WHITNEY PITKANEN: Hi, everyone. I hope—again, I'm Whitney Pitkanen, a project manager at CALSTART. We are a non-profit organization located in Pasadena, and I hope that this presentation will be a bit fun and get you to sort of really think about some of these out-of-the-box commuter solutions, or out-of-the-bus, as you will. So let's --

AUDIENCE MEMBER: Before you start, could you move closer to the microphone?

WHITNEY PITKANEN: Oh, sure, okay. Better? A little? Okay, first by way of just a bit of background, as I said, we are a non-profit organization. We have several focus areas all towards the five-year goal of developing vehicles, fuels, and systems that can reduce petroleum use 20% by the year 2020. I work in the area of innovative mobility. There are other areas actually that deal with vehicles and drive trains and policy and new fuels and there are overlaps.

But what I'd like to focus on today is our innovative mobility, or it's also called Our First Mile Program. The programs focus not only on car-free solutions, but on integrating small, efficient EVs, for instance, into perhaps station cars at transit stations. And we just want to try to create a seamless, door-to-door transit solution using several different modes. So we have to be creative in doing that and not every solution fits every customer, but we try to think sort of, as I said, out of the box on these ideas. And I'll go through a bit—a few of our programs that do just that.

Again, our program is called First Mile. It's not necessarily tied only to transit even though the name connotes that. But what we believe is there's an increasing array of transportation solutions that, when packaged together, can provide that seamless trip. Near-term solutions can include applications of existing technology such as dynamic ridesharing or vanpooling, while the longer-term solutions involve policy changes and land use changes, and those are usually after the year 2020. So we're not necessarily dealing with those, we'd like to deal with the near-term solutions right now.

And one of those areas that we're particularly interested in now is instant ridesharing or dynamic ridesharing. And that is not necessarily on the spot carpooling as casual carpooling or slugging it's called, where people just line up at areas, you know, in San Francisco to cross the Bay Bridge where there's an HOV lane of some sort where both members, the passenger and the rider, benefit from that. But it adds one more level of planning onto ridesharing where you hook up with people on your PDA, on Facebook via Zimride or some sort of application like that, and—but again, it's very spontaneous. And often through Facebook you can hook up rides with people that you know and so it adds a level of predictability and safety to ridesharing, which some other programs do not use.

To just give you an idea of the kind of demonstrations projects that we have done over the years, again, we've been around since 1992. But we have a strong history of "first of" demonstration programs out there. In 2002, we were involved with a clean fuel car sharing program in association with Flexcar. Many car sharing programs use traditional gasoline or diesel vehicles, but our idea was to integrate clean vehicles in there, maybe NGVs (natural gas vehicles) or electric vehicles. So you get a double win situation. You have a car sharing program that also uses clean vehicles. And the cities involved in that particular demonstration program were the cities of Seattle and Eugene. So that was a fairly successful program.

Again, we were also involved in a car share—a station car program at BART stations in the Bay Area. And this used EVs to connect to transit stations. And they're typically leased by the end users, the station cars are, so the insurance issues sort of dissipate that are commonly present with car sharing programs. And in this case, you can use a lot, as I said, clean or electric vehicles or NGVs to provide the drive train for the cars.

And finally, which I'll sort of discuss more in a few slides was our clean mobility center called City Wheels at Bikestation, Long Beach here in Long Beach. And at that station we provided a variety of options for people and it was connected to a transit mall. So you could make that transit connection if that were the case or you could just use it for, the vehicles there for local trips around town. But again, the services included car sharing, electric bike and scooter rentals, and electronic bike lockers and free valet parking, bike parking for people. But we'll go into that in just a sec.

First, though, I'd like to define the problem as we see it, and that's the transit access problem. I think we all agree that many car-oriented people are unwilling or, in many cases, unable to walk the quarter mile that it takes to connect to a new transit service, be it a BRT service or a light rail service. And park and ride facilities, which is the business as usual operation for many transit agencies, are not always the most cost effective solution. In-fact, there's been several studies, you know, most prominently by Donald Shoup of UCLA, that an above ground parking space can cost upwards of $25,000 per space, while underground parking structures are even more on top of that.

So it's not always the—if we transferred some of that money that they're using towards building the parking structures into shifting some people from one mode to another, from a single occupancy vehicle to a shared vehicle or to some of the smaller vehicles, which I'll discuss in a moment, it seems like a win-win for the agency as well as for the end user. That—excuse me. So, yeah, sorry about that.

