CalMod Local Policy Maker Group (LPMG)

Thursday, May 28, 2015
6:00 PM – 7:30 PM
SamTrans Offices - Bacciocco Auditorium 2nd Floor
1250 San Carlos Ave., San Carlos

Agenda

1. JPB Staff Report

2. Information/Discussion
   a. EMU Procurement: Boarding Height Compatibility w/ HSR
      (Attachment A)
   b. EMU Procurement: Seats / Standees / Bikes / Bathrooms Balance
      (Attachment B)

3. Public Comments

4. LMPG Member Comments/Requests

5. Next Meeting  In-person: June 25, 2015 at 6:00pm
Memorandum

Date: May 28, 2015

To: CalMod Local Policy Maker Group (LPMG)

From: Marian Lee, CalMod Executive Officer

Re: EMU Request for Proposal: Boarding Height Considerations

The EMU RFP is targeted for issuance in July 2015. The JPB will need to provide guidance on boarding height which will impact the design of the cars.

Staff will provide a presentation on different EMU boarding height strategies that will not preclude level boarding and shared platforms with high speed rail in the future.

While level boarding and high speed rail service is not part of the electrification project, decisions today about Caltrain’s EMU car design will set the height at which Caltrain can achieve level boarding in the future and at which stations we could have shared platforms with high speed rail.

The presentation is attached. This information has been provided to the JPB and the JPB Citizen Advisory Committee. It is also being provided to other agencies as requested.

Staff recommendation will inform the draft RFP and JPB action on the final RFP at the July 2, 2015 meeting.
Caltrain Modernization
EMU Procurement
Boarding Height

LPMG Meeting
May 28, 2015

Context
Average Weekday Ridership
Since 2004 143% increase

Standees: 2015 Maximum Loads

<table>
<thead>
<tr>
<th>Northbound</th>
<th>Depart SJ</th>
<th>Percent of Seated Capacity (low season)</th>
<th>Percent of Seated Capacity (high season)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7:03 AM</td>
<td>135%</td>
<td>158%</td>
</tr>
<tr>
<td></td>
<td>7:45 AM</td>
<td>128%</td>
<td>150%</td>
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<td></td>
<td>5:23 PM</td>
<td>122%</td>
<td>143%</td>
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<td></td>
<td>6:57 AM</td>
<td>122%</td>
<td>142%</td>
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<td>7:50 AM</td>
<td>117%</td>
<td>137%</td>
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<td>6:45 AM</td>
<td>108%</td>
<td>126%</td>
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<td>6:50 AM</td>
<td>106%</td>
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<td></td>
<td>4:39 PM</td>
<td>106%</td>
<td>124%</td>
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<tr>
<td></td>
<td>7:55 AM</td>
<td>103%</td>
<td>121%</td>
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<tr>
<td></td>
<td>8:40 AM</td>
<td>102%</td>
<td>119%</td>
</tr>
<tr>
<td></td>
<td>4:23 PM</td>
<td>96%</td>
<td>113%</td>
</tr>
</tbody>
</table>
Exceeding Capacity Today

Rider Average Trip

- Caltrain
  - Average trip length 20-28 miles
  - Average trip time 30-50 minutes
- Other Bay Area Transit Systems
  - BART 14 miles / 24 minutes
  - Muni 2.8 miles / variable
  - VTA light rail 5.7 miles / 23 minutes
  - ACE 48 miles / 60+ minutes
Regional Transportation Needs

• US 101 and Interstate 280 Congested
• Corridor supports growing economy
  - 14% CA GDP; 52% CA patents; 25% CA tax revenue
• Caltrain Commuter Coalition (formed 2014)
  - 75% Caltrain rider’s commute to work; 60% choice riders

Need to Maximize Capacity

• Add cars to diesel trains now
• Caltrain Electrification (2020)
  - More trains / serve more riders
  - Increase station stops and/or reduced travel times
• Level boarding and longer trains
Key Regional Benefits

