Office of the Chairwoman Washington, DC 20594



September 3, 2025

Mr. Drew Feeley Acting Administrator Federal Railroad Administration 1200 New Jersey Ave., SE Washington, DC 20590

Dear Mr. Feeley:

This letter provides information about the National Transportation Safety Board's (NTSB) August 4, 2025, report, *Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts,* NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

As a result of this investigation, we identified the following safety issues:

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.
- The uncoordinated and inadequate communication between the Housatonic Railroad Company (HRRC) and Middlesex Corporation that failed to identify the repeated unsafe actions of HRRC and Middlesex employees.
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to the Federal Railroad Administration (additional information regarding these recommendations can be found in the noted sections of the report):

• Require all on-track roadway maintenance machines (RMMs) to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-6) (See section 2.3.)

• Require on-track roadway maintenance machines with booms or other movable extensions to be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-7) (See section 2.3.)

In addition, the NTSB reiterates the following recommendations to the Federal Railroad Administration:

 Require that safety management systems and the associated key principles (including top-down ownership and policies, analysis of operational incidents and accidents, hazard identification and risk management, prevention and mitigation programs, and continuous evaluation and improvement programs) be incorporated into railroads' risk reduction programs required by Public Law 110-432, Rail Safety Improvement Act of 2008, enacted October 16, 2008. (R-12-3.)

In the same report, we also classified two previously issued safety recommendations:

 Require all newly manufactured and all rebuilt and remanufactured roadway maintenance machines to be equipped with backup cameras. (R-23-22, classified Closed–Superseded in section 2.3.)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-6 through R-25-7 and reiterated Safety Recommendation R-12-3). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. If your reply, including attachments, exceeds 20 megabytes, please e-mail us at the same address for instructions on how to send larger documents. Please do not submit both an electronic copy and a hard copy of the same response.

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Office of the Chairwoman Washington, DC 20594



September 3, 2025

Mr. John Hanlon President The Housatonic Railroad Company P.O. Box 1146 Canaan, CT 06018

Dear Mr. Hanlon:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge The Housatonic Railroad Company to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.
- The uncoordinated and inadequate communication between the Housatonic Railroad Company (HRRC) and Middlesex Corporation that

- failed to identify the repeated unsafe actions of HRRC and Middlesex employees.
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendation to the Housatonic Railroad Company (additional information regarding the recommendation can be found in the noted sections of the report):

 Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)

The NTSB is vitally interested in this recommendation because it is designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement the recommendation. When replying, please refer to the safety recommendation by number (Safety Recommendation R-25-8). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

If your reply, including attachments, exceeds 20 megabytes, please e-mail us at the same address for instructions on how to send larger documents. Please do not submit both an electronic copy and a hard copy of the same response.

All communications regarding safety recommendations are stored by the NTSB and viewable by the public. Please do not send privileged or confidential communications in response to this recommendation. Responses marked as confidential or privileged (or similar designations) will be considered nonresponsive. In the likely event that your company uses auto-generated and/or preformatted confidentiality statements on letterhead or outgoing e-mails, please include a statement in your letter indicating that the information can be publicly released. If you have concerns about this protocol, please contact us at ExecutiveSecretariat@ntsb.gov.

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Office of the Chairwoman Washington, DC 20594

TRANSPORTION SAVELLA BOARD

September 3, 2025

Mr. Robert W. Pereira, II Chairman & Chief Executive Officer The Middlesex Corporation One Spectacle Pond Road Littleton, MA 01460

Dear Mr. Pereira:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge the Middlesex Corporation to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, *Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023,* NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.

- The uncoordinated and inadequate communication between the Housatonic Railroad Company (HRRC) and Middlesex Corporation that failed to identify the repeated unsafe actions of HRRC and Middlesex employees.
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendation to the Middlesex Corporation (additional information regarding the recommendation can be found in the noted section of the report):

 Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)

The NTSB is vitally interested in this recommendation because it is designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement this recommendation. When replying, please refer to the safety recommendation by number (Safety Recommendation R-25-8). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

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[Original Signed]

