



Caltrain Business Plan

Setting a Shared Baseline & Project Update

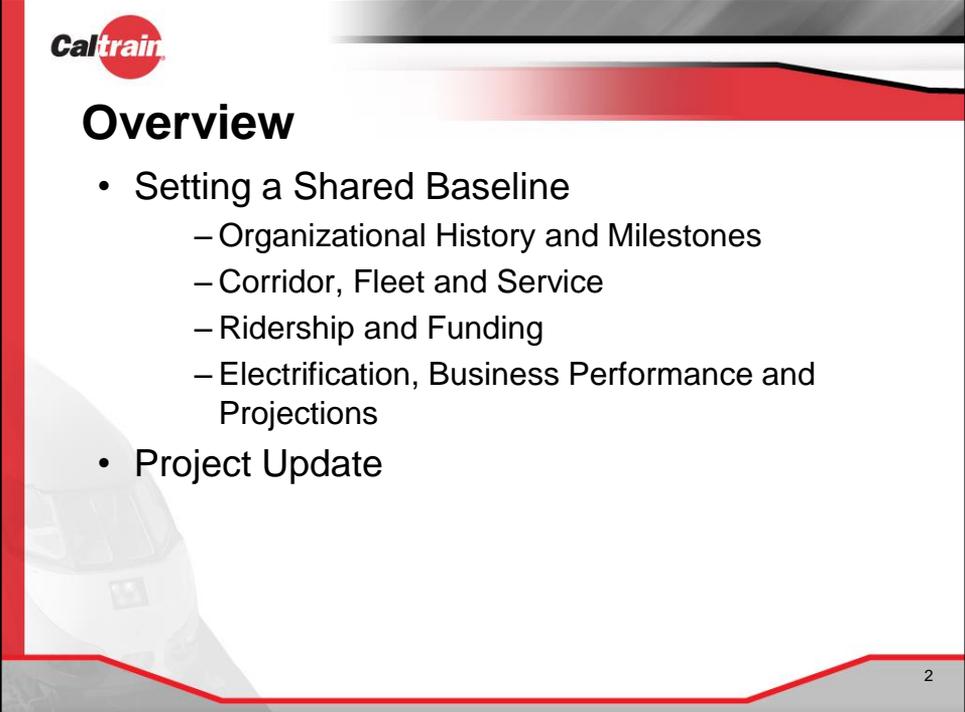
LPMG Meeting
January 2018



Overview

- Setting a Shared Baseline
 - Organizational History and Milestones
 - Corridor, Fleet and Service
 - Ridership and Funding
 - Electrification, Business Performance and Projections
- Project Update

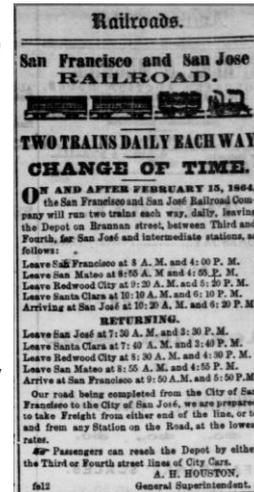
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History and Milestones

- **1860's – 1970's:** Southern Pacific (SP) operated commercial passenger service on the Peninsula corridor between San Francisco and San Jose
- **1980 -1992:** Caltrans assumes responsibility for the passenger service in concert with the three local partners (SamTrans, Santa Clara County Transit District and the City and County of San Francisco). SP operates the service under contract with Caltrans



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History and Milestones

- **Late 1980's:** State decides to withdraw its oversight role and financial support for "Caltrain Service"
- **1988:** Creation of Peninsula Corridor Joint Powers Study Board (JPB) and execution of first JPA to prepare for local takeover. SamTrans designated as managing agency
- **1992:** JPB acquires rail corridor from SP for \$212 million and assumes local control of Caltrain Service
 - \$120 million funded by State
 - Balance fronted by SamTrans
 - Amtrak awarded contract to manage/operate Caltrain Service



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History and Milestones

- **1996:** Amendment and Restatement of JPA
 - Still in effect today (1996 JPA has 10 year term followed by year-to-year continuance)
 - Members share operating costs (net of fares) using formula based on morning boardings
 - Capital costs for system replacement and enhancement shared equally among members
 - Capital funding for system expansion to be determined on a case by case basis

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History and Milestones

- **2004:** Launch of the “Baby Bullet” express service
- **2008:** ROW Reimbursement Agreement
 - Developed plan with MTC for SF and VTA to reimburse SamTrans for their shares of ROW acquisition price (principal only)
 - Designated SamTrans as the Managing Agency of the JPB for as long as SamTrans desires to retain the role
- **2012:** Transit America Services Inc. awarded contract to operate and maintain the Caltrain Service