- Greenhouse gases annual: 176,000 metric tons of CO₂
- Daily traffic congestion: 619,000 vehicle miles
- Engine noise reduced
- Up to 97% Caltrain emission improvement
- 111,000 ridership daily
- More service, improved frequency/quickier trips

Note: 2013 Bay Area Council Report, generates $2.5 billion economic activity and 9,600 jobs

PCEP Service Benefits

<table>
<thead>
<tr>
<th>Metric</th>
<th>Today</th>
<th>PCEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trains / peak hour / direction</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Example Baby Bullet Train

- Retain 5-6 stops
- Retain SF to SJ 60 minutes
  - 60 minutes
  - 45 minutes
  - 6 stops
  - 13 stops

Example Redwood City Station

- Train stops / peak hour
  - 3
  - 5
Electrification Project

2020 Revenue Service

Important milestones to meet 2020 service date
2 Key Contracts / Milestones

- Design Build Electrification Infrastructure
  - RFQ Issued / 6 Teams Pre Qualified
  - DB RFP Issued
  - Contract Award (Fall 2015)

- Electric Multiple Units (96 cars)
  - RFI Issued (2 – 4 builders interested)
  - RFP to be issued July 2015
  - Contract Award (Winter 2015/2016)

EMU Original Plan / Modification Consideration
Information to Car Builders
Summer 2014

• Growing Demand
  - Weekday ridership today: 60,000+
  - Weekday ridership future: 110,000+

• Today
  - 20+ mile trips
  - 96%-135% peak weekday (over capacity in low season)
  - 11% bikes on board

• Future
  - Share train slots (6 Caltrain / 4 HSR) per hour / direction

Request for Information
Summer 2014

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Industry Confirmation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximize Capacity</td>
<td>• Bi-level (versus single level)</td>
</tr>
</tbody>
</table>
| Previously Made             | • Service proven options
                              | • Saves costs / time                                                                  |
| US Regulation Compliance    | • ADA
                              | • Buy America                                                                        |
                              | • FRA Waiver / Alternative Compliant Vehicles Criteria                               |
                              | • Meet Caltrain Technical / Quality Standards                                         |
| Floor Threshold             | • 2 double doors per car (low-level boarding)                                         |
                              | • ~22" to ~25" most common                                                           |

Note: Anticipate adequate competition for the RFP
Recommended EMU

- Bi-level car
- 2 double doors (located: ~25” floor)
- Passengers step (1-2) from platform
- ADA passengers and bikes located ~25” level
- ADA use mini highs and wayside lifts

1-2 steps onboard

Similar to Today’s Bombardier

- 17
- Similar to Today’s Bombardier
- 18
Future Level Boarding (Beyond Electrification)

- Important to Caltrain
- Safety enhancements
- Operating efficiencies
- Passenger convenience
- ADA

Future Level Boarding continued (Beyond Electrification)

- Caltrain ~25” Dedicated Level Boarding all stations
- HSR ~50” Dedicated Level Boarding 2 – 3 stations
  - Transbay Terminal Center
  - Millbrae
  - San Jose Diridon
Level Boarding Challenges

- Lengthy construction period with revenue service
- CPUC waiver needed for freight corridor
- Tenants with different boarding heights
  - Altamont Corridor Express
  - Capitol Corridor
  - Amtrak
- Station area impacts (e.g. ramps, circulation, etc.)

Request for EMU Modification
Request for EMU Modifications

- Stakeholder request for car modification
- Caltrain bi-level EMU ~25” boarding height
- HSR single level cars ~50” boarding height (different needs than Caltrain)
- Can Caltrain modify EMUs to not preclude ~50” boarding in the future?

