

Road Safety Vision 2010 Mid-Term Review

Executive Summary

1 OVERVIEW

Road Safety Vision 2010 is Canada's national road safety plan. It is the successor to the first national initiative, Road Safety Vision 2001, officially launched in 1996. The goal of Road Safety Vision is to make Canada's roads the safest in the world. Its strategic objectives are:

- To raise public awareness of road safety issues
- To improve communication, cooperation and collaboration among road safety agencies
- To enhance enforcement measures
- To improve national road safety data quality and collection.

Road Safety Vision 2010 emphasizes the importance of partnerships and the use of a wide variety of initiatives that focus on road users, roadways and motor vehicles. The adoption of Road Safety Vision 2010 by the Canadian Council of Motor Transport Administrators (CCMTA), and the official endorsement of its stated targets by the Council of Ministers Responsible for Transportation and Highway Safety in the fall of 2000, provided Canada's road safety stakeholders with targets against which to develop new strategies and measure intervention efforts. Annual Road Safety Vision reports have introduced the program, described Canada's action plan, reviewed successful road safety initiatives implemented in Canada and internationally, and outlined the benchmark data for the quantitative targets.

In June 2006 the Canadian Traffic Safety Institute was retained by the CCMTA to undertake a mid-term review of Road Safety Vision 2010. This review included:

- An assessment of the progress made by the provincial/territorial/federal governments towards achieving the strategic objectives and targets of Road Safety Vision 2010
- Identification of what measures in the various strategies have been implemented in each jurisdiction
- Identification of areas where greater efforts are required to achieve the targets
- Recommending possible changes in the targets
- Identifying the expertise and resources required to achieve the quantitative targets
- Comparing programs and targets in the world's safest countries.

The full report outlines the findings of the review and makes several recommendations. It is structured as follows:

- **Chapter 2** reviews the progress towards the overall targets by all jurisdictions
- **Chapter 3** describes the management processes adopted by countries with the safest driving conditions

- **Chapters 4 through 12** review each of the sub-targets and outline the progress
- **Chapter 13** concludes on where greater focus is required, and makes recommendations.

2 REVIEW OF PROGRESS

Progress at the end of 2005 (and confirmed by the recently available preliminary fatality figure for 2006 for Canada) towards the RSV 2010 fatality and serious injury targets is disappointing. While some sub-target areas have responded to the rollout of effective interventions, and the serious injury levels continue to fall, (although at less than half the desired rate), fatalities have rebounded to levels last experienced in 2002. It is important to recognize that some provinces/territories are in fact meeting the required reduction in fatalities and serious injuries, but ***the overall Canadian position is unacceptable.***

Why is Canada in this position? Other similar jurisdictions internationally have continued to lower their fatality levels.

From 2002 to 2004, the fatality trend for Canada was sufficiently close to the required trend to support the view that the target was readily achievable. However, fatalities increased substantially in 2005, and again in 2006 (preliminary figures which are not included in this report).

