Longer Trains / Platforms

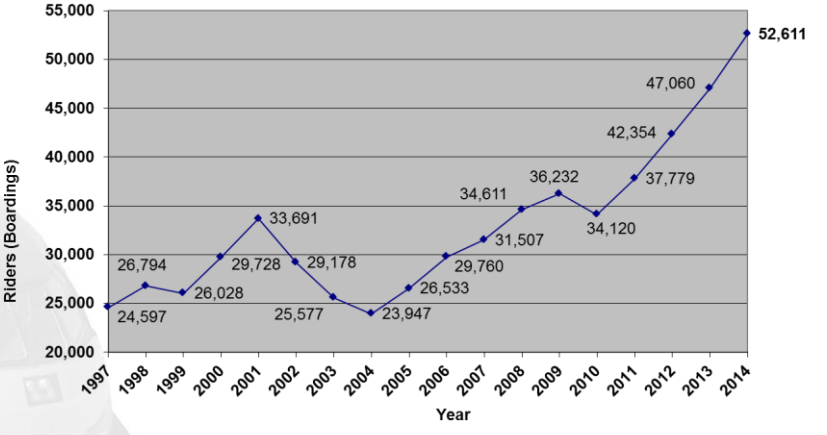
LPMG
May 22, 2014

Caltrain Today

Key Facts

- Diesel commuter rail system
- San Francisco to Gilroy
- 77 mile corridor, 32 stations
- 92 trains on weekday / 36 Saturday / 32 Sunday
- Ridership: 50,000+ weekday

Caltrain Ridership



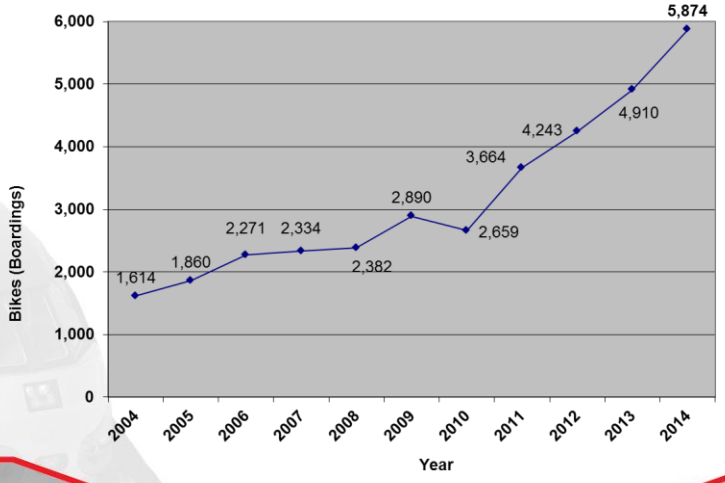
2014 Top Ridership Trains

Northbound			
Train Number	Depart SJ	Max Load	Percent of Seated Capacity
319	7:03 AM	796	123%
323	7:45 AM	746	115%
329	8:03 AM	738	114%
375	5:23 PM	689	106%
217	6:57 AM	675	104%
225	7:50 AM	674	104%
233	8:40 AM	641	99%
313	6:45 AM	632	97%

Southbound			
Train Number	Depart SF	Max Load	Percent of Seated Capacity
376	5:33 PM	813	125%
370	5:14 PM	706	109%
366	4:33 PM	690	106%
268	4:56 PM	670	103%
278	5:56 PM	648	100%
324	8:14 AM	622	96%
322	7:57 AM	622	96%

Note: February 2014 counts (lower ridership season)

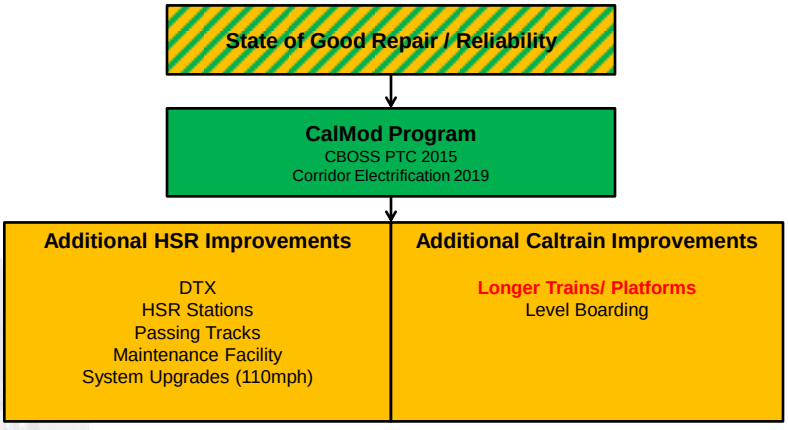
Average Weekday Bike Ridership



Bikes on Board Program

- Bike bumps significantly reduced
- 2004
  - 16 to 32 bikes per train,1-2 bike cars
- 2009
  - 40 to 80 bikes per train, 1-2 bike cars
- 2011
  - 48 to 80 bikes per train, 2 bike cars

