

Interview

Serving Huntington Beach, Costa Mesa and surrounding communities

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Photo: John Earl

Roy Reynolds

Transportation consultant says give PRT a chance

By John Earl
Editor

Roy Reynolds is Managing Director for PRT Strategies in Fountain Valley. Recently he has been speaking to city council and transportation officials throughout Orange County to convince them to use some of their Measure M grant money from the Orange County Transit Authority to study Personal Rapid Transit, a rapid, individualized non-stop public transportation system that he says can get commuters out of their cars and help unravel Southern California's gridlock. PRT is one of the transportation systems under consideration for Irvine's Great Park and there are plans to build PRT at London's Heathrow Airport and in Sweden, with test runs commencing in 2007. An earlier version of PRT has operated in Morgantown Pennsylvania for thirty years.

What is PRT?

Personal Rapid Transit is personal. An elevated light-weight track carries very small light-weight vehicles that transport two to four people. Conceptually, it works differently from mass transit in that it's an on demand system. There are no schedules. It runs 24/7 and you don't have to wait for it. You do a card swipe to pay for your ride and punch in a destination. The vehicle opens its door. You get in, push a button to close the door and it takes off. You don't have to stop at the next station as a train would. When you disembark the car becomes available for another person at that station.

How is PRT powered?

A magnetic linear induction motor—without any kind of a transmission or gears—that has no physical contact with the track. It uses electricity to create a magnetic field that pushes or holds against magnets that are imbedded in the trackway.

Does PRT save more energy?

Figures show that PRT is much more energy efficient than other forms of transit like light rail. The Skyweb people out of Minnesota show that their system gets 146 miles per gallon car. [But] we don't consider light rail to be the competition. It's too expensive.

Providing cheaper public transportation makes you a competitor, right?

Videos and graphics from PRT vendors, courtesy of Roy Reynolds, PRT Strategies.

WORLDWIDE ADVANCED TRANSIT DEVELOPMENT - PRT SYSTEMS



ULTRA (United Kingdom)
Government funded demonstration system
in development



POSCO (Korea)
Government funded demonstration system
in development in Sweden



RLF (Denmark)
in development



MAIT (Germany)
in development



Coaster (Australia)
Demonstration in development



Sportzai (Norway)



SkyTran (California, USA)
in development



SkyWeb-Taxi2000 (Minnesota, USA)
in development

competitor, right?

We can build PRT for \$20 million a mile, including 70 vehicles. Centerline was going to cost about \$120 million a mile. It was \$1.1 billion for 9.3 miles after Irvine dropped out of it. The Redline in LA cost \$300 million a mile. Either the Orange or Green was more expensive, like \$450 million per mile. One of the reasons the PRT is so cheap is that it doesn't cost that much to put a hole in the ground with a pole in it. It's [also] a natural for being built into buildings.

Development in Orange County these days is vertical—the land is too valuable. Pacific City and the Strand in [downtown] Huntington Beach will have mixed residential condos and it's going to be a kind of mall situation. They're doing the same thing in Triangle Square in Costa Mesa. A PRT system can be built into those buildings.

What about technical problems with PRT?

Most of the mechanical issues have been resolved. This is an off the shelf technology. Linear induction motors are not new. They've been used at amusement parks for a long time, especially on roller coasters

What about the practicality and aesthetics or PRT? What about privacy and blocking views?

The track way is only a yard square and the pole is only about two feet in diameter. So that's not a significant amount of structure that's being put up into the air. You could see the back side of someone's home, but the good news is that PRT runs silently because it's electrically powered. No emissions and no lights because there's nothing for it to see.

Where would PRT go in Huntington Beach specifically? Would it connect with the supposed light rail station Ellis or replace the entire system?

I would just do PRT.

When it gets into Huntington Beach where would it go?

First of all, I wouldn't use the Union Pacific right of way at all because the big problem is that they city never asked the Union Pacific's permission. That's private right of way designed for freight.

Why does the GO LOCAL study seem to have been commissioned to support a foregone conclusion?

I don't know that I have a real answer to that. The OCTA is predisposed toward trains. Why is that? Well, they like trains. Everybody likes trains. Trains have been a good mode of transit for hundreds of years in the United States and around the world.

But it's so hard to get to a Metrolink station.

That's the whole idea behind this Go Local program. I think that grant program is a good idea if there's a close and convenient way like PRT to get to the nearest Metrolink station.