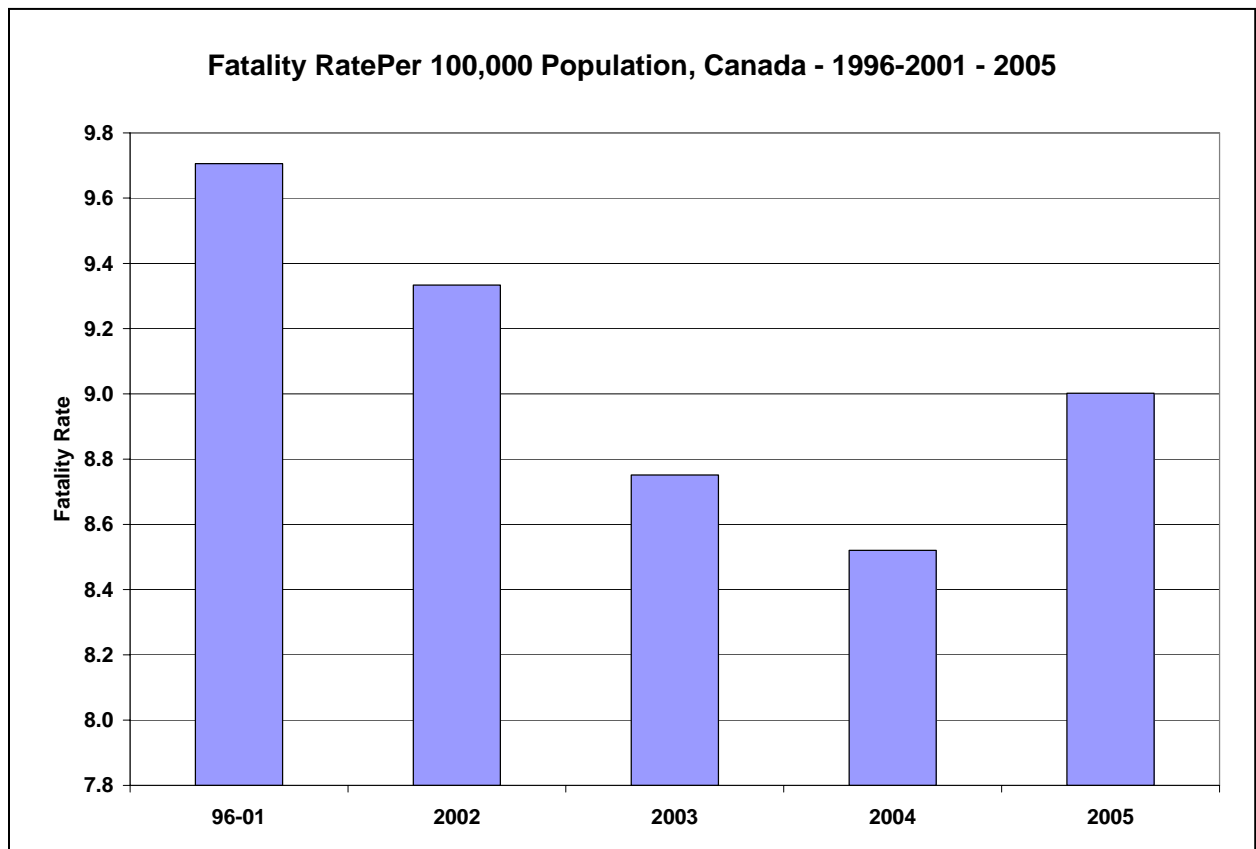


Figure 1: Summary of performance on the basis of fatalities / population – 1996-2001 - 2005

Canada has achieved a reasonably good performance in fatality reduction over the 1996-2001 baseline period on a deaths per population basis. Keeping in mind that the overall 2010 casualty reduction targets are based on three-year average figures, Canada's death rate during the 2003-05 period was 9.8% lower than the 1996-01 fatality rate.

When comparisons are made on actual changes in fatalities, Canada still showed improvement. However, the actual fatality reduction during the 2003-2005 period when compared with the 1996-2001 baseline period was less impressive than the reduction on a per population basis, in part because of the increased numbers of drivers and vehicles on Canada's roads during the latter period.

