



Making it Right:

A SIX-MONTH PROGRESS REPORT ON EAST PALESTINE, OHIO,
AND SURROUNDING COMMUNITIES



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From the beginning, our guiding principle has been to make things right for East Palestine and the surrounding communities.

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Letter from the CEO

AUGUST 4, 2023



How can we help? It's a question my Norfolk Southern colleagues and I have been asking for the past six months. How can we help East Palestine? How can we help Darlington Township? How can we help the communities impacted by February's train derailment?

WE PROMISED TO MAKE THINGS RIGHT, and we've made a lot of progress. Our work isn't over, which is why we will keep asking people who live in East Palestine and the surrounding communities how we can make things right. I've been to the area almost every week, talking with folks about ideas and concerns, and checking on our progress. More than 300 of my Norfolk Southern colleagues and our contractors are doing the same thing because we promised to help these communities recover and thrive, and **we're a company that keeps its promises.**

In the spirit of transparency, Norfolk Southern has compiled the following report detailing our efforts thus far, as well as next steps.

Many people told me they wanted the soil replaced underneath our tracks at the derailment site, and we listened. We promised to clean the site safely, thoroughly, and with urgency. We're doing that, coordinating with local, state, and federal agencies every step of the way.

We know there have been concerns about environmental safety and we take that seriously. Environmental monitoring continues to show the air and drinking water are safe, and to provide an additional level of assurance, we're working closely with all relevant stakeholders on a medical compensation fund.

We promised we would help people whose lives were disrupted by the derailment. We're continuing to do that. Our Family Assistance Center has helped thousands of families. We're also developing an assistance plan for home sellers if their property loses value because of the derailment. Getting this and other funds right is an important part of keeping our promises.

I've had conversations with residents about how we can support the long-term economic vitality of communities in the area. Based on their feedback, we're doing that with forward-thinking investments, including revitalizing East Palestine City Park, a recent donation to the Pittsburgh Foundation, and many other contributions large and small. Our financial assistance and commitments to date total more than \$64 million, with more to come.

We promised to learn from what happened and make a safe railroad even safer. We're doing that, too. I've asked all 20,000 of my Norfolk Southern colleagues to speak up about ways we can enhance our safety culture. Through July, accidents on our mainline are trending down 40% from last year. We went outside the railroad industry and brought in an independent consultant headed by a retired admiral from the Nuclear Navy – the gold standard in safety. We're partnering with labor unions that represent our front-line railroaders, and I'm advocating for federal legislative provisions to enhance safety for the entire rail industry.

You'll find additional details about these efforts and more in this report. **Our work isn't finished.** We're staying in East Palestine as long as it takes, and we just bought property for a new Norfolk Southern office in the village. As we move forward, we will continue to seek out honest feedback from area residents because we know supporting a community means listening to the people who call it home. We will continue to listen, and we will continue our work to help the area recover and thrive.

We're in it for
the long haul.
We will see
this through.

Alan

Alan Shaw

President & CEO, Norfolk Southern



HOW WE'RE MAKING IT RIGHT

We are grateful there were no physical injuries or loss of life resulting from the derailment – but we know the incident disrupted unique and vibrant communities in the area.

On day one, we committed to paying for all remediation costs associated with the derailment. [Our site remediation efforts are progressing](#), and we continue to coordinate closely with local, state, and federal officials on a long-term plan.

In addition to environmental remediation, our efforts to make things right include **assistance programs for people and businesses disrupted by the derailment, charitable investments, and broader safety and operational enhancements** that will make what happened in East Palestine less likely to occur in the future.

 <p>85,000+ tons of waste soil shipped off site</p>	 <p>100+ air purifiers distributed</p>
 <p>27M+ gallons of impacted water recovered</p>	 <p>10,400+ families helped through the Family Assistance Center</p>
 <p>750+ wells of drinking water tested</p>	 <p>\$64M committed to support East Palestine and surrounding impacted communities in Western Pennsylvania – \$25M of which to fund updates and improvements to the East Palestine City Park</p>
 <p>5,200 feet of impacted waterways flushed</p>	
 <p>14M gallons of clean water bypassed, eliminating the need for more than 600 storage tanks and eliminating over 4,000 truckloads around the community</p>	 <p>4 East Palestine Bulldog Legacy Scholarships awarded to area high schoolers</p>
 <p>2,600+ samples of surface water collected</p>	 <p>\$1M+ to East Palestine nonprofits</p>

* Data set forth herein has been provided as of August 1, 2023

Environmental remediation

SUMMARY OF RESPONSIVE ACTIONS



As we continue to work to make things right in East Palestine, safe air, water, and soil for the residents are our highest priorities.”

