



April 2011

## Expert Panels Discuss Intelligent Transportation Systems in New Jersey

Sometimes the key to smoother travel isn't greater road width, but greater bandwidth. From smarter buses to smarter road signs and toll collection systems, technology is providing new options to better operate our transportation network.

These applications, known as intelligent transportation systems (ITS), were the subject of a symposium hosted by the North Jersey Transportation Planning Authority (NJTPA) on March 25. The event was the fourth in a series of NJTPA symposiums focused on technology and transportation.

A panel of about 20 experts representing transportation agencies, state and federal government, universities



Left, Morris County Freeholder and North Jersey Transportation Planning Authority First Vice Chairman Gene F. Feyl; right, keynote speaker, Wayne Berman, Federal Highway Administration.



and nonprofit organizations shared their views on the state of ITS technologies in New Jersey, what capabilities they might offer in the future, and how they can help integrate transportation planning and operations efforts.

Morris County Freeholder and NJTPA First Vice Chairman Gene F. Feyl said

that as large-scale infrastructure projects become harder to finance, ITS applications will play a greater role in maximizing the transportation network's potential.

"We will not only need to work smarter with every tool and technology we have, we will need to develop new technologies," Feyl said.

The event's panel discussions are highlighted in this newsletter. Videos of presentations and related multimedia are available at [www.njtpa.org](http://www.njtpa.org).

The event's keynote speaker was Wayne Berman, a transportation specialist with the Federal Highway Administration (FHWA). Berman discussed the importance of setting quantifiable goals for regional transportation systems and measuring progress to ensure "we're where we want to be."

NJTPA Executive Director Mary K. Murphy noted that ITS initiatives are a prominent component of the region's long-range transportation plan, known as Plan 2035, and would continue to influence the organization's work.

"We want to make sure that technology is not an afterthought, that it's something that has a real solid place in our transportation project decision-making," she said. ■



Sean Hill, New Jersey Turnpike Authority, responds to a question during the symposium's roundtable discussion.

## ITS Brings Transportation into Information (Sharing) Age

Intelligent Transportation Systems don't just help keep the traveling public informed—they enable transportation agencies to share critical information with each other. To that end, the symposium featured a session focused on information exchange, performance measurement and data sharing.

Matt Edelman, Executive Director of TRANSCOM,

discussed various regional initiatives and coordination between dozens of agencies in integrating information across transportation modes. TRANSCOM is a coalition of the 16 major traffic, transit and public safety agencies in

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From left to right: Dave Rynerson, NJ Transit; David Liebgold, New Jersey Meadowlands Commission; Dennis Motiani, New Jersey Department of Transportation; Rizwan Baig, Port Authority of N.Y. and N.J.; Jose Dios, N.J. Turnpike Authority.

## Agencies Work to Deploy ITS Systems in N.J.

A panel of representatives from some of the region's key transportation agencies said ITS deployments are making roads safer and more efficient.

Jose Dios, New Jersey Turnpike Authority Senior

Engineer, said signs featuring variable messages, adjustable speed limits, and other capabilities will soon replace hundreds of older signs on the Turnpike and Garden State Parkway (see graphic). According to New Jersey Department

of Transportation Director of Traffic Operations Dennis Motiani, 120 additional traffic cameras and 100 variable message signs will soon be installed on state roads.

The Port Authority of New York and New Jersey is developing a 15-year strategic ITS plan to replace outmoded, stand-alone technologies with a more effective agency-wide, comprehensive and centrally controlled ITS approach, said Rizwan Baig, Assistant Chief Traffic Engineer. However, Baig said it's challenging to implement ITS upgrades on that scale with funding in such high demand. "One can imagine the competition that goes on," Baig said.

David Liebgold, Chief of Transportation at the New Jersey Meadowlands Commission, said the organization's current ITS focus is on a \$12.5 million project to upgrade outdated traffic signals within the greater Meadowlands region by 2013. He said the centralized signals will be wirelessly interconnected and adapt to traffic and incidents. A \$10 million federal grant will support the project.

also discussed DVRPC's new online mapping service for detours.