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History and Milestones

- **2011-2013: Establishment of the Blended System**
 - Congresswoman Anna Eshoo, State Senator Joe Simitian, and Assemblyman Rich Gordon introduce “Blended System” concept as a response to community concerns over proposal for 4-track, fully grade separated system
 - CHSRA Business Plan confirms “early investment” and Blended System approach
 - JPB, MTC, CHSRA and six other funding partners establish an agreement to support joint Caltrain and High Speed Rail operation on a primarily 2-track Blended System and provide early investment to the Caltrain Modernization Program
 - Senate Bill 557 provides Prop 1A funds and codifies into law requirement that the rail system “primarily consist of a 2-track blended system”

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History and Milestones

- **2013-2017: Advancing Electrification**
 - **2015:** Peninsula Corridor Electrification Program environmentally cleared
 - **2016:**
 - Cost updates, Funding Agreements with HSR and supplemental 7-Party MOU executed among funding partners
 - Funding Partner oversight protocols established
 - Contracts awarded to Balfour Beatty (electrification) and Stadler (EMUs); Limited Notices to Proceed issued
 - **2017:**
 - Receipt of Federal Full Funding Grant Agreement
 - Full Notices to Proceed issued to Balfour Beatty and Stadler

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Caltrain
Corridor

JBP owns right-of-way from SF to San Jose (51 miles)

UP owns corridor. JPB has limited trackage rights

- Primarily two track system with some 4-track segments
- Varying right-of-way widths throughout corridor
- At-Grade crossings, viaducts, and bridges
- Primarily JPB owned but with exceptions and variation (especially at and around stations)

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Caltrain
Grade Crossings

- 42 at grade crossings on main line
- Over 400,000 vehicle crossings per day
- Wide variation in traffic levels
- 62 crossings already separated

Total Average Daily Traffic over Caltrain At-Grade Crossing (all modes)

Crossing	County	Approximate Daily Traffic
Mission Bay Dr	San Francisco	15,000
16th Street	San Francisco	10,000
Linden Ave	San Francisco	5,000
Scott St	San Francisco	5,000
Center St	San Francisco	5,000
Broadway	San Francisco	28,000
Oak Grove Ave	San Francisco	10,000
North Lane	San Francisco	5,000
Howard Ave	San Francisco	5,000
Bayswater Ave	San Francisco	5,000
Peninsula Ave	San Francisco	15,000
Villa Terrace	San Francisco	5,000
Bellevue Ave	San Francisco	5,000
1st	San Mateo County	5,000
2nd	San Mateo County	5,000
3rd	San Mateo County	10,000
4th	San Mateo County	10,000
5th	San Mateo County	10,000
9th	San Mateo County	10,000
25th	San Mateo County	10,000
Whipple Ave	San Mateo County	25,000
Brewster Ave	San Mateo County	10,000
Broadway	San Mateo County	10,000
Maple Street	San Mateo County	5,000
Main Street	San Mateo County	5,000
Chestnut Street	San Mateo County	10,000
Fair Oak Lane	San Mateo County	5,000
Watkins Ave	San Mateo County	5,000
Encinal Ave	San Mateo County	5,000
Glenwood Ave	San Mateo County	5,000
Oak Grove Rd	San Mateo County	10,000
Raveswood Ave	San Mateo County	25,000
Alma Street	Santa Clara County	15,000
Churchill Ave	Santa Clara County	10,000
East Meadow Dr	Santa Clara County	10,000
Charleston Rd	Santa Clara County	15,000
Rengstorff Ave	Santa Clara County	20,000
Castro Street	Santa Clara County	15,000
Mary Ave	Santa Clara County	25,000
Sunnyvale Ave	Santa Clara County	10,000
Auzerais Ave	Santa Clara County	5,000
West Virginia Ave	Santa Clara County	5,000



Stations



- 32 Stations
- 29 receive regular weekday service
 - 2.5 in San Francisco
 - 11.5 in San Mateo County
 - 15 in Santa Clara County
- Wide variation:
 - Urban context
 - Intermodal connections
 - Buildings and amenities
 - Ownership and management

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Fleet

- 134 Passenger Cars
 - Gallery and
Bombardier Sets
 - 54% past 30-year life
- 29 Locomotives
 - F40PH-2s and
MP36-3Cs
 - 69% past 30-
year life



Gallery Set



Bombardier Set

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Central Equipment & Maintenance Facility (CEMOF)



- Primary site for inspection, maintenance, train washing, storage, fueling and dispatching
- Completed in 2007
- 20 Acre site north of Diridon in San Jose

