AUTOMATED TRAFFIC ENFORCEMENT
March 18, 2019
OVERVIEW

• Highlights from the report
  • 53 pages of detail
  • Try to take main points/story for presentation
  • Focus discussion on recommendations
  • Enough overall information for decisions

• Collaborative report
  • Report takes information from a number of other reports
  • Input from a variety of stakeholders

• Attitude
Why are we here?


- 2017 election campaign resulted in additional questions from new Council. ATE info provided to Council as part of their orientation in early 2018.

- Province ordered a review of ATE across AB in 2017.

- Council still requested additional information and another report in order to make decisions on ATE future.

- Waiting for release of provincial report before coming to Council.
Speeding

The World Health Organization...

“Speed has been identified as a key risk factor in road traffic injuries, influencing both the risk of a road crash as well as the severity of the injuries that result from crashes.”
Even on dry pavement, the combination of reaction time and the braking distance means that your vehicle will travel a long way before stopping.

- **50 km/hr**
  - Reaction Distance: 10 m
  - Braking Distance: 20 m
  - Total Distance: 30 m
  - Ends 10 m before hitting pedestrian
  - Survival Rate: 95%

- **60 km/hr**
  - Reaction Distance: 10 m
  - Braking Distance: 30 m
  - Total Distance: 40 m
  - Hits pedestrian
  - Survival Rate: 45%

- **70 km/hr**
  - Reaction Distance: 10 m
  - Braking Distance: 40 m
  - Total Distance: 50 m
  - Hits pedestrian
  - Survival Rate: 10%

For pedestrians, speed is particularly lethal. If hit by a vehicle travelling at:
- **30 km/hr**, survival rate is 95%
- **50 km/hr**, survival rate is 45%
- **60 km/hr**, survival rate is 10%
Traffic Safety Standards

- The formulation of the Spruce Grove Traffic Safety Plan, now a requirement, is in line with international, national, provincial and other municipal evidence based best practices. It further utilizes the concepts of the “Safe Systems” Approach; “Vision Zero” and the 5 E’s (engineering, education, enforcement, engagement, and evaluation) to traffic safety.
Automated Traffic Enforcement

• Use now wide spread throughout many parts of the world.
• Research has consistently demonstrated the positive road safety benefits achieved through the use of these technologies.
• Consistent controversies. Study in 2002.
  1. Credibility dilemma: Use in areas where it is “safe to speed”, primary revenue generating mechanism, and “cash cow” locations.
  2. Legitimacy dilemma: Doesn’t recognize driver, delay in receiving notification of the offence, no opportunity to explain circumstances of the event.
  3. Implementation dilemma: Diversion of resources away from more “serious matters” like crime, reductions in road “trauma” are not seen to compensate for slower travel speeds.
  4. Social dilemma: Belief that speeding slightly in excess of the limit is not associated with increased crash risk if otherwise driving safely.
ATE in Spruce Grove

- Originated in Corporate Services in 2005.
- 2007 transferred to a retired constable.
- 2008 City Manager asked Fire Chief to do a review. ATE moved under Fire Chief and a new department (Protective Services) was created.
- 2008 Intersection Safety Program was created.
- 2009 program presented to Council with a mandate for 20% collision reductions (collisions had been on the rise in previous 3 years including 3 separate fatalities).
- Consistent decline in collisions and violations per hour.
- Zero traffic fatalities since 2009.
ATE in Spruce Grove

- ATE is one tool that the City uses to address speeds and collision reductions or maintenance.
- Other enforcement measures include manned enforcement, engineering, check-stops, and other speed monitoring devices.
- ATE under umbrella of Safe City which includes vehicle and pedestrian safety as a key part of their mandate.
- The City of Spruce Grove ATE program utilizes mobile red light, stop sign, and speed including speed on green as well as fixed ATE that captures red light and speed on green. (report lists breakdown)
- Currently utilizes a contract provider.
Legal Jurisdiction and Framework

AJSG:
• Government of Alberta is responsible for ensuring adequate and effective policing is maintained throughout Alberta.
• The ATE Technology Guideline (Guideline), established under section 3.1 of the Police Act, provides direction, which police services shall adhere to prior to and when using ATE.
• The Minister of AJSG approves this Guideline, after consulting with the Minister of Transportation, as required. The Minister of AJSG can provide additional direction and requirements at any time.
• The Ministry of AJSG shall audit police services against all requirements in this Guideline once every two years. The Ministry of AJSG may also conduct additional directed reviews, at its discretion.
Legal Jurisdiction and Framework

