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Baltimore Bridge Collapse: Frequently Asked Questions (FAQ)

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Contents

Figures

Contacts

Introduction

At about 1:30 a.m. on March 26, 2024, the MV *Dali*, a container ship departing the Port of Baltimore, struck a pier of the Francis Scott Key Bridge (Key Bridge) in Baltimore, MD, causing the bridge to collapse into the Patapsco River.[1] The bridge was a segment of Interstate 695 (I-695)—Baltimore's beltway—and spanned the Patapsco shipping channel into the harbor.[2]

A pothole repair crew of eight was on the bridge at the time of the collision. Two survived, one with injuries. Authorities were able to stop traffic over the bridge right before the vessel strike. There were 23 mariners aboard the ship, and none sustained injury.[3]

The bridge collapse disrupted highway traffic, port traffic, freight movement, and economic activity in the region. The port has since reopened to large vessel traffic, and by April 2026, workers had begun placing piles to support a replacement bridge.[4] Multiple agencies responded to or investigated the bridge collapse, including the National Transportation Safety Board (NTSB), the U.S. Coast Guard, the Federal Highway Administration (FHWA), the U.S. Department of Justice (DOJ), the Maryland Department of Transportation (MDOT), the Maryland Transportation Authority (MDTA),[5] and the City of Baltimore.

Who Owned and Operated the Bridge?

The Key Bridge opened to traffic in 1977. It was a steel truss bridge[6] spanning 9,086 feet and with a vertical clearance of 185 feet.[7] It carried I-695 over the Patapsco River from Baltimore to Dundalk, MD. The bridge was owned and operated by MDTA. MDTA collected tolls for use of the bridge.[8]

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[1] A *bridge pier* is a vertical load-bearing support structure. It is often an intermediate support structure between two ends of a bridge. See *Encyclopedia Britannica*, (2021), under "pier," https://www.britannica.com/technology/pier-architecture; and Federal Highway Administration (FHWA), *Underwater Bridge Repair, Rehabilitation, and Countermeasures Reference Manual*, FHWA-NHI-23-029, November 2024, p. xxiv, https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi23029.pdf (hereinafter FHWA, *Underwater Bridge Repair, Rehabilitation, and Countermeasures Reference Manual*).

[2] For a map showing the location of port terminals in relation to the bridge, see Moran Towing Co., Port Baltimore map, https://www.morantug.com/Customer-Content/www/ports-and-operations/PortMap/Baltimore.pdf.

[3] Key Bridge Response 2024, https://www.keybridgeresponse2024.com/.

[4] Bryan P. Sears, "Maryland Transportation Officials Hold Firm on $5.2 Billion Price Tag to Replace Key Bridge," *WTOP News*, June 3, 2026, https://wtop.com/baltimore/2026/06/maryland-transportation-officials-hold-firm-on-5-2-billion-price-tag-to-replace-key-bridge/.

[5] Maryland Transportation Authority (MDTA) is a state agency "responsible for constructing, managing, operating and improving the State's toll facilities, as well as for financing new revenue producing transportation projects." See MDTA, "About the Maryland Transportation Authority (MDTA)," accessed May 1, 2026, https://mdta.maryland.gov/About/About_the_MDTA.html.

[6] In a *truss bridge*, the load-bearing structures are trusses, a series of interconnected triangles. See North Carolina Department of Transportation, "Truss Bridges," July 16, 2020, https://www.ncdot.gov/initiatives-policies/Transportation/bridges/historic-bridges/bridge-types/Pages/truss.aspx.

[7] National Transportation Safety Board (NTSB), *Contact of the Container Ship Dali with Francis Scott Key Bridge and Subsequent Bridge Collapse*, MIR-25-40, November 18, 2025, p. 60, https://www.ntsb.gov/investigations/AccidentReports/Reports/MIR2540.pdf (hereinafter NTSB final report).

[8] MDTA, *Tolling at Francis Scott Key Bridge (I-695) Facility: A Report to the Maryland General Assembly Senate Budget and Taxation Committee and House Appropriations Committee*, December 2023, https://dlslibrary.state.md.us/publications/JCR/2023/2023_85.pdf.

Although signage indicated that the bridge was part of the Interstate Highway System (IHS),[9] the section of I-695 that included the Key Bridge had not been designated as part of the IHS at the time of the collapse. While not part of the IHS, this section of I-695 was a federal-aid highway and therefore generally eligible for federal highway funding.[10] On April 29, 2024, FHWA approved a request from the State of Maryland to redesignate this section of I-695 as part of the IHS.[11]

Who Owned the Ship?

At the time of the incident, the *Dali* was chartered (i.e., leased) by Maersk, a Danish shipping firm that provides container shipping services worldwide in addition to other types of shipping. The ship was managed by the Synergy Marine Group and owned by Grace Ocean Private Ltd., both based in Singapore.[12] The ship's crew were from India. It was flagged and homeported in Singapore and was *classed* (meaning certified as meeting construction and maintenance standards) by a Japanese firm, Nippon Kaiji Kyokai (ClassNK).[13] The multiple nationalities involved in operating and administering the ship are typical of the industry.

