

# Saving Lives on Alberta's Roads

**Report and Recommendations for a  
Traffic Collision Fatality and Injury  
Reduction Strategy**

**June 2004**



**Alberta**

## Letter of Transmittal

June 30, 2004

Honourable Ed Stelmach  
Minister of Transportation  
#320, 10800 – 97 Avenue  
Edmonton, Alberta  
T5K 2B6

Dear Minister Stelmach;

I am pleased to provide you with the report and recommendations for a Traffic Collision Fatality and Injury Reduction Strategy.

Since you initiated this review and asked me to take the lead, it has been my privilege to meet with many people who are actively involved in road safety issues, including some whose lives have been directly affected. I have been impressed by their concern with road safety issues, by the ideas and suggestions they provided during the course of this review, and by their willingness to participate in local and provincial initiatives designed to improve safety on Alberta's roads and highways.

In spite of the many good programs and activities that have been initiated and a strong sense by many that road safety issues are a serious problem in Alberta, it is my overall conclusion that road safety in general does not receive the priority it deserves, particularly given the tremendous costs to individuals and their families, to our health care system, and to our society.

It is my hope that this report will act as a catalyst for action not only at the provincial government level but in communities across the province. With clear leadership and deliberate plans in place, we have an opportunity to be national leaders in road safety. We have an opportunity to save millions of dollars in costs, particularly in Alberta's health care system. And we have an opportunity to save lives on Alberta's roads.

I appreciate very much the opportunity to undertake this review on your behalf.

Sincerely,

Don McDermid

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## Executive Summary

*At the inquest into the world's first road traffic death in 1896, the coroner was reported to have said, "This must never happen again." More than a century later, 1.2 million people are killed on roads every year and up to 50 million more are injured. These casualties of the road will increase if action is not taken.*

*World Health Organization  
Road Safety: A Public Health Issue  
March 29, 2004*

Road safety is a serious issue in Alberta and around the world. The impact on individuals and their families is devastating. And the overall cost to Alberta society is estimated to be in the range of \$4.7 billion a year.

At the request of Alberta Transportation Minister Ed Stelmach, a review of Alberta's Traffic Safety Initiative was launched in February 2004. The objective was to recommend the best way to coordinate strategies, set goals and allocate resources to address road safety issues.

As part of the review, information was collected on traffic collisions and their impact, on current initiatives, and on best practices around the world. Key stakeholders were invited to provide their input on five key questions:

1. What are the major obstacles to improving the safety of Alberta's roads? Where are there gaps in programs or actions to reduce Alberta's collision rates?
2. What is working well in Alberta in terms of reducing collisions, injuries and fatalities? What programs or initiatives have proven to be successful and should be continued or expanded?
3. What specific actions should be taken to improve Alberta's collision rate and reduce the number of collisions, injuries and fatalities? What are the most important priorities?
4. What mechanisms or structures should be put in place to ensure that key stakeholders can work together to improve road safety on an ongoing basis? Who should be involved? What role would your organization be prepared to play?
5. Should Alberta set targets similar to those established in Road Safety Vision 2010 and what should they be?

Based on the information and advice received throughout the review, several things are abundantly clear.

- Alberta needs a decisive and deliberate plan for improving road safety in the province.
- We need proactive, coordinated leadership from the provincial government.
- Communities need to be actively engaged in identifying their own priorities and developing their own programs and initiatives consistent with a province-wide plan.
- There needs to be a comprehensive approach taken with clear links among education and awareness, enforcement, engineering, legislation and standards, and social policy areas.
- Individual Albertans need to take more responsibility for their own driving behaviour and to understand that the vast majority of so-called 'accidents' can be prevented.

In the time available for this review, it simply was not possible to identify which of the many ideas and initiatives should or should not be included in an effective road safety strategy. More work, and the active participation of key stakeholders, are needed to assess each of the ideas and determine how they would fit as part of an overall plan for the province. Consequently, the recommendations in this report focus primarily on “how” rather than “what” should be done to improve road safety in the province.

Specific recommendations are as follows:

**Recommendation 1:** Establish a provincial mechanism to provide leadership, direction, coordination and evaluation of road safety initiatives in Alberta.

**Recommendation 2:** Develop and implement a comprehensive road safety plan for Alberta with clearly defined objectives, strategies and work plans tailored to meet provincial and local needs.

**Recommendation 3:** Establish a sustainable source of ongoing funding for road safety initiatives in the province.

**Recommendation 4:** Expand research and the availability of comprehensive, timely information about road safety in the province.

**Recommendation 5:** Establish specific targets consistent with Road Safety Vision 2010 and report regularly on progress in achieving those targets.

**Recommendation 6:** Engage Aboriginal leaders and elders in the development of targeted strategies to reduce the rates of collisions, injuries and fatalities among Aboriginal people.

**Recommendation 7:** Take advantage of advances in technology provided the objectives are directly related to improving road safety.

**Recommendation 8:** Ensure that adequate resources are available to provide effective enforcement on Alberta’s roads and highways.

**Recommendation 9:** Undertake a thorough review of current driver education and driver examinations in the province.

With an effective process and leadership from the province, the active involvement of stakeholders, adequate resources, a clear plan and measurable targets in place, Alberta has an opportunity to be leaders in road safety. We have an opportunity to save millions of dollars in costs to the health care system every year. We can help reduce escalating insurance costs. And most important, we have an opportunity to save hundreds of lives every year.

## Introduction

*Police are still piecing together the crash that claimed two lives yesterday near Borden Park. Their sports car was speeding on a bend in the road when the driver lost control. Emergency crews tried to calm a 19 year old man trapped in the back seat of this 82 Mustang. His two friends in the front couldn't be saved. The Mustang was rounding the corner on 112 Avenue. Seconds later, it was wrapped around this pole. We may never know what happened in the moments in between. A-Channel News, Edmonton, March 11, 2004*

Unfortunately, stories like this one are far too common. In fact, by the end of an average day in Alberta, about 80 people will be injured, more than 500 vehicles will be damaged, and at least one person will be dead – all because of traffic collisions.

While good progress has been made in reducing the number of deaths on Alberta roads, the collision rate continues to increase. In fact, a look back over the past ten years shows that a number of road safety targets have not been met. Back in 1992, a report written by Alberta Transportation and Utilities indicated that, “If the trends over the next five years continue in the future, the following results can be expected over the next ten years. More than 500,000 people will perish on North American highways, with more than 4000 deaths in Alberta alone.”<sup>1</sup> In fact, 3,875 people died on Alberta roads between 1992 and 2002.

To put the current numbers in perspective, traffic crashes take six times more lives than homicides, eight times more lives than AIDS, and 100 times more lives than meningitis.<sup>2</sup> The societal cost of traffic collisions in Alberta is estimated at close to \$4.7 billion in 2002.<sup>3</sup> When health care costs, property losses and other factors are considered, the economic cost of traffic collisions to Canadians is as high as \$25 billion a year.<sup>4</sup>

In spite of those statistics, the reality is that, too often, traffic collisions are seen as inevitable ... as something that just happens. Some have suggested that if one person died every day from homicides, from West Nile Virus, or from the flu, there would be a great hue and cry with demands that something be done. Unfortunately, with traffic collisions, there is deep sadness when a fatality occurs on our roads and highways, but rarely have we heard a concerted call for a comprehensive plan to improve road safety and prevent the needless loss of life and extensive injuries that occur as a result of traffic collisions.

*“... this evidence does not appear to be reaching Albertans in a way that makes injuries matter to them. Injuries appear to be too casually dismissed as accidents that can happen to anyone – that everyone will die sometime and if death occurs by injury, how unfortunate. This attitude needs to be changed.” Alberta Injury Control Strategy, p. 26*

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<sup>1</sup> Alberta Transportation and Utilities (1992). Highway User Safety for Albertans – The Decade to Come, 1992-2002.

<sup>2</sup> Anielski Management Inc. *Alberta Traffic Safety Progress Report: Key Indicators and Trends*.

Prepared for the Alberta Motor Association, January 2004. p. 4.

<sup>3</sup> Ibid

<sup>4</sup> Health Canada. *Road Safety in Canada – An Overview*.

In February 2004, Transportation Minister Ed Stelmach initiated a review of Alberta's traffic safety initiatives. The aim was to find the most effective ways to change driver habits and reduce collisions and, in the Minister's words, to "reduce the unacceptable number of fatalities and injuries that occur every year in this province."

This report provides a summary of the current situation in relation to road safety in the province, the key ideas and suggestions made by stakeholders involved in consultations, highlights of some best practices from around the world, and recommendations for action.

Road safety faces the challenge of having many participants, a few reluctant players and no champion. It is included in the mandates of Transportation, Solicitor General, Justice, Health and Wellness, Learning and others, but unfortunately, is it not the first priority.

Overall, this report is a call for deliberate and concerted action, starting with leadership from the provincial government then following through with a province-wide plan to improve road safety and provide a catalyst for community action across the province.