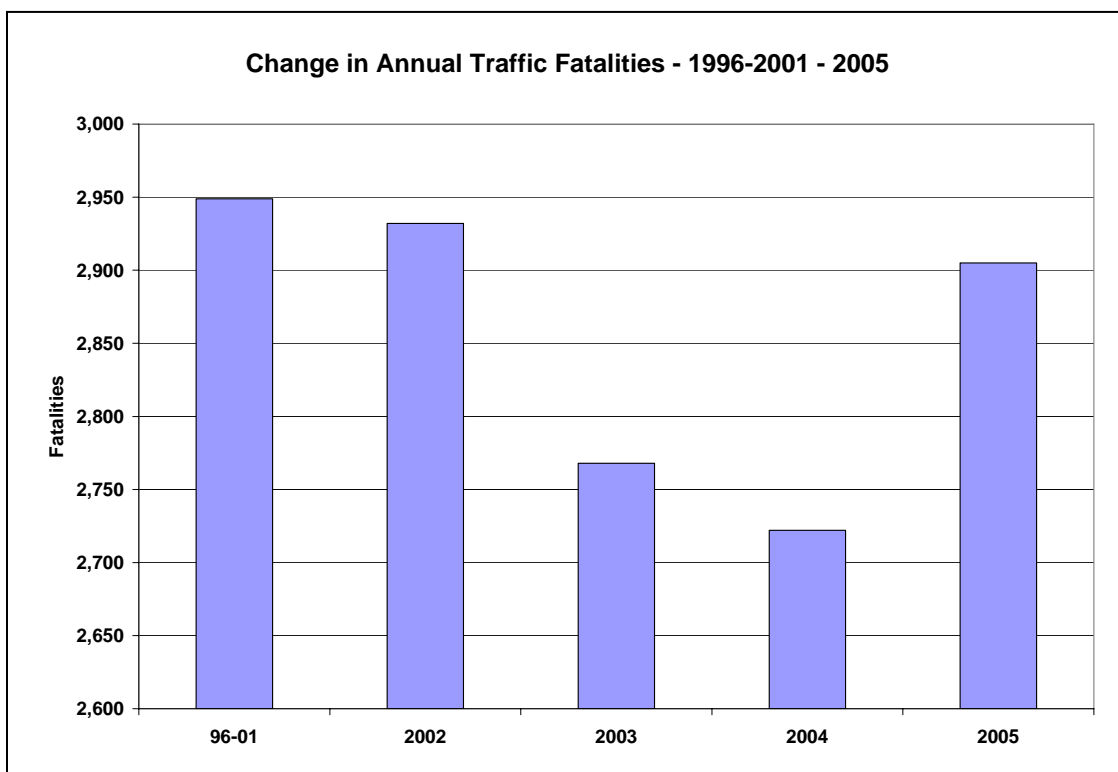


Figure 2: Performance - Fatality reduction (pro-rata target--17%) – 1996-2001 - vs 2003-05

There was a slightly larger reduction in the number of victims seriously injured in crashes than the decrease among fatally injured victims.

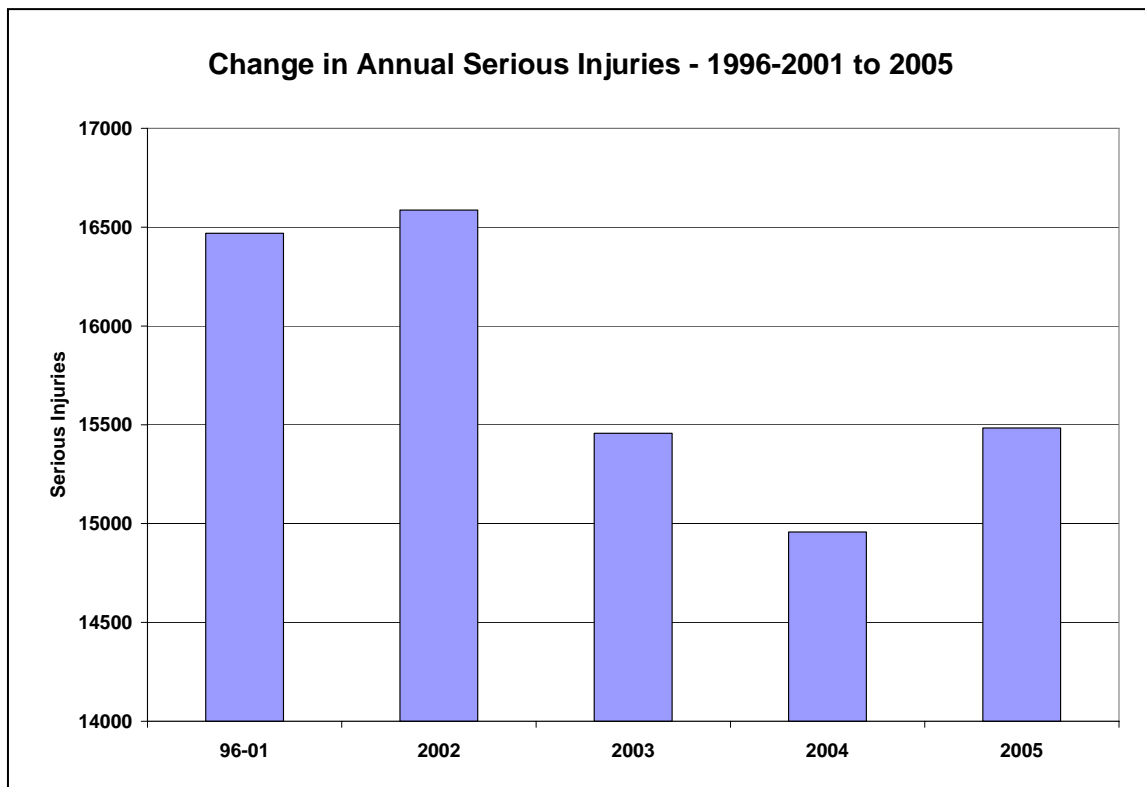


Figure 3: Performance – Serious injury reduction (pro-rata target –23.7%) – 1996-2001 vs 2003-- 05

