Agency
New Hampshire Department of Transportation (NHDOT)
Bureau of Turnpikes

Project
Hampton Toll Plaza Open Road Tolling (ORT) Conversion, Interstate 95

Purpose
Congestion relief and safety improvements at mainline toll plaza along a critical Interstate corridor.

Vital Stats
- Existing 16-lane toll plaza, the New Hampshire Turnpike’s busiest, converted to an ORT facility with four toll collection lanes operating at highway speeds.
- 16-month, accelerated ORT project completed in 2010.

History
Before the Hampton Toll Plaza was converted to ORT in 2010, the limited capacity of the existing 16-lane facility resulted in congestion and long delays during the summer weekends, when more than 100,000 vehicles per day travelled the road. Even with the introduction of the E-ZPass electronic toll collection system in 2005, more than 50 percent of all vehicles still paid with cash, resulting in long delays and back-ups from the toll plaza that extended for miles.

In January 2009, House Bill 391 directed the Bureau of Turnpikes to “install open road tolling for existing tolls on the main lines of the turnpike system” to address growing capacity and safety issues. NHDOT set a completion date of Memorial Day 2010 to allow for the free flow of traffic during the summer peak.

The fast-tracked schedule depended on a contracting plan that enabled some construction to begin early, with minimal delay, while allowing additional time for design and construction on other parts of the project. A detailed set of maintenance and protection of traffic (MPT) plans laid out a phased construction approach and identified the minimum number of travel and toll lanes required to maintain efficient traffic flow and preserve critical revenue collection, while ensuring safe, cost-effective construction.

Results
Conversion of the Hampton Toll Plaza to ORT dramatically improved traffic flow and safety for all users, with or without E-ZPass. Specific benefits of this project include:
- Delays reduced by an estimated 180,000 hours per year.
- Fuel consumption reduced by an estimated 276,000 gallons per year.
- Fewer collisions at the toll plaza.
- 35 percent reduction in toll collection costs.
- 12.5 percent increase in E-ZPass share since 2010, the highest of any toll plaza on the New Hampshire Turnpike system.
- Substantial reductions in emissions of carbon monoxide, volatile organic compounds and oxides of nitrogen.
"Having this project complete by Memorial Day, before the summer traffic, was of utmost importance for all of us," said Turnpike Administrator Chris Waszczuk. "Several factors made it possible to meet the accelerated schedule, including coordination and cooperation between NHDOT and its consultant, HNTB Corporation, to complete final design plans." Clauses in the two most critical construction contracts and the ORT contract provided monetary incentives for completion on a very aggressive schedule.

A strong public outreach effort included an informational brochure that anticipated and answered many common questions associated with ORT, including where members of the traveling public could purchase an E-ZPass. NHDOT distributed the brochures at New Hampshire information centers to educate users about the conversion of the toll plaza from mainline to highway-speed tolling.

Key Success Factors

“What a difference the open road tolling makes!” said New Hampshire State Senator Nancy Stiles. “I think the visitors to our state this summer will appreciate the difference and know that New Hampshire is on the move.”

“Memorial Day travelers got to see something new this year—a toll booth in New Hampshire with no traffic backed up on either side,” wrote the Portland Press Herald.

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