



Caltrain Bike Parking Management Plan Update

Bicycle Advisory Committee

January 19, 2017



Overview

- Background and Purpose
- Update on Summer and Fall 2016 Activities
- Next Steps



Background and Purpose

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Context for Project

- Capacity and Access Issues
- Forthcoming Caltrain Electrification Project
- Growing Bike-Based Trips



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Key Questions

- What is the market for bike parking at Caltrain?
 - What will the future demand for bike-based trips to Caltrain be?
 - What mix of bike parking will best serve Caltrain customers?
 - Which customers will always choose to bring their bike on board vs. which ones might choose to park a bike if better facilities were available?

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Key Questions, continued

- How can Caltrain deliver high-quality bike parking?
 - What goals and standards should apply to our bike parking system?
 - What is the best model for managing and operating a bike parking system? What resources may be needed?
 - How should we focus and phase investments in the bike parking system?

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Update on Summer and Fall 2016 Activities

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Overview of Summer/Fall Activities

- Outreach
 - Website with comment form
 - BAC Subcommittee for surveys
- Data Collection
 - Analysis of data from various surveys
 - Bike rack occupancy survey
 - Keyed locker utilization survey
- Customer Outreach
 - On-board intercept survey
 - Online survey
 - Focus groups

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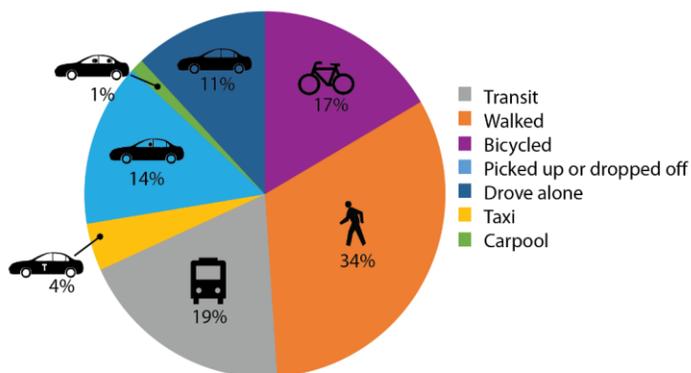
Analysis of Multiple Surveys

- 2016 Annual Count (conducted annually)
- 2013 Access Survey (conducted for Caltrain electrification project)
- 2014 On-Board Transit Survey (used by MTC in its regional travel demand model)

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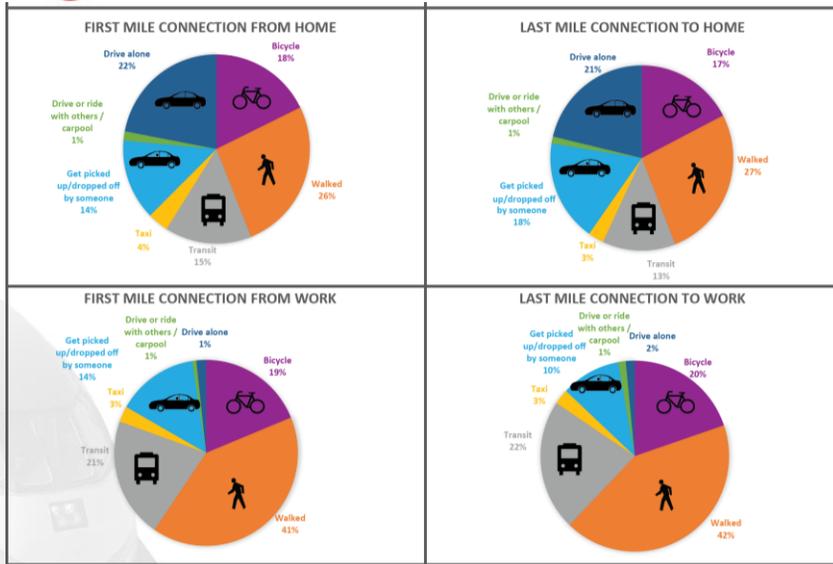
Overall Mode of First and Last Mile Connections to Caltrain



