FOR IMMEDIATE RELEASE
Contact: mdtapios@mdta.state.md.us

MARYLAND TRANSPORTATION AUTHORITY'S RESPONSE TO NATIONAL TRANSPORTATION SAFETY BOARD RECOMMENDATIONS

BALTIMORE (April 21, 2025) – According to publicly available bridge data, available on the Federal Highway Administration's website, the William Preston Lane Jr. Memorial Bay Bridge has been inspected annually, for more than 30 years, and found to be in safe and satisfactory condition. In the last decade, Maryland has invested more than $175 million on Bay Bridge safety and security infrastructure. The current design and condition of the Bay Bridge's pier protection complies with its federal permit. Bridges that comply with their federal permit throughout the United States do not require modification. That is true for the Bay Bridge.

Although not obligated to do so under the law, the Maryland Transportation Authority (MDTA) initiated a $160 million project in the spring of 2024 to evaluate and study bridge protection at the Bay Bridge. The project's operational recommendation and evaluation phase is complete, and the study/concept development phase has concluded. MDOT hired the consulting firm Moffatt & Nichol, a nationally recognized company for their expertise regarding vessel collision design of bridges, to conduct the $600,000 study phase of the project through an existing contract with MDTA. Moffatt & Nichol staff previously served as the principal author of the American Association of State Highway and Transportation Officials (AASHTO) vessel collision requirements. Now that the study phase is complete, the MDTA will advance the project into design this summer. Procurement methods and a timeline for the project are being determined. The MDTA is performing this project at the same time it is studying the potential replacement of the existing Bay Bridge spans as part of the MDTA's Bay Crossing Study. As such, the MDTA will be sure not to preclude a future project to replace the existing spans.

The following response was provided in compliance with the National Transportation Safety Board's request to provide an update within 30 days on any action the MDTA intends to take based on our evaluation of the pier protection systems, operational changes and vessel transit procedures of the Bay Bridge.

Letter: MDTA 30-day response to NTSB

Dear Chairman Homendy,

Thank you for your letter dated March 20, 2025, regarding the urgent safety recommendations resulting from the National Transportation Safety Board (NTSB) March 18, 2025 report "Safeguarding Bridges from Vessel Strikes: Need for Vulnerability Assessment and Risk Reduction Strategies" (MIR-25-10).

The Maryland Transportation Authority (MDTA) is committed to ensuring the safety of the traveling public and the structural safety of its transportation infrastructure. The MDTA appreciates the NTSB's role in advancing national transportation safety.

In direct response to the recommendations, the MDTA provides the following information:

Safety Recommendation H-25-3

MDTA engaged the consulting firm Moffatt & Nichol (M&N) to conduct an initial evaluation of the risk of vessel collision with the William Preston Lane Jr. Memorial Bay Bridge (Eastbound) and the William Preston Lane Jr. Memorial Bay Bridge (Westbound) (herein the "Bay Bridges") in accordance with American Association of State Highway and Transportation Officials (AASHTO) Method II risk analysis procedures. The M&N scope of work included conducting AASTHO Method II risk analyses for the main channel of the Bay Bridges, developing options for risk reduction and providing concept design of protective structures.

M&N is nationally and internationally recognized for their expertise regarding vessel collision design of bridges and their staff includes the principal author of the AASHTO vessel collision requirements. M&N staff also taught the Federal Highway Administration/National Highway Institute's 2-day short course on vessel collision analysis for AASHTO when the ship and barge collision requirements were originally implemented by AASHTO/FHWA in 1991 and updated in 2009.

The Bay Bridges are twin bridges with eastbound traffic and westbound traffic carried on separate parallel structures constructed in 1952 and 1973, respectively. The analysis was conducted in accordance with the procedures outlined in the *AASHTO Bridge Design Specifications, 10th Ed, 2024*, which applies primarily to new bridges, and in accordance with the procedures contained in the *AASHTO Guide Specifications and Commentary for Vessel Collision Design of Highway Bridges, Second Edition, 2009* (including 2010 interim revisions), which includes recommendations on the evaluation of existing bridges. The 2009 AASHTO Guide Specifications are significantly more comprehensive in the analysis and design of new bridges for vessel collision than the abbreviated requirements of the 2024 AASHTO Bridge Design Specifications (Code).

The results of the AASHTO Method II vessel collision risk assessment conclude that the Bay Bridges do not meet the AASHTO risk threshold for new bridges.

Safety Recommendation H-25-4

Based on results of the AASHTO Method II analysis for H-25-3, MDTA is developing a comprehensive risk reduction plan that will include short-term and long-term strategies for reducing risk, such as bridge operational restrictions, regulatory requirements for vessel transits under the Bay Bridges, and physical protection measures. Short-term strategies may include: communication protocols for vessel pilots, reduced vessel speeds, one-way transits, and methods to manage vehicular traffic on the bridge. Long-term strategies may include: physical protection measures such as dolphins and pier fenders.

Following the initial AASHTO Method II study for H-25-3, detailed analysis and further refinement of the risk analysis is being conducted and the design of potential physical protection measures will be undertaken by MDTA. MDTA will continue to coordinate with local representatives from the U.S. Coast Guard and the U.S. Army Corps of Engineers concerning risk reduction at the Bay Bridges and the new Francis Scott Key Bridge. Risk reduction measures will be coordinated and reviewed by the Federal Highway Administration, U.S. Coast Guard, and U.S. Army Corps of Engineers Interdisciplinary Team identified by NTSB in Safety Recommendations H-25-001 and H-25-002.

In summary, MDTA has opted to apply the industry-standard vessel collision risk assessment methods for the evaluation of vessel collision risk. The findings from the vessel collision study will contribute to the comprehensive analysis of safety risks associated with the regional highway network and the safe navigation of vessels under and near the Bay Bridges.

The MDTA appreciates the NTSB's efforts to enhance infrastructure safety and welcomes continued collaboration on these critical issues. Should further clarification be required, please contact our office directly.

Sincerely,

Paul J. Wiedefeld
Secretary of Transportation
Chairman, Maryland Transportation Authority Board

cc: Mr. Bruce Gartner, Executive Director
Mr. James Harkness, Chief Engineer