Police of Jurisdiction (RCMP for COSG):

• Police services shall provide program direction for ATE in the form of:
  • Ensuring enforcement is conducted in accordance with local traffic safety plans;
  • Reviewing and approving site locations for ATE use;
  • Directing at which sites automated traffic enforcement technology is to be used; and
  • Setting periods of operation and duration of enforcement.
• The Alberta Provincial Policing Standards Operations Policy 2.0 requires police services to establish partnerships with traffic safety stakeholders to effectively solve transportation safety issues. This includes assistance from provincial and local government road authorities to provide traffic information to establish sound traffic safety plans.
Legal Jurisdiction and Framework

City Council:

• Generally speaking, City Council’s role related to ATE is the determination of whether or not to utilize ATE as one of its tools for traffic safety.

• Responsibility to ensure that the municipality and/or police of jurisdiction use of ATE meets the required Guideline as set by the AJSG and its own traffic safety priorities.

• Limited operational control or responsibility for the interpretation, direction, and day-to-day implementation of ATE.

• Direction could include “in-house”, allocation of funds, transparency and reporting (above the Guideline), etc.
Legal Jurisdiction and Framework

Administration:
• Police services, in collaboration with municipalities, may choose to have municipalities provide administrative services related to ATE.
• RCMP have been satisfied that expertise exists within the City to not only implement ATE but also to determine its effective usage, while still providing the legislated oversight.
• List of services as per Guideline included in report.
Legal Jurisdiction and Framework

Contract Providers:
• Provide equipment, technology, and training for ATE operators;
• Provide technical advice regarding equipment and technology used for ATE;
• Provide individuals who could be hired by the municipality as peace officers, as defined by Alberta’s Peace Officer Act, to be ATE operators, as long as the municipality is an authorized employer of peace officers.
• Process and mail violation tickets to offending registered vehicle owners; and
• Manage and conduct inspections, testing and certification/recertification of ATE equipment if qualified and certified by AJSG.
• Contract service providers are prohibited from setting program direction (directing sites, reviewing and approving sites, setting periods and duration of operations).
Provincial Review and Findings

- The review was comprised of the following elements:
  1. Jurisdictional Scan
  2. Municipal Attitudes Review
  3. Guidelines Review
  4. Collision Data Analysis
  5. Literature Review
  6. Public Engagement Survey
- The review findings concluded that:
  - Over the 10-year study period, photo radar made a small contribution to traffic safety in the province.
  1. 1.4% reduction of traffic collision rates, and
  2. 5.3% reduction in proportion fatal collisions
  - Alberta photo radar programs generate revenue and have some effect on traffic safety.
  - Municipal photo radar programs are operating in compliance with provincial guidelines.
  - Need better data to evaluate the success of photo radar in achieving traffic safety outcomes.
  - Municipalities wanted the guidelines to be updated to provide more clarity for photo radar operations.
  - Provincial guidelines could be used more effectively to maximize traffic safety outcomes.
As a result of the review and its findings, the Government of Alberta updated the ATE Guideline effective February, 2019 with some new timelines for implementation.
Previous Audits & Reporting

• Administration implemented an annual Protective Services report to Council in 2017 which includes a heavy emphasis on ATE. No reporting requirement in previous Guideline unless through audits.
• The City of Spruce Grove is regularly audited by the AJSG.
• In each audit the City has received positive feedback and minor recommendations related to their ATE program.
• The last audit of the City of Spruce Grove’s ATE Program was completed in January, 2017. The AJSG released their findings in March 2017.
• The audit concluded:
  “Overall, their (Spruce Grove) A.T.E. Program is well run and those involved are knowledgeable and appear both professional and dedicated to ensuring it is run in accordance with the underlying principles of the Provincial A.T.E. Program.”
2016 Operational Effectiveness Review

- Council of the day asked in terms of whether ATE in the COSG was effective in reducing collisions and personal injury.
- The report presented evidence, statistics, and rationale for answering this question in the affirmative.