The ship was built in 2015 by Hyundai Heavy Industries in South Korea with a MAN-manufactured engine.[14] It is 984 feet in length and 158 feet in breadth with a capacity to carry 10,000 TEUs of containers (a TEU is a 20-foot container). It could be considered an average-sized container ship today but would be considered a large ship compared with the fleet in the late 1970s when the Key Bridge was built. The ship had sailed from Asia through the Panama Canal and had called at Norfolk and New York before its Baltimore port call. When it struck the bridge, the ship was departing Baltimore for Sri Lanka.

What Caused the Ship to Strike the Bridge?

NTSB issued a final report on its investigation into the bridge collapse in November 2025. NTSB determined that

> the probable cause of the contact of the containership *Dali* with the Francis Scott Key Bridge was a loss of electrical power (blackout), due to a loose signal wire connection to a terminal block stemming from the improper installation of wire-label banding, resulting in the vessel's loss of propulsion and steering close to the bridge.[15]

According to NTSB, a contributing factor was "the lack of countermeasures to reduce the bridge's vulnerability to collapse due to impact by ocean-going vessels."[16] The Key Bridge had

[9] Interstate Highway System (IHS) routes are the highest functional classification of highways, designed for high-speed and long-distance travel. All IHS routes are federal-aid highways.

[10] A *federal-aid highway* is a public highway "other than a highway functionally classified as a local road or rural minor collector." See 23 U.S.C. §101(a)(6).

[11] See 01:24:37 in U.S. Congress, Senate Committee on Environment and Public Works, *The Response to the Francis Scott Key Bridge Collapse on March 26, 2024*, 118th Cong., 2nd sess., July 10, 2024, https://www.epw.senate.gov/public/index.cfm/hearings?ID=1006C0F1-2D20-47EC-930A-71E247BC04A1; and NTSB final report, p. 60.

[12] Synergy Marine Group, "About Us," https://www.synergymarinegroup.com/about/about-us/; and Lloyd's Register of Ships, 2022-2023 edition. The ship's International Maritime Organization (IMO) identification number is 9697428.

[13] ClassNK, "Introduction," https://www.classnk.com/hp/en/about/aboutNK/index.html.

[14] MAN is a Germany-based manufacturer of ship engines. Lloyd's Register of Ships, 2024/2025 edition, IHS Maritime.

[15] NTSB final report, p. 202.

[16] NTSB final report, p. 202.

physical protection systems in place to protect the piers: four dolphins and a pier fendering system.[17] The *Dali*'s trajectory took it between two dolphins protecting Pier 17, the bridge pier it struck. The fendering systems included a crushable concrete box, timber fenders, and steel plates. The fendering systems did not withstand the impact load of the *Dali*.[18] For more information on the pier protection system, see the section on "What Is the Plan for Replacing the Bridge?"

How Do Ships Navigate Through Harbors?

When the *Dali* lost propulsion, two Baltimore harbor pilots were aboard the ship; harbor pilots navigate ships in and out of harbors because they have expertise with local navigation conditions. Even when harbor pilots are at the helm, the captain of the ship and the shipping line (Maersk) remain responsible for the safety of the vessel. Tugs typically assist in moving ships into and out of their berths (docking and undocking) and rarely escort ships through harbors as an emergency safety measure. This ship released the tugs before reaching the bridge, as is reportedly normal in the Baltimore harbor.[19]

How Common Is It for Ships to Lose Power?

Loss of propulsion is a known and recorded occurrence in shipping. An annual review of marine incidents for vessels with a connection to the European Union (EU)—including EU-registered or EU-owned vessels or incidents occurring in EU waters—found that loss of propulsion surpassed vessel-to-vessel collisions as the leading cause of marine casualties from 2014 to 2022.[20]

Could Tug Escorts Have Prevented the Collapse of the Bridge?

Some observers have raised the question of whether tugs escorting the ship under the bridge could have prevented the ship from hitting one of the towers.[21] After the ship reportedly lost power, the pilot called for tug assistance moments before striking the bridge, but by then it was too late for the tugs to reach the ship.[22] Tugs have the ability to push ships in a desired direction

[17] A *dolphin* is a group of piles (i.e., long slender columns) driven close together to protect portions of a bridge. A *fender* is a structure that acts as a buffer to protect portions of a bridge exposed to floating debris and waterborne traffic from collision damage. See FHWA, *Underwater Bridge Repair, Rehabilitation, and Countermeasures Reference Manual*, pp. xix and xx.

[18] NTSB final report, p. 68.

[19] John Konrad, "Ship Lost Control Before Hitting Baltimore Bridge," *gCaptain*, March 26, 2024, https://gcaptain.com/ship-lost-control-before-hitting-baltimore-bridge/.

