CalMod Local Policy Maker Group (LPMG)

Thursday, February 26, 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. Peninsula Corridor Electrification Program Quarterly Update – (Attachment A)
    b. Peninsula Corridor Electrification Program Design Build RFP – (Attachment B)

3. Public Comments

4. LMPG Member Comments/Requests

5. Next Meeting In-person: April 23, 2015 at 6:00pm

Memorandum

Date: February 26, 2015

To: CalMod Local Policy Maker Group (LPMG)

From: Marian Lee, CalMod Executive Officer

Re: **Peninsula Corridor Electrification Project Quarterly Update**

Dave Couch, the CalMod Delivery Director, will provide the quarterly update of project delivery activities. This Quarterly update highlights procurement activities for the Electrification and Vehicle contracts as well as information from the online survey aimed at receiving feedback from the public on how they would like the new electric vehicles to be configured with an emphasis on capacity issues like seating, bike storage and bathrooms.

Nearly 4,200 people participated in the online survey and when asked to rank the most important aspect of their current riding experiences, the passengers rated seating availability as their top priority, standing room next, followed by bike storage, bathrooms, and luggage storage.

The online survey was available in English, Spanish, Vietnamese, and Chinese. Outreach efforts to encourage survey participation were made through: in-person tabling at the top ridership stations, onboard pamphlets, VMS messages at stations, social media, news release, e-newsletter, email distribution, website page, and dissemination by various partner agencies, cities, and community based organizations to their membership. Meetings on the topic were also held with elected officials, advisory and advocacy groups.

Because the online survey was voluntary—referred to as an opt-in poll—the results of the study cannot be measured for margins of error and therefore are not statistically valid. This data does provide some important feedback into the vehicle procurement process. Additional public discussion regarding the electric vehicle purchase will take place to aid in the development of the Request for Proposals for the acquisition of the rail cars, an action that will come to the Caltrain Board later in 2015.

A full copy of the online results of the survey is available here: www.caltrain.com/emu

Peninsula Corridor Electrification Project Delivery Quarterly Update

LPMG

February 26, 2015

Design Build Electrification RFP

- Review
  - Prequalified firms
  - SFMTA, VTA, CAHSR, SFCTA, MTC
- February
  - RFP complete (includes comments round I)
  - JPB action to release RFP to 6 prequalified firms
- March – April
  - Develop PLA
  - Comments round II complete / issue amendments
- Anticipate contract award in fall 2015

EMU RFP

- Current
  - Technical analysis with CHSRA on compatible boarding heights
  - Monthly update of progress to funding partners
  - Technical feasibility with vehicle manufacturers
- JPB action July to release RFP
- Anticipate contract award in winter 2015/2016

Vehicle Compatibility Analysis

- December 2014
  - Key criteria analysis
  - Fatal flaw analysis
- January – February 2015
  - Trade off assessment
- March – May 2015
  - Policy discussion / decisions
  - Updated funding commitment

EMU Outreach Phase I

- Public input on capacity
  - Focus: seats/standees, bathrooms, and bikes onboard
  - 4,196 survey responses
  - 1,200+ individual comments
- Public priority and use combine with technical/operational considerations

Survey Methodology

- “Opt-in” Survey
  - *Not statistically valid*
  - Highlight interests
- Input received Sept. 5 to Oct. 17
- Available in Spanish, Vietnamese, Chinese
- Outreach
  - In-person (tabling at stations), onboard, VMS messages
  - Social media, news release, e-newsletter, email, website
  - Meetings elected officials, advisory, advocacy groups
  - Dissemination by various partner agencies and organizations to their membership

Survey: Participant Overview

Description	EMU Survey
Time Riding Caltrain	45% more than 4 years
Trip Purpose	73% work; 19% social
Type trip	94% round trip
Access to Car	83% yes
Gender	68% male
Age	38% between 25 – 34 years
Income (household)	36% income $100,000 – $199,999

Survey: Station Access / Egress

Description	EMU Survey
Top Origin Stations	SF; San Jose; Mountain View; Hillsdale; Palo Alto
Top Destination Stations	SF; Palo Alto; Mountain View; San Jose
Distance (Origin to Station)	53% from 1 – 5 miles; 33% up to 1 mile
Distance (Station to Destination)	56% from 1 – 5 miles; 33% up to 1 mile
Access Mode (Origin to Station)	29% bike; 27% walk; 26% car; 10% transit
Departure Mode (Station to Destination)	38% walk; 27% bike; 16% shuttle; 13% transit