– Josh Raglin, Chief Sustainability Officer

The people who call East Palestine and the surrounding areas home deserve to know the air is safe to breathe, the water is safe to drink, and the land is safe to farm.

We are committed to cleaning the site of the derailment safely, thoroughly, and with urgency, including daily, comprehensive testing, guided by scientific best practices and working hand-in-hand with the Ohio and U.S. Environmental Protection Agency (EPA).

Robust sampling programs at the derailment site and in the community at large have continually shown the air and water around the site are safe. In addition, the results of the EPA-approved soil sampling program show concentrations of semi-volatile organic compounds (SVOCs) and dioxin/furans were consistent with known concentrations for soil in urban and rural areas. We will build on these testing results and [continue our work](#) to reassure people that their community has not suffered long-term damage as a result of the accident.

AIR

Air quality testing began within hours of the derailment and has continued daily ever since. Monitoring has been performed by both the EPA and an independent team of scientists, including the independent consulting firm, [CTEH](#). It continues to show the air in the East Palestine community is safe.



Our teams have tested and sampled the air in East Palestine near the incident site and throughout the community. These methods include hand-held testing devices around the village, data from stationary equipment that has been placed along the edge of the derailment site, and state-of-the-art mobile air monitoring vans capable of detecting chemicals of concern in real time. Based on thousands of data points, [the EPA](#) and toxicologists at CTEH concur; the data collected does not indicate any short- or long-term risks.

WATER

The municipal drinking water is safe, as shown through weekly sampling by the Ohio EPA and a team of independent scientists. In addition, the Columbiana County Health Department and independent scientists have tested more than 750 drinking water wells and have concluded the water from these wells is safe to drink. We are developing plans with East Palestine and the State of Ohio to ensure municipal and private well drinking water remains safe to drink in the future.



We have seen significant ecological recovery in many downstream waterways, and we remain committed to restoring them, particularly Sulphur Run and Leslie Run.

We have used a variety of methods to remove impacts from local waterways. Sediment testing results will inform future work. Testing and monitoring is also focused on the impact to local wildlife.



For example, the EPA has found that the Hellbender salamander, an endangered species, is thriving in the local waterways that have been subject to testing.

SOIL

East Palestine is an important agricultural area, making it critical to ensure the soil around the incident site is safe for growing food. [Farmers are now operating as normal](#), having been reassured by testing from government agencies.

In a community soil sampling program, overseen and approved by the EPA, scientists inspected 357 locations in and around East Palestine and collected soil samples for testing at 146 of those locations. Samples were evaluated to determine if shallow soil near the derailment site may have been impacted by the initial derailment fire and subsequent vent and burn.



All soil samples were analyzed at a laboratory certified by the Environmental Laboratory Accreditation Program. According to the EPA, [its preliminary review of results](#) indicates the level of contaminants in the soil is not outside normal parameters. In May, the Ohio Department of Agriculture and Ohio State University also [released final results](#) from plant tissue sample testing on crops within a five-mile radius of the derailment, showing plants did not contain any SVOCs.

Norfolk Southern's remediation plan for soil demonstrated its commitment to making it right for the affected residents, with **both train tracks and the underlying soil removed in response to feedback from the community** and the EPA. In June, Norfolk Southern [completed remediating both tracks that run through East Palestine](#).



This June, Norfolk Southern completed remediating the soil around both tracks that run through East Palestine. The underlying soil was removed in response to feedback from the community and the EPA.



Governance efforts

SUMMARY OF COMMITMENTS AND APPROACH



Our commitment to making things right goes beyond cleaning the air, soil, and water. We're taking a hard look at our oversight and governance practices to ensure we're as responsive to our stakeholders as possible."

– Amy E. Miles, Chair of the Board

Our response to the incident in East Palestine includes looking at our organization top to bottom to **determine how we can enhance our safety culture and oversight to better understand how to prevent incidents like the East Palestine derailment in the future.**

Our commitment to making things right includes good governance practices, including implementing weekly board of directors' meetings after the derailment to oversee Norfolk Southern's community recovery and site-specific mitigation efforts. **Two new directors have**

also recently been elected to the board, Admiral Philip Davidson, U.S. Navy (Ret.) and Francesca DeBiase, a seasoned supply chain, sustainability, and finance executive. A new chairman of the board's Safety committee, Chris Jones, will rotate in as of Sept. 1. As a former senior executive at Northrop Grumman, a retired U.S. Air Force maintenance officer, and an engineer by training, Jones brings a deep background in operations-driven environments to his new role. The Safety committee will be further strengthened by the addition of Davidson, who led large safety initiatives in the U.S. Navy that resulted in the implementation of new training and assessment processes.