Recommendations and Status
- Full report updates these.
- Most are complete or significantly in the process of completion.
- New Guideline and recommendations exceed.
Statistics and Analysis

Research study called *Speed Cameras Improving Safety or Raising Revenue?* (Richard Tay – Chair of Road Safety UofC Engineering)

ATE and collision data in City of Edmonton:

- This study found that both the number of photo radar operating hours and the number of drivers apprehended per month had statistically significant effects in reducing the number of injury collisions.
- The study also showed that the number of tickets issued has a significant independent effect in reducing the number of injury crashes above the deterrent effect provided by police presence alone.
Statistics and Analysis

Replicated same study *(Dr. El-Basyouny Research Chair Urban Traffic Safety City of Edmonton)*

- The findings were consistent with previous research, indicating significant reductions in known photo radar locations.
- Additionally, the study found that when people know there is photo radar on one side of an arterial road they also reduce speed, and therefore collisions, on the opposite side of the road where ATE is not in operation (spillover effect – behaviour change).

“I can say without any doubt the automated traffic enforcement program in Edmonton has been effective in saving lives. Now, that is not my personal opinion. It’s not me saying what I think or what I believe in. That is actually based on the data we have analyzed here in the City of Edmonton.” ~ Dr. El-Basyouny
Statistics and Analysis

Following the implementation of ATE in these cities the results have been reported as follows:

- Calgary intersection collisions decreased by 7%; fatal collisions by 100%; injury collisions by 4%.
- Edmonton severe collisions decreased by 32%; property damage collisions decreased by 29%; total collisions decreased by 28%; speed related collisions decreased by 27%. (independent UofA study)
- Winnipeg injury collisions decreased by 24%; property damage collisions decreased by 13%; 2% increase in property damage collisions without intersection cameras.
- Gatineau fixed ATE locations saw 58% reduction in collisions; mobile locations saw 25% reduction in collisions.
# Statistics and Analysis

## Effectiveness of Mobile Speed Cameras

<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Location</th>
<th>Effects on Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carnis &amp; Blais (2013)</td>
<td>France</td>
<td>The fatality rate per 100,000 vehicles reduced by 21%; 26.2% reduction in non-fatal traffic injuries in the first month.</td>
</tr>
<tr>
<td>Goldenbeld &amp; Schagen (2005)</td>
<td>Netherlands</td>
<td>Reduction of injury crashes by 21% (Rural) and have spillover effect. 3.5 km/h decline in mean speed.</td>
</tr>
<tr>
<td>Gains, Heydecker, Shrewsbury, &amp; Robertson (2004)</td>
<td>UK</td>
<td>Reduction of injury crashes by 22% (urban) and 15% (rural).</td>
</tr>
<tr>
<td>OECD (2006)</td>
<td>France</td>
<td>5 km/h decline in mean speed 30% decline in fatal crashes (highway).</td>
</tr>
<tr>
<td>Retting &amp; Farmer (2003)</td>
<td>DC, US</td>
<td>14% decline in mean speed; 82% decline in speeding vehicles.</td>
</tr>
<tr>
<td>Coleman &amp; Paniati (1995)</td>
<td>Victoria, Australia</td>
<td>Reduced percent of speeding vehicles from 23% to 2.9%; 22% decline in total crashes; 38% decline in injury crashes.</td>
</tr>
</tbody>
</table>

**Mobile Photo Enforcement**

- reduces crashes by 20–30%
- reduces injury crashes by 51%
- reduces mean speed by 2–10 km/h
Statistics and Analysis

- Collision Cost Estimates (CRISP 2010)
  - The direct collision costs ranged in the Capital Region from approximately $11,000 - $180,000 for minor collisions to fatalities respectively.
  - Indirect collision costs, such as “human capital” ranged from the same $11,000 for minor collisions but jumped to an estimated $1.8 million for fatalities.
- Spruce Grove population, registered drivers, collisions

<table>
<thead>
<tr>
<th>TYPE</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>33640</td>
<td>34881</td>
<td>35766</td>
</tr>
<tr>
<td>Licensed Drivers</td>
<td>37300</td>
<td>37812</td>
<td>38691</td>
</tr>
<tr>
<td>Total Collisions</td>
<td>756</td>
<td>742</td>
<td>768</td>
</tr>
<tr>
<td>Injury Collisions</td>
<td>127</td>
<td>129</td>
<td>129</td>
</tr>
</tbody>
</table>
# Statistics and Analysis

