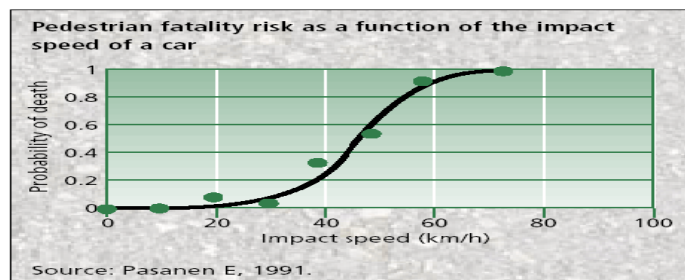


The citizens of Edmonton have regularly rated traffic speed and aggressive drivers as the top concern in the Citizen Satisfaction Survey conducted on behalf of the Edmonton Police Service. In an effort to address this concern, the Edmonton Police Service has joined with the City of Edmonton's Office of Traffic Safety (OTS) to carry out programs designed to make the streets of Edmonton safer for motorists, pedestrians and cyclists. The Office of Traffic Safety is working with its partners to make Edmonton's roads and communities safer through education, engineering, evaluation and enforcement.

Speeding increases the likelihood and severity of a crash. The faster a vehicle is moving, the less time the driver has to react to a hazard, and for other road users to react to that vehicle. A speeding vehicle requires more time and distance to stop, and is harder to control.

Speed also contributes to the severity of the impact when a collision does occur. For car occupants in a crash with an **impact speed of 80 km/h, the likelihood of death is 20 times** what it would have been at an impact speed of 30 km/h
http://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/speed_en.pdf

The relationship between speed and injury severity is particularly critical for vulnerable road users such as pedestrians and cyclists. For example, pedestrians have been shown to have a 90% chance of survival when struck by a car travelling at 30 km/h or below, but less than 50% chance of surviving an impact at 45 km/h. Pedestrians have almost no chance of surviving an impact at 80 km/hr.
 - World Health Association 2004.



The enforcement of traffic laws in Edmonton is a cooperative project between the Edmonton Police Service who are responsible for manned enforcement initiatives and the Office of Traffic Safety who administer the automated traffic enforcement strategies including the Mobile Photo Enforcement Program and the Intersection Safety Camera Program. Mobile units utilize either photo radar or photo laser technology to measure and capture the speed of vehicles in violation of the speed limit.

Mobile Photo Enforcement FAQ:

- **What is the goal of the Mobile Photo Enforcement Program?**

Through the strategic deployment of mobile photo radar and photo laser units, the OTS aspires to make Edmonton's streets safer by reducing the occurrences of speeding, which will in turn reduce the number and severity of collisions.

Every year in the Capital Region thousands of people are injured or killed in **preventable collisions** resulting in substantial personal and financial costs. In 2012, **23,237** collisions occurred on Edmonton roadways; **4,337** people were injured and **27** were killed. These collisions result in higher insurance premiums, increased wait times for emergency services and medical care, higher taxes, legal costs, lost productivity and travel delays. If we consider the pain and suffering of victims and their families the cost of these preventable collisions are almost immeasurable.

Speed determines the severity of a collision and it is literally a matter of life and death. A study from Australia found the risk of dying in a crash approximately **doubles for each 5 km/h increase in speed**. "*Traffic Safety*" P.209 Leonard Evans 2004

Using the example of an increase in speed from 50km/h to 60km/h, the following results:

- Stopping distance increases from 25 meters to 33 meters;
- Risk of injury crash increases by 44 percent;
- Risk of serious crash increases by 73 percent;
- Risk of a fatal crash increases by 107 percent.

- **How does Photo Radar Operate?**

Radar works on the Doppler Shift Principle. Put simply, a radio wave with a known frequency is emitted from the transmitter/receiver. When the wave strikes a vehicle moving away from the unit it returns to the receiver and the difference between this lower frequency wave and original wavelength is calculated into a speed. If the speed is above the

designated speed a photo is taken of the vehicle's licence plate. This violation is confirmed manually by the operator in the photo enforcement vehicle.

- **What type of equipment is being utilized in the mobile photo enforcement program?**

Since 2009 the City of Edmonton has used the American Traffic Solutions AXSIS SC-300 Digital Radar Speed Camera.

