



**Massachusetts Bay
Transportation Authority**

MBTA Quarterly Safety Report

Ronald Nickle, Chief Safety Officer

October 30, 2017



Overview

- Regulatory Updates
- Workplace Safety Improvement Initiative
- Derailments
- Collisions and Fatalities
- Commuter Rail Trespasser Strikes
- Keolis Stop Signal Corrective Action Plan (CAP)



Regulatory Updates – FTA & DPU Regulatory Changes

- FTA Final Rule – State Safety Oversight (49 CFR 674)
 - Increased DPU enforcement and safety standard requirements
 - Revisions to DPU's existing State Safety Program Standard (220 CMR 151)
 - MBTA Provided Feedback on the Program Standard Draft
 - Currently in Public Comment Period
 - Public hearing held on September 26, 2017

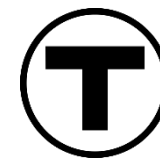




Workplace Safety Improvement Initiative

- **Phase 1:** Occupational Health & Safety Plan (Draft under review)
- **Phase 2:** Prioritization & Implementation Plan (Oct 1, 2017 – July 1, 2018)
- **Phase 3:** Implementation (July 1, 2018 – Onward)

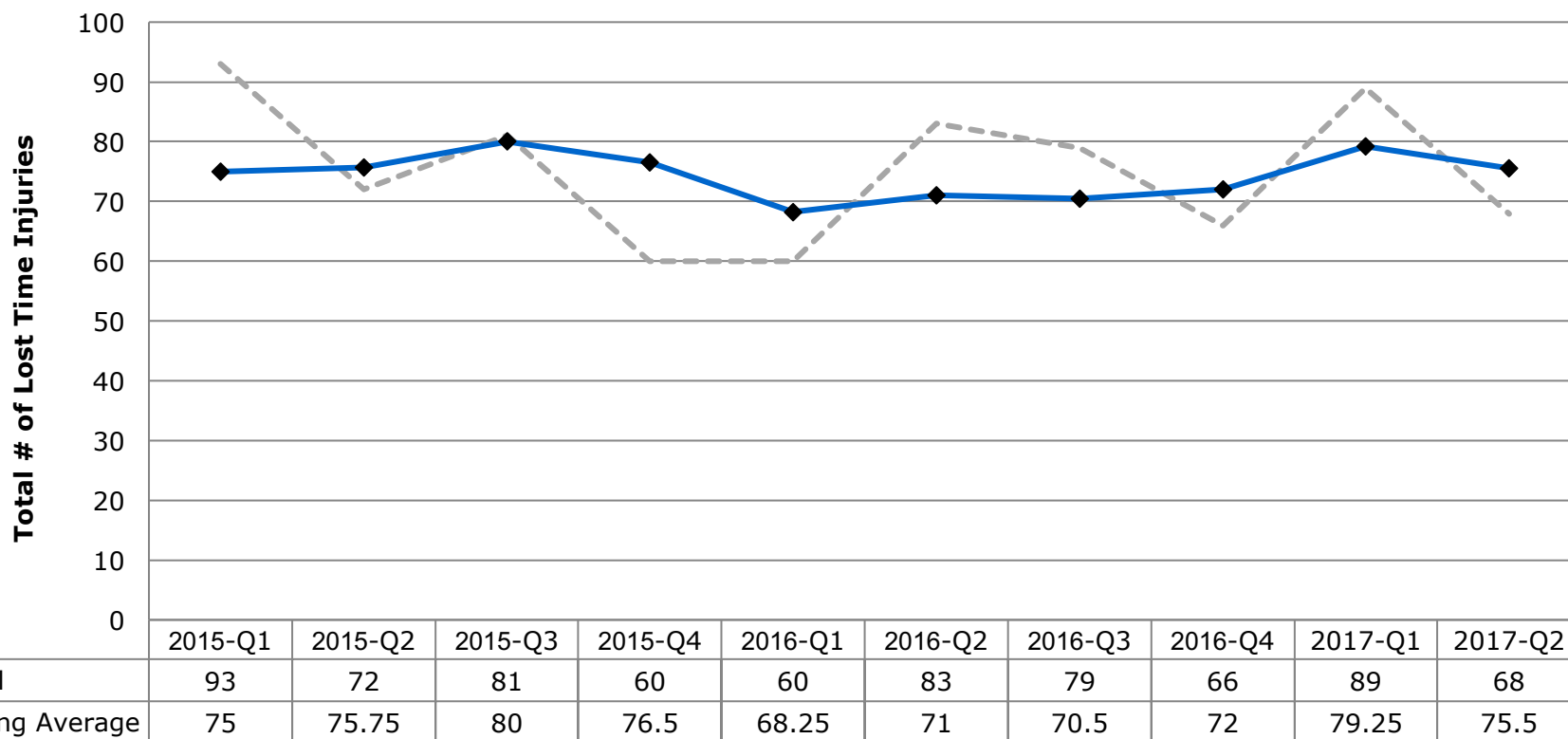




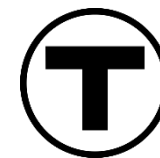
Employee Lost Time Injuries

MBTA Safety has calculated an OSHA Recordable Incident Rate of **5.48** for calendar year 2016.

