



# Calgary Safer Mobility Plan 2013-2017

## Annual Report 2016

Transportation - Roads - Traffic

The City of Calgary

November 9, 2016

## 1. Introduction

The Safer Mobility Plan (SMP) Annual Report 2016 provides an update on the most recent collision data for Calgary and alignment with targets, a summary of actions the City and our partners have undertaken in each of the Strategies in the last year, and what we plan to do over the coming year. The *Calgary Safer Mobility Plan 2013-2017* is available on [Calgary.ca](http://Calgary.ca). 2016 was a busy year and the most significant achievements from each strategy within the SMP are as follows:

### Strategy



**Collision Data**

The Transportation Department produces an annual collision data report which summarizes traffic collisions in Calgary. The *Traffic Collision Annual Report 2015* presents information about collision trends, where and when collisions are happening and the road user groups is involved. Key figures from this document are presented in Attachment 2. In 2015, there were 22 fatal collisions, 2,504 injury collisions, and 34,279 Property Damage Only (PDO) collisions on Calgary roads. The societal cost of these collisions is estimated to be \$1.02 Billion. Calgary is continuing to perform well compared to other major Canadian cities with an overall collision rate of 205 casualties per 100,000 population compared to a range of 205 to more than 500 (Calgary being the lowest found) casualties per 100,000 population for major Canadian Cities. For pedestrian collisions in 2015, there were 7 fatal collisions, 304 injury collisions. The pedestrian casualty rate of 25.3 casualties per 100,000 population in Calgary is half the average of 52 casualties per 100,000 population for major Canadian cities in a recent national study. A selection of cities are shown in the table below.

City	All casualty collision rate (Collisions/100,000 population)	Pedestrian casualty collision rate (Collisions/100,000 population)
Calgary (2015)	205	25.3
Edmonton (2015)	342	36.7
Ottawa (2014)	395	37.0
Toronto (2013)	530	49.9

Nonetheless, traffic collisions are a leading cause of death and injury for Albertans under the age of 30. Progress made on each of the Focus Areas in the SMP and key actions for 2017 to ‘turn the curve’ are discussed in Section 2. It is important to note that there is a lag between our activities and the resulting change in collisions. The trends in the most recent collision data are a result of activities completed during 2014 or earlier.

**Engineering Activities**

The Transportation Department has recently published and continues to develop guidelines to create safer roads in the City. This includes the development of a Pedestrian Strategy, the Complete Streets Guide, an update to the Calgary Temporary Traffic Control Manual, and a guideline for traffic safety processes in Calgary, including Road Safety Audits and In-Service Road Safety Reviews. Network screening processes are also employed and being refined to identify where there are high concentrations of collisions where we focus In-Service Road Safety Reviews and implementation of measures to mitigate the identified collision issues.

There are several methods to rank intersections, interchanges or corridors based on collisions by considering the number of collisions, severity of collisions, obtaining traffic volume based rates, and looking at persistence of the issues. As an example, the ranking list that was used to determine safety work programs for intersections in 2016 (using most recent 2014 data of the time) is presented in Table 1, with a description of the review type (Collision Review (CR) or In Service Road Safety Review (ISRSR)), what was done at each location, or a description of why works were not undertaken based on planned capital improvements or maintenance activities. The ranking lists are reviewed on an annual basis using the most recent collision data and taking into account recent transportation network changes.

**Table 1: Intersections identified for review or implementation based on collision rate**

Intersection		Review type*	Proposed Improvements	Status
1	69 St & 34 Av NW	CR	<ul style="list-style-type: none"> <li>To be determined</li> </ul>	CR initiated
2	68 St & McKnight Bv NE	CR	<ul style="list-style-type: none"> <li>Protected only left turns</li> </ul>	Design
3	3 St & 11 Av SE	CR	<ul style="list-style-type: none"> <li>To be determined</li> </ul>	CR initiated
4	36 St & 12 Av NE	CR	<ul style="list-style-type: none"> <li>Signal timing improvements</li> <li>Geometric improvements to be determined</li> </ul>	Planned
5	36 St & 20 Av NE	CR	<ul style="list-style-type: none"> <li>Signal timing improvements</li> <li>Reconfigure WB approach to separate left turn from the shared through/left</li> <li>Upgrade to allow simultaneous NBL and SBL</li> </ul>	Planned
6	52 St & Whitehorn Dr NE	ISRSR	<ul style="list-style-type: none"> <li>Protected/permissive southbound left turn phasing improvement</li> <li>Eastbound and westbound laning changes</li> </ul>	Design
7	7 St & 13 Av SW	CR	<ul style="list-style-type: none"> <li>To be determined</li> </ul>	CR initiated
8	29 St & Sunridge Bv NE	CR	<ul style="list-style-type: none"> <li>To be determined</li> </ul>	CR initiated
9	85 St & Aspen Stone Bv SW	CR	<ul style="list-style-type: none"> <li>To be determined</li> </ul>	CR initiated
<b>Additional locations/improvements from previous ranking lists:</b>				
Memorial Dr & 36 St SE		ISRSR	<ul style="list-style-type: none"> <li>Northbound and eastbound right turn improvements</li> <li>Left turn bay extensions and Transit changes</li> </ul>	Design
McKnight Bv & 52 St NE		ISRSR	<ul style="list-style-type: none"> <li>Eastbound right turn channel improvements</li> </ul>	Design
Glendeer Cir & Heritage Dr SE		ISRSR	<ul style="list-style-type: none"> <li>Rebuild NB right turn</li> <li>Sidewalk connections</li> </ul>	Design completed \$200k, ROW issue
Macleod Tr & Shawville Bv SW		CR	<ul style="list-style-type: none"> <li>Southbound right turn improvements</li> </ul>	Completed 2016, \$100k
Country Hills Bv & Harvest Hills Bv NW		ISRSR	<ul style="list-style-type: none"> <li>Northbound right turn improvements</li> <li>Southbound right turn improvements</li> <li>Dual protected left turn lanes on Harvest Hills</li> </ul>	Completed 2016, \$350k
Macleod Tr & Southland Dr SW		ISRSR	<ul style="list-style-type: none"> <li>Protected only left turns</li> </ul>	Completed 2016
Bow Trail & 37 St SW		ISRSR	<ul style="list-style-type: none"> <li>Signal revisions, pedestrian enhancement, access management</li> </ul>	Implementation underway
16 Av & 68 St NE		ISRSR	<ul style="list-style-type: none"> <li>Details to be determined</li> </ul>	Planned

