VDRPT Initiates Transit Technology Standards Program

The Virginia Department of Rail and Public Transportation (DRPT) has announced the development of a new Transit Technology Standards Program (TTSP). The program’s overarching goal is to implement a standards-based framework for future transit technology deployments across the state.

The initial task for this program includes the creation of a Transit Technology Standards Working Group (TTSWG) which will include transit operators and transit-oriented stakeholders from around Virginia. The working group will be tasked with identifying the best approach for implementing standards usage, as well as identifying best practices, selecting standards, identifying optimal contract language, and providing guidance to transit agencies implementing technology-based solutions.

In addition, the initial phase will include identification, development and definition of measures of effectiveness in order to provide metrics and oversight for the new program. The initial phase includes the identification and collection of standards, concept of operations, specifications, requirements and scopes of work for existing transit technology applications currently in use by transit providers across the state. The TTSP is also creating and deploying a new web-based database to store collected documentation and to facilitate information sharing amongst transit agencies.

The DRPT is also currently conducting an assessment of existing communications technologies currently in use by Virginia transit agencies and include an assessment of the impact and possible network modifications necessary as a result of the new “narrowbanding” requirements instituted by the FCC.

The team of PBS&J and Kimley-Horn Associates is supporting DRPT in the deployment of the TTSP as well as conducting the communications assessment.

VDOT Completes Virginia Highway Stimulus Funding Obligation

The Virginia Department of Transportation (VDOT) received approval Feb. 24 from the Federal Highway Administration (FHWA) to obligate funding on its final project using American Reinvestment and Recovery Act money to improve Virginia’s transportation system.

Virginia received $694.5 million in highway funding under the stimulus legislation, and was required to have its allocation obligated by March 2, 2010.

“VDOT staff have worked very closely with localities, metropolitan planning organizations and FHWA to ensure that we continued our track record of meeting or exceeding every deadline outlined in the stimulus legislation,” said Acting Commissioner Greg Whirley. “We are dedicated in this difficult economy to maximizing every possible dollar of federal funding available to develop projects and create jobs that have a lasting impact on the lives of every Virginian.”

Every state was given the March 2 deadline to have its total allocation obligated, meaning the projects have been certified by the state and approved for reimbursement from FHWA.

Because Virginia obligated all of it stimulus funding on time, the commonwealth is positioned to accept additional stimulus funding not obligated by other states before the deadline.

Virginia’s priorities are to use stimulus funding to address deficient pavements, structurally deficient bridges and much-needed highway capacity and rail improvements to improve the economic competitiveness of the commonwealth and offer safe, reliable transportation options for all Virginians.

Virginia’s highway projects included 68 projects obligated by the Commonwealth Transportation Board (CTB) and 54 projects obligated by the metropolitan planning organizations (MPOs).

Of the 68 CTB-obligated projects, $413.7 million in work on 45 projects has already been advertised for bidding, and $287.1 million of work for 40 projects has already been awarded to contractors.

Of the 54 MPO projects, $2.8 million has been advertised for two projects, and seven projects with a value of $6.8 million have been awarded.

The American Recovery and Reinvestment Act was signed into law by President Obama on Feb. 17, 2009.

For more information about the Virginia highway ARRA projects, visit http://www.virginiadot.org/newsroom/stimulus_info.asp