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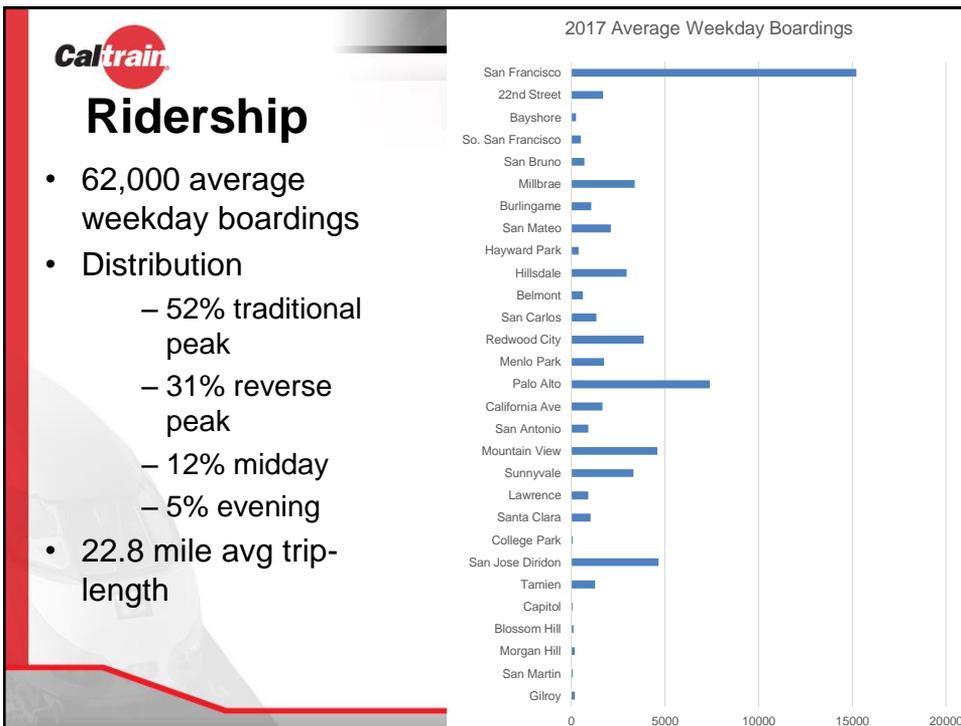
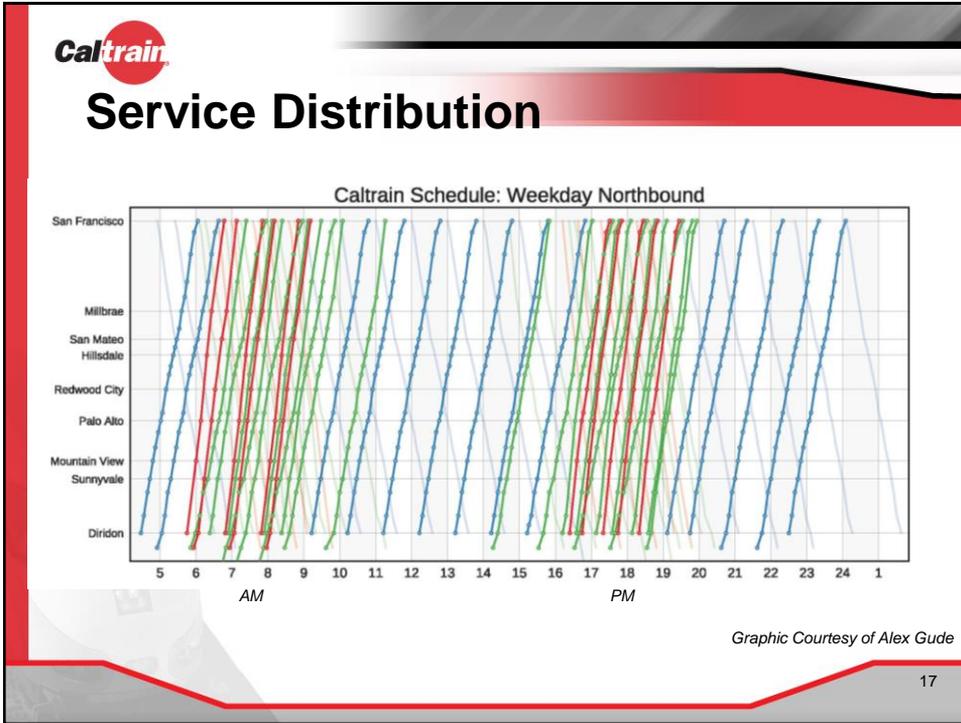


