



STAFF REPORT INFORMATION ONLY

Safe Service Action Plan

Date:	March 2017
To:	TTC Board
From:	Chief Executive Officer

Summary

In January 2015, the Board received for information a report of the implementation of a road safety plan initiated by the CEO. This plan is known as the Safe Service Action Plan (SSAP). The purpose of the SSAP is to drive down risk of bus collisions and pedestrian fatalities. The SSAP mitigates risk of collisions and pedestrian fatalities by reinforcing safe operation, internal and external communications, enhanced operator training, GPS and Lidar speed audits, and improved incident investigation and tracking of corrective actions.

The collaborative efforts of multiple departments to implement the SSAP have resulted in a decrease in the total fatalities due to bus and streetcar collisions. Most importantly, there have been no preventable pedestrian fatalities involving a bus in two years (since the inception of the plan in January 2015).

This report outlines the risk management actions that have been completed, underway or remain under review. Appendix 1 sets out the statistical performance indicators.

Financial Impact

This report has no financial impact beyond what has been approved in the 2017 operating budget.

Decision History

The Board received for information the initial report outlining the SSAP designed to reverse the trend of fatal collisions.

Report:

https://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2015/January_21/Reports/SAFE_SERVICE_ACTION_PLAN.pdf

Issue Background

The CEO directed a safety review already underway to be expedited as a result of pedestrian fatalities involving TTC vehicles in late 2014. These tragic events resulted in the creation of the SSAP Committee. The role of the Committee was to review and understand the current state of safety in surface operations and make improvements to reduce the risk of collisions and, more specifically, pedestrian fatalities.

Statistically for bus collisions:

- From 2010 to 2014, there were eight pedestrian fatalities involving a bus and six fatalities of automobile drivers or passengers resulting from a bus collision.
- Since the implementation of the SSAP in January 2015 to the end of 2016, there were no preventable fatalities. There have been three non-preventable fatalities: two automobile driver fatalities after their automobiles rear-ended stationary buses, and one pedestrian fatality after an automobile collided with a bus and then contacted two pedestrians (one of which was a fatality).
- When expressed as a rate, there was a decline in total fatalities due to bus collisions from .06 deaths per million miles in 2010 to 0.02 in 2016.

Statistically for streetcar collisions:

- From 2010 to 2014, there were seven pedestrian or cyclist fatalities involving a streetcar.
- In 2015, there was one preventable pedestrian fatality, one non-preventable pedestrian fatality and one non-preventable fatality of a driver of a motorcycle.
- In 2016, there were no preventable or non-preventable fatalities.
- When expressed as a rate, there was a decrease from .25 deaths per million miles in 2010 to 0 in 2016.

Graphs that depict collision fatality rates for both bus and streetcar are attached as Appendix 1.

Accessibility/Equity Matters

There are **no** accessibility or equity issues.

Comments

The SSAP incorporated review of operating culture, recruitment, training and supervision of operators, management and scheduling of routes, advanced technology for warning and detection systems, internal and external communications, incident management and reporting and the overall management approach to road safety within the Service Delivery Group.

This review involved multiple departments across the TTC to develop the elements of the plan and implement real change to processes, communications and the approach to road safety. The TTC departments include Safety & Environment, Bus and Streetcar Transportation, Bus Maintenance, Strategy and Service Planning, Training, Corporate Communications, Transit Enforcement, Employment Services (Recruitment), Employee Relations and Legal. The TTC

also partnered with the City in the development of an external communications campaign on pedestrian and cyclist safety.

The changes implemented under the SSAP include:

- Imbed a new road safety culture of “Operate to Conditions”. All training, communications and messaging to Operators is the requirement to operate the vehicle in accordance with conditions. In practical terms, the message is no speeding, obey signals, take it easy in areas of construction, bad weather and congestion, and to always put safety first.
- Focused internal communications campaign to Operators to “Operate to Conditions” including one-on-one discussions by Managers with every Operator (approx. 4600 Operators), internal “back to school” safety campaign, targeted monthly safety talks with local Joint Health and Safety Committees.
- In collaboration with the City of Toronto, the “Stay Focused. Stay Safe.” community outreach campaign revolving around pedestrian safety and behaviours was launched in spring 2015.
- Schedule improvements to routes to ensure schedule provides sufficient time for Operator to operate to conditions including East Mall, Dufferin and Shorncliffe.
- Revisions to Initial and Recertification training curriculum for Bus and Streetcar Operators to include more time “in the seat”, more night driving and elements of human behaviour such as distracted drivers and pedestrians.
- Any outstanding Bus Operator Recertification training was completed and scheduling process improved to ensure training requirements are completed.
- Assessment for Defensive Driving (ADD) program checklists updated. Training department conducting ADD following incidents.
- Operator risk tool developed to assist Managers to identify Operators who may be at risk for a serious accident and manage accordingly.
- Bus Route Supervisor Daily Activity Plan was initiated with Supervisors assigned to key stations to provide Operator support and continually message safe operations.
- Incident investigation process was evaluated and improved to ensure more comprehensive reports which identify risk and recommend corrective actions.
- Incident investigation database was developed to track incidents and corrective actions to closure.
- Speed audits using GPS data gathered from buses and on-street LiDAR (radar technology) was used to identify speeding infractions and violations.
- New bus and streetcar rules books drafted for implementation in 2017.
- Implement position of Safety Manager for Service Delivery in 2015 to ensure the identification of safety risk and implement mitigation plans in cooperation with the Safety & Environment department.
- Preparation of business case to present to Ontario Privacy Commissioner to use forward and side facing cameras on buses. New bus procurement will include specification for cameras.
- With implementation of VISION, integrating bus and streetcar route management into centralized control centre beginning spring of 2017.
- Working in partnership with City of Toronto on transit signal priority project.