At the end of 2005, there is not a sub-target area that was below the target trend line. The sub-target areas where performance has been most disappointing have been speed management, vulnerable road users, commercial vehicle involved crashes, drinking and driving, rural roads and in 2005, young drivers. At the end of 2005, only unbelted serious injury rates and intersection related fatality and serious injury rates were within reach of the required pro-rata sub-target.

Therefore, while it is considered unlikely that the established targets in RSV 2010 will be met, there is much to be done if improved movement towards the RSV 2010 targets and sub-targets is to be achieved. This will require the active commitment of Canada's road safety agencies and governments in all provinces and territories and at the federal level. There are also important opportunities for actions in the medium term that will, if embraced, not only assist movement towards the target, but importantly, will provide for increased effectiveness of any successor strategy (and achievement of associated targets) beyond RSV 2010.

3. THE THREE-TIER APPROACH

How is Canada (at the provincial, territorial and federal levels) approaching the task of managing road safety?

The current World Bank Transport Note (TRN-1) addresses this issue of road safety management. It emphasizes the importance of **implementation (institutional and management frameworks)** as underpinning effective road safety outcomes. It notes that worthwhile and effective **interventions** require and build upon this robust foundation / framework in order to achieve **outcomes / results**.

This three tier approach to the management of road safety overall is considered a highly useful model, with application for higher performing countries. As a means of assessing Canada's capacity to achieve the RSV 2010 and future targets, the review therefore set out to examine the road safety situation in Canada under the categories of:

- Implementation (institutional and management frameworks)
- Interventions
- Results (targets and outcomes).

Most of the existing emphasis in the RSV 2010 program is on achieving **results** (the target) and introducing the series of **interventions (strategies/actions)** that jurisdictions were encouraged to adopt.

While this focus is necessary, there is in fact little emphasis on the underpinning **implementation (institutional and management) frameworks** including the linkages to senior government levels. It is contended that the arrangements within these frameworks are fundamentally important in determining whether road safety operates successfully in any jurisdiction. These issues are discussed in more detail In Section 4.1 below.

Finally, it is encouraging that in the past couple of years, some jurisdictions have begun to develop a more strategic and collaborative approach to managing road safety. We are hopeful that in the latter part of the Road Safety Vision 2010 implementation (i.e. 2007-2010) greater progress will be made towards the targets. Planning for the next version of Canada's Road Safety Plan should commence within this time frame looking towards greater progress in the next 5-10 years and should have a more robust target setting mechanism (**results**), set out to comprehensively address the management and institutional framework (**implementation**) issues and of course, set and achieve the targets through the roll out of challenging **interventions**.

While all levels of government, as well as several instrumental public and private sector partners supported the announcement of the renewed plan, in many instances this support was not transferred into action - through any substantial allocation of additional resources or on-going commitment to major legislative change. Perhaps

greater progress might have been made if all jurisdictions had been prepared to adopt improved road safety as a priority.

4. AREAS WHERE GREATER EFFORT IS REQUIRED

The areas which are considered to warrant focus in order to (a) improve performance and move towards achievement of as much as possible of the desired RSV 2010 target reductions in road trauma by 2010 and (b) to establish the strategies and settings for an effective successor strategy to RSV 2010, are summarised below under the headings of Implementation, Interventions and Results.

4.1 Implementation (institutional and management frameworks)

There is little in the area of improved road safety institutional, management and coordination arrangements (implementation arrangements) that was proposed in the RSV 2010 Actions.

While there has been a considerable level of research into interventions over the years, ***little research has been carried out*** into the institutional and management frameworks. In recent years, the awareness of the importance of this framework – how we organize ourselves to tackle road safety effectively - has developed and a number of papers have begun to seriously address it.

As indicated earlier, the current World Bank Transport Note – TRN-1 emphasizes the importance of implementation (institutional and management frameworks) for achieving road safety outcomes, together with the need for an approach targeting results/ outcomes and utilizing a series of worthwhile and effective interventions.

