



CANADA'S ROAD SAFETY STRATEGY 2015

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**RETHINK
ROAD SAFETY**

“Rethink Road Safety” to make
Canada’s roads the safest in the world.

CCMTA · CCATM
CANADIAN COUNCIL OF MOTOR TRANSPORT ADMINISTRATORS
CONSEIL CANADIEN DES ADMINISTRATEURS EN TRANSPORT MOTORISÉ

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EXECUTIVE SUMMARY

The ultimate goal of Road Safety Strategy (RSS) 2015 is to continue to reduce fatalities and serious injuries caused by collisions on Canada's roads.

Since 2008, the Canadian Council of Motor Transport Administrators (CCMTA) has undertaken consultations with its government members, along with members of the engineering and police community, as well as key industry stakeholders, to develop a new road safety strategy framework to succeed Road Safety Vision 2010. The Council of Ministers Responsible for Transportation and Highway Safety endorsed the Road Safety Strategy (RSS) 2015 in September 2010.

The Road Safety Strategy is similar to its predecessors in a number of ways. First, it retains the long-term vision of making Canada's roads the safest in the world. Second, the core objectives of the Road Safety Vision 2010 plan will continue as objectives in the successor plan. These are:

- Raising public awareness and commitment to road safety.
- Improving communication, cooperation and collaboration among all stakeholders,
- Enhancing enforcement.
- Improving road safety information in support of research and evaluation.

However, a number of key elements contribute to the new Road Safety Strategy 2015's uniqueness. These key elements are:

- The strategy will be considerably more flexible than its predecessor.
- The strategy will take a much more holistic approach to road safety.
- Hard percentage reduction targets will not be established at the national level.
- Progress will be measured at the national level using rate-based measures.
- Core to the strategy will be a framework of "best practice" strategies that jurisdictions may use to address key road safety risks and risk groups.
- While CCMTA led the development of the strategy and will manage it, each jurisdiction will "own" the strategy and will use the "best practice" framework to develop their own jurisdictional plans, and
- The strategy will have a shorter five-year timeframe.



Flexibility - The structure of the strategy is different as it provides more flexibility. The strategy outlines best practices and initiatives that jurisdictions will have the flexibility to adopt depending on their suitability, feasibility and acceptability within their respective operating environments. Each jurisdiction will develop and 'own' their respective road safety plans.

Holistic approach - The Road Safety Strategy is holistic in nature and provides a coordinated approach which includes initiatives to address road users, infrastructure and vehicles. This acknowledges the interdependencies that exist between drivers, roads and vehicle safety design, and will move the Road Safety Strategy 2015 to more of a "safe systems" framework. Indeed, the Road Safety Strategy represents the outcome of very strong collaboration between CCMTA and members of the Engineering Research and Support Committee (ERSC).

No hard targets; rate-based measurement - Unlike predecessor plans, the Road Safety Strategy will not include hard percentage based targets, but will seek to achieve directional downward trends in fatalities and serious injuries throughout its five-year duration. Downward trending will be measured using rate-based measures. Jurisdictions will continue to report fatalities and serious injuries to Transport Canada on an annual basis. A report on national progress of reducing fatalities and serious injuries will be produced using this rate-based measurement approach. While the Road Safety Strategy 2015 will not include hard quantitative targets like RSV 2010, it will not prevent individual jurisdictions, should they wish to do so, from establishing their own targets.

Best practices - Core to the Road Safety Strategy is a framework of best practices designed to address key target groups and key contributing factors that drive fatalities and serious injuries on Canada's roads. The framework has been developed and includes a variety of road safety initiatives that have proven to be effective in Canada and/or in other OECD countries based on a comprehensive environment scan undertaken by CCMTA. The nature of the framework is such that it will be a fluid document that will be regularly updated throughout its five-year duration as new road safety strategies are introduced in OECD countries or as existing strategies are evaluated and their effectiveness in reducing fatalities and serious injuries is established.



Updating and ownership - As custodian of the Road Safety Strategy, CCMTA, working through the jurisdictions and its committees and task forces, will be responsible for updating the Strategy. Given its fluid and proactive design, updates may include documenting progress made on new research projects undertaken, identifying new initiatives to be included in the multi-cell matrix of key target groups and contributing factors, revising the framework of proven best practice initiatives and reporting on its progress.

While CCMTA is the custodian of the Road Safety Strategy, each jurisdiction will become the owner of its own provincial or territorial action plans, and in creating these plans, can utilize the appropriate strategies that have been proven effective in Canada and elsewhere.