While these initiatives have led to an improvement in road safety for pedestrians, with the notable achievement of no preventable pedestrian fatality involving buses in two years and no preventable or non-preventable pedestrian fatality involving streetcars in 2016 , the work is ongoing. The SSAP Committee continues to plan and implement initiatives to further improve road safety. The TTC will also continue to partner with the City to support Toronto's road safety plan, Vision Zero.

Contact

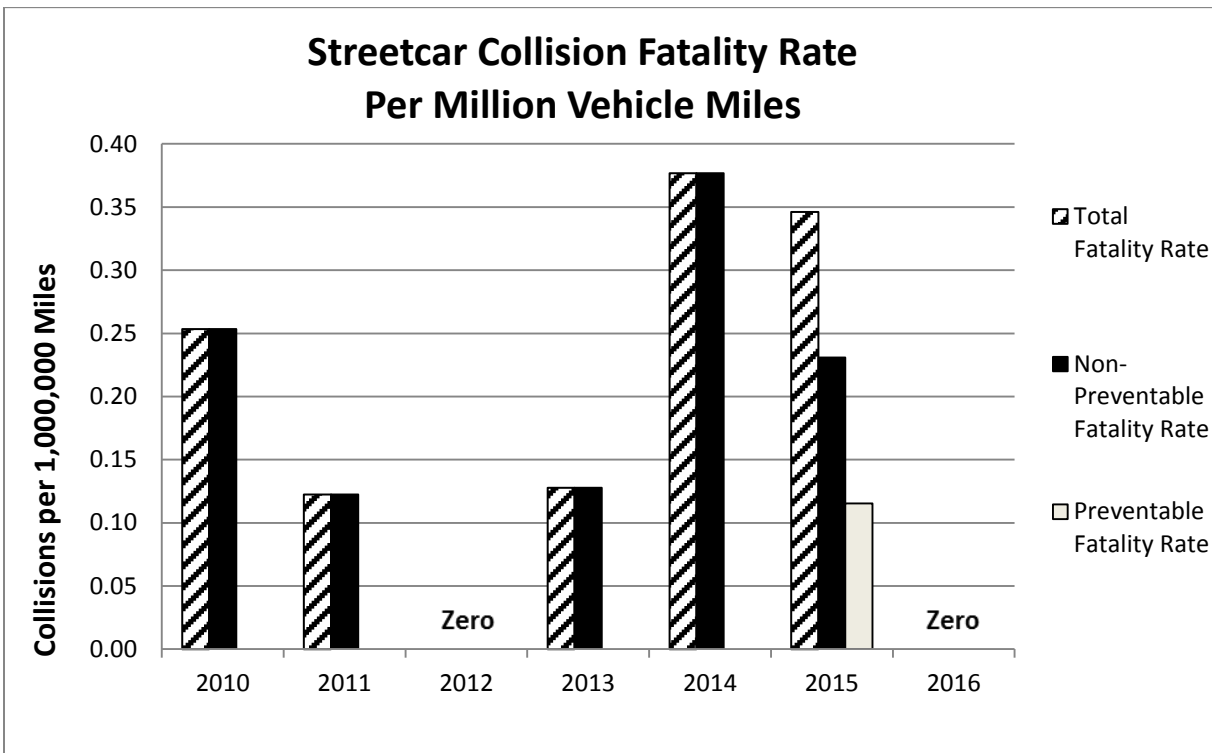
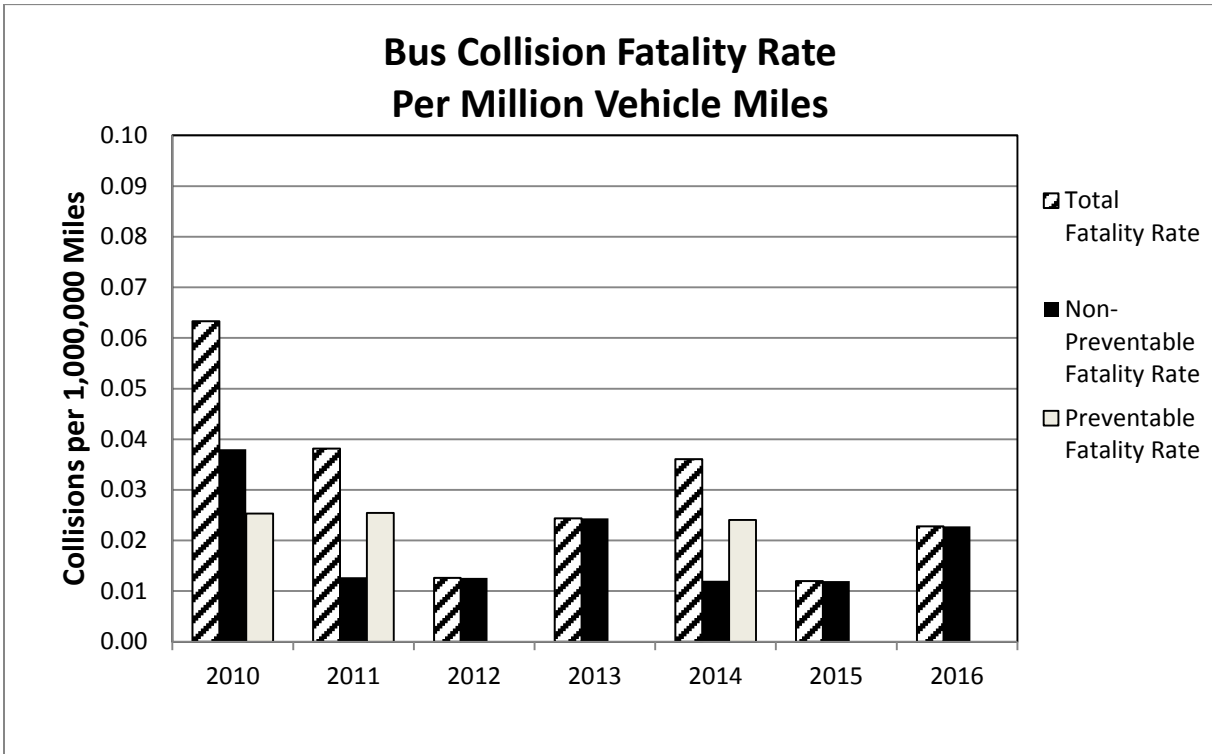
John O'Grady	Chief Safety Officer	416-393-4229
Rick Leary	Chief Service Officer	416-981-1122
Kirsten Watson	Deputy Chief Service Officer	416-393-7804