Beyond board oversight, **a new safety-focused position, the Vice President of Safety, was created this year.**

John Fleps, a 17-year veteran of the company, was appointed to the role. Fleps is working to enhance our safety culture, strengthen trust and collaboration with employees, and foster universal respect for risks and hazards in the workplace.

Safety was also added to new executive compensation metrics for 2023, with 10% of Norfolk Southern's annual incentive goals now based on measurable and publicly-reported safety metrics – specifically the Federal Railroad Administration (FRA) reportable injury rate and reportable train accident rate.



At NS' Moorman Yard in Bellevue, Ohio, President and CEO Alan Shaw hosted a company-wide Town Hall alongside labor union leaders.



Atkins Nuclear Secured (ANS) Chairman Elmer Naples joined NS President and CEO Alan Shaw for a tour of our Inman Yard facility in Atlanta, Georgia.

Safety efforts

SUMMARY OF RESPONSIVE ACTIONS



Meaningful safety improvements will be a team effort – requiring everyone in the industry, from the railcar and tank manufacturers to the railroad companies, to work together.”

– John Fleps, Vice President of Safety

At Norfolk Southern, everything starts with safety, and while the National Transportation Safety Board (NTSB) continues its investigation into the cause of the accident, **we are not waiting for the final results to enhance our safety culture**, and we’ve already identified specific actions.

INDEPENDENT REVIEW OF SAFETY BY ANS

We are seeking input from outside the rail industry for unique perspectives on impactful improvement. To that end, Norfolk Southern appointed Atkins Nuclear Secured (ANS), an independent consultant headed by a retired admiral from the Nuclear Navy. ANS will conduct an independent review of our safety culture and safety-related training programs.

The nuclear industry is the gold standard for industrial safety. Supported by their partnership with ANS, **Norfolk Southern seeks to become the gold standard in safety for the rail industry**. Full results of ANS’s review are expected



in Q4 2023, and agreed-upon recommendations will be implemented in phases, as part of a larger roadmap for long-term success.

PARTNERSHIP WITH CRAFT EMPLOYEES

When it comes to safety, our craft employees are Norfolk Southern’s first line of defense.

In May, our CEO, along with leaders of 12 Norfolk Southern labor unions, issued a [joint letter](#) underscoring our shared commitment to driving continuous safety improvements.

“Working together – and broadening the conversation to ensure everyone plays a part – is the best way to achieve meaningful improvement.”

Norfolk Southern leadership plays a key role in setting the tone for our workforce, which is why we’re working with all our ballast line supervisors to ensure every conversation starts with safety. **Our leadership has also been on the ground listening to front line employees’ concerns and needs**. As part of these efforts to ensure we are fostering a culture of transparency, Chief Operating Officer Paul Duncan has had multiple meetings with large groups of our craft railroaders across our 22-state network.

Additionally, in June, at the start of National Safety Month for the rail industry, we held a companywide town hall meeting to directly communicate with our 20,000 employees. At the meeting, CEO Alan Shaw and labor union leaders talked about the importance of safety.

We are encouraged by the progress we’ve made enhancing our safety culture, and our efforts to make a safe railroad even safer will continue.

12% drop INJURY FREQUENCY RATIO

We’ve seen our injury frequency ratio drop 12% year over year through the first half of the year. Our accident rate through the first half of the year is also down from prior years.

40% improvement MAINLINE TRAIN ACCIDENT RATE

Our mainline train accident rate improved 40% compared to last year through the first half of the year.

NTSB INVESTIGATION RESULTS & RESPONSE

We are cooperating fully with the NTSB, an independent federal agency charged by Congress with investigating significant events in modes of transportation, as the agency continues its investigation into the cause of the incident. **We seek a clear understanding of what caused the derailment and how similar incidents can be prevented in the future.**

The NTSB's preliminary report, released on Feb. 23, indicates Norfolk Southern's rail crew operated the train within the company's rules and operated the train below the track speed limit. Under the supervision of the Federal Railroad Administration (FRA), the company has inspected all wayside detectors in the area of the incident. The NTSB has traced the derailment and the initial fire to an overheated axle on car number 23.

