

ANNUAL REPORT

2017

VISION ZERO EDMONTON

YEAR TWO

DEDICATION

This report is dedicated to the victims of traffic crashes in Edmonton—the daughters, sons, mothers, fathers, wives, husbands, siblings, family members and friends who have been killed or seriously injured on our streets.

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MESSAGES

MESSAGE FROM CITY COUNCIL

At the heart of Vision Zero is the principle that traffic deaths and serious injuries are unacceptable and, most importantly, preventable. Two years after the launch of Vision Zero, the City has made progress towards this goal. Some of those changes are obvious, like playground zones and new pedestrian crossings. Some are subtle, like leading pedestrian intervals at crosswalks. The biggest change is in our psyche. We are putting safety first.

2017 was a tough year for fatalities. Each of the 27 people who lost their lives left behind friends and loved ones who now deal with pain and grief. Each life lost on Edmonton streets reminds us of the urgency of the Vision Zero Edmonton's goal.

City Council unanimously supports Vision Zero Edmonton. We do not believe life and health should ever be exchanged for convenience. We believe everyone deserves to leave and come home safely. This is why Traffic Safety is a Council initiative.





Please join with the City, Edmonton Police Service, community partners and safety-minded citizens as we move towards our goal of eliminating fatalities and serious injuries.



Councillor Bev Esslinger Councillor Mohinder Banga

B Essling

MID



MESSAGE FROM THE EDMONTON POLICE SERVICE



Every day, members of the Edmonton Police Service (EPS) witness firsthand the harm motor vehicle collisions cause in our city. From property damage to tragic losses of life, traffic collisions cost our society dearly, and the worst part is they are largely preventable.

Vision Zero acknowledges the shared responsibility of governments, planners, law enforcement and road users and seeks to eliminate all traffic fatalities and serious injuries.

Over the last decade, we have seen encouraging reductions in the number of serious and fatal collisions, but there is still more work to be done. No traffic fatality is acceptable and the EPS will continue to work with our partners to make Edmonton's roads as safe as possible.

Rod R. Knecht - Chief of Police

MESSAGE FROM EDMONTON FIRE RESCUE SERVICES



Edmonton Fire Rescue Services (EFRS) responds to thousands of calls each year, including traffic collisions that impact Edmontonians every day. While we strive to keep everyone safe, these collisions are usually preventable, so we look forward to the day they stop occurring.

Vision Zero is an important part of achieving that goal. Their work with various stakeholders, including EFRS and the public, helps reduce the consequences of traffic incidents and ensures Edmonton is a safer place to live, work and play.

While this work continues, EFRS maintains its role in the shared responsibility of traffic safety and encourages everyone to do the same. We all have places to go, but together, we can help everyone travel safely, whether they walk, bike, drive or use another form of transportation.

Fen S Bhela

Ken Block - Fire Chief

MESSAGE FROM THE CITY MANAGER



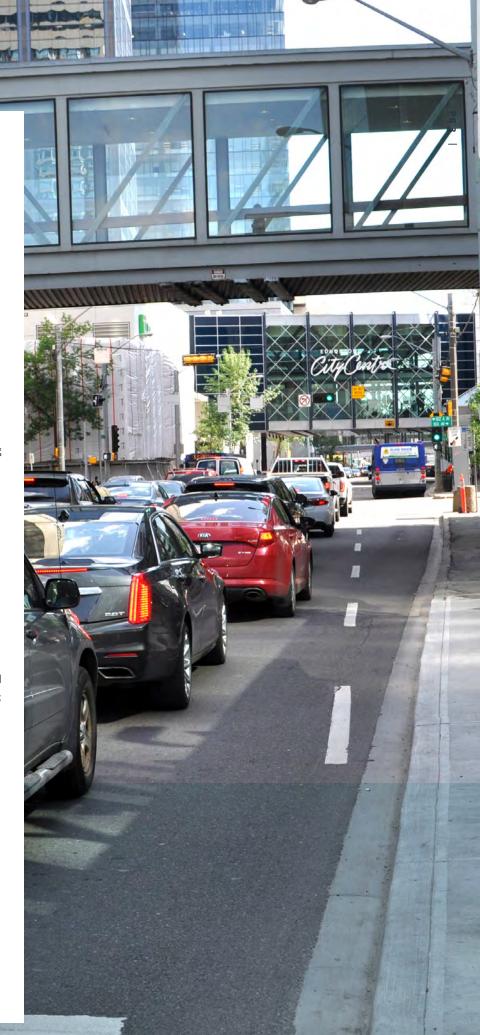
The City of Edmonton is working diligently towards improving road safety and infrastructure, changing road user behaviour, and striving to achieve zero traffic fatalities. Through Vision Zero, we remain constantly focused on moving from safe to safer with our people, equipment and processes. As a core value, safety is everyone's responsibility, every day.