Note: \* CR = Collision Review, ISRSR = In-Service Road Safety Review

New technology continues to be used to improve traffic safety. Application of Rectangular Rapid Flashing Beacons (RRFB) continued in 2016 with the construction of an additional 34 installations. City staff are also chairing work at a national level, through the Transportation Association of Canada (TAC), to establish a formal warrant process for these devices. Over 400 crossing locations have been evaluated for RRFB based on an interim ranking tool that provides some guidance in the absence of a

formal warrant. The conversion of streetlights to LED technology is underway and provides improved visibility while using less power.

The use of mobile Speed Limit Observation and Warning System signs (SLOWS) to target areas identified by citizens have been shown to result in lower vehicle speeds when present, and we expanded our fleet to be more responsive to citizen requests. These electronic signs also support the Community Traffic Calming Program. Traffic signal operations and signal timing continue to be reviewed where safety issues have been identified.

Snow and Ice Control continues to provide safer travel during winter conditions on roads where those activities are completed. The severity of winter collisions is also lower, due in part to lower speeds, with 1 fatal collision in 2015 being related to snow/ice road conditions.

Other simple engineering/community initiatives have been initiated in 2016. One example is the Community Speed Watch, initiated this year, which allows citizens to convey safety messages to Calgarians who are driving and to collect data that can be communicated back to communities. The development and pilot application of Traffic Calming Curbs has allowed quick responses to traffic safety and traffic calming issues at a low cost and low impact to existing infrastructure. The Traffic Calming Curbs have also enabled a Pilot of Traffic Calming on a neighbourhood basis in Erin Woods. The pilot of reflective sleeves for crosswalks has received a great deal of positive feedback from citizens; evaluations of speed and yielding behavior are ongoing as well as guidelines for use.

### **Education and Awareness**

A major focus of the department are public education programs focused on improving safety for motorists, pedestrians and cyclists. In 2016, these programs included:

- continuation of education for cycle tracks,
- educational materials regarding the 5 Avenue Lane Reversal Pilot,
- 'Look Out for Each Other' pedestrian crossing and distracted driving campaign,
- 'Move Together' cycle track pilot education campaign,
- school bus safety, and
- pedestrian safety.

Support was also provided to our external partners including the AMA School Patrol program, Safer Calgary, the Calgary Safety Council "Safety City", and MADD.

Support was also provided to our external partners including the Alberta Motor Association (AMA) School Patrol program (for which there have been no recorded motor vehicle collisions while patrollers are present during the history of the program) and the MADD Report an Impaired Driver campaign. One example is that Roads is providing new traffic cones to all school patrol programs in the city. The City also extended support to the Calgary Safety Council and their 'Safety City' program where thousands of first and second grade students go to learn about traffic safety.

Public consultation about traffic safety has been initiated in partnership with the Calgary Police Service and direction from communications and the Engage unit, through the Community Traffic Safety Meetings. These meetings, held on a ward basis, will be completed on an annual basis moving forward. The focus of the meetings is engagement with citizens to share traffic safety information, and to get

feedback from citizens to assist our engineering, enforcement and educational activities. The initial meetings have been well attended and the information requested will be implemented through existing programs and processes with regular reports back to the Wards and updates at subsequent Community Traffic Safety Meetings.

### **Possible Future Directions**

An interim review of the SMP has identified that the establishment of a dedicated office of traffic safety may be an improvement over the current decentralized model of the SMP to maintain strategic focus and strengthen proactive efforts. The SMP established a decentralized group of City staff to contribute to the plan with a core of 3 FTE positions and a capital budget of \$1.5M specifically focused on Traffic Safety. Funding for new activities is another area for exploration in the coming year since the SMP was based on utilizing existing resourcing. Other funding sources will be reviewed for possible future direction of the SMP as the next iteration of the traffic safety plan for 2018-2022 inclusive is developed over the next year. For comparison purposes, the City of Edmonton has an Office of Traffic Safety with 26 FTE positions (excluding photo enforcement operations) and annual funding of \$17.3M while the City of Toronto has a Road Safety Plan team and related programs with annual funding of \$16.1M over the new five year plan and 13 dedicated FTE positions. Reallocation of existing FTEs and resources, which have a safety function, to create a focused team and implementation funds may be more efficient than the current organization without the need to request additional budget.