Five-year timeframe – The Road Safety Strategy has a five-year timeframe and a mid-term evaluation on its success will be conducted in year 3.

It is expected the Road Safety Strategy will inspire road safety stakeholders from all levels of government as well as key public and private sector stakeholders to work together towards the common goal of making Canada's roads the safest in the world.



1.0 INTRODUCTION

Since 1996, Canada has had a road safety vision of having “the safest roads in the world”. Jurisdictions, under the auspices of the Canadian Council of Motor Transport Administrators (CCMTA), along with other key stakeholders, such as police forces and road safety organizations, have been working towards this vision through the direction of road safety plans.

Road Safety Vision 2001, Canada's inaugural national road safety plan was adopted by the Council of Ministers Responsible for Transportation and Highway Safety in 1996. Under this plan, fatalities decreased by 10% while serious injuries declined by 16% despite steady increases in the road user population.

In October 2000, Road Safety Vision 2010 was approved by the Council of Ministers Responsible for Transportation and Highway Safety. It retained the vision and strategic objectives and added an overall national target and sub-targets. The quantitative targets were intended to provide road safety stakeholders with broad-based benchmark data of key road safety indicators, against which intervention efforts could be measured.

The national target called for a 30% decrease in the average number of road users killed and seriously injured during the 2008-2010 period over comparable 1996-2001 baseline figures. The sub-targets' proposed reductions ranged from 20% to 40%, to address the specific areas of occupant restraints, impaired driving, commercial vehicle safety, vulnerable road users, speed and intersection safety, rural roadways, young drivers and high-risk drivers. It was expected the achievement of these targets would further reduce Canada's road fatality total to fewer than 2,100 by 2010.

As result of a mid-term review of the plan and evidence that indicated progress had stalled, jurisdictions made a concerted effort to accelerate the reduction of fatalities and serious injuries in the areas of greatest concern: curbing the incidence of drinking and driving, excessive speeding and non-use of seat belts. Recent indications suggest that progress



has improved significantly. The 2007 fatalities were 6% lower than the baseline, while serious injuries were almost 15% lower.

Canada's Road Safety Vision 2010 has also played a pivotal role in raising the profile of traffic safety concerns among the enforcement community. In their efforts to help achieve the objective of the vision, the enforcement community, for the most part, changed its traffic services delivery model from a random patrol enforcement strategy to a team service delivery model where data analysis is combined with education and enforcement strategies to address key causal factors through targeted enforcement.

Core to the strategy is a framework of best practices, consisting of a multi-cell matrix of key target groups and key highway safety issues or contributing factors, along with a variety of road safety initiatives that jurisdictions may adopt to address their specific priorities. Jurisdictions will have the flexibility to adopt these initiatives and strategies depending on their suitability, feasibility and acceptability.

2.0 STRATEGY

Canada's third national road safety strategy, which has a five-year timeframe (2011-2015), is somewhat different from its two predecessors. The strategy is similar in that it will retain the long-term vision that Canada will have the safest roads in the world. As well, the four strategic objectives are expected to result in safer road users, safer road infrastructure and safer vehicles through:

- Raising public awareness and commitment to road safety,
- Improving communication, cooperation and collaboration among all stakeholders,
- Enhancing enforcement,
- Improving road safety information in support of research and evaluation.

The Road Safety Strategy differs from Road Safety Vision 2010 because it is considerably more flexible for jurisdictions to use. It no longer includes targets set at the national level that then become de-facto targets for each province/territory. Rather, the success of the new framework will be measured by achieving yearly downward trending in fatalities and serious injuries, as reported at the national level. In addition, progress will be determined



using rate-based measures, rather than the previous practice of setting percentage-based targets and translating these into actual numbers of fatalities and serious injuries.

The Road Safety Strategy will provide jurisdictions with a framework of best practices which each jurisdiction can adopt or adapt to address its specific road safety challenges. Some of the best practices have been proven effective and for others, measured effectiveness is not yet available. With the Road Safety Strategy 2015, jurisdictions will have the responsibility for their respective plans and also have the option of developing their own quantitative targets for specific casualty reductions during the five-year time-frame, if they wish to do so

2.1 The Vision

Canada's road safety stakeholders' vision is to have the **"safest roads in the world"**. The vision is aspirational in nature and need not necessarily be achieved within the Road Safety Strategy's timelines.

