

Toll Interoperability Paves the Way for Mobile Payments, Touchless Transactions

By: TEAMFL



It isn't unusual for toll agencies and surface transportation providers to do the impossible and make it look easy. But once in a while, the community gets to celebrate a win that might look simple enough on the surface, but was only possible after years or (in this case) decades of slow, steady progress.

That was the story in early July, when Florida's Turnpike Enterprise and Georgia's State Road and Tollway Authority (SRTA) announced plans to join the E-ZPass Group, a consortium of tolling agencies that will now stretch along the entire east coast of the United States from north to south.

For the first time, any electronic toll tag user in any eastern state will be able to use a toll system anywhere along the road from the Maine-New Brunswick border to south Florida. They'll no longer have to wonder—and participating agencies will no longer have to spend all their time explaining—why a transponder that worked just fine 20 miles ago is suddenly out of service, just because the customer crossed a state border.

To a customer, it sounds so easy, obvious, and straightforward. As anyone involved with interoperability knows, it's anything but—getting electronic systems to talk to each other up and down the coast was a monumental, painstaking task that involved getting the technology right, designing detailed business rules to make the whole system work, and counting on the dedication and good will of dozens of tolling professionals to get it done.

Which is why full east coast interoperability is a shining prize that's been [nearly three decades](#) in the making.

Creative Problem-Solving

Interoperability has always been about bringing multiple agencies and jurisdictions together to solve problems. And with so many voices around the table, it's never easy.

"None of this has ever been a revolution. It's always been evolving," says J.J. Eden, Executive Director of the North Carolina Turnpike, who played a pioneering role in getting E-ZPass off the ground as an executive with the Pennsylvania Turnpike Commission in the early 1990s.

Even for the three states and seven agencies that founded the consortium, "E-ZPass took years to work out, and it wasn't easy," he recalls. "We were talking about moving transaction data and billions of dollars between toll agencies 30 years ago," long before those processes had the benefit of today's data processing systems or cloud computing.

Eventually, those early systems evolved through electronic toll collection to today's all-electronic tolling technology, with a new era of mobile payments and cross-platform integration on the near horizon.

Along the way, one of the biggest challenges on the road to toll interoperability was the need to coordinate the three different electronic protocols in place to read toll tags along the east coast. Multi-protocol readers were a tough sell at first, Eden recalls, but tolling agencies did their own testing to come up with the technology integration that customers expected.

Everyone is a Winner

An earlier generation of leaders in the tolling industry spent years building an interoperable system because they knew everyone stood to gain.

Agencies could more efficiently and seamlessly collect revenue from drivers outside their jurisdictions who travelled their roads. For customers, interoperability is about more convenience and a lot less annoyance and confusion.

"People know they can take a cell phone anywhere and expect it to work, and they ask why they can't do it with their toll transponders," Eden says. "For the most part, if they're driving from Raleigh to Orlando, they don't understand or care that it's a different toll system. It's just tolling."

Even bigger wins for customers are just around the corner. Eden predicts a not-too-distant future in which tolls, parking, fast food, gasoline, and a host of other services will all be available via mobile payment—in fact, he says it's already happening with some vendors and vehicle models. And with the COVID-19 pandemic bringing new attention to touchless payments, the push for credit card technology with biometric authentication has gained new urgency.

"With that shift, interoperability becomes even more important," Eden says. "Neighboring agencies will have to be on the same platform."