Jennifer L. Homendy Chairwoman On behalf of the entire Board

cc: Joshua S. Wernig, General Manager

Office of the Chairwoman Washington, DC 20594

TRANSPORTION SAVELLA BOARD

September 3, 2025

Mr. Roger Harris President AMTRAK 1 Massachusetts Ave NW Washington, DC 20001

Dear Mr. Harris:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge AMTRAK to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.
- The uncoordinated and inadequate communication between the Housatonic Railroad Company (HRRC) and Middlesex Corporation that

- failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to AMTRAK (additional information regarding these recommendations can be found in the noted sections of the report):

- Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)
- Require all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-9) (See section 2.3.)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-8 through R-25-9). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

If your reply, including attachments, exceeds 20 megabytes, please e-mail us at the same address for instructions on how to send larger documents. Please do not submit both an electronic copy and a hard copy of the same response.

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[Original Signed]

Office of the Chairwoman Washington, DC 20594

September 3, 2025



Ms. Katie Farmer President & Chief Executive Officer BNSF Railway 2650 Lou Menk Dr Fort Worth, TX 76131-2830

Dear Ms. Farmer:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge BNSF Railway to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.
- The uncoordinated and inadequate communication between the Housatonic Railroad Company (HRRC) and Middlesex Corporation that

- failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to BNSF Railway (additional information regarding these recommendations can be found in the noted sections of the report):

- Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)
- Require all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-9) (See section 2.3.)

The NTSB becauses vitally becausenterested becausen these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-8 through R-25-9). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

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[Original Signed]

Office of the Chairwoman Washington, DC 20594

TRANSPORTION SAVETA BOARD

September 3, 2025

Ms. Tracy Robinson
President & Chief Executive Officer
Canadian National Railway Company
CN Montreal (Headquarters)
935 de La Gauchetière St. West
Montreal, QC H3B 2M9, Canada

Dear Ms. Robinson:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge the Canadian National Railway Company to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.

- The uncoordinated and inadequate communication between The Housatonic Railroad Company (HRRC) and Middlesex Corporation that failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to the Canadian National Railway Company (additional information regarding these recommendations can be found in the noted sections of the report):

- Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)
- Require all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-9) (See section 2.3.)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-8 through R-25-9). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

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statement in your letter indicating that the information can be publicly released. If you have concerns about this protocol, please contact us at ExecutiveSecretariat@ntsb.gov.

Sincerely,

[Original Signed]

Office of the Chairwoman Washington, DC 20594

TRANSPORTETION SAVETA BOARD

September 3, 2025

Mr. Keith Creel President & Chief Executive Officer Canadian Pacific Kansas City 7550 Ogden Dale Road S.E. Calgary, AB, Canada T2C 4X9

Dear Mr. Creel:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge Canadian Pacific Kansas City to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
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- The uncoordinated and inadequate communication between The Housatonic Railroad Company (HRRC) and Middlesex Corporation that failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to Canadian Pacific Kansas City (additional information regarding these recommendations can be found in the noted sections of the report):

- Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)
- Require all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-9) (See section 2.3.)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-8 through R-25-9). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

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statement in your letter indicating that the information can be publicly released. If you have concerns about this protocol, please contact us at ExecutiveSecretariat@ntsb.gov.

Sincerely,

[Original Signed]

Office of the Chairwoman Washington, DC 20594



September 3, 2025

Mr. Joseph Hinrichs President & Chief Executive Officer CSX Transportation 500 Water Street Jacksonville, FL 32202

Dear Mr. Hinrichs:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge CSX Transportation to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

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- The uncoordinated and inadequate communication between The Housatonic Railroad Company (HRRC) and Middlesex Corporation that

- failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to CSX Transportation (additional information regarding these recommendations can be found in the noted sections of the report):

- Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)
- Require all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-9) (See section 2.3.)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-8 through R-25-9). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

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Office of the Chairwoman Washington, DC 20594

TRANSPORTION SAVELLA BOARD

September 3, 2025

Mr. Mark George President & Chief Executive Officer Norfolk Southern Corporation 650 W. Peachtree Street NW Atlanta, Georgia 30308

Dear Mr. George:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge Norfolk Southern Corporation to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.
- The uncoordinated and inadequate communication between The Housatonic Railroad Company (HRRC) and Middlesex Corporation that

- failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to Norfolk Southern Corporation (additional information regarding these recommendations can be found in the noted sections of the report):

- Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)
- Require all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-9) (See section 2.3.)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-8 through R-25-9). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

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Office of the Chairwoman Washington, DC 20594



September 3, 2025

Mr. Jim Vena Chief Executive Officer Union Pacific Railroad 1400 Douglas Street Omaha, NE 68179

Dear Mr. Vena:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge Union Pacific Railroad to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.
- The uncoordinated and inadequate communication between The Housatonic Railroad Company (HRRC) and Middlesex Corporation that

- failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to Union Pacific Railroad (additional information regarding these recommendations can be found in the noted sections of the report):

- Require all on-track roadway maintenance machines (RMMs), including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. (R-25-8) (See section 2.3.)
- Require all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity. (R-25-9) (See section 2.3.)

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-8 through R-25-9). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

If your reply, including attachments, exceeds 20 megabytes, please e-mail us at the same address for instructions on how to send larger documents. Please do not submit both an electronic copy and a hard copy of the same response.

All communications regarding safety recommendations are stored by the NTSB and viewable by the public. Please do not send privileged or confidential communications in response to these recommendations. Responses marked as confidential or privileged (or similar designations) will be considered nonresponsive. In the likely event that your company uses auto-generated and/or preformatted confidentiality statements on letterhead or outgoing e-mails, please include a statement in your letter indicating that the information can be publicly released. If you have concerns about this protocol, please contact us at ExecutiveSecretariat@ntsb.gov.

[Original Signed]

Office of the Chairwoman Washington, DC 20594



September 3, 2025

Mr. Chuck Baker President American Short Line and Regional Railroad Association 50 F St. NW, Ste. 500 Washington, DC 20001-4600

Dear Mr. Baker:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge the American Short Line and Regional Railroad Association to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.
- The uncoordinated and inadequate communication between the Housatonic Railroad Company (HRRC) and Middlesex Corporation that

- failed to identify the repeated unsafe actions of HRRC and Middlesex employees.
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to the American Short Line and Regional Railroad Association (additional information regarding these recommendations can be found in the noted sections of the report):

- Inform your members of the safety benefits of equipping roadway maintenance machines (RMMs) with collision avoidance systems and, when RMMs have movable extensions, a people detection system that alerts operators of nearby workers. (R-25-10) (See section 2.3.)
- Urge your members to inform their employees of the circumstances of this accident, the importance of thorough job briefings with railroad contractors, and the requirement to communicate on-track activities and movements with the roadway worker-in-charge. (R-25-11) (See section 2.4.)

To assist you in fulfilling this recommendation, we are attaching a "sample article" covering the Great Barrington accident that addresses the safety issue area identified in the recommendation. Please feel free to use this article (or parts of it) in your communications to members. If you would like to discuss the article or this recommendation, please contact Sara Lyons, at sara.lyons@ntsb.gov or (202) 285-6361.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-10 through R-25-11). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

If your reply, including attachments, exceeds 20 megabytes, please e-mail us at the same address for instructions on how to send larger documents. Please do not submit both an electronic copy and a hard copy of the same response.

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Sincerely,

[Original Signed]

Office of the Chairwoman Washington, DC 20594



September 3, 2025

Ms. Ashley Wieland President National Railroad Construction and Maintenance Association 80 M St. SE Washington, DC 20003

Dear Ms. Wieland:

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in the other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

We are providing the following information to urge the National Railroad Construction and Maintenance Association to act on the safety recommendations in this letter because we believe your organization can help reduce the risk of future accidents.

This letter also includes information about our August 4, 2025, report, Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachusetts, August 4, 2023, NTSB/RIR-25-11. The details of this accident investigation and the resulting safety recommendations may be found in the attached report, which can also be accessed at http://www.ntsb.gov.

- The unsafe operation of a tie drilling machine.
- The need for roadway maintenance machines to be equipped with new technologies such as collision warning and avoidance systems.

- The uncoordinated and inadequate communication between the Housatonic Railroad Company (HRRC) and Middlesex Corporation that failed to identify the repeated unsafe actions of HRRC and Middlesex employees
- The Federal Railroad Administration's lack of annual evaluations to assess which railroads have inadequate safety performance and, therefore, are required to establish risk reduction programs.

