Agency
Tampa-Hillsborough Expressway Authority (THEA)

Project
Bus Toll Lanes (BTL) Proof-of-Concept Study

Purpose
Demonstrate a model for financially sustainable transportation by combining transit with value pricing and congestion relief by adding new capacity as priced-managed lanes.

Vital Stats
- Projected 375 percent to 1,826 percent increase in transit ridership.
- Guaranteed capacity, level of service, reliability and lower fares for bus rapid transit and express bus service.
- 100 percent coverage of operating costs through operating revenues.

History
With a grant from the U.S. Federal Highway Administration, the Tampa-Hillsborough Expressway Authority (THEA) and Hillsborough Area Regional Transit (HART) studied whether they could combine transit with price-managed lanes to boost capacity in congested urban corridors. With about 200 miles of managed lanes planned, THEA chose three highway networks for in-depth analysis.

In contrast to a conventional managed lane, the roadways in the Tampa-Hillsborough study would be dedicated first to rapid transit and express buses, with the goal of making transit a reliable, affordable and therefore competitive choice for commuters. Users would either travel by bus or pay to drive on the toll lane. The approach offers two advantages over HOT lanes:

- Revenue is more sustainable, since the system does not allow HOV discounts.
- There’s no need to pay for on-the-ground enforcement, since all private vehicles are required to pay the toll.

The combination of modes would neatly solve a problem that could otherwise become an insurmountable barrier to project financing. Toll roads are in a good position to generate operating revenue, but are sometimes challenged to raise sufficient capital funds. Transit agencies often have access to capital dollars, but typically have trouble meeting their operating expenses. In the THEA-HART model, in exchange for a capital investment to build the lanes, the transit company would receive an ownership interest in the lanes and gain access to a toll revenue stream that THEA calls the New Transit Fare Box.
The study looked at three potential managed lane networks in the Tampa-Hillsborough area.

- On one 65-mile network, a $591 million capital expenditure would increase the number of weekday boardings by 472 percent, from 3,325 to 15,706, and yield annual ridership of just over four million.
- On a second 45-mile network, a $719 million capital expenditure would increase boardings by 375 percent, from 5,176 to 19,414, and produce annual ridership of 4.95 million.
- On a third 52-mile network, a $1.1 billion capital expenditure would increase boardings by 1,826 percent, from 1,280 to 23,374, and attract annual ridership of 5.96 million.

With time savings on existing routes and additional buses, the transit authority would be able to guarantee reliability by operating on 10-minute headways.

On its own, a tolling agency would only be able to raise about half the capital required to build any of the price-managed lanes in the study. A transit authority would qualify for a capital grant, but would incur operating losses over the same 30-year horizon. Together, the study showed that they could cover capital costs in a public-private partnership arrangement and generate $2 billion in net revenue. The community would have a new managed lane for use by drivers in their personal vehicles. In return, the transit agency would own the corridor and the revenue stream, and cover almost all of its operating and maintenance costs from the day operations began.

Key Success Factors

“If people are sitting on the bus in congestion, they won’t use it,” said Joe Waggoner, Executive Director of THEA. “But if transit is as fast and reliable as a car and saves a lot of money, you’re more likely to get more people out of their cars and into transit.”

From a tolling agency’s point of view, the business model “is about focusing the resources to get something done sooner, and if you put in your resources at the right time, you achieve a long-term benefit, as well,” he said. “Nobody’s got enough money, but if you want to compete for what money is out there, this becomes a very competitive model.” And “the more of these systems you build, the more revenue the Federal Transit Administration will have to spend on capital projects.”

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