The city staff use the term "light rail."

The locomotive that was pictured in the presentation to the city

council in the study session is a diesel gas powered locomotive. Light rail is more typified by the electrically powered.

But couldn't light rail be used instead?

Sure, but then we've got to build a whole electrical structure around it. You have to build a way to transfer electricity to the vehicles.

But the biggest problem is that it [proposed train] doesn't go where they want it to go. How are you going to make the three miles from Ellis St. to the beach? Eminent domain is politically unfeasible to do. Are you going to go down Seapoint? Or over there where Scott Bough lives? No, there's no way that you're going to expand a train like that.

Maybe people would like a PRT going up and down Pacific Coast Highway.

I don't think you would sell the Coastal Commission on that at all. [But] I wouldn't use the UP right of way at all. I think it makes more sense to run PRT down Beach Blvd., possibly all the way from the Buena Park Metrolink station. There's total retail along Beach Blvd. The retailers are going to have the exact opposite reaction to PRT as a homeowner.

Similarly for Harbor Blvd. for Triangle Square and Bristol St. for South Coast Plaza?

Right. Triangle Square is dying. They're going to convert that to a complex very similar to what's going on at Pacific City, which is also PRT accessible in my plan. You could run PRT down to Triangle Square and probably help revitalize it because now you're going to be able to get people to it who don't normally ride the buss.

So what do you want HB and the three other cities taking part in the study to do with PRT?

Make it fair. Let the PRT vending firms like mine look over what the potentials are for no cost to the city.

The city wouldn't have to use any of that \$400,000 in OCTA grant money?

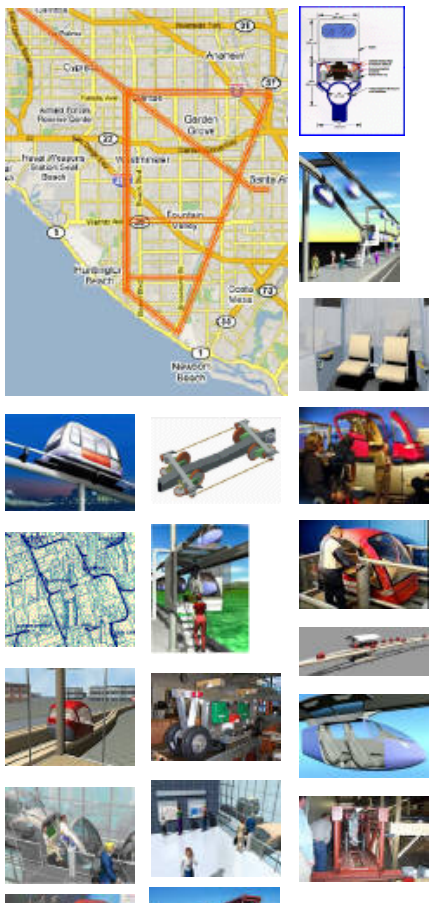
Not at all. Give us 30 days to respond, not the years they were talking about the other day, because we're talking business time, we're talking private enterprise time, not government time.

You told me that the OCTA would like to use the Pacific Electric Right of way. Explain that.

The old Red Car line runs from Watts Towers to almost the Santa Ana Civic Center. It's a quarter mile short of the civic center and another quarter mile short of the Santa Ana Metrolink station. It's an area that used to have trolleys in it. You could put PRT in it. And when you get up into LA it crosses the Blue Line. So now you've got a way to get into LA that crosses the Green Line, which goes to LAX, almost. This is a golden opportunity.

Where do you go from here?

The most important PRT project in the county now would be the Great Park. The Great Park board will request a PRT proposal, probably in about a year, and they are welcoming our response.





PRT Links

[Wikipedia Entry - excellent info](#)
www.prtstrategies.com
www.sktran.net
www.taxi2000.com
www.vectusppt.com
www.cprt.org
www.megarail.com
www.getherefast.org
www.atsld.co.uk

The other opportunity is the OCTA Go Local program. I would like to see some Orange County cities get interested in PRT and let us respond to them and consider some of the natural things that can be used. We think the Santa Ana River is absolutely appropriate for PRT. The river is used for so many other things, why not PRT? The [HB] Hyatt Hilton and Pacific City could have their own stations. Come along Orange Ave. behind the downtown area. Now we have a perfect way to move people from anywhere else on the PRT system to downtown. You don't lose all the parking spaces and you don't have to shut the streets down.