltrain):
  - 12 operate with zone-based fare system
  - 7 operate with fare system of station-to-station pairs

- Zones-based system is regarded as easier to understand for passengers and is easier to enforce

- Station-to-station fares can be seen as more fair for passengers but harder to enforce

Sources: Agency websites, May 2017
Peer System Characteristics

• Of the 19 systems studied, Caltrain has fares that are about average (as of May 2017 Clipper Cash fares):
  - 11th highest base fare (no change after FY18 fare increase)
  - 8th highest maximum fare (7th highest after FY18 fare increase)
  - 10th highest price per track mile (no change after FY18 fare increase)

• Majority of peer systems studied offer monthly pass:
  - Some discount longest trip; some discount shortest trip
  - Others do multiplier for number of trips (like Caltrain)

Sources: Agency websites, May 2017
Farebox Recovery Ratio

- Caltrain has highest farebox recovery of commuter rail systems (2015)

Caltrain Business Metrics

Percentage Change in Key Operating Metrics - CPI Adjusted
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)
Caltrain System’s Demand Elasticity

- Calculated using Caltrain’s newly developed fare elasticity model
- Demand elasticity modeling results:
  - Caltrain’s ridership is inelastic
  - Elasticity value: estimated to be -0.2
- Fare increases are unlikely to result in steep drops in ridership on Caltrain and should be revenue positive
- Resulting policy question: how much revenue should Caltrain generate from its fares?
MTC’s Means-Based Fare Study
Regional Coordination on MTC Means-Based Fare Study

• MTC study for region commenced in 2015
  - Caltrain staff is continuing 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
Next Steps
Next Steps

- Update JPB in May 2018
- Finalize analysis of potential fare scenarios
- Draft Phase 1 Final Report
- Integrate analysis and findings into Caltrain Business Plan
- Determine next steps for Fare Study Phase 2:
  - Additional Go Pass analysis
  - Develop fare policy
  - Pursue Parking Study (anticipated FY19)
Questions?