We have adopted a Safe Systems Approach that ensures safety is delivered through vehicles, roads, speeds, and user attitudes and behaviours. We are designing and operating roadways to prevent collisions or reduce their severity. Eliminating fatalities and serious injuries is a shared responsibility between the City and Edmontonians; education through our street teams, engagement on safety issues including speed, and enforcement of speed limits all play an important role in creating and maintaining a safe environment.

When we actively work together, in partnership with industry and with the citizens we serve, we can reach our goal of zero traffic fatalities and serious injuries by 2032. I look forward to the day when every journey is a safe one.

Inda V. M. Cochrae.

Linda Cochrane, City Manager



WHAT IS VISION ZERO?

Vision Zero Edmonton is the long–term goal of zero traffic fatalities and serious injuries. Vision Zero recognizes that striving towards zero traffic fatalities and serious injuries is the only ethical goal.

Principles that guide Vision Zero are:

- • No loss of life is acceptable
- • Traffic fatalities and serious injuries are preventable
- • We all make mistakes, but these mistakes shouldn't cost our lives
- • We are physically vulnerable when involved in motor vehicle collisions
- Eliminating fatalities and serious injuries is a shared responsibility between those who design and maintain our roadways and all road users.

When will we reach Vision Zero?

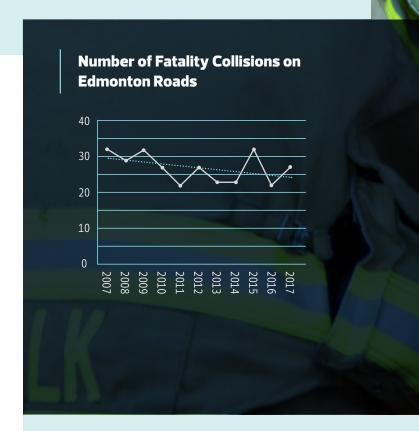
People make mistakes. Kids run onto the road, people drive too fast for the conditions, and drivers turn corners without checking for pedestrians. Although we may not prevent all collisions, we've made human life a priority. We recognize our choices matter to the lives of others.

Vision Zero is bringing a culture shift to those who design, build and maintain the roads, and to road users. We design our roads and set our speed limits to prevent serious injuries and fatalities. Change is not instant. Change is not easy. To reach our goal will take brave and consistent action. Reaching zero traffic fatalities and serious injuries will take the municipality, industry and all Edmontonians working together. Together, we can do it by:

2032

"WE ALL DEPEND ON GETTING AROUND SO WHETHER WE ARE DESIGNING ROADS OR TRAVELLING ON THEM, WE NEED TO MAKE SAFETY OUR PRIORITY."

Gord Cebryk, Acting Deputy City Manager





YEAR TWO HIGHLIGHTS

40 more Driver Feedback Signs





Automated
Enforcement
locations
posted online,
then on
Open Data







Protected bike lanes



43
Junior high school zones

164
Standalone
playground
zones





Vision Zero Street Team



Traffic Safety Culture Survey

Data (Insight Community responses) posted in Open Data

School Safety Committee





given away before Halloween



Proclamations:

School Patroller Safety Day in Edmonton

Motorcycle Safety Month

Council Protocols:

Community Traffic Safety Award

Vision Zero Recognition

Reports released:

Traffic Safety Culture Survey

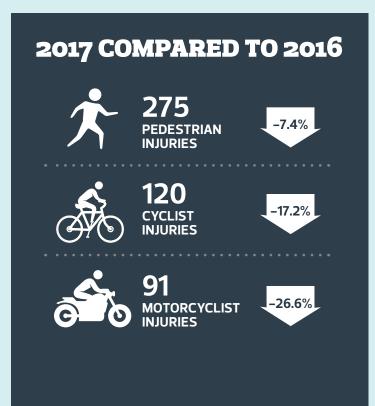
Year one Annual Vision Zero Report

Annual Collision Report

Awards:

International
Association of Business
Communicators (IABC)
Award of Excellence for
the 2015 annual collision
report—Category:
Communication Skills,
Publications







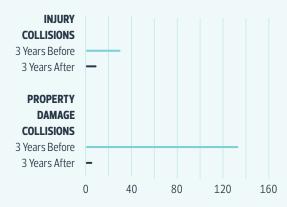
ENGINEERING

The Safe Systems Approach

In simple terms, a Safe System can be described as safe vehicles, safe roads, safe speeds, and safe road users. To get to a Safe System is a journey that involves changing infrastructure, changing roaduser behaviour and culture, and advancements in vehicle technology.

The City is implementing a Safe Systems approach to reach Vision Zero through Engineering, Education, Enforcement, Engagement and Evaluation.

Right turn bay following too closely collisions before and after redesign



"ULTIMATELY, THE TEST OF A SAFE SYSTEM IS HOW WELL IT WORKS FOR ITS YOUNGEST, OLDEST AND MOST VULNERABLE ROAD USERS."

—OECD, Zero Road Deaths and Serious Injuries

STOP SIGNS



33
YIELD SIGNS CHANGED
TO STOP SIGNS

TT TWO-WAY STOPS CHANGED TO 4-WAY STOPS 10 NEW STOP SIGNS ADDED

Building in Safety

Fundamental to the Safe Systems Approach is designing and operating roadways to prevent collisions from occurring or to reduce the severity of those collisions. At the same time, the possible role of human error in precipitating crashes is considered. Edmonton's transportation system is changing as road users shift to public transportation. This increasing demand for multimodal options - walk, bike, ride, transit requires a holistic approach to designing and operating an increasingly complex transportation system. The City makes our streets safer by shortening pedestrian crossing distances with curb extensions, adding playground zones, protected bike lanes, crosswalk markings, speed humps, and intersection controls.

In 2017, the following 24 schools were reviewed for traffic safety and upgraded:

- Ward 1: Annunciation Elementary School, Meadowlark School
- Ward 2: Katherine Therrien Elementary School, Inglewood School
- Ward 3: St. Philip School, Lago Lindo School
- Ward 4: Fraser School, Kirkness School
- Ward 5: Good Shepherd Elementary School, Ormsby School
- Ward 6: Edmonton Menorah Academy, Grandin Elementary School
- Ward 7: Glengarry School, Delton School
- Ward 8: Suzuki Charter School, Hardisty School
- Ward 9: George P. Nicholson School, Esther Starkman School
- Ward 10: St. Boniface Elementary School, St. Teresa Elementary School
- Ward 11: Donnan School, Sakaw School
- Ward 12: Mary Hanley School, A. Blair McPherson School

Safety features were installed at 16 new schools as they were built and at the following nine schools during neighbourhood renewal:

- Belgravia School, École Père-Lacombe, École Publique Gabrielle-Roy, J.A. Fife School, John Barnett School, Lansdowne School, Lauderdale School, Mary Hanley School, Bisset School, and Montrose School.
- ••• 43 school zones put in place at junior high schools.
- • 164 standalone playground zones created.
- 60 school zones converted to playground zones out of 194 playgrounds adjacent to schools.
- 12 additional pedestrian crossing control upgrades including pedestrian signals, overhead pedestrian amber flashers or rapid flashing beacons.
- ••• 7 left-turn-only on green flashing arrow controls installed.
- ••• 3 major intersections had angles of right turn (merge) lanes modified.

Three High Quality Protected Bike Routes installed in 2017:

- • Adaptable Downtown Bike Network (7.8 km)
- • West Central Bike Route (4.4 km)
- ••• Southside Bike Routes (4.4 km)

Road user safety is top of mind with respect to proper design and infrastructure and a strong commitment to educate all road users on safe road behaviours.