*****
<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>W. Todd Kell</td>
<td>PBS&amp;J</td>
</tr>
<tr>
<td>President-Elect</td>
<td>Ken Jennings</td>
<td>Virginia Department of Motor Vehicles</td>
</tr>
<tr>
<td>Secretary</td>
<td>Gregory J. Pieper</td>
<td>SmarTek Systems Inc.</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Cathy McGhee</td>
<td>Virginia Transportation Research Council</td>
</tr>
<tr>
<td>Past President</td>
<td>Stephen D. Little</td>
<td>Transdyn, Inc.</td>
</tr>
<tr>
<td>Executive Director</td>
<td>Douglas Easter</td>
<td>Easter Associates, Inc.</td>
</tr>
<tr>
<td>Ex Officio</td>
<td>Iris Rodriguez</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>State Chapter Representative</td>
<td>Michael Harris</td>
<td>DRPT</td>
</tr>
<tr>
<td>Directors</td>
<td>Robb Alexander</td>
<td>Virginia Department of Transportation</td>
</tr>
<tr>
<td></td>
<td>Vinit Deshpande</td>
<td>T3 Design</td>
</tr>
<tr>
<td></td>
<td>Ken Earnest</td>
<td>Virginia Department of Transportation</td>
</tr>
<tr>
<td></td>
<td>Robert Gey</td>
<td>City of Virginia Beach</td>
</tr>
<tr>
<td></td>
<td>Mike Haas</td>
<td>Open Roads Consulting</td>
</tr>
<tr>
<td></td>
<td>Tiger Harris</td>
<td>Open Roads Consulting</td>
</tr>
<tr>
<td></td>
<td>Dr. Asad J. Khattak</td>
<td>Old Dominion University</td>
</tr>
<tr>
<td></td>
<td>Adam McGavock</td>
<td>Northern Virginia Transportation Commission</td>
</tr>
<tr>
<td></td>
<td>Jeremy Siviter</td>
<td>IBI Group</td>
</tr>
<tr>
<td></td>
<td>Brian Smith</td>
<td>University of Virginia</td>
</tr>
<tr>
<td></td>
<td>Moe Zarean</td>
<td>Iteris, Inc.</td>
</tr>
</tbody>
</table>
New “Open Government” Initiatives Support ITS

By Jon Sorensen
ITS Project Manager, PBS&J

On January 21, 2009, President Obama published an executive order which enacted the “Open Government Initiative.” The new directive instituted a new organizational framework based on three fundamental principles: Transparency, Participation and Collaboration. The memorandum specifically directed executive departments and agencies to utilize new technologies to make information available to the public and facilitate and encourage greater public participation. The memorandum also stated that “knowledge is widely dispersed in society, and public officials benefit from having access to that dispersed knowledge.” One of the first products directly attributed to the executive directive was the implementation of a new national data warehouse, Data.gov. The goal of the new site was to provide a single, accessible resource to aggregate government data and to provide the public with a single portal to freely access the “open data.”

Open Data

The term “Open Data” refers to a new philosophical approach to the management of public data and information. In general terms, “Open Data” simply refers to programmatic strategies that make data and associated metadata sets openly available to the general public. “Open Data” initiatives have enabled transportation agencies to capitalize on the growing capacity and sophistication of public intelligence. By making datasets available to an unlimited pool of resources, small agency staffs can supplement their internal knowledge-base, and expand their potential for innovation of transportation solutions. “Open Data” Initiatives have also proven to provide an excellent vehicle for expanding public outreach and enhancing public engagement. Open Data allows public agencies to receive valuable public commentary on the condition of existing data sets, as well as attain insight for potentially improving the characteristics and management of existing datasets.

Implementation at State and Local Levels

President Obama’s Open Government Initiative was spearheaded by Vivek Kundra, the nation’s first Federal Chief Information Officer (CIO). Prior to accepting his role as the CIO, Kundra was Chief Technology Officer for the District of Columbia where he instituted the nation’s first Open Data Initiative and created the widely successful crowdsourcing project, “Apps for Democracy.” The “Apps for Democracy” project utilized an advertised “open” call to all software developers to create applications based on the City’s newly “democratized” data catalog. The City posted $50,000 in prize money and ultimately received a total of 47 iPhone, Facebook and other web-based applications (an estimated $2,600,000 in value to the City), all in a 30-day span. Entries included multiple transportation-based applications, as well as pedestrian and parking applications.