[20] European Maritime Safety Agency, "Annual Overview of Marine Casualties and Incidents 2023," June 15, 2023, p. 40, https://www.emsa.europa.eu/publications/reports/item/5052-annual-overview-of-marine-casualties-and-incidents.html. The NTSB final report (p. 128) summarizes U.S. Coast Guard data on the loss of power experienced by vessels in U.S. waters.

[21] Bruce Buls, "Key Bridge Mistake," *WorkBoat*, April 1, 2024, https://www.workboat.com/key-bridge-mistake; Tony Munoz, "A Remedy for Ship Accidents: Tug Escorts," *The Maritime Executive*, March 30, 2024, https://maritime-executive.com/editorials/a-remedy-for-ship-accidents-tug-escorts.

[22] For NTSB's preliminary timeline of the incident, see NTSB, "Contact of Cargo Vessel Dali with Francis Scott Key Bridge and Subsequent Bridge Collapse," March 27, 2024, https://www.ntsb.gov/investigations/Pages/DCA24MM031.aspx.

and even stop ships over some distance, but they must have sufficient engine power and have other design features specifically for this purpose.[23]

Some harbors require tug escorts, but the requirements appear to be exclusively for tankers of liquid bulk cargoes, such as oil, chemicals, or liquid natural gas (LNG). The requirements are not intended to specifically prevent bridge strikes but rather to prevent any event that might result in a spill, such as a tanker grounding. Tug escorts are a federal requirement for tankers in Prince William Sound, AK, and in Puget Sound, WA.[24] The State of California requires tug escorts of tankers in its harbors per state regulation.[25] However, requiring tug escorts can introduce additional risk exposure simply due to the presence of more vessels on the water.[26] For instance, in January 2023, one of five tugs assisting an empty tanker into the Port of Corpus Christi, TX, accidentally got caught in the tanker's propeller.[27]

In 2000, the U.S. Supreme Court distinguished federal regulations concerning the safe operation of tankers in harbors from nonfederal requirements that can be imposed if they do not conflict with federal requirements and are based on "the peculiarities of local waters."[28] State proposals concerning ship safety could also interfere with international treaties that have established global standards. While local requirements for tug escorts are allowed, ports may be reluctant to require them because of their cost and the heightened competition for containerized cargo.

How Is Road Traffic Affected?

The Key Bridge had annual average daily traffic of over 30,000 vehicles in 2023, including over 3,000 trucks per day. It was less heavily used than the Fort McHenry and Baltimore Harbor Tunnels running under the Patapsco River farther north (see **Figure 1**).

Highway traffic was rerouted through the Baltimore Harbor or Fort McHenry Tunnels or on I-695 to the north of Baltimore City. Some larger vehicles, including all double trailers, and most shipments of hazardous materials are not permitted in the tunnels, and trucks are not allowed through the Baltimore Harbor Tunnel. The Baltimore Metropolitan Council reports that travel times for the tunnels have increased significantly since the loss of the Key Bridge. In the fourth quarter of 2025, the tunnels were among the top 5 bottlenecks in the region, whereas in the fourth quarter of 2023, the tunnels were not included in the list of top 10 bottlenecks.[29]

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[23] Iain Braidwood and Robert G. Allan, "A Risk Profile for Escorted Tankers and Their Resistance to Collision Damage," in *Royal Institution of Naval Architects, Damaged Ship IV*, May 16-17, 2018, https://static1.squarespace.com/static/58ffe2e66b8f5b40c0cec664/t/5c8172af971a1811b3000599/1551987382686/Braidwood+Allan+RINA+Damaged+Ships.pdf.

[24] 33 C.F.R. Part 168.

[25] California Code of Regulations, Title 14, Division 1, Subdivision 4, §§851.20-851.32.

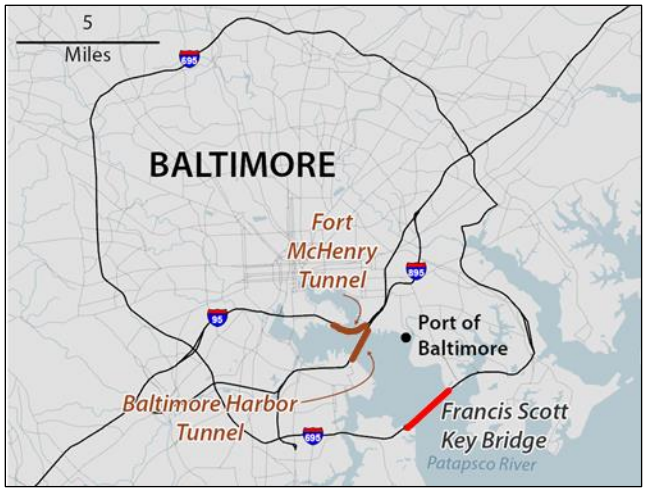
[26] Pamela Glass, "Tug Escort Rules in Ports May Be Reviewed After the Key Bridge Collapse," *WorkBoat*, April 3, 2024, https://workboat.com/coastal-inland-waterways/tug-escort-rules-in-ports-may-be-reviewed-after-the-key-bridge-collapse.