Source: 2014 Caltrain On-Board Transit Survey Data

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Caltrain First and Last Mile Connections to Caltrain

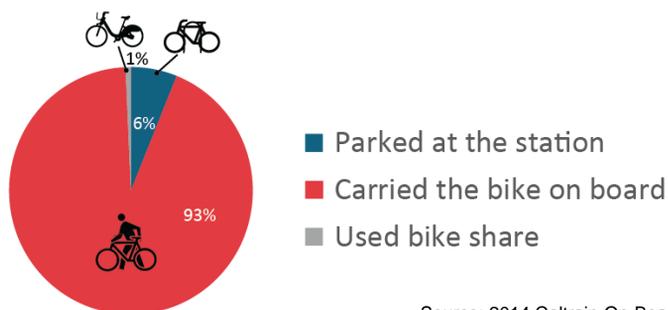


Source: 2014 Caltrain On-Board Transit Survey Data

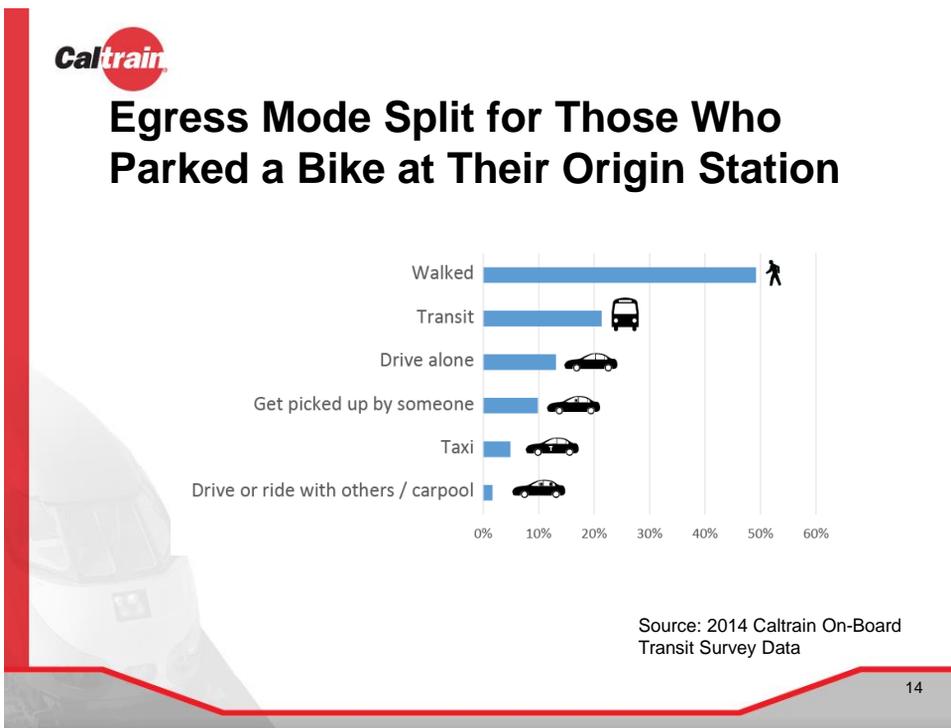
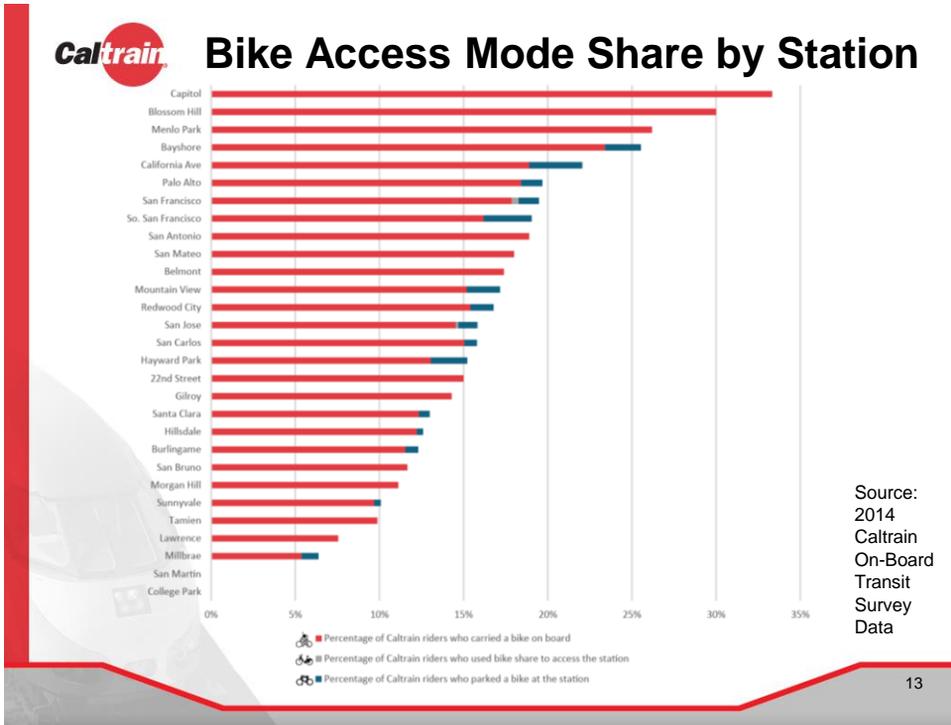


