



# Caltrain Fare Study Update

Caltrain Citizens Advisory Committee

April 18, 2018

Agenda Item #9

# 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

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- 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?

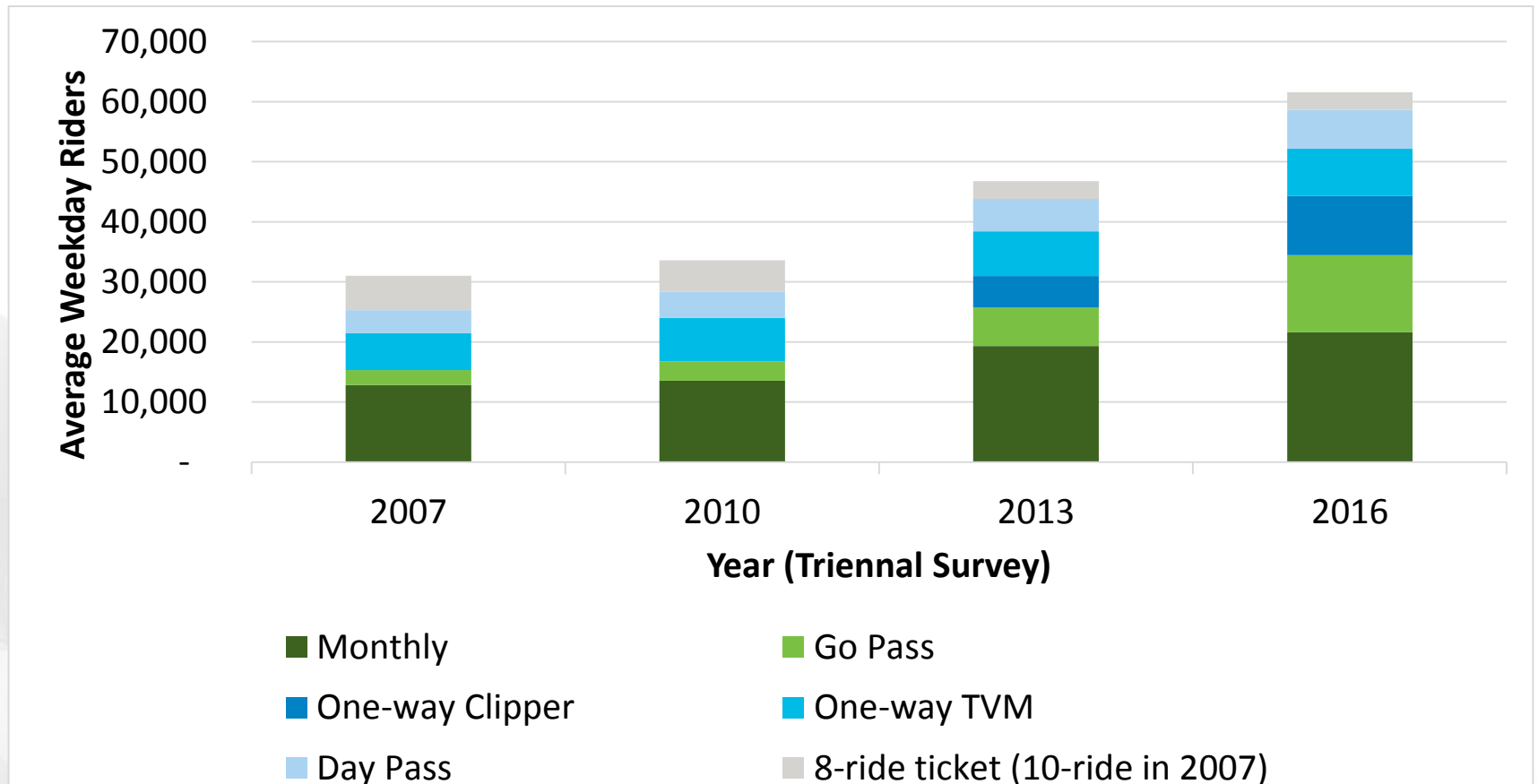
# **Key Findings from Existing Conditions and Peer Comparison Reports**