[27] NTSB, "Collision Between Tugboat *Mark E Kuebler* and Tanker *Nisalah*, MIR-24-04, February 21, 2024, https://www.ntsb.gov/investigations/AccidentReports/Reports/MIR2404.pdf.

[28] United States v. Locke, 529 U.S. 89 (2000).

[29] Baltimore Metropolitan Council, *Quarterly Congestion Analysis Report: Top 10 Bottlenecks in the Baltimore Region, 4th Quarter 2023*, January 2024, p. 10, https://baltometro.org/wp-content/uploads/files/bmc_documents/publications/transportation/congestion-analysis/CAReports_2023-Q4.pdf; and Baltimore Metropolitan Council, *Quarterly Congestion Analysis Report: Top 10 Bottlenecks in the Baltimore Region, 4th Quarter 2025*, February 2026, pp. 10, 13, 15, https://baltometro.org/wp-content/uploads/CAReports_2025-Q4.pdf.

Figure 1. Map of Baltimore Transportation Facilities



Source: Created by CRS using data from the U.S. Census Bureau and Esri.

Notes: The Fort McHenry and Baltimore Harbor Tunnels are marked in brown, and the location of the Key Bridge is marked in red. The Key Bridge location forms part of the southeastern edge of Interstate 695.

What Is the Plan for Replacing the Bridge?

MDTA plans to replace the Key Bridge with a cable-stayed bridge[30] with a length of 11,015 feet and vertical clearance of 230 feet. The pier protection system for the new bridge is expected to include pylon protection fenders made of reinforced concrete and supported by steel pipe piles. MDTA indicates that the pier protection structures will be designed according to the latest American Association of State Highway and Transportation Officials (AASHTO) specifications.[31] The Key Bridge had a pier protection system, but it was designed prior to the issuance of AASHTO specifications, and the fender systems were made of crushable concrete boxes and timber.[32]

When Will the Bridge Replacement Be Completed, and How Much Will It Cost?

Originally, in May 2024, Maryland officials estimated that it might take approximately four years to replace the bridge, at a cost of between $1.7 billion and $1.9 billion.[33] In November 2024, MDTA revised the estimated replacement cost to between $4.3 billion and $5.2 billion and projected that the new bridge would open to traffic in late 2030. MDTA attributed the revised estimates to "increased material costs and to a robust pier protection system designed to protect

[30] In a *cable-stayed bridge*, "the weight of the bridge deck over the main span is supported by cables connected to tall towers, which allows for longer spans and requires fewer piers." See MDTA, "Cable-Stayed Bridge," accessed May 1, 2026, https://keybridgerebuild.com/glossary/cable-stayed-bridge/.

[31] MDTA, "Bridge Design: Rebuilding for the Future," accessed May 1, 2026, https://keybridgerebuild.com/design/.

[32] NTSB final report, pp. 63-69.

[33] Brian Witte, "Maryland Officials Release Timeline, Cost Estimate, for Rebuilding Bridge," Associated Press, May 2, 2024, https://apnews.com/article/baltimore-bridge-collapse-body-found-cdd8441c5dff48028d1e141b943ca31e.

the new Key Bridge and reduce the likelihood of a future ship strike to the bridge's foundational piers."[34]

In April 2026, news outlets reported that the contractor MDTA had retained for the preconstruction phase of the project had provided an estimate to MDTA for the construction phase that "far exceeds" the $4.3 billion-$5.2 billion cost range.[35] In the article, Maryland officials indicated that they would seek new bids for the construction phase of the project. In May 2026, MDTA announced four separate procurements for remaining demolition and construction work on the replacement bridge. According to the announcement, demolition will begin in the fall of 2026, and construction will begin in the spring of 2027.[36]

Who Is Paying for the Bridge Replacement?

FHWA's Emergency Relief (ER) Program provides funds to repair or replace federal-aid highways and bridges damaged in disaster events.[37] The ER Program provides "quick release" funds to cover emergency repairs and operations, as well as funds for permanent repair or replacement of damaged structures. MDOT applied for and received $60 million in quick release funds on March 28, 2024. In July 2024, then-FHWA Administrator Shailen Bhatt testified that "additional Emergency Relief program funding will be made available as work continues."[38]

Under the ER Program, federal funds generally cover up to 90% of eligible project costs for projects on the IHS and up to 80% of eligible project costs on other federal-aid highways.[39] The remaining percentage of eligible project costs is known as the "non-federal match" or "local match" and must be covered by the aid recipient, in this case MDOT. FHWA's redesignation of this section of I-695 as IHS could have increased the federal share for the project.[40] Another provision also could have increased the federal share for the project: If the total expenses a state incurs to deal with disaster-damaged roads in a given fiscal year exceed the state's total federal-aid highway formula funds in that fiscal year, the maximum federal share also increases to 90%.[41]

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[34] MDTA, "Maryland Transportation Authority Releases Updated Estimates for Cost Range and Schedule for Francis Scott Key Bridge Rebuild," press release, November 17, 2025, https://keybridgerebuild.com/wp-content/uploads/2025/11/MDTA-Releases-Updated-Estimates-for-Cost-Range-and-Schedule-for-Francis-Scott-Key-Bridge-Rebuild.pdf.