## Road safety issues in Alberta today

### The impact of collisions

Several reports highlight the serious impact of road safety in Alberta. Compared with other provinces, in 2001, Alberta had the second highest fatality rate at 13.3 per 100,000 population and the highest injury rate at 917 per 10,000 population. If we look at the number of fatalities and injuries in comparison to the number of kilometres driven, Alberta ranked 7<sup>th</sup> best among the provinces with a rate of 10 fatalities and 4<sup>th</sup> best for injuries at 682 injuries per billion kilometres.<sup>5</sup>

Since 1998, the number of reportable collisions has steadily increased and, while the number of people killed has gone down, the number of people injured has not. In fact, in 2002, close to 29,000 people were injured on Alberta's roads – the highest number in our province's history. That amounts to three people injured every hour in a motor vehicle collision.<sup>6</sup>

What do we know about where and when these collisions occur and who is most often involved?<sup>7</sup>

- In terms of people killed in traffic collisions:
  - Just over half of the people killed were drivers
  - Almost a quarter of those killed were passengers
  - 39 pedestrians were killed in 2002
  - 7 people were killed while riding a bicycle
  - 24 people were killed while riding on motorcycles
- Of those injured:
  - Almost 61% were drivers
  - Close to 30% were passengers
  - 4.5% were pedestrians
- Male drivers between the ages of 16 and 19 had the highest rate of involvement in casualty collisions.
- Traffic related fatalities represent the number one cause of death from unintentional injuries in First Nations people. In 2001, motor vehicle fatality rates for Aboriginal people were three times higher than rates for the non-Aboriginal population. Impaired driving was involved in 73% of all Aboriginal motor vehicle related fatalities (2001). In 2000, 75% of First Nations people killed in motor vehicle collisions were not wearing seat belts. One survey showed that average seat belt wearing rates among people in First Nations communities was as low as 33.6%.<sup>8</sup>
- Almost 21% of drivers involved in fatal collisions had consumed alcohol prior to the collision. Young men between the ages of 18 and 24 were more likely to have consumed alcohol before a collision than any other age group. 27% of pedestrians killed in collisions had consumed alcohol before the fatal collision.

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<sup>5</sup> Alberta Transportation. *Alberta Traffic Collision Statistics 2002*.

<sup>6</sup> Anielski Management Inc. p. 11.

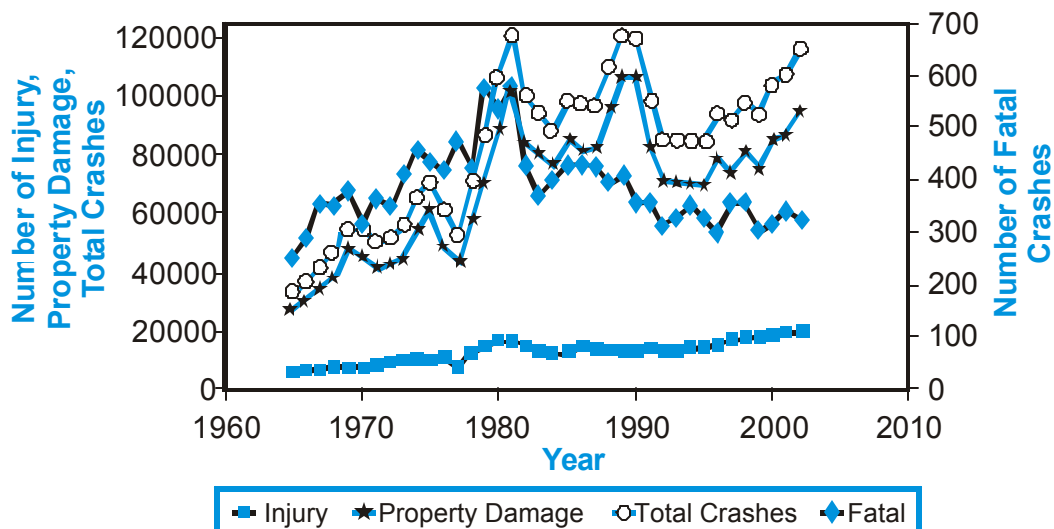
<sup>7</sup> Unless otherwise noted, information is taken primarily from *Alberta Traffic Collision Statistics 2002*.

<sup>8</sup> Aboriginal Traffic Safety Summit: Guidance for the Journey. Summit Report, March 2003. p. vi.



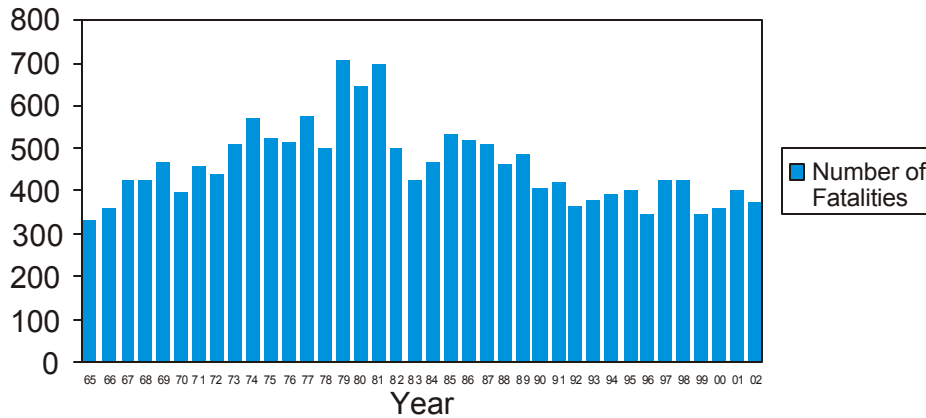
- People who were not using a seatbelt at the time of the collision were two and a half times more likely to be injured than those who had their seatbelt buckled. Surveys suggest that, in 2001, the use of seatbelts declined to just under 85%. That's the second lowest rate of seat belt use in Canada. In rural Alberta, the rates of seatbelt use are considerably lower at 77%. Alberta's rate of proper use of child restraints (66%) was slightly lower than the national average in 1997.<sup>9</sup>
- While over 80% of collisions occurred in urban areas, more people are killed in collisions in rural areas. Collisions in rural areas accounted for 70.5% of all fatal crashes.
- More fatal collisions occur in the months of June, August and December. More collisions take place on Friday than other days of the week, and the afternoon rush-hour is when most crashes occur.
- The most common driver errors leading to casualty collisions were following too closely, running off the road, and making a left turn across the path of oncoming traffic.
- Passenger cars (55.8%) and pickup trucks and vans (20.3%) were most often involved in casualty collisions. In 2002, there were 49 people killed and 744 people injured in collisions involving truck tractors. Six people were killed and 38 people were injured in collisions with a train.
- Contrary to what some people might think, the majority (63%) of all casualty collisions occurred on dry roads. Slush, snow or ice was involved in less than 17% of fatal collisions.

## Number of Traffic Collisions in Alberta 1965 - 2000

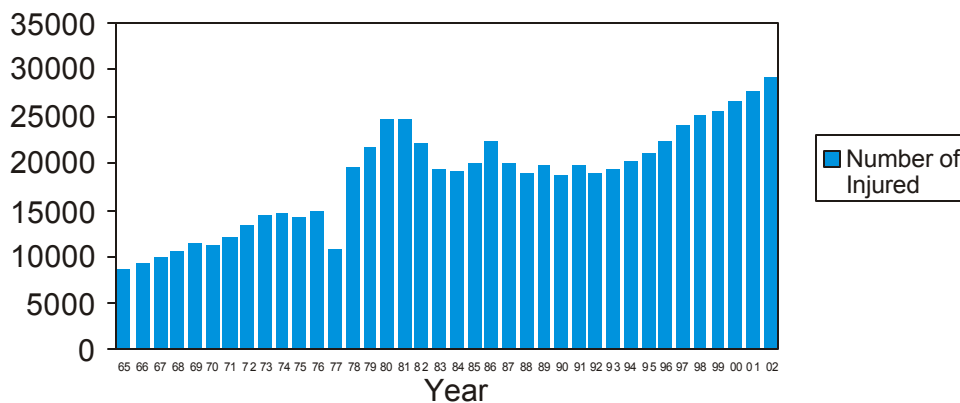


<sup>9</sup> Anielski Management Inc. p. 22-23.

## Number of Fatalities in Alberta Traffic Collisions 1965 - 2000



## Number Injured in Alberta Traffic Collisions 1965 - 2000



There are different ways of looking at the impact of traffic collisions on the individuals, their families, the workplace, the health system, and our society as a whole.

Estimates are that the overall direct and indirect societal cost of traffic collisions in Alberta is close to \$4.7 billion. That includes the direct costs to the health care system, insurance costs and property damage, and indirect costs related to loss of productivity and foregone income. There is no way of attaching a dollar figure to the pain and suffering caused by losing a family member or friend to a traffic collision.

*Rochelle Sobel, mother of a victim, and founder and president of ASIRT (Association for Safe International Road Travel) said, "When you lose a child, you die. The mourning never stops. The pain is constant. While the emotional toll of loss is horrendous and cannot be quantified, the economic toll on families and governments can be calculated and it is devastating."*

*Source: World Health Organization news release, September 2003*

The impact on the health system is severe. One study done for the Alberta Centre for Injury Control and Research estimated that, in 1997, the direct health care costs of motor vehicle crashes was \$115 million.<sup>10</sup> We can assume that those costs are considerably higher today. More recently, Capital Health assessed the hospitalization costs of a vehicle crash at roughly \$10,000 per bed while at Calgary Health, the costs of emergency and direct inpatient hospital costs related to motor vehicle collisions was estimated at \$13,800 per patient.<sup>11</sup>

Put another way, how much could be saved if concerted action was taken to prevent motor vehicle collisions? A 2002 report for the Alberta Centre for Injury Control and Research estimates that \$1 spent on road safety improvements saves \$3.