There is also significant discussion about vision zero in Calgary, consistent with the SMP mission of “Striving for zero... pursuing transportation completely free of fatalities and injuries”. Establishing more aggressive casualty reduction targets than those set out in the SMP will require additional resources beyond what is (and historically has been) dedicated specifically to the improvement of traffic safety. Communications are a very critical part of the SMP and to date, the Safer Mobility Leadership Team has not had capacity to establish those communications either through dedicated communications staff or through the Engage! Unit.

### **Summary**

Due in part to our efforts and new activities, four of the five targets set out in the SMP were on track in 2014 to achieve the targets. Discussion of each target and the related actions for 2017 to ‘turn the curve’ are outlined in Section 2. The 11 Safer Mobility Strategies of the SMP are discussed in Section 3, with a summary of actions initiated or completed in 2016 and the planned actions for 2017.

Overall, the City of Calgary has a sound safety record and compares well with other jurisdictions across Canada. The actions we are taking to implement the Safer Mobility Plan 2013-2017 will continue to improve traffic safety in our city. However, additional resources could enhance our progress toward the established targets, and further investigation will be put forward in the next iteration of the SMP to look at accelerating our efforts and establishing more aggressive targets from 2018 to 2022.



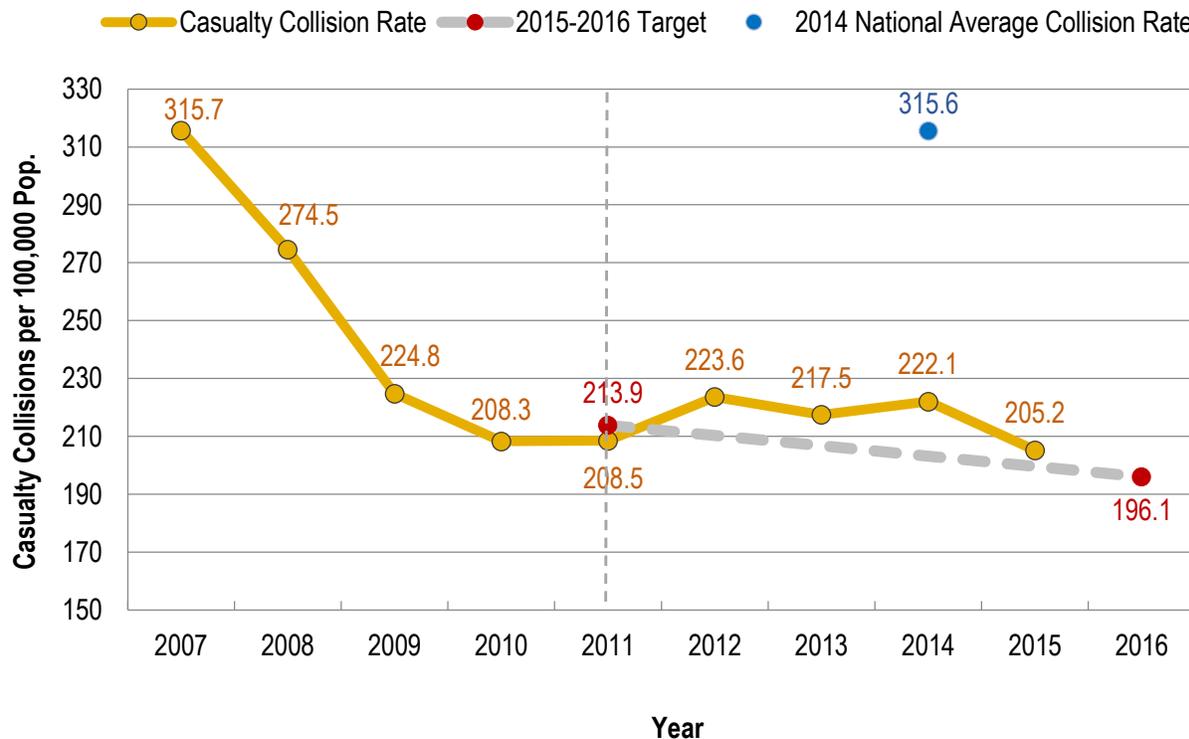
## 2. Progress on Focus Area Targets and Key Actions for 2017

Due in part to our efforts and new activities, four of the five targets set out in the SMP were on track in 2014 to achieve the targets. However, the impact of previous year's activities on collision reduction is may not be clearly evident until a full year of data is available. Discussion of each focus area and actions for 2017 to 'turn the curve' for each of these areas are discussed in this section.

### 2.1 Overall Casualty Collision Target

**Target:** 10 percent reduction in casualty collision rate (fatality and injury combined) per 100,000 population, based on a 3 year rolling average (2015-2017)

**Baseline:** Casualty (fatality and injury combined) collision rate of 213.9 per 100,000 population, based on a 3 year rolling average (2009-2011)



*Progress summary:* The overall casualty collision rate for 2015 experienced an 8% reduction compared to the previous year and trending toward the target, however, the projected three year rolling average targets were not met. The 2014 National Average, the most recent available, was 315.6 casualty collisions per 100,000 population. Intensified effort is required to achieve this target.