Explore Modification Options

- 6-month effort (Dec 2014 to May 2015)
- Car builder interviews w/ HSR
- Technical analysis w/ HSR
- Caltrain operational assessment
Car Builder Interviews

• 7 Participated
• Proposed Modification Solutions
  – Option A Cars with more doors
    (Seat loss 60 - 100 per 6-car train)
  – Option B Cars with traps
    (No seat loss, operational challenge)
• Redesign existing vehicles (not starting from scratch)
• Vehicle delivery (2020 revenue service)
• Competition adequate

Caltrain Operational Assessment
Analysis

• 2 Modification Options
• 2 Timeframes
  – 2020 electrified service without HSR
  – Future blended service with HSR
• Focus Areas
  – Boarding for passengers with and without bikes, ADA
  – Passenger circulation within the cars
  – Operational changes

Terminology

Platform 8’ Above Top of Rail (ATOR)

Double Door

Single Door

Notes: Caltrain EMU Floor ATOR: 22”-25” (for this presentation ~25”); HSR Train Floor ATOR: 48”-51” (for this presentation ~50”)
2020 Evaluation
Mixed EMU and Diesel Service
(Using Existing Stations)

Modification A (2020)
*Cars with More Doors*

- 4 double doors (located: ~25” & ~50”)
- ~50” double doors may not be feasible
- Passengers / bikes use ~25” doors (1-2 steps)
- ADA location TBD
  - Located at ~50” (use high doors: need high blocks / wayside lift)
  - Located at ~25” (use low doors: need mini high / wayside lift)
Modification A (2020) continued

*Cars with More Doors*

- High Block
- Wayside lift
- Mini High

Modification B (2020)

*Cars with Traps*

- Trap: 3-5 steps
- Platform 8”

- Open Trap
- Close Trap
- Single Door w/ Trap
Modification B (2020) continued

Cars with Traps

- 2 single doors w/ traps, 2 single doors no trap
  - All doors to ~50” floor
- Single door access (longer dwell)
- Passengers/bikes use doors w/ traps (3-5 steps)
  - Taller first step or step stool needed
  - Bikes located ~25” level (additional internal steps down)
- ADA location ~50” level
  - At stations high blocks / wayside lifts
- Automatic / manual traps

Future Blended System Evaluation
Full Fleet EMU Service

(HSR and Modified Level Boarding Stations)
Scenario 1: Shared Platform at HSR Stations Only

2-3 Stations: Caltrain / HSR Stations Common Platforms ~50"

25 Stations: Caltrain Level Boarding ~25"

Scenario 2: Shared Platforms at All Stations

28 Stations: Caltrain / HSR Stations Common Platforms ~50"
Modification A (Future)

Scenario 1: Shared at 2 – 3 Stations
- Continue using both doors
- Seats cannot be restored
- Interior lift needed
- Interior circulation challenges

Scenario 2: Shared at All Stations
- Seal low doors and use high doors only
- Interior reconfiguration / restore seats
- Bike circulation and storage challenge
- Interior lift needed if ADA ~25” level
Modification B (Future)

Scenario 1: Shared at 2 – 3 Stations
- Less steps (use at 25 stations)
- Interior steps navigated by bikes
- Platform 50"
- Platform 25"

Scenario 2: Shared at All Stations
- Seal traps
- Single door (dwell impacts)
- Bike circulation and storage challenge

Modification B (Future Scenarios)

- Scenario 1: Shared at 2 - 3 Stations
  - Continue using traps (longer dwell)
  - Interior circulation challenges
- Scenario 2: Shared at All Stations
  - Seal traps
  - Single door (dwell impacts)
  - Bike circulation and storage challenge
Potential Path Forward

Framework

• HSR / Caltrain blended system partnership
• Blended system not yet defined
  - Community planning
  - Environmental evaluation
• Early investment program (defined / environmentally cleared)
  - CBOSS PTC (2015)
  - Electrification Project (2020)
• Need to make EMU design decision now to not preclude common platforms w/ HSR in future
Cars with More Doors Option