Employee Lost Time Injuries*

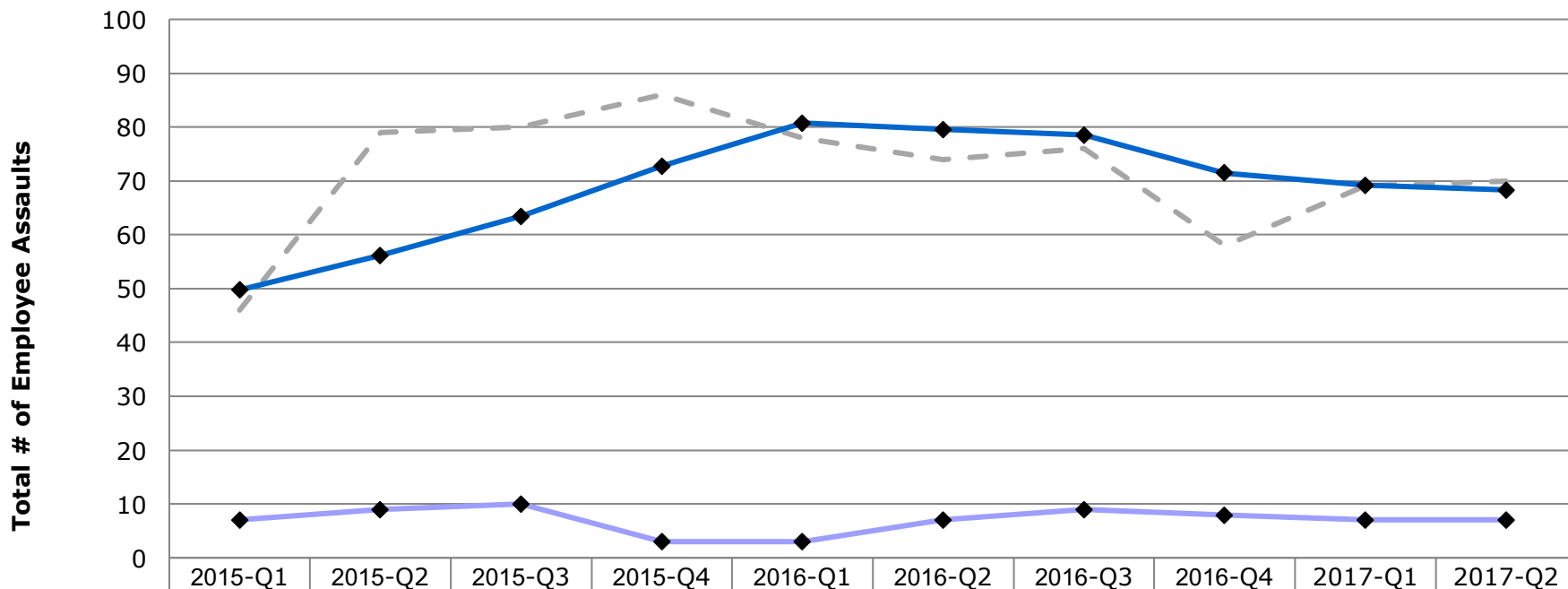


*Totals based on injury reports submitted to MBTA Safety

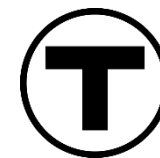


Assaults on Employees