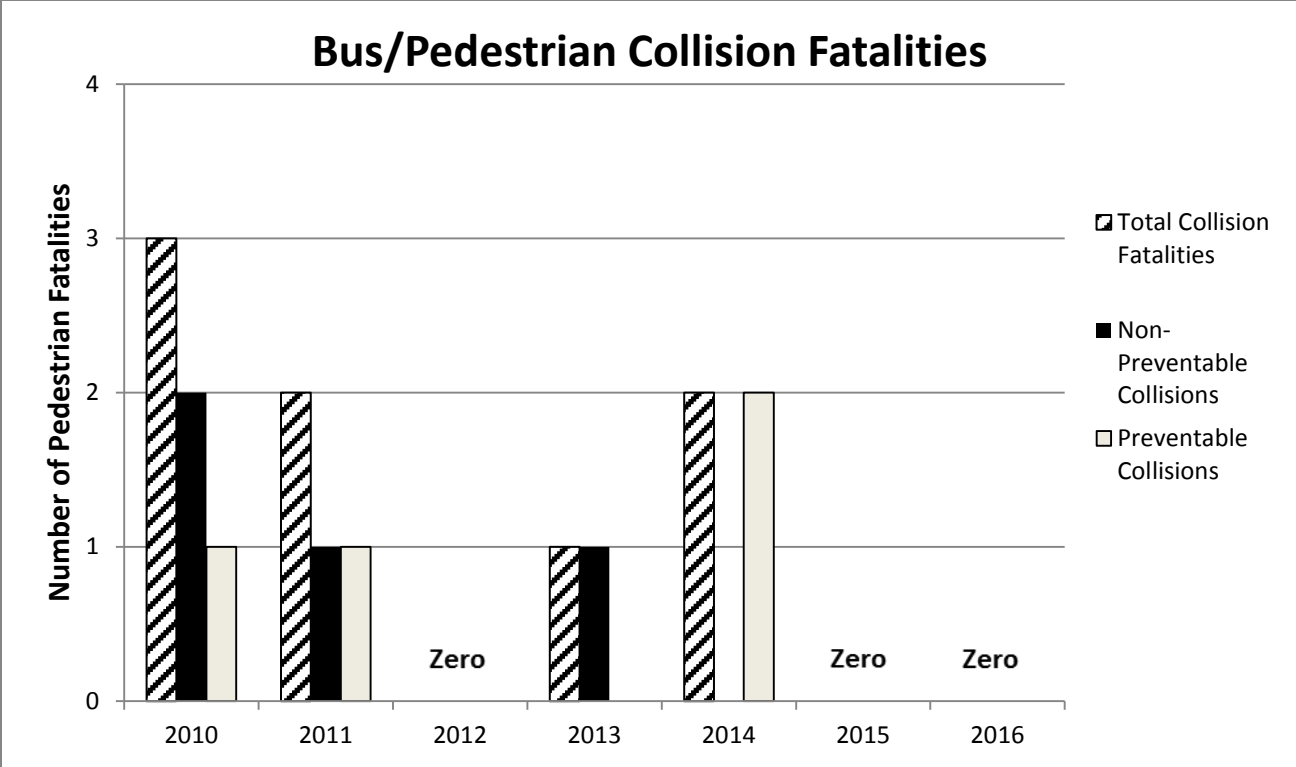
Attachments

Appendix 1: Incident Summary (2010 to 2016)

Appendix 1

Incident Summary (2010 to 2016)







SAFE SERVICE ACTION PLAN

Kirsten Watson
Deputy Chief Service Officer
Service Delivery Group



PRESENTATION



1. Late 2014, CEO directs expedited development of road safety plan.
2. January 2015, implementation of Safe Service Action Plan.



3. Results:
 - Bus - **No** preventable fatality since inception of plan.
 - Streetcar - **No** preventable or non-preventable fatality in 2016.





Review of Operator Training:

- More time in the seat
- More night/weekend driving
- New focus on distracted drivers and pedestrians