EDUCATION

Everyone has a part in safety. A driver feedback sign is a good example of safety education. Drivers see the flashing number, check their speedometers and then take corrective action. A reminder about playground zones or to check your blindspot works the same. Ultimately, if many people obey the traffic rules, the traffic safety culture changes and everyone is safer.

Vision Zero Street Team

The Vision Zero Street Team was launched in the Fall of 2017 with a goal of reaching pedestrians and drivers. By partnering with Tim Horton's, the Street Team was able to hand out brochures, windshield cleaners and sunglasses to drivers as they pulled through the drive-thru to grab their morning coffee.

The Street Team talked to over 8,000 Edmontonians at over 15 locations throughout the City.

And they were seen by 29,000 Edmontonians.

They handed out:

- ••• 6,480 brochures with tips for driving cautiously at sunset and in the dark
- • 1,486 windshield cleaners to help drivers clean the inside of their windshield for better visibility
- ••• 473 pairs of sunglasses to help drivers battle the glare or sunrise and sunset
- • 7,500 jacket-pull reflectors for pedestrians
- ••• 1,991 flashing reflectors for pedestrians

Bike Safety Education

The bike routes came with many new features — road markings, signs, signals, and new rules necessitating the development of a strategic bike education program to speak to all roadusers and key messages included:

- • How to safely use the new infrastructure in your car, on your bike, and on foot
- ••• How to safely interact with all road users
 let's get there together
- • Where the network is and how to connect to it.



Bike Education Street Team

The face to face approach allowed for the collection of both qualitative and quantitative data and was key to the success of the 2017 Bike Education campaign. The Bike Education Street Team had 7,668 total interactions (3 routes combined) and 5,879 quality conversations where people stopped to talk.

Positive feedback was received regarding road user confidence:

 28% of non-cyclists (5155) and 82% of cyclists (1832) reported feeling confident traveling along the Downtown Bike Network



- • 76% of the 233 people reported feeling confident traveling along the Southside Bike Routes
- ••• 70% of the 50 people reported feeling confident traveling along the West Central Bike Routes

Driver-Focused Campaign

The need to better target drivers travelling along the bike routes was identified, resulting in the creation of a driver-focused bike education campaign with "Four Things To Know":

- • Watch for new signs (i.e. no right turn on red, yield to bikes)
- • Don't stop on the green paint
- • Shoulder check and look both ways
- • Yield to cyclists when turning across bike lanes.

@VisionZeroYEG on Twitter

April 3, 2017, we launched our presence on Twitter as @VisionZeroYEG. In a nine-month period:

- • 436,000 people saw Vision Zero Edmonton tweets
- • on average, 1,600 people per day saw Vision Zero tweets



BROCHURES DISTRIBUTED 600,000

SPEEDING IMPACTS US ALL

2,000 SAFE WALKING

2,000 MOTORCYCLE SAFETY



Campaigns

Pedestrian Safety:

- • Turning? Check for Pedestrians.
- • Yield to People in Crosswalks
- • Slow down. School Zone.
- • Be a Textbook Driver. Speed Kills.
- ••• Playground Zones. Slow to 30.

Everyone's Safety:

- • Watch for Motorcycles. Share the Road.
- • Hang Up and Drive (Distracted Driving)
- • Leave More Room to Stop
- • Beware the Glare and Outsmart the Dark

9th International Conference on Urban Traffic Safety

The 9th International Conference on Urban Traffic Safety and the 4th International Conference on Transportation Information and Safety was a collaboration between the City of Edmonton, the University of Alberta, and Wuhan University of Technology, China. The conference allowed local traffic safety and Vision Zero experts to network with traffic safety researchers, practitioners and industry professionals from around the world, develop skills, and forge connections, with a common goal: ending traffic-related serious injuries and fatalities.

