Caltrain Bike Parking Management Plan Update

Bicycle Advisory Committee

May 18, 2017

Overview

- Background and Purpose
- Summary of Phase 1 Findings
- Update on Spring 2017 Activities
  - Draft Goals and Performance Measures
  - Draft Management and Administrative Options
- Next Steps

Background and Purpose

Context for Project

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

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?

5

Key Questions, continued

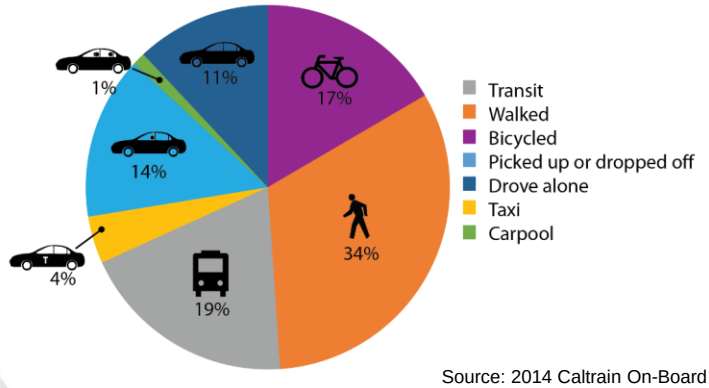
- How can Caltrain deliver high-quality bike parking?
  - What goals and standards should apply to our bike parking system?
  - What is the best model for managing and operating a bike parking system? What resources may be needed?
  - How should we focus and phase investments in the bike parking system?

6

Summary of Phase 1 Findings

Caltrain passengers and bicycle usage patterns

Overall Mode of First and Last Mile Connections to Caltrain



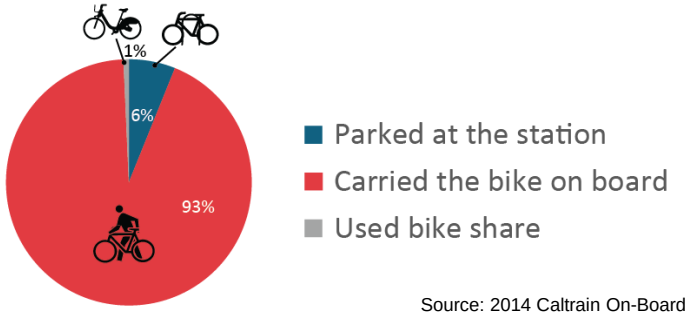
Source: 2014 Caltrain On-Board Transit Survey Data

9

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

10

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.

11

Caltrain Keyed Bike Locker Utilization Survey

Average Keyed Bike Locker Utilization Rate

Station	*Keyed Lockers*	*Rented Lockers*	*Average Utilization Rate (over 5 days)*
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.

12

E-Locker Utilization at Caltrain Stations

E-Locker Utilization for July 1, 2015 to June 30, 2016

Station	*Number of Lockers*	*BikeLink Cards per Locker per Year*	*Average Rentals Per Month*
Millbrae	24	5.7	250
San Mateo	12	5.5	195
Hayward Park	4	1.5	4
Hillsdale	12	5.3	142
Sunnyvale	4	13.8	54

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.

13

Shared Bike Parking Facilities

Shared Parking Facilities (2016)

Station	*Parking Spots Available*	*Average Spots Used Per Day*
San Francisco 4th 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 uses 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.

14

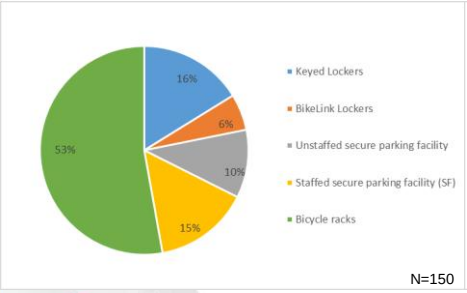
Bike Parking Usage

- 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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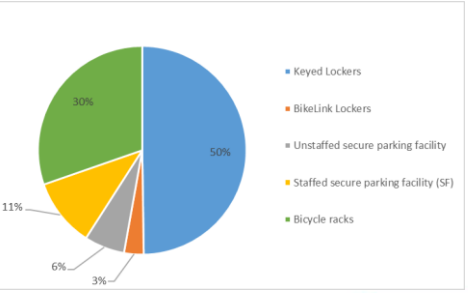
Source: 2016 Online Survey