The report *Towards Zero: Ambitious Road Safety Targets and the Safe System Approach*, states "OECD and International Transport Forum (ITF) countries include a wide range of economies with large differences in their road safety performance. The best-performing countries have fatality rates of around 5-7 killed per 100,000 population."¹

To place the vision of having the safest roads in context, the vision would result in Canada achieving a rate of 5 fatalities per 100,000 population. In 2007, there were 2,767 fatalities, which translate to a comparable fatality rate of 8.4 per 100,000 populations. For Canada to achieve a target of 5 fatalities or less per 100,000 populations would have required a further reduction of 1,120 fatalities in 2007.

This national vision represents Canada's desire to strive towards being a world leader in road safety. While this vision may not be achieved over the short term, it highlights the desire for the best possible road safety outcomes for all Canadian jurisdictions.

¹ OECD and International Transport Forum, Transport Research Centre, *Towards Zero: Ambitious Road Safety Targets and the Safe System Approach*. 2008. p. 35.



The Road Safety Strategy is intended to inspire road safety stakeholders from all levels of government and key public and private sector stakeholders to work together towards the common objective of making road travel in Canada safer. The vision can best be achieved through the implementation of initiatives that are consistent with its four strategic objectives.

Nationally, the Strategy serves as an impetus to CCMTA's standing committees, task forces and working groups to collaborate in the development and implementation of numerous initiatives and focused interventions aimed at improving Canada's level of road safety.

2.2 Principles

The development of the Road Safety Strategy 2015 is based on key guiding principles, including: year-over-year downward trends in fatalities and serious injuries, safer systems concepts, a five-year timeframe, a continuation of collision reporting by province/territory, and a framework of best practices.

Downward Trends

The Road Safety Strategy seeks to achieve directional downward trends in the rate-based number of fatalities and serious injuries -successes against which will be measured at the national level on a yearly basis, rather than the actual fatalities and serious injuries. Trending will be measured using rolling averages to smooth out short-term fluctuations, since year-over-year reductions may not be practical or attainable. Two rate-based indicators are commonly used internationally: fatalities (or serious injuries) per million populations; and fatalities (or serious injuries) per billion kilometres travelled.

Although the national strategy does not include hard quantitative targets, this will not preclude individual jurisdictions from establishing such targets when there is government, law enforcement and/or road safety stakeholder support for doing do.



Safer Systems Concept

The Road Safety Strategy is holistic in nature and provides a coordinated “safer systems” approach that includes strategies to target road users, vehicles and infrastructure. This “safer systems concept” is an effective means to bring all stakeholders together by recognizing the interdependencies that exist between these elements. It incorporates “safer systems concepts” rather than a “safe systems approach”, which traditionally involves very significant long-term investments.

Five-Year Timeframe

The term for the Road Safety Strategy is five years rather than ten years and could be renewed or extended. A shorter timeframe will help build and maintain momentum for jurisdictional initiatives throughout the life of the Road Safety Strategy.

Statistical Reporting

Jurisdictions will continue to report fatalities and serious injuries to Transport Canada on an annual basis and these data will be used to produce a report on national progress in reducing fatalities and serious injuries using rate-based indicators.

Best Practices

Core to the Road Safety Strategy is a framework of best practices. The framework consists of a multi-cell matrix of key target groups and contributing factors, along with a variety of road safety initiatives that jurisdictions may adopt to address their specific priorities. Jurisdictions will have the flexibility to adopt specific strategies depending on their suitability, feasibility (i.e.: resources) and acceptability (i.e.: operating environment).

The framework of best practices is intended to be fluid, meaning that new target groups, contributing factors and suggested initiatives and strategies can be added to the Road Safety Strategy over time, depending on the needs identified by



jurisdictional members and research of best practices in other OECD member countries.

3.0 THE MATRIX

The initiatives are intended to address the key target groups and major contributing factors that need to be addressed to improve road safety in Canada. The integration of these factors is key to its success. Initiatives in the framework have been proven effective in Canada or other OECD countries and as such, are deemed to be “best practices” in reducing or preventing fatalities and injuries.

Key Target Groups	Contributing Factors			
	Impaired Driving (alcohol, drugs, fatigue, distraction)	Speed & Aggressive Driving	Occupant Protection	Environmental Factors
Young drivers				
Medically-at-risk-drivers				
Vulnerable road users				
Motor carriers				
High-risk drivers				
General population				

3.1 Key Target Groups:

The key groups of driver being targeted are defined as follows.

