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Senate Banking, Housing and Urban Affairs full committee
Strengthening the Ability of Public Transportation to Reduce Our Dependence on Foreign Oil
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Chairman Dodd, Ranking Member Shelby and Members of the Committee, thank you for the opportunity to testify on this timely topic this morning.

While California is no stranger to the vulnerability of energy markets and rising energy prices, this past year has pushed the state with the nation's highest gas prices to new heights.

Since service began 35 years ago, BART has played a unique and important role in reducing the Bay Area's congestion and connecting a diverse region.

Increasingly, our service is becoming a more viable transportation option for people trying to combat rising gas prices.

BART, which serves four counties in the San Francisco Bay Area, carries over 370,000 people a day or more than 1 million passengers a year.

Our ridership has increased over 7% since last year and we have seen a 9% growth in people using our system during non-peak times.

In fact, our service to and from the San Francisco International Airport grew by 37%.

Clearly, more people are choosing to ride transit and not just to get to work.

During this same period, we have also seen our power costs increase by 16%.

BART is a 100% electric with two-thirds of our power provided by renewable, hydro-electric power.

BART uses approximately 400,000 megawatt hours annually for our traction and station power.

Seventy-five percent of this is used for train operations, which is the equivalent of the electricity needed to power about 11,000 homes for a year.

In order to reduce our own energy costs, BART is partnering with Pacific Gas and Electric to identify and hopefully implement energy efficiency strategies to reduce our monthly bill and demand on the grid.

PG&E and BART have identified eight strategies to reduce energy consumption by retrofitting our rail car fleet.

I would like to highlight one of these technologies this morning and ask that the full report be submitted for the record.

The BART fleet is equipped with regenerative breaks, which already have higher energy savings than systems with vehicles that are unable to redirect the electricity generated from breaking, back into the third rail.

The new technology we analyzed would install an ultra capacitor storage device on-board each vehicle, which would be able to store the electricity generated from breaking and use it for propulsion.

If these ultra-capacitors were installed on all of our 669 vehicle fleet, we estimate that we'd reduce our traction power demands by 26%. This translates into a savings of about eight million dollars a year.

The cost of retrofitting our entire fleet is estimated to cost about 94 million dollars, which would be paid for through energy savings over ten years and the resulting energy and emissions benefits would be immediate.

If we were able to fund all of the vehicle efficiency retrofits in this report, we would save almost 130 kilowatt hours of electricity each year or 43% of the power necessary to run our vehicles.

These reductions would not only benefit our customers, but reduce demand on the grid and allow PG&E a bit more flexibility in managing the power demands of Northern California.

BART is also looking at ways to generate our own power. We have a solar demonstration project underway at two of our maintenance facilities and at one of our stations.

We are installing energy efficient lighting at these same locations to demonstrate that more efficient lighting can be powered by smaller solar panels--making these investments a bit more cost-effective.

These energy efficiency technologies are scalable, in terms of cost, and have quantifiable benefits in terms of reducing our energy-use.

These technologies are not unique to BART and could be applied on a national level in a short time frame, but this requires a strong federal partner to make it possible.

The largest contribution that BART, and other transit operators around the country, can do to reduce our dependence on foreign oil is to provide a viable alternative to driving.

When polled, eighty percent of our customers tell us they have another means to get where they are going, but chose to ride BART. Most tell us that other mode is a car.

The BART system is 104 miles long, connecting suburban and urban centers on both sides of the San Francisco Bay and beyond.

With an average trip length of almost 14 miles and a 96% on-time performance rating, we ***are*** providing a viable alternative to driving.

In fact, during rush-hour, our customers are traveling at the equivalent of 249 Miles per Gallon.

According to a study by U.S. PIRG, which I'd like to submit for the record, riders on our system saved about $522 million in fuel costs by riding BART and avoided consuming almost 200 million gallons of gas.

This data was from 2006, so those savings would certainly be higher today.

As you have heard from Mr. Millar, transit agencies across the country are facing record ridership increases as people are forced to drive less due to high gas prices.

This trend is expected to continue and coupled with an aging and growing population, BART and other large rail operators will soon be facing a capacity crisis.

We are seeing this today during our peak commute hours and in fact are removing seats as a temporary way to expand our capacity.

If transit is to continue to be a viable alternative to driving and meet our country's growing mobility demands, we ***must*** address our core capacity needs.

At BART and in the Bay Area, we have seen several successful Transit Oriented Development projects take root.

Data shows that households living in these developments drive half as many miles as people living in traditional suburban neighborhoods.

The future success of this model will depend on transit agencies being able to serve these developments with robust, reliable service.

For BART, and many operators serving metropolitan areas, this will require additional capacity in our existing core systems.

To achieve this, we will need a new and sustained federal investment.

I look forward to working with this Committee, APTA and our industry partners to advance this concept in the next authorization bill.

Like the energy efficiency technologies, the return on investment for expanding our ridership is significant and quantifiable.

The question of whether people will get out of their cars and ride transit has been answered.

The new question is - will we be able to meet this growing demand?

That is our challenge and one that requires a strong federal partnership to achieve.

Thank you and I am happy to answer your questions.