*By implementing a prevention strategy based on buckling up, driving sober, slowing down and looking first on the roads, there would be almost 789 fewer hospitalizations, about 1,500 fewer injuries treated outside a hospital setting and about 180 fewer injuries leading to permanent disability. The net savings to the people of Alberta would amount to approximately \$127 million annually.*<sup>12</sup>

Traffic collisions also have a direct impact on Canada's overall health outcomes. A recent study from the Conference Board of Canada compared health outcomes in 24 Organization for Economic Cooperation and Development (OECD) countries and concluded that Canada ranked 15<sup>th</sup> on the impact of "non-medical factors" on health outcomes. One of the key reasons for this relatively low ranking was the high rate of road traffic collisions.<sup>13</sup>

## Attitudes to road safety

In spite of statistics showing not only the serious devastation caused by traffic collisions but also the opportunity for substantial savings if more collisions could be prevented, Albertans' attitudes to road safety are often complacent at best.

Several reports indicate that Albertans rate road safety as an important social issue. At the same time, only about a third of Albertans believe that injuries are fairly preventable while a similar percentage (29%) think that injuries are not preventable or only somewhat preventable. That is in spite of the fact that 96% of Albertans think that collisions are caused by driver error.<sup>14</sup>

Other studies suggest that Albertans resist being told they must do something such as wear their seatbelts or stop at stop signs.<sup>15</sup> As noted above, Alberta's rates of seat belt use are the second lowest in the country. And that is in spite of the fact that 94% of Albertans say that you should always wear a seat belt.<sup>16</sup>

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<sup>10</sup>*The Economic Burden of Unintentional Injury in Alberta*. Prepared for the Alberta Centre for Injury Control and Research by Smartrisk, 2002. p. 3.

<sup>11</sup> Anielski Management Inc. p. 13.

<sup>12</sup> *The Economic Burden of Unintentional Injury in Alberta*, p. 8.

<sup>13</sup> The Conference Board of Canada (2004). *Understanding Health Care Cost Drivers and Escalators*

<sup>14</sup> Anielski Management Inc. p. 26.

<sup>15</sup> Included in a March 15, 2004 submission from Alberta Health and Wellness.

<sup>16</sup> Anielski Management Inc. p. 22 and 26.

Those who see the direct impact of traffic collisions and who work towards raising awareness and preventing injuries and fatalities know that the large majority of collisions can be prevented. “The problem stems from a universal misunderstanding and misuse of the word ‘accident.’ Injuries sustained by falls or motor vehicle collisions are not seen as a result of predictable events but rather to be the result of ‘accidents’ or ‘acts of fate.’”<sup>17</sup> In fact, research shows that is not the case. The vast majority of so-called accidents can be prevented.

An earlier review of Alberta’s Traffic Safety Initiative reinforced concerns about people’s attitudes to road safety. “Most stakeholders believe that the public ‘doesn’t seem to care.’ Driving is seen as a ‘right’ in a free and democratic society, rather than as a privilege. Deaths and injuries due to motor vehicle crashes are viewed as an acceptable risk and the ‘cost of doing business.’ Photo radar traffic fines are perceived by some drivers to be merely a ‘speed tax.’ Overall societal attitudes need to change before any progress will be made.”<sup>18</sup>

Different studies and reports point to differences in views towards road safety among different groups of Albertans. For example, a study prepared for the Alberta Motor Association indicates that “rural drivers tend to have a higher propensity than urban drivers to engage in the driver actions that contribute most substantially to rural collision fatalities including driving without seat belts and driving under the influence of alcohol.” The same report quotes the Alberta RCMP as saying the three main reasons people die in rural collisions are, “they drink and drive, ignore stop signs and don’t use their seat belts.”<sup>19</sup>

*Have you seen this bumper sticker? It says, “Some people just don’t know how to drive. I call these people Everybody But Me.”*

## **Alberta’s Traffic Safety Initiative**

Alberta’s Traffic Safety Initiative was launched in 1996 with four key components: information/awareness, education, standards and enforcement.

A number of important initiatives have been undertaken as part of the Traffic Safety Initiative including:

- Alberta Occupant Restraint Program – including representation from Transportation, Solicitor General, Health and Wellness, and law enforcement agencies and focused on increasing rates of seat belt use
- Alberta Provincial Impaired Driving Committee – responsible for addressing the issue of impaired driving through a combination of education/awareness and enforcement
- Changes to the Traffic Safety Act – consolidated related legislation under a single Act, introduced the new Graduated Driver Licensing program, and introduced significant increases in fines for traffic violations
- Education and awareness strategies – includes a number of campaigns related to child traffic safety, snowmobiles, school buses, bicycles and motorcycles

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<sup>17</sup> The Economic Burden of Unintentional Injury in Alberta. p. 6-7.

<sup>18</sup> Pascoe Management Consulting Inc. Evaluation of the Traffic Safety Initiative – Phase III. p. 11.

<sup>19</sup> Nichols Applied Management. Towards the Development of Evidence-based Rural Collision Reduction Initiatives in Alberta. Prepared for the Alberta Motor Association. May 2003.

- Linkages with other provinces and territories – working with other provinces and territories to examine trends across Canada, share information, and support actions designed to achieve the targets set in Road Safety Vision 2010.

A complete list of all the various initiatives and programs under the Alberta Traffic Safety Initiative is included in Appendix 2.

Three evaluations of the Traffic Safety Initiative have been undertaken in the past four years. Overall, those evaluations expressed concerns about the perceived absence of public profile, pursuit of legislative remedies and the lack of resources for proper enforcement. Those involved in the evaluations indicated that there is considerable fragmentation among various ministries and pointed to the need for greater emphasis on governance structures, processes and accountability. Virtually all the stakeholders involved in the evaluations indicated that the Traffic Safety Initiative was under-resourced relative to the magnitude of this major public health issue. Many indicated that there was no overall plan for addressing road safety in the province.

## Enforcement

Enforcement is a critical component of any effective road safety plan. Investing in well-directed and intelligence-led enforcement activities will ensure safer and more secure communities and, if these investments are made in road safety, they will lead to fewer fatalities and injuries.

*Among the factors which determine whether a driver will offend are the chance of being caught, the chance of being penalized, and to what degree; the social stigma or peer approval attached to offending or getting caught; and any enjoyment derived from the offending behaviour.” (PACTS: Road Traffic Law & Enforcement Summary, p. 6)*

In 2002, Alberta had 157 police officers per 100,000 population, the third lowest level of enforcement resources in Canada. This number is down 8.7% from 1992. And it means that fewer officers are available to enforce traffic safety regulations.<sup>20</sup>

As part of an earlier evaluation of Alberta’s Traffic Safety Initiative, the various police departments involved indicated that the resources available were insufficient to provide any real deterrent to complement information and awareness campaigns. “Traffic safety is seen to be the ‘bottom of the agenda’ for many police forces. It is the first program to be reallocated in reorganizations and downsizings, or where other priorities arise.”<sup>21</sup> In the consultations undertaken as part of this review, representatives of various police departments indicated that, although traffic enforcement is considered a core function of the police, enforcement practices vary, resources are insufficient, and many do not have targeted budgets allocated exclusively to traffic enforcement and prevention activities.

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<sup>20</sup> *ibid*, p. 34.

<sup>21</sup> Pascoe Management Consulting Inc. *Evaluation of the Traffic Safety Initiative – Phase III*. June 9, 2002, p. 12.

Albertans' attitudes towards enforcement are also an issue. A 2001 survey of Alberta drivers<sup>22</sup> indicated that:

- Only 52% of drivers believe photo radar is effective in reducing the number of drivers who speed
- 49% of drivers disagreed that fines are an effective deterrent in reducing speeding
- Only 39% agreed that police should do more to prevent traffic collisions, yet 76% said Alberta's traffic laws should be more strictly enforced.

## Engineering standards for Alberta's roads and highways

Those involved in road safety consistently say that there is more to preventing collisions than simply improving driver behaviour. There needs to be a combination of actions underway, including the way roads are designed, signage, visibility, and the "forgiveness" of roads.

***"We must stop constantly blaming the driver for his or her mistakes and accept that humans are not infallible, that they make mistakes for a variety of reasons, and therefore we must design our highways to be more forgiving, to accommodate these mistakes." Brian Fildes, Monash University, quoted in Highway Safety, Traffic Law Enforcement and Truck Safety, Transportation Research Record No. 1830, 2003.***

Estimates are that the road environment is fully or partially responsible for 30% of collisions in the province. Many of the collisions attributed to driver error could be prevented by improving the environment or making the road environment more forgiving in the case of a crash. This can be done through a variety of measures including improving visibility, adding or adjusting traffic signals, relocating driveways, providing sidewalks, or adding turning lanes.<sup>23</sup>

In Alberta, construction and maintenance of safe roads and highways is a priority, although limited resources have made it difficult to keep pace with growing needs and the increasing volume of traffic. Compared with other jurisdictions, Alberta's system of roads and highways is quite safe. Alberta has taken the lead in promoting advanced safety engineering practice by establishing the requirements for road safety audits and developing national safety review guidelines for rural and urban roads. Work is also underway in several parts of the province to identify existing and potential "black spots" – locations that have a high incidence of collisions.

Alberta Transportation has also recently announced the use of new technologies to improve safety on Highway 2. Intelligent Transportation systems (ITS) technologies include new dynamic, electronic message signs and upgrading of existing signs to provide real-time information to drivers about road conditions, delays and closures, and highway incidents. Road Weather Information System stations will also be established. They will monitor changes in air temperature, atmospheric conditions and pavement temperatures and provide that information to maintenance contractors and travelers. The use of automatic de-icing spraying is also being explored. These are just some examples of how technology combined with engineering standards can be used to improve the safety of Alberta's roads.