First Mile Connections by Bike

Most people who rode a bike to the station took it with them on board
 Among people who rode a bike to the station...

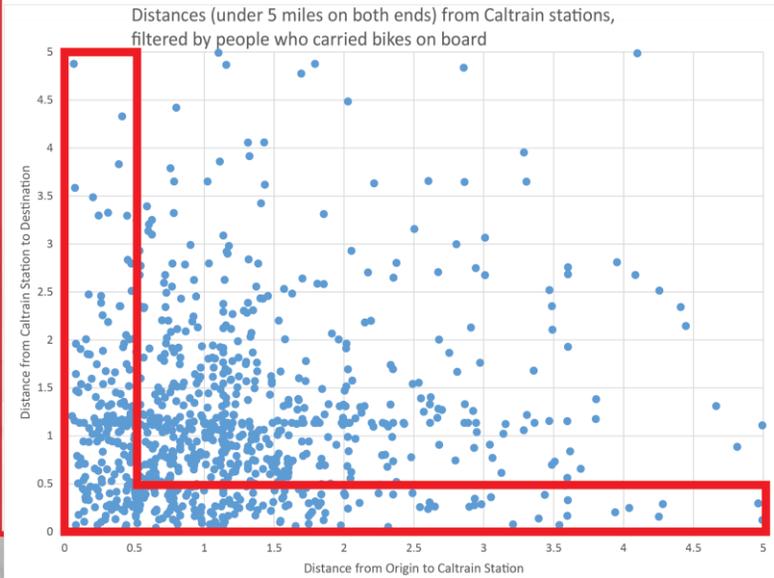


Source: 2014 Caltrain On-Board Transit Survey Data





Distance of Origins/Destinations of People who Bring Bikes On Board



Source:
2014
Caltrain
On-Board
Transit
Survey
Data



Caltrain Bike Rack Occupancy Survey

Average Bike Rack Occupancy Rate

Station	Capacity	Average Occupancy Rate (over 3 days)
San Carlos	40	23%
Redwood City	20	73%
Palo Alto	184	53%
Mountain View	26	83%
San Jose Diridon	10	57%
TOTAL	280	53%

Notes:

1. Bike racks constitute about 30% of Caltrain's total bike parking supply.
2. Surveyed between 10am – 1pm on 11/1/16, 11/2/16, and 11/4/16.



