FHWA International NEWS BRIEF



Federal Highway Administration



PRESENTING THE FHWA's INTERNATIONAL NEWS BRIEF

By: Leslie Wright, Director, Office of International Programs

Welcome to the inaugural external edition of the Federal Highway Administration's (FHWA) International News Brief. We are excited to launch this publication. Multiple times a year, we will publish new articles on FHWA's international activities and provide updates about ongoing international programs throughout the Agency.

The International News Brief will serve as a vital communication tool, showcasing the remarkable work of subject matter experts and highlighting FHWA's global relationships. FHWA will highlight several significant international programs and activities, including studies conducted under the Global Benchmarking Program, important binational relations with long standing foreign counterparts such as Japan, Korea, and the Netherlands, as well as noteworthy multilateral relationships, including FHWA's participation in the World Road Association (known globally as PIARC), and the Forum of European Highway Research Laboratories.

This inaugural external edition features information on a Global Benchmarking Program Study on Bridge and Tunnel Strikes. It also highlights FHWA's technology exchanges with Senegal. Finally, this edition includes an article from colleagues at the Michigan Division showcasing the Gordie Howe International Bridge (GHIB) project, which is currently under construction and will create a vital international border crossing between Detroit, Michigan, and Windsor, Ontario.

I trust you will enjoy this edition and invite you to share it with your colleagues and counterparts. Finally, stay tuned for upcoming editions, where we will continue to share the many benefits of FHWA's international collaborations.

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PREVENTING BRIDGE STRIKES: FHWA's Global Efforts to Safeguard Infrastructure

By: Vincent Chiarito, Structural Engineer, Office of Bridges and Structures and **Hana Maier,** Global Benchmarking Program Manager, Office of International Programs



Visit by study team to Heinenoordtunnel in the Netherlands (Photo: FHWA)



View of Irish Rail warning system triggered by an overheight vehicle (Photo: FHWA)

Bridge strikes are one of the leading causes of bridge failures in the U.S., see FHWA TechBrief at https:// www.fhwa.dot.gov/bridge/security/hif24051.pdf. According to data from the National Highway Traffic Safety Administration (2021), since 2013, on average approximately 15,000 vehicular collisions involving bridges in the United States occur each year. Oversized trucks, or the inadvertently raised portions of cargo (e.g., dump beds or crane booms) frequently strike bridges and tunnels, causing significant damage to infrastructure, traffic delays, and re-routing of traffic to remove the truck and repair the damage. In the worst cases, bridges can partially or fully collapse, resulting in deaths, injuries, economic loss, and costly quality of life impacts for entire regions before the facility reopens to traffic.

The Federal Highway Administration is undertaking several efforts to address this challenge. In addition to exploring cost-effective solutions, FHWA is sponsoring work through the Transportation Research Board to develop a guide for States to prevent bridge strikes by over-height vehicles. This guide includes a framework for collecting bridge strike data, communicating data among the State agencies, and using data to support operational changes and develop bridge strike countermeasures.

Recently, and partly informed by a World Road Association Special Project on this topic, the FHWA also conducted a Global Benchmarking study to identify and evaluate proven countermeasures, emerging practices, and technologies used in the Netherlands, the United Kingdom, and the Republic of Ireland to reduce the incidence and consequences of trucks striking bridges and tunnels. The study team was comprised of two FHWA representatives, two State DOT representatives (Missouri and Texas), and a report writer. Prior to the country visits on June 24-28, 2024, the study team engaged in several virtual meetings that included European Union (EU) representatives and stakeholders.

The study gathered valuable information on successfully implemented technologies and technologies to prevent bridge strikes from occurring, detect when bridge strikes occurred, and mitigate the strikes' effects. In addition, effective processes and tools for collecting, analyzing, and communicating bridge strike data were identified and are being studied for future deployment. The study team is in the process of developing their report, which is expected to be available in 2025 and posted on the FHWA website.

