

## A Single View of Traffic in New Jersey: PART II

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Activu sat down with Brian Gorman, Director of Technology and Administration at the NJ Turnpike Authority's Traffic Management & Technology Center, to understand how the Authority and NJDOT have achieved a "Single View of Traffic" in New Jersey. Part I of our interview was published in the October issue of vuPoint. It provided insight into how the operations center was developed, how they are improving traffic management, and how they've become a model for future TMCs.

We continue our interview with Brian in Part II of this article which discusses the technical and functional aspects of the visualization solution.

### **What are the most important technical aspects of your solution?**

It's interesting because I probably walked you into the building at exactly the wrong time and at exactly the right time. And that's simply because the maps that I expected to see on the wall were not there. What you saw in its place was a mouse moving around and some window screens and the really bad thing about it was—I didn't have the map that I wanted to show you. But the really good thing about it is that's the user community who were, in real-time, making adjustments to the things that are on the wall and posting new information to the wall. So from a technology perspective, the simplest thing to say is that it has to be capable of being driven by the end user. And the end users are people who use computers to do their jobs, but they're not computer people. So with that said, the person has got to have a level of comfort with the software that they use to be able to begin taking advantage of the greater power of the tool. From the user perspective, I thought it was really interesting that the users were adding stuff to the wall and doing it on a real-time basis. So the technology has to be really simple to use. The technology has to be absolutely reliable and bullet proof. We've been up and operational now for about 18 months and I can tell you that the technology really has been reliable. The other thing that I can tell you is that it's been so simple to use that we basically did a series of rolling cuts. Moving people from one ops center to another and migrating different

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groups into this facility can be difficult to say the least. Each and every one of those moves, folks viewed with trepidation because it's a big day, a horrible day, we all know that change is difficult. We did all of the moves on Sunday mornings at 6:00am. The first day, everybody held their breath, and after everyone finally breathed we all just went to work, because it all worked. We had actually tested everything in parallel. That was one of the great things about Activu, it's not intrusive, it's passive. And we were able to run our systems real time, the way we always did from the old computers. In the building, we actually ran the same servers, but we ran them using Activu and wow, we could actually test. We did day-in-the-life simulations here and continued to do our job from the original location during testing. We really were confident about moving in here, we knew that it all worked. So every one of the move in days were non-events. We were here at six in the morning and we'd all bring donuts and coffee and it was like any other day. The second day we did this, it was kind of neat because the second group of people were coming in and they all had the big eyes. Everyone had seen the building first but it was still new and they wondered "am I going to be able to do my job here." Meanwhile the first group who moved in were thinking "this is really cool", donuts and coffee again. It was a good day; and for the third group that moved in, it was an even better day. And that's because the technology is simple to use for the end user. It's non-intrusive; most folks don't even know it's there, and that's the simplest and best part about it. And for people who manage the wall, as you just have seen, they actually use it on a regular basis.

**And it's seamless?**

Yes, absolutely.

**How many specific groups are sitting out on the floor?**

We have integrated three groups into this facility. The New Jersey Department of Transportation (NJDOT), the New Jersey State Police dispatch for Troops D and E, and the NJ Turnpike Authority operations (Turnpike and Parkway). This is the only center for the Turnpike Authority. This is the DOT's central traffic operations location for decision making purposes, with a secondary facility that operates during peak travel times in Cherry Hill. So we've merged together three groups all using common tools, and all use Activu.

**You said you have 42 workstations?**

There are 42 workstations on the floor. On an average day, 32 of them are used during peak travel times. We have built in expansion, built in room for hardware failure, and built in room for special events.

**Can you share any qualitative and quantitative results?**

Sure. I can't quote the numbers off the top of my head but we have metrics which show that the mean time to remove incidents from the roadways has been reduced. That by itself is reactive, but yet that just shows that we're doing a better job. What's really meaningful about that and what most people don't recognize is the real impact of traffic. And during peak travel times, we use a pretty standard

metric. For every minute that there is no mitigation done for an incident, a mile of traffic will back up. Now interestingly, that mile of traffic actually takes twelve to fifteen minutes to clear. So think about it from a context of four minutes of delay time. That could be an hour worth of delay. That's a really big deal. Minimizing the mean time to clear incidents off the roadway has dramatic effects.

### **You're the model for future TMCs.**

We hope we are! We think that we've done a couple of things differently and a couple of things right. When other transportation agencies come through to see our facility, we tell them about what we've done. As far as we can tell this is just the beginning. If they can pick up one idea from our facility, employ it, and do something better with it, we hope they'll come back and let us know. We're proud of what we've done, but we know that we're only scratching the surface. So we're happy to adopt new ideas. And because of the way we deployed our technology with Activu, we have absolutely no problem plugging in new technology because the core of what we do doesn't change what we have on the floor. It's just more information and better information. So we look forward to new ideas.

[Part I](#) of this interview is available online.

## **About Brian Gorman**

Brian Gorman, Director of Technology, New Jersey Turnpike Authority. In 2003, Mr. Gorman joined the New Jersey Turnpike Authority in support of the consolidation of the Garden State Parkway and New Jersey Turnpike roadways. Mr. Gorman is responsible for the business technology infrastructure and for electronic communications. Upon joining the New Jersey Turnpike Authority, Mr. Gorman was tasked with modernizing the technology infrastructure on both roads to support the consolidation initiative and provide opportunities for process improvements through the use of technology.

The New Jersey Turnpike Authority has made improvements in voice, microwave, traffic surveillance, land mobile radio technologies, and fiber optic technology, but most notably in the management of roadway assets.

In 2008, the opening of the new Statewide Traffic Management Center (STMC) integrated NJDOT, New Jersey Turnpike, Garden State Parkway, and NJ State Police Operational Dispatch Unit into one state-of-the-art facility, resulting in an immediate positive impact to roadway operations.

With a common command floor, the sharing of information and co-location of personnel is designed to facilitate a faster and more comprehensive response to any situation that may impede the free flow of traffic. Through the use of integrated technology, information is presented to a cross agency team to aid in solving regional transportation incidents more quickly and effectively.

Prior to joining the New Jersey Turnpike Authority, Mr. Gorman was Director of Information Technology with the New Jersey Sports & Exposition Authority.