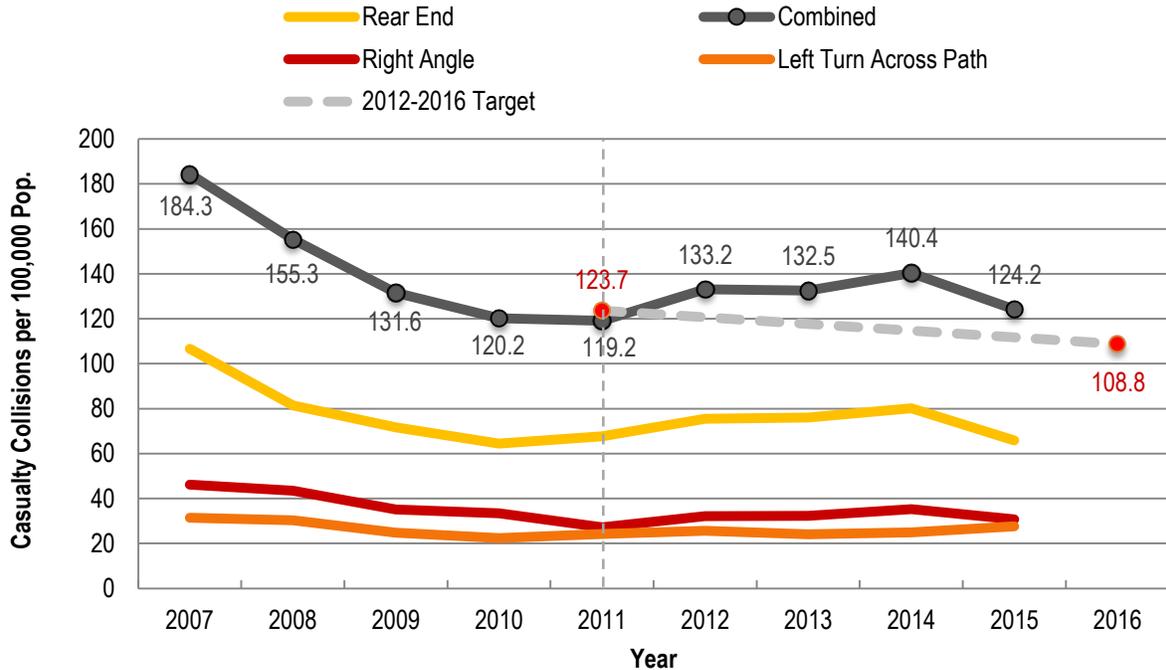
Key Actions to 'turn the curve':

- In-Service Road Safety Reviews/Road Safety Audits/focused infrastructure improvements
- Engagement and awareness activities related to speed
- Support of Calgary Police Service (CPS) targeted enforcement activities

## 2.2 Intersection Collision Target

**Target:** 12 percent reduction in combined rear end, right angle, and left turn across path casualty collision rate per 100,000 population, based on a 3 year rolling average (2015-2017)

**Baseline:** Combined rear end, right angle, and left turn across path casualty collision rate of 123.7 per 100,000 population, based on a 3 year rolling average (2009-2011)



*Progress summary:* The intersection casualty collision rate for 2015 decreased by 10% compared to 2014 and is moving towards the target. Casualty rates for Left turn collisions have increased slightly, but decreases were observed in rear end and right angle collisions. Continued effort is required to achieve this target. National averages are not available for intersection collisions.

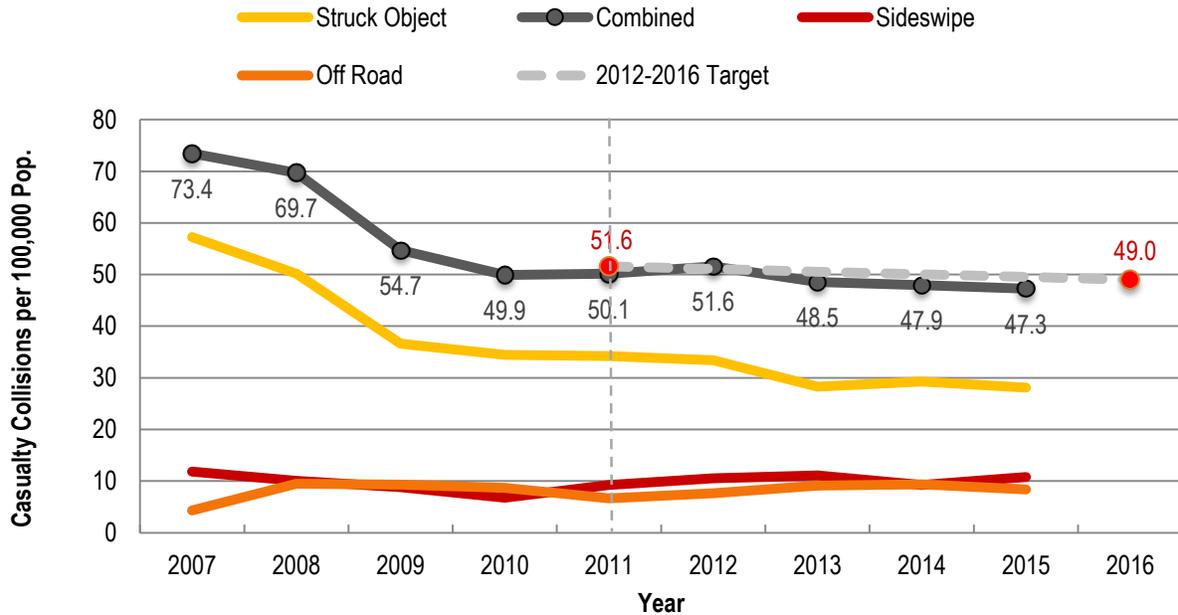
Key Actions to 'turn the curve':

