



**Foothill Transit**

STATEMENT OF PROCEEDINGS FOR THE  
REGULAR MEETING - STUDY SESSION OF THE  
FOOTHILL TRANSIT EXECUTIVE BOARD

FOOTHILL TRANSIT ADMINISTRATIVE OFFICE  
2<sup>ND</sup> FLOOR CONFERENCE ROOM  
100 S. VINCENT AVENUE  
WEST COVINA, CALIFORNIA 91790

Friday, April 27, 2018  
8:00 a.m.

1. CALL TO ORDER

The meeting was called to order by Chair Calaycay at 8:01 a.m.

2. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Chair Calaycay.

3. ROLL CALL

Roll call was taken by Christina Lopez, Board Secretary.

Present: Member Sam Pedroza, Member Cynthia Sternquist, Member  
Carol Herrera, Vice Chair Corey Warshaw, Chair Corey Calaycay

4. APPROVAL OF AGENDA

The agenda was approved as presented.

5. PUBLIC COMMENT

5.1. Executive Director Response to Public Comment

No members of the public addressed the Executive Board.

6. ELECTRIC BUS PROGRAM UPDATE

Recommendation: Receive and file the update on Foothill Transit's Electric Bus (EB) program.

Roland Cordero, Director of Maintenance and Vehicle Technology, presented this item.



Mr. Cordero presented an in-depth review of Foothill Transit's Electric Bus Program. The program began with a demonstration of three Proterra Battery Electric Buses (BEBs) in October 2010. The demonstration included the construction of two bus charging stations at the Pomona Transit Center. The BEBs operate on Line 291. In 2014, Foothill Transit moved forward with an order of 12 next-generation BEBs from Proterra. In 2016, the fleet expanded with the purchase of two 40-foot Catalyst Fast Charge buses. Foothill Transit also reached a milestone of one million electric bus miles in 2016. In 2017, Foothill Transit purchased 14 40-foot Extended Range Buses to operate on Line 280.

Foothill Transit operates one charging station at the Pomona Transit Center with two high-power charging heads. Since the station opened in 2010, 138,000 charge cycles have been completed. A charging station is also located at the Azusa Intermodal Transit Center (AITC) with two charging heads that will provide opportunity charging to 14 40-foot Extended Range Buses to fully electrify Line 280. Line 280 will be fully electrified using the 14 Extended Range Buses that are scheduled to be delivered in December 2018. The plan is to charge the buses at the Arcadia Operations and Maintenance Facility with plug-in chargers and utilize the AITC chargers for longer blocks of the route. Foothill Transit has been working with Proterra on the design and implementation of a depot charging station at the Arcadia facility. The current plan is to install 14 overhead chargers.

Mr. Cordero shared results of range tests conducted on Line 280 (AITC to Puente Hills Mall), Line 187 (AITC to Pasadena), and Lines 493 and 498 (Industry to Downtown L.A.). The data shows ranges from 149 miles to 250 miles. Longer ranges were achieved on the express routes due to limited bus stops and less traffic stops found on local routes. The range tests show that local routes achieved a range of between 149 to 167 miles. Express routes achieved a range up to 194 miles. Opportunity charging provides an additional range of up to 49 percent. However, opportunity charging adds operational cost to the route.

Mr. Cordero reviewed lessons learned from Foothill Transit's Electric Bus Program. Electric buses still do not offer a one-to-one replacement of a CNG bus. CNG buses have a range of 350-400 miles on a full tank of gas. Maintenance costs tend to be lower with electric buses due to the elimination of consumable items, but the cost of electricity is much higher. The cost to operate an electric bus is 48 cents per mile, while the cost for a CNG bus is 36 cents per mile. Installation of in-depot charger infrastructure is challenging. An analysis of each yard's electricity needs is crucial as it needs to be determined if the current facility infrastructure has the capacity to



provide the energy needed to charge the fleet. Construction scheduling is crucial to ensure that bus operations is not interrupted and one of the biggest issues is finding funding to pay for the infrastructure. In addition, limitations of electric buses require planners and operations management to make more consideration of how to incorporate technology into daily fleet operation.