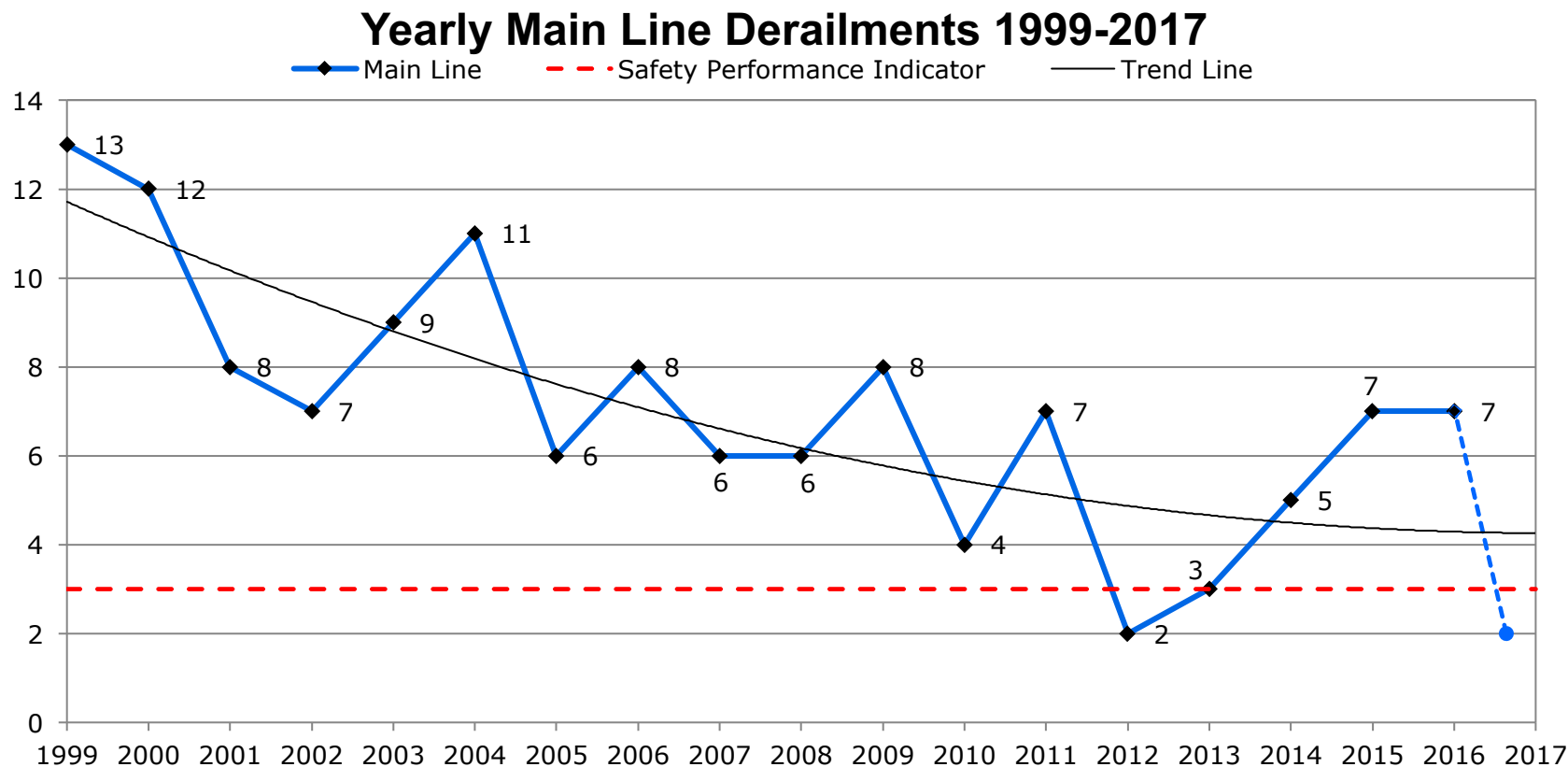
Assaults on Employees*



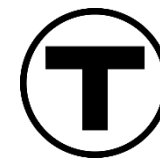
*Totals based on a review of Operations Logs and injury reports submitted to MBTA Safety