- In-Service Road Safety Reviews/Road Safety Audits/focused infrastructure improvements
- Network screening and focused application of mitigation measures for left turn collisions
- Pilot of Traffic Calming Curbs at intersections
- Focused application of mitigation measures for rear end and right angle collisions
- Engagement and awareness activities related to speed
- Engagement and awareness activities related to distracted driving
- Support of CPS targeted enforcement activities

### 2.3 Non-Intersection Collision Target

**Target:** 5 percent reduction in combined struck object, sideswipe, and off road casualty collision rate per 100,000 population, based on a 3 year rolling average (2015-2017)

**Baseline:** Combined struck object, sideswipe, and off road casualty collision rate of 51.6 per 100,000 population, based on a 3 year rolling average (2009-2011)



*Progress summary:* The non-intersection casualty collision rate for 2015 remained relatively static compared to 2014 and is still meeting the projected target. Casualty rates for sideswipe collisions increased slightly, but there was a similar decrease in struck object off road collisions. Continued effort is required to maintain achievement for this target. National averages are not available for non-intersection collisions.

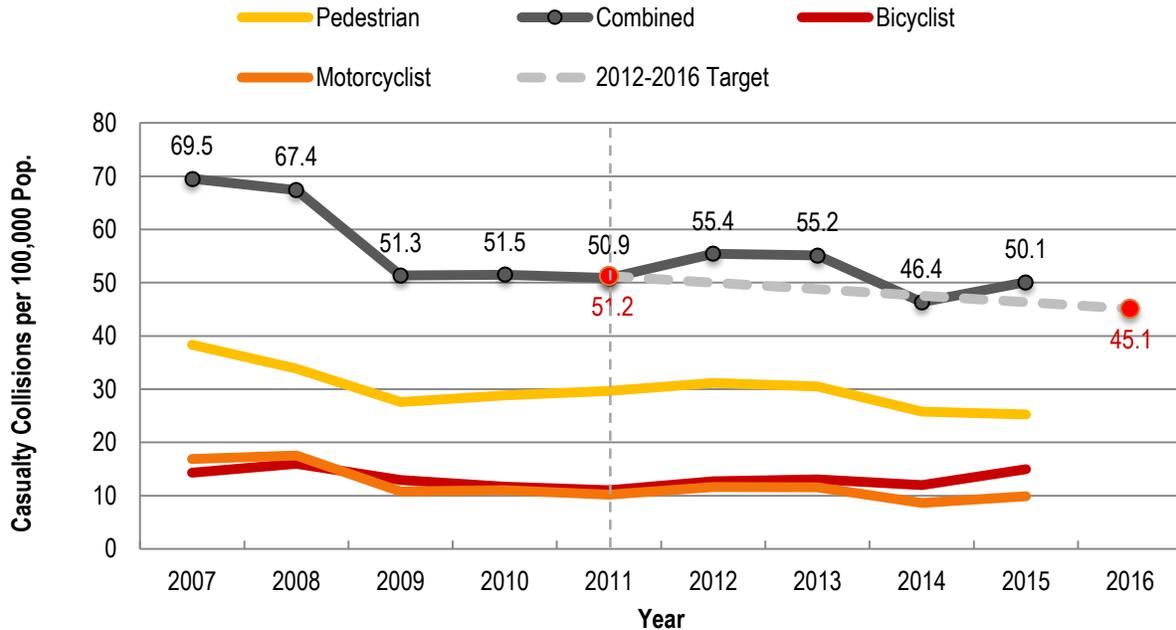
Key Actions to ‘turn the curve’:

- In-Service Road Safety Reviews/Road Safety Audits/focused infrastructure improvements
- Focused application of mitigation measures for struck object and off road collisions
- Prioritization and strategic implementation of median and roadside barriers
- Engagement and awareness activities related to speed
- Engagement and enforcement activities related to distracted driving (Sideswipe collisions)
- Support of CPS enforcement activities

## 2.4 Vulnerable Road Users Collision Target

**Target:** 12 percent reduction in vulnerable road user casualty collision rate per 100,000 population, based on a 3 year rolling average (2015-2017)

**Baseline:** Vulnerable road user casualty collision rate of 51.2 per 100,000 population, based on a 3 year rolling average (2009-2011)



*Progress summary:* The vulnerable road user casualty collision rate for 2015 increased compared to 2014 and is not meeting the projected target. While pedestrian collision rates continued to decrease, casualty rates for cyclists and motorcyclists increased, with the largest increase experienced by bicyclists. Continued effort is required to achieve this target. National averages are not available for vulnerable road user collisions.