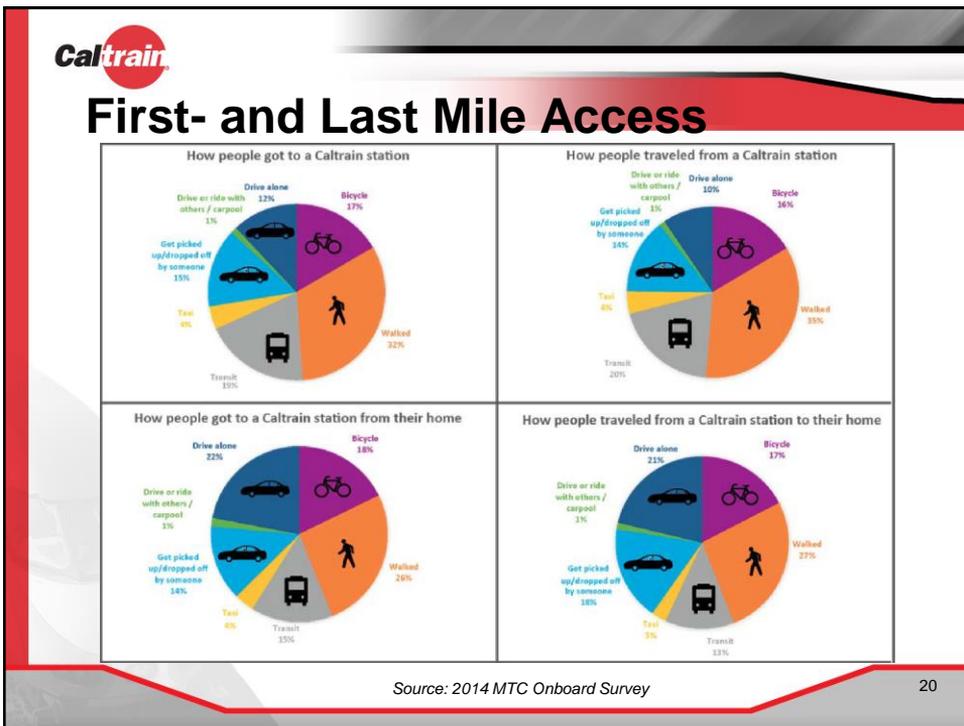
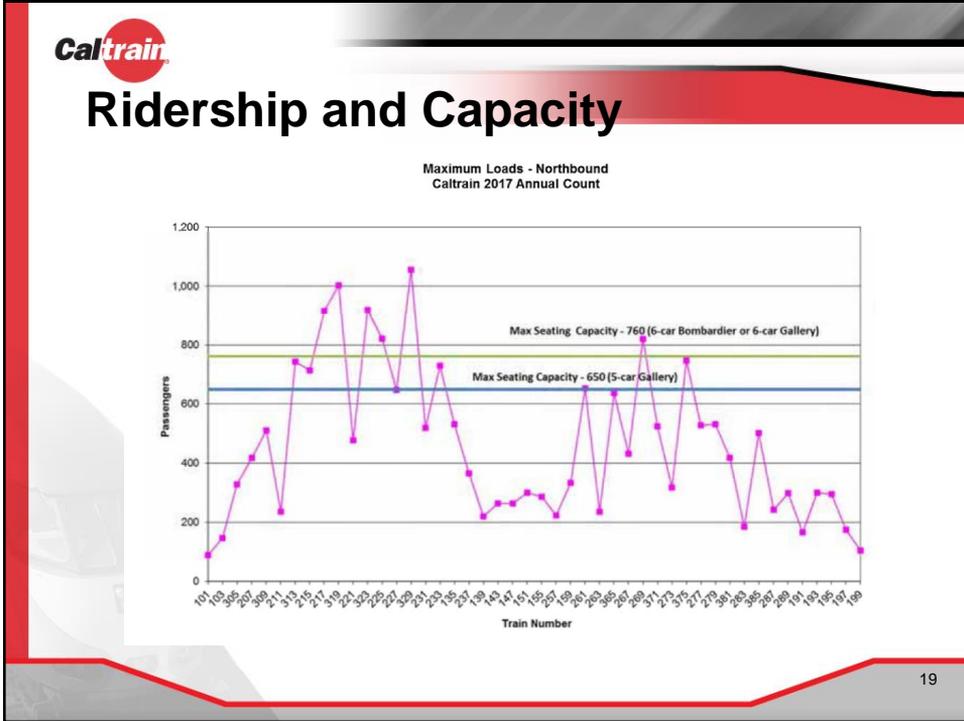
People

- Managed by SamTrans
- Operation of service and maintenance of trains and facilities contracted to Transit America Services Inc (contract through 2022)
- Staffing
 - 65 Rail Division staff + 19 seconded consultants
 - 60 FTE support staff from other SamTrans divisions
 - 485 TASI staff
 - 11 unions represented



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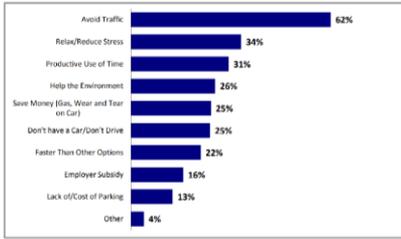