Canadian provinces/territories, to varying degrees, have embraced the latter two measures. However, the implementation approaches in most provinces/territories are not of good practice standard. As discussed above much could be done at the provincial/territorial level to improve road safety management arrangements.

At the ***provincial/territory level***, these institutional and management arrangements should include, for example,

- A strong focus on day to day activity and planning (measuring performance, responding promptly and proactively to emerging issues including briefings for Ministers) for achievement of improved road safety outcomes
- The requirement to become more effective advocates within government, seeking to convince senior executive management in the first instance about the merits of your case, to gain their commitment to improved outcomes and then to engage the political level through them, with a clear ongoing focus on achieving road safety gains
- Identification and effective operation (with others) of the lead agency
- Developing the business cases for funding and pursuing improved allocations
- Effective active partnerships with research institutions
- Arguing strongly for legislative change

- Constantly review the adequacy and enforceability (for police) of legislation
- Seeking government support for more extensive, targeted, police enforcement
- Integrated, coordinated arrangements between the relevant agencies, both - vertically (i.e., levels of government) and horizontally (departments/ agencies within a level of government) -not as separate groups in behavioural, enforcement, infrastructure and vehicle safety activities who communicate infrequently – if at all - with each other
- Clear accountabilities for performance which are regularly measured and reported to government and the community
- Monitoring and evaluation of interventions.

At the ***national level***, the fragmentation of practitioner groupings between behavioural, enforcement and infrastructure/speed limit issues in particular, limits development of comprehensive responses to road trauma and does not provide an optimum model for multi-sectoral management arrangements at provincial/territorial level, limiting identification, adoption and rollout of integrated solutions.

Working together offers the promise of substantial benefits and provides a stronger basis for approaches to government seeking support for programs.

A good example of the need for close working relationships is enforcement. This cannot just be left to police to do their best. Strong partnerships require all agencies to agree to the inputs necessary, the intermediate outcomes to be achieved (e.g. percentage of alcohol impaired drivers, free speeds, seat belt wearing rates) and the final road trauma reductions to be achieved. A combined approach to government, recognizing the primary police role but, for example, supporting them in advocacy (within and outside government), the combined production of public information materials and involvement in media appearances to support enforcement efforts (well prior to, and during rollout) are examples of activities required from a genuine partnership. Without this support, change is less likely to be successfully introduced.

These are major challenges for CCMTA in reassessing its road safety activity in the immediate future. It will require an engagement of the various committees with infrastructure, speed limit setting, vehicle safety, justice and enforcement specialists as an essential means to obtain a broader perspective not only of the intervention related issues, but also the effectiveness of the road safety management effort. The challenge will be to provide support to the jurisdictions to address these matters, provide guidance about highly effective, focused interventions and to work together in a multi-sectoral way to obtain support within the provinces/territories and at the federal level, for their implementation and delivery.

It will be important to encourage timely reporting of trauma and other performance data to governments and the public.

While the critical work of introduction of change and the detailed development, advocacy and negotiation of those changes will continue to occur at provincial/territorial level, the vital role of CCMTA road safety committees in providing professional and policy development leadership nationally requires strengthening in these activity areas.

4.2 Interventions

It must be said that interventions are considered weak for some sub-target areas, such as speed-related crashes, vulnerable road user crashes, commercial vehicle involved crashes, rural road crashes and drinking driving. There would be substantial benefit in strengthening these measures, in addition to adopting a Safe System approach (see Section 3.1 of the report) to interventions. This could bring about improved outcomes developed around addressing particular crash types (such as run off road, head-on, intersection and pedestrian- involved), but could also encourage the closer working arrangements between agencies that would be required.

The inadequacies of the planned interventions in the above sub-target areas have been compounded by poor performance, generally – for Canada in aggregate – in delivering these interventions.

Determining specific causation would require detailed evaluation studies. However, there has been unequivocal comment from jurisdictions and stakeholders about **reduced levels of police enforcement** effort since 2001 and some evidence from a jurisdiction that supports this position. This would be consistent for example with an increase in mean free speeds for the provinces where speed-related fatalities and serious injuries have increased, but this link needs to be established.