Key Actions to ‘turn the curve’:

- Continued application of enhancements for pedestrian crossings including RRFBs, pedestrian corridor improvements, Traffic Calming (TC) curb pilot
- In-Service Road Safety Review of cycle track pilot project to identify mitigation measures
- Completion of Safer Waking Report and application of mitigation measures for pedestrian collisions including targeted lighting improvements
- Identification of downtown pedestrian collision clusters, solutions, and application of mitigation measures
- Providing safety input to Pedestrian Strategy and various infrastructure improvement projects to incorporate safety improvements aimed at collision reduction
- Engagement and awareness activities related to vulnerable road user safety
- Support of CPS enforcement activities related to vulnerable road users

## 2.5 Impaired and Distracted Driving (Mobility) Support Target

**Targets:** Share data analysis and mapping related to impaired driving with CPS to aid with targeted enforcement efforts.

Form/maintain partnerships with CPS and other stakeholders and provide support in educating and engaging the public.

*Progress summary:* The impaired and distracted driving targets are currently qualitative. Discussions are underway to establish quantitative baseline values and targets despite the lack of direct control. Continued effort is required to maintain achievement for this target.

Key Actions to 'turn the curve':

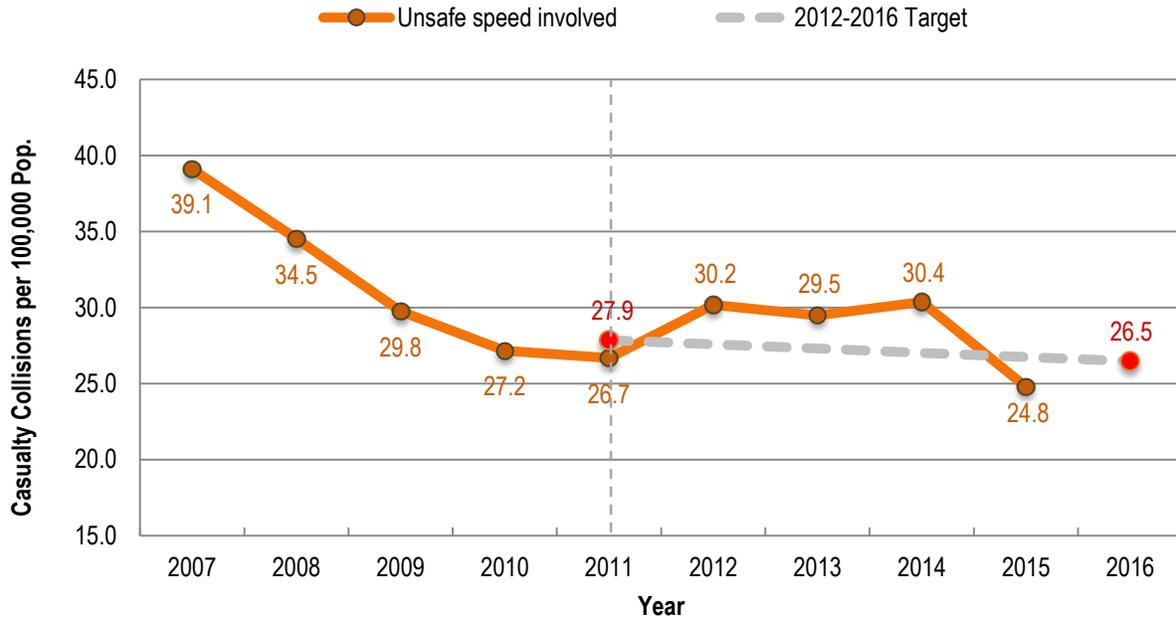
- Establishment of quantified baseline and target values in collaboration with CPS
- Engagement and awareness activities related to distracted and impaired mobility
- Support of CPS enforcement activities related to impaired and distracted mobility
- Support CPS in the year ahead with messaging regarding drug impaired mobility



## 2.6 Speeding Involved Collision Target

**Target:** 5 percent reduction in speeding involved casualty collision rate (fatality and injury combined) per 100,000 population, based on a 3 year rolling average (2015-2017)

**Baseline:** Speeding involved casualty collision rate of 23.8 per 100,000 population, based on a 3 year rolling average (2009-2011)



*Progress summary:* The speeding involved casualty collision rate for 2015 decreased compared to 2014 and is now trending to achieve the projected target. National averages are not available for speeding involved collisions.

Key Actions to 'turn the curve':

- In-Service Road Safety Reviews/Road Safety Audits/focused infrastructure improvements
- Application of design guidelines such as Complete Streets to encourage lower speeds
- Traffic Calming (TC) Curb pilot aimed at reducing speeds in neighbourhoods
- Network screening and application of mitigation measures for speeding involved collisions
- Engagement and awareness activities related to speed, including SLOWS and Community Traffic Calming, and Community Speed Watch
- Support of CPS speed enforcement activities collaboration regarding SLOWS requests and Traffic Service Requests (CPS equivalent of 311 for traffic issues)

### 3. Progress on SMP Strategies in 2016 and Planned Actions for 2017

This section highlights a selection of actions that have been undertaken in 2016 by various groups. Some of these have been completed while others are ongoing. The planned actions for 2017 are also identified for each strategy. A description of each of the strategies is provided in the Safer Mobility Plan 2013-2017.