# Average Weekday Riders by Fare Product, 2007 – 2016

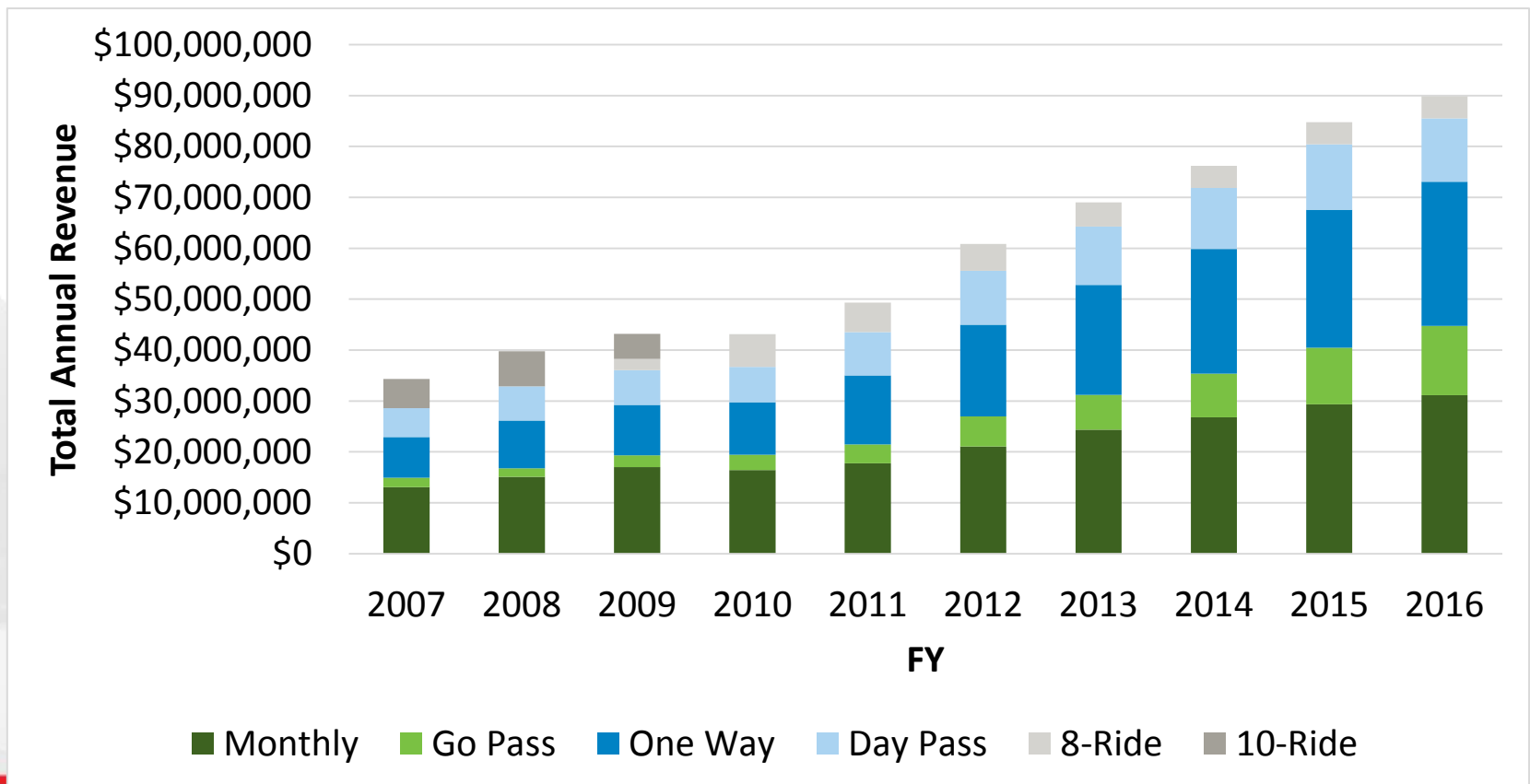
- Ridership has doubled since 2007
- Large growth in Go Pass and Clipper Card use in recent years