Derailments – Data Review

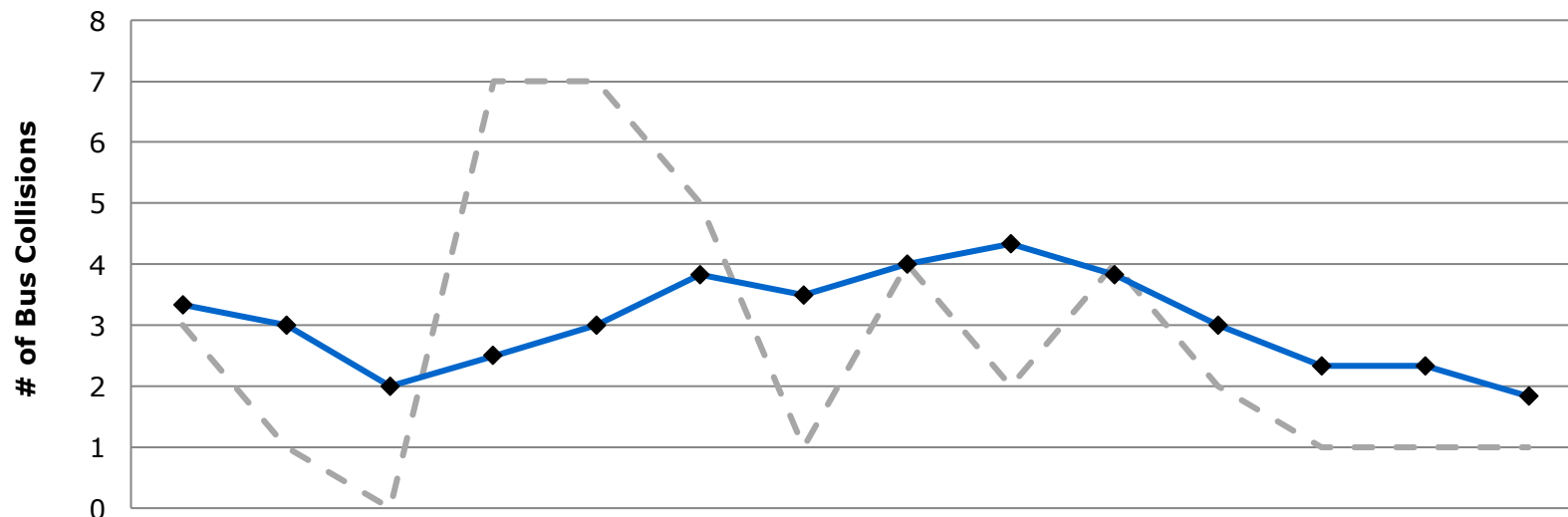


MBTA Safety has coordinated with Transportation Management to improve Investigation processes & procedures.