Given the policy trends across the provinces/territories in the last 5 or so years (removal of automated speed enforcement in some provinces and the lack of far-sighted initiatives to increase the scope, depth and effectiveness of speed and drinking driving enforcement in particular through changes to legislative and regulatory arrangements with associated police funding for increased road safety enforcement in most provinces), it is hardly surprising that fatality and serious injury numbers in many jurisdictions have been disappointing.

Governments need to **not only maintain the all important enforcement resource** to avoid rapid deterioration in road trauma due to impaired driving (alcohol, drugs, distraction, and fatigue), speeding and lack of seat belt wearing, but also to:

- Strengthen the mix of policy instruments in use to better address these and other key challenges
- Allocate increased resources to support their rollout and enforcement
- And improve public awareness of the scale of risk these issues represent for the community.

These are vital road trauma reduction issues.

Vulnerable road user, commercial vehicle involved and rural road crash casualties are also unacceptably high. It is possible that the vulnerable road user increase in casualties is a reflection, among other matters, of poor levels of resourcing for enforcement, an inadequate policy response to the growth of motorcycling activity and a lack of investment in targeted infrastructure safety measures to improve pedestrian safety. It is likely that rural road crash risk and commercial vehicle involved crash risk would both be reduced by increased targeted enforcement and targeted infrastructure safety measures to improve vehicle occupant safety.

Political will to acknowledge (a) the irrefutable benefits of random breath testing and automated speed enforcement, (b) the need for tougher alcohol offence penalties at BAC levels below 0.10% and (c) the responsibility to lead the public debate to achieve the introduction of these and other measures is needed in Canada. Future generations of Canadians may judge current governments harshly if they do not campaign for and achieve regulatory change and ensure they are not just giving lip service to improving road safety without showing political leadership.

4.3 Results

In terms of results, the timeliness of the current provision of up to date road trauma outcome data, through CCMTA to the Deputy Ministers and to Ministers, let alone to the public, is unacceptable in terms of good international practice.

It is a poor reflection upon the provinces/ territories that monthly or even quarterly reporting of fatality data, even if it is provisional in nature, to the federal level does not take place. Provisional fatality data could be collected from police each week with later periodic adjustment as police/coronial crash files are closed and some deaths are determined to not be road deaths as defined.

This needs to be addressed as an immediate and highly important measure. CCMTA needs to champion and achieve this improvement.

It is not clear how different progress towards the overall target may have been if jurisdictions had implemented all the measures that were suggested in RSV 2010. The absence of a quantified target based on modeling inputs and outcomes makes it impractical to assess how likely it was from the outset that the target could have been achieved.

To be credible, future targets should relate input interventions to expected quantified impacts on fatalities and serious injuries. This planning approach is most useful for determining the likely outcome of a strategy but it is also a basis for a dialogue between the practitioners and the political level to agree on implementation

arrangements and interventions, including levels of funding, required legislative change and the performance required on an annual basis to move towards the target.

5. PRIORITY AREAS FOR EFFORT

Tables 5 and 6 in Chapter 13 of this report summarize the identified priority areas for effort in the short term (immediately) and the medium term (1 to 2 years), and is based on the following framework:

Time frame	Road safety management element	Responsible organization
<ul style="list-style-type: none"> Short term (now) Medium term (1-2 years) 	<ul style="list-style-type: none"> Interventions Implementation Results 	<ul style="list-style-type: none"> CCMTA (CC) Provincial/Territory Govts. (P/T) Federal Government (including Transport Canada) (FG)

Within the full report, recommendations (actions) are identified in more detail following each of the individual chapters, responding to current performance against the overall Canadian targets and the individual Canadian sub-targets and the identified priority areas for effort.

To facilitate prioritization of effort by CCMTA and jurisdictions and the marketing of proposals to governments by practitioners, a more focused summary of recommended priority actions is presented here, drawing upon those included in more detail throughout the report.