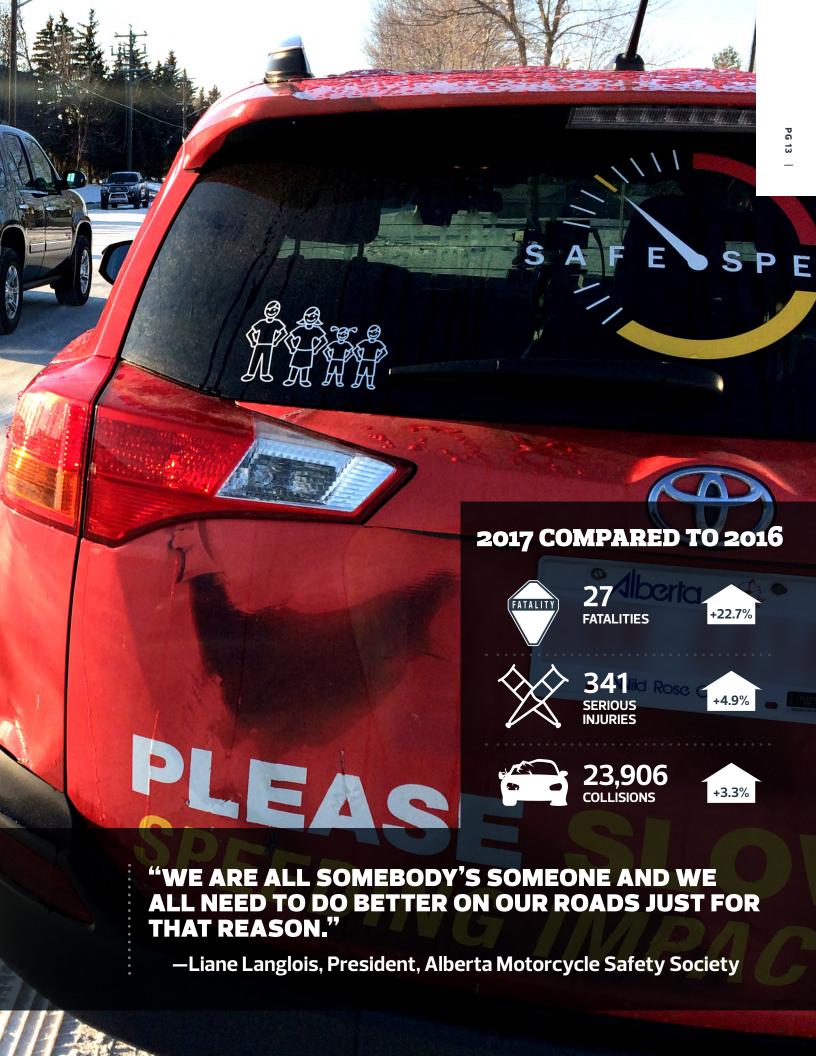
The Voices of Traffic Safety

There is nothing more powerful than hearing first-hand, personal experiences of those affected by traffic collisions to illustrate the importance of Vision Zero Edmonton. In 2017, new videos feature Rod Randolph, Riley Geddie, and Reagan Lissack. Lafarge provided the first industry partner video. Find the Voices of Traffic Safety videos at edmonton.ca/visionzero.



SPEED REDUCTION

140 DRIVER FEEDBACK 1,046,184 DRIVER FEEDBACK SIGN DISPLAY HOURS 168,720 SPEED TRAILER DEPLOYMENT HOURS



ENFORCEMENT

Creating Safe Speeds

In 2017, the City received 1,194 complaints from citizens about speeding on our streets.

Driver behaviour continues to be a leading contributor to motor-vehicle collisions that result in fatalities, injuries and property damage. Speed may not always be the cause of a collision, but it has a direct bearing on the severity of injuries and likelihood of fatalities. Unfortunately, without enforcement, many people ignore the law. However, 56 per cent of license plates that received speeding tickets during the last five years did not receive a second violation during that period.

Lower violation speeds and a decline in violations shows the program is working.

Operation 24 Hours

The Operation 24 Hours program (OPS24), dubbed the Big Ticket Event, uses speed enforcement to improve traffic safety. In 2017, through OPS24, 18,718 tickets were issued. What is unique about OPS24 is the use of traffic safety messages displayed on permanent and mobile dynamic messaging signs warning drivers that the "Big Ticket Event" is taking place and "Don't Speed." Police issue tickets for speeding and other violations, including seat belt infractions, impaired driving, distracted driving, traffic safety violations and criminal code violations. The following table summarizes the results of Operation 24 Hours in 2017.