Caltrain Keyed Bike Locker Utilization Survey

Average Keyed Bike Locker Utilization Rate

<i>Station</i>	<i>Keyed Lockers</i>	<i>Rented Lockers</i>	<i>Average Utilization Rate (over 5 days)</i>
San Francisco	180	159	18%
San Carlos	36	34	12%
Mountain View	116	104	15%
Total	332	297	14%

Notes:

1. Keyed bike lockers constitute about 50% of Caltrain's total bike parking supply.
2. Surveyed each evening on 11/14/16 – 11/18/16.

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Caltrain Keyed Bike Locker Utilization Survey

Breakdown of Weekly Individual Locker Usage

<i>Days Used</i>	<i>San Francisco</i>	<i>San Carlos</i>	<i>Mountain View</i>	<i>Overall</i>
0	65%	71%	72%	68%
1	111%	12%	6%	9%
2	9%	9%	11%	9%
3	4%	6%	4%	4%
4	3%	3%	3%	3%
5	7%	0%	5%	5%

Notes:

1. Keyed bike lockers constitute about 50% of Caltrain's total bike parking supply.
2. Surveyed each evening on 11/14/16 – 11/18/16.

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E-Locker Utilization at Caltrain Stations

E-Locker Utilization for 2016

<i>Station</i>	<i>Number of Lockers</i>	<i>BikeLink Cards per Locker per Year</i>	<i>Approximate Rentals Per Month</i>
Millbrae	24	TBD	TBD
San Mateo	12	8.58	150-200
Hayward Park	4	3.25	6
Hillsdale	12	8.92	100-150
Sunnyvale	4	26.75	45-60

Notes:

1. Electronic bicycle lockers are reserved on-demand, on a first come, first served basis using an electronic debit card.
2. BikeLink is the vendor which manages the e-lockers and electronic stored value cards and is the source of this data.

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Shared Bike Parking Facilities

Shared Parking Facilities (2016)

<i>Station</i>	<i>Parking Spots Available</i>	<i>Average Spots Used Per Day</i>
San Francisco 4 th and King Bike Valet Station	200 in racks; 250 at maximum capacity	145 – 180 bikes per day (200+ bikes about once a week)
Menlo Park Bike Shelter	50	TBD
Palo Alto BikeStation	96	TBD; 80% of users store bikes overnight
Mountain View Bike Shelter	40	110 rental agreements; 10-15 use daily

Notes:

1. San Francisco 4th and King Bike Valet Station operated by Bikehub for Caltrain.
2. Menlo Park Bike Shelter operated by Caltrain under keyed locker agreement.
3. Palo Alto BikeStation operated by City of Palo Alto.
4. Mountain View Bike Shelter operated by City of Mountain View.

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Caltrain On-Board Intercept Survey

- An on-board intercept survey in the bike cars
- Conducted in July 2016 during morning peak commute hours
- 328 participants
- Fairly representative of typical commute trips:
 - 97% started their trip from home
 - 90% destined for work/school
 - 59% used Caltrain five days/week
 - 79% were making a round trip

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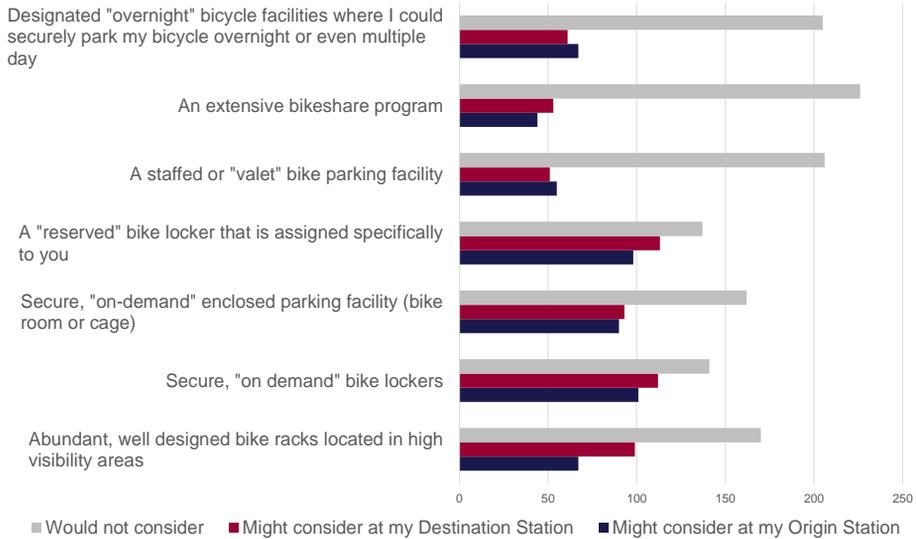
Caltrain On-Board Intercept Survey