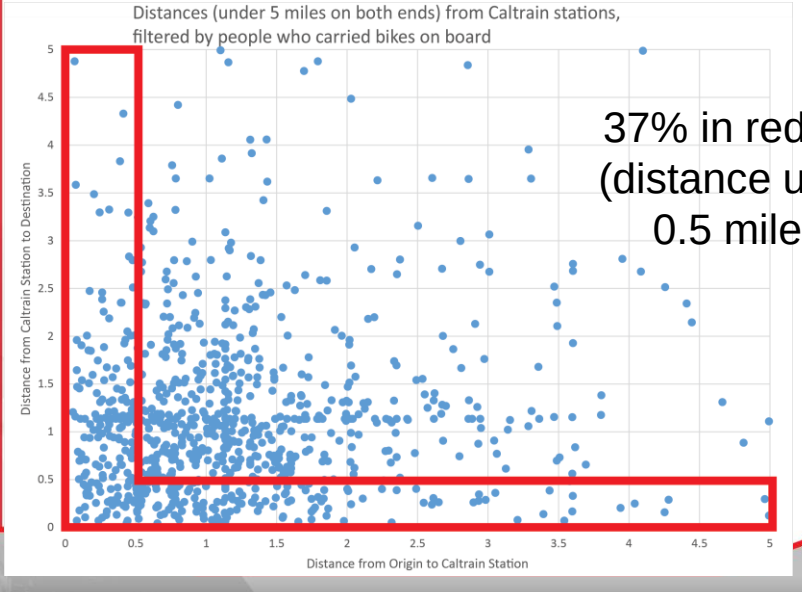
Source: Caltrain

15

Potential demand for bicycle parking at Caltrain stations

16

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



37% in red box (distance under 0.5 miles)

Source: 2014 Caltrain On-Board Transit Survey Data

17

Top Reasons for Bringing Bike On Board

- Need bike at other end of the trip
- Didn't feel bike would be secure if parked at the station (worried about theft)
- Need bike to run errands during the day
- Used to bringing bike on board and hadn't thought about parking it at the station
- Bike parking facilities at the station require advanced sign up, cost money, or rules/regulations are too much of a hassle

Source: 2016 On-Board Survey and 2016 Online Survey

18

Top Reasons for Not Bringing Bike On Board

- Crowded bike cars
- Stress of being bumped or denied boarding if the bike car is full
- Bike loading process is complicated
- Don't like carrying bike up the steps

Source: 2016 On-Board Survey and 2016 Online Survey

19

Percentage of online survey respondents that would consider using the bike parking facility instead of bringing bike on board the train

- Staffed, secure bike valet: 80%
- On-demand bike lockers: 75%
- Unstaffed, secure, enclosed bike facility: 66%
- Reserved bike locker: 60%
- Bike racks: 49%
- Extensive bike share program: 45%

Source: 2016 Online Survey

20

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

Source: 2016 Online Survey

21

Update on Phase 2 Activities

22

Draft Goals and Performance Measures

Goals & Performance Measures

- **Goals:** provide key areas of achievement for Caltrain's overall bike parking system
  - Set the direction for the bike parking system
- **Performance Measures:** Quantifiable measures to track progress towards goals
  - Evaluate performance and progress of **overall** bike parking management system
  - Guide decision-making about **individual** investments (action-oriented)

Draft Goals for Caltrain's Bike Parking System

1. Enhance customer experience for Caltrain passengers.
2. Provide a viable alternative to bringing a bicycle on board for Caltrain passengers.
3. Make efficient use of Caltrain's resources.