#### Strategy 1: Safer Mobility Plan Management Strategy

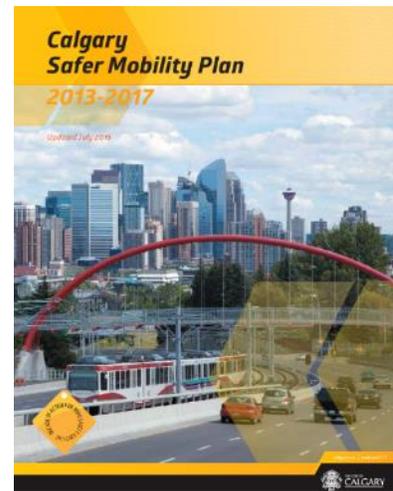
The management of the SMP is primarily done through the collaborative teams of the SMP. One of the main actions in this strategy is to report on the progress of the plan annually and to re-assess the SMP at the end of 2017.

##### Actions initiated /completed in 2016

- Ongoing collaboration through the Safer Mobility Leadership Team and the Safer Mobility Operations Team including regular meetings to guide the plan
- Initiation of the Safer Mobility Communities Team to implement the Community Traffic Safety Meeting campaign
- Production of the 2016 Safer Mobility Plan Annual Report

##### Planned actions for 2017

- Ongoing meetings and collaboration through various Safer Mobility Teams
- Investigation of possible organizational changes and funding needs/opportunities
- Production of the 2017 Safer Mobility Plan Update and Annual report
- Production of the 2018-2022 traffic safety plan



#### Strategy 2: Transportation Safety Data Management Strategy

##### Actions initiated /completed in 2016

- Move to E-Collisions, an enhanced process of input and transfer of collision data
- Ongoing discussions through the Collision Data Working Group to improve the data collection process and quality

##### Planned actions for 2017

- Continued evaluation of existing data and opportunities for enhancement of data quality
- Develop use based measures to monitor pedestrian, bicycle and motorcycle collisions

### Strategy 3: Vulnerable Road User Safety Strategy

#### Actions initiated /completed in 2016

- In-Service Road Safety Review of cyclist safety at cycle tracks
- Identification, prioritization, and implementation of RRFBs, including 450 locations reviewed and 31 to be installed. Continuous work with Transportation Association of Canada (TAC) to develop process for application nationally
- Installation of supplementary side-mounted flashers at pedestrian corridors to improve conspicuity and reduce collisions
- Traffic Calming (TC) curb pilot – implementation at crosswalks with quantified safety concerns to reduce speeds and crossing distance
- Initiation of traffic safety related actions identified in the Step *FORWARD* pedestrian strategy including various pilots and policy activities, review of top pedestrian collision locations, and support for tactical urbanism and traffic calming activities
- School Site Safety Study and the development of the Safe Walk program for schools



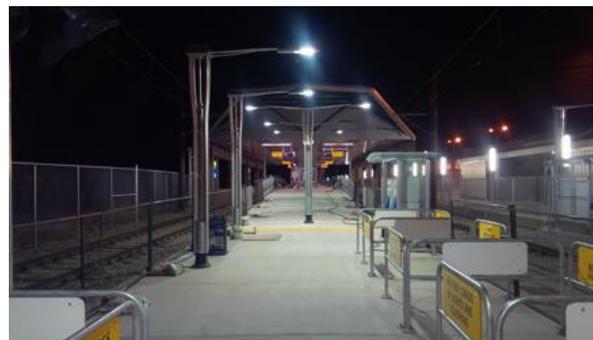
#### Planned actions for 2017

- Continued support of RRFBs implementation process

### Strategy 4: Safer Transit Strategy

#### Actions initiated /completed in 2016

- At-Grade LRT Crossing Committee operational, resulting in implementation of cost effective measures to improve safety at identified locations
- Development of training programs for transit operators
- Launch of safety and suicide awareness programs (operator training, education/awareness campaign for public)



#### Planned actions for 2017

- Formal review of pedestrian crossings of LRT system
- Road Safety Audit (RSA) of Green Line and safe accommodation of transit users
- Continued enforcement of safe pedestrian crossings of LRT system

### Strategy 5: Transportation Network Screening Strategy

#### Actions initiated /completed in 2016

- Completion of 2015 Annual Collision Report and internal distribution
- Various additional network screening analysis of collisions including left turn, pedestrian, roundabout, and snow and ice related

#### Planned actions for 2017

- Network review of identified safety issues or design elements (e.g. right turn channelization/rear end collisions, review of roadside barriers {such as High Tension Cable Barrier shown to right} and run off road collisions)
- Develop Safety Performance Functions (predictive models) to support network screening using latest methods



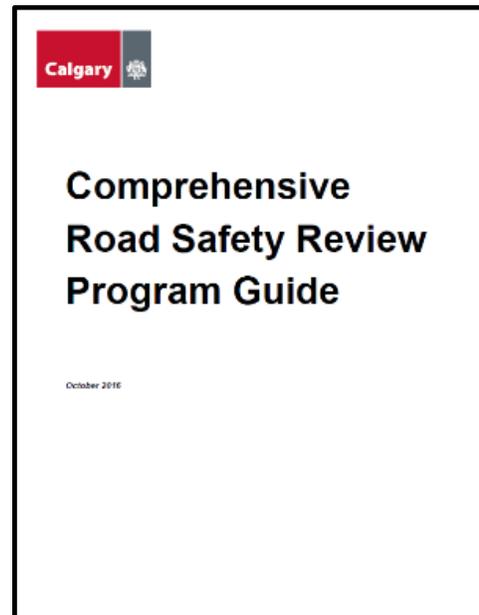
### Strategy 6: Road Safety Audit Strategy