OPERATE TO CONDITIONS - COMMUNICATIONS

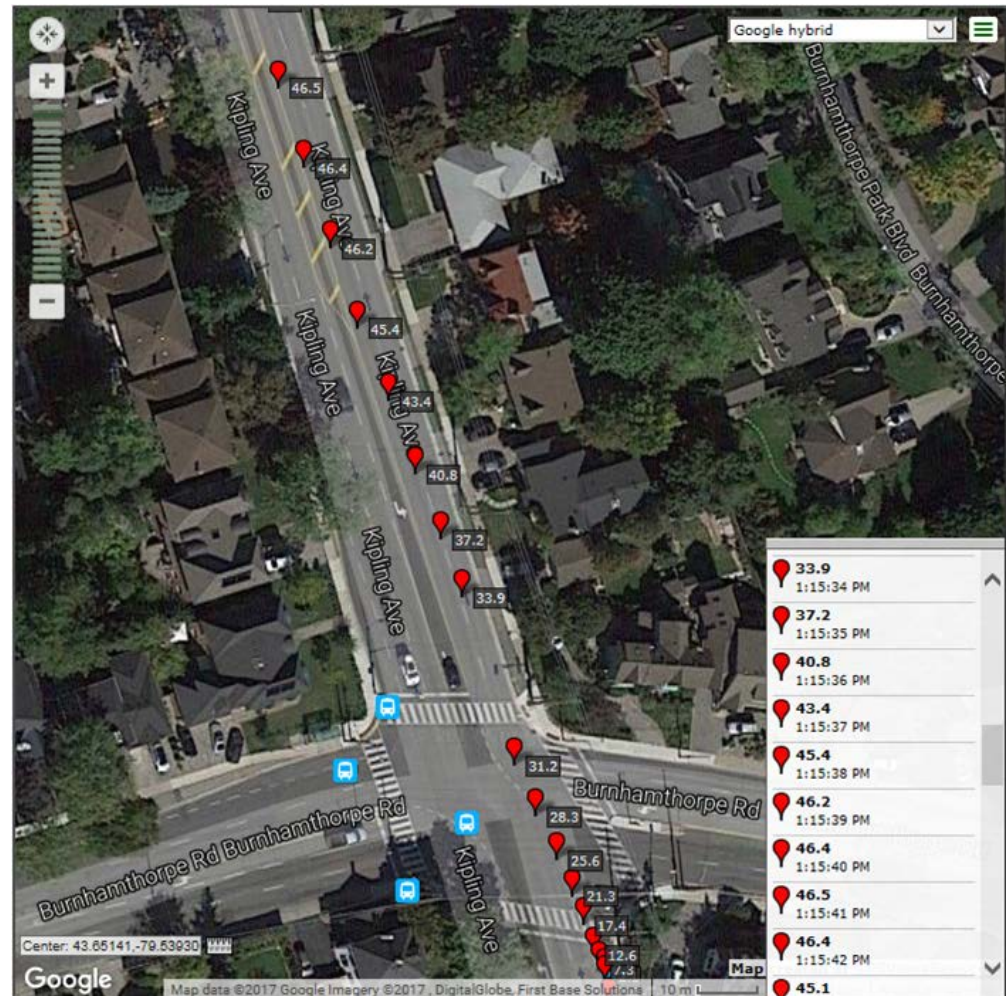


- Community Outreach with City of Toronto
- Manager face-to-face discussion with all operators
- Targeted campaigns to operators – eg.: *Back to School*
 - *Stay Focused, Stay Safe*
- JHSC safety days



MANAGING RISK

- GPS/LIDAR Audits and “Hot Spot” Checks
- Post Incident Assessment of Defensive Driving managed by Training Department
- Implement Operator Risk Registry
- Improved incident investigations and tracking data base



