



# **AUTOMATED TRAFFIC ENFORCEMENT**

## **2021 ANNUAL TRAFFIC REPORT**

### Overview

The City of Red Deer's Automated Traffic Enforcement (ATE) Program includes photo laser, red light and intersection speed cameras. The City of Red Deer (The City) operates three mobile trucks with 252 site locations (104 Traffic Corridors and 148 Playground/School zones) that have oversight and approval from the Red Deer Detachment of the Royal Canadian Mounted Police (RCMP). Along with the mobile sites, Red Deer has 10 permanently affixed Intersection Safety Device (ISD) cameras, with four of the ten ISDs activated on a rotational monthly basis. The ATE program supports education and enforcement with a balanced and transparent approach, while working in conjunction with conventional traffic enforcement.

### Coordinated Traffic Safety

The City of Red Deer prioritizes traffic safety initiatives. Through monthly interdepartmental meetings, a working group ensures traffic safety initiatives are pursued and areas of concern are identified and mitigated in a timely manner. The City of Red Deer traffic safety outcomes are achieved using the Five E approach (Education, Engineering, Enforcement, Engagement and Evaluation).

The City of Red Deer is committed to increasing the level of safety for city roadway users. The ATE is a tool used to achieve increased roadway user safety by targeting an overall reduction in the number of collisions in our city. Reducing speed and managing intersection traffic compliance has a direct impact on collisions within Red Deer. The ATE is considered only one enforcement technique from a variety of methods including enforcement by Community Peace Officers and members of the RCMP. Over-reliance on any one method is viewed as an imbalance. The Table below shows ATE data from 2017-2021.

| YEAR         | PHOTO LASER | RED LIGHT CAMERA | SPEED THROUGH INTERSECTIONS | VIOLATION TOTALS |
|--------------|-------------|------------------|-----------------------------|------------------|
| <b>2017</b>  | 20,825      | 136              | 1,378                       | 22,339           |
| <b>2018</b>  | 15,152      | 255              | 19,993                      | 35,400           |
| <b>2019</b>  | 10,444      | 322              | 14,876                      | 25,642           |
| <b>*2020</b> | 6,951       | 288              | 9,246                       | 16,485           |
| <b>*2021</b> | 8,365       | 382              | 8,276                       | 17,023           |

### The Impact of COVID-19

Since March 2020, Red Deer realized a significant reduction in traffic volume due to school closures, reduction in activities outside of the home, and an increase of work-from-home models. This traffic volume reduction is reflected in the decrease of infractions across the enforcement methods. (\*As noted above.) Additionally, ATE was temporarily reduced for approximately 30 days during the initial COVID wave in 2020.

### Photo Laser

The primary focus of the mobile units is in school and playground zones. Traffic corridors are monitored as per the criteria defined by the Automated Traffic Enforcement Technology Guidelines, February 2019 version. An overall increase of violations by  $\approx 17\%$  has been realized between 2020 to 2021.

### Red Light Cameras

From 2020 to 2021, there was  $\approx 25\%$  increase in red light violations. In April of 2018, The City of Red Deer implemented a new Intersection Safety Device system that has the ability to enforce all lanes of traffic simultaneously. The previous system was only able to enforce 1 lane at a time. The infraction increase is primarily due to the enhancement of technology and its ability to capture more violations at any given time. It is acknowledged that other factors such as an increase of drivers, weather conditions, and distracted driving may also contribute to the overall increase in violations. The City is committed to making the streets safer by reducing the number of traffic offences, which contribute to injuries and fatalities on our roadways.

## Intersection Speed Cameras

In 2017, Red Deer City Council approved the use of intersection speed technology. In April 2018, Red Deer implemented a new Intersection Safety Device system with the ability to enforce infractions in all lanes of traffic simultaneously. Research confirms that the first year of implementation of intersection speed technology results in the highest infraction rate as drivers require time to adjust driving behavior and patterns. From 2020 to 2021, there was an overall reduction in speed violations by  $\approx 11\%$ . The average speed of motorists was  $\approx 74$  km/h.

In 2021, a total of 6,815,309 motor vehicles travelled through the City's monitored intersections, and of that number, 8,658 violations were issued for either red light and/or speed infractions.

| Year    | Total # Public Roadway Collisions | Total # Fatal & Injury Collisions | Total # Collisions at ISD Locations | Total # ISD Fatal & Injury Collisions |
|---------|-----------------------------------|-----------------------------------|-------------------------------------|---------------------------------------|
| 2016    | 2,206                             | 187                               | 221                                 | 20                                    |
| 2017    | 2,450                             | 139                               | 269                                 | 18                                    |
| 2018    | 2,195                             | 144                               | 234                                 | 14                                    |
| 2019    | 2,451                             | 185                               | 184                                 | 18                                    |
| 2020    | 1,883                             | 163                               | 119                                 | 13                                    |
| ** 2021 | 1,447                             | 112                               | 163                                 | 24                                    |

Data collected and numbers updated from the City of Red Deer Engineering Services.

\*\* Partial data received from the City of Red Deer Engineering Services. Full data expected September 2022

**Public Roadway Collisions** includes all collisions that occurred on any road or street within the City of Red Deer. Parking lots and alleys are excluded.

### From 2016 to 2018:

- There is a 5.8% overall reduction in total number of collisions
- There is a 25% overall reduction in injury and fatal collisions
- There is a 36% overall reduction in collisions at our intersection camera locations in Red Deer

### From 2019 to 2021:

- There is a 41% overall reduction in total number of collisions
- There is a 39% overall reduction in injury and fatal collisions
- There is a 7% overall reduction in collisions at our intersection camera locations in Red Deer

## Our Commitment

The City of Red Deer, Municipal Policing Services, RCMP, and the Province of Alberta share the same end goal - to make our roadways safer. Through the ATE and continued public education, The City of Red Deer remains dedicated to reducing both the occurrence and severity of collisions in our community.