- **Young drivers:** Drivers under the age of 25 years.
- **Medically-at-risk-drivers:** Drivers whose existing medical condition may affect the safe operation of their vehicles, their occupants and the safety of other road users would be targeted under this group (e.g.: epilepsy, ischemic heart disease etc.). This includes driver performance, related to the aging process, deemed to be outside of the boundaries of normal driving behaviour (e.g.: poor cognitive or perception skills, slow reaction time to decision-making situations, visual or auditory limitations) that may result in collisions.
- **Vulnerable road users:** Pedestrians, motorcyclists and cyclists and persons in personal mobilized devices (e.g.: motorized wheelchairs and scooters).



- **Motor carriers:** A person or entity who is responsible for a commercial vehicle (e.g.: driver, carrier).
- **High-risk drivers:** Repeat offenders with patterned illegal driving behaviours (e.g.: recurring incidences of alcohol/drug impaired driving, traffic violations, collision involvement or suspended/prohibited drivers).
- **General population:** Road users who benefit from strategies/interventions/regulations/legislation introduced to make roads, vehicles and road users safer.

3.2 Contributing Factors

The key causes of collisions being targeted are defined as follows.

- **Impaired Driving:** Includes all forms of impairment, such as impairment resulting from the ingestion of a substance (alcohol, drugs (prescription, over the counter or illicit)) as well as due to actions that result in driver impairment from natural causes (fatigue or distracted behaviours).
- **Speed & Aggressive Driving:** Includes driving at speeds beyond posted legal limits on all road types in urban and rural settings, and driver behaviours deemed outside of socially acceptable norms that put other road users at risk of injury or contribute to crashes and casualties. It also includes driving too fast for road conditions.
- **Occupant Protection:** Includes issues pertaining to proper restraint use among all road users, vehicle technology enhancements (crashworthiness and crash-avoidance) and safer roads (e.g.: dangerous roadside obstacles, lighting, signage, etc.).
- **Environmental Factors:** Includes issues/factors that may affect the likelihood of crash occurrence (e.g.: roadway configuration, roadway construction, road surface condition, road and roadside design, weather conditions, urban and rural infrastructure, etc.).



3.3 Strategies

For each target group and contributing factor there may be more than one intervention or strategy. These strategies can address users, infrastructure or vehicles or some combination of these factors. A range of strategies is recommended to address road safety issues. These strategies are in keeping with the objective of broadening the successor to RSV 2010 to incorporate safer systems concepts.

These are:

- Education/Training
- Communication and Awareness
- Enforcement
- Information/data/research
- Policy/Legislation/Regulation
- Technologies
- Road Infrastructure
- Linkages

In many cases, the effectiveness of some program elements can be short-lived without a simultaneous and sustained application of other elements (e.g.: enforcement efforts working in concert with communication and awareness). The strategies are defined as follows:

- **Education/training:** Includes activities that provide knowledge and/or test the capacity of a person to demonstrate appropriate behaviour with respect to road safety.
- **Communication and awareness:** Includes all activities that contribute to increased knowledge of key road safety issues (e.g.: regarding risks associated with drinking and driving and non-use of restraints) by the general public that may lead to safer road user behaviour.
- **Enforcement:** Includes activities that facilitate the delivery of enforcement strategies by police services (e.g.: knowledge sharing, legislative and policy initiatives, resources).
- **Information/data/research:** Includes capturing and compiling more complete, uniform and timely data (crash, trauma, exposure) to expedite the identification of emerging crash/victim trends/issues, or for the development of new or



revised motor vehicle safety regulations. It also includes the use of all available mechanisms to monitor road user behaviour (e.g.: surveys, questionnaires or electronic devices to monitor restraint use, vehicle speeds); to identify road infrastructure deficiencies or to evaluate the effectiveness of vehicle safety technologies (analyzing crashes involving vehicles equipped with advanced safety features (e.g.: Electronic Stability Control (ESC))).

- **Policy/legislation/regulation:** Includes provincial/territorial/federal regulations/legislation introduced to improve road user behaviour (e.g.: sanctions for excess speeding, etc.), make roads safer (e.g.: requirements for road safety audits for all new road infrastructure, etc.) or safer vehicles (e.g.: improved crash avoidance technologies) and all policies introduced by these agencies to facilitate and expedite their introduction.
- **Technologies:** Includes technologies aimed at helping drivers to avoid collisions (e.g.: electronic stability control, intelligent speed adaptation) or making vehicles safer in the event of crash involvement (side curtain airbags); improving driver behaviour (e.g.: fitment of ignition or seatbelt interlocks in vehicles); and making roads safer, weather travel advisory systems or automated enforcement technologies).
- **Road infrastructure:** Includes initiatives that strengthen the infrastructure element in road safety (e.g.: road and roadside, intersections, signage), summer and winter maintenance practices, and traffic management within work zones.
- **Linkages:** Includes the establishment of linkages between jurisdictional, national or international governmental and non-governmental organizations with a vested interest in (can impact on or are affected by) road safety to facilitate the fostering of partnerships, knowledge sharing and best practice guidelines and improved cooperation and collaboration among key road safety stakeholders.



