



Research Roundup

BALTIMORE BRIDGE COLLAPSE – RESEARCH AND STATISTICAL ACTIVITIES PROVIDE MISSION-CRITICAL TOOLS

On March 26, a 95,000-ton container ship leaving Baltimore harbor collided with the Francis Scott Key bridge, bringing down huge sections of the 1.6 mile long structure over the Patapsco River. The Volpe Center's [Situational Awareness and Logistics Division](#) provided near real-time data to decision makers at USDOT through its Maritime Safety and Security Information System. As the rescue and recovery efforts played out in Baltimore, Bureau of Transportation Statistics staff quickly stood up a [new page specific to the Baltimore Port](#) and published updated data on commodity flows through the port, truck movements around the bridge, and other logistics on its [Port Performance Statistics](#) page. Unfortunately, six members of a construction crew perished during the bridge collapse. During a [White House News Briefing](#) on March 27, DOT Secretary Pete Buttigieg outlined four priorities for the days and months ahead, saying that USDOT pledges to:

- Reopen the Port;
- Deal with Supply Chain implications until the Port reopens;
- Rebuild the Bridge; and,
- Deal with surface transportation implications until the bridge is rebuilt.



Francis Scott Key Bridge, March 30 2024. Photo credit: Rolf Schmidt, BTS

ITS AMERICA

April 22-25, DAS Hampshire, ITS JPO Director Cronin, and other FHWA and OST-R senior officials and staff will participate at the [Intelligent Transportation Society of America's \(ITSA\) annual conference](#), in Phoenix, AZ. DAS Hampshire is scheduled to speak on April 25 at a plenary entitled "[Artificial Intelligence - Unlocking the Next Frontier in Transportation.](#)" On April 25, ITS JPO will also be hosting a free [foundational V2X training session](#) during ITSA aimed to introduce transportation professionals to some of the key concepts surrounding V2X systems.



DAS Hampshire (L) and Raj Rajkumar, Director Safety21 National UTC. Photo: CMU

ICYMI

[The National Safety Summit of the University Transportation Centers hosted by Safety21/Carnegie Mellon University](#) was held April 4 in Washington, D.C. DAS Hampshire was keynote speaker at the event which highlighted the theme of Advancing Safety for All and featured a DOT panel on National Perspective on Transportation Safety.

DOT BY THE NUMBERS

From 2022 to 2023, the total number of trucks entering the U.S. from Canada increased 0.6% (5.49 million; 5.53 million). In that same period, the total number of trucks entering the U.S. from Mexico increased 4.9% (7.26 million; 7.36 million).



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CHERRY BLOSSOMS AT PEAK, SO IS TRAFFIC

It's cherry blossom season in DC and with that comes millions of visitors to the National Mall and increased traffic. To help improve safety and support a positive visitor experience, the [Volpe Center has assisted the National Park Service \(NPS\) in developing a Transportation Management Plan](#). The plan recommends vehicular detours, designated pick-up/drop-off zones, designated lanes for the DC Circulator bus, and temporary signage for visitors. Volpe staff will visit the festival to observe and collect data, after which they will develop a lesson learned memorandum with recommendations to continue to improve the festival for years to come. The 2024 National Cherry Blossom Festival runs through April 14.

V2X IN THE SPOTLIGHT

In [Telling the Story ITS JPO Director's Blog](#), Director Brian Cronin discusses how [SMART Grant Awardees Turn to V2X to Address Transportation Challenges](#). In March, [USDOT announced](#) more than \$50 million in SMART grant awards for 34 technology demonstration projects across the country. Several of the new awardees plan to utilize vehicle-to-everything (V2X) communications as the centerpiece of their projects including, the Pennsylvania Department of Transportation which is piloting a cellular-based system to deliver curve speed warnings to drivers and the City of Chattanooga, Tennessee, which is implementing a C-V2X solution for detecting vulnerable road users at midblock crossings.