[35] Chris Marquette, "Maryland Drops Contractor for Second Phase of Key bridge Rebuild," *Politico*, April 28, 2026, https://subscriber.politicopro.com/article/2026/04/maryland-key-bridge-contractor-00895502.

[36] MDTA, "Maryland Transportation Authority Announces Four Separate Procurements for Key Bridge Rebuild Construction," press release, May 19, 2026, https://mdta.maryland.gov/blog-category/mdta-news-releases/maryland-transportation-authority-announces-four-separate.

[37] A *federal-aid highway* is a public highway "other than a highway functionally classified as a local road or rural minor collector"; see 23 U.S.C. §101(a)(6). For information about the Emergency Relief Program, see CRS Report R47724, *Emergency Relief Program for Disaster-Damaged Highways and Bridges*, by Ali E. Lohman; and CRS Report R48297, *The Backlog of Requests for Aid from the Federal Highway Administration's Emergency Relief Program*, by Ali E. Lohman.

[38] Testimony of Shailen Bhatt, FHWA Administrator, U.S. Department of Transportation, in U.S. Congress, Senate Committee on Environment and Public Works, *Lesson Learned from the Federal Response to the Francis Scott Key Bridge Collapse March 26, 2024*, hearing, 118th Cong., 2nd sess., July 10, 2024, S.Hrg. 118-724, https://www.epw.senate.gov/public/_cache/files/1/9/19f0314e-13d5-4e02-a725-404c060be8c0/0BA24068CBCFE9322A84D741510616B8.07-10-2024-bhatt-testimony.pdf.

[39] 23 U.S.C. §120(a) and (b). Certain projects are eligible for an increased federal cost share, such as those located in states with a high proportion of federally owned land or certain types of safety projects.

[40] See 01:24:37 in U.S. Congress, Senate Committee on Environment and Public Works, *Lesson Learned from the Federal Response to the Francis Scott Key Bridge Collapse on March 26, 2024*, hearing, 118th Cong., 2nd sess., July 10, 2024, S.Hrg. 118-724, https://www.congress.gov/event/118th-congress/senate-event/335941?s=1&r=19.

[41] 23 U.S.C. §120(e)(4).

In December 2024, Congress passed the American Relief Act, 2025 (P.L. 118-158), which increased the federal share to 100% for ER funds used to reconstruct the Key Bridge.[42] In the past, Congress has made similar exceptions allowing ER funds to cover 100% of costs for specific projects, such the Interstate 35W bridge project.[43] P.L. 118-158 also appropriated $8 billion for the ER Program, which at the time had an $8 billion gap between funds available and requests for aid.

Could the Owner of the *Dali* Be Liable for Damages?

Since the Key Bridge collapsed, the U.S. DOJ, the State of Maryland, Baltimore County, Baltimore City, local businesses, members of the International Longshoremen's Association, the families of the six workers who died in the collapse, and others have taken legal action against Grace Ocean Private, Ltd. and Synergy Marine Group.[44] Some of these legal actions have been resolved, while others are ongoing.

On April 1, 2024, Grace Ocean Private, Ltd. and Synergy Marine Group filed a petition in federal district court under the Limitation of Liability Act of 1851 (46 U.S.C. Ch. 305) asking the court either to exonerate them from liability for the collision or to restrict their potential financial liability to approximately $43 million. This figure, known as an "interim stipulation of value," is related to the value of the vessel itself and the amount earned from the vessel's voyage.[45]

In October 2024, the DOJ announced that it had reached a $102 million settlement with Grace Ocean Private, Ltd. and Synergy Marine Group. DOJ indicated that the settlement funds would be disbursed between the federal agencies that incurred costs related to clearing the channel. Grace Ocean Private, Ltd. also separately paid the Coast Guard National Pollution Funds Center for costs related to abating the threat of oil pollution.[46]

MDTA had a $350 million insurance policy on the Key Bridge, which the insurer reportedly paid out in August 2024.[47] Press reports indicate that Grace Ocean Private, Ltd. and Synergy Marine

[42] P.L. 118-158, Title XII, Department of Transportation, FHWA, Emergency Relief Program.

[43] P.L. 110-56. The Interstate 35W bridge in Minnesota collapsed in August 2007 because of a design error. See NTSB, *Collapse of I-35W Highway Bridge, Minneapolis, Minnesota, August 1, 2007*, NTSB/HAR-08/03, November 14, 2008, https://www.ntsb.gov/investigations/AccidentReports/Reports/HAR0803.pdf.