Incremental Investments



Note: Orange has no funding plan; Green has funding plan

Service / Capacity Improvements

State of Good Repair/ Reliability	CBOSS PTC Corridor Electrification EMUs	Additional Improvements	Ridership Demand Forecast *(PCEP DEIR 2014)*
• Foundation	• Closer headways • 10 slots ph/pd • 6 Caltrain trains ph/pd* • More station stops and/or reduced travel time	• More seats • Shorter dwells at stations	• Today: ~50,000 • 2020: 69,000 • 2040: 111,000

** Note: 4 slots for high-speed rail*

PCEP Ridership Projections

- Demand driven approach
- Tool: VTA model (systemwide projections)
- Key model inputs:
  - 2013 ABAG projections
  - MTC Regional Transportation Plan
  - Prototypical schedules (PCEP DEIR 2014)

Longer Trains / Platforms Considerations

Program Concept

- Lengthen EMUs from 6 to 8 car trains
  - Increase seat capacity by ~33%
  - Provides comfort for 20 – 30 mile trips
- Platforms need 700 ft.
  - 18 / 27 PCEP stations need extension
  - Challenging at 12 stations (i.e. vehicle and/or pedestrian crossing, holdout)

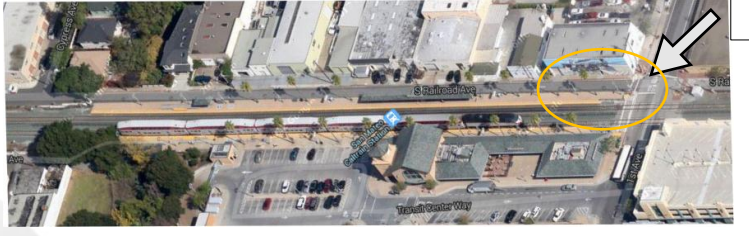
Platforms (8-car EMUs)

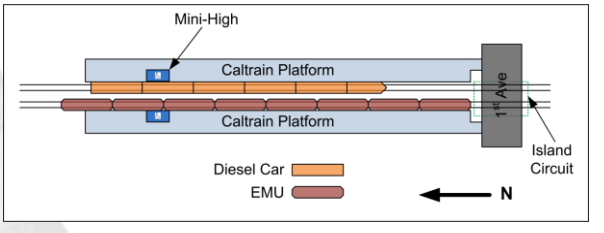
No Extension Needed	Extension Needed	Extension Needed + Difficult
4th and King	Belmont	22nd Street*
Bayshore	California Ave	Atherton*
Diridon	San Antonio	Broadway*
Lawrence	San Carlos	Burlingame
Millbrae	San Mateo	College Park*
Palo Alto	Santa Clara (SB)	Hayward Park
San Bruno		Hillsdale
Santa Clara (NB)		Menlo Park
Stanford		Mountain View
Tamien		Redwood City
		South San Francisco*
		Sunnyvale

** Additional Improvements Hold-Out or ADA*

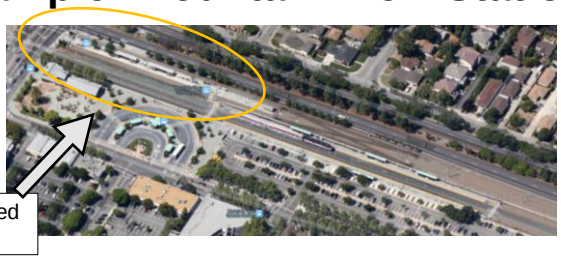
Top 10 highest ridership station

Example: San Mateo Station (easy)

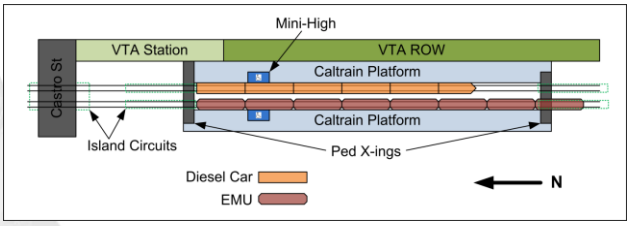




Example: Mountain View Station (difficult)



Constrained Area



Rough Cost Estimates

- Vehicle
  - Addition to 96 EMUs for electrification
  - Full EMU Conversion (42 EMUs): $210m
  - 8-Car EMUs (~46 EMUs): $230m
- Platform Extension
  - $1m - $2m / station
  - Assume limited modifications within ROW
  - Does not include cost for level boarding

Discussion