25

Draft Goals & Performance Measures

Goal 1: Enhance customer experience for Caltrain passengers

Number	*Performance Measure*	*Notes*
1A	Percentage of bike parking facilities that are **available 24/7**	Facilities with no operating hours
1B	Percentage of bike parking facilities that are **weather protected**	Facilities that are covered or indoors
1C	Percentage of bike parking facilities that are **perceived as secure**	Facilities that provide the highest perceived level of security
1D	Percentage of bike parking facilities that are **hassle free and easy to use**	Facilities that do not require pre-registration
1E	Percentage of bike parking facilities that are **available on-demand**	Facilities that are not reserved in advance

Note: Would apply to both the bike parking system overall and individual stations

26

Draft Goals & Performance Measures

Goal 2: Provide a viable alternative to bringing a bike on board

Number	*Performance Measure*
2A	Total number of bike parking spaces
2B	Percentage of **keyed lockers** that are available for rent
2C	Percentage of **e-lockers** that are available during peak periods
2D	Percentage of **bike racks** that are available during peak periods
2E	Percentage of **unstaffed secure facility spaces** available during peak periods
2F	Percentage of **staffed secure facility spaces** available during peak periods

Note: Could apply to both the bike parking system overall and individual stations

27

Draft Goals & Performance Measures

Goal 3: Make efficient use of Caltrain's resources

Number	*Performance Measure*
3A	**Annual cost per use** for system-wide bike parking facilities
3B	**Annual cost per space** for system-wide bike parking facilities
3C	**Square footage per space** for system-wide bike parking facilities

Note: Would apply to the bike parking system overall

28

Management and Administrative Options for Caltrain's Bike Parking System

Summary of Caltrain's Existing Bike Parking System Management Approach

- **Caltrain staff:** responsible for the oversight and administrative end of existing bike parking facilities (registration/invoicing for keyed lockers, TASI coordination, etc.)
  - Resource and time constraints
- **Transit Services America, Inc. (TASI) staff:** responsible for all the physical aspects of existing bike parking facilities (maintenance, emergency repairs, keys for lockers, etc.)

Three Management Approaches to Future Bike Parking System and Improvements

1. **Centralized:** Caltrain hires new staff to procure, install, and manage all improvements to bike parking facilities and manage/administer existing (and new) facilities.
2. **Decentralized:** Caltrain's partners (cities, counties) lead bike facilities improvements at stations, and Caltrain's current management and administration of existing bike parking facilities is maintained.
3. **Third Party:** Caltrain contracts with third party vendors to procure, install, and manage improvements to bike parking facilities and manage/administer existing (and new) facilities. (Similar to current SF Bike Valet Station)

31

Assessment of Management Approaches

- For each management approach, research and analysis includes:
  - Roles and responsibilities of main players, including Caltrain
  - Organizational changes for agency
  - Costs (including new hires, allocated costs, vendor costs, and materials)
  - Near-term activities to implement approach
- Research involves interviews with peer transit agencies; detailed cost analysis; conversations with agency staff and executive team

32

Centralized Approach

- Pros:
  - Provides the agency with control and flexibility on bike parking facility improvement delivery (timing and locations)
  - Ensures uniformity of bike parking facilities across the corridor at all stations
- Cons:
  - Increases workload for staff and requires new staff to be hired to ensure delivery of improvements
  - Requires greater involvement with customers
  - Higher start-up costs and on-going operating costs

33

Decentralized Approach

- Pros:
  - Lower start-up and operating costs to the agency
  - No new staff required to be hired
- Cons:
  - Reduces agency control of bike parking facility improvement delivery (timing and locations)
  - Requires ongoing staff coordination with partners
  - Uncertainties about capital and operating funding (relies on partners)
  - Uncertainty about uniformity of bike parking facility improvements across the system

34

Third Party Approach

- Pros:
  - Allows agency to partner with bike parking specialist to efficiently deliver improvements to bike parking system and provide customer service
  - Greater potential for innovation and technology to be incorporated into bike parking system
  - No new staff required to be hired
- Cons:
  - Requires ongoing capital funds and operating subsidies for vendors
  - Requires agency staff to manage third party vendors and contracts/procurement process

Next Steps

What's Next:

- Goals and performance measures:
  - Finalize goals and performance measures
  - Evaluate existing and future bike parking system
- Management/administration approaches:
  - Complete research and analysis
  - Formulate recommendation for agency
- Determine implementation strategies
- Draft Plan
- Next BAC meeting: July 2017
- Wrap up by end of summer 2017

37

Questions and Comments?

Thank you!

38