NOTEWORTHY

ARPA-I Listening Session March 15, DAS Hampshire spoke at an ARPA-I Listening Session in Detroit, MI at Newlab. The session was hosted by USDOT and attendees included representatives from academia, industry, and IOOs.

Transport Research Arena April 15-18, DAS Hampshire, RD&T Director Ibrahim, and Director for RD&T Coordination Cain will lead a U.S. DOT team to the European Union's Transport Research Arena (TRA) Conference in Dublin, Ireland. ITS JPO Director Cronin will participate on a panel discussing "Big Data and AI for Road Safety." TRA is the largest European research and technology conference on transport and mobility.

National Work Zone Awareness Week is April 15-19. NWZAW spread awareness for work zone safety across the country. Events include a national kickoff event on April 16 and Go Orange day on April 17.

In the media:

- [Chatham Area Transit initiates micro-transit pilot through \\$1.2M grant](#) FY22 SMART grant recipient CAT SMART micro-transit pilot program has soft launched in Savannah, GA.
- [Introducing The Digital Curb: A Fundamental Building Block For Modern Curbside Management](#) appeared in *Forbes*. Article highlights the effort to digitize curbs and cites several ongoing SMART projects.
- [Projects receive more than \\$50M in SMART grants](#). One of several national and local news stories touting the latest round of SMART grants. Appeared in Transportation Today.



DAS Hampshire speaking at the ARPA-I Listening Session in Detroit.
Photo: USDOT



Questions, comments or ideas for future issues? Send us an email: USDOTresearch.info@dot.gov

UPCOMING

Explore upcoming webinars, conferences and opportunities from OST-R program offices

- **[DOT Learning Agenda Supplement](#)**: USDOT is seeking public input to inform our DOT Learning Agenda Supplement. Lend your voice to help create our agency's evidence-building strategic plan, and together let's make transportation better for all. Please submit your comments by **April 13**.
- **[HASS Connects](#)**: speakers from state/local DOTs will discuss highly automated transportation system deployment that seeks to improve safety in work zones, in honor of National Work Zone Awareness Week. For more info, contact denise.bakar@dot.gov **April 17**.
- **[DOT Climate Change Center 2024 Webinar Series: Intermodal Freight Decarbonization](#)**. Monthly series hosted by the DOT Climate Change Center focused on various climate change and transportation topics. **April 26, 1:30pm**
- **[Small Business Research Initiative \(SBIR\) Phase I Solicitation Complete Streets AI Initiative](#)**: \$15 million award to develop an interactive decision support tool for state and local transportation agencies that offers suggestions for Complete Streets improvements on a network-level for communities. **Closes May 10**.
- **[US DOT Future of Transportation Summit](#)**: Keynotes from US DOT and other Federal agency leaders, panel and presentations from Congress, industry, non-profits and other stakeholders. US DOT Headquarters, Washington, DC. Registration required. **August 13-15**.

UTC CORNER

The April [UTC Spotlight Newsletter Advancements in Smart Transportation: The Evolution of MUST Sensor Technology](#) outlines the Mobility Unit for Sensing Traffic (MUST) a multisource roadside sensor that integrates computer vision, sensor fusion, V2X communications, and other technologies developed by the PacTrans UTC.

The Center for Automated Vehicle Research with Multimodal Assured Navigation (CARMEN+) UTC received the [IEEE Aerospace and Electronic Systems Society \(AESS\) Harry Rowe Mimno Award](#) for their paper titled "[I Am Not Afraid of the GPS Jammer: Resilient Navigation Via Signals of Opportunity in GPS-Denied Environments](#)." The paper showcased the first ever vehicular navigation results in a real-world GPS-jammed environment (at Edwards Air Force Base, CA) by exploiting terrestrial cellular signals of opportunity as an alternative navigation system to GPS.

The UTC program has a [full library of past webinars available from our university partners on YouTube](#).

[Upcoming webinar topics include:](#) *Asphalt Emulsions in Flexible Pavement Preservation - Session 1* (April 10) and *Marginalized Populations' Access to Transit* (April 17).