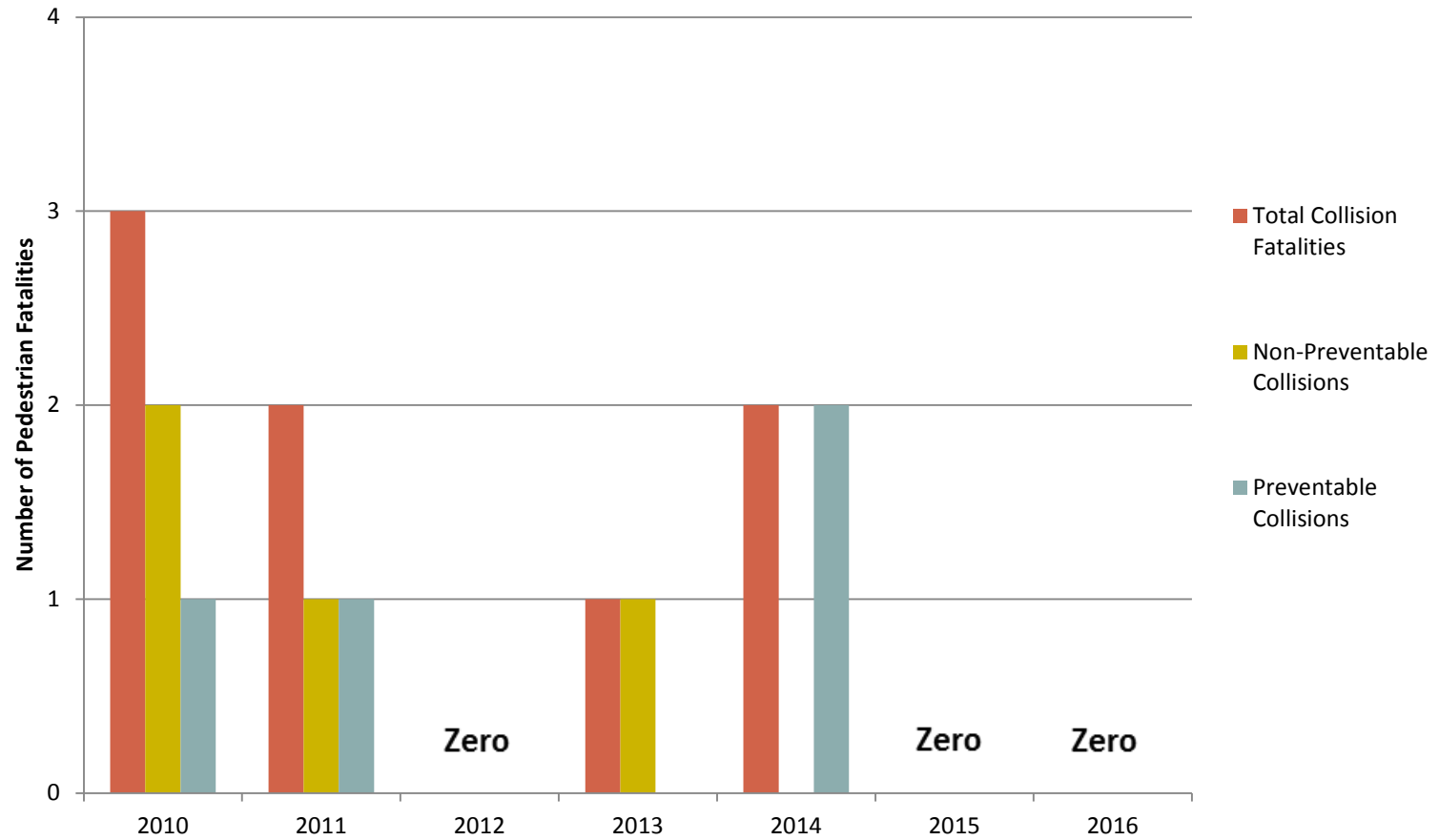


- New schedules
- New Safety Manager for Service Delivery
- New increased bus supervision at stations
- Partnership with TPS – Division Town Halls