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<sup>22</sup> Anielski Management Inc. p. 26.

<sup>23</sup> Anielski Management Inc. p. 30.

## Resources

It is difficult to get an accurate picture of what is currently spent on a variety of road safety related activities across the province.

The Transportation Safety Services Division of Alberta Transportation oversees vehicle and driver safety services, driver licensing standards, road safety information and programs, driver fitness and licence enforcement, impaired driver prevention programs, dangerous goods control, and monitoring of the motor carrier industry and provincial railways. The Division administers over-weight and over-dimension vehicles fees and permits and commercial vehicle inspection stations. Transportation Safety Services also undertakes various educational initiatives aimed at the traveling public, commercial carriers and shippers, pedestrians, schools, and interest groups. The annual budget for these activities is in the range of \$28 million. Of this budget, \$2.4 million is spent directly on the Traffic Safety Initiative.

Other government departments are also involved in safety-related activities as are health authorities, schools, municipalities and a variety of community agencies. It is difficult to estimate the total value of these various initiatives and activities.

As noted earlier, while traffic enforcement is considered a core function of police departments, enforcement practices vary and many do not have targeted budgets allocated exclusively to traffic enforcement and prevention activities.

Revenues are generated through a variety of fines for traffic-related offenses including speeding, seat belt infractions, impaired driving, failing to stop for pedestrians or at stop signs, etc. With changes to the Traffic Safety Act, a number of the fines were increased substantially effective May 1, 2003.

All traffic-related fines imposed as a result of provincial laws are collected by the provincial government. Under Section 162(1) of the *Traffic Safety Act*, subject to subsection (2), any fine or penalty imposed under the Act belongs to the Crown in right of Alberta. Exceptions noted under subsection (2) are as follows:

- (2) Any fine or penalty imposed under this Act in respect of an offence occurring in
  - (a) a municipality that is an urban area, belongs to that municipality
  - (b) a municipal district or Métis settlement, other than on a highway designated as a primary highway pursuant to the Public Highways Development Act, belongs to the municipal district or Métis settlement, and
  - (c) an Indian reserve, other than on a highway designated as a primary highway or a highway designated as a secondary road pursuant to the Public Highways Development Act, belongs to the band.

In the majority of cases, fines collected by the provincial government are returned to municipalities. For example, the city of Calgary received close to \$27.5 million in fine revenues from the provincial government in 2002-03 and the city of Edmonton received \$21.4 million. Smaller municipalities receive correspondingly smaller amounts.

The following table shows the number and amount of fines collected by the provincial government for 2002-03 and 2003-04. While the information does not break out the number of traffic-related offences, it is safe to assume that at least 95% of all fines imposed were directly related to traffic violations.

### Provincial Fine Revenue

	2002-03	2003-04
<b>Number of fines</b>	1,771,522	1,673,583
<b>Total fine revenue</b>	\$107.6 million	\$123.4 million
<b>Disbursement of revenue</b>	\$28.8 million – Province \$78.8 million – Municipalities	\$31.6 million – Province \$91.8 million - Municipalities

In addition to fine revenue, the province also collects a tax on insurance premiums. This tax has been in place since the early 1900's. In 2004/05, the insurance premiums tax (3% of premiums) is expected to raise \$118 million in revenue. All of the money goes to the general revenues of the province. The insurance industry also contributes about \$60 million towards the cost of health care services in the province.

During the consultations, many suggestions were made about the importance of establishing a source of sustainable funding for road safety-related initiatives. Several organizations suggested that a portion of fine revenues should be dedicated towards road safety programs while others suggested that a portion of gasoline taxes, alcohol taxes, insurance premiums taxes, etc. should be used to support initiatives to improve road safety in the province, including enforcement. A review of best practices in other jurisdictions around the world also reinforced the need for a sustainable source of funding.

It's fair to say that, whatever the source of revenues, people consistently said that not enough resources are dedicated to all aspects of road safety from education and awareness to enforcement and road safety design.

### Road Safety Vision 2010

Road Safety Vision 2010 is Canada's national road safety plan. However, it is the responsibility of each of the provinces, territories and local governments to conduct their own comprehensive programs. In Alberta, the responsibility for road authority is outlined under Section 1(mm) of the Traffic Safety Act. Additionally, under Section 3(c) of the Municipal Government Act, it is the responsibility of each municipal authority to develop and maintain safe and viable communities.

Road Safety Vision 2010 was adopted by the Canadian Council of Motor Transport Administrators. It has been endorsed by all levels of government as well as several key public and private sector partners and law enforcement agencies across the country.

Road Safety Vision 2010 has a goal of making Canada's roads the safest in the world. It sets an overall target of a 30% decrease in the average number of road users killed or seriously injured during the 2008-2010 period compared with 1996-2001 averages. In addition, it sets the following specific targets:

- A 95% rate of seat belt wearing and proper use of appropriate child restraints by all motor vehicle occupants



- A 40% decrease in the number of fatally or seriously injured unbelted occupants
- A 40% decrease in the percentage of road users fatally or seriously injured in crashes involving drinking drivers
- A 40% decrease in the number of road users fatally or seriously injured on rural roadways
- A 20% decrease in the number of road users killed or seriously injured in speed- or intersection-related crashes
- A 20% decrease in the number of young drivers/riders (aged 16-19) killed or seriously injured in crashes
- A 30% decrease in the number of fatally or seriously injured vulnerable road users (pedestrians, motorcyclists and cyclists)
- A 20% decrease in the number of road users fatally or seriously injured in crashes involving high-risk drivers.

Alberta has endorsed Road Safety Vision 2010 and its targets, but no specific strategies have been developed to ensure that the targets can be met. In fact, several participants in this review noted that it will be difficult, if not impossible, to reach the targets in Alberta if the status quo is continued. As an example, meeting the targets in Alberta would mean:

- 47 fewer deaths and 226 fewer injuries every year due to people not using their seatbelts
- 42 fewer deaths and 247 fewer injuries due to crashes involving impaired drivers
- 117 fewer deaths and 649 fewer injuries in crashes in rural Alberta.

## Learning from best practices around the world

Alberta certainly is not alone in seeking effective ways for improving road safety, and there is much to be learned from other jurisdictions around the world. Several reports highlight approaches taken in countries such as Great Britain, Sweden, the Netherlands, New Zealand, and Australia (particularly the State of Victoria). Great Britain has the best overall record of traffic fatalities per billion kilometres driven, followed by Sweden and the Netherlands.

The following are some highlights of what can be learned from the approaches taken in these selected examples.

- Great Britain, Sweden and the Netherlands have:
  - Adopted quantitative targets for reducing traffic fatalities and injuries within a defined time line
  - Achieved similar levels of safety through continuing to focus on planned improvements
  - Made progress through targeted policies in three areas: vehicle, road, and road users
  - Integrated the road safety plan in the road transport plan
  - Decentralized responsibilities for the national road safety plan to regional and local authorities with some central financial support
  - Viewed road traffic deaths and injuries as mostly avoidable through road safety measures that have affordable costs and are known to be effective.<sup>24</sup>

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<sup>24</sup> Anielski Management Inc. p. 39

- Great Britain has set up a year-round road safety public awareness campaign called THINK. It focuses on child safety, vulnerable road users, drinking and driving, seat belt use, teenage drivers, and speed reductions. One of its primary benefits is that it raises awareness of a number of road safety-related issues under a single umbrella and maximizes the impact of the message.<sup>25</sup>
- Sweden has established a long-term goal that no one will be killed or seriously injured in traffic crashes. Called Vision Zero, their plan focuses on special safety measures for the most dangerous roads and safer traffic movement in built-up areas, safer cycling conditions, and compulsory use of studded winter tires. It also places greater responsibility on road design and the development of alternative forms of financing for new roads.<sup>26</sup>
- The Netherlands' plan is a coordinated one that involves sharing of costs and responsibilities among the national, provincial and municipal governments as well as the private sector. Targets are set at all three levels of government. Activities under the plan include coordinated efforts to modify road user behaviour, improve infrastructure, improve driver training, enhance enforcement, and reinforce a "safety culture."<sup>27</sup>
- Australia also has a national plan for reducing traffic fatalities and injuries. It focuses on proven measures such as reducing the incidence of drinking and driving, improving compliance with speed limits, and increasing seat belt and child restraint use. Steps are also being taken to match speed limits to road conditions, address driver fatigue, and encourage the use of in-vehicle intelligent transportation systems.<sup>28</sup>
- The state of Victoria, Australia has achieved significant reductions in collisions, fatalities and injuries through a combination of aggressive enforcement and a hard-hitting campaign against drinking and driving and speeding. With annual investments of \$12 - \$20 million in the late 1980s, they were able to achieve a 49% reduction in collisions, 54% reduction in fatalities, 40% reduction in hospitalizations, and \$2 billion in savings in societal costs. Despite the initial success of the plan, the fatality rate began to increase again in the 1990s. As a result, a renewed road safety program was launched in 2002 with a target of reducing fatalities and serious injuries by 20% by 2007.

The Global Road Safety Partnership has undertaken a comprehensive review of road safety management in selected countries around the world.<sup>29</sup> The review highlights critical components that should be in place for successful road safety programs including clearly defined leadership, active participation of key stakeholders, a well-resourced road safety central office, a sustainable budget, and targeted plans at the country, state/province, and local levels. Highlights of the findings of this study are included in Appendix 3.