SIX-POINT PLAN

Soon after the East Palestine incident and taking into account the preliminary findings of the NTSB, Norfolk Southern announced a six-point plan focused on enhancing the safety of all operations.

- 1 Enhancing the hot bearing detector network.** After analyzing our 10,000 mile core network, we anticipate adding approximately 250 hot bearing detectors – the first two have been installed near East Palestine. In alignment with new industry consensus, as of May 2023 we lowered the critical alarm thresholds from 200 to 170 degrees.
- 2 Piloting next-generation hot bearing detectors.** We are working to accelerate the testing and deployment of new technology that can scan a greater cross-section of a railcar's bearings and wheels, increasing the chance of detecting an overheated bearing before it fails.
- 3 Working with industry on practices for hot bearing detectors.** We plan to work with peers to review best practices and analyze data for patterns that could provide earlier warnings of potential safety issues. We're also working with suppliers to shore up the supply chain for hot bearing detectors, and while that process takes place, we are moving forward with all supporting engineering at the sites to expedite installation once the devices arrive.
- 4 Deploying more acoustic bearing detectors.** In addition to five acoustic bearing detectors already in service, Norfolk Southern has installed three new detectors, with plans to install 14 more. These detectors use sound to identify potential problems that may escape visual detection. All of the new detectors will be in place by November, putting us ahead of the original rollout schedule.
- 5 Accelerating our Digital Train Inspection program.** We are partnering with Georgia Tech Research Institute to develop a next generation of advanced safety inspection technology, leveraging ultra high-resolution cameras, machine vision and algorithms powered by artificial intelligence.
- 6 Supporting a strong safety culture.** Norfolk Southern has agreed to join the FRA's Confidential Close Call Reporting System (C3RS), working with the Association of American Railroads (AAR) and the Railroad Safety Advisory Committee (RSAC). This builds upon our own long-standing Close Call Experience Program in partnership with our SMART-RD and BLET unions.

Our positive progress on this plan was shared in a letter to U.S. Secretary of Transportation, Pete Buttigieg on July 25. In the letter, we stressed our commitment to collaborating with others across the industry on an "ongoing, iterative effort to find the best new methods for early detection."

Community support

SUMMARY OF RESPONSIVE ACTIONS



We committed to the East Palestine community that we will be here for the long haul. We will continue to listen to and work with residents to focus our support on the areas of greatest need.”

– Annie Adams, EVP & Chief Transformation Officer

Norfolk Southern will continue to invest in East Palestine and the surrounding areas **for as long as it takes** to help these communities recover and thrive. Our financial assistance is only part of our promise to make these communities whole.

FAMILY ASSISTANCE CENTER

The Family Assistance Center (FAC) is the main point of contact between Norfolk Southern and community members. It opened the day after the derailment and has been the main channel for our efforts to help those whose lives were disrupted by the derailment. **We have helped thousands of families, many of them multiple times.**

On June 1, to provide even more convenient access, the FAC moved to a more permanent home right in the heart of East Palestine.



10,400+ families

helped through the Family Assistance Center

The center is open five days a week, and residents can file claims forms and seek additional forms of assistance. If community members are unable to physically make it to the center, a company representative will go to them.