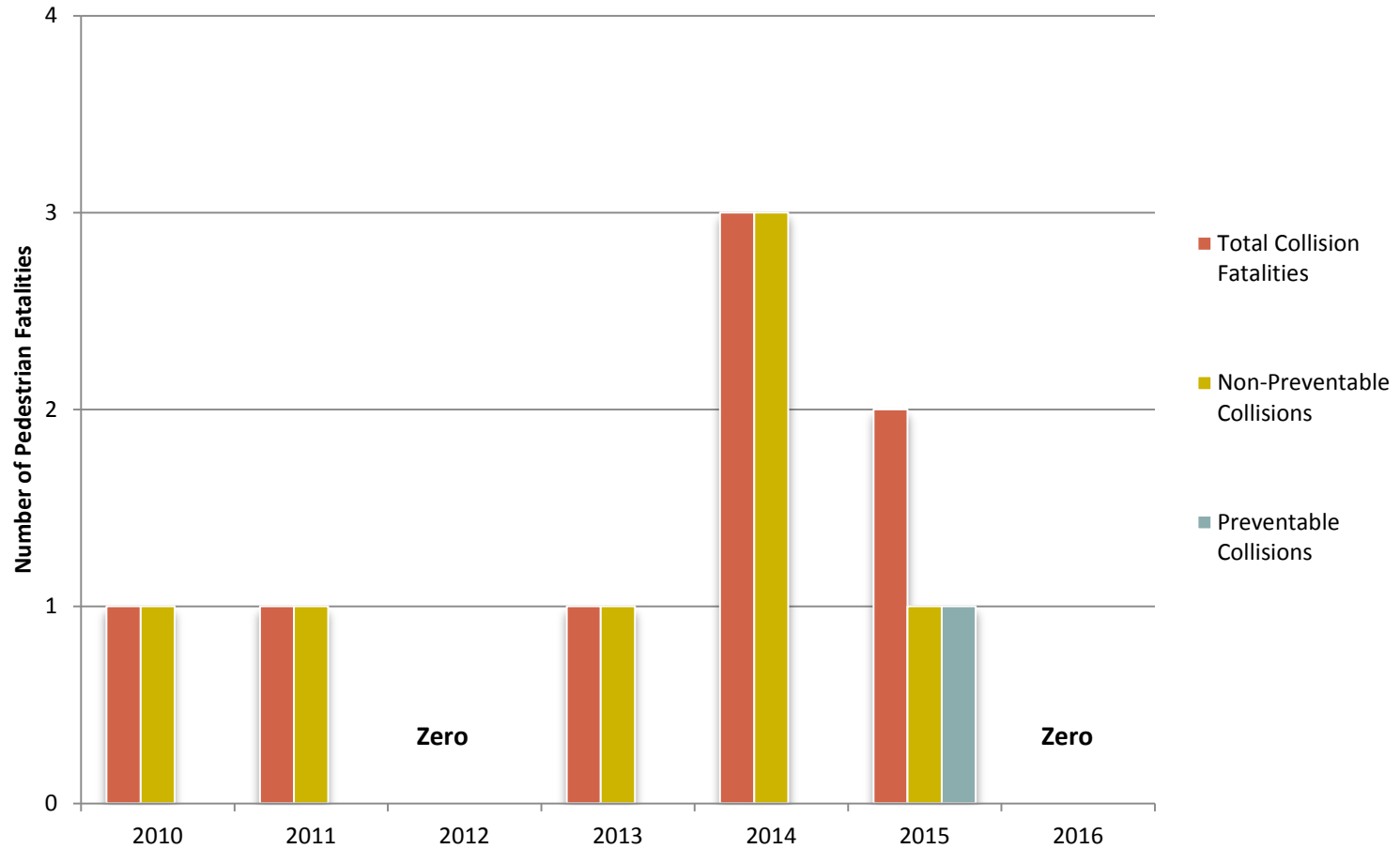


Bus/Pedestrian Collision Fatalities





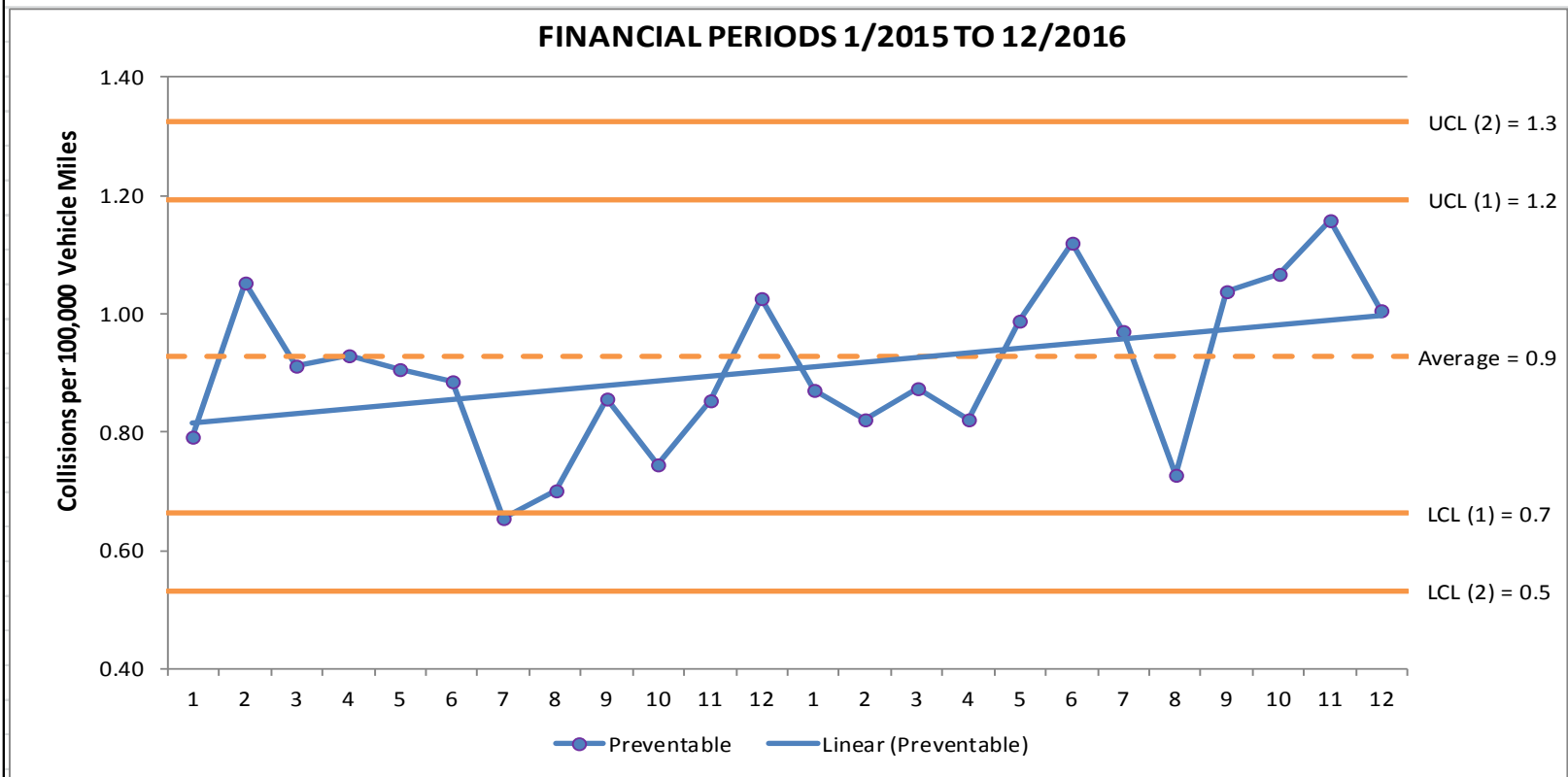
Streetcar/Pedestrian Collision Fatalities



BUS PREVENTABLE COLLISION RATE



CHART 6B: BUS PREVENTABLE COLLISION RATE



Preventable Collisions: With a p-value of **0.04**, there is enough evidence to support a statistically significant upward trend in the preventable bus collision rate from P1'15 to P12'16. However, the Period 12, 2016 preventable bus collision rate of 1.01 collisions per 100,000 vehicle miles is within the control limits. There is enough evidence to support a significant upward trend in the preventable collision rate with Fixed Objects. Moreover, Eglinton & Wilson divisions show a significant upward trend in the preventable collision rate.