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<sup>25</sup> Road Safety Vision 2010 – Annual Report 2002, p. 6.

<sup>26</sup> Ibid

<sup>27</sup> Ibid

<sup>28</sup> Ibid

<sup>29</sup> *Review of road safety management practice – Final Report*. Available from the Global Road Safety Partnership web site at [www.grsproadsafety.org](http://www.grsproadsafety.org).

# Stakeholders give their advice on road safety in Alberta

## Addressing key questions

One of the key aspects of this review involved listening to the views of stakeholders involved in road safety across the province. Organizations and individuals were invited to provide written submissions and meetings were also held with representatives of several organizations. A list of submissions and meetings with organizations is included in Appendix 1.

To provide a framework for the consultations, people were asked to respond to the following key questions:

1. What are the major obstacles to improving the safety of Alberta's roads? Where are there gaps in programs or actions to reduce Alberta's collision rates?
2. What is working well in Alberta in terms of reducing collisions, injuries and fatalities? What programs or initiatives have proven to be successful and should be continued or expanded?
3. What specific actions should be taken to improve Alberta's collision rate and reduce the number of collisions, injuries and fatalities? What are the most important priorities?
4. What mechanisms or structures should be put in place to ensure that key stakeholders can work together to improve road safety on an ongoing basis? Who should be involved? What role would your organization be prepared to play?
5. Should Alberta set targets similar to those established in Road Safety Vision 2010 and what should they be?

## Highlights of responses

### What are the major obstacles?

Consistently we heard that the major obstacle is the lack of overall leadership and the absence of a consistent and concerted plan for addressing and improving road safety across the province. Initiatives undertaken to date are not well coordinated and often run at cross-purposes. As a result, the overall approach to road safety in the province is fragmented.

Concerns were also expressed about the lack of resources for road safety initiatives in general, the need for timely, comprehensive information and research to guide decisions and evaluate what is working well and what isn't, and inconsistencies and insufficient resources for enforcement.

As noted earlier in this report, the resources available for Alberta Transportation's Traffic Safety Initiative, including the current staffing complement, are perceived by virtually all stakeholders to be significantly under resourced. This concern was expressed in earlier evaluations of the Traffic Safety Initiative and remains a concern among many stakeholders that participated in this review.

Others pointed to concerns with driver attitude and the apparent low priority that is placed on road safety and preventing traffic collisions. At the same time, several respondents pointed to the need for a comprehensive approach focusing not just on driver attitudes but also on the multitude of factors that influence and can improve road safety including enforcement, engineering,

legislation, standards, and social policy. A number of concerns were raised about the quality of driver education and the need for better monitoring of driver examiners.

With increasing fines, concerns were raised about corresponding increases in the number of people willing to plead not guilty and take their case to court. While it is too soon to assess the impact, we frequently heard stories about plea bargains to reduce fines and demerits and the reluctance of the courts to impose the full penalties available under the law.

## What is working well?

The majority of respondents identified programs such as Check Stops, seat belt awareness and enforcement initiatives coordinated through the Alberta Occupant Restraint Program, STEP (Selective Traffic Enforcement Program) involving the RCMP, and specific campaigns such as the PARTY program or Think, Think Again. Awareness and education initiatives related to drinking and driving were also noted as examples of success stories. Others pointed to the AMA's Mission Possible campaign. Positive comments were made about the Graduated Licensing Program, although many pointed to areas where the program should be strengthened. At the local community level, a number of very positive initiatives are underway involving community partnerships working together on a cooperative and coordinated approach. Increased fines and the use of technology such as red light cameras and photo radar when it is tied directly to improving road safety, were also identified as positive steps.

At the same time, many respondents indicated that there was insufficient information available to be able to assess what initiatives are working well and which ones are not. Too often, programs are based on common sense or what seems right rather than sound evidence and research. There also was very low awareness of the range of programs provided through Alberta's Traffic Safety Initiative.

## What should be done?

Overall, respondents said that the province should take a strong leadership role and work with key stakeholders to establish a road safety plan for Alberta. They said there should be better coordination through some type of cross-ministry initiative involving a number of ministries including Alberta Transportation, Alberta Solicitor General, Alberta Health and Wellness, and Alberta Justice. The approach should be a comprehensive one that addresses not only education and awareness but also enforcement, engineering, legislation and standards, and related policies. Municipalities, health regions, local law enforcement agencies, schools, and community agencies should be involved in developing their own community plans under the umbrella of an overall province-wide plan. They called for more research to identify trends and the leading causes of collisions. This information should be used to identify priorities and guide policy decisions. They also indicated the need for better mechanisms for reporting, sharing and using information.

In addition to those overall directions, a wide range of specific suggestions were made including recommendations to introduce demerit points for seatbelt infractions, implement stricter impaired driving rules and more enforcement, make driver education mandatory and closely monitor driver examinations, expand the requirements of the Graduated Driving Licence program, require farm

vehicles to meet the same safety standards as commercial vehicles when they are on roads and highways, etc. Highlights of these suggestions are included in Appendix 4.

### What mechanisms should be in place?

The vast majority of respondents indicated that the province should take the lead in setting up a coordinated mechanism for planning road safety initiatives in the province. Most indicated that Alberta Transportation should take the lead but that there should be a partnership with the Solicitor General, Health and Wellness, Justice and other key ministries.

While there was some support for an arms length mechanism (such as a delegated administrative organization or a road safety commission) most agreed that a government-led organization would be more effective in ensuring both accountability and an ongoing commitment of resources.

Many suggested that their organization would be willing to participate actively in developing plans at either the provincial or the local level. There was a clear message that, while the province should coordinate an umbrella provincial plan, stakeholders should be actively involved in that process and the delivery of programs should occur at the local level as part of community-based plans and initiatives.

### Should specific targets be set?

Respondents strongly supported the need for specific targets to be set and most indicated that those targets should be consistent with Road Safety Vision 2010. Caution was expressed, however, that the targets should be specific to Alberta, should address the pressing problems in road safety in Alberta, and should be realistic and achievable. As noted earlier, several said that it is highly unlikely that Alberta could achieve the targets in Road Safety Vision 2010 without a deliberate strategy and concerted actions across the province.

## Conclusions and recommendations for improving road safety in Alberta

Alberta is not alone in facing the serious and tragic problem of deaths and injuries on our roads. As noted in the World Health Organization's 2004 World Report on Road Traffic Injury Prevention:

*Road traffic crashes occur on all continents, in every country in the world. Every year they take the lives of more than a million people and incapacitate many millions more. ... Despite the growing burden of road traffic injuries, road safety has received insufficient attention at both the international and national levels. The reasons include lack of general awareness and specific information on the scale of the problem, in the health, the social and economic costs of road traffic crashes, and on the interventions that can prevent crashes or reduce the harm they cause. Another reason is that the problem of road traffic crashes and injuries does not "belong" to any specific agency, either at the national or international levels. Instead the responsibility for dealing with the various aspects of the problem – including the design of vehicles, the design of road networks and roads, urban and rural planning, the introduction and enforcement of road safety legislation, and care and treatment of crash victims – is divided among many different sectors and groups. There has usually been no leader to ensure*

*that they coordinate their efforts and address the problem as a whole. In this environment, it is not surprising that political will has frequently been lacking to develop and implement effective road safety policies and programmes. (p. 37)*

Based on an assessment of the current situation in Alberta, a review of best practices around the world, and the key messages from various stakeholders in road safety in the province, several things are abundantly clear.

- Alberta needs a decisive and deliberate plan for improving road safety in the province.
- We need proactive, coordinated leadership from the provincial government.
- Communities need to be actively engaged in identifying their own priorities and developing their own programs and initiatives consistent with a province-wide plan.
- There needs to be a comprehensive approach taken with clear links among education and awareness, enforcement, engineering, legislation and standards, and social policy areas.
- Individual Albertans need to take more responsibility for their own driving behaviour and to understand that the vast majority of so-called ‘accidents’ can be prevented.

In the time available for this review, it simply was not possible to assess each of the specific detailed suggestions and decide whether or not they should be included in a road safety plan for the province. For example, many people called for specific changes such as demerit points for seatbelt infractions, new licensing requirements, safety standards for farm vehicles, or re-testing of drivers with bad driving records. Each of these ideas may have merit, but they should not be considered in isolation or without an assessment of the impact they would have as part of an overall plan.

Similarly, although the review called for an assessment of Alberta’s Traffic Safety Initiative, specific information is not available to enable a thorough evaluation of each of the various programs against specific objectives, goals and targets. A number of the campaigns were well received by those who participated in this review but there also is very little awareness of many of the programs and little information that would allow the programs to be linked directly to specific outcomes such as reductions in the number of collisions, fatalities or injuries.

Consequently, the following recommendations focus primarily on “how” rather than “what” should be done to improve road safety in the province. With an effective process and leadership from the province, the active involvement of stakeholders, adequate resources, a clear plan and measurable targets in place, Alberta has an opportunity to be a leader in road safety. We have an opportunity to save millions of dollars in costs to the health care system every year. We can help reduce escalating insurance costs. And most important, we have an opportunity to save hundreds of lives every year.

### **Recommendation 1:**

**Establish a provincial mechanism to provide leadership, direction, coordination and evaluation of road safety programs in Alberta.**

Leadership, commitment and accountability have to come from the top. A review of best practices and lessons learned from other jurisdictions suggests that the most effective approaches involve leadership from governments. This approach was also supported by the majority of stakeholders involved in the consultations as part of this review.

