The Railway Safety Act of 2023 takes key steps to strengthen rail safety. The legislation:

- 1. Mandates the use of defect detection technology which could have prevented the East Palestine derailment, making them more frequent near dense urban areas:
 - The Norfolk Southern train that derailed in East Palestine passed three hotbox detectors that showed the wheel bearing that ultimately failed was getting increasingly hotter. Despite indications that the wheel bearing was failing, Norfolk Southern's company policy did not require the crew to stop the train until it was too late. Currently, DOT does not mandate that railroads use hotbox detectors or other defect detectors, including where they must be installed, when railroads should stop trains, or how often they should be inspected to make sure they are working as intended.
 - For the first time, this legislation mandates that railroads use defect detectors. Railroads will be required to submit plans to the Federal Railroad Administration proving that they will deploy the defect detectors that meet standards set by DOT. The law mandates that hotbox detectors be deployed an average of every 15 miles, a reduction of the current voluntary industry practice of installing defect detectors an average of 25 miles today. If a railroad does not comply with its plan, and an accident occurs, no matter the cause, the railroad will be considered in violation of rail safety law and subject to a fine. The bill also empowers DOT to make railroads stop trains when these technologies identify something is wrong. This law would have ensured Norfolk Southern stopped the train earlier, preventing the derailment.
- Expands the types of hazardous materials, like the vinyl chloride carried by the East Palestine train, that trigger increased safety regulations, including speed restrictions, better braking, and route risk analysis:
 - In 2015, the Federal Railroad Administration required trains carrying large amounts of flammable liquids (like crude oil) to comply with speed restrictions in urban areas, improve braking systems to make trains stop faster, conduct a route risk analysis to ensure railroads take the safest route and take steps to mitigate safety and security risks, and ensure railroads have a hazardous materials (hazmat) spill response plan in the event of a derailment to ensure that if a derailment occurs, the consequences are less severe. However, the East Palestine train carrying vinyl chloride was not subject to these safety requirements because it was a flammable gas and not a flammable liquid.
 - The bill expands the types of chemicals that trigger these specific safety requirements so that trains carrying vinyl chloride and other explosives and toxic materials, including flammable gas, poisonous gas, and nuclear material, are subject to the same safety requirements as flammable liquid trains. It is estimated this will impact one-eighth of all trains in the United States and will ensure railroads are taking extra care with trains like the one that derailed in East Palestine in the future.
- 3. Improves emergency response by providing states information about the hazardous materials being transported by rail through their communities and strengthening railroad emergency response plans:
 - Governor Mike DeWine has repeatedly said that the State of Ohio was never alerted that
 trains carrying dangerous chemicals like vinyl chloride were moving through the State.
 Communities cannot adequately prepare for potential disasters if they do not know what
 is being transported through them. To address this issue, the bill requires that railroads

- notify states about the types and frequency of trains carrying hazmat transported through the state boundaries.
- Additionally, it should never be the responsibility of a small community, similar to East
 Palestine, to have to respond to a major hazmat spill alone. The bill requires DOT to
 improve railroads' existing hazmat response plans by ensuring railroads have: (1) a DOT
 approved plan explaining how they will respond to a release of dangerous chemicals that
 high-hazard trains transport; and (2) that railroads have their own hazmat spill response
 teams to quickly respond to derailments and support local firefighters.

4. Prevents 30-second railcar inspections and mandates a new requirement that ensures railcars are properly maintained:

- To ensure that a railcar is free of defects that could lead to a derailment, like the failed wheel bearing that caused the East Palestine event, railcars are required to be inspected prior to a compiled train departing its initial location. However, the Committee received documents showing Norfolk Southern recommended its employees complete inspections of one side of a railcar in just 30 seconds. Additionally, in September 2022, DOT sent all the Class I railroads a letter raising concerns that railroads were not using properly trained mechanics to conduct the predeparture inspections. This bill creates a statutory prohibition on railroads imposing time requirements on inspectors and also requires DOT to ensure railroads use trained mechanics to conduct these inspections.
- Another issue is that freight railcars, like the hopper car carrying plastic pellets that caused the derailment in East Palestine, are not subject to any periodic maintenance requirements. Similar to an automobile that is recommended to get a thorough inspection every 30,000 miles, railcars should go through a more thorough periodic inspection by a trained mechanic to see if any parts, like wheel bearings, need to be replaced. The bill mandates a new requirement that all railcars have a thorough inspection at least once every five years to ensure all its components are in working order. The bill improves the regular maintenance of railcars to ensure they are less likely to cause derailments.

5. Increases penalties for violations of rail safety law to ensure safety laws are taken seriously:

- Class I railroads are multi-billion-dollar companies. However, the average penalty they pay for a violation of rail safety law was less than \$4,000 per violation in 2021.
- To ensure that railroads take seriously both rail safety laws and hazardous materials safety laws, including the mandates in this bill, the legislation increases the maximum statutory civil penalty from \$100,000 to \$10 million.

6. Requires two crewmembers to operate a train to prevent a situation where only one person is on the train in an emergency:

• The Norfolk Southern train had more than one crewmember, which significantly helped them figure out the immediate risks from the derailed train to the community. The conductor on the train in East Palestine quickly inspected the train to see what had happened, identified that a fire had started, set the manual brakes so railcars could not roll away, and quickly alerted first responders, all while ensuring the entire crew could get away to safety. • Railroads have proposed eliminating conductors from the cab of the locomotive and having them follow the train in trucks. It is hard to imagine that a conductor stationed in a pickup truck with no immediate knowledge of what happened in the derailment could have aided the locomotive engineer after the derailment. This law creates a statutory requirement that all trains operated by Class I railroads are operated with two crewmembers. This ensures that the public is not used in a test case for finding out if things could have been worse with only one crew member on the East Palestine train.

7. Ensures firefighters are made whole after responding to major derailments:

- Firefighters bravely rushed to the East Palestine derailment to protect their community. However, responding to an incident like this is expensive. Fire departments incur overtime costs, operational costs when they set up command centers, and costs with replacing contaminated equipment. However, under current law, there is a gap in the existing Oil Spill Liability Trust Fund and the Hazardous Materials Superfund that hinders states and firefighters from being quickly reimbursed after responding to a hazmat transportation incident.
- This bill closes that gap by giving DOT the authority to declare a "significant hazardous materials transportation incident" and make \$10 million available to reimburse first responders for overtime and equipment costs, as well as baseline health care assessments. These baseline health care assessments help inform long-term healthcare needs that a firefighter could face after being exposed to hazmat. The fund is capitalized through fines paid when companies violate hazmat law and requires the entity responsible for the incident to reimburse the government.

8. Expands the existing Hazardous Materials Emergency Preparedness grant to allow fire departments to purchase the personal protective gear that keeps them safe.

- More than 300 firefighters from 50 departments, many of them volunteer firefighters, responded to the East Palestine derailment. However, some of them did not have the right personal protective equipment exposing them to toxic chemicals. DOT's Hazardous Materials Emergency Preparedness (HMEP) grant cannot be used to purchase personal protective gear, which is essential to ensuring firefighters are prepared to respond to a hazardous material spill.
- The bill expands the eligibilities of the HMEP grant program so that fire departments can purchase personal protective gear. The bill also doubles the hazardous materials transportation registration fees that large businesses pay, which will nearly double the amount of grant funding available.