



Rapid buses beat rails

By Randal O'Toole

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Transit agencies from Baltimore to San Diego and from Seattle to St. Petersburg are planning new light-rail lines. Yet light rail is not only vastly more expensive than buses, it is slower, less comfortable, less convenient and has lower capacities than a well-designed rapid-bus system.

Being expensive to build, light rail can only reach parts of a region and thus most people have to drive to a park-and-ride station or transfer from a bus to train and back, thus lengthening the time of their trip. By comparison, for less money, rapid buses, which often rely on dedicated bus lanes to bypass traffic, can reach every corner of an urban area.

When full, most people have to stand on a light-rail train, but most people on a bus can be seated. Modern buses can also come equipped with WiFi and other amenities, making them even more attractive to riders.

And while it would appear that light rail can transport more people per day, the opposite is true. A single light-rail car can hold about 150 people, and in most cities three can be strung together in a train holding 450. By comparison, the biggest buses hold only a few more than 100 people. For safety reasons, however, most light-rail lines can support only about 20 trains an hour in each direction, while city streets can serve more than 160 buses per hour, giving the buses a huge capacity advantage. Where an expensive light-rail line can move about 9,000 people per hour, an inexpensive bus route can move nearly twice that many on city streets and many times more on a freeway lane.

The trade-off between light rail and buses is that one has higher capital costs and the other has higher operating costs. With the federal government willing to pay much of the capital costs of transit, but little of the operating costs, many transit agencies chose light rail so they don't have to impose high operating costs on their taxpayers.

This is a false bargain, however, because the light-rail line ends up serving far fewer people. To reach more people, the light rail must be supported by feeder buses, which cost nearly as much to operate as a rapid-bus system.

Moreover, when the costs of maintenance are counted, light rail ends up costing more, not less, than buses. Most maintenance costs are hidden because it isn't needed until the rail line approaches 30 years old. But few transit agencies have budgeted for these costs, with the result that the Federal Transit Administration says America's rail transit lines have a \$59 billion maintenance backlog and growing.

And for many areas, there's no point to creating such lines. If a corridor won't attract 9,000 riders per hour, then why go to the expense of building rail when buses will move them for far less money? The truth is that light rail makes no sense anywhere in the world except places that are so rich they want to waste money.

It turns out that, outside of Manhattan and possibly Chicago, there is no urban area in America that needs any kind of rail transit at all. Buses can easily move hundreds of thousands of people into and out of a downtown or other urban center, as football fans learned when buses worked far better than trains at moving people to and from the MetLife Stadium for the 2014 SuperBowl.

Transit agencies that want to build light rail are wasting their taxpayers' money. Cities that haven't yet built light rail should plan rapid buses instead. Cities that have light rail should expand their systems with rapid buses and plan to replace the rail lines when they wear out with more efficient buses.

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