Commuter Rail and Positive Train Control
FACT SHEET

OUR COMMITMENT TO SAFETY

For commuter rail operators and the entire public transportation industry, safety is our first priority. Safety is not simply a value we share; it is a core operating principle and a promise to our riders.

Even before PTC was fully implemented, commuter rail was among the safest form of transportation; with PTC operational, traveling by rail is even safer. Traveling by **commuter and intercity rail is 18 times safer** than traveling by auto. Between 2000 and 2017, commuter rail safely operated 8.2 billion trips and 194 billion passenger miles.

We are incredibly proud of the outstanding safety record and our dedication to the safety of riders, operators, and the communities we connect.

PTC is only the latest effort to make commuter rail even safer.

There is a long-standing industry requirement to conduct a safety inspection even before the rail vehicle departs. This includes a thorough inspection by the operator inside the cab and the vehicle, and an external vehicle inspection with a brake system functional check. It is also an industry requirement that a supervisor conduct spot checks to ensure an effective pre-trip safety inspection. Another example of our focus on rail safety is our long-standing participation in Operation Lifesaver, an organization that promotes driver and pedestrian safety near train tracks.

PTC is only the latest example of commuter rail's commitment to safety—it's embedded in nearly everything we do. Already among the safest form of transportation, the commuter rail industry is continuously working to develop and implement new measures to keep riders and communities safe.

Traveling by commuter or intercity rail is 18× safer than traveling by automobile.

Here are just a few of the measures the industry has taken to make commuter rail safe.

- **Confidential Close Call Reporting System (C3RS)** We worked with the Federal Railroad Administration (FRA) to develop a voluntary reporting program that allows railroad carriers and their employees to report close calls and unsafe conditions, free from the fear of discipline. We found that creating a safe environment can have a positive impact on overall safety. C3RS has been successfully implemented by several large commuter railroads including, New Jersey Transit, Amtrak, SEPTA, MBTA/Keolis, Metra, Metro-North, and Long Island Rail Road.
- **Sleep Apnea Testing** Sleep apnea is often the cause of operator fatigue that can lead to accidents. APTA, together with many commuter rail agencies and employee unions, developed programs to test operators for sleep apnea and fatigue to prevent accidents before they happen. With no national law or rule to enforce sleep apnea treatment in place, the industry is leading the way on safety.

What type of accidents are not prevented by PTC?

While Positive Train Control prevents many types of incidents and will make our safe systems even safer, PTC does not prevent the following:

- Grade-crossing collisions;
- People trespassing on track;
- Track or train defect derailments;

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How much will PTC cost to maintain and operate?

The estimated cost to operate and maintain PTC is up to $130 million per year. The implementation of PTC cost over $4.1 billion and, though mandated by Congress, the state and local governments shouldered the bulk of the installation costs. When originally mandated, the bulk of the technology needed for PTC had yet to be created. The development and implementation cost of PTC, and the annual costs of operating and maintaining PTC, are in addition to the approximately $100 billion needed to bring the national public transportation industry into a state of good repair. This is a major challenge for publicly funded transit systems in dire need of upgrades.

How does PTC work?

PTC Systems monitor the precise location, direction, and speed of trains and compares that information with the authorized movement for the trains. It warns operators of potential changes to operating conditions and conflicts and will bring the train to a stop if the engineer fails to act appropriately. The exact method by which this is applied is dependent on the variant of PTC system used.

- **APTA Safety Management Audit Program** An industry-adopted program, the APTA Safety Management Audit provides a review of an agency's safety management processes and a tool for demonstrating system safety. Aligned with Safety Management Systems (SMS) and the requirements from the FRA in the Part 270 rule, teams of three to five auditors visit commuter rail systems to assess the agency's safety plan and conduct tours of the system. The auditors issue a final report telling agencies how they can improve safety system-wide.
- **Inward and Outward-Facing Cameras** As cameras become more common on trains and buses to improve security and safety, commuter rail agencies are starting to adopt both inward and outward-facing cameras. While most transit and commuter rail agencies already have outward facing cameras, many are starting to adopt inward facing cameras as well. APTA supports the use of both inward and outward-facing cameras. APTA is working with FTA to establish best practices for the use of inward and outward facing cameras on rail transit.

PTC is a safety system that monitors the speed and movement of trains. It can automatically stop a train to prevent certain accidents caused by human error. In 2008, Congress mandated that PTC be installed on all commuter rail and intercity passenger railroads. The law requires that PTC prevent four specific types of accidents:

- Train-to-train collisions;
- Over-speed derailments;
- Incursions into established work zone limits; and
- The movement of a train through a mainline switch in the improper position.

APTA AMERICAN PUBLIC TRANSPORTATION ASSOCIATION