



# NTSB Urges Action on Uncoated Weathering Steel Bridges

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The National Transportation Safety Board (NTSB) is urging action for bridges nationwide made of “uncoated weathering steel” (UWS).

Based on an ongoing investigation of a 2022 bridge in Pittsburgh, the NTSB recommended on May 18 that federal and state authorities go over inspection reports and identify incomplete follow-up actions for bridges that included the material.



“On Jan. 28, 2022, the 447-foot-long Fern Hollow bridge experienced a structural failure and fell approximately 100 feet into the park below,” [NTSB said in a statement](#). “Six vehicles were on or near the bridge when it collapsed, injuring four.”

The board said investigators found corrosion, deterioration, and section loss on all four of the bridge’s legs “due to the continual accumulation of water and debris.”

“Uncoated weathering steel requires periods of dryness to form a protective oxide coating, or patina, that resists corrosion over time,” NTSB said.

Per the Central Steel Service Inc. website: “Weathering steel plate, sheet and coil are commonly used in structures where added durability is important along with a longer life cycle due to their corrosion-resistant properties.”

The board said prior inspections of the bridge performed on behalf of the Pennsylvania Department of Transportation identified problems with drainage. However, maintenance was not regularly performed to resolve the issue.

Kevin Dempsey, president and CEO of the American Iron and Steel Institute (AISI), highlighted that the problem was not with the material itself.

“The NTSB report illustrates that the issue with the Fern Hollow bridge is not an issue with steel,” he said in an email provided to SMU. “Rather, it is about failure to address the known maintenance issues on a particular bridge.”

He said that weathering steel can achieve lifespans of up to 120 years.

“Thousands of weathering steel bridges have performed extremely well for decades,” commented Dempsey.

Likewise, the American Institute of Steel Construction (AISC) underlined the benefits of uncoated weathering steel.

“For more than 50 years, bridge owners have relied on uncoated weathering steel to deliver excellent performance in diverse environments,” AISC said in a [statement on May 22](#).

The institute noted that UWS has inherent corrosion protection and doesn't require any coating applications.

“This shaves time off the construction schedule, and even long after construction, it minimizes traffic disruptions due to decreased maintenance needs,” AISC added.

At this time the NTSB said it is asking the Federal Highway Administration to develop a process for bridge owners nationwide to perform necessary follow-up actions on bridges with uncoated weathering steel components.

“While the Fern Hollow bridge investigation is not yet complete, the NTSB is making this early recommendation due to the immediate implications for bridge safety nationwide,” the board said.

NTSB noted that the final report with a probable cause, other findings, and recommendations will be issued in the coming months.

Beyond only bridges, AISI's Dempsey said the bipartisan infrastructure law is expected to provide as much as 40-45 million tons of steel demand over the life of the projects.

“The demand for steel to meet our nation's infrastructure needs remains strong and is expected to grow as the infrastructure law is fully implemented,” Dempsey said.

He noted that American steel “is, and will remain, at the core of the plan to build our critical national infrastructure—including structurally deficient bridges.”

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