Leading-Edge Tech Shows

USDOT-FHWA Tech Show, Lab Tours, and Test Drives
FHWA Intelligent Transportation Systems
Connected Vehicles / Vehicle-to-Infrastructure (V2I)
Big Data Computing in Transportation
Human Center Systems, Highway Driving Simulator (HDS)
Transportation Safety, Geometric Design, Crash Analysis and Simulation
Transpiration GIS/GPS/LiDAR

The FHWA Tech Show, Lab tours, and test drives will take place at Federal Highway Administration (FHWA) Turner-Fairbank Highway Research Center (TFHRC) on Wednesday afternoon Aug. 6, 2014.

On July 15, 2014, U.S. President Obama visited FHWA-TFHRC and tested a self-driving car at a simulator of Highway Driving Simulator (HDS) Lab, then gave a speech on "the Importance of Our Nation's Infrastructure". The news was reported by the White House, U.S. Department Transportation, The Washington Post, and FHWA, respectively.

LAB TOUR REGISTRATION

Only a limited number of attendees for the tour is available. Please register first.

Please Note: All participants 18 and older will need a government issued pictured identification card to gain access to the facility. Also, please keep in mind we have over 20 indoor and outdoor laboratories and weather can be a factor. There will be a lot of walking and standing; comfortable clothes and shoes are recommended.

TFHRC BACKGROUND
The Turner-Fairbank Highway Research Center (TFHRC) is the Nation’s premier federally owned and operated highway research and development facility. Located in McLean, VA as the research center for the Federal Highway Administration (FHWA), TFHRC coordinates and conducts an ambitious program of innovative highway research and development to address critical needs of the national highway system. Through its three research and development (R&D) offices – Infrastructure, Safety, and Operations – along with the Exploratory Advanced Research Program, FHWA engineers, scientists, and psychologists conduct applied and exploratory advanced research in vehicle-highway interaction, nanotechnology, and a host of other types of transportation research in safety, pavements, highway structures and bridges, human-centered systems, operations and intelligent transportation systems, and materials. With more than 20 laboratories, the center provides a vital resource for advancing the body of knowledge that has been created and developed by our researchers.

TFHRC provides the world highway community with advanced and applied research and development related to new and existing highway technologies. The center reviews, tests, studies, researches, and finds solutions to complex technical problems through the development of more economical, environmentally sensitive designs; more efficient, quality controlled construction, operational, and safety practices; and more durable materials. The end result is a safer, longer-lasting, more reliable highway transportation system.

At times, when our expertise is requested, we also work with FHWA’s Federal Lands Highway to test new solutions specifically for Federal lands and parks, to make transportation facilities, roads, or structures more aesthetically in tune with nature, yet still function with the same high standards of other highway structures and materials. We collaborate with other national laboratories and agencies to address the needs of the Nation and to keep American citizens safe in all parts of the world.

**MIT Driverless Vehicle Tech Show**

**The Future with Self-Driving Cars**

This work demonstrates work at SMART, the Singapore-MIT Alliance for Research and Technology, focused on development and testing of a new mobility-on-demand paradigm. This work, led by Professor Emilio Frazzoli of MIT, consists of a fleet of fully autonomous vehicles that can be summoned via smartphone by users to take them to a desired destination. The vehicles respond rapidly due to state-of-the-art backend software that positions the vehicles based on analysis of historical demand data. Analysis of transport data by the SMART researchers have shown that all of Singapore could be effectively served by such a mobility-on-demand paradigm, even while substantially reducing the overall number of vehicles on the road.

**The Intelligent Co-Pilot: a Path toward Fully Autonomous Vehicles**

This tech show demonstrates the “Intelligent Co-Pilot,” a practical, near-term pathway to autonomous vehicle development. In this framework, the human driver and the autonomous control system share control authority, with the autonomous system generally only assuming control when the threat of an accident is significant. The system could also be tuned, however, to provide a greater degree of assistance. Such a system represents an attempt to reap the safety benefits of full autonomy, while ensuring that the operator remains attentive and responsible for high level decisions.
COMStar OfficeMap Tech Show

Save Time and Achieve the Best Map Results with OfficeMap for MS Office!

COMStar OfficeMap is the latest Microsoft PowerPoint Add-in. It provides a fast and easy way to directly create various kinds of maps on PowerPoint slides.

OfficeMap offers many map templates. The map templates for MS Office is an impressive collection of dozens of categorized maps with appropriate projections for PowerPoint slides. They include world maps, continental maps, country maps, US state maps, and US county maps. All boundary maps and some satellite maps are provided.

OfficeMap offers three different symbol collections for simple symbols, color ramp symbols, and point symbols (i.e., markers, icons, and fonts).

The maps created by OfficeMap are composed of PowerPoint shapes, texts, and pictures. All of operations for texts and illustrations in PowerPoint can be directly employed to those maps within PowerPoint.

OfficeMap provides a friendly and powerful graphics user interface for users to easily insert the maps, select the symbols for the maps, and set the features for map shapes, texts, and pictures.