

Positive Train Control



Objectives

The MBTA has commissioned a study of PTC to address safety concerns. PTC must reflect the optimal combination of enhanced safety and operational throughput



PTC is designed to prevent

- **train-to-train collisions**

- **derailments caused by excessive speed.**

- **Unauthorized entrance into work zones (incursions).**



Positive Train Control is designed to prevent :

- **Movement of a train through a track switch left in the wrong position.**

Preparing for PTC

The MBTA has commissioned a study of PTC to address safety concerns on the Green Line. The project will consist of multiple phases.

The phases consist of:


- Evaluation of vehicle based collision avoidance**
- An alternatives analysis**
- A preliminary design.**

Based on the results the MBTA will determine how best to proceed with the subsequent design and construction.

Next Steps

The study will allow the evaluation of the system alternatives based on the following criteria:

- 1.Operational improvements or impact**
- 2.Order of Magnitude cost**
- 3.In-service history**
- 4.System safety certification**
- 5.Impact on collision avoidance**

- 
- 6 Vehicle considerations**
 - 7 Infrastructure improvements**
 - 8 Modification and expansion**
 - 9 Fall back operations**
 - 10 Additional operational advantages**
 - 11 Feasibility of implementation**



In Conclusion

This project requires dedicated staff from multiple groups including signals, communications, vehicles, operations, safety, and training.

A grayscale photograph of a train station platform. The tracks recede into the distance, leading towards a train. A large steel truss structure arches over the tracks. The background shows city buildings and utility poles.

Questions and Answers