Several options for a provincial mechanism could be considered including:

- Delegating responsibility to a single ministry – This would establish clear lines of responsibility and accountability. Many participants in the review suggested that Alberta Transportation must have a lead role. Partnerships would be required with other ministries involved in related issues. The primary disadvantage is the lack of a clear link with the enforcement side of road safety issues.
- Establishing an arms-length body or commission – As noted earlier, this approach has some advantages in terms of profile but the disadvantages are that there is less accountability and less ability to have a direct influence on policy, legislation, and funding.
- Establishing a type of cross-ministry initiative – The provincial government has a number of cross-ministry initiatives that operate primarily at the Deputy Minister and ministry staff levels. Given the importance of road safety issues, a cross-ministry approach is critical, but it should be in place at the Ministerial level.

The following specific approaches are recommended:

- Establish a Ministerial leadership committee co-chaired by the Minister of Transportation, the Solicitor General and the Minister of Justice and Attorney General and involving the Minister of Health and Wellness, the Minister of Aboriginal Affairs and Northern Development, and other Ministers as necessary.
- Establish a Deputy Ministers' committee responsible for coordinating and implementing provincial responsibilities for road safety.
- Establish a multi-sector advisory group with representatives from all the major stakeholders to provide regular input and advice to deputy ministers and to assist in developing a province-wide road safety plan.
- Establish a single office for road safety with adequate resources and support. This likely is best placed in Alberta Transportation but should draw on resources from other ministries as well.
- Establish a series of working and technical committees to address specific components of a road safety plan for the province. This could include working groups responsible for addressing enforcement issues, the use of technology, education and awareness programs, research and information, commercial trucking, etc. As recommended by the international study done for the Global Road Safety Partnership, people who serve on the various working and technical committees should be those who are actively involved in road safety and who have the best expertise and knowledge to bring to the table.

## **Recommendation 2:**

**Develop and implement a comprehensive road safety plan for Alberta with clearly defined objectives, strategies and work plans tailored to meet provincial and local needs.**

Throughout the review, we consistently heard that the current approaches to road safety in the province are fragmented and while there are many good initiatives in place and effective programs at the community level, there is no consistent overall plan in place. Experience from countries that are leaders in road safety reinforces the need for a comprehensive umbrella plan complemented by specific, local plans and initiatives.

To be effective, key stakeholders should be actively involved in developing an umbrella plan for the province. A number of different approaches could be used to achieve this objective as long as the people and organizations involved are those with direct experience and responsibility for road safety-related initiatives. Consultation with the groups involved in this review process would allow many of the specific issues and suggestions raised by those groups to be addressed as part of a comprehensive plan.

*“The key to successful prevention lies in the commitment of all relevant sectors, public and private – health, transport, education, finance, police, legislators, manufacturers, foundations and the media – to make road safety happen.” United Nations Secretary General Kofi Annan, World Health Day, April 7, 2004*

The province-wide plan should take a comprehensive approach focusing on all of the key components necessary to produce positive results and reduce traffic collisions, injuries and fatalities. That includes education and awareness, enforcement, engineering, legislation and standards. Several reports emphasize the fact that concentrating on any one area alone will not produce the best results. A combination of strategies and actions need to be undertaken and clear linkages need to be established among the various components of a comprehensive plan. The plan should be linked to research and information about the current situation in Alberta. It should set priorities based on what we know today. And results should be carefully monitored and tracked on an ongoing basis.

The plan should also identify responsibilities and accountability. One of the concerns with the current approach is the lack of clear responsibility and accountability and the number of “disconnects” between different areas involved in improving road safety. The plan should also be directly linked to the proposed Injury Control Strategy for Alberta.

The provincial plan should not supersede the need for locally-driven plans and programs. In fact, experience from leading countries and here in Alberta suggests that locally-driven initiatives can be most effective in addressing specific problems in communities. Municipalities, law enforcement agencies, health authorities, schools, community organizations and other key partners should be encouraged to develop their own local road safety plans consistent with the overall direction set by a province-wide umbrella plan.

There are several good examples where stakeholders are actively working together at the local level to focus on road safety. The Edmonton Approach, for example, brought together representatives from more than 65 organizations from across the province. As a result, many ideas were discussed dealing with education, enforcement, legislation, coordination and leadership, engineering, positive and negative reinforcement, funding, research and evaluation. Similarly, the RCMP is working with agencies in a variety of communities and, in other cases, police services and stakeholders are dedicating the same kind of attention to road safety issues and demonstrating a willingness to work together to develop strategic plans for their communities.



## Key Features of Effective Road Safety Planning

### Content

- Coordination of national, provincial, and local plans
- Key components:
  - Time frame
  - Structure
  - Responsibilities
  - Target dates
  - Costs
  - Funding source
  - Performance indicators (e.g. casualty reduction plus other action-related indicators)

### Development

- Who is the lead organization?
- What support is provided?
- Who is involved in consultations?

### Approval

- Who is the lead organization?
- Who are the implementing agencies and what approvals do they provide?

### Implementation

- Who is responsible for what components of the plan?
- How will progress be monitored and by whom?
- Are resources sufficient and, if not, how can investment be increased?

### Accountability

- Who is accountable if targets are not met?
- How will changes be made to the plan on an ongoing basis?

### Recommendation 3:

**Establish a sustainable source of ongoing funding for road safety initiatives in the province.**

The lack of sufficient, targeted resources for road safety initiatives is a consistent concern. That applies not only at the provincial government level but also to enforcement, to community partnerships, and to a variety of organizations involved in road safety.

Several suggestions were made about funding road safety plans and initiatives through dedicated taxes. Many of the stakeholders suggested that a portion of traffic fine revenues should be dedicated to road safety initiatives because of the link between enforcement and road safety. Others suggested using a portion of the insurance premiums tax, taxes on alcohol, licensing fees, or motor vehicle registrations. With few exceptions, Alberta does not have dedicated taxes.

In other countries, funding has been provided through a combination of sources including general tax revenues, specific taxes (usually traffic fines) earmarked to support spending on road safety, levies added

to insurance premiums, road funds derived from road user charges, and sponsorship by private businesses. Because road safety is typically viewed as a public sector responsibility, funding from government general revenues is the most common approach although, in most cases, the funding is dispersed among a number of different ministries and governments.

As noted earlier in this report, Alberta Transportation currently spends about \$2.4 million specifically on specific road safety initiatives. Revenue collected from a combination of insurance premiums tax and traffic fines amounts to in excess of \$130 million. While it is difficult to estimate what the cost of an overall province-wide road safety plan would be, experience from the State of Victoria with a slightly higher population than Alberta's showed that an investment of \$20 million produced significant results in reducing collisions, fatalities and hospitalizations.

It is recommended that one of the first steps in developing a province-wide road safety plan is to develop a business case, to identify the priorities and costs, and to establish an ongoing sustainable source of funding for road safety initiatives. Consideration should also be given to involving the private sector in funding road safety plans and initiatives. A portion of the funds allocated for road safety initiatives should go to local municipalities and communities to assist in implementing local programs and activities.

#### **Recommendation 4:**

**Expand research and the availability of comprehensive, timely information about road safety in the province.**

While a lot of data is collected about collisions, we consistently heard that there is limited ability to link data from different sources, there are inconsistencies in data, and there are limited resources available to analyze the data and use it effectively. Concerns were expressed about the need to update the collision report form. Specific recommendations included the need for an integrated collision reporting system and a rural Alberta collision information system to track information specific to collisions in rural communities.

Research is also a key concern. With limited resources, the priority is to implement programs rather than to assess their effectiveness. Research is neither available nor consistently used to evaluate programs or to make decisions on priorities. More could be done to build on the expertise and information currently available within Alberta Transportation. Alberta's Centre for Injury Control and Research is in an ideal position to work with Alberta Transportation and with other stakeholders on targeted research on road safety issues in the province. Alberta's universities, including the Road Safety Chair at the University of Calgary, also have an important role to play in expanding research on various road safety issues.

As part of the overall plan for road safety in the province:

- A new collision reporting system should be established and augmented by electronic collection of information. The collision report form should be revised, building on work already underway across Canada on a national collision report form.
- Steps should be taken to coordinate information and ensure that different stakeholders can access and use the information they need
- Dedicated research funding should be provided
- Assistance should be available to community-led partnerships to help with evaluating the outcomes of their programs.

### **Recommendation 5:**

**Establish specific targets consistent with Road Safety Vision 2010 and report regularly on progress in achieving those targets.**

There was widespread support for establishing Alberta-based targets consistent with the targets outlined in Road Safety Vision 2010. The targets should be established as part of the overall province-wide plan. They should reflect specific road safety-related issues in Alberta and encompass targets that have been set by Alberta Health and Wellness as part of their Framework for a Healthy Alberta. The targets should be considered as starting points with the goal being the safest roads in Canada and the world. Annual reports should be made on the progress achieved in meeting each of the targets. Monitoring and reporting progress on specific targets underscores the importance of having a comprehensive collision reporting system and better information in place.

### **Recommendation 6:**

**Engage Aboriginal leaders and elders in the development of targeted strategies to reduce the rates of collisions, injuries and fatalities among Aboriginal people.**

As noted earlier in this report, traffic collisions are a primary cause of injury and death among Aboriginal people. Some initial work has been done through the Aboriginal Traffic Safety Summit held in Edmonton in March 2003. Important priorities were identified during the Summit including increasing use of seat belts, increasing the use of child safety seats, and reducing impaired (alcohol/substance abuse) driving.