Highway 16A

<table>
<thead>
<tr>
<th>Location</th>
<th>Cross / Intersection</th>
<th>Collisions 2016</th>
<th>Rank</th>
<th>Collisions 2017</th>
<th>Rank</th>
<th>Collisions 2018</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hwy 16A</td>
<td>Jenn Heil / Campsite</td>
<td>41</td>
<td>1</td>
<td>29</td>
<td>2</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Hwy 16A</td>
<td>Century Rd</td>
<td>35</td>
<td>2</td>
<td>31</td>
<td>1</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>Hwy 16A</td>
<td>Calahoo Rd</td>
<td>31</td>
<td>3</td>
<td>23</td>
<td>3</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Jenn Heil Way</td>
<td>Grove Drive</td>
<td>20</td>
<td>4</td>
<td>17</td>
<td>6</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Century Rd</td>
<td>Grove Drive</td>
<td>18</td>
<td>5</td>
<td>16</td>
<td>7</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>Hwy 16A</td>
<td>Nelson / Westgrove</td>
<td>16</td>
<td>6</td>
<td>18</td>
<td>5</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Jenn Heil Way</td>
<td>Mcleod Ave</td>
<td>14</td>
<td>7</td>
<td>12</td>
<td>10</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Jenn Heil Way</td>
<td>Spruce Ridge Drive / Hawthorne</td>
<td>12</td>
<td>8</td>
<td>13</td>
<td>8</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Grove Drive</td>
<td>Calahoo Rd</td>
<td>11</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Century Road</td>
<td>Kings Link / Vanderbilt</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>22</td>
<td>8</td>
<td>12</td>
</tr>
</tbody>
</table>
Statistics and Analysis

Behaviour Modification

Driver Behavioural Modification

- Speeding per Hour Fixed 15 km (+)
- Speeding per Hour Mobile 15 km (+)
- Speeding per Hour Fixed under 15 km
- Speeding per Hour Mobile under 15 km

Year: 2011 - 2019

Values:
- 2011: 5.1, 0.7
- 2012: 4.6, 0.5
- 2013: 2.5, 0.4
- 2014: 2.3, 0.2
- 2015: 1.7, 0.1
- 2016: 1.4, 0.1
- 2017: 1.0, 0.1
- 2018: 0.7, 0.2
- 2019: 0.4, 0.3

Graph shows the decline in speeding rates over time.
Statistics and Analysis

Resident vs. Non-Resident

- **Failure to Stop Violations**
  - Spruce Grove Residents: 56%
  - Non Residents: 44%

- **Speed Violations**
  - Spruce Grove Residents: 84%
  - Non Residents: 16%
Statistics and Analysis

Safest Cities in Canada Annual Study

- Allstate Insurance Canada conducts an in-depth analysis of company collision claims data to determine the safest communities in Alberta, New Brunswick, Nova Scotia and Ontario based on the frequency of collisions.
- Statistically valid.
- Even just for Allstate customers prior to the implementation of ATE, Spruce Grove was not even in the top 100 of the study.
- 2015 #1 in Canada; 2016 #1 in Canada; 2017 #2 in Canada.
- 2018 10 yr combined ranking #7 in Canada (#2 in Alberta).
- #1 in Canada over a 10 year period for the greatest decrease in collision claims (-27%).
Public Complaints

Safe City began tracking complaints related to ATE in May of 2017.

Can’t emphasize enough to direct all complaints to ES.
Statistics and Analysis

Public Perception – Provincial Review

To what degree do you believe that photo radar/Intersection Safety Cameras have contributed to improved safety outcomes (reduced speeding, fewer collisions, better driver attention/behaviours) in the last five years.
Statistics and Analysis

Public Perception – Provincial Review

*In the past five years, photo radar/Intersection Safety Cameras have reduced collisions in my municipality in Alberta.*

![Bar chart showing public perception of photo radar and intersection safety cameras in Alberta.](chart)
Public Perception – Provincial Review

*Intersection Safety Cameras (ISCs) that detect speeding make intersections safer.*

![Bar chart showing public perception on the effectiveness of ISC cameras.](chart.png)
Statistics and Analysis