5.1 SUMMARY – PRIORITY ACTIONS - SHORT TERM

Interventions

1) Speed Management

- Identify mean free travel speeds on urban and rural road networks, estimate the **potential annual savings** in fatalities and serious injuries if free speeds were reduced to posted speed limits and brief Ministers (Police, Justice, Roads, Health) about the benefits and costs of introducing substantially increased speed enforcement, to obtain their commitment and resourcing. (P/T)¹
- Increase **public awareness** of the role of small increases in speed beyond safe system limits in dramatically increasing fatalities and serious injuries including TV advertising campaigns such as the "Wipe off 5" campaign used in Victoria, Australia in recent years. (P/T)

¹ Provincial / Territorial Governments

- Substantially expand **automated camera enforcement** in urban and rural areas. (P/T)
- Start **enforcing speed limits** at no more than a few kilometres an hour above the posted limit. (P/T)
- Strengthen **finest**, increase **demerit points** for speeding offences, and lower demerit point and suspension thresholds. (P/T)

2) Impaired Driving

- Request the federal Minister of Transport to seek government agreement to establish a **Federal Parliamentary Committee** of Inquiry into drinking and driving in Canada. (FG)²
- **Brief key Ministers** in government responsible for Police, Justice, Roads, Health about substantial expansion of random check point activity, associated breath testing of drivers and riders and alcohol interlock programs to obtain commitment and resourcing. (P/T, FG)
- **Review and strengthen** the CCMTA recommendations within STRID 2010 and the STRID 2005 Strategy to Address Lower BAC drinking drivers. (CC)³

3) Occupant Restraints

- Each jurisdiction should continue working towards the **removal of exemptions** for the non-use of seat belts. (P/T)
- Each jurisdiction should **target the high-risk driver** by increasing the monetary cost of an infraction and by introducing or increasing the number of demerit points for non-use of seat belts and child car seats. (P/T)

4) Road Network Improvement

- Assess road network wide risks by major crash type and identify **cost-effective prioritized and innovative** infrastructure interventions (such as carefully targeted/risk assessment based roadside barrier treatments or roadside hazard removal) which present a strong business case for large scale cost-effective programs to be funded by insurers or government. (P/T, FG)
- **Measure crash risk levels** across the network on the basis of travel as a key ongoing performance indicator. (P/T, FG)

5) Vehicle Safety

- Increase promotion of **vehicle safety information** and benefits to the public. (P/T, FG)

² Federal Government

³ CCMTA

- Provide strategic leadership (and boost market demand for safety features) by ensuring new **government fleet vehicles** are suitably equipped. (P/T, FG)
- **Measure proportion** of vehicles entering the Canadian Fleet each year with key vehicle safety features such as electronic stability control and side curtain airbags and by overall crash protection ratings. (FG)

6) **Motorcycle Safety**

- Develop a **comprehensive and collaborative strategy** and action plan in association with motorcycle representatives to address motorcycle safety that is broader than just motorcycle training programs. (P/T)

7) **Pedestrian Safety**

- In areas of pedestrian activity, review speed limits (and reduce where risk is higher), implement engineering measures - fencing, footpaths, crossing provision with refuges and substantially increase enforcement and associated publicity. (P/T)

8) **Vulnerable Road User Safety**

- Develop a **Vulnerable Road User strategy** and action plan including the measures set out above for motorcycle and pedestrian safety, plus further longer term measures (including cyclist safety measures). (P/T)

Implementation

9) **Action plans and reporting**

- Prepare **3 year action plans** now to address key issues in each province/territory. Ensure key recommendations above for speed and drinking and driving legislation and enforcement plus road network improvement, motorcycle and vulnerable road user safety actions, together with specific other local issues are targeted. (P/T)
- Deputy Ministers to be **accountable** for delivery and CCMTA's Standing Committee on Road Safety Research and Policies will report on action plan development and roll out. (P/T and CC)
- Improve **direct reporting** (and associated briefing) to the relevant Deputy Minister and Minister (on the Council of Ministers) with responsibility for road safety. (P/T)
- Adopt the **end of 2010** as the target date for achievement of RSV 2010 targets rather than the average of 2008-2010. (CC, FG, P/T)

10) **Management and Coordination**

- Identify the lead agency for road safety, introduce effective coordination and management arrangements, clearly identify departments' accountabilities for results and complete and implement road safety strategies including modeled targets. (P/T)

11) Develop integrated activity between road safety practitioners

- Build **stronger linkages** between infrastructure, vehicle safety and behavioural program practitioners to achieve integrated safety programs, particularly between TAC and CCMTA. (P/T, CC, FG)
- Adopt **safe system thinking** in addressing road trauma. (P/T, FG, CC)