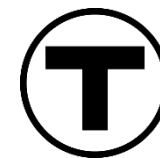
Bus Collisions

Reportable Bus Collisions*



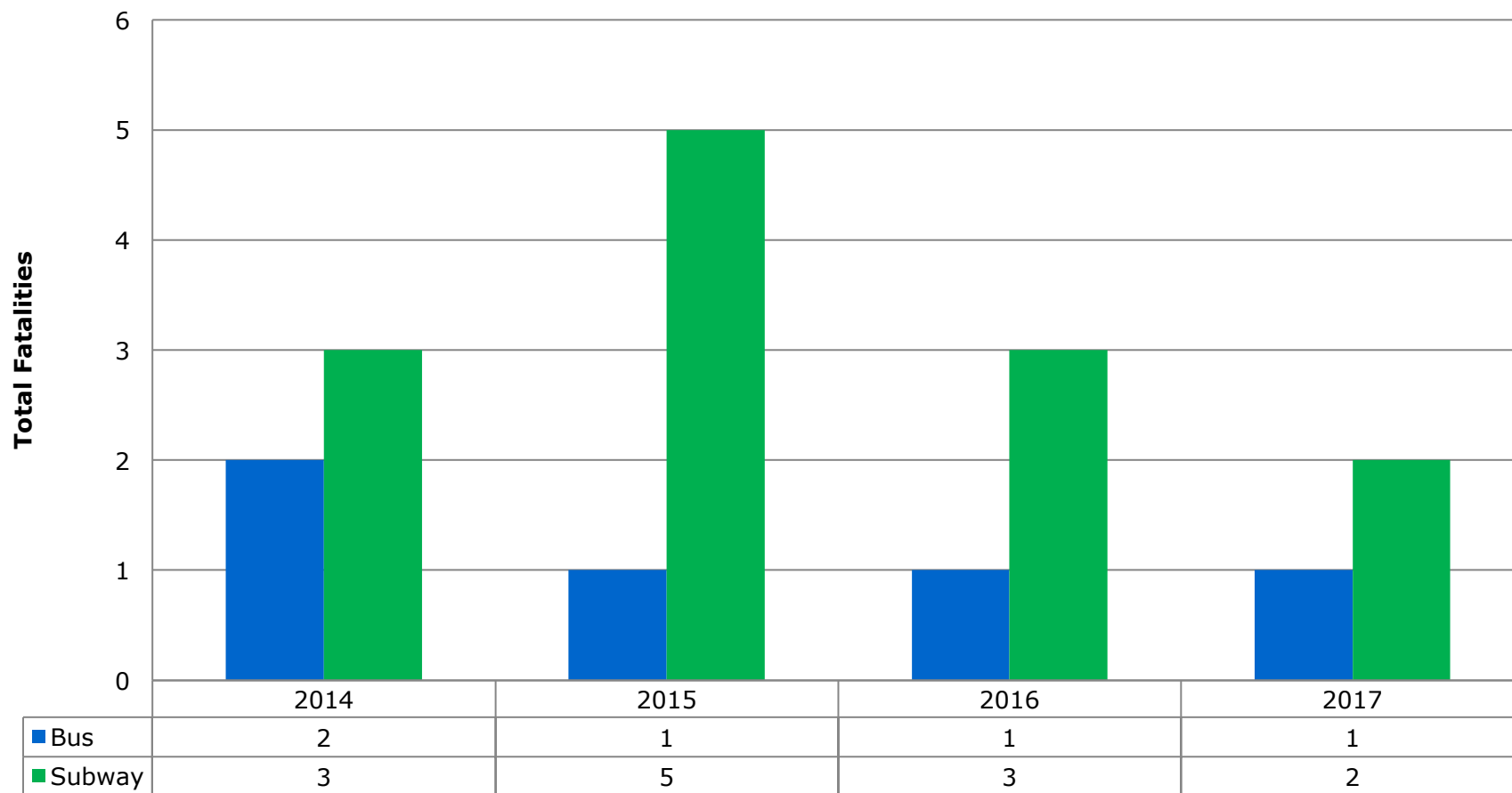
	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17
Bicyclist	0	0	0	3	1	0	0	0	0	0	1	0	0	0
Object	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Person	1	1	0	2	5	4	0	3	1	2	1	1	0	0
Vehicle	2	0	0	2	1	0	1	1	1	2	0	0	1	1
— Total Collisions	3	1	0	7	7	5	1	4	2	4	2	1	1	1
◆ Total Rolling Average	3.3	3.0	2.0	2.5	3.0	3.8	3.5	4.0	4.3	3.8	3.0	2.3	2.3	1.8

*Reportable bus collisions are collisions with a person requiring transport to a medical facility, any collision involving three or more transports for medical treatment, or any collision resulting in property damage \geq \$50,000.