Public Perception – Provincial Review

Knowing that I could receive an Automated Enforcement violation/fine has improved my own driving behaviour (reducing speeding, running red lights, etc.).
Statistics and Analysis

Public Perception – CRISP

*On a freeway, how many kilometers above the posted speed limit do you personally feel it is okay to drive?*

<table>
<thead>
<tr>
<th>Speed over the speed limit</th>
<th>Insight Focus Group</th>
<th>Online Participants Surveyed</th>
<th>Telephone Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 15 km/hr</td>
<td>3.9%</td>
<td>8.9%</td>
<td>3.2%</td>
</tr>
<tr>
<td>11-15 km/hr</td>
<td>16.0%</td>
<td>10.4%</td>
<td>9.8%</td>
</tr>
<tr>
<td>6-10 km/hr</td>
<td>47.2%</td>
<td>43.0%</td>
<td>47.8%</td>
</tr>
<tr>
<td>1-5 km/hr</td>
<td>21.7%</td>
<td>18.9%</td>
<td>26.4%</td>
</tr>
<tr>
<td>0 km/hr</td>
<td>11.3%</td>
<td>8.8%</td>
<td>12.9%</td>
</tr>
</tbody>
</table>
Common Concerns & Perceptions

Cash Cow
- Concur that for some jurisdictions/sites this is the case (no evidence).
- Abuse by others does not mean COSG should reject completely.
- 100% about safety in COSG (recognize more transparency).
- There has not been any evidence, discussion, or suggested practice that has/had revenue as its focus when contemplating ATE sites, initiatives, or other operational matters.
- Administration has nothing to gain from increased revenue.
- Collision cost analysis.
- City budgeting – no increases despite increase population/drivers.
- 16A has consistently been the road where we have the highest number of intersection collisions and excessive speeds.
- New technologies welcomed by administration.
- Sites have been pulled that were higher revenue generating sites but not seeing improvements (i.e. failure to stop Jen Heil, Golden Spike)
Common Concerns & Perceptions

For Profit Operator vs. “In-House”

• Concern a “for profit” operator obviously can’t be focused on safety over revenue if their reason for existence and business success is about revenue.
• Report to our PS department (and ultimately the RCMP) and must comply with all of the Guideline and other aspects of their contract.
• They have no input into program direction.
• If “in-house” complaints would decrease? Not necessarily.
• “In-house” – perception may be that a particular department is utilizing ATE revenue to fund initiatives or positions within said department.
• Private operator has more to lose if found not in compliance with contract or Guideline (muni/province can cancel contract or authority to operate and go to open market).
Common Concerns & Perceptions

Covert vs. Overt

• Common concern related to ATE is that it can be “sneaky”.
• Those against covert operations maintain that receiving a ticket a number of weeks later in the mail does little to slow down drivers and contribute to safety.
• These same detractors would argue that a clearly marked and identifiable ATE operation has the effect of immediately slowing drivers down similar to manned enforcement operations.
• Covert, mobile speed camera enforcement programs provide a more generalized deterrent effect and may have the added benefit that drivers are less likely to know precisely when and where cameras are operating.
• Studies have shown that overt operations produce relatively localised effects on vehicle speeds or what is sometimes called the “kangaroo effect”.
• 50/50 ideal split (province recommendation).
Common Concerns & Perceptions

Doubling Up

- Mobile unit may be set up within close proximity to a fixed ATE location and the perception is that it is the City’s intent to capture violators twice.
- No double or multiple tickets are given for the same infraction.
- May be utilized for different infractions.
- May be utilized to deal with “kangaroo effect”.
- Additional concern about two vehicles in same location (could be training, shift change, supervision, equipment malfunction/change).
Common Concerns & Perceptions

Tolerances

• Legally there are no tolerances when it comes to speeding or stopping.
• Tolerances that may exist via policy must be approved by the police of jurisdiction and for legal reasons may not be disclosed.
• The AJSG office will not take a position on tolerances as doing so would establish a new maximum speed above what road designers have established.
• If in place are at the sole discretion of the RCMP and subject to court challenges.
Common Concerns & Perceptions