On September 28, 2009, the Massachusetts Department of Transportation launched the 2009 MassDOT Developers Challenge. The challenge was built upon a new Open Government Initiative implemented by Governor Patrick. The “Challenge” called on application developers to create new transit applications based on real-time and static transportation data made available by the MassDOT. The developer’s conference was a resounding success, with a total of eight (8) applications and nine (9) visualizations developed for MassDOT during the one-day conference.

On October 21, 2009, San Francisco Mayor Gavin Newsom implemented the “Open Data Executive Directive” for the City of San Francisco. The directive required that City departments make all non-confidential datasets available to the public. The directive also established a centralized data warehouse and corresponding web portal (www.DataSF.org) to facilitate data aggregation and implement a public portal. To date, over a dozen transit and traveler information applications have been developed as a result of the open data initiative in San Francisco.

A Roadmap to “Open Data”

The National Association of State CIOs (NASCIO) is supporting the implementation of open government and open data initiatives at the state and local levels by developing reference resources for public agencies. NASCIO recently released “Guidance for Opening the Doors to State Data” for state and local agencies considering the implementation of an Open Data Initiative. Additionally, the Federal Government’s Office of E-Government and Information Technology has prepared a detailed Concept of Operations (ConOps) for the Data.gov program.

Stakeholder and User Agreements

Early-adopters of Open Data initiatives have typically relied on the utilization of two types of overarching agreements to implement an open data program: A “Principles Agreement” and a “Developers Agreement.” The intent of the Principles Agreement is to define a framework by which use of data and management of products emanating from the data is to proceed. The Principles Agreement establishes a programmatic framework for day-to-day operations of an open data program, including identification and use of necessary supporting technologies, tools and applications. The document identifies program goals, general operating procedures and desired principles for the relationship between the developers and the transportation agency. The “Developer’s Agreement,” or “Developer’s Access Agreement,” represents the initial agreement between an agency and a transportation application developer. The agreement sets specific terms and conditions for governing an open data program and sets forth terms of use, user obligations, agency or organizational rights, disclaimers and liability waivers. The agreement implements policies necessary for operations and management of the data catalog and may also include requirements associated with any products (applications, tools, etc.) generated from the use of the data catalog.

Public Engagement

The true value of open data is the ability to engage the general public in participating in the development of transportation solutions. This typically involves some form of “crowdsourcing” task where an agency moves to engage the public through open calls to participate in a solutions development project. Crowdsourcing can be a challenge to successfully execute. The success of crowdsourcing the development of new transportation tools, applications or solutions is largely dependent on the abilities and intelligence of the public resources pooled to participate.

Conclusion

The emergence of open data initiatives has provided a catalyst for transportation agencies to capitalize on the communal intelligence of the public. Transportation agencies are realizing they don’t have to build it all, and can get more done in less time and with minimal resources. The open data philosophy is also implementing a framework for migration to the next generation web, commonly known as the “semantic web,” or what some have aptly labeled “Web 3.0.” This next major advancement in the internet will essentially create a web of data, rather than a web of documents, facilitating enhanced access and optimization of data and information exchange across all platforms of the internet.

*****
The ITSVA Legislative Reception is an Annual event hosted by the Association at no cost to its members. The reception provides the perfect opportunity for members to visit with legislators in a more casual atmosphere to discuss the importance of technology in transportation. State Legislators, including members of the House and Senate Transportation & Finance committees as well as legislative aides and senior officials from VDOT, DMV, DRPT and other state agencies attended the reception this year.
The Road Worrier: Solving 21st Century Problems with a 19th Century Mindset Doesn’t Work

By Glenn N. Havinoviski

Now that the snow has been cleared and/or melted, it’s time to start thinking about brighter things. That’s not easy to do in our transportation world right now. If you talk to politicians, you will hear them talk about keeping taxes down, about making sure there’s money for education, and of course voting to allow us to carry concealed weapons into bars and restaurants. But transportation is the giant shadow in the room that everyone (I think) knows is there, but no one talks about. It seems to be much easier for an elected official to toss the problem back in VDOT’s court than it is to deal with the reality.