Bus & Subway Fatalities – 2014 & 2017

Bus and Subway Fatalities 2014-2017

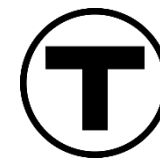




Federal Railroad Administration (FRA) Initiative

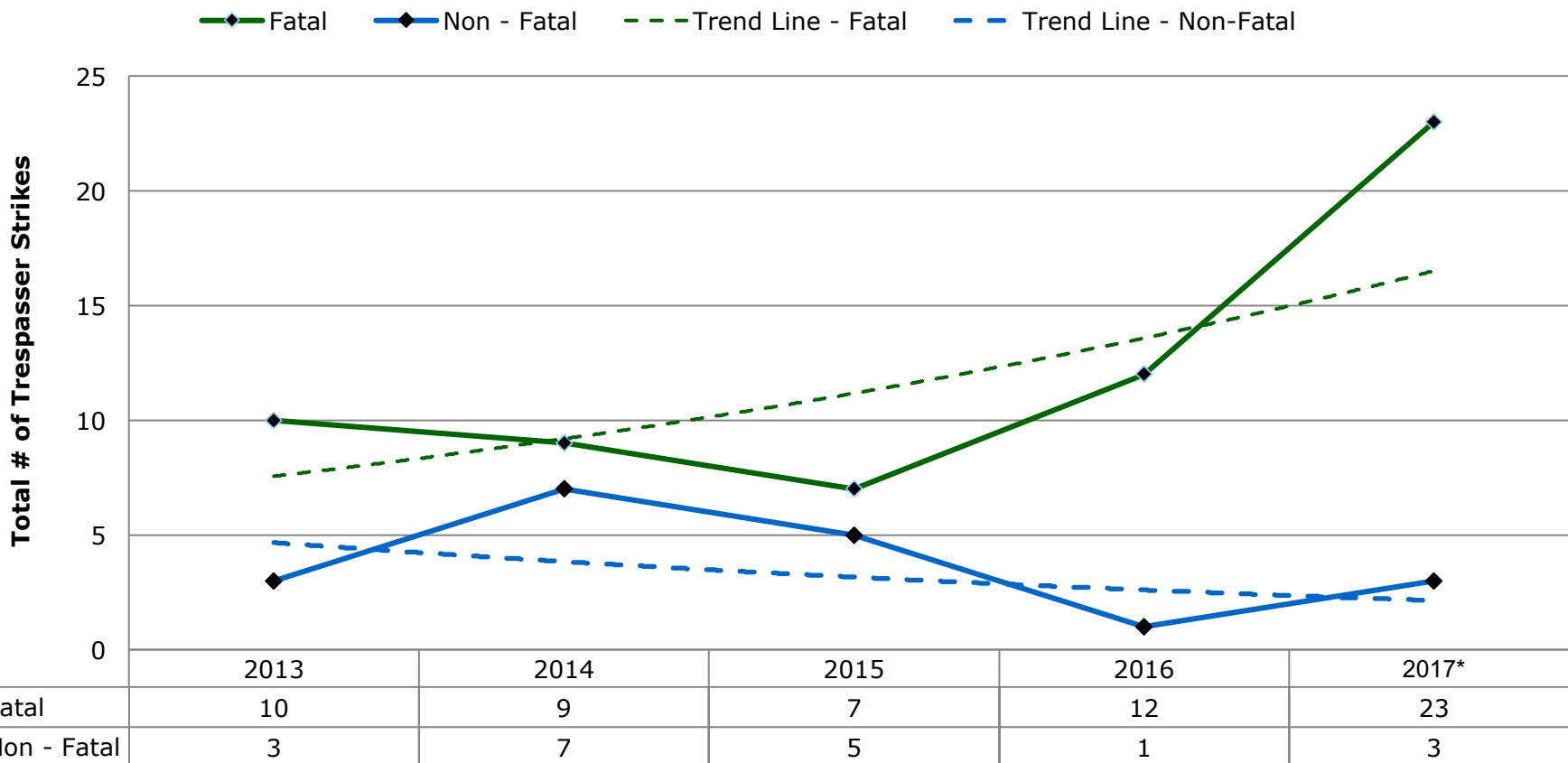
- National Railway Trespass and Suicide Prevention Project
 - The Volpe Center is analyzing person-to-train collisions
 - Effort is to reduce fatalities from railroad trespass and suicide
 - Project sponsored by the FRA
 - MBTA has agreed to provide access to data on railroad fatalities and injuries
 - Intend to use resulting research reports to identify areas of concern and mitigations