# 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

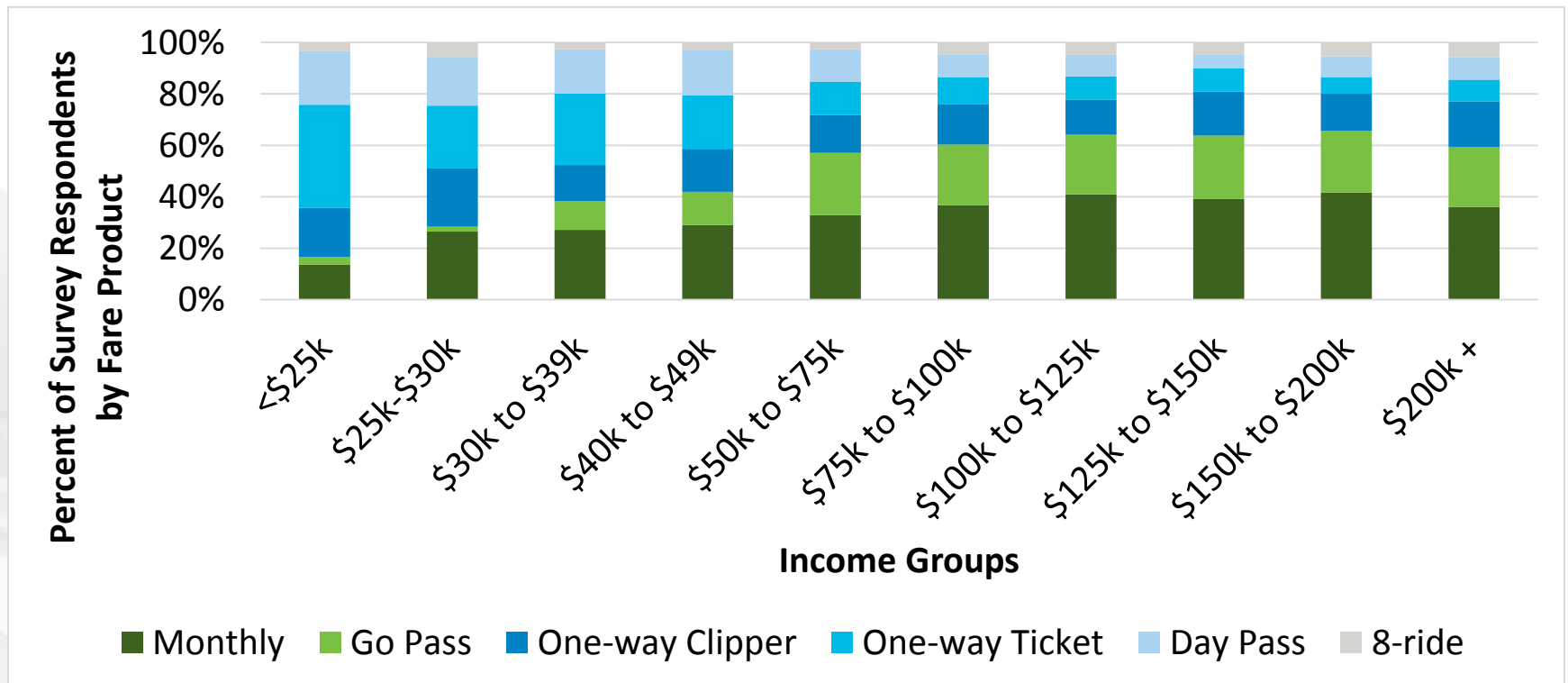
<i>Fare Product</i>	<i>Under \$50,000</i>	<i>\$50,000 - \$100,000</i>	<i>\$100,000 - \$150,000</i>	<i>\$150,000 - \$200,000</i>	<i>\$200,000 or more</i>	<i>Total</i>
One-way Ticket	38%	23%	16%	8%	15%	100%
Day Pass	29%	25%	15%	12%	19%	100%
Go Pass	5%	27%	25%	17%	26%	100%
Clipper Cash Value	17%	23%	21%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