Results

12) Crash data

- Provide crash data in a **timely manner** – fatality and serious injury data for the previous calendar year to be provided by June 30 to Transport Canada. (P/T)
- Process crash data from jurisdictions in a timely manner and **regularly publish** fatality and serious injury data comparisons between jurisdictions to governments and the public. (FG)

13) Accountability for outcomes

- Clearly identify **departments' accountabilities** for results and set output targets for each department. (P/T, FG)

5.2 SUMMARY – PRIORITY ACTIONS – MEDIUM TERM

Interventions

1) General

- Achieve **improved road user compliance** with road rules and Canadian law, particularly drinking and driving, speed and seat belt wearing - and strengthen graduated driver licensing provisions for novice drivers. (P/T)
- Continue to **further develop** (in response to emerging issues) and promote the recommended actions from the National Occupant Restraint Program (NORP), the Speed and Intersection Safety Management (SISM) and the Strategy to Reduce Impaired Driving (STRID) task forces for adoption by all jurisdictions. (CC)

2) Speed

- Ensure **automated enforcement** in urban and rural areas has been substantially expanded and enforcement tolerance levels reduced. (P/T)
- Review **speed limits** on roads and streets in higher crash risk locations where safe system thinking indicates limits are too high. (P/T)
- Continue a substantial program to increase **public awareness** of the role of small increases in speed beyond safe system limits in dramatically increasing fatalities and serious injuries. (P/T, FG)

3) Drinking and Driving

- Increase extent of, and review strategies for, drinking and driving legislation and enforcement, including introduction of any measures arising from a Parliamentary Inquiry or other comprehensive provincial/territory review. (P/T)

4) Network Risk

- **Expand** targeted infrastructure safety programs. (P/T, FG)

5) Vehicle Safety

- Promote the use of **in-vehicle technology** such as black box devices, and speed limiters (currently being studied by CCMTA) to address speeding and fatigue and encourage insurers to provide incentives for fitment. (P/T, FG, CC)
- Work with manufacturers and international road safety agencies to achieve a limit to the **top speeds of vehicles** of 120km/h. (FG, CC)
- Increase promotion of **new vehicle safety information**, safety features and their associated benefits to the public including behaviour control related technologies. (P/T, FG)

6) Commercial Vehicle Operation

- **Monitor compliance** of commercial vehicle operators and motor carrier industry with driving hours and speed limits, deter **drug use** and measure **crash involvement**, reporting data regularly to Ministers and the public. (P/T, FG)
- Seek **voluntary company** safety policy development and quality assurance for their fleets, drivers and other employees. (P/T, FG)

Implementation

7) Legislation

- Increase deterrence of unsafe behaviours through introduction of further **legislative instruments** and review of ineffective existing legislative instruments. (P/T, FG)
- Examine **minimum mandatory penalties** for certain offences and ease of enforceability for police and the courts. (P/T, FG)

8) Advertising of speed and acceleration of vehicles

- Request the automotive suppliers to establish a Committee to develop a **Voluntary Industry Advertising Code of Practice**, to restrict the focus on speed and power (acceleration) in advertising in electronic and print media. (P/T, FG)

9) Crash awareness

- Introduce ongoing crash factor **awareness raising programs** for road safety agencies and other key stakeholder groups such as the Swedish OLA program – (Objective data, List of Solutions and Addressed Action Plans) for rollout in all provinces/territories. (P/T, FG)

Results

10) Performance measures

- Continue to measure free travel speeds, network safety quality and (through Transport Canada) vehicle fleet safety quality as **key performance indicators** of the effectiveness of programs. (P/T, FG)

6. CLOSING COMMENTS

Good practice road safety programs such as those found in Sweden, the UK and the State of Victoria, Australia have several things in common:

- They are the outcome of clear **political will** to ensure that road safety remains an important public priority
- They have established **lead agency and management and coordinating frameworks** of government and non-government agencies to oversee the development of **strategic, integrated and targeted** approaches
- Government agencies have a strong **results focus** upon achievement of target outcomes
- They have instituted the **legislative frameworks** that provide the foundation for the enforcement and deterrence of unsafe behaviours
- There is the provision of **adequate resources**, primarily dedicated funding for effective road safety programs, which provides the leverage for others to undertake worthwhile activities and the means to inform the public about actual risks
- A commitment to **monitoring and evaluation** of interventions impacts.