Accordingly, the NTSB makes the following safety recommendations to the National Railroad Construction and Maintenance Association (additional information regarding these recommendations can be found in the noted sections of the report):

- Inform your members of the safety benefits of equipping roadway maintenance machines (RMMs) with collision avoidance systems and, when RMMs have movable extensions, a people detection system that alerts operators of nearby workers. (R-25-10) (See section 2.3.)
- Urge your members to inform their employees of the circumstances of this accident, the importance of thorough job briefings with railroad contractors, and the requirement to communicate on-track activities and movements with the roadway worker-in-charge. (R-25-11) (See section 2.4.)

To assist you in fulfilling this recommendation, we are attaching a "sample article" covering the Great Barrington accident that addresses the safety issue area identified in the recommendation. Please feel free to use this article (or parts of it) in your communications to members. If you would like to discuss the article or this recommendation, please contact Sara Lyons, at sara.lyons@ntsb.gov or (202) 285-6361.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate a response within 90 days of the date of this letter, detailing the actions you have taken or intend to take to implement these recommendations. When replying, please refer to the safety recommendations by number (Safety Recommendations R-25-10 through R-25-11). We encourage you to submit your response to ExecutiveSecretariat@ntsb.gov. For your convenience, please refer to additional guidance on responding to our safety recommendations on our website.

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Sincerely,

[Original Signed]

Roadway Worker Struck by Equipment Injuries and Fatalities are Preventable

Railroad roadway workers are subject to on-the-job risks and hazards markedly different from those faced by other railroad employees. In recent years, commercial technologies for roadway maintenance machine (RMMs) have become available to prevent or mitigate collisions, including RMM-to-RMM collisions, RMM-to-person collisions, and collisions involving movable RMM extensions such as booms or arms.

The National Transportation Safety Board (NTSB) wants to inform railroads and the rail roadway worker industry about the safety benefits of equipping RMMs with collision avoidance systems and, when RMMs have movable extensions, a people detection system that alerts operators of nearby workers.

Roadway Maintenance Worker Fatality

The NTSB investigated an August 4, 2023, fatal accident in Great Barrington, Massachusetts, in which a roadway maintenance worker, operating a leaf blower, was struck by an RMM operated by a tie drilling machine (driller) operator who was making a reverse movement along the Berkshire (rail) Line. Although the driller operator had sufficient sight distance to see the employees on the tracks, the driller operator did not stop the driller before striking the employee.

The NTSB determined that the driller struck the employee because the driller operator did not actively observe the driller's path of travel or monitor the roadway maintenance machine's rearview mirror as he approached the work group, so he was unaware of the need to stop. The NTSB found that because the driller was not equipped with safety devices (other than a wide-angle mirror) to aid the operator's lookout for hazards, the lapse in the driller operator's attention and/or judgment resulted in severe consequences.

What Can Industry Do?

Collision warning and avoidance systems provide employee protection beyond sole reliance on operators by providing warnings or automatically intervening when an operator makes a mistake. In the case of the driller operator in this accident, a collision avoidance system could have mitigated the human error—the failure to watch the path of the driller—from leading to a fatality by stopping the RMM when the employee on the track was detected.

The NTSB recommends that railroads require all on-track RMMs, including leased or contracted RMMs, to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. Likewise, all on-track RMMs with booms or other movable extensions, including leased or contracted RMMs, should be equipped with a 360°

people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity.

What Can Regulators Do?

The NTSB recommends that the Federal Railroad Administration (FRA) require all on-track RMMs to be equipped with collision avoidance systems that can detect people, objects, or other machines on the ground and automatically stop the RMM before a collision. The NTSB also recommends that the FRA require on-track roadway maintenance machines with booms or other movable extensions to be equipped with a 360° people detection system that covers the length of the boom or extension in all directions and alerts operators when people are within an unsafe proximity.

Additional Information

Additional information about the Great Barrington accident, including the final report, *Middlesex Corporation Employee Fatality on Housatonic Railroad Company-Operated Line, Great Barrington, Massachussetts, August 4, 2023,* can be found on the NTSB website at www.ntsb.gov, railroad investigation RRD23FR015.