- Challenges Associated with More Doors
  - Seat loss / Passenger circulation inside car
- Short-term Solution (2020)
  - Design car with 2 sets of doors
  - Keep high doors sealed / use low doors
  - Car configured similar to original EMUs (mitigate challenges)
  - Request HSR to fund modification costs
- Future Blended System (TBD)
  - Evaluate use of high doors (~50”)
  - Associated car interior reconfiguration

Future Blended Service

- Additional Work Needed
- Community Planning / Environmental Review
- Blended System Definition
  - Service Plan
  - System Upgrades
  - Infrastructure (passing tracks, maintenance facility)
  - HSR Stations / Caltrain Station Modifications
Next Steps

May – July Activities

- Public Meetings
- Release Draft RFP to Car Builders
- June JPB
  - Update on proposed path forward
  - Seats/Standees/Bikes/Bathroom balance
- July JPB
  - Release EMU RFP
  - Regional funding plan update
Questions

website: [www.caltrain.com/emu](http://www.caltrain.com/emu)
email: [calmod@caltrain.com](mailto:calmod@caltrain.com)
Memorandum

Date: May 28, 2015

To: CalMod Local Policy Maker Group (LPMG)

From: Marian Lee, CalMod Executive Officer

Re: EMU Request for Proposal: Seats, Standees, Bikes, Bathrooms Balance

The EMU RFP is targeted for issuance in July 2015. The JPB will need to provide guidance on balancing seats and standee space, bikes on board and bathrooms in the new EMU cars.

Staff is updating a few slides on the presentation and the updated version will be available at the May 28, 2015 LPMG meeting. Staff received feedback on this topic from the JPB Bicycle Advisory Committee and here is a link to the presentation they received: [http://www.caltrain.com/Assets/__Agendas+and+Minutes/BAC/Presentations/2015/2015-05-21+BAC+Seats-Standees-Bikes-Bathrooms.pdf](http://www.caltrain.com/Assets/__Agendas%20and%20Minutes/BAC/Presentations/2015/2015-05-21+BAC+Seats-Standees-Bikes-Bathrooms.pdf) This topic will be presented as an informational item at the June JPB meeting.

Staff recommendation will inform the draft RFP and JPB action on the final RFP at the July 2, 2015 meeting.
Purpose

- Seats / standees / bikes / bathroom balance
- Develop framework for Draft EMU RFP
- Feedback on car configuration and “range” of increased seats and bikes on board
Ridership Demand

Average Weekday Ridership

Since 2004 143% increase

Riders (Boardings)
### Exceeding Capacity Today

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<th>Percent of Seated Capacity (low season)</th>
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<td>122%</td>
<td>142%</td>
</tr>
<tr>
<td>7:50 AM</td>
<td>117%</td>
<td>137%</td>
</tr>
<tr>
<td>6:45 AM</td>
<td>108%</td>
<td>126%</td>
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</tr>
</tbody>
</table>

### Trains AM peak hour

**Capacity vs. Demand (“Spikiness”)**

*Feb. 2015 - AM Peak Hour (NB) Max Load by Train*

- **Standees**
  - 7:03am
  - 8:03am
Bikes Onboard Program

- Program began in mid-1990s
- Over time, removed seats and added bike space

<table>
<thead>
<tr>
<th>Time period</th>
<th>Bike spaces added per train (by removing seats)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gallery Train</td>
</tr>
<tr>
<td>Train Type</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>32</td>
</tr>
<tr>
<td>Today</td>
<td>80</td>
</tr>
<tr>
<td>Added Bombardiers</td>
<td>80</td>
</tr>
</tbody>
</table>

Bikes Onboard Today

- 11% Riders Bring Bike Onboard (~ 6,000)
- 1% Riders Park Bike Before Boarding (~600)
- Bike “Bumps” (2015 Annual Count)
  - 214 bikes bumped from 525 trains counted
  - 11 stations had bumps
  - 32,625 bikes carried on trains counted
Today Wayside Facilities