- Top reasons for bringing bike on board (respondents could choose 1+ options):
 - Need bike at other end of the trip – 88% of respondents
 - Didn't feel bike would be secure if parked at the station (worried about theft) – 20% of respondents
 - Need bike to run errands during the day – 14% of respondents
 - Am used to bringing bike on board and hadn't thought about parking it at the station – 14% of respondents

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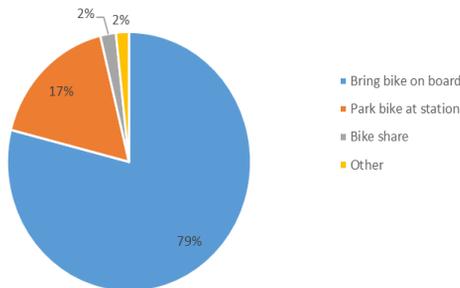
Caltrain On-Board Intercept Survey

How would the following parking facilities or programs at the Caltrain stations you use influence your decision to bring a bike on board the train in the future?



Caltrain Online Survey

- An online survey open to all
- Live from 11/8/16 to 11/29/16
- About 1,200 participants
- 870 participants ride a bike to/from Caltrain at least once a month:





Caltrain Online Survey

- Top reasons for bringing bike on board:
 - Need bike at other end of the trip (use a bike to get to and from Caltrain) – 85% of bikes-on-board respondents
 - Didn't feel bike would be secure if parked at the station (worried about theft) – 51% of bikes-on-board respondents
 - Need bike to run errands during the day – 24% of bikes-on-board respondents
 - Bike parking facilities at the station require advanced sign up, cost money, or rules/regulations are too much of a hassle – 16% of bikes-on-board respondents

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Caltrain Online Survey

- Top reasons for *not* bringing bike on board:
 - Crowded bike cars – 59% of bike parkers
 - Stress of being bumped or denied boarding if the bike car is full – 50% of bike parkers
 - Bike loading process is complicated – 34% of bike parkers
 - Don't like carrying bike up the steps – 30% of bike parkers

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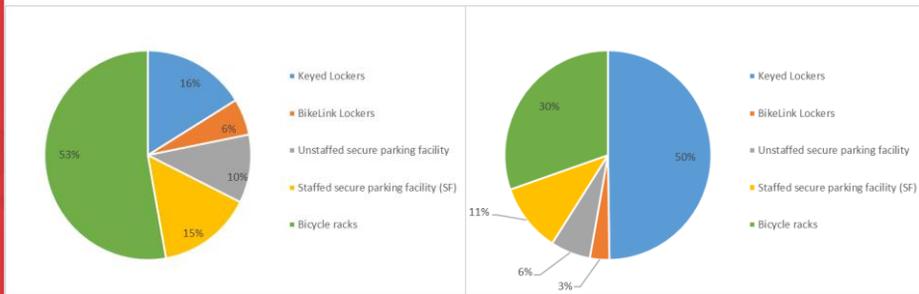


Caltrain Online Survey

- Discrepancy between bike parking facilities used and types of bike parking facilities supplied by Caltrain

Participants' Reported Use of Bike Parking Facilities

vs. Caltrain's Current Bike Parking Facility Supply



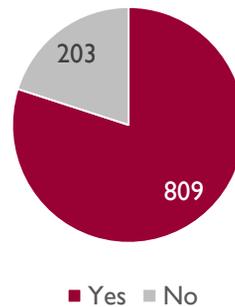
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Caltrain Online Survey

- Considering Use of Bike Parking Facilities

Would you consider parking your bike at a Caltrain station if there were a **staffed, secure "valet" bike parking facility**, where you could leave your bike with an attendant, who would watch it until you return to the station?



