

**Testimony of  
Doran J. Barnes  
Executive Director**



**Foothill Transit**

West Covina, California

**SUBMITTED TO**

**COMMITTEE ON TRANSPORTATION  
AND INFRASTRUCTURE**

**HONORABLE JAMES L. OBERSTAR, CHAIRMAN  
HONORABLE JOHN L. MICA, RANKING MEMBER**

Recovery Act Transportation and Infrastructure Projects:  
Impacts on Local Communities and Business

2167 Rayburn House Office Building

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## Testimony of Doran J. Barnes

Mr. Chairman and members of the Committee, my name is Doran Barnes, and I serve as the Executive Director of Foothill Transit in West Covina, California. I am joined by Foothill Transit's Board Chair Roger Chandler, who is also a Councilmember from Arcadia, one of the communities in our service area. Thank you very much for the opportunity to share with you today how we are successfully putting Recovery Act dollars to work in the Los Angeles area creating jobs, reducing our carbon footprint and making our communities more livable.

Mr. Chairman, Foothill Transit provides public transit services over a 327 square-mile service area in the San Gabriel and Pomona Valleys of Los Angeles County. Foothill Transit is a Joint Powers Authority governed by local elected officials representing 22 communities and the County of L.A., and all services – from administration to bus operations and maintenance -- are contracted out to the private sector. Congress has designated Foothill Transit as a national public-private model for transit authorities.

We pride ourselves on being on the cutting edge of technology and doing what is necessary to provide the best service to over 14 million customers annually. One of the key components of Foothill Transit's mission statement is innovation. Our new Ecoliner project is at the very heart of this concept.

When Recovery Act funding was made available, we first used as much funding as possible to support our ongoing operations in light of diminished local funding due to the economic slowdown. Our primary focus is always the delivery of high quality service to our transit riders. Next, we advanced a number of state-of-good-repair and environmental projects that created and sustained local jobs and helped us reduce our ongoing operating expenses. Targeted at energy efficiency, these projects included installation of solar panels and window replacements, as well as elevator rehabilitation in our various facilities.

In addition to these projects, our Board saw this program as an opportunity to truly embrace the "innovative" aspect of our mission statement. This led to the concept of the "Ecoliner," the first in the world zero emissions electric bus which recharges in less than 10 minutes. I would like to pause briefly here to share a video about this new cutting edge technology.

*(Pause for Ecoliner video.)*

### **The Vehicle**

The Ecoliner is the first heavy-duty electric bus of its kind in the world, and it is made in America. What makes the vehicle unique is that it can fully recharge in less than 10 minutes at a drive-in docking station located on its designated route.

The Ecoliner is different than most battery drive vehicles where range is dictated by the number of batteries. The Ecoliner can operate on its route 24 hours a day, seven days a week on routes equipped with fast-charge stations. The key to this project is the utilization of the fast-charge battery; so that it will retain its energy reserve and charging profile from 8,000 to 25,000 charge-discharge cycles and can be quick-charged from a 10 percent to a 95 percent charge in ten minutes or less while the bus is at a layover.

The Ecoliner has demonstrated unrivaled fuel economy and life-cycle costing as calculated by testing. With a 30-mile range of the bus on battery power alone, fuel economy testing was conducted for the bus on simulated central business district, arterial, and commuter courses. The results were (diesel equivalent) of 21.35 mpg, 17.55 mpg, and 29.23 mpg, respectively. Considering that a conventional 40' diesel bus averages 3.8 mpg and current hybrid electric buses average 4.8 mpg, these findings indicate that the Ecoliner will result in a minimum of a 400 percent increase in fuel economy.

Some key highlights of the Ecoliner include:

- A completely zero-emission and all “green” electric, battery powered public transit bus.
- A made-in-America green technology innovation which will help increase our country's competitiveness in the world.
- A decrease in our reliance on foreign fuels.
- 100% zero emissions - from both the motor and its recharge sources.
- 10 minutes to a full recharge – not even a cell phone can match that.
- Potential for 90% reduction in fuel costs, yielding the financial flexibility to put more service on the street.
- A yield of more than 30 miles on a single charge.