- 2,000+ wayside parking
  - Racks
  - Lockers
  - Dedicated facilities (San Francisco, Palo Alto, Mountain View)
  - Valet parking San Francisco
- Varies Station to Station, Can be Confusing
- Regional Bike Share Program

Challenge

- Past
  - Available capacity
  - Ability to add bike spaces and seat customers
- Today and Tomorrow
  - Over capacity at peak hour trains
  - More and more customers are standing
  - Bike bumping continues
Additional Considerations for Balancing Customer Needs

JPB Policy
Strategic Plan (Adopted 2014)

- Safety
- Maximize passenger capacity
- Address onboard accommodation of bikes, luggage and passenger facilities
- Maintain comfort
- Complement bikes onboard program with consistent capacity information and wayside improvements

Title VI (Adopted 2013)

- Sufficient seating capacity to meet demand is a priority
- During peak not always possible to provide a seat for each passenger

<table>
<thead>
<tr>
<th>Service Standards</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Load Factor</td>
<td>1.2</td>
</tr>
<tr>
<td>Off-Peak Load Factor</td>
<td>1</td>
</tr>
</tbody>
</table>
Customer Preference Survey (2014)

About the Survey

- 4000+ Responses
- “Opt-in” Survey
  - Not statistically valid
  - Highlight interests
- Input Sept. 5 to Oct. 17
- Extensive Outreach
- Translated Spanish, Vietnamese, Chinese
## Survey Highlights

### Seats / Standees

<table>
<thead>
<tr>
<th>Description</th>
<th>% of Survey Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Trip Time (in train)</td>
<td>28% from 31 – 45 min</td>
</tr>
<tr>
<td></td>
<td>26% from 46 – 60 min</td>
</tr>
<tr>
<td>Seat Availability (destination trip)</td>
<td>64% always</td>
</tr>
<tr>
<td></td>
<td>17% standing up to 10 min</td>
</tr>
<tr>
<td></td>
<td>7% standing more than 20 min</td>
</tr>
<tr>
<td>Seat Availability (return trip)</td>
<td>57% always</td>
</tr>
<tr>
<td></td>
<td>19% standing up to 10 min</td>
</tr>
<tr>
<td></td>
<td>8% standing up more than 20 min</td>
</tr>
</tbody>
</table>

## Survey Highlights continued

### Bikes

<table>
<thead>
<tr>
<th>Description</th>
<th>% of Survey Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brought bike onboard</td>
<td>44%</td>
</tr>
<tr>
<td>Bumped in last year</td>
<td>46% never</td>
</tr>
<tr>
<td></td>
<td>13% once</td>
</tr>
<tr>
<td></td>
<td>30% 2 – 12 times</td>
</tr>
<tr>
<td>Staffed bike facility as an alternative to bringing a bike onboard?</td>
<td>52% (yes)</td>
</tr>
<tr>
<td>Additional bike lockers as an alternative?</td>
<td>49% (yes)</td>
</tr>
<tr>
<td>Additional shuttles provide an alternative?</td>
<td>47% (yes)</td>
</tr>
<tr>
<td>Bike sharing as an alternative?</td>
<td>39% (yes)</td>
</tr>
</tbody>
</table>
### Survey Highlights continued

#### Bathrooms

<table>
<thead>
<tr>
<th>Description</th>
<th>% of Survey Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of bathroom</td>
<td>53%</td>
</tr>
<tr>
<td>How often utilized</td>
<td></td>
</tr>
<tr>
<td>2% never</td>
<td></td>
</tr>
<tr>
<td>23% once a year</td>
<td></td>
</tr>
<tr>
<td>60% twice – 12 times</td>
<td></td>
</tr>
<tr>
<td>13% multiple times per month</td>
<td></td>
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<tr>
<td>3% multiple times per week</td>
<td></td>
</tr>
</tbody>
</table>