In addition, there needs to be a clearer understanding that traffic safety laws apply on reserves as well as off reserves. Increased enforcement is also key as is greater awareness of how injuries and fatalities can be prevented. The critical component is strong leadership from Aboriginal leaders and targeted strategies developed by and for Aboriginal communities.

### **Recommendation 7:**

**Take advantage of advances in technology provided the objectives are directly related to improving road safety.**

Currently, Alberta is not making optimal use of technology to assist in improving road safety and in traffic enforcement. For example, hand held devices have been developed that would allow police officers to automatically record details of collisions and to immediately access driver information. But these are only being used on a pilot basis in Alberta. Red light cameras and photo radar can also be used to detect other traffic offenses.

New developments in technology should be used to supplement, rather than replace, current enforcement practices. The key is that there needs to be a clear link between the use of technology and road safety objectives. Examples of technology that should be considered include:

- Expanded use of breath alcohol ignition interlock devices
- Use of roadside cameras
- In-car video technology (VICS)
- Tachographs (on board devices used to record distance travelled, speed, rpms, stops, etc.; generally used in commercial and emergency vehicles)
- Vehicle data recorders (black boxes)

- Police roadside access to information
- Smart licences, to take full advantage of the capability this new technology provides to track information about drivers.

Photo radar also has an important role to play in places where it is unsafe to try to stop vehicles or where there are high rates of collisions. Unfortunately, there are inconsistencies across the province in why photo radar is used, how it was introduced, the levels of public information and awareness, how it is administered, and how results are monitored and reported. Since 1999, guidelines have been in place for the use of photo radar but there has been no independent analysis of whether the key objectives of reducing traffic collisions and ensuring officer safety have been met. As a November 2002 report on photo radar concluded, “The controversy surrounding photo radar still seems to be the manner in which it is used with regard to the aspect of consistency and fairness, and the optics of it being used to generate revenue rather than manage speed, reduce collisions and enhance public and officer safety.”<sup>30</sup>

In terms of the use of photo radar on provincial highways, the MLA Policing Review Committee recommended that: “... in order to enhance highway enforcement, and motorist and officer safety, the provincial police [should] be authorized to use photo enforcement on selected problem highways and school and construction zones. The use must be subject to provincial guidelines, and should be conducted in consultation with other government departments. There must be no reduction in the number of police officers presently assigned to the highway patrols.” To date, that recommendation has not been endorsed by the provincial government.

### **Recommendation 8:**

**Ensure that adequate resources are available to provide effective enforcement on Alberta’s roads and highways.**

As outlined earlier in this report, ensuring proper and adequate road safety is the responsibility of either the provincial government or local municipalities, depending on which order of government acts as the road authority. For roads that come under provincial jurisdiction (including all provincial highways), there is a shared responsibility between Alberta Transportation and Alberta Solicitor General. Currently, enforcement responsibilities on provincial roads are provided by the Police Service Traffic Section of the RCMP while a number of branches from Alberta Transportation Safety Services provide safety and inspection services.

Municipalities are responsible for roads within their jurisdiction. A number of urban municipalities, municipal districts and counties employ Special Constables with designated authority to enforce moving vehicle violations within their territorial boundaries under the Alberta’s *Traffic Safety Act*.

In discussions with police agencies, it was their view that sufficient resources are not dedicated to traffic enforcement. If additional resources are not provided, in their view, it will be impossible to meet the challenge of Road Safety Vision 2010. The RCMP have recently completed a traffic safety plan and a Resource Study and determined that 84 positions should be added to Traffic Services Units throughout the province.

<sup>30</sup> *Photo Radar in the Province of Alberta. Report to the Deputy Solicitor General prepared by Don McDermid, November 29, 2002.*

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To ensure that there are adequate resources to provide effective enforcement, each jurisdiction with responsibility for road safety should review its needs and determine, in consultation with the provincial government, whether those needs will be met with regular sworn police officers, or if there is a requirement to supplement with Special Constables, in which case the role of Special Constables should be reviewed and clearly defined.

**Recommendation 9:  
Undertake a thorough review of current driver education and driver examinations in the province.**

Several concerns were expressed primarily related to driver examinations. In Alberta, driver examinations are conducted by private driver examiners licensed by the provincial government. A recent Auditor General's report expressed concern about the lack of sufficient monitoring of driver examiners and whether or not they were meeting standards set by Alberta Transportation. Those concerns were echoed by several groups during the consultations.

Concerns were also expressed about driver education in general and several groups suggested that driver education should be mandatory. Others said that there was little consistency in standards among driving schools and that beginning drivers were not necessarily well prepared for treacherous driving conditions or how to respond when something unexpected happens. As one person said, there is a lot of emphasis on being able to parallel park, and yet no one has ever died trying to parallel park! At the same time, there were a number of positive comments about Alberta's new Graduated Driver Licensing program.

A review of current driver education and examinations should be done before any consideration is giving to re-testing or to making driver education mandatory. During the review, there was considerable attention to the idea of mandatory re-testing for all drivers. While some organizations supported re-testing, the majority said we should do a better job of preparing beginning drivers and should only re-test where a good case can be made based on a person's driving record.

## Appendix 1

### Submissions and consultations

#### Written submissions received from:

Alberta Aboriginal Affairs and Northern Development  
Alberta Alcohol and Drug Abuse Commission  
Alberta Association of Chiefs of Police  
Alberta Association of Municipal Districts and Counties  
Alberta Centre for Injury Control and Research  
Alberta Energy and Utilities Board  
Alberta Forest Products Association  
Alberta Government Services  
Alberta Health and Wellness  
Alberta Justice and Attorney General  
Alberta Learning  
Alberta Motor Association  
Alberta Municipal Affairs  
Alberta Special Constables Association  
Alberta Seniors  
Alberta Solicitor General  
Alberta Transportation  
Calgary Health Region  
Calgary Police Service  
Canadian Petroleum Safety Council  
Capital Health  
Chinook Regional Health Authority  
City of Calgary  
CRISP (Capital Region Intersection Safety Program)  
David Thompson Regional Health Authority  
East Central Health  
Hamilton-Finn  
Motor Dealers Association  
Northern Lights Health Region  
Palliser Health Region  
Road Safety Consultants Inc.  
Royal Canadian Mounted Police

In addition, several submissions were received from interested members of the public.

#### Meetings with representatives from the following stakeholders:

Alberta Aboriginal Affairs and Northern Development  
Aboriginal Policing  
Alberta Agriculture, Food and Rural Development  
Alberta Association of Chiefs of Police  
Alberta Association of Municipal Districts and Counties

Alberta Centre for Injury Control and Research  
Alberta Energy and Utilities Board  
Alberta Government Services  
Alberta Health and Wellness  
Alberta Learning  
Alberta Justice and Attorney General  
Alberta Motor Association  
Alberta Motor Transport Association  
Alberta School Bus Safety Committee  
Alberta Special Constable Association  
Alberta Solicitor General  
Alberta Transportation  
Calgary Health Region  
Calgary Police Service  
Capital Health  
Centre for Transportation Engineering and Planning  
City of Calgary  
CRISP (Capital Region Intersection Safety Program)  
DriveAble  
ECS Safety Services  
Edmonton Police Service  
Health Canada  
Insurance Bureau of Canada  
Mothers Against Drunk Driving  
Pacific Railway Police Service  
Royal Canadian Mounted Police  
Sim-Drive Canada  
Students Against Drinking and Driving

## **Appendix 2**

### **Alberta's Traffic Safety Initiative**

#### **Commercial Vehicles**

- Professional Driver's Handbook
- Truck speed brochure
- Saferoads.com web site
  - Truck (commercial vehicle) safety
  - Partners in Compliance
  - Air brakes
  - Sharing the road

#### **Vehicle Leasing Program**

- Vans leased by Alberta Transportation to assist police in Edmonton, Calgary and the RCMP in delivery of safety programs

## Helmet and Bicycle Safety

- “No helmet. No bike.” brochure
- “Safe Cycling Checklist” brochure
- Bicycle safety committee
- Saferoads.com web site
  - Driving near bicycles
  - Host a bicycle rodeo
  - Safe cycling checklist
  - Ride-right safety videos

## Motorcycle Safety

- “Live to Ride” motorcycle awareness brochure
- “Live to Ride” motorcycle safety posters
- Motorcycle safety committee
- Saferoads.com web site
  - Motorcycle checklist
  - Motorcycle helmet information

## Impaired Driving

- Provincial Impaired Driving Committee
- “Your number is up” impaired driving campaign posters and billboard campaign (Calgary, Edmonton, Medicine Hat, Lethbridge, and RCMP)
- Post-card consequences (“Dan thought about going to college ...”)
- Joint forces Checkstops
- Radio and TV commercials
- Saferoads.com web site
  - Impaired driving enforcement
  - Alberta Administrative Licence Suspension Statistics
  - The Checkstop program
  - Impaired driving facts
  - Impaired driving statistics
  - Designated drivers
  - Hosting safe parties

## Child Traffic Safety

- Walk the Talk
  - Bicyclist
  - In-line skater
  - Skateboarder
  - Pedestrian
  - School bus rider
  - Planning a Walk the Talk event
- Kinetic Kids Workbook
  - Grades K to 1, 2 to 3, and 4 to 6



- Saferoads.com web site
  - Just for kids (Grades K to 3)
  - Kids in Grades 4 to 6
  - Tips for educators

