



Intelligent Transportation Systems Advisory Committee
Wednesday, September 22, 2010 1:00 p.m.
General Assembly Building, 6th Floor, Speaker's Conference Room

- **Call to Order; Roll Call**
The meeting was called to order.
- **Introduction of Members**
Members of the Committee introduced themselves, briefly explaining their backgrounds.
- **Review of JCOTS & Role of Advisory Committee**
JCOTS Staff reviewed the advisory committee process and the role of JCOTS in the General Assembly. A copy of the presentation is available on the JCOTS website at <http://jcots.state.va.us>.
- **Discussion & Formulation of Work Plan for Future Meetings**
Delegate Harry R. Purkey urged the Committee to consider how transportation technologies might help alleviate some of the long term economic and budgetary issues the state might face. He expressed particular interest in finding ways to reduce government expenses. He also urged to Committee to consider how Virginia might become a center for transportation technology companies by supplying an educated labor force.

Committee members expressed great interest in vehicle miles traveled ("VMT") as an alternative to the fuel tax. VMT would tax drivers based on their total miles traveled instead of total fuel purchased, potentially creating a stronger link between actual road usage and **revenue raised for transportation**. Members discussed programs in other states, like the pilot program in Oregon and the tiered monitoring program in Minnesota. Several related issues such as privacy, funding, collection costs, and the ability of the VMT system to operate with other intelligent transportation systems, like congestion pricing, also were mentioned.

The Committee spent considerable time discussing several aspects of intelligent transportation systems. JCOTS staff presented a list of several intelligent transportation ideas that members had submitted prior to the meeting. **List?**

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Intelligent monitoring cameras drew the Committee's attention. Members addressed speed cameras, including average-speed cameras, red light cameras, and issues involved in their deployment. Many of the concerns, such as privacy, appropriate uses, and limits of applicability also arose in the discussion on tolling technologies.

Members from the tolling industry explained that they are developing technologies that will allow for multimodal use of tolling systems, particularly by advancing the transponders that identify vehicles. Multimodal transponders might be able to communicate with a range of facilities including tolling stations, parking lots, and ferry boats. Limits on the amount of data transponders can carry, as well as interoperability, are challenging the potential expansion of tolling and traffic monitoring systems. The intelligent transportation systems of the future, such as the U.S. Department of Transportation's Intellidrive™, will likely require that vehicles communicate and receive significant amounts of data.

Committee members questioned whether other vehicle data collection and exchange technologies might merit further consideration, such as license plates equipped with radio frequency identification ("RFID") tags. Some countries already use license plate RFID tags to record, update, and collect vehicle registration information. While these systems reduce costs, there are significant privacy concerns.

Committee members noted that regardless of the intelligent transportation technology deployed, several issues need to be resolved regarding transportation data. For example, license plate photo capture technologies sometimes run into problems when communicating with DMV and other databases. Some of the challenges can be attributed to the need for DMV, and other government agencies, to protect drivers' private information.

Transportation authorities, however, collect significant amounts of anonymous, non-private data. **These include accident reporting, road conditions due to weather, and traffic volume estimates derived from sensors in roadways.** Where this data has been made available to the public in real time, entrepreneurs have developed computer and smartphone programs which provide valuable traffic information for specific communities. If a common standard for government transportation data could be developed and implemented, some of the information related goals of intelligent transportation systems might possibly be realized without necessarily requiring the widespread adoption of new technologies.

In addition to intelligent transportation systems, the Committee considered how technologies and policies might be employed to help promote safer, more intelligent drivers. To some extent, improved enforcement of existing laws could

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provide the means to achieve some of these ends. For example, improved breath alcohol ignition interlock systems make it more difficult for drivers to trick the interlock systems, increasing the effectiveness of driving under the influence laws. Additionally, the Virginia Tech Transportation Institute (“VTTI”) has continued conducting naturalistic driving studies. Naturalistic driving studies investigate drivers under real-world conditions with the goal of making driving safer. Among other things, this research has studied the effects of texting on driving.

The Committee mentioned several other topics briefly. These included using technologies to improve freight movement and truck parking, as well as a recent Virginia Department of Transportation study on increasing speed limits. Additionally, members noted that Governor McDonnell’s administration is trying to increase communication among agencies to facilitate and increase freight transport by rail and water.

Committee members mentioned some topics that could be explored further. Delegate Purkey suggested that the potential use of RFID in improving freight transport might merit consideration by the Committee at a future meeting. Committee members expressed an interest in hearing more about VMT in other states. They also would like to hear more about VTTI’s recent research on naturalistic driving.

For the next meeting, JCOTS staff will develop some education pieces based on the topics discussed. The next meeting will take place in approximately one month.

- Adjournment