### Survey Highlights continued

#### Level of Importance

Rate on a sliding scale the importance of these features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Very Important</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase seating capacity</td>
<td>56%</td>
<td>2%</td>
</tr>
<tr>
<td>Increase onboard bike capacity</td>
<td>38%</td>
<td>10%</td>
</tr>
<tr>
<td>Increase standing capacity</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td>Increase bike storage at stations</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>Include bathroom onboard</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Increase bike sharing kiosks at stations</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Increase luggage storage</td>
<td>3%</td>
<td>24%</td>
</tr>
</tbody>
</table>
# Survey Summary Results

Prioritize what is most important to your riding experience  
*(weighted average from ranking scale of 1 to 5)*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Seating</td>
<td>4.5</td>
</tr>
<tr>
<td>Standing Room / Leaning Area</td>
<td>3.26</td>
</tr>
<tr>
<td>Bike Storage</td>
<td>3.11</td>
</tr>
<tr>
<td>Bathroom</td>
<td>2.18</td>
</tr>
<tr>
<td>Luggage Storage</td>
<td>1.95</td>
</tr>
</tbody>
</table>

# Other Properties
## Bay Area Systems

<table>
<thead>
<tr>
<th>Service</th>
<th>Bathrooms (per train)</th>
<th>Bikes spaces on-board (per train)</th>
<th>Standees (load standard)</th>
<th>Frequency peak hour, direction (7am - 8am)</th>
<th>Average Trip Length / Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTA</td>
<td>0</td>
<td>6-18</td>
<td>1.2</td>
<td>up to 6</td>
<td>5.7 miles / 23 min</td>
</tr>
<tr>
<td>MUNI</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td>up to 9</td>
<td>2.8 miles / N/A</td>
</tr>
<tr>
<td>BART</td>
<td>0</td>
<td>6-20</td>
<td>up to 1.6</td>
<td>up to 9</td>
<td>14 miles / 24 min</td>
</tr>
<tr>
<td>Caltrain</td>
<td>2-5</td>
<td>72-80</td>
<td>up to 1.2</td>
<td>up to 5</td>
<td>24 miles / 40 min</td>
</tr>
<tr>
<td>Capitol Corridor</td>
<td>Every car</td>
<td>25-32</td>
<td>1</td>
<td>up to 2</td>
<td>68 miles / 60+ min</td>
</tr>
<tr>
<td>ACE</td>
<td>Every car</td>
<td>22-54</td>
<td>1</td>
<td>up to 2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Notes: VTA – Frequency: At Snell Station, NB. MUNI—Frequency: At Judah St / 19th, N line, inbound. BART— Bikes: Number of bikes per space not limited. Bikes not allowed crowded cars, first car, or first 3 cars during rush hour. Standee: Title VI. Frequency: At Embarcadero Station, yellow line SB. Caltrain— Bikes: with added Bombardiers cars. Standees: peak period. Average Trip: 25-26 miles / 30-50 mins CC— no standee policy because rarely have standees. ACE – no standee policy because rarely have standees.*

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## DRAFT RFP

**Car Configuration Input**
Context / Approach

- Multiple EMU builders
- Range of car internal configurations
- Specific numbers difficult to establish
- Balance approach to maximize seats/standees and bike capacity

Bathroom Recommendation

- No Bathrooms in EMU Cars
  - 1 ADA bathroom = 8 seats / 16 standees
  - Saves capital and o/m costs
  - Low priority in survey
- Bathroom Availability
  - Diesel fleet*
    - At 2 terminal stations
- Future: Consider with Station Improvements

* Bombardier: 5 per train, all ADA accessible; Gallery: 2 per train, some ADA accessible
Context

- Today
  - 5 trains / peak hour / direction (5 car train)
- With Added Metrolink Cars
  - 5 trains / peak hour / direction (5 and 6 car trains)
- With EMUs + Diesel Fleet (2020 Service)
  - 6 trains / peak hour / direction (6 car trains)
  - 2 diesel trains and 4 EMU trains

PCEP Service Benefits

<table>
<thead>
<tr>
<th>Metric</th>
<th>Today</th>
<th>PCEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trains / peak hour / direction</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