Senegalese Road Infrastructure Agencies Visit FHWA

By: Lateefah Burgess, Former International Program Manager, Office of International Programs



The Senegalese delegation participated in meetings and site visits with subject matter experts from the Federal, State, and local levels. Pictured above are the delegation members with representatives from FHWA's Office of Policy and Governmental Affairs on the first day of their 5-day visit. The delegation expressed that the program was well planned and executed and they gained extensive knowledge to implement in their country. (Photo: FHWA)

In 2022, the Federal Highway Administration (FHWA) began engaging with Senegalese road infrastructure agencies when the Office of International Programs (HPIP) conducted meetings with representatives of the Ministry of Infrastructure, Land Transport, and Air, and the Senegalese Road Management Agency (AGEROUTE) during an annual World Road Association (PIARC) Council meeting hosted in Dakar, Senegal. Over the past two decades, Senegal has made significant investments in transportation projects and continues to pursue transformative plans for the country's road infrastructure. The Office of International Programs anticipates there are opportunities to collaborate, contribute to, and learn from the work of FHWA's counterparts in Senegal.

In 2023, FHWA's former Associate Administrator for Highway Policy and External Affairs, Keith Benjamin, and an HPIP representative at the time, Lateefah Burgess, conducted meetings in Dakar with road infrastructure government agencies and stakeholders to identify opportunities for further engagement.

Senegalese government officials were invited to visit FHWA headquarters to gain further insight on topics that are high priorities for Senegalese road networks.

During the week of September 23, 2024, three highlevel Senegalese delegates from three agencies visited FHWA's headquarters, where they held dialogues with representatives from six FHWA offices, received a tour of Turner-Fairbank Highway Research Center, met with the American Association of State Highway Transportation Officials, and were hosted by the Virginia Department of Transportation and the City of Alexandria Transportation Planning Division. Topics addressed Senegalese priorities, including safety, data collection, program delivery, strategic planning, and toll roads. Site visits included the George Washington Parkway, Memorial Bridge, and toll lanes on 1-495, I-395, and I-66. The Senegalese visit was a first step along the road to mutually beneficial exchanges with FHWA's counterparts in West Africa.

GORDIE HOWE INTERNATIONAL BRIDGE: A New Era for United States and Canada Trade

By: Ted Burch, FHWA Michigan Division Administrator; **Chris Dingman**, FHWA Northern Border Specialist; and **Jon Stratz**, FHWA Michigan Division Project Oversight Manager



Final preparations for the bridge deck closure (Photo: Detroit Bridge Authority)



Completed deck closure view from Canada into the US Windsor (Photo: Windsor Detroit Bridge Authority)

The Gordie Howe International Bridge (GHIB) project, named after ice hockey legend Gordie Howe, will create a new international border crossing between Detroit, Michigan, and Windsor, Ontario. This project includes a 1.5-mile-long cable-stayed bridge, along with new U.S. and Canadian ports of entry, a cross-border bike and pedestrian path, and a new Interstate 75 interchange in southwest Detroit. The bridge will change the Detroit and Windsor skyline, with its two towers standing at a full height of 722 feet above ground level. The new bridge has a clear span of over half a mile, the longest main span of any cable-stayed bridge in North America, eliminating the need to place support piers in the river.

Since the bridge was originally conceived over two decades ago, the Federal Highway Administration (FHWA) has been heavily involved in all stages of the project, working closely with Michigan, U.S., and Canadian agencies to bring it to fruition. From complex international negotiations and leading the U.S. environmental analysis to oversight of significant right-of-way purchases and relocations, FHWA has

been at the forefront. Innovative financing strategies, such as Canadian investments in the U.S., a unique Buy America waiver, and the development of the nearly 6,500-page Public Private Partnership (P3) project agreement have been key components of this effort. Since construction began in 2018, FHWA has collaborated closely with project managers and subject matter experts to resolve design, construction, and contract related issues. FHWA conducts quarterly oversight reviews of federal-aid eligible activities, which has resulted in improvements from a project quality, documentation, and partnering perspective, thereby reducing risk on this high-profile project.

According to the USDOT Bureau of Transportation Statistics, almost 30 percent of all U.S.-Canada truck freight by dollar value moves through the Detroit/ Windsor corridor, highlighting the GHIB's importance to both domestic and international economies. The new international crossing, expected to open in Fall 2025, will bolster security, enhance efficiency, and reduce travel time and costs for the busiest U.S. - Canada trade corridor.