[44] Jessica Albert, "Dozens of Lawsuits Take 'Bold Action' Against Dali's Owner, Baltimore County Executive Says," *CBS News*, September 25, 2024, https://www.cbsnews.com/baltimore/news/dozens-of-lawsuits-take-bold-action-against-dalis-owner-baltimore-county-executive-says/; Hayes Gardner, "2 Years. 6 Lives. Billions at Stake. The Key Bridge Tragedy Isn't Over," *Baltimore Banner*, March 25, 2026, https://www.thebanner.com/economy/key-bridge-rebuild-funding-lawsuits-QPWWTFI22RHKBBNYJPPNGDCQQI/; and U.S. Department of Justice, "Foreign Operators and Technical Superintendent of M/V Dali Indicted for Roles in Key Bridge Crash," press release, May 12, 2026, https://www.justice.gov/opa/pr/foreign-operators-and-technical-superintendent-mv-dali-indicted-roles-key-bridge-crash. The 18-count indictment is available at https://assets.law360news.com/2476000/2476217/indictmentdali.pdf. United States v. Synergy Marine Private Ltd., No. 1:26-cr-00118 (D. Md. April 8, 2026).

[45] For more information about how courts evaluate such petitions, see CRS Legal Sidebar LSB11155, *The Baltimore Bridge Collapse and the Limitation of Liability Act of 1851*, by Bryan L. Adkins, Alexander H. Pepper, and Clay Wild.

[46] U.S. Department of Justice, "U.S. Reaches Settlement for Over $100M in Civil Lawsuit Against Owner and Operator of the Vessel That Destroyed the Francis Scott Key Bridge," press release, October 24, 2024, https://www.justice.gov/archives/opa/pr/us-reaches-settlement-over-100m-civil-lawsuit-against-owner-and-operator-vessel-destroyed.

[47] "Maryland Transportation Authority Receives $350 Million Payout from Key Bridge Insurer," *DredgeWire*, August 28, 2024, https://dredgewire.com/maryland-transportation-authority-receives-350-million-payout-from-key-bridge-insurer/.

Group reached a $350 million settlement with the insurer in April 2026.[48] Also in April 2026, the Maryland Attorney General announced that Maryland had reached a settlement in principle with Grace Ocean Private, Ltd. and Synergy Marine Group but declined to provide details pending finalization of the settlement.[49]

Would Insurance Payouts or Compensation for Damages Affect Federal Funding for the Bridge Reconstruction?

Any insurance payout or compensation for damages reduces the funding provided by the ER Program. According to 23 C.F.R. §668.105(e),

> ER funds shall not duplicate assistance under another Federal program or compensation from insurance or any other source. ... Any compensation for damages or insurance proceeds including interest recovered by the State or political subdivision or by a toll authority for repair of the highway facility must be used upon receipt to reduce ER fund liability on the project.

If a state receives insurance proceeds while a project is ongoing, the federal share of the proceeds is withdrawn from the state's allocated ER funds. (The federal share of the insurance proceeds is proportionate to the federal share for the project).[50] After a disaster such as a ship striking a bridge, liability litigation may continue for years. In some cases, a state may complete an ER project before the courts determine liability for the disaster. In such situations, the state calculates the amount it owes to FHWA by multiplying the federal share for the project (e.g., 80%) by the dollar amount of the insurance proceeds. The state must pay that amount to FHWA.[51]

For example, the Skagit River Bridge in Mount Vernon, WA, collapsed on May 23, 2013, when a semitrailer truck hauling an oversize load struck the bridge, damaging the truss structure.[52] In response to the disaster, FHWA allocated a total of $19,682,233 in ER Program funds to Washington.[53] On February 2, 2015, Washington State Department of Transportation filed a lawsuit against multiple parties, including the truck driver and the driver's employer, seeking at least $17 million to recover costs associated with the bridge collapse.[54] Litigation regarding liability for the bridge collapse continued for several years.[55] Ultimately, Washington State

[48] Brian Carlton, "Key Bridge Case: $350M Insurer Settlement Reached, Trial Moves Forward," *Baltimore Sun*, April 7, 2026, https://www.baltimoresun.com/2026/04/07/key-bridge-settlement-insurance-case/.

[49] Maryland Office of the Attorney General, "Attorney General Brown Announces Settlement in Principle with Owners and Operators of the M/V Dali in Francis Scott Key Bridge Collapse Case," press release, April 9, 2026, https://oag.maryland.gov/News/pages/Attorney-General-Brown-Announces-Settlement-in-Principle-with-Owners-and-Operators-of-the-MV-Dali-in-Francis-Scott-Key-Bri.aspx.

[50] FHWA, *Emergency Relief Manual*, May 31, 2013, p. 16, https://www.fhwa.dot.gov/reports/erm/er.pdf#page=21.

[51] FHWA, *Emergency Relief Manual*, May 31, 2013, p. 16, https://www.fhwa.dot.gov/reports/erm/er.pdf#page=21.