- Example Baby Bullet Train
  - Retain 5-6 stops
  - 60 minutes
  - 45 minutes

- Retain SF to SJ
  - 60 minutes
  - 13 stops

- Example Redwood City Station
  - Train stops / peak hour
  - 3
  - 5
Capacity Peak Hour / (NB) Direction

<table>
<thead>
<tr>
<th>Metric</th>
<th>Seats</th>
<th>Bikes</th>
<th>Standees</th>
<th>Ratio Seats to Bikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today* (with turnover)</td>
<td>3,250</td>
<td>336</td>
<td>1,050</td>
<td>10:1</td>
</tr>
<tr>
<td>Add Bombardier Cars* (with turnover)</td>
<td>3,502</td>
<td>384</td>
<td>1,170</td>
<td>9:1</td>
</tr>
<tr>
<td>Example EMU (with turnover)</td>
<td>3,712</td>
<td>392</td>
<td>2,160</td>
<td>9:1</td>
</tr>
<tr>
<td>(Staff Rec.)</td>
<td>6,459</td>
<td>682</td>
<td>3,758</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
* Example peak hour (mix of vehicle types may vary in a given hour)
* Example EMU car capacity of 100 seats

Additional Bike Access Commitments

- System-wide Bike Parking Management Plan ($130K)
- $$$ Funding Commitment by July
  - Wayside investment
  - Bike staff
- Explore Ways to Increase Predictability On-board Program
  - Capacity monitoring and reporting
  - Explore on-board management strategies (e.g. reservations or permitting systems)
Next Steps

May – July Activities

• Public Meetings
• Release Draft RFP to Car Builders
• June JPB Updates
  - Proposed path forward common platforms
  - Seats/Standees/Bikes/Bathroom balance
• July JPB
  - Release EMU RFP
  - Update on regional funding plan amendment
Questions

website: www.caltrain.com/calmod
email: calmod@caltrain.com
Summary Notes

The purpose of these notes is to capture key discussion items and actions identified for subsequent meetings.

**MEMBERS PRESENT:** C. Wiest (Atherton), C. Lentz (Brisbane), J. R. Ortiz (Burlingame), W. Lee (Millbrae), K. Keith (Menlo Park), Pat Burt (Palo Alto), Ron Collins (San Carlos), J. Matthews (San Mateo), G. Gillett (San Francisco), J. Davis (Sunnyvale)

**CHAIR – Acting:** K. Matsumoto (South San Francisco)

**MEMBERS ABSENT:** B. Pierce (Redwood City), A. Kalra (San Jose), K. Ibarra (San Bruno), J. Matthews (Santa Clara), C. Clark (Mountain View), C. Stone (Belmont), A. Tissier (JPB Representative)

**VACANT SEAT(S):** San Francisco County, San Mateo County, Santa Clara County

**CALMOD TEAM PRESENT:** D. Chung, D. Couch, C. Fromson, M. Lee

**JPB Staff Report**

- Jim Harnett has been named the new CEO of Caltrain. He is looking forward to working with the cities in moving the CalMod Program forward.

- The CBOSS PTC project continues to make progress on both the installation and testing work. No new complaints since the last meeting.

- Caltrain has been conducting a detailed tree survey along the Caltrain corridor from San Francisco to Tamien station in San Jose. This tree survey WILL NOT identify which trees will be removed or pruned as part of the Peninsula Corridor Electrification Project (PCEP). The purpose of the survey is to create a detailed tree inventory on the corridor. The survey is expected to be complete by summer 2015. Following completion of the tree survey, Caltrain staff will work closely with each county and city, including local arborists, on the development of the tree avoidance, minimization and replacement plan.
Information/Discussion Items

Peninsula Corridor Electrification Project Quarterly Update

The LPMG received the quarterly report on project delivery activities. The update highlights procurement activities for both the Electrification and Vehicle contracts.