#### Actions initiated /completed in 2016

- Finalization of Road Safety Review Guidelines, including Road Safety Audits (RSA) for City Projects
- Formal RSAs completed for Trans-Canada/Bowfort Road, Trans-Canada/Sarcee Trail, Shaganappi Trail/Stoney Trail, and Glenmore Trail/Ogden Road interchanges, Southwest BRT, 17 Avenue SE Transitway, and Stoney Trail and Sarcee Trail interchange upgrades
- Pre-opening RSAs planned for Crowchild Trail/Flanders Avenue and MacLeod Trail/162 Avenue interchanges

#### Planned actions for 2017

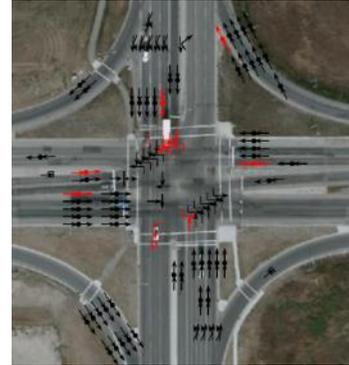
- Ongoing implementation of Safety Review Guidelines and use of Road Safety Audits
- Training of City Staff in Road Safety Audits



### Strategy 7: In-Service Road Safety Review Strategy

#### Actions initiated /completed in 2016

- Finalization of Road Safety Review Guidelines, including In-Service Road Safety Reviews (ISRSR) for City Projects
- In-Service Road Safety Review of cyclist safety at cycle tracks
- Completion of In-Service Road Safety Reviews at numerous intersections (52 Street NE corridor including 12 intersections between Memorial Drive and McKnight Boulevard, Bow Trail & 37 St, etc.)
- Left turn collision analysis and application of mitigation measures (Memorial Drive/68 Street NE, 114 Avenue/52 Street SE, 64 Avenue/14 Street NW, 52 Street/Marbank Drive NE)
- Implementation of roadside improvements including cable barrier on Anderson Road from Deerfoot Trail to Macleod Trail
- Coordination and implementation of cost effective measures identified through the ISRSR process to improve safety under the Safety Improvements Capital Program (\$1 million) and other related capital programs
  - Crowchild Trail Corridor between 17 Avenue SW and 24 Street NW
  - Country Hills Boulevard and Harvest Hills Boulevard NW
  - Macleod Trail and Shawville Boulevard SW
  - Memorial Drive and 36 Street NE
  - 52 Street and McKnight Boulevard NE



#### Planned actions for 2017

- Completion of In-Service Road Safety Reviews at four or more intersections or road segments
- Implementation of recommendations from previous In-Service Road Safety Reviews
- Evaluate the effects of previous mitigation measures that have been applied

### Strategy 8: Public Response Strategy

#### Actions initiated /completed in 2016

- Finalization of Safety Review Guidelines, including Collision Reviews and Safety Assessments to investigate public feedback
- Completion of over 30 Collision Reviews and Safety Assessments based on concerns raised by members of the public or Administration, for example Edmonton Trail/Memorial Drive and 33 Avenue/20 Street SW
- Development of Calgary.ca/safety webpage to improve the dissemination of traffic safety related information to the public

#### Planned actions for 2017

- Ongoing public response to Service Requests through 311



### Strategy 10: Targeted Enforcement Support Strategy

#### Actions initiated /completed in 2016

- Implementation of Community Speed Watch, volunteer lead speed awareness program
- Ongoing coordination of the SLOWS Trailer (mobile) program and deployment of iSLOWS (pole mounted) signs
- Ongoing support for “Report Impaired Driving” signage
- Update of speed compliance map based on collected traffic data
- Participation in CPS Collision Reconstruction review meetings and sharing of data/analysis of collisions
- “Limit Your Speed” campaign signage

#### Planned actions for 2017

- Deployment of traffic speed data collection devices to assist CPS in targeted speed enforcement
- Review of traffic collision/incident management practices and reduction of secondary collisions, renewal of ‘take it off the road’ campaign.



### Strategy 11: Safety Research and Innovation Strategy

#### Actions initiated /completed in 2016

- Initiation of the Safer Mobility Research Team
- Trial and evaluation of innovative countermeasures such as Traffic Calming curbs, Reflective Sleeves, lane reversals, Diverging Diamond Interchange (DDI), down lighting at pedestrian corridors, LRT crossing improvements for pedestrians, right turn arrow, high-friction surface pavement treatment
- Support with University of Calgary’s research comparing efficacy of RRFB devices and overhead flasher devices
- Traffic safety knowledge exchange with the City of Edmonton and Alberta Transportation
- Identification of lead individuals within the City for traffic safety related technical organizations
- Active participation on TAC committees guiding projects to develop application guidance for the use of RRFBs, and to investigate the use of reflective material on sign posts and fluorescent-yellow green crosswalk signs
- Application of video based conflict analysis for proactive evaluation of pedestrian related safety countermeasures measures



#### Planned actions for 2017

- Formalize traffic safety knowledge exchange within the Safer Mobility Teams
- Pedestrian signal changes at intersections (leading or lagging interval, phasing & timing changes)
- Trial high-surface pavement treatment for poor surface conditions