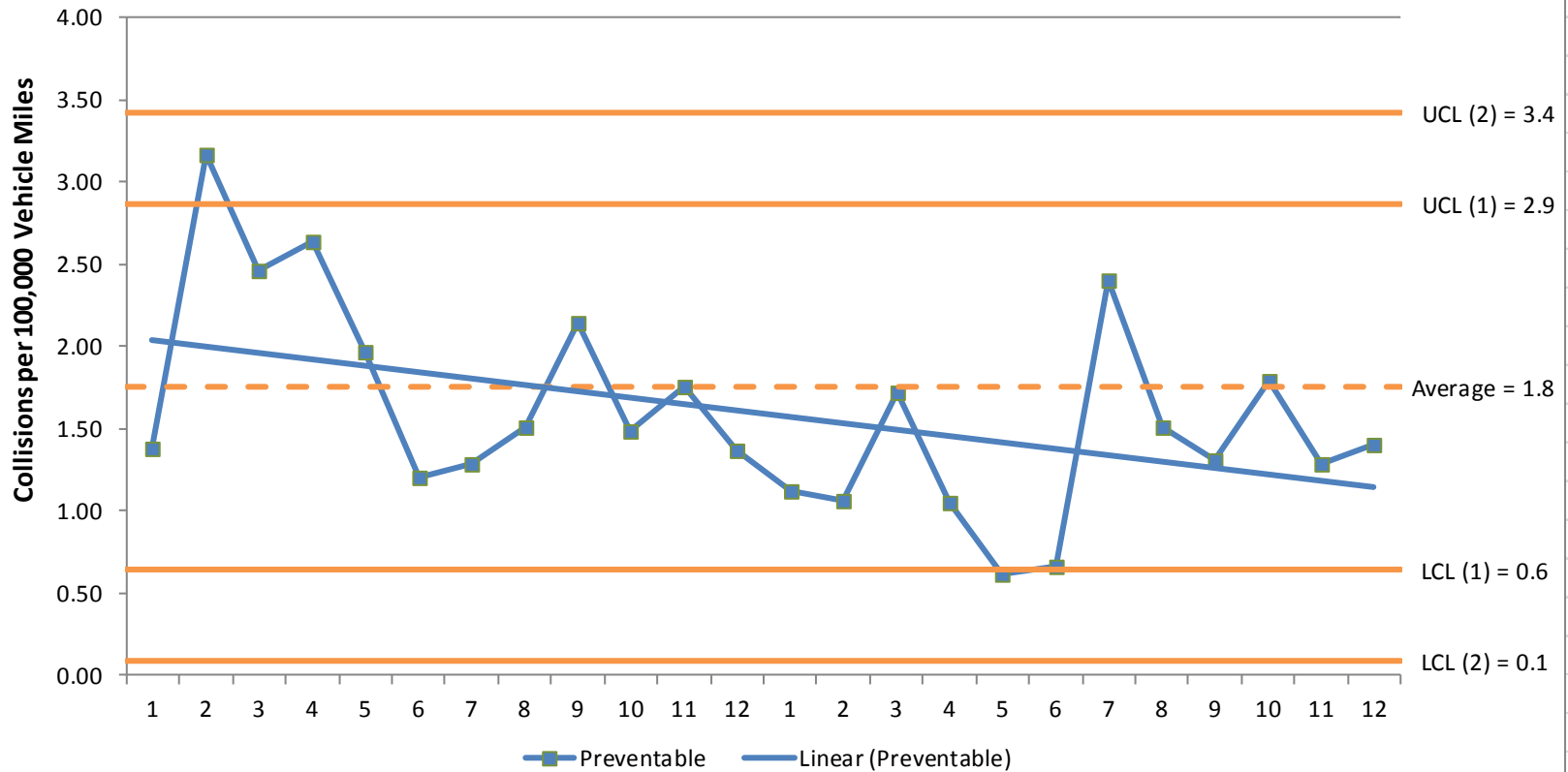


STREETCAR PREVENTABLE COLLISION RATE



CHART 8B: STREETCAR PREVENTABLE COLLISION RATE

FINANCIAL PERIODS 1/2015 TO 12/2016



Not Preventable Collisions: With a p-value of **0.03**, there is enough evidence to support a statistically significant downward trend in the not preventable streetcar collision rate from P1'15 to P12'16.





- Challenges continue: fixed objects, bus/bus
- Partnerships with City: Vision Zero
- Message: Operate to Conditions
- GPS/LIDAR Audits
- Route Improvement Strategy – new schedules
- Centralized Control Centre (OCC)
- Sharing traffic info with the City
- Rule books for buses and streetcars
- VISION
- Cameras on buses and streetcars
- Transit Signal Priority
- Fitness for Duty



OUR COMMITMENT



Safety is our commitment to everyone in our community.