And the reality is there are only so many times you can blame the deteriorating infrastructure and heavy traffic on VDOT, then reorganize them while squeezing the money dry. And all the while they are asked to stand up and perform magic tricks, like making the snow and ice disappear from from Interstate highways to local roads after the worst snowstorms in over a century (that in turn made Chicago look like Palm Springs in comparison).

If you were to grade our industry on ambition and wherewithal independent of government resources, I would give them a solid B to B+. We have real-time traveler information tools readily available on the Internet and smart phones that tell us almost to a block-by-block level where the traffic tie-ups are (thanks to increasing market penetration of hand-held GPS). In many cities, we can get “next bus and train” information tied to our current location.

At the national level, there is a push to upgrade our traffic management from “reactive” (e.g., put a message on a sign to warn of congestion or accidents) to “active” (e.g., get the traffic to slow down well ahead of the back-up to avoid traffic shockwaves and secondary rear-end collisions, open shoulder lanes as needed to reduce the back-up and improve response time for emergency vehicles). Several states are following through with Active Traffic Management projects of their own and VDOT is interested too.

And finally, the IntelliDrive program is working to create a useful infrastructure for communicating to and from vehicles for safety warnings and traffic information.

But in the end, as long as roads and transportation are operated and maintained by that public sector that many people love to hate and are threatening to rescale to 19th Century proportions, I think most folks can sense a direct connection between good safety and traffic information for smart phones, adaptive signal control, and congestion charging are all activities on the table.

Now I cannot vouch for the existence of Jeffersonian democracy in Abu Dhabi or any of the other United Arab Emirates, nor do I believe there aren’t some skeletons in their closet when it comes to their dealings with people we don’t like. But clearly, while one could hardly blame the Abu Dhabi Emirate if they wanted to live off their wealth and glitz (because they can), they have instead chosen a more visionary path. Why are we leaving it to them to recast itself as a capital of sustainable living (albeit with a Ferrari World theme park and Formula 1 race track). They are planning communities and neighborhoods like Masdar City that run on solar and wind power, and a dense network of Metros and light rail systems along with bus services to reduce the almost exclusive dependence on the automobile. Their new Capital District will create a walkable, transit-oriented community of public sector offices and residential areas for their employees.

And they are planning large scale ITS investment. Their Emirate-wide Master Plan (of which transportation is only one part) specifically calls for reducing congestion, encouraging alternative transportation modes, and (gasp!) deploying Intelligent Transportation Systems. I wrote this column while flying over to Abu Dhabi to help finish and present their ITS Implementation Plan, and their Department of Transport wants to implement widespread Active Traffic Management on their freeway network, not just for congestion management but to support speed enforcement, to provide fog and sandstorm warnings (a 2008 accident in the fog involved over 200 cars), and to help manage work zone operations. Electronic payment services for transit, parking management, real-time traveler information for smart phones, adaptive signal control, and congestion charging are all activities on the table.

By Glenn N. Havinoviski is Associate Vice President for Transportation Systems with Iteris, Inc. in Sterling. He was President of ITS Virginia from 2006 to 2007 and has been a columnist for the ITSVA Journal since 2002.
Intelligent Transportation Systems • Traffic Data • Installation & Maintenance • Design & Integration • Data Collection & Distribution • Intelligent Transportation Systems • Quality • Integrity • Traffic Data • Installation & Maintenance • Design & Integration • Data Collection & Distribution • Intelligent Transportation Systems • Traffic Data • Installation & Maintenance • Design & Integration • Quality • Integrity • Intelligent Transportation Systems • Traffic Data

Delivering Transportation and Physical Security Solutions through Technology

Our Systems Provide the Backbone of Some of the World’s Most Intense Operational Environments

Proud to be a Virginia-based, Woman-owned Business Enterprise

Corporate office based in Chesapeake, VA, with offices in Fairfax, VA, and our new location in Austin, TX.

Call us at 757-546-3401 or visit us online

www.openroadsconsulting.com

Integrity • Partnership • Innovation