During the session, Walter Kraft, Executive Technical Director at Eng-Wong, Taub and Associates, detailed the work of the Transportation Research Board (TRB) committee on Regional Transportation Systems Management and Operations (RTSMO). RTSMO maintains information on regional collaboration to improve transportation operations and serves as a source of data for transportation agencies. ■

### ITS on the Turnpike & Parkway

The following ITS devices are being installed on N.J.'s two busiest toll roads:

- 215 variable message signs
- 141 variable speed limit signs
- 250 traffic cameras
- 215 traffic detection devices

Dave Rynerson, NJ Transit Director of Scheduling and Data Integration, said the agency is implementing "smart bus" technology that will, once deployed system wide, enable riders to track bus locations in real time online and on mobile devices. ■

**"Smart bus" technology will enable NJ Transit riders to track bus locations in real time.**

**ITS**  
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the New York/New Jersey/Connecticut metro region. The organization uses real-time data on travel flow, video sharing, written advisories and other methods to help reduce the impact of incidents that threaten to disrupt the regional transportation system.

Professor Thomas Wakeman of the Stevens Institute of Technology discussed potential uses for ITS in enhancing the flow of exports in the region's freight system. Regional inte-

gration of information and data to be shared with shippers and manufacturers can "improve private business's ability to compete in the global marketplace," Wakeman said.

John Ward, Associate Director of the Planning Division at the Delaware Valley Regional Planning Commission (DVRPC), discussed his organization's Regional Integrated Multimodal Information Sharing (RIMIS) initiative, which helps the Philadelphia metro region deal with recurring congestion, incident management, evacuation and other transportation challenges. He

## Issue Spotlight



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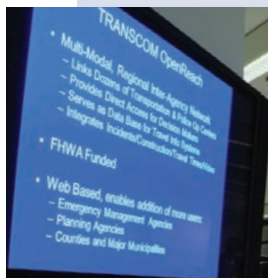
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# Planning for Operations: Advancing New Jersey's ITS Initiatives

March 25, 2011



Clockwise from top right: An audience of about 100 looks on; Professor Tom Wakeman, Stevens Institute of Technology; Professor Darius Sollohub (center), NJIT, speaks with roundtable members; Jose Dias, N.J. Turnpike Authority; NJTPA Director of External Affairs Mary Ameen; from left to right, panelists Dave Rynerson, of NJ Transit, Jim Hogan, NJDOT, and Tom Batz, TRANSCOM, follow the roundtable discussion; the crowd watches a presentation; from left to right, panelists Walter Kraft, TRB, John Ward, DVRPC, and Matt Edelman, TRANSCOM; Walter Kraft, TRB; NJTPA Executive Director Mary K. Murphy speaks during the roundtable.





## Next Steps for New Jersey ITS

What are the next steps for improving ITS applications in New Jersey?

The question was taken up by a panel of experts to conclude the symposium.

There was general agreement that providing customized data on travel times and conditions to individuals—such as informing drivers about congestion ahead of them in real time—is a key goal for the future.

Agencies can also look to create and distribute “predictive travel times,” according to Tom Batz, Deputy Executive Director of TRANSCOM.

For instance, by analyzing past data on roadway incidents, “when a lane closes on a two-lane road, we’ll know what’s going to happen out there and its effect on travel time,” he said.

Improved information delivery was also a common theme. “When an agency says, ‘We’re taking the information out on the Web,’ that’s not

good enough,” said Darius Sollohub, Director of the New Jersey School of Architecture at the New Jersey Institute of Technology. He called smartphone apps “critical” devices given their widespread use, especially among young people.

Sean Hill, Director of Operations at the New Jersey Turnpike Authority, noted that the state’s 511 travel information service now offers an iPhone app called Trumpit which can read alerts to drivers. The app will be upgraded to work on other platforms

and eventually integrate GPS so it can provide “trouble ahead” alerts, he said.



From left to right: Tom Batz, TRANSCOM; Ken McGoldrick, N.J. Turnpike Authority; North Jersey Transportation Planning Authority Executive Director Mary K. Murphy; Tom Wakeman, Stevens Institute of Technology; Darius Sollohub, New Jersey Institute of Technology; Jim Hogan, New Jersey Department of Transportation.

Even with all the data and technology advancements, coordination and communica-

panel were: Jim Hogan, Executive Director of Traffic Operations, New Jersey Department of Transportation; Professor Alain Kornhauser, Princeton University; Ken McGoldrick, Assistant Director of Operations, Turnpike Authority; and Stan Platt, Manager, Office of Transportation Operations Management, Delaware Valley Regional Planning Commission. ■

**Providing customized data about travel times and conditions to individuals—such as informing drivers about congestion ahead of them in real time—is a key goal for the future.**

tions among government, academia and the private sector is critical to realizing progress on ITS, the panel agreed. A particular focus must be on maintaining the effectiveness and redundancy of ITS during emergencies.

Other members of the



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