4.0 INITIATIVES

Initiatives were sought to address each of the cells in the matrix from the perspective of the road user, infrastructure and the vehicle.

4.1 “Proven” Road User Initiatives

A number of road user initiatives have proven to be effective in addressing the challenges of dealing with those who drink and drive, speed or drive aggressively or refrain from buckling up. The “proven” initiatives are best practices, nationally and/or internationally, that have measured effectiveness in reducing fatalities and serious injuries. These are accompanied by performance measures.

In addition to the initiatives that have been previously tested, many other potentially good initiatives have been reviewed but may be considered too “young” to demonstrate direct effectiveness in reducing fatalities and serious injuries. As such, there are no performance indicators for these initiatives

Proven Road User Initiatives	Applicable uses by causal factor	Applicable uses by risk group
GLS/GDL	Impaired Driving (alcohol, drug, distraction), Speed and Aggressive Driving, Occupant Protection	Young drivers, Vulnerable road users
Random breath testing	Impaired Driving (alcohol, drug)	General population
911 program	Impaired Driving (alcohol, drug)	General population
Automated enforcement	Speed and Aggressive Driving	General population, High-risk drivers
Speed reader boards	Speed and Aggressive Driving	Vulnerable road users; General population, Young drivers
Selective Traffic Enforcement Programs (STEP)	Occupant Protection, Impaired Driving	General population
Automated licence plate recognition (ALPR)	Environmental Factors	High-risk drivers
School/parent patrol programs	Speed and Aggressive Driving	Vulnerable road users
Education on speed and aggressive driving related crashes	Speed and Aggressive Driving	Vulnerable road users



Proven Road User Initiatives	Applicable uses by causal factor	Applicable uses by risk group
Booster seats	Occupant Protection	General population
Removal of seat belt exemptions	Occupant Protection	General Population
Assessment and treatment programs	Impaired Driving (alcohol, drug),	High-risk drivers
One seat belt per occupant	Occupant Protection	General population
Awareness / education programs	Impaired Driving (all forms), Occupant Protection; Speed and Aggressive Driving	Young drivers, High-risk drivers; Vulnerable road users, General population
Jaywalking awareness	Environmental Factors	Vulnerable road user
No riding in the back of a pick-up	Occupant Protection	General population
Zero BAC	Impaired Driving (alcohol, drug)	Young drivers, Vulnerable road users, Motor carriers
Increase penalties for impaired driving if children in vehicle	Impaired Driving (alcohol, drug)	General population
Increase penalties in vulnerable areas	Speed and Aggressive Driving, Occupant Protection	High-risk drivers, General population
Driver distraction	Impaired Driving (distraction)	General population
Cargo securement	Environmental Factors	Motor carriers
Safety rating	Environmental Factors	Motor carriers
Periodic motor vehicle inspection for motor carriers	Environmental Factors	Motor carriers
Trip inspections	Environmental Factors	Motor carriers
Roadcheck	Environmental Factors	Motor carriers
Operation Air Brake	Environmental Factors	Motor carriers

4.2 “Proven” Infrastructure Initiatives

The infrastructure elements are diverse and, depending on the initiative, can address rural and urban situations, focussing on the road and the roadside. The objective of infrastructure initiatives is to reduce the likelihood and/or the severity of a collision, recognizing that, despite efforts to educate and control road users, driving errors will continue to be made. Generally, many of the initiatives have been evaluated and, as such, their effect on collision rates after implementation can be estimated. These are accompanied by performance indicators.

In addition to the initiatives that have been previously tested, many other potentially good initiatives have been reviewed but may be considered too “young” to



demonstrate direct effectiveness in reducing fatalities and serious injuries. As such, there are no performance indicators for these initiatives.