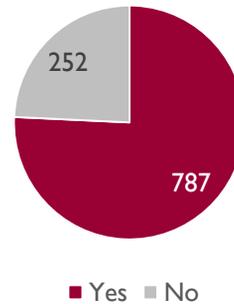
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Caltrain Online Survey

- Considering Use of Bike Parking Facilities

Would you consider parking your bike at a Caltrain station if there were secure, **“on-demand” bike lockers** available on a first-come first-served basis?



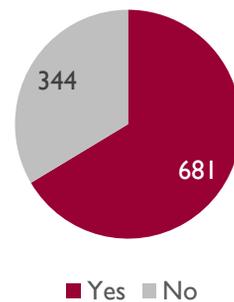
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Caltrain Online Survey

- Considering Use of Bike Parking Facilities

Would you consider parking your bike at a Caltrain station if there were secure, **“on-demand” enclosed parking facility (without an attendant)** available on a first-come, first-served basis (such as a bike room or cage) at the station?



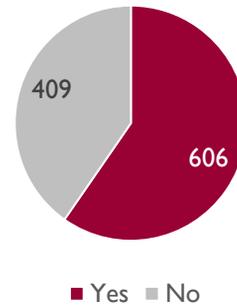
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Caltrain Online Survey

- Considering Use of Bike Parking Facilities

Would you consider parking your bike at a Caltrain station if there were a **“reserved” bike locker** that was assigned specifically for you?



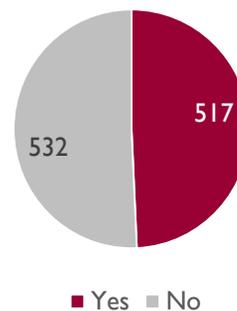
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Caltrain Online Survey

- Considering Use of Bike Parking Facilities

Would you consider parking your bike at a Caltrain station if there were abundant, well designed **bike racks** located in high visibility locations?



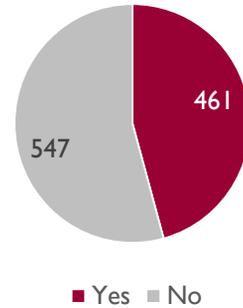
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Caltrain Online Survey

- Considering Use of Bike Parking Facilities

Would you consider parking your bike at a Caltrain station if there were an **extensive bike share program** available on the other end of your trip?



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Caltrain Online Survey

- What bike parking facilities would you prioritize for investment? Rank 1 (first choice) – 6 (last choice)
 1. On-demand bike lockers
 2. On-demand enclosed parking facilities
 3. Valet bike parking facilities
 4. Reserved bike lockers
 5. Bike racks
 6. Bike share program

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Caltrain Focus Groups

- Three focus groups held with Caltrain passengers:
 - 12/6/16 in San Francisco
 - 12/7/16 in Mountain View
 - 12/8/16 in San Carlos
- Purpose was to determine the motivations of customers when making choices about what to do with their bike when riding the train
- Participants recruited from intercept and online surveys
- Participants selected based on what they did with their bike when they arrived at the station

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Caltrain Focus Groups

- Summary of Key Findings:
 - General agreement that parking bike at a station is preferable to bringing bike on board
 - Strong interest in and support for more secure wayside parking facilities (staffed or unstaffed bike rooms most popular)
 - Location of bike parking is important (near platform, well-lit, safe)
 - Better communication about and service of Caltrain's bike parking options desired

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Next Steps

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What's Next:

- Phase 1 Report is being prepared and will be finalized in coming weeks
- Tasks for winter/spring 2017:
 - Develop performance goals, measures, and targets and evaluate existing parking system
 - Evaluate management and administration alternatives and make recommendations
 - Determine implementation steps
- Next BAC meeting: March 2017

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