[52] NTSB, *Collapse of the Interstate 5 Skagit River Bridge Following a Strike by an Oversize Combination Vehicle, Mount Vernon, Washington, May 23, 2013*, NTSB/HAR-14/01, PB2014-106399, July 15, 2014, pp. 1-7, https://www.ntsb.gov/investigations/AccidentReports/Reports/HAR1401.pdf#page=11.

[53] FHWA email to CRS, April 11, 2024.

[54] Rachel La Corte, "State Files $17 Million Suit Over Skagit Bridge Collapse," *Spokesman-Review*, February 3, 2015, https://www.spokesman.com/stories/2015/feb/03/state-files-17-million-suit-over-skagit-bridge/.

[55] Mike Lindblom, "Washington Supreme Court Tells Trucking Companies, Not WSDOT, to Pay for I-5 Skagit Bridge Collapse," *Seattle Times*, October 31, 2019, https://www.seattletimes.com/seattle-news/transportation/washington-supreme-court-tells-trucking-companies-not-wsdot-to-pay-for-i-5-skagit-bridge-collapse/.

Department of Transportation received insurance proceeds from the responsible parties and returned $16,621,345 to FHWA. FHWA returned this balance to the ER Program fund in August 2023.[56]

Will the Replacement Bridge Require Federal Permits?

Rebuilding the Key Bridge would require permits from federal agencies, and these types of authorizations would normally require review under the National Environmental Policy Act (NEPA).[57] However, for replacement of a damaged or destroyed bridge, FHWA may grant a categorical exclusion (CE) exempting it from further NEPA reviews if certain conditions are met.[58] To qualify for such a CE, applicants must ensure that work has begun within two years of an emergency declaration and occurs "within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction)."[59] FHWA approved a CE for the Key Bridge rebuild in July 2024.[60]

Bridges to be built over navigable waterways must submit their design plans to the U.S. Coast Guard so the agency can ensure that the bridge does not impose a safety hazard for navigators.[61] The U.S. Coast Guard and FHWA have signed a memorandum of agreement that is intended to expedite and coordinate their roles in bridge permitting generally.[62]

Has Anything Like This Happened Before?

Other bridges have collapsed, including as a result of vessel strikes, leading to disruptions in maritime and highway transportation.

In May 1980, the bulk freighter MV *Summit Venture* struck a support column of the Sunshine Skyway Bridge near Tampa, FL, causing a large portion of the bridge span to collapse and resulting in 35 fatalities. Federal investigators concluded that the probable causes of the collision were the unexpected sudden and severe weather, the absence of a severe weather warning, and the failure of the pilot to change course when weather obscured the channel markers.[63] The Tampa incident led to the publication of new bridge design guidance for withstanding vessel impacts.[64]

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[56] FHWA email to CRS, April 11, 2024.

[57] 42 U.S.C. §§4321 et seq. and 23 C.F.R. Part 771.

[58] 23 C.F.R. §771.118.

[59] 23 C.F.R. §771.118(c)(11)(ii)(A).

[60] MDTA, "Key Bridge Rebuild: Environment," accessed June 8, 2026, https://keybridgerebuild.com/environment/.

[61] 33 U.S.C. §401, §491, and §525; 33 C.F.R. Subchapter J.

[62] "Memorandum of Agreement Between the United States Coast Guard and the Federal Highway Administration to Coordinate and Improve Bridge Planning and Permitting," https://www.dco.uscg.mil/Portals/9/USCG_FHWA_MOA_Jan2014.pdf.

[63] NTSB, *Marine Accident Report: Ramming of the Sunshine Skyway Bridge by the Liberian Bulk Carrier Summit Venture Tampa Bay, Florida, May 9, 1980*, NSTB-MAR-81-3, April 10, 1981, https://www.ntsb.gov/investigations/AccidentReports/Reports/MAR8103.pdf.

[64] NTSB, *Safeguarding Bridges from Vessel Strikes: Need for Vulnerability Assessment and Risk Reduction Strategies*, (continued...)

In May 2002, the towboat *Robert Y. Love* and the two barges it was pushing veered off course and struck a support column of a bridge carrying Interstate 40 over the Arkansas river in Oklahoma, also causing a section of the bridge to collapse and resulting in 14 fatalities. Federal investigators concluded that the probable cause of the incident was the captain's loss of consciousness, possibly as the result of an unforeseeable, abnormal heart rhythm.[65] The inability of motorists to detect the collapsed bridge in time to stop their vehicles contributed to the loss of life.

Are Other Bridges at Risk of Collapse from Vessel Collisions?