Mr. Cordero introduced Ryan Popple, President and CEO, Proterra. Mr. Popple provided an update on vehicle technology and infrastructure. By 2021, Proterra expects to reach 250 miles with a basic four-battery vehicle. It is expected that electric buses will be price competitive on a purchase cost basis with CNG by 2023 and price competitive with a diesel bus by 2025. Doran Barnes, Executive Director, Foothill Transit stated that Foothill Transit has positioned itself to be at the forefront and to be the operating environment where some of the breakthroughs occur. Mr. Barnes stated that Foothill Transit needs to continue to pursue grant funding, in order to lead the way through breakthroughs. Mr. Popple shared infrastructure images of implemented charging stations at various agencies. Board members expressed their support of the Electric Bus Program.

Received and filed.

The meeting recessed at 9:43 a.m.

The meeting reconvened at 9:50 a.m.

#### 7. CONTRACT AWARD - MOBILE FARE PAYMENT SYSTEM

Recommendation: Authorize the Executive Director to negotiate final contract terms and conditions and enter into a sole source agreement in the amount of \$515,000, including all merchant processing fees with AmericanEagle.com for a Mobile Ticketing and Retail Point-of-Sale system. The agreement has a three-year term.

John Xie, Revenue Manager, presented this item.

Mr. Xie reported on an unsolicited proposal received from AmericanEagle.com for mobile ticketing and a point-of-sale system. Mobile ticketing is not currently available on Foothill Transit. Mobile ticketing has proven to improve customer convenience and experience. Transit agencies that have implemented mobile ticketing saw a reduction in cash fares and farebox repairs. Various transit agencies have introduced mobile ticketing. Foothill Transit has not implemented mobile ticketing technology because it



does not fit Foothill Transit's operations and fare structure.

In January 2018, Foothill Transit received an unsolicited proposal from American Eagle.com to do a mobile ticketing and retail point of sale project. The proposal included a unique way of validating mobile tickets that has not been deployed. The proposal also includes a point of sale system, flexible mobile app development, complete back office account management tools, and existing website integration with customer portal.

Foothill Transit released a Request for Information and Qualifications (RFIQ) to provide all vendors an opportunity to comment or submit competing fare collection technology solutions. A total of eight proposals were received. It was determined that the unsolicited proposal from AmericanEagal.com offered a unique combination of fare collection improvements not available from any other respondent.

Representatives for AmericanEagle.com provided a demonstration of the mobile ticketing system. Mr. Xie reported that implementation will begin with beta testing, followed by Phase 1, which will be a controlled group, Phase 2 will consist of commuter express passes, Phase 3 will consist of all Foothill Transit passes, and Phase 4 will be full deployment with stored value. The Executive Board will be provided with updates on each phase of the project.

Motion by Member Pedroza, second by Member Herrera, to approve. Motion carried 5-0.

## 8. EXECUTIVE DIRECTOR COMMENT

Comments by Mr. Doran J. Barnes, Executive Director, Foothill Transit.

Mr. Barnes reported the following:

- Thanked the Executive Board for attending today's extended meeting.
- Thanked Chair Calaycay and Vice Chair Warshaw for attending the Metro board meeting and supporting John Fasana's motion to make changes to the I-10 ExpressLanes corridor. The motion passed 10-1.
- Mr. Barnes asked that Michelle Caldwell, Director of Finance and Treasurer, update the Executive Board on a grant award. She reported that Foothill Transit was awarded \$3.2 million BOS Grant for the Downtown Los Angeles Layover Project.
- The draft business plan and budget will be presented at the May Executive Board Meeting.



9. BOARD MEMBER COMMENT

Comments by Members of the Foothill Transit Executive Board.

- Member Herrera stated that the meeting was very informative.
- Vice Chair Warshaw thanked staff for their great presentations.

10. ADJOURNMENT

Adjournment for the April 27, 2018 Foothill Transit Executive Board Meeting  
- Study Session.

There being no further business, the Foothill Transit Executive Board  
meeting adjourned at 10:15 a.m.