Where Workflows Meet Traffic Flows

What are the most important transportation trends influencing government technology in this decade?
It starts with our vehicles. They’re getting smarter and more data intensive, and the types of data they’re capturing is incredible. As we understand more about data and smart vehicles, issues such as vehicle security and privacy will become ever more critical.

How will government agencies’ workflows have to change to adapt to these trends?
A lot of government business processes are manual, so agencies need to think about streamlining processes to make them more efficient.

A great example is the automation of the Amber Alerts process. State departments of transportation have automated those alerts across radio, digital street signs, and cellular and data communications. Having the right technology to support those multiple channels – with quick and minimal approvals – is key.

As agencies look at that example, they’ll need to figure out how to automate real-time responses to situations like traffic changes.

How will data and analytics come to define issues like traffic flow management and smart transportation?
Smarter vehicles can help transportation agencies make roads safer and optimize traffic flows, so we need to understand the data and apply that knowledge to long-term planning, safety and scalability.

The data from smart transportation initiatives, whether they are about parking, wrong-way driving or drunken driving, can all work together to help us make transportation safer and optimized for a better experience.

How will the evolving transportation landscape impact revenues and budgets?
Roughly 50 to 60 percent of transportation budgets come from fuel-tax revenue. With the rise of electric and alternative-fuel vehicles, agencies need to understand how to capture that lost revenue in the future.

As transportation organizations look at traffic patterns, perhaps they can tie them back to revenue. For example, commercial and industrial vehicles might see a different tax rate based on the time of day. Could we incentivize over-the-road truckers or autonomous vehicles by taxing them differently to ease rush-hour congestion? I think there’s a huge opportunity here.

What should agencies be doing right now to prepare for changes in the transportation landscape?
When you think about the amount of data vehicles can capture, then the push for broadband expansion is huge, especially on interstates and highways. And then there’s safety and privacy. As we think about the technology operating vehicles, buses and airliners, the last thing we want is for them to be compromised or hacked.

Government agencies also need to be looking at the roles and skillsets they will need on their team. As data becomes such a source of what we do now — and what we do next — we need to understand that data-related roles are really going to be needed in government, so we can take data and turn it into usable information.