Source: 2016 Caltrain Triennial Survey



# Fare Product Use by Annual Household Income (2016)

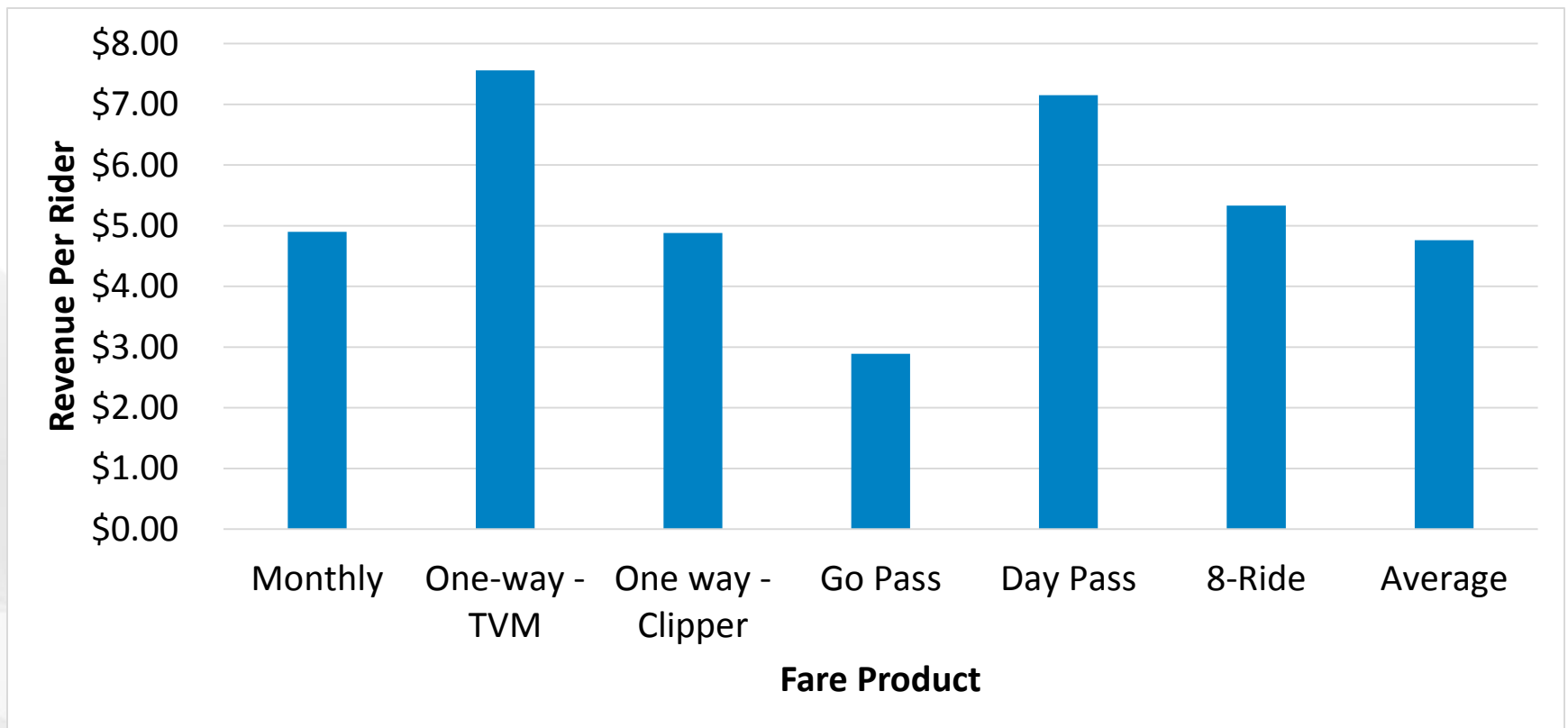
- As annual household income increases, usage of high-value products like Go Pass or Monthly Pass increases
- One-way tickets are most common in lowest income groups