### **Child Safety (car) Seats**

- Part of Albert Occupant Restraint Program (AORP) Steering Committee
- Child Safety Seat brochure
- Instructors for St. John Ambulance “Child Restraint Systems” program
- Instruction to police, fire, emergency, health and retail personnel
- Assist in local/regional child seat inspection clinics
- Assist police in child restraint enforcement programs

### **Occupant restraints**

- AORP manual
- AORP media kit
- AORP posters
- Radio commercials
- Saferoads.com web site
  - Radio spots
  - Child Safety Seat brochure
  - Seat belts

### **School Bus Safety**

- School bus safety committee
- Safety tips bookmark
- School Bus Safety Rules brochure
- School Bus Driver’s Guide (handbook)
- School Bus Driver’s Checklist (booklet)
- School Bus Driver Improvement Program (“S” endorsement program)
- Saferoads.com web site
  - Inspections
  - Facts

### **Off-Highway Vehicles**

- Safety Goes a Long Way – pocket guide to snowmobile safety
- ATV brochure
- Snowmobile safety task group
- Saferoads.com web site
  - Snowmobile fact sheet
  - Code of ethics
  - Snowmobiling hand signals
  - Sledding in emergency situations
  - Snowmobiling and the law
  - Towing your sled
  - Snowmobile safety guide

## General Traffic Safety

- Basic Driver's Licence Handbook
- Professional driver's handbook
- Motorcycle rider's handbook
- Geared to Go – A Workbook for Coaching New Drivers
- Collision Prime Time radio spots
- Saferoad reminders brochure
- New Rules for New Drivers brochure
- New Rules for New Riders brochure
- Links with other jurisdictions through CCMTA/Road Safety Vision 2010
- Saferoads.com web site
  - Graduated driver licensing
  - Road construction safety
  - Rules of the road
  - Visitors driving in Canada
  - Enforcement
  - Driving on winter roads
  - Recreational vehicles
  - Written-off or salvaged vehicles

## Appendix 3 Highlights of Global Road Safety Partnership Report

### On road safety organization:

- Lead responsibility for road safety should be defined and should include a coordinating role.
- A good working relationship is needed between traffic police and roads authorities.
- Multi-sector coordination should be based on successful initiatives undertaken to date.
- Working groups and technical committees should be used to develop road safety policy.
- Those involved in the various committees should be committed and proactive in their approach.
- A road safety central office is needed regardless of the organizational model used and adequate financial and technical resources must be provided.

### On road safety plans:

- The first step should be to determine the budget and how much will be allocated to various sectors and organizations.
- A key priority should be to develop sustainable funding sources.
- Road safety plans should include the work programs of key implementing organizations and should not be sector based or have diffused responsibility.
- Local staff should take the lead role in developing plans based on what has worked effectively.
- Technical assistance should be focused on helping with local development not producing the plan.
- Sector working groups should be developed to ensure that the perspectives of vested interest groups are considered.
- The first plans should be targeted to a limited number of actions and organizations and should include short-term, low or no cost actions.
- Post-crash interventions such as trauma management should be included in the overall road safety plans.

- Greater priority needs to be placed on monitoring performance indicators.
- Local plans should be developed independently.
- Annual work plans should be developed and include quarterly monitoring.
- Donors should provide seed money for implementing the plan and technical assistance.

#### **On funding:**

- Funding should be considered as important as other technical aspects including enforcement and engineering.
- Governments should assume responsibility for road safety funding and ensure that ministry budgets include road safety financing.
- Road maintenance budgets and road funds should include a budget for hazardous location treatment.
- Road user charges should be used to provide a regular and dedicated funding source.
- A proportion of traffic fines should be allocated to traffic law enforcement for road casualty reduction activities only.
- Road Safety Funds should be established for those activities that are not the direct responsibility of a ministry.

## **Appendix 4**

### **Highlights of Specific Changes Suggested in Consultations**

#### **On seat belts:**

- Introduce demerit points for seat belt infractions
- Levy a special charge at hospital for people who were injured and weren't wearing a seat belt
- Suspend drivers licences for parents who do not restrain their children in proper occupant restraints
- Undertake research on the effectiveness of booster seats for children under the age of 8 and/or 80 pounds

#### **On graduated licensing:**

- Limit the number of passengers who can be in a vehicle
- Restrict driving times to exclude driving between midnight and 5:00 am
- Put signs on vehicles driven by someone with a graduated licence
- Require additional driver education before a full licence is provided
- Raise the age for stage one of the graduated licensing program (currently, the age is 14)
- Put stricter limits on the age of accompanying drivers

#### **On funding road safety programs:**

- Provide increased and sustainable resources to support road safety initiatives
- Use a portion of the insurance premiums tax
- Use a portion of fine revenue
- Use a portion of alcohol taxes to fund drinking and driving programs
- Develop an effective and transparent way of allocating resources for road safety initiatives

### **On impaired driving:**

- Increase enforcement and the frequency of Checkstop programs
- Make bars and other establishments that sell alcohol more responsible for preventing impaired driving
- Introduce zero tolerance for drinking and driving
- Introduce mechanisms so that 24 hour suspensions for drinking and driving show up on a person's driving record and abstract
- Track 24 hour suspensions to identify problem drivers early and direct them to appropriate programs
- Give police the explicit statutory authority to demand blood alcohol tests when people are stopped at Checkstops
- Streamline the judicial process for impaired driving cases
- Evaluate the impact of current impaired driving programs
- Increase penalties (including jail time) for people who drive while their licence is suspended
- Reduce the legal blood alcohol limit from 80 to 50 milligrams of alcohol in 100 millilitres of blood.

### **On enforcement:**

- Increase resources for traffic enforcement
- Have police officers attend the scene of more collisions and issue summonses
- Reduce the discretion exercised by the courts and encourage them to levy the maximum fines
- Review the role of special constables and commercial vehicle inspectors in traffic enforcement
- Involve community members in enforcement through programs similar to Neighbourhood Watch or complaint lines
- Ban cell phones while driving

### **On driver education and testing:**

- Make driver education mandatory
- Provide driver education in schools
- Review current driver education programs
- Review the role and effectiveness of private driver examiners and increase monitoring of driver examiners
- Consider re-testing drivers that have poor driving records
- Make Alberta's standards for driving testing and issuance of drivers' licences as high as or higher than any jurisdiction in North America and ensure that those standards are consistently applied
- Establish opportunities for people to use technology to voluntarily assess and improve their driving knowledge and skills (e.g. web-based hazard perception tests have been introduced in Great Britain)
- Establish targeted driver education, examinations and graduated licences for larger vehicles including motor homes and recreational vehicles
- Expand access to defensive driving programs

### **On high-risk drivers and driving:**

- Target enforcement and other strategies to address problems with chronic, repeat offenders
- Use technology to coordinate information on driving record, collision record, impaired driving convictions, and 24 hour suspensions and use that information to identify and target high-risk drivers
- Introduce a province-wide strategy on dangerous driving practices including tailgating and improper lane changes
- Seize vehicles from people with serious driving records
- Increase insurance rates for high risk drivers

### **On education and awareness programs:**

- Introduce more graphic, hard-hitting media campaigns
- Reinforce the message that collisions are preventable and the current situation is not acceptable
- Coordinate messages and priorities so people are not bombarded by several campaigns at the same time
- Start when children are young and increase
- Introduce programs to address driver fatigue and inattentiveness

### **On the use of technology:**

- Tie photo radar more directly to road safety, particularly to high risk areas (A few respondent suggested that photo radar should be abolished and all enforcement should be done by police officers. Others said photo radar should be introduced on provincial highways)
- Introduce demerits for photo radar
- Ban radar detectors
- Expand the use of technology including speed on green cameras

### **On data and information:**

- Improve data collection and compile more comprehensive information on driver histories, collision sites, causes of collisions, etc.
- Revise the current collision report form

### **On engineering:**

- Introduce more road side rest stops on highways
- Take a more proactive approach rather than reacting only after “black spots” have been identified
- Identify roadway “black spots” and correct them quickly
- Increase the size of stops signs, introduce flashing lights at T intersections, and review the line of vision at intersections and railway tracks.

### **On vehicles and standards:**

- Require farm vehicles to meet the same standards as other commercial vehicles if they are driven on regular roads and highways
- Require regular inspections of vehicles above a certain age or all vehicles
- Review vehicle safety standards
- Require expanded safety programs for all commercial carriers
- Develop commercial driver profiles

### **On aging drivers:**

- Consider graduated de-licensing programs that allow seniors to maintain their licences as long as certain conditions are met
- Introduce opportunities for older drivers to learn adaptive driving skills and coping skills once they are no longer able to drive
- Require physicians to report any medical conditions that could affect a person's ability to drive
- Require mandatory re-testing for people above a certain age

### **On commercial vehicles and school buses:**

- Review speed limits for school buses and commercial vehicles on provincial highways
- Introduce an apprenticeship-type model for truckers
- Establish mandatory standards for school bus drivers (voluntary standards currently are in place)
- Re-introduce the Partners in Compliance Program
- Strengthen and enforce laws on driving times for truck and bus drivers

### **On alternatives to driving:**

- Increase access to public transportation
- Make it safer and easier for people to walk or take a bike
- Require helmets for all off-road vehicles including snowmobiles and all terrain vehicles (ATVs)
- Make bicycle helmets mandatory for all ages
- Introduce age restrictions for driving snowmobiles and ATVs