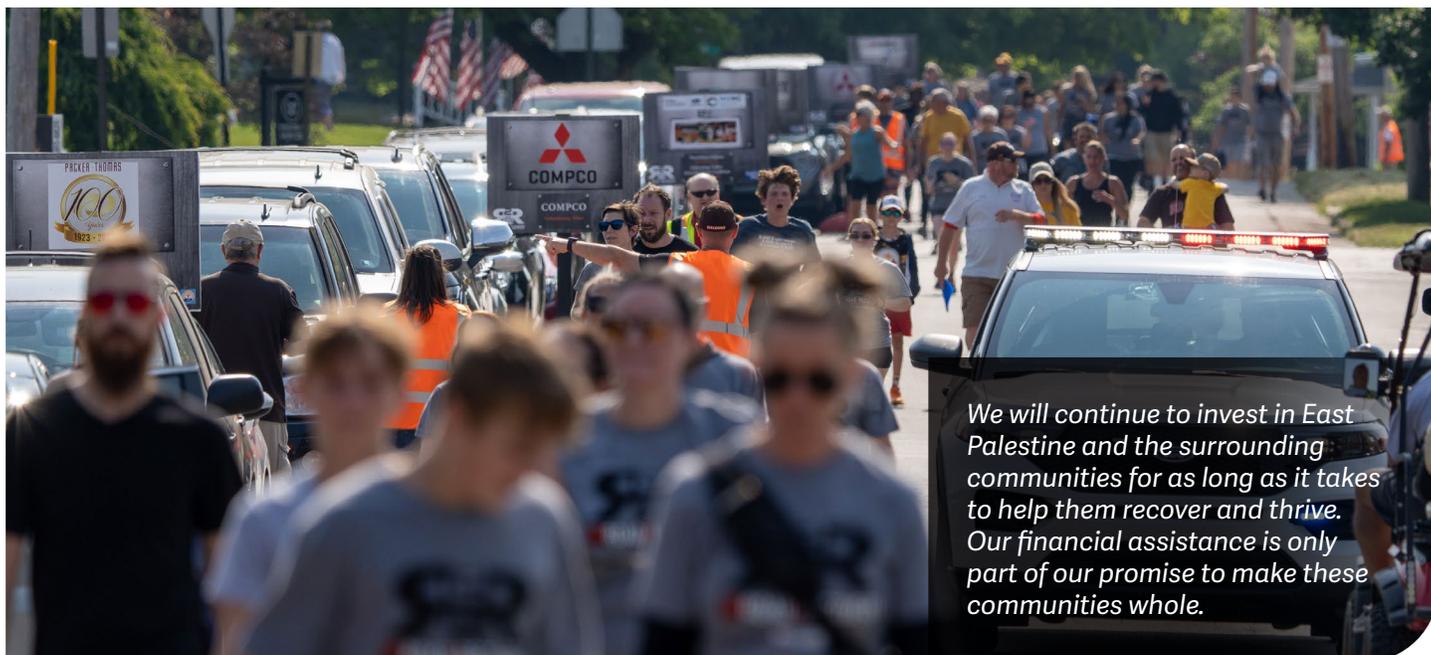
Our goal is to assist community members as quickly as possible.

COMMUNITY SUPPORT

Norfolk Southern is committed to supporting impacted communities through financial contributions and community engagement. Since the derailment, CEO Alan Shaw has visited and met with residents more than a dozen times. To build connections and trust with the community, members of the Norfolk Southern team have hosted a variety of events, including promotional events for local businesses. They've also attended countless community meetings to listen to concerns, and gone door-to-door to affected businesses. In order to be transparent and accountable, Norfolk Southern continuously mails information about remediation efforts directly to residents, and runs a website as well. The website, nsmakingitright.com, is updated daily based on community feedback and provides information regarding ongoing efforts to support East Palestine and surrounding communities.



Norfolk Southern team members worked side-by-side with residents to help beautify the town during the annual Day of Service.



Other examples of Norfolk Southern's dedication to the community include:

- Working side-by-side with residents to help beautify the town during the annual Day of Service.
- Lending a helping hand in large and small ways. For example, when we learned that the local florist was going to be closed because of the derailment – right before one of the busiest days of the year on Valentine's Day – we bought flowers and delivered them to local nursing homes.
- Sponsoring community events, including the Pennsylvania New Galilee Carnival to make the fun, family tradition free for all residents.



Overall, Norfolk Southern has committed more than **\$64M** to support East Palestine and nearby communities in Ohio and Pennsylvania, including:

- Contributing **\$8.5M** in financial assistance to Pennsylvania emergency responders, health and environmental agencies, and the community.
- Giving **\$1M** to the Pittsburgh Foundation to support nonprofits in Lawrence and Beaver Counties in Western, PA.
- Providing **\$3M** in reimbursements and support to the East Palestine Fire Department for equipment used in the response.
- Donating more than **\$1M** to support nonprofits in the East Palestine community.
- Establishing a **\$1M** fund for East Palestine community leaders to identify and direct donations with the most impact.
- Setting up a **\$1M** fund to support the immediate needs of the East Palestine community, overseen by a Norfolk Southern craft railroader who lives in town and has been appointed to serve as a community liaison.
- Pledging **\$25M** for [upgrades and improvements to the East Palestine City Park](#), including a new aquatic center, three new playgrounds, upgraded baseball fields, a new amphitheater, and more.
- Renovating and donating the historic train depot to the Village of East Palestine, along with a **\$100K** grant for future development.

Open Letter: Jeremy Vranesevich



Jeremy Vranesevich is a community liaison for Norfolk Southern and an East Palestine resident.

When I first moved to East Palestine with my family, I didn't know much about the community. In the years since, I've seen first-hand how special it is. It's a great place to raise a family — a place where people work hard and take care of their neighbors.