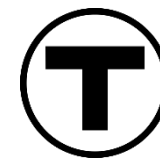


Commuter Rail Trespasser Strikes

Commuter Rail Trespasser Strikes¹

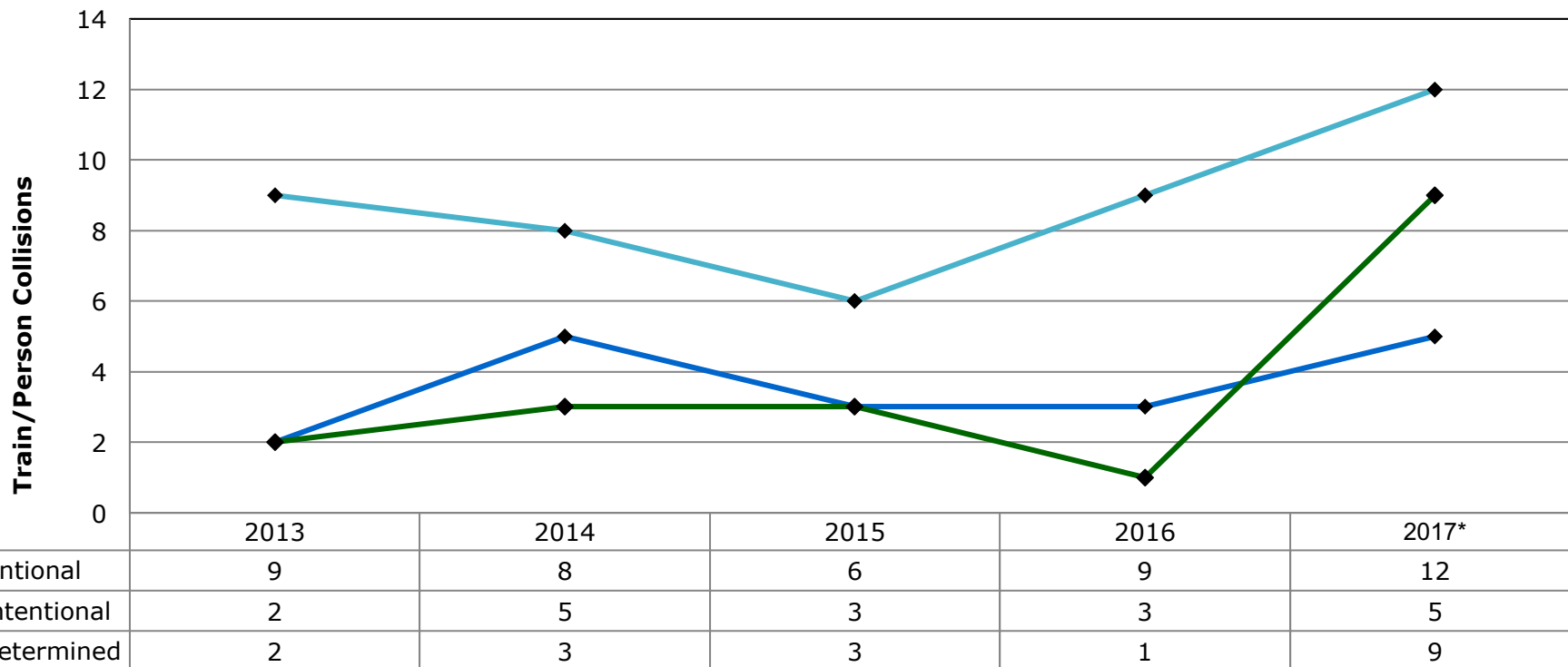


¹Totals based on a review of Commuter Rail incident and Safety Summary Reports



Commuter Rail Trespasser Strikes

Commuter Rail - Intentional vs. Unintentional 2013-2017



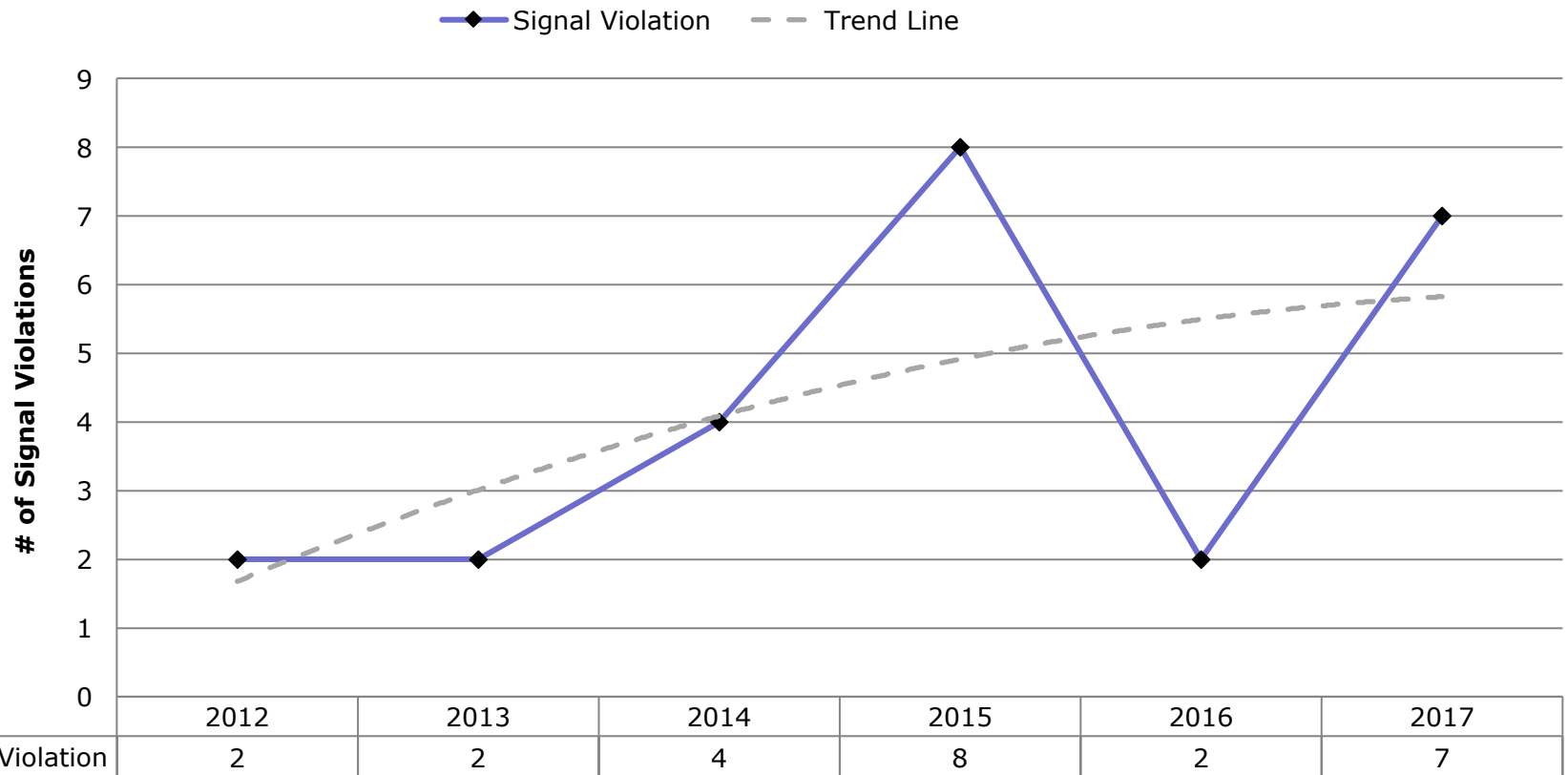
Categorizations are based on a reasonable determination utilizing the available information.

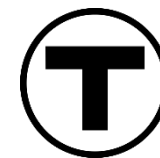
Undetermined incidents include recent incidents without sufficient initial information to make a determination or incidents without adequate historical information



Commuter Rail Stop Signal Violations

Commuter Rail Signal Violations





Commuter Rail Stop Signal Violations

- Keolis Stop Signal Corrective Action Plan (CAP)
 - Significant Increase in 2017 Commuter Rail Stop Signal Violations
 - August 31, MBTA Issued a CAP Notification to Keolis
 - Keolis must conduct a trend analysis, identify causal factors, and develop actions to eliminate or control occurrences
 - CAP sent to MBTA Safety on September 30, 2017

Total Signal Violations ¹	
2012	2
2013	2
2014	4
2015	8
2016	2
2017*	7

¹Totals based on a review of Commuter Rail incident and safety summary reports

* As of October 24, 2017



Questions?