- **How does Photo Laser Operate?**

The laser used in our Photo laser speed system emits a laser light beam that strikes the suspected speeding vehicle. The light beam is reflected back to the laser receiver and a distance calculation is made. The unit takes several distance readings over an interval of time and uses those readings to determine the speed of the vehicle. If the calculated speed exceeds the designated speed limit a digital image is taken. The image is displayed on a tablet and the operator visually confirms that the image on the tablet matches the vehicle that was targeted. The DragonCam laser beam is very narrow making it target specific.

- **What type of photo laser system is used in Edmonton?**

Edmonton uses the DragonCam Photo/Laser system. The Lidar component is a Class 1 laser product. The laser beam produced by this unit poses no safety or health risk to the public or the operators when used in accordance to the manufacturer's specifications

- **How do we know the unit is accurate?**

Units are certified by the manufacturer and re-certified as per the manufacturer's specifications. Daily testing prescribed by the manufacturer are completed at the beginning and end of each shift to ensure the unit's accuracy. Prescribed tests are also conducted at the start and end of each deployment (site).

- **How will I be notified of a Photo Enforcement speed violation?**

The images capturing the violation will be reviewed and verified and a violation notice will be mailed to the registered owner of the licence plate. The process can currently take 1 - 2 weeks.

- **How are Photo Enforcement sites selected?**

The Government of Alberta has developed guidelines for the operation of automated enforcement programs (link below). Criteria for site selection include areas where:

- Conventional speed enforcement methods are deemed too risky for citizens or police such as high-speed multi-lane roadways,
- Data indicates motorists are ignoring or breaking traffic laws on an ongoing basis,
- Data indicates a greater frequency of property damage, injury or fatal collisions,
- Data indicates a high volume of pedestrian traffic including areas near educational facilities and playground zones.

Photo Enforcement will also be utilized in construction zones and on roadways identified by members of the public as problem speeding locations. <http://goo.gl/828of>

- **Who operates the Photo Enforcement units and what are their qualifications?**

The City of Edmonton contracts the Corps of Commissionaires to operate the photo Enforcement units. Each operator has successfully completed a recognized training program and has been designated as a Peace Officer as legislated by the Province of Alberta (details in link). <http://goo.gl/y2kru>

Peace Officers are protected by Section 129 of the Criminal Code of Canada which states that:

Every one who:

- (a) resists or willfully obstructs a peace officer in the execution of his or any person lawfully acting in aid of such officer is guilty of
- (d) an indictable offence and is liable to imprisonment for a term not exceeding two years, or
- (e) an offence punishable on summary conviction.

- **Can Photo Enforcement vehicles park illegally and idle for extended periods of time?**

Yes. Section 64 (2) of the Use of Highway, Rules of the Road Regulations authorizes a Peace Officer to park in contravention of the Provincial Act and Municipal Bylaw. This includes No Parking zones, boulevards, shoulders and overpasses. The vehicles must be left idling to provide the power required to sustain the equipment.

Roadways such as Anthony Henday Drive, Yellowhead Trail and Whitemud Drive are not classified as highways inside the Edmonton municipal boundaries and as per the Highway Transfer Agreement between the Government of Alberta and the City of Edmonton, enforcement is the responsibility of the municipality.

- **What are my options if I receive a Photo Enforcement violation ticket?**

- You may view the original image online with your PIN# located on your offence notice:

www.automatedphotoenforcement.edmonton.ca

The link below outlines the details of the 3 options which are noted on your violation notice. They include:

- Voluntary in-person payment of the fine at a Registry Office or Provincial Court. By mail. On-line.
- Appear before a Justice at the address on your ticket to plead guilty or not guilty.
- Plead not guilty by mailing in the notice as per the instructions on the ticket.

For detailed instructions: <http://www.edmontonpolice.ca/TrafficVehicles/PhotoRadar/HowtoPayYourFine.aspx>

- **How can I arrange for Photo Enforcement in my neighbourhood?**

If you have a concern about speeding in your neighbourhood you can call 311 or send an email to speeding@edmonton.ca

Additional information can be found at http://www.edmonton.ca/transportation/traffic_safety/safe-speed-vans.aspx

- **Where can I find more information on Photo Enforcement?**

There are a number of websites available with photo enforcement information:

www.edmonton.ca/transportation/traffic-safety.aspx

<http://www.edmonton.ca/transportation/traffic-safety.aspx>

Comments?

If you have any comments about the information outlined in this information circular, please send them to:

<mailto:saferoads@edmonton.ca>