# 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

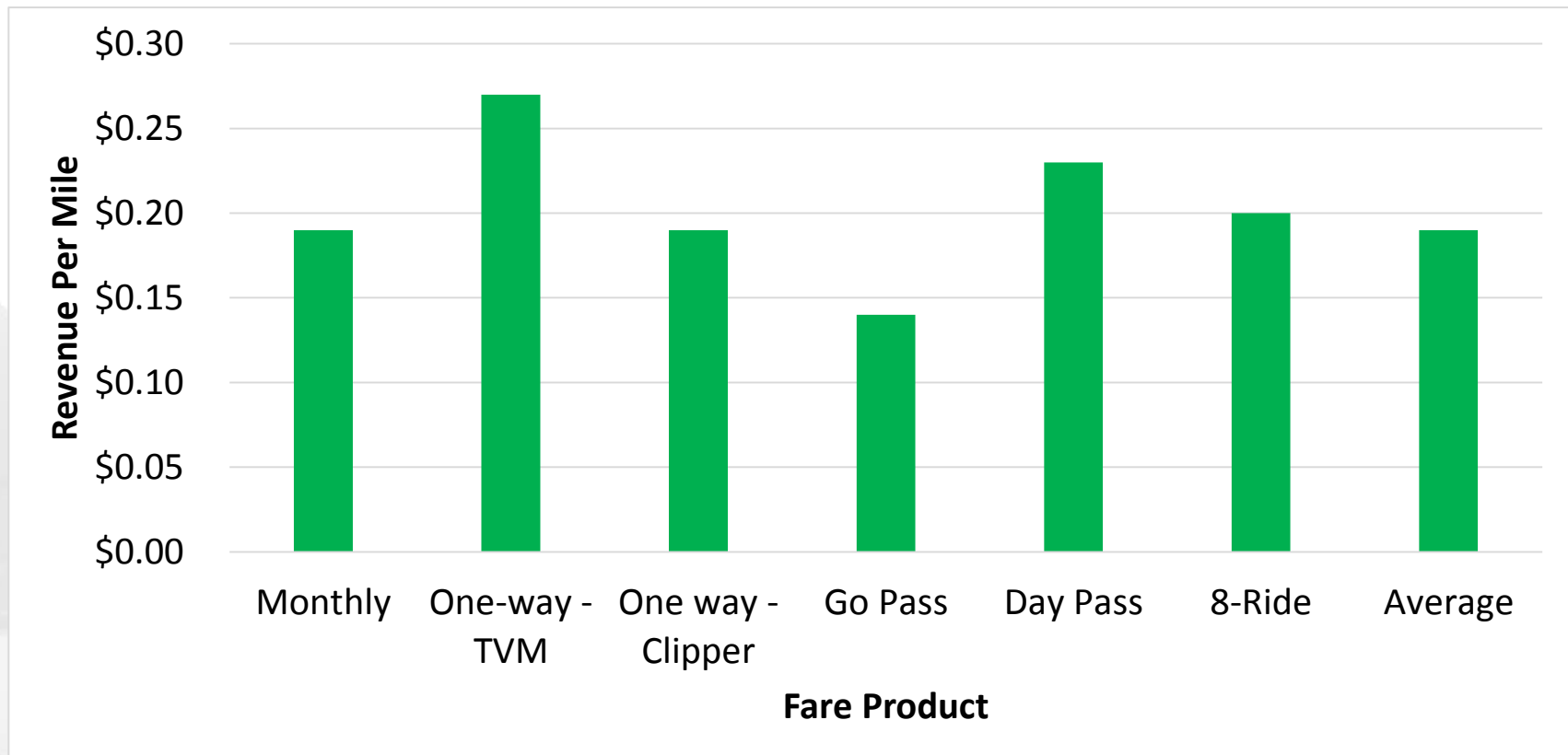


Sources: Caltrain Triennial Survey 2016; Caltrain Fare Media Sales Based Ridership, 2016; Caltrain Revenue 2016; Go Pass Fare Revenue, 2016