“Illegal Parking” of Community Peace Officer’s/Contractor

- Concerns have been expressed to Council and administration regarding what many people feel are illegally parked vehicles while executing enforcement activities.
- CPO’s are legally able to park anywhere in the execution of their duties.
- Reasons:
  - When enforcement operations are unsafe for the operator to perform in a traditional location.
  - When enforcement operations are intended to be of the covert variety or to maximize efficiency and effectiveness.
  - When there is an emergent situation.
- COSG ensures that CPO/ATE operations meet the above or corrections are immediately taken.
Common Concerns & Perceptions

Stop sign/light failure to stop infractions

- USA – 1/3 of all intersection crashes and 40% of fatalities.
- 70% of these involve failing to stop or “rolling through”.
- Year after year, ‘stop sign violation’ is in the top four improper driver actions that cause casualty collisions in Alberta. (GOA)
- GOA increased fines in 2015 because of this concern.
- Drivers often think they have stopped.
- Complaints about the fact they “slowed down and looked” and it isn’t dangerous.
- Complaints about infractions when it isn’t busy (justifying it is therefore okay to not stop) leading to “cash cow” perception.
- Research indicates drivers do not always judge correctly.
- Research in several cities has indicated positive results following implementation of ATE enforcement.
Common Concerns & Perceptions

Site Selection
- Guideline - sites shall be approved by the police service of the jurisdiction and shall meet one or more of the established criteria.
- All ATE sites in the City of Spruce Grove have followed the approved process for consideration and selection.
- The new Guideline provides greater information and transparency when it comes to site selection and providing initial and ongoing rationale for such.
- GOA will work with municipalities to further define “rationale”.
- Additional recommendations to provide transparency for all sites (can simply refer public to reports and/or website instead of having to respond individually).
Common Concerns & Perceptions

Revenue Allocation

- Two schools of thought – general revenue and dedicated (towards safety initiatives).
- General: no one department is seen to directly benefit.
- Dedicated: violators may feel “better” if it goes to other safety initiatives.
- Industry philosophy that enforcement dept’s don’t want dedicated revenue.
- No financial impact. Same overall net impact either way.
- Comes down to perception. Other recommendations can address this.
- By going to general revenue all initiatives and budgets are considered equally vs. elevated because it may appear to be funded.
Common Concerns & Perceptions

Manned Enforcement vs. ATE

- ATE is a more cost effective enforcement method with equal to greater success.
- Better safety for law enforcement officials.
- Fair and impartial.
- Self funding.
- Strathcona County.
Common Concerns & Perceptions

Residential Neighbourhoods

- Different concern in that people sometimes request ATE or other enforcement in residential areas due to perceptions of speeding.
- Must meet criteria in Guideline.
- Design and layout of residential areas have a far greater positive impact on reducing speeds.
- Same design and other factors (parked cars, narrower streets) often lead to increased speed perceptions.
- Complaints and appropriate monitoring often reveal very different facts. (Harvest Ridge example: 16,000 vehicles monitored; 4% violations; avg overage of violations was 2 km/h; 85th percentile was 44 km/h)
- Would consider residential areas but must meet criteria. Data has not supported it to date (speeding and collisions).
Common Concerns & Perceptions

School and Playground Areas
• Strong opinion that it should only be used in these areas. Many municipalities exclusively do this.
• Site criteria from Guideline (meet one or more).
• Areas usually have decreased speed limits and other engineering treatments that already have a significant impact on driving behaviours and speeds.
• No history of collisions or excessive speeding concerns in city.
• COSG uses manned enforcement at critical times (education) and other speed monitoring devices which has contributed to success.
• With no supporting rationale implementing in these areas in the city would further perpetuate the “cash cow” perception.
“In-House” Financial Analysis

• 2018 Corporate Plan initiative.
• Scope of work was not to provide any rationale or opinion related to the pros and cons of our existing program, the “in-house” option, or on ATE itself.
• Extent of the initiative was simply to do a financial comparison and provide information on implementation.
• Comprehensive background research was completed by the consultant team to determine best practices being employed by peer municipalities, legislative requirements, and costs associated with all items included in a three-year budget.
• The report also summarized the three models that exist for the provision of ATE services in municipalities: municipality-led (internal/in-house); contractor-led (external), and a blended approach that is led internally but leverages contracted support.
“In-House” Financial Analysis