Proven Infrastructure Initiatives	Applicable uses by causal factor	Applicable uses by risk group
Rumble strips	Impaired Driving (all forms)	General population
	Speed & Aggressive Driving	High-risk drivers
	Environmental Factors	Motor carriers, General population
Divided highways	Impaired Driving (alcohol and drug)	General population
Median treatments	Impaired Driving (alcohol and drug)	General population
	Speed & Aggressive Driving	High-risk drivers
Forgiving roadsides	Impaired Driving (alcohol and drug)	General population
	Environmental Factors	Motor carriers, General population
Grade separation (overpasses)	Impaired Driving (alcohol and drug)	General population
Sign conspicuity and reflectivity	Environmental Factors; Speed & Aggressive driving	Medically-at-risk-drivers
	Impaired Driving (fatigue)	General population
Transition zones	Speed & Aggressive Driving	Vulnerable road users, General population
Reduce speed limits	Speed & Aggressive Driving,	Vulnerable road users
	Environmental Factors	General Population, Motor carriers
Collision-prone locations program	Speed & Aggressive Driving	High-risk drivers
Variable/seasonal speed limits	Environmental Factors	Motor carriers, General population
Access control/bypasses	Speed & Aggressive Driving	General population
	Environmental Factors	Motor carriers, General population
Jersey barriers and guardrails	Occupant Protection	General population
Improve intersection	Environmental Factors	Medically-at-risk drivers
Manage intersections for VRUs	Environmental Factors	Vulnerable road users
Positive guidance / pavement markings	Environmental Factors	Motor carriers, General population
Paved shoulders	Environmental Factors	Motor carriers, General population
Runaway lanes/escape ramps	Environmental Factors	Motor carriers, General population
Roundabouts	Environmental Factors	Motor carriers, General population
Advance intersection notification	Environmental Factors	Motor carriers, General population
2+1 roads with median	Environmental Factors	General population
Road safety audits and in-service reviews	Environmental Factors	General population
Street lighting and illumination	Environmental Factors	General population
Passing lanes	Environmental Factors	General population



Proven Infrastructure Initiatives	Applicable uses by causal factor	Applicable uses by risk group
Road alignment and curve flattening	Environmental Factors	General population
Bus and high-occupancy vehicle lanes	Environmental Factors	General population
Longer pedestrian signals at crosswalks	Speed and Aggressive Driving	General population, Young drivers and Medically-at-risk drivers
Improve signage at railway grade crossings	Environmental Factors	General population
Highway messaging signs	Impaired Driving (alcohol and drugs)	Young drivers
Wind breaks/snow hedges	Environmental Factors	General population
Fixed Automated Spray Technology (FAST)	Environmental Factors	General population
Safety edge on pavements	Environmental Factors	General population
Road Weather Information Systems (RWIS)	Environmental Factors	General population
Anti-icing technology	Environmental Factors	General population
Pre-wetting of salt	Environmental Factors	General population
Truck dragnet arrestor system	Environmental Factors	General population, Motor carriers
Rockfall catchment fence	Environmental Factors	General population
Signing ("move over for emergency vehicles" signs)	Environmental Factors	General population
Advanced warning systems at rural high speed signalized intersections (Texas detection system)	Environmental Factors	General population
Mobile barrier system (Balsi Beam)	Environmental Factors	General population
Treated sand	Environmental Factors	General population

4.3 "Proven" Vehicle Initiatives

Road safety advances for vehicles tend to be realized through innovative measures at the vehicle manufacturing level and through the Canadian Motor Vehicle Safety Standards (CMVSS). These are accompanied by performance indicators.

In addition to the initiatives that have been previously tested, many other potentially good initiatives have been reviewed but may be considered too "young" to



demonstrate direct effectiveness in reducing fatalities and serious injuries. As such, there are no performance indicators for these initiatives.

Proven Vehicle Initiatives	Applicable uses by causal factor	Applicable uses by risk group
Crash avoidance technologies	Impaired Driving (all); Speed and Aggressive Driving	All target groups
Electronic Stability Control (ESC)	Impaired Driving (all); Speed and Aggressive Driving	All target groups
Aftermarket electronic vehicle immobilizers	Environmental Factors	General population; Vulnerable road users
Ignition Interlock	Impaired Driving (alcohol)	All target groups
Seat occupant sensors	Occupant Protection	General population
Vehicle Classification Model (VCM)	Environmental Factors	General population

5.0 MANAGEMENT OF THE PLAN

CCMTA will be the custodian of the Road Safety Strategy 2015 and will be responsible for its update.

Updates may include documenting progress made on new research projects undertaken, identifying new initiatives to be included in the multi-cell matrix of key target groups and contributing factors, revising the framework of proven best practice initiatives, reporting on progress towards Canada's vision of having the safest roads in the world.