Survey: Seats / Standee Related

Description	EMU Survey
Average Trip Onboard Caltrain (Time)	28% from 31 – 45 min; 26% from 46 – 60 min
Seat Availability (Destination trip)	64% always; 17% standing up to 10 min; 7% standing more than 20 min
Seat Availability (Return trip)	57% always; 19% standing up to 10 min; 8% standing up more than 20 min

Survey: Bike Related

Description	EMU Survey
Brought bike onboard	44%
Bumped in last year	46% never; 13% once; 30% twice – 12 times
Would a staffed bike facility be an alternative to bringing a bike onboard?	52% yes
Are additional bike lockers an option for use?	49% yes
Would bike sharing be an alternative to bringing a bike on board?	39% yes
Could the addition of shuttles provide an alternative to bringing a bike on board?	47% yes

Survey: Bathroom Related

Description	EMU Survey
Use of bathroom	53% yes
How often utilized	2% never 23% once a year 60% twice – 12 times 13% multiple times per month 3% multiple times per week

Summary Results

Prioritize **what is most important to your riding experience (weighted average from ranking scale of 1 to 5)**	
Seating	4.5
Standing Room / Leaning Area	3.26
Bike Storage	3.11
Bathroom	2.18
Luggage Storage	1.95

Level of Importance

***Rate* on a sliding scale the importance of these features**		
Feature	***Very Important***	***Unimportant***
Increase seating capacity	56%	2%
Increase onboard bike capacity	38%	10%
Increase standing capacity	22%	5%
Increase bike storage at stations	22%	13%
Include bathroom onboard	17%	14%
Increase bike sharing kiosks at stations	16%	17%
Increase luggage storage	3%	24%

Technical/Operational Considerations Seats / Standees

- Current provision
  - Bi-level
  - 2 / 2 configuration
  - 620 – 670 seats
  - Standee space limited
- Seating important (20+ mile average trip)
- Circulations space for conductor
- ADA compliance for space and accessibility
- Seat pitch between rows
- Aisle widths

Technical / Operational Considerations Bikes on Trains

- Current provision
  - 48 to 80 bikes per train (5 trains / peak hour)
  - 1 bike and customer take up 2 seats
  - Two bike cars per train
  - Bike bumps occurring
  - Wayside bike parking facilities improvement opportunities
- Dedicated bike cars more efficient and safer than bikes onboard throughout train
- Additional bike cars may require crew changes driving operational costs

Technical / Operational Considerations Bathroom

- Current provision
  - Portion of fleet have 2 to 5 bathrooms per train
  - Not all ADA compliant
  - 2 terminal stations have bathroom
- Multiple configurations available
- 1 ADA compliant bathroom equals 8 seats
- Additional utility during delays
- O/M implications of 2 versus 6 bathrooms

Next Steps

- Outreach Phase I
  - Survey complete (report at www.caltrain.com/emu)
  - February - March public discussion
  - April staff recommendation (seats / bikes / bathrooms)
  - Inform vehicle RFP
- Outreach Phase II (after Vehicle Contract Award)
  - Interior configuration / design seating, standee, bikes
  - Interior style and colors
  - Exterior appearance

Questions

Memorandum

Date: February 26, 2015

To: CalMod Local Policy Maker Group (LPMG)

From: Marian Lee, CalMod Executive Officer

Re: **Peninsula Corridor Electrification Project Design-Build RFP**

On February 5, 2015, the Caltrain Board authorized the release of the Peninsula Corridor Electrification Project (PCEP) Design Build Request for Proposals (RFP) to the six prequalified proposer teams. The electrification project will require the final design and installation of an overhead contact system (OCS) and traction power facilities (TPF) along the rail corridor. The Board usually does not take action on a project at this stage but given the unique nature and magnitude of the PCEP, Board action addressed several critical issues that were important to communities along the corridor.

A copy of the staff memo and resolution can be found here:
http://www.caltrain.com/Assets/__Agendas+and+Minutes/JPB/Board+of+Directors/Agendas/2015/2015-02-05+JPB+BOD+Agenda+Packet.pdf

One of the issues that was of interest to many of the cities along the corridor was the establishment of a policy directing the prequalified teams to assume an OCS (the poles and wires) design that most effectively minimizes tree impacts along the right of way corridor. The RFP will require that the project be designed to include alternative pole configurations, such as a center-pole design, to significantly reduce the impact on trees. During the environmental review period, Caltrain applied these alternative designs to five test cases. In one such case, the number of trees required for removal was reduced from 50 to 14 using the alternative design. The design alternative will be used unless physical conditions, existing utilities or other extenuating circumstances require a different approach.