BEFORE THE DERAILMENT, I SPENT MY NORFOLK SOUTHERN CAREER as a machinist at Conway Yard. As an employee of the railroad and resident of the village, I was

in a unique position to take on a new role after the accident. I welcomed the opportunity to serve as community liaison, helping to connect my neighbors with the assistance they needed. I wanted to ensure the resources being offered by Norfolk Southern made the most impact possible. **It's important to me that our efforts honor the spirit of this hardworking community**, and I'm proud of the progress we've made to this point.

We're working to clean up the effects of the derailment. We're providing financial support for local schools, youth organizations, businesses, and more. Just as important, if not more so, we're engaging with the community. Residents want to be heard—and I've found that listening goes a long way.

East Palestine is my home. My child attends our schools and plays at our park. For as long as it takes, I'm determined to do everything I can to make things right. Through it all, I've received full support from Norfolk Southern, and I'm grateful for the opportunity to help my neighbors and my community recover. I can say confidently, we're here for the long haul.

What's next: The work ahead

SUMMARY OF RESPONSIVE ACTIONS



We are encouraged by early results, but we know much more work lies ahead of us to not only make it right in East Palestine but to ensure that Norfolk Southern is the safest railroad for our employees, customers, and communities.”

– Paul Duncan, EVP and Chief Operating Officer

NEXT STEPS: ENVIRONMENTAL REMEDIATION

Norfolk Southern is committed to long-term testing to establish the air, water, and soil around the derailment site are safe.

Additional details on cleanup efforts will be forthcoming, including:

- Completing excavation activities north and south of the tracks and disposing of excavated soils.
- Taking thousands of soil samples to assess whether impacts remain at the site.
- Assessing sediments in local waterways to inform potential future stream-washing or other remedial activities.
- Offering a home cleaning program as an additional service where residents have voiced concerns about potential lingering odors.

We are making progress in our recovery efforts but know our work is not yet done.

The majority of waste disposal from the derailment is currently scheduled to be completed by the end of October.

NEXT STEPS: SAFETY

Norfolk Southern is a safe railroad, and we will continue pushing to become even safer. It's part of our vision for making decisions in the best long-term interests of our employees, our customers, and the communities we serve. Our six-point safety plan is a roadmap for how to do that, but it's just a starting point.

In his recent remarks to Congress, our CEO noted that two bipartisan pieces of proposed legislation, the Railway Safety Act and the RAIL Act, contain “measures with the potential for meaningful improvement, such as funding additional training, better advanced notifications, accelerating the phase out of older tank cars, and much more.”

Modernization efforts are also underway at Norfolk Southern that will have an impact on safety, including purchasing 22 DOT-117 tank cars used for transporting flammable liquids with enhanced safety features to replace currently operating DOT-111 cars. Beyond rail cars, **we are modernizing the equipment used by workers in the field**, including mobile-friendly programs that notify crew members and dispatchers when critical alarms occur, and infrared temperature guns that will display a digital temperature reading at the bearing. Other new safety measures in progress include:

- Creating Mechanical Department Instruction (MDI) as a clear process for mechanical employees to follow when called to assist with critical bearing alarms.
- Using artificial intelligence and years of historical data to find trends that could identify defects even earlier.
- Purchasing 10,000 169-degree surface temperature measurement sticks to replace the higher temp units deployed.
- Rolling out the first five of 17 inspection corridors including two portals with ultra high-resolution cameras that will provide 360-degree views.
- Continuing to work with industry groups to develop additional benchmarking initiatives around temperature trending algorithms.

NEXT STEPS: COMMUNITY SUPPORT

East Palestine is a special community, and we're committed to continuing to support the village long-term. We are listening to people who live there to understand how we can best support them. In addition to the efforts outlined in this report, Norfolk Southern is working to:

- Create long-term funds that will help support health outcomes in the community, ensure municipal and private well drinking water remains safe to drink, and mitigate any effect of the incident on a seller's home property value.
- Make renovations to the historic train depot, which are expected to be completed this fall.

- Continue our work to strengthen the community, with a particular focus on supporting the local economy.
- Complete the enhancements to East Palestine City Park, including presenting the revitalization plans and timeline to the city council.
- Follow through on other large-scale philanthropic investments.

We will continue to update nsmakingitright.com on our progress and continued efforts to keep our promise to make things right for East Palestine and the surrounding communities. Please continue to check for the latest information.



East Palestine
Ohio!