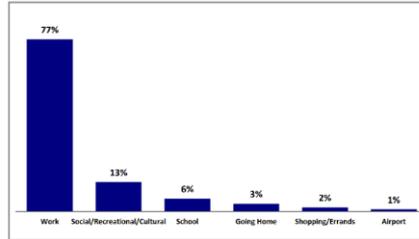


Customer Demographics

Reason for Riding Caltrain



Trip Purpose



Source: 2016 Triennial Survey



Customer Demographics

Household Income

	2016 Total
Base (All Respondents)	5,554
	%
Less than \$24,999 a year	6
\$25,000 to \$29,999	2
\$30,000 to \$39,999	3
\$40,000 to \$49,999	4
\$50,000 to \$74,999	12
\$75,000 to \$99,999	13
\$100,000 to \$124,999	13
\$125,000 to \$149,999	10
\$150,000 to \$199,999	15
\$200,000 or more	23
Total	100

Home Location

	2016 Total
Base (All Respondents)	5,554
	%
BAY AREA (NET)	96%
SANTA CLARA COUNTY	41%
SAN MATEO COUNTY	30%
SAN FRANCISCO	22%
ALAMEDA COUNTY	2%
MARIN COUNTY	<1%
NAPA COUNTY	<1%
CONTRA COSTA COUNTY	<1%
SOLANO COUNTY	<1%
SONOMA COUNTY	<1%
OTHER CALIFORNIA BY COUNTY (NET)	2%
OUTSIDE OF CALIFORNIA (NET)	2%
OUTSIDE THE US	<1%

Source: 2016 Triennial Survey



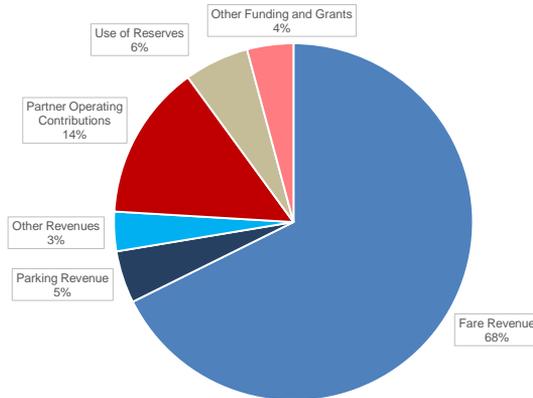
Fares

Fare Product	October 2016 Revenue	October 2016 Riders	Average Trip Distance	Revenue per Mile	Revenue per Ride
<i>Full-Price Products</i>					
Monthly	\$2,644,349	539,578	25.06	\$0.19	\$4.90
One-way - TVM	\$1,222,561	161,806	28.69	\$0.27	\$7.56
One-way - Clipper	\$1,068,078	218,938	25.7	\$0.19	\$4.88
Go Pass	\$957,163	331,500	20.87	\$0.14	\$2.89
Day Pass	\$924,393	129,262	31.94	\$0.23	\$7.15
8-Ride	\$379,260	71,133	26.97	\$0.20	\$5.33
<i>Eligible Discount (ED) Products (Medicare, Senior, Youth, Disability)</i>					
ED Monthly	\$69,325	26,830	21.09	\$0.13	\$2.58
ED One-Way - TVM	\$77,442	22,929	22.26	\$0.16	\$3.38
ED One-Way - Clipper	\$60,598	23,291	20.69	\$0.13	\$2.60
ED Day Pass	\$58,989	20,095	27.48	\$0.11	\$2.94
ED 8 Ride	\$8,330	4,571	18.87	\$0.09	\$1.82
Total	\$7,470,488	1,570,822	25.11	\$0.19	\$4.76



Revenue and Funding

Operating Funding Sources - FY18 Adopted Budget

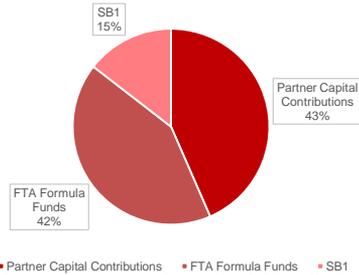


Total FY18 Operating Budget = \$145 Million



Revenue and Funding

Annual Recurring Capital Funding Sources



- Total FY18 recurring sources of capital funding = \$34.5 million
- Used for track, bridge and system repair as well as capitalized rolling stock maintenance and station repairs
- Not sufficient to cover ongoing SOGR needs, especially for rolling stock
- Specific enhancements or localized capital projects typically have separate funding plans