- Apples to apples comparison (i.e. # of violations, hours, etc.) showed the same cost as is currently realized by the City with a contractor.
- Virtual net zero impact over existing program.
- Costs included the following:
  - The purchase of seven fixed ATE cameras.
  - The purchase of two mobile automated traffic enforcement and stop sign cameras.
  - A separate office setup for ATE program operations.
  - Full-Time Equivalent (FTE) employees (7.5).
  - The purchase of all required equipment to support an internal ticket processing operation, including a mailroom.
- Estimated 6 month implementation or transition.
- With net zero impact it comes down to perception.
Financial Considerations

Where does the money go?
• The province mandates that 26.67% of any fine returns to the province.
• The remainder of the set fine amount is retained by the City of which they allocate a portion to cover the contract expenses.
• On top of any set fine amount 15% is added under legislation and is directed to Victim Services.

NOTE: City does not set fine amounts nor have any control over reductions thereof (totally at discretion of court officials)
## Financial Considerations

- ATE does have a *budget* impact.
- Any program or service change has a budget impact.

### Automated Traffic Enforcement - City of Spruce Grove

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</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$5,213,361</td>
<td>$4,644,216</td>
<td>$3,644,476</td>
<td>$4,522,000</td>
<td>$4,522,000</td>
<td>$4,522,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>$2,474,324</td>
<td>$1,752,306</td>
<td>$1,457,283</td>
<td>$1,814,000</td>
<td>$1,814,000</td>
<td>$1,814,000</td>
</tr>
<tr>
<td>Net Revenue</td>
<td>$2,739,037</td>
<td>$2,891,910</td>
<td>$2,187,193</td>
<td>$2,708,000</td>
<td>$2,708,000</td>
<td>$2,708,000</td>
</tr>
<tr>
<td>% of overall operating budget</td>
<td>3.4%</td>
<td>3.6%</td>
<td>2.4%</td>
<td>2.8%</td>
<td>2.5%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Original Budget $5.2
Forecast $4.6

Will amend in current CP cycle
Financial Considerations

Tax Implications
• ATE is included as a part of our Corporate Plan which ultimately factors into the tax rate that is recommended and decided upon by Council.
• Many factors influence tax rate. Removal of ATE does not automatically mean tax increases.
• Other decisions would need to be contemplated to account for loss of revenue (i.e. delay initiatives or keep/move below the line; service cuts; other revenue increases).

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net ATE Revenue</td>
<td>$2,708,000</td>
<td>$2,708,000</td>
<td>$2,708,000</td>
</tr>
<tr>
<td>1% of Tax</td>
<td>$ 395,975</td>
<td>$ 424,103</td>
<td>$ 461,930</td>
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<tr>
<td>Total tax representation of ATE rev.</td>
<td>6.8% 5.6%</td>
<td>6.4% 5.2%</td>
<td>5.9% 4.8%</td>
</tr>
</tbody>
</table>
RECOMMENDATION #1
That Automated Traffic Enforcement in the City of Spruce Grove be continued subject to the recommendations in this report or others that are allowed under legislated oversight that may come forward through discussions with Council or through the options presented for Council’s consideration.

• ATE has proven to be a very successful tool in reducing speeding and collisions in the COSG.
• Caveat of additional recommendations to increase transparency, rationale, success analysis.
RECOMMENDATION #2
That the City of Spruce Grove does not develop a policy for the use of ATE subject to the other recommendations for public information, oversight, and the updated provincial Guideline.

• Administration was preparing a policy to bring forward; however, provincial changes are stronger and include everything suggested.
• Over 90% of existing municipal policies reiterate legislation.
• Double legislation.
• Additional aspects of a possible policy (revenue allocation, transparency) are addressed in other recommendations and would have a far more effective reach.
Recommendations & Options

RECOMMENDATION #3
That administration investigate and develop a form of an advisory committee, with public participation, that includes ATE and other traffic safety aspects as part of its scope and bring back to Council for information or decision before December 31, 2019.

• While the other awareness and transparency recommendations should go a long way to alleviating public perceptions, adding some sort of advisory group with public participation is seen as very beneficial.
• Do not know scope or best fit yet (i.e. existing committee’s or new).
• Not oversight (can’t as per Guideline) but advisory and conduit to public related to traffic safety intent.
Recommendations & Options

RECOMMENDATION #4
That administration and the City proceed with the implementation of public awareness initiatives as identified.