Another key topic for communities along the corridor was the final location, based on options in the FEIR, of traction power facilities (TPF). The Board action on the RFP confirms the locations of TPFs for the following cities: South San Francisco, San Francisco, San Mateo, Palo Alto, and

Sunnyvale. The selection of the options was based on technical feasibility and local jurisdiction preferences. The remaining final TPF locations in San Jose, San Mateo County, and Burlingame will be selected after additional coordination with the local jurisdictions.

The Board RFP action also approved:

- Maintenance options which, if exercised, would commit the successful proposer team to provide specialized maintenance services for the new electrical infrastructure and/or the signal system.

- Deferments/eliminations to contain project cost, including eliminating the electrification of Union Pacific-owned tracks, deferring electrification of storage tracks at the 4th and King Rail Yard in San Francisco, and Michael Yard in San Jose. These options were presented to the Board as part of the PCEP cost/schedule update in 2014 and the cumulative effect of these components amount to approximately $85 million in cost savings.

- Construction work windows that minimize the impact to service to the greatest extent possible while expediting the completion of the work. Reduced rail service will operate on the weekends to accommodate the installation project and additional work windows will be provided overnight Thursdays through Mondays.

In May 2014, as required by law, a RFQ was issued to solicit firms interested in the contract. Seven teams responded and six firms were determined to be qualified to perform the work. The six firms are:

- Shimmick/Alstom (JV)
- Caltrain Modernization Partners (JV) (Elecnor/Cobra)
- Balfour Beatty
- Mass Electric/Siemens (JV)
- Skanska-Comstock-Aldridge (JV)
- Peninsula Electrification Partners (JV) (PTG, Isolux-Corsan)

The RFP will be formally released in late February. Once bids are received, an extensive review process will take place with the award of the contract scheduled for late 2015.

Link to the Press Release:
http://www.caltrain.com/about/news/Caltrain_Board_Authorizes_Release_of_Electrification_Design_Build_RFP.html

Electrification Infrastructure Design Build RFP

LPMG

February 26, 2015

Context

- JPB approved Peninsula Corridor Electrification Corridor project (Jan 2015)
- Federal and State environmentally cleared (Dec 2009, Jan 2015)
- JPB approved contract methodology (Sept 2013)
  - Design Build for electrification infrastructure
  - Evaluation criteria weighted to ensure highly experienced contractor
  - Best Value for vehicles (Electric Multiple Units)

RFP Preparation

- More than 800 comments from six prequalified firms and three funding partners
- Technical Review
  - Six prequalified firms
  - HSR, VTA, SFMTA
- On-going coordination with funding partners

RFP Key Components

Electrification Scope / Adjustments

- Scope
  - 50+ mile 25 kV system
  - Overhead Contact System (OCS)
  - Traction Power System
- Adjustments
  - Defer electrification south of Tamien Station
  - Defer electrification of storage tracks at 4th and King
  - Eliminate electrification of UP owned MT-1
  - Share foundations for guy wire pole

Power Facilities Selection

Facilities / Jurisdiction	Option Selection
Traction Power Substations (2)	
- TPS 1 (South San Francisco)	Option 4
- TPS 2 (San Jose)	TBD
Switching Station (1)	
- SS (Redwood City)	TBD
Paralleling Stations (7)	
- PS 1 (San Francisco)	Option 1 (no other option)
- PS 2 (San Francisco)	Option 1 (no other option)
- PS 3 (Burlingame)	TBD
- PS 4 (San Mateo)	Option 3
- PS 5 (Palo Alto)	Option 2
- PS 6 (Sunnyvale)	Option 2
- PS 7 (San Jose)	TBD

Note: TBD is subject to further coordination with jurisdictions / agencies.

DB Maintenance Options

- Electrification will require specialized maintenance
- Maintenance options will provide information on DB capabilities and cost
- Two options
  - Overhead contact system
  - Signal and communication systems

Minimize Tree Removal

- Pole placement between tracks where space permits
- Double poles utilized from one side spanning both tracks where trees can be saved beyond opposite track
- Portal structures with feeder cable located closer to track minimizing tree removal and tree trimming

Non -standard Workweek

- Operational requirement for safe, efficient customer service prohibits work times during weekday peak periods
- Lower ridership during weekends allows for single track operations to support continuous work from Friday evening until Monday morning
- Thursday and Monday evenings until end of revenue service followed by work until start of service provide an additional full shift
- Limited work hours during non revenue hours results in 3-4 work hours
- A PLA is currently being negotiated with the labor unions that will be presented to the Board in the near future

Questions