Electrification - Overview



Area	Project	Service
51 miles San Francisco to San Jose (Tamien Station)	Electrification: <ul style="list-style-type: none"> • Overhead Contact System (OCS) • Traction Power Facilities Electric Trains (EMUs) <ul style="list-style-type: none"> • 75 percent of fleet 	Up to 79 mph Service Increase <ul style="list-style-type: none"> • 6 trains / hour / direction • More station stops / reduced travel time • Restore Atherton & Broadway service Mixed-fleet service (interim period) Continue tenant service <ul style="list-style-type: none"> • ACE, Capital Corridor, Amtrak, Freight



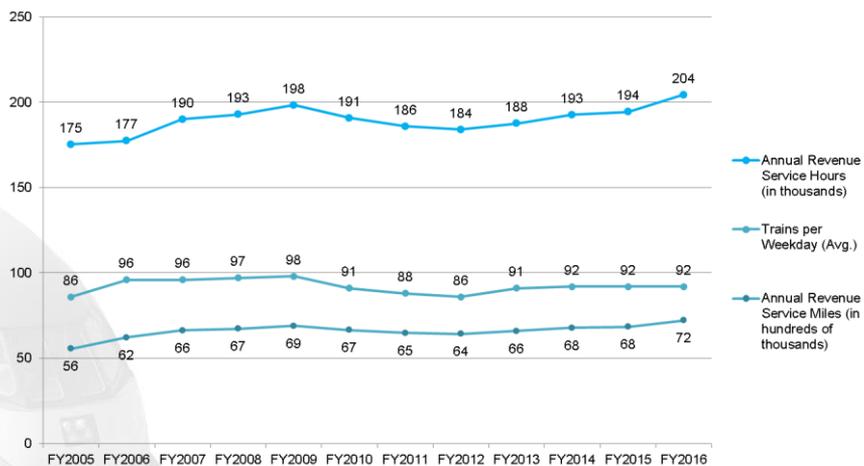
Electrification - Financial Outlook

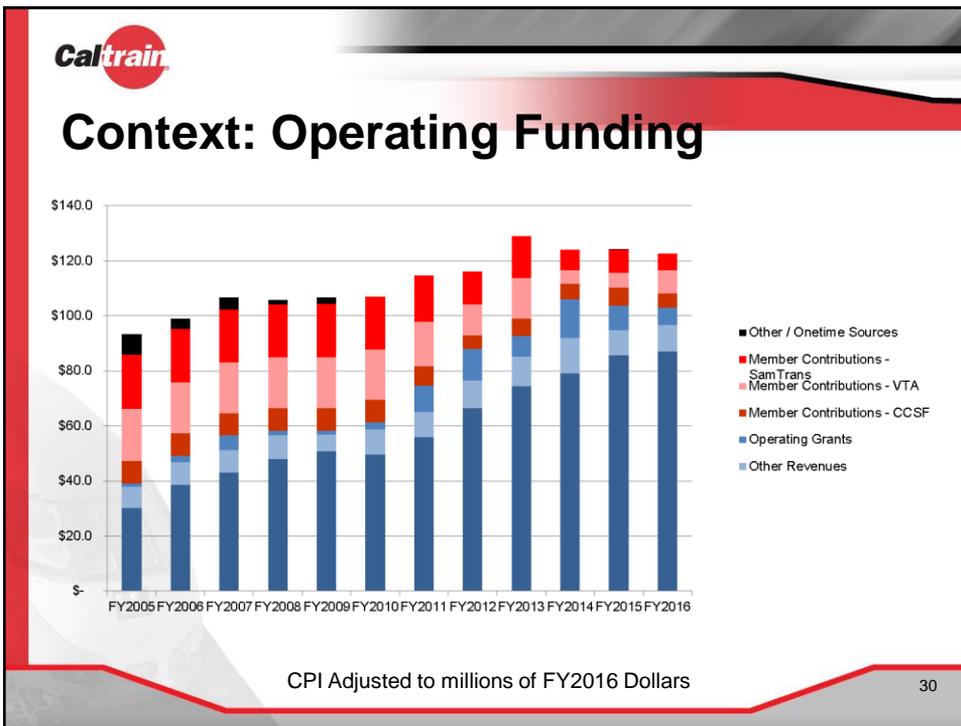
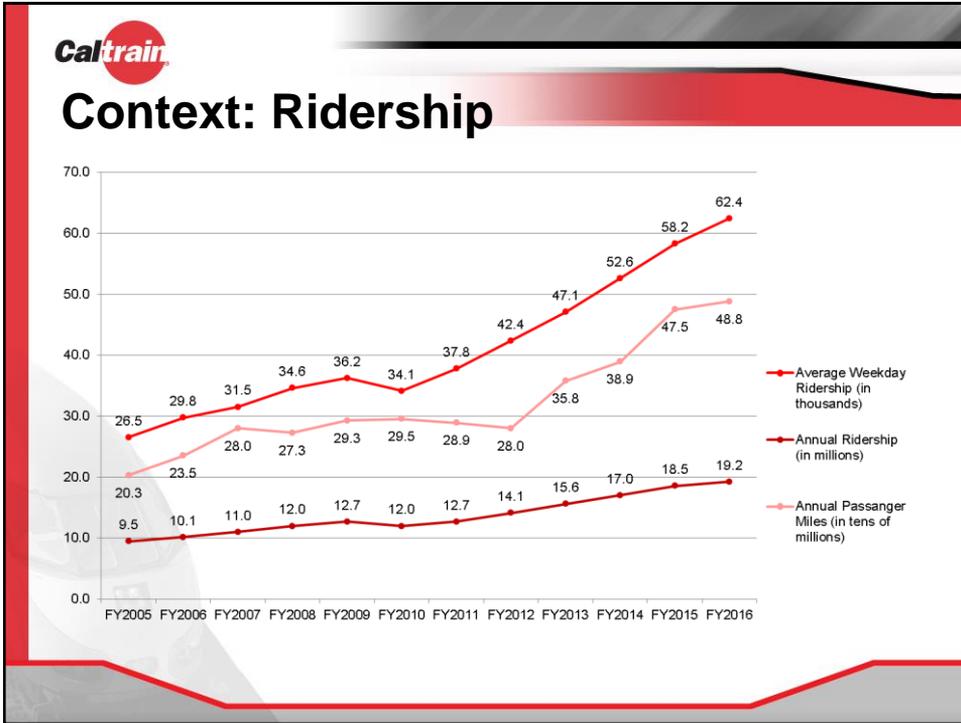
- Projections show that electrification will allow Caltrain to serve more riders at a lower cost per passenger
- However, Caltrain projects an ongoing annual need for \$30-\$40 million in operating subsidies:
 - Similar to FY2001-2011 (\$30 - \$40 million typical)
 - More than recent years (\$17-25 million)
- Need for capital funding also increasing as existing infrastructure and fleet ages and new systems are added
- Caltrain will be at risk if member contributions fall short or if ridership significantly declines