Tickets Issued by Mobile Photo and Laser Enforcement, 2015–2017

Range of Exceeded Limit (km/h over the speed limit)	2015	2016	2017
1–5	-	-	-
6-10	59,544	63,226	46,155
11-15	217,646	254,292	224,716
16-20	152,264	143,816	132,179
21-50	68,396	61,182	55,223
More Than 50	377	264	235
Grand Total	498,227	522,780	458,508

Note: Compulsory court is $51\,km$ per hour and over the posted speed limit.

Operation 24 Hours Summary of Results for EPS Enforcement in 2017

Operation	Month	Speed	Other	Total
1	Feb	853	587	1,440
2	Apr	1,235	423	1,658
3	May	926	676	1,602
4	Jun	1,301	587	1,888
5	Sep	717	549	1,266
6	Oct	1,007	426	1,433
Total	Feb-Oct	6,039	3,248	9,287



Intersection Safety Devices

Intersection safety devices, known as red-light and speed-on-green cameras, are proven to reduce collisions in intersections. In 2017, tickets were issued to 13,793 vehicle owners for running red lights and 133,659 for speeding.

"FOR CAR OCCUPANTS, WEARING SEATBELTS IN WELL-DESIGNED CARS CAN PROVIDE PROTECTION TO A MAXIMUM OF 70 KM/H IN FRONTAL IMPACTS AND 50 KM/H IN SIDE IMPACTS."

-World Health Organization

ENGAGEMENT

THE CITY OF EDMONTON VALUES HEARING FROM AND MEETING WITH EDMONTONIANS.



School Safety Committee

The School Safety Committee meets regularly to discuss issues around the safety of school children. Committee members include representatives from various City departments, Public School Board, Catholic School Division, Francophone Schools, Alberta Motor Association, Alberta Traffic Safety Council, and Edmonton Police Service.



Cycle in the City

A Vision Zero booth was at the Cycle in the City event in Sir Winston Churchill Square.





Run Walk Ride for Vision Zero

This family–friendly event is all about promoting the importance of traffic safety in our community for everyone: pedestrians, cyclists, motorcyclists and drivers. In 2017, it took place on June 18.

Presentation to VersaCold

Traffic Safety staff presented Vision Zero information to the staff at VersaCold during North American Occupational Safety and Health (NAOSH) week.

2017 Scholarship Recipients

- 2017 Memorial and Traffic Safety Fund Award
 Suliman Gargoum for his overall research contributions to date
- 2017 Graduate Bob Boutilier Award Amr Mohamed for having the highest grade in term project presentation in CIV E 616 Road Traffic Safety
- • 2017 Graduate Bob Boutilier Award Wenxuan Cao for having the highest grade in CIV E 315 Transportation Engineering

These awards included a monetary prize as well as a complimentary registration to the 9th Annual Conference on Urban Traffic Safety in Banff, AB, Canada.

Residential Speed Engagement

Focus groups with vulnerable road users on residential speed.

Vision Zero Street Team

The Street Team talked to Edmontonians at locations throughout the city.



Bike Education Street Team

Data collected by the Bike Education Street Team helps us to learn about the impacts of protected bike lanes and in particular, the perception road users have with respect to safety on those roads. The information from the 2017 Bike Education campaign speaks favourably about the approach the City is taking when it comes to bike lane installation.

Community Traffic Management Plan Surveys (CTMP)

CTMP worked in numerous communities conducting public and stakeholder events, finalizing two plans.

Outreach to Industry and Corporate Leaders

Meetings were held with industry leaders on working together towards Vision Zero.

EVALUATION

Evidence-based Actions

Fatality numbers aren't just a statistic. Each one was a life cut short, leaving behind friends and loved ones. That is why Traffic Safety staff review the location, time of day, weather, and actions of those involved to see how future crashes could be avoided. They monitor crash trends and make recommendations.

Some examples of using data for decision making

Driver Feedback Signs (DFS) not only flash a warning to drivers to watch their speed, they provide hour by hour speed data which is used to inform efficient and effective use of resources in the speed management continuum.

Dynamic Message Signs (DMS) are one of the tools that we use for education through the displaying of traffic safety messages. They also support the E's of enforcement, engagement and evaluation. Messages are carefully crafted based on traffic collision trends in the city as well as high collision risk locations.