So one thing we've been working on is the two wheel transit linked mobility options. And again, these are anything from scooters to conventional bicycles to electric bicycles, but whatever they are, they represent a smaller step from the traditional car to, say, a bicycle. A lot of people aren't ready to make that jump from, you know, your comfortable Lexus with your climate control to a bicycle where you're hit by pollution and don't have necessarily good bike lanes to ride in. So some of these vehicles are, as I said, a smaller step and more comfortable for people to transition to them. And building the appropriate storage or infrastructure at these transit stations is much less costly; it's 10% of a car space. And the operational cost for the user is nearly 10% of owning a car as well. According to AAA, the average ownership and operation cost of a vehicle in Los Angeles is $10,000 a year. And a lot of people don't really think about that in terms of insurance and, you know, just new tires and just all the different costs. It definitely adds up.

So what are the new forms of two-wheel mobility that we see out there? There's a bunch of them and I've—and even out to the little push scooters, which are not really right for every market or application and we're very aware of that fact. But if, for instance, if people like myself ferry children around to school or people carry cargo or women wear heels, it's not actually the perfect solution, but it is good for sometimes. And it may also be a good solution, as I mentioned, for low-income individuals

who may want to get rid of that yearly expense of having a car, that $10,000 a year. And believe it or not, for people who have physical infirmities such as maybe overweight or have bad knees or what not, these can represent an option that is not as strenuous as, say, a conventional bicycle.

Again, quickly looking at this Long Beach MOBILITY Center, this had a shared fleet of five Ford TH!NK vehicles. I don't know if you guys know what the little Ford TH!NKs are. They're not on the market anymore. The city of Long Beach was very proud of this program and many of the marketers picked it up and advertised it. It was a big success at the time. And interestingly enough, 25% of the members had not been bicyclists or even transit users prior to this program. So we reached a new market in this area. Also, the technology that we used in the program can be used for other applications. For instance, some of the online membership-based functions that we use can be used for ridesharing programs as well. Trying to go through this fast.

Then the program was—the logical extension was to launch another one and then the second one came up in Seattle, and CALSTART was funding that up through 2008. This is no longer a clean mobility center, meaning multiple vehicles and multiple modes. It's now a 24/7, unmanned bike storage facility. But it was for a while there and it had some great numbers as a result of that. It operated at 90% to 95% of capacity while it was a clean mobility center. There were 9,502 bicycles parked over a 2-year period, and that means 57,171 vehicle miles replaced for that program. The one thing I have to mention is the key to these clean mobility centers is that flexibility and choice are key in making it successful.

Quickly I just wanted to mention this program that we did, MyGo-Pasadena. It was a subsidy program designed to get people to buy electric bicycles to connect to their local transit station. People were given a rebate of $500 off the price of an electric bike, which run anywhere from a $1,000 to $1,500. And they were required to connect to their local transit station at least twice a week, in which case they would get a transit ridership award of anywhere from $30 to $10 depending on the number of days that they connected to transit. So that was an incentive to not just use the electric bike for local trips, but to connect to transit for the full commute.

And here's just a nice slide of all the people that were on the program. We took these pictures just to make sure the people were actually using the program since we were actually, you know, giving out cash incentives towards them. But as you can see, you know, they don't necessarily look like the hardcore cyclists in spandex. They're car drivers, right? They're people that are getting out of their car and trying a new option, and the electric bikes provided that baby step for them.

Again, online if you want to look at some of the things we have, we have a local use EV compendium, as well as our compendium of sustainable community transportation strategies, which was developed in response to SB 375. It provides at least transportation part of the strategies out there. And it tries to be a one-stop shopping guide to a bunch of different solutions such as first mile, last mile connectors as well as street cars, car sharing, bike sharing. It attempts to compile some metrics with regard to each of these strategies to see which is more successful and in which environment they would be more successful. For example, here's a cut from it. You can see that it shows how the station car program in San Francisco had a VMT reduction of so much and also, very importantly, it did emissions

reductions in terms of criteria emissions as well as GHG emissions. So it's a first shot, but we're getting closer to developing some good metrics on this.

Finally, this was just produced by SCAG with CALSTART was on the consultant team, developing some mobility options in Los Angeles, first mile strategies. This is on the SCAG website if you're interested in these. And there was a series of 13 strategies that were developed by the team and it was down selected to these 6 strategies as being the most effective for Los Angeles, the city of. So it's a very interesting report if you guys want to take a look at that.

And that is it. Thank you very much.