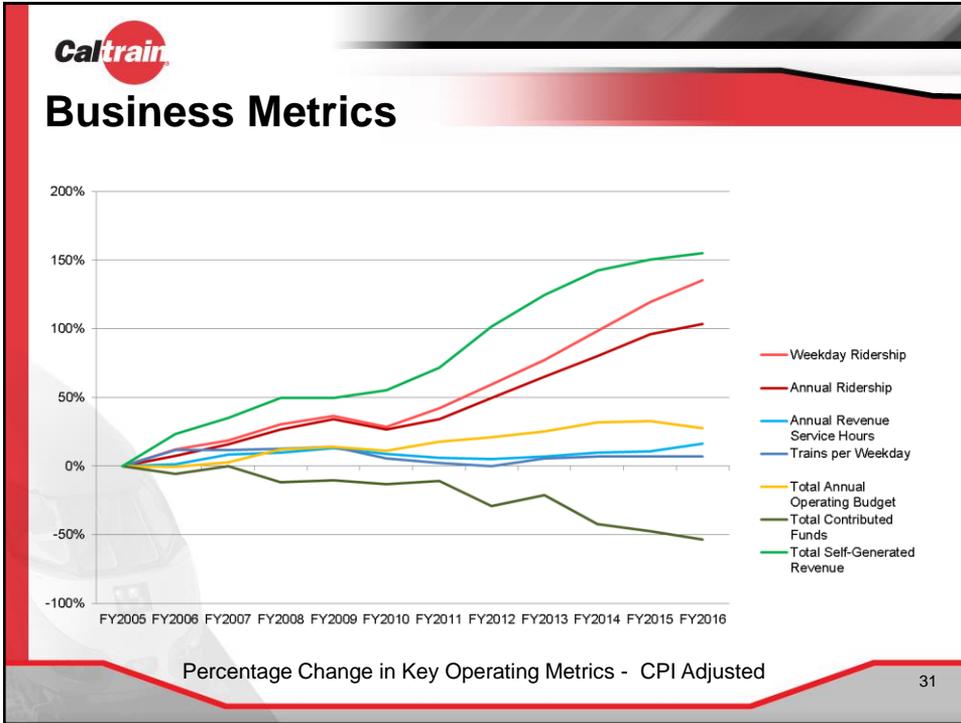
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Business Metrics







Caltrain

Caltrain Business Plan Project Update



The Caltrain Business Plan



The purpose of the Caltrain Business Plan is to maximize the value of the public investment in Electrification

The Business Plan will identify the steps and resources needed to truly modernize the railroad

The Business Plan will lay out the strategic position and importance of the Caltrain corridor and how Caltrain can maximize its effectiveness and integrate with a growing, megaregional rail system