As part of its investigation, NTSB released safety recommendations in March 2025. NTSB determined that, according to AASHTO guidance, the Key Bridge's risk for collapse from a vessel collision was almost 30 times greater than the acceptable level.[66] AASHTO first issued bridge design guidance for withstanding vessel impacts in 1991, partly in response to the collapse of the Sunshine Skyway Bridge after a vessel collision in 1980.[67] The Key Bridge, which opened in 1977, predated this AASHTO guidance. AASHTO had previously recommended that states perform vulnerability assessments to evaluate and address risks even if their bridges predated the guidance.[68]

In the March 2025 recommendations, NTSB identified 68 other bridges that (1) span navigable waterways frequented by oceangoing vessels and (2) were built before the 1991 guidance was issued. NTSB recommended that the 30 entities who own these bridges assess the probability of collapse and, where appropriate, develop and implement a comprehensive risk reduction plan. NTSB maintains a public record of correspondence with the bridge owners. The records contain information about ongoing and completed bridge assessments, and in some cases ongoing and completed development of risk reduction plans. As of June 11, 2026, NTSB had classified responses from 10 of the bridge owners as "closed" and responses from 20 of bridge owners as "open – acceptable."[69]

NTSB also recommended that FHWA, in coordination with the U.S. Coast Guard, establish an interdisciplinary team to provide guidance and assistance on evaluating and reducing the risk of a bridge collapse from a vessel impact.[70] In April 2025, FHWA's chief counsel indicated that

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MIR-25-10, March 18, 2025, p. 9, https://www.ntsb.gov/investigations/AccidentReports/Reports/MIR2510.pdf. For the 1991 guidance, see American Association of State Highway and Transportation Officials, *Guide Specification and Commentary for Vessel Collision Design of Highway Bridges, Volume I: Final Report*, 1991, https://store.transportation.org/Item/PublicationDetail?ID=395; and for the results of the pooled fund study that informed the guidance, see FHWA, *Guide Specification and Commentary for Vessel Collision Design of Highway Bridges, Volume I: Final Report*, FHWA-RD-91-006, December 1990, https://rosap.ntl.bts.gov/view/dot/74807.

[65] NTSB, *U.S. Towboat* Robert Y. Love *Allision with Interstate 40 Highway Bridge Near Webbers Falls, Oklahoma May 26, 2002*, NTSB/HAR-04/05, August 31, 2004, https://www.ntsb.gov/investigations/AccidentReports/Reports/HAR0405.pdf.

[66] NTSB final report, p. 135.

[67] NTSB, *Marine Accident Report: Ramming of the Sunshine Skyway Bridge by the Liberian Bulk Carrier Summit Venture Tampa Bay, Florida, May 9, 1980*, NSTB-MAR-81-3, April 10, 1981, https://www.ntsb.gov/investigations/AccidentReports/Reports/MAR8103.pdf.

[68] NTSB final report, p. 134.

[69] NTSB, "Safety Recommendations H-25-004: Addressee Details," June 11, 2026, https://data.ntsb.gov/carol-main-public/sr-details/H-25-004.

[70] NTSB, *Safeguarding Bridges from Vessel Strikes: Need for Vulnerability Assessment and Risk Reduction Strategies*, MIR-25-10, March 18, 2025, https://www.ntsb.gov/investigations/AccidentReports/Reports/MIR2510.pdf.

FHWA would collaborate with the U.S. Coast Guard and the U.S. Army Corps of Engineers to "create a team of experts" to provide such guidance and assistance. As of June 11, 2026, NTSB had classified this response as "open – acceptable."[71]

In May 2026, Representative Sam Graves, Chair of the House Committee on Transportation and Infrastructure, introduced a surface transportation authorization bill (H.R. 8870, 119th Congress) that would, among other things, require the Secretary of Transportation to establish an interagency bridge strike working group. The working group would be made up of representatives from FHWA, the U.S. Coast Guard, the U.S. Army Corps of Engineers, and "any other entities determined appropriate by the Secretary." The working group would be required to analyze "current bridge vulnerabilities that risk leading to a bridge collapse from a vessel collision" and to make recommendations for bridge owners and policymakers to reduce the risk of bridge collapse due to vessel strikes.[72]

Did Investigators Have Any Other Recommendations?

In addition to recommending that bridge owners assess at-risk bridges, NTSB also made recommendations to several other entities, including the U.S. Coast Guard, the U.S. Army Corps of Engineers, FHWA, AASHTO, the American National Standards Institute, the Harbor Safety Committee National Steering Team, and multiple private companies. Among other things, NTSB issued recommendations focused on research and guidance related to motorist warning systems and emergency communications between ships and shoreside support. Other recommendations related to wire connections in terminal blocks and wire-label banding on ships. NTSB also made recommendations related to so-called black box data recorders and storage on ships to better enable investigations of future calamities involving ships.[73]

Author Information

John Frittelli
Specialist in Transportation Policy

Ali E. Lohman
Analyst in Transportation Policy

Ben Goldman
Analyst in Transportation Policy

[71] NTSB, "Safety Recommendation H-25-001: Addressee Details," June 11, 2026, https://data.ntsb.gov/carol-main-public/sr-details/H-25-001.

[72] H.R. 8870 (119th Congress), §1309.

[73] NTSB final report, pp. 203-208.

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