# 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

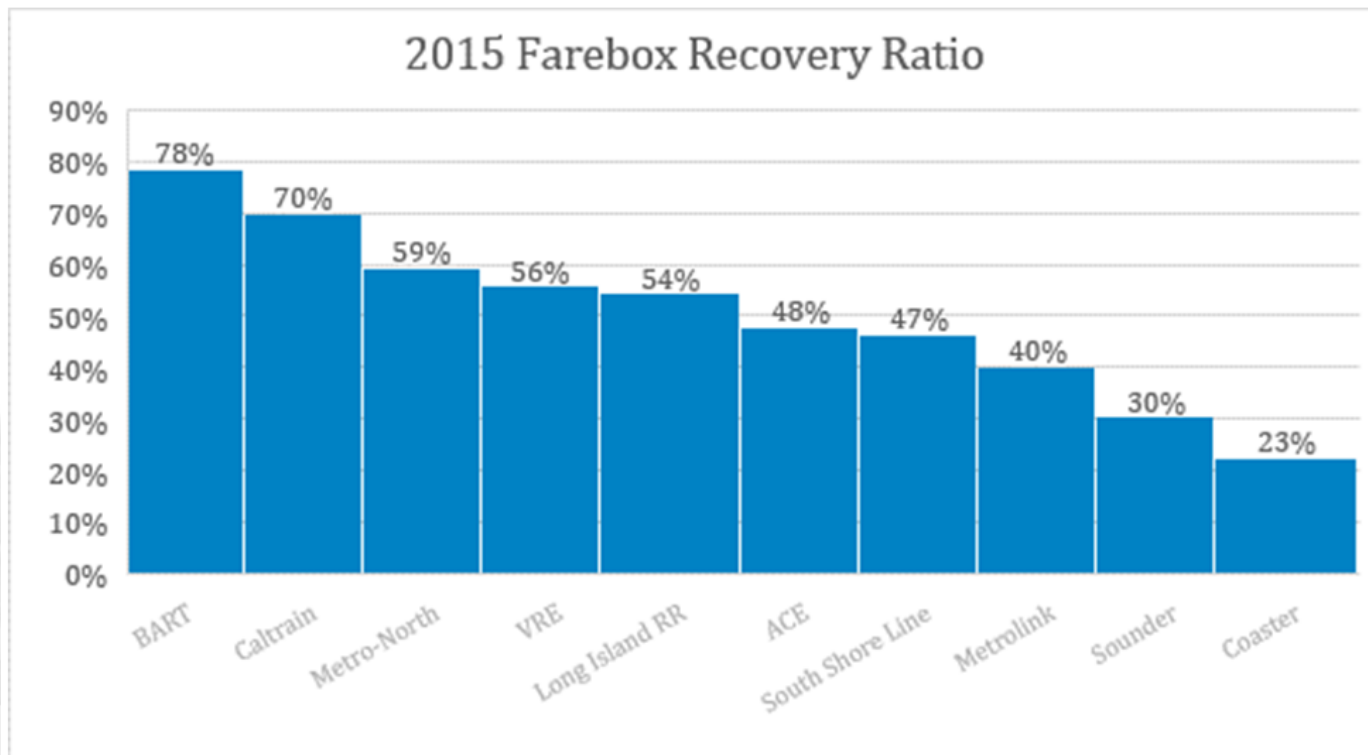
- Fare structure for 19 systems studied (including Caltrain):
  - 12 operate with zone-based fare system
  - 7 operate with fare system of station-to-station pairs
- Zones-based system is regarded as easier to understand for passengers and is easier to enforce
- Station-to-station fares can be seen as more fair for passengers but harder to enforce