We conduct fatality and serious injury reviews on all Vulnerable Road User (pedestrian, cyclist, and motorcyclist) collisions. Based on the data we collect and the analyses, recommendations for changes are discussed on a weekly basis. The engineering group oversees the implementation of improvements (e.g., adding signs, light, improving the visibility of crosswalks) and monitor interventions for effectiveness.

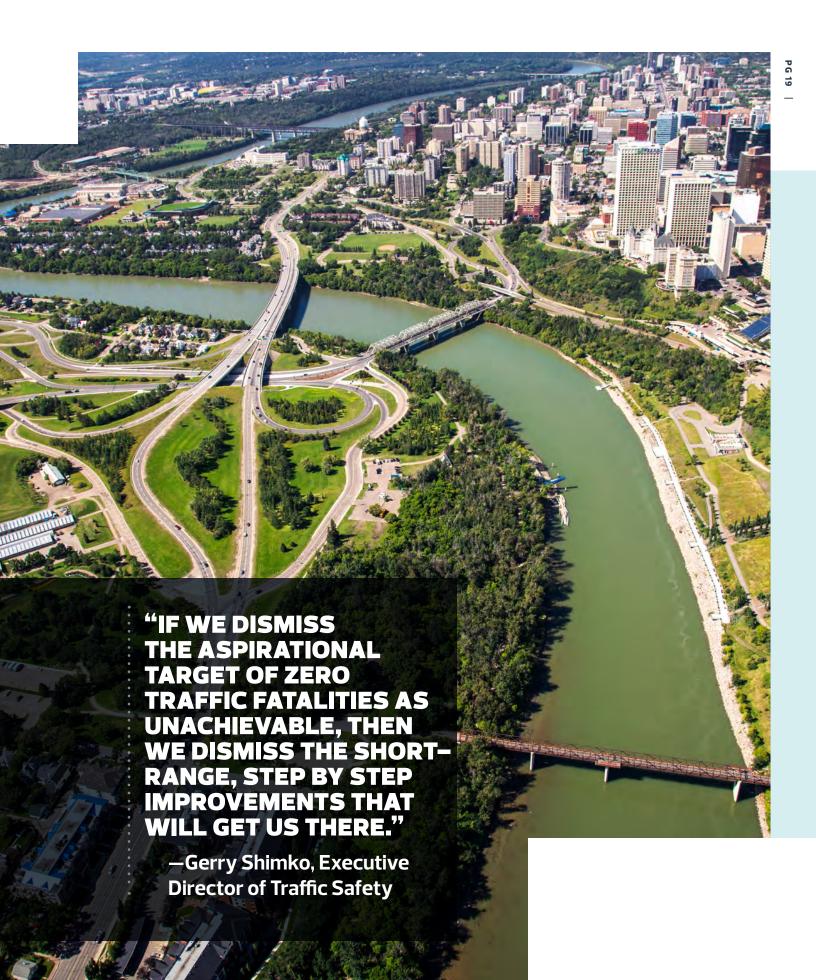
Traffic safety looked at over 1,400 intersections

and ranked pedestrian crossings for safety improvements. Those at the top of the list are then scheduled for upgrades. Vision Zero ranking criteria includes:

- Intersection pedestrian-collision history
- • Number of pedestrians
- • Number of vehicles
- • Number of traffic lanes pedestrians have to cross
- • Median or other pedestrian refuge
- • Speed limit

Intersection improvements are based on data. For example, intersections chosen for right turn redesign are selected by the aggregate number of injury and property damage following too closely collisions. Protected right turn signals are installed based on collision data and road configuration.

Before and After Right Turn Redesign: Follow Too Closely Collisions at Yellowhead Tr. & Victoria Tr. 2006 2007 2008 Redesigned in 2009 October of 2009 2010 2011 2012 2013 2014 2015 2016 2017 0 10 20 30 40 **Collision Severity:** Serious Injury Property Damage Only Minor Injury



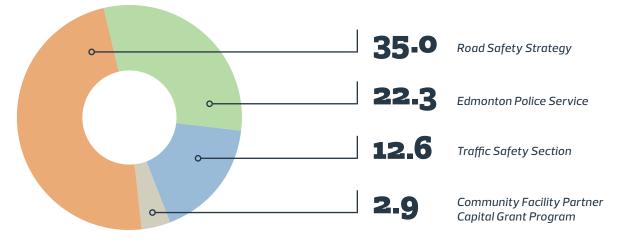
FINANCIAL SUMMARY 2017

The Traffic Safety and Automated Enforcement Reserve, established by Council in 2014, funds the Traffic Safety section, other traffic safety programs as approved by City Council in the capital or operating budget, the Edmonton Police Service, and Community infrastructure programs such as the Community Facility Partner Capital Grant Program and the Community League Infrastructure Grant Program.