## **Jobs**

In addition to helping us tap into the latest innovations in renewable energy, the Foothill Transit Ecoliner project accomplished a major goal behind ARRA funding. That being job creation. At Colorado-based Proterra, the principal manufacturers of the Ecoliner, there will have been over 40 jobs created and sustained by the end of year in meeting the demands of Foothill Transit's project.. Proterra also subcontracts with more than 100 vendors for parts, located across 33 states, so utilizing the standard 3 to 1 multiplier, that becomes about 120 jobs by the end of the year, including suppliers. In looking at longer term job creation, it should be noted that the manufacturer is also building a new plant in Greenville, South

Carolina, and expects to ramp up to about 1,300 jobs over a five-year period in serving additional transit agencies in the wake of the Foothill Transit product launch. Again, applying the standard multiplier, that becomes about 4,000 jobs including suppliers.

And I would be remiss if I did not note here that we also have a representative of Proterra with us today, Mr. Marc Gottschalk, Chief Business Development Officer and General Counsel.

The Foothill Transit Ecoliner could change everything we know and assume about public transportation and renewable energy. This is exactly the type of forward thinking we need, not just at Foothill Transit, and not just in Los Angeles, but in our country and the world at large. It's starting at Foothill Transit because we all pushed for a solution – the agency, the company, and our government.

But it won't end there. Foothill Transit has been receiving calls about its Ecoliner from transit operators throughout the United State and transit systems in Europe and the Pacific Rim who are eager to see how this cutting edge technology plays out in a real world environment. For example, a delegation from Paraguay will be visiting Foothill Transit to take a first-hand look at the vehicle in early November and the Imagineers from Disney have already been out to see the Ecoliner.

### **The Introduction**

The Ecoliner's introduction on September 3, 2010 was held at Foothill Transit's Pomona operations and maintenance division and drew guests from around the nation and the globe. Notable attendees included:

- Congressman John Mica, Ranking Member on the Transportation and Infrastructure Committee
- Congresswoman Grace Napolitano, Member of the Transportation and Infrastructure Committee
- Congressman David Dreier
- Therese McMillan, Deputy Administrator of the Federal Transit Administration (FTA)

In addition to industry peers, several local and state elected officials also came out to celebrate this potential "game changer" in public transportation.

The Ecoliner began revenue service, carrying its first paying Foothill Transit customer on September 8, 2010. The Ecoliner will run service on Line 291 between the cities of Pomona and La Verne and will charge at the Pomona operating division

until the charging station at the Pomona Transit Center (PTC) is complete later this fall.

The debut of the Foothill Transit Ecoliner has been buzzing through the newswires resulting in stories published nationwide in green tech news publications, mainstream media, and even internationally in Swedish and French news outlets. The press coverage is important in that it focuses on this new technology. It is equally important because it highlights the importance of transit to the communities that we serve.

### **The Future**

Where do we go from here? Later this year, Foothill Transit will retire the last of its diesel fueled buses and we are excited about that. Over three-fourths of our fleet now consists of cleaner burning compressed natural gas (CNG) coaches. As we have been doing the past eight years in replacing our diesels with CNG, we hope to move forward with replacing CNG with all electric.

Provided that the vehicle meets our performance expectations, the Foothill Transit Board has funding in place now to purchase an additional nine electric buses for line 291 and has instructed staff to seek funding for additional vehicles on a second line. Further, the performance characteristics of the vehicle would allow us to operate this vehicle on more than half of Foothill Transit's lines.

This has been an exciting year in Foothill Transit's history. We believe that ours is truly a success story in facilitating the creation of jobs and, perhaps more importantly, a "green" made-in-America industry that can provide jobs for many years into the future!

Mr. Chairman, thank you for this opportunity to provide testimony today. I would be happy to answer any questions you or the other members may have.

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