**Electrification Infrastructure**

The Request for Proposals (RFP) for the Design-Build contract was issued to the six pre-qualified teams and the public can view a copy of the Electrification RFP on the website: [www.caltrain.com/calmod](http://www.caltrain.com/calmod). Several amendments to the RFP will be issued over the next several weeks. JPB is scheduled to award the Design-Build contract in fall 2015.

**Electric Multiple Units (High-Performance Vehicles)**

Caltrain / HSR staff conducted analysis and met with car builders to discuss options to modify the design of Caltrain EMUs to support compatible platforms with HSR trains in the future. The presentation highlights the benefits and challenges of modifying the vehicles. Caltrain’s operations department will review the options and their findings will be presented at the May JPB meeting and brought back to the LPMG in June.

The process to vet different vehicle modifications started in December 2014 and was initiated based on requests from stakeholders to support common platforms with HSR in the future. JPB policy action on the vehicle RFP is expected in summer 2015, after a public dialogue on the compatibility analysis and seats/standees/bike/bathroom balance discussion is complete.

**LPMG members’ key comments include the following:**

- Several members asked clarifying questions about how the alternative cars would function on the Caltrain corridor and how platform construction would be phased at different heights / lengths. (Staff noted that it could be beneficial to do the platform construction for lengthening and level boarding at the same time and that no money is available at this time for that project. Staff also noted that retrofitting the platforms is a challenging construction program and will take multiple years.)

- Several members asked which platforms would be impacted and what the benefits of common platforms are. (Staff noted that HSR’s current business plan calls for HSR
stations at the Transbay Terminal Center (TTC), Millbrae, and Diridon. The benefits of common platforms include system flexibility and faster recovery from incidents.)

- One member commented that raising platforms to 50” would be a significant impact.

- One member suggested a significant benefit of common platforms was funding from HSR for level boarding and reduced station footprints. The member also commented on the importance of level boarding for TTC which will be a future high ridership station.

- One member asked about how HSR was going to interface with Metrolink in LA and if they were facing a similar issue. (Staff responded that HSR has separate tracks for the majority of the route and in Southern California they don’t share the corridor the same way it does with Caltrain. Staff said they would check in with LA and see if there might be any helpful insights.)

- There was discussion about how common platforms would impact the design of the future HSR Millbrae Station. It was expressed that common platforms would reduce the station footprint. (Note: Staff is not aware of any analysis/documentation that show common platforms to result in a reduced footprint.)

- Several members discussed the importance of funding grade separations on the corridor. (Staff noted there are over 40 at-grade crossings on the corridor and each county has different funding mechanisms to support grade separation projects.)

Public Speakers:

- A public speaker expressed support for the LPMG reviewing this issue and asked that future presentations contain information about projected capacity and dwell time impacts to using internal stairs in the modified cars. The speaker also expressed support for any efforts to make the Transbay Terminal Center more efficient because it would be an important future high ridership station.

- A public speaker stated that HSR should look at different boarding heights, not Caltrain.

- A public speaker said the benefits of 50” platforms are unclear. Operations staff should explain how cars with extra doors could be difficult for ADA passengers and how passengers with bikes would have a difficult time using cars with traps. The speaker also stated that the problem is at the Transbay Terminal Center and the solution should be modification to the station design – not the vehicles. The speaker provided his website for more information: http://www.transitunlimited.org/User:Andy
Public Comments

- A public speaker voiced support for grade separations and the benefits of the common platforms on schedule and TTC operations.

- A public speaker said there should be a HSR station that connects directly to the SFO airport and doesn’t require multiple transfers.

LPMG Member Comments/Requests

- Grade Separations: Interest was expressed by the City/County of San Francisco to discuss coordinating grade separation efforts and projects in the Caltrain corridor.

- LPMG Scope and Purpose: Interest was expressed by the City of Palo Alto to expand the scope of the LPMG from the CalMod Program to Caltrain matters in general.