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Process

- April 2017 - Business Plan concept introduced to JPB
- July – Update to JPB
- August – Formation of Ad Hoc Committee
- September – Stakeholder workshop
- October / November – Ongoing outreach
- December – Draft Business Strategy and Scope presented to JPB

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Draft Business Strategy

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Key Questions

- Stakeholder outreach helped identify three “big picture” interrelated questions



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graph TD; A[What is the Service Vision for Caltrain?] <--> B[How Can the service be delivered as effectively as possible?]; A <--> C[How does Caltrain interact and connect with the communities it touches?]; B <--> C;
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Draft Business Strategy

- Caltrain's core business is rail service.
- The primary task of the Business Plan is to aid in the selection of a detailed, achievable Service Vision for Caltrain that provides maximum value to its customers.
- Caltrain's organizational, governance, and commercial and contracting strategies will be evaluated as part of a comprehensive structural assessment of what is needed to deliver value and support the long term success of the Service Vision.
- The Business Plan should explore economic, policy and technical approaches that will allow Caltrain to strategically and equitably manage its interface with communities in a way that minimizes impacts, generates value, and supports the Service Vision.

What is the Service Vision for Caltrain?

How Can the service be delivered as effectively as possible?

How does Caltrain interact and connect with the communities it touches?

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Draft Scope of Work

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Task 2- Identifying Options

- Analyze options for the evolution of rail service on the Peninsula corridor (trains/hour, local vs. express, stopping patterns and connectivity)
- Understand infrastructure, fleet, ridership, cost and revenue implications and develop “business case” analysis of choices
- Assess the “Caltrain Organization” and understand how peer railways are organized nationally and internationally
- Identify and quantify the full range of community impacts, benefits and opportunities the railroad creates. Focus on value creation / development and grade-crossing impacts

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Proposed Board Action – Adopt a “Service Vision”

- Adopt a long range “Service Vision” for the Caltrain corridor including:
 - Incremental, interim steps and timeframes to evolve from current service levels to the 2040 Service Vision
 - Preliminary performance targets for Caltrain service including ridership, service characteristics, costs and revenues.
- Provides guidance for development of detailed business plan
- Supports ongoing plans and projects throughout region including planning work related to Diridon
- Serves as the basis for grounding future organizational needs and understanding of community benefits and impacts

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Task 3- Develop the Business Plan

- Optimize and refine the service assumptions included in the “Service Vision”. Detailed focus on the first 10-years of electrified service
- Incorporate additional issues and strategies including customer experience, first- and last-mile connections, TOD, fares and retailing strategies
- Work with Caltrain’s partners to develop an organizational strategy identifying how the organization could grow and change in support of the Service Vision
- Work with Caltrain’s partners and local jurisdictions to develop a community interface strategy that maximizes the community benefits the Service Vision creates while minimizing and mitigating impacts

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Task 4- Funding and Implementation

- Develop a funding plan or funding scenarios for implementation of recommend services and investments
- Understand what can be funded through self-generated revenues and monetization of assets
- Identify where new funding sources may be needed and analyze potential options including measures, value-capture strategies and public private partnerships
- Develop a focused implementation plan that identifies steps that the organization and its partners must take within the next 5-years

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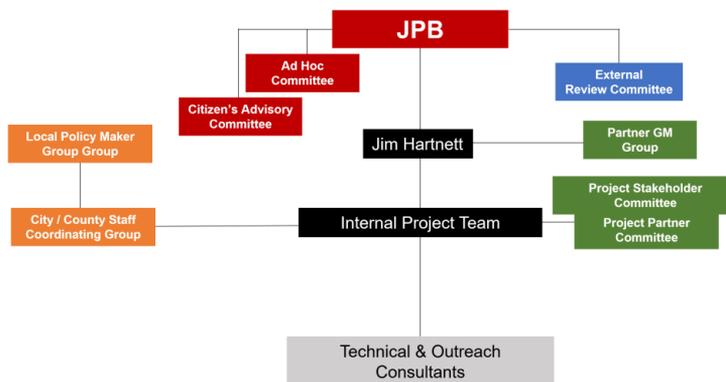
Outreach and Engagement

- Major outreach and engagement campaign planned
- Customer and public engagement through dedicated website and visual communications tools, meetings, station-based outreach, social media engagement and surveying
- Coordination with local jurisdiction staff and policy makers through the City and County Staff Coordinating Group / LPMG as well as direct meetings
- Outreach to state and federal policymakers
- Presentations to partner agency boards and committees
- Coordination and outreach to community groups, advocacy organizations and business groups

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Project Structure



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Next Steps

- Continue outreach and take feedback on materials
- Revise Business Strategy and Scope
- Identify initial funding and begin consultant procurement activities
- Present refined Business Strategy and Scope to Board for proposed adoption in February 2018