# Peer System Characteristics

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

# Farebox Recovery Ratio

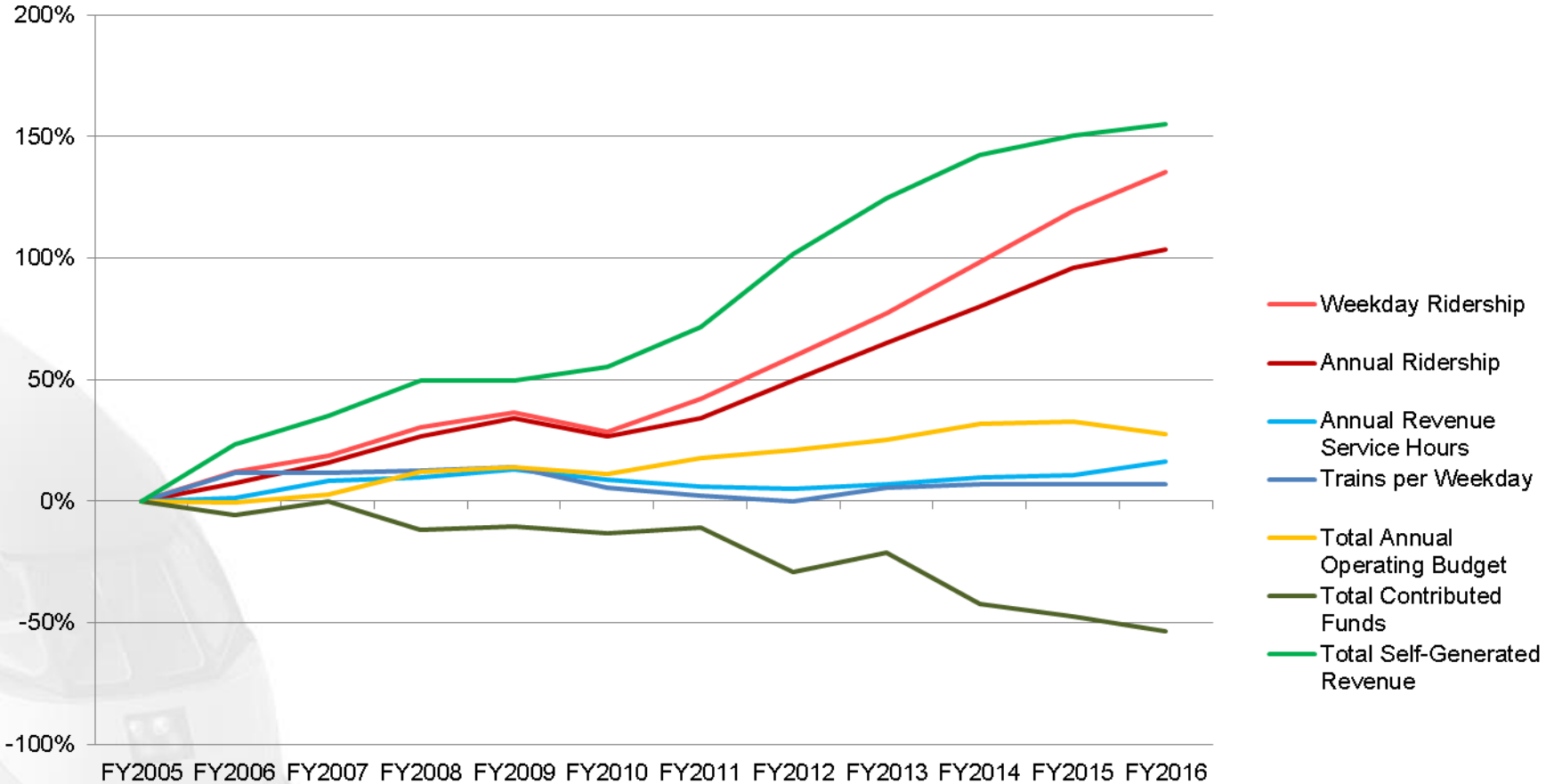
- Caltrain has highest farebox recovery of commuter rail systems (2015)



Source: National Transit Database, 2017.



# 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?**