Approved 2017 Funding from Traffic Safety and Automated Enforcement Reserve (\$ million)

As part of the 2016–2018 approved operating budget, the following funds were allocated to each operational area or program in 2017.



│ TOTAL \$72.8 MILLION





VISION ZERO PARTNERS

Reaching our goal of zero traffic fatalities and serious injuries is not something the municipal government can do on its own. Everyone who uses the roadways shares responsibility. The following are some of the organizations that demonstrated commitment to Vision Zero Edmonton.

"ON BEHALF OF AMA SCHOOL SAFETY PATROL, THANK YOU FOR BEING SUCH A VALUED PARTNER IN TRAFFIC SAFETY AND YOUR ONGOING SUPPORT OF THE PATROL PROGRAM."

–Jeff Kasbrick,
 Vice President, Government
 and Stakeholder Relations
 at Alberta Motor
 Association

Alberta Health Services

Alberta Motor Association (AMA)

Alberta Motorcycle Safety Society

Alberta Safety Council

ATS Traffic

Capital Region Intersection Safety Partnership (CRISP)

CN Police

Deford Construction

Edmonton Catholic School District

Edmonton Police Service (EPS)

Edmonton Public School Board

EPCOR

Ford Motor Company

Greater North Central Francophone Education Region

LafargeHolcim

Traffic Injury Research Foundation (TIRF)

Tim Horton's

University of Alberta, Centre for Smart Transportation

Besides these organizations, many individuals have shown support and shared their stories and ideas.

Special thanks to ATS Traffic for donating \$5,000 to the Memorial and Traffic Safety Fund.

HOW TO BE PART OF VISION ZERO EDMONTON

We're all in this together. To successfully eliminate traffic fatalities and serious injuries, we need your help. We all have a personal responsibility to make the right choices and to spread the word about why traffic safety matters—making the City's efforts even more effective.

- • Participate in the Run Walk Ride for Vision Zero
- • Share the Voices of Traffic Safety videos
- • Print posters and fact sheets for work or school
- ••• Follow us on Twitter (VisionZeroYEG) and retweet safety messages
- Share this vision with friends, family, and coworkers
- ••• Encourage your community groups like schools, clubs and community leagues to be Vision Zero partners
- Have your business join with others working together to end fatalities and serious injuries
- • Learn the rules of the road and obey the traffic laws



"I ENCOURAGE EVERYONE TO GET INVOLVED WITH VISION ZERO. I THINK THE LASTING EFFECTS ARE GOING TO BE WHAT WE NEED FOR THIS GENERATION AND FOR THE ONES TO COME."

-Carey DeFord, Owner, DeFord Contracting Association



UPCOMING EVENTS

7th Annual Run Walk Ride for Vision Zero, June 2, 2018

This family friendly event is all about promoting the importance of traffic safety in our community for everyone: pedestrians, cyclists, motorcyclists and drivers. More information at

edmonton.ca/runwalkride

Edmonton's 10th International Conference on Urban Traffic Safety, July 9 – 12, 2018

This conference attracts transportation–safety experts from across Canada, and around the world by showcasing leading research by international speakers in Enforcement, Education, and Engineering.

For more information, please visit urbantrafficsafetyconference.com

International Council on Alcohol, Drugs and Traffic Safety Conference, 2019

The City of Edmonton has been selected to host the 22nd International Council on Alcohol, Drugs and Traffic Safety conference in 2019.

This triennial conference brings together leading experts from around the world to speak to the very serious threat of alcohol and drug impaired road users to safety on our roadways. Through sharing of leading and best practices these experts will contribute to the reduction of alcohol and drug-related fatalities and injuries.

Information is available at <u>t2019.org</u>