1. Report to Council
   • Enhanced annual report (ATE only).
   • Easier for public to see/more detail.
   • Will include:
     • Overarching safety guidelines and philosophy
     • Provincial Guideline adherence
     • Provincial audit findings if applicable (audits are not annual)
     • Financial information and considerations (including money spent on safety initiatives in relation to overall Protective Services)
     • Other traffic safety initiatives
     • Statistics on violations, collisions, intersections, complaints, covert/overt, etc.
     • Recommendations or options for changes/improvements
     • Advisory committee comments
     • Site rationale (existing, new, removal)
     • Clearer summaries of ATE that will be incorporated into the annual Corporate Plan document
Recommendations & Options

RECOMMENDATION #4
That administration and the City proceed with the implementation of public awareness initiatives as identified.

2. ATE Guideline Requirements
   • Most we are already in compliance with.
   • Signage (in compliance but will look to enhance).
   • Location and rationale for each site on a monthly basis on our website (ready to roll out by June 1 deadline).
   • Annual report demonstrating impact on traffic safety (already proposed as part of Council report).
Recommendations & Options

RECOMMENDATION #4
That administration and the City proceed with the implementation of public awareness initiatives as identified.

3. Interactive Mapping
   • Was looking to develop this as an initiative but it required significant resources that the City does not currently have.
   • Now aware of different technologies/service providers.
   • Could include:
     • Citizens would be able to view the map and click on approved mobile and fixed locations for all ATE operations (speed and stop/red light) and see in real time whether they are active or not.
     • Rationale for the sites would be included.
     • Statistics for each location would be included (violations, collision history).
     • Citizens could see the number of enforcement hours for each location.
     • Similar data would be included for non-ATE locations such as covert monitoring devices or speed signs.
     • Engineering would have detailed traffic data.
   • Recommending pursuing these technologies and services and possible impacts.
Recommendations & Options

OPTION #1
That administration be directed to maintain ATE operations with a contract provider and secure changes to the contract and/or provider through a RFP that meet the requirements of the provincial Guideline and the City identified with the additional recommendations in this report.

OPTION #2
That administration be directed to transition ATE operations to an “in-house” model and bring forward for information a detailed implementation plan.
Recommendations & Options

OPTION #1 or OPTION #2 ("In-House vs. Contract")

- Pro’s / Con’s already presented.
- There are risks associated with an “in-house” program should changes be legislated or needed (i.e. technology, human resources and possible layoffs, asset loss for equipment, etc.).
- Perception issues around both options demonstrates that one cannot address these concerns by the choice of model alone.
Recommendations & Options

RECOMMENDATION #5
That the City of Spruce Grove continue with the ATE program, supplemented by a balanced and increased program of manned enforcement.

OPTION
That administration be directed to do a full analysis and transition plan away from ATE and to a fully dedicated manned traffic enforcement unit.

• As indicated throughout the report, a balanced approach to traffic safety is and should be the goal.
• While manned enforcement can be cost/revenue neutral administration does not believe that it is as efficient or effective as ATE and comes with an overall cost implication.
• The recommendations for improvement in this report should have a significant impact on perceptions of ATE in the City rather than moving towards strictly a manned enforcement program.
RECOMMENDATION #6
That the recommendations identified in the 2016 Operational Effectiveness Review be continued and detailed as part of the proposed annual report to Council.

• In short, administration proposes to continue those that have been implemented, complete those that are still underway, and supplement those outstanding recommendations with the new Guideline requirements and recommendations in this report.
Recommendations & Options

RECOMMENDATION #7
That the City of Spruce Grove maintain their current philosophy of ATE revenue allocation to “general revenue” but work to include more information related to the monies spent on safety initiatives in the City in the proposed annual report to Council and in the Corporate Plan.

- The City’s current policy is that all revenue generated from any user fees simply goes to “general revenue”.
- Consistent with other policies (i.e. no reserves).
- Finance representatives are of the opinion that revenue allocation in its current form should be maintained.
- No budget impact; equitable consideration of all initiatives.
- Perception issues on either side – other recommendations will address vs. making a major shift in City’s accounting philosophies.
Next Steps

• Discussion/questions from Mar 18 COW meeting.
• Consensus on recommendations?
• Additional information required?
• Bring forward for future decision on recommendations/options (Mar 25 if possible).