

Road Safety Vision 2010



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



Introduction:

Road Safety Vision 2010 ⁽¹⁾ (RSV 2010) was Canada's second generation national road safety plan that guided road safety stakeholder efforts during the 2002-2010-period. RSV 2010 was championed by the Ministers and supported by all levels of government as well as instrumental public and private sector partners. The plan was officially endorsed by all ministers of transportation and highway safety in the fall of 2000. This report summarizes the progress that occurred in the key areas identified for improvement under RSV 2010 during its nine-year tenure.

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Background:

In Canada, road safety is a responsibility that is shared among the federal, provincial/territorial and municipal levels of government. The federal government is responsible for developing and enforcing new motor vehicle safety standards and regulations pertaining to tires and child restraints as well as interprovincial commercial vehicle safety fitness. The provinces, territories and municipalities are responsible for building and maintaining roads, commercial vehicle operations, driver and vehicle licencing and the development and implementation of road safety strategies.

The levelling-off of road safety progress in the mid-1990s and the desire for improved cooperation among Canada's road safety stakeholders led experts from various levels of government, non-governmental organizations and other key road safety stakeholders to participate in a national forum on road safety. The forum culminated in the creation of Canada's first national road safety plan, called Road Safety Vision 2001, in 1996. The two most identifiable attributes of Road Safety Vision 2001 were its vision and its strategic objectives.

Canadian road safety stakeholders' vision was to eventually have the safest roads in the world. The four strategic objectives that were identified to help achieve this goal included: (a) raising public awareness of road safety issues; (b) improving communication, cooperation and collaboration among road safety agencies; (c) enhancing enforcement measures; and (d) improving national road safety data quality and collection.

The principal focus of Canada's inaugural road safety plan was on getting both road safety practitioners and the public to buy into the vision and its strategic goals. Two major areas of focus under Road Safety Vision 2001 were on the development of strategies to get motorists to buckle up more and to drink and drive less. The National Occupant Restraint Program 2001 had a goal to get 95% of motorists to wear seat belts and properly restrain their children by 2001. The Strategy to Reduce Impaired Driving 2001 aimed to have 20% fewer road users killed or seriously injured in alcohol related crashes in 2001 than the comparable annual average figure during the 1990-1995-period.

During the time frame of Canada's first national road safety plan, fatalities and serious injuries decreased by 9.4% and 18.4%, respectively. While no assessments were undertaken to determine if the existence of Road Safety Vision 2001 played a significant role in the casualty reductions that took place between 1996 and 2001, the notable decrease in serious casualties that occurred during this period led Canadian road safety experts to agree to the development and implementation of a more focused and measurable successor plan.

Analyses of serious crash data highlighted the need to bring focus to longstanding road safety challenges through the creation of targets for casualty reductions. The new plan – Road Safety Vision (RSV) 2010 – retained the vision and the four strategic objectives of the inaugural plan and added an overall national target and several quantitative sub-targets for fatality and serious injury reductions in order to help Canadian road safety experts achieve their national goal of having the safest roads in the world.

Prior to the launch of RSV 2010, quantitative targets supported by strategies were already in place or being developed to address some of the road safety challenges that were identified for improvement under the RSV 2010 initiative. These targets, whose goals were to increase seat belt use, decrease serious casualties resulting from crashes that occurred at intersections as well as those that involved speeding, non-use of occupant restraints and drinking drivers, were incorporated into the RSV 2010 framework. In addition, new targets were identified that called for decreases in fatalities and serious injuries in crashes involving commercial vehicles, vulnerable road users, young drivers/riders and victims of crashes on undivided rural roads. The new and existing quantitative targets were developed and vetted through consultations among CCMTA standing committees, task forces, associate members and other interested stakeholders.

The overall national target for RSV 2010 called for an overall 30% decrease in the average number of road users killed or seriously injured during the 2008-2010 period when compared with 1996-2001 figures. The proposed reductions in serious casualties (fatalities and serious injuries) for the sub-targets ranged from 20% to 40% during the same comparison periods.

The national target and sub-targets were intended to be ambitious but achievable and sufficiently broad based to enable all jurisdictions to identify at least some road safety challenges as priorities for the development and implementation of focused interventions.

During the term of RSV 2010, existing and newly created national task forces comprised of government members and key road safety partners guided the development and implementation of strategies and monitored progress toward the achievement of target objectives. The task forces included the National Occupant Restraint Program 2010 (NORP 2010) Task Force, the Strategy to Reduce Impaired Driving 2010 (STRID 2010) Task Force, the Speed and Intersection Safety Management Task Force, the Vulnerable Road Users Task Force, the Rural Road Safety Task Force and CCMTA's Standing Committee on Compliance and Regulatory Affairs.

RSV 2010: National Target Progress

RSV 2010 had an overall objective of achieving a 30% or greater decrease in the average number of road users killed or seriously injured in traffic collisions during the final three years of the initiative (2008-2010) when compared with average deaths and serious injuries that occurred during the timeframe of the inaugural national road safety plan (i.e., RSV2001). Although the ultimate objective was not attained, substantial reductions in the number of serious casualties nevertheless occurred. Fatalities and serious injuries were 22.4% and 26.3% lower, respectively, during the 2008-2010-period than during the 1996-2001 baseline-period as can be seen in Figure 1. The average number of road users killed in crashes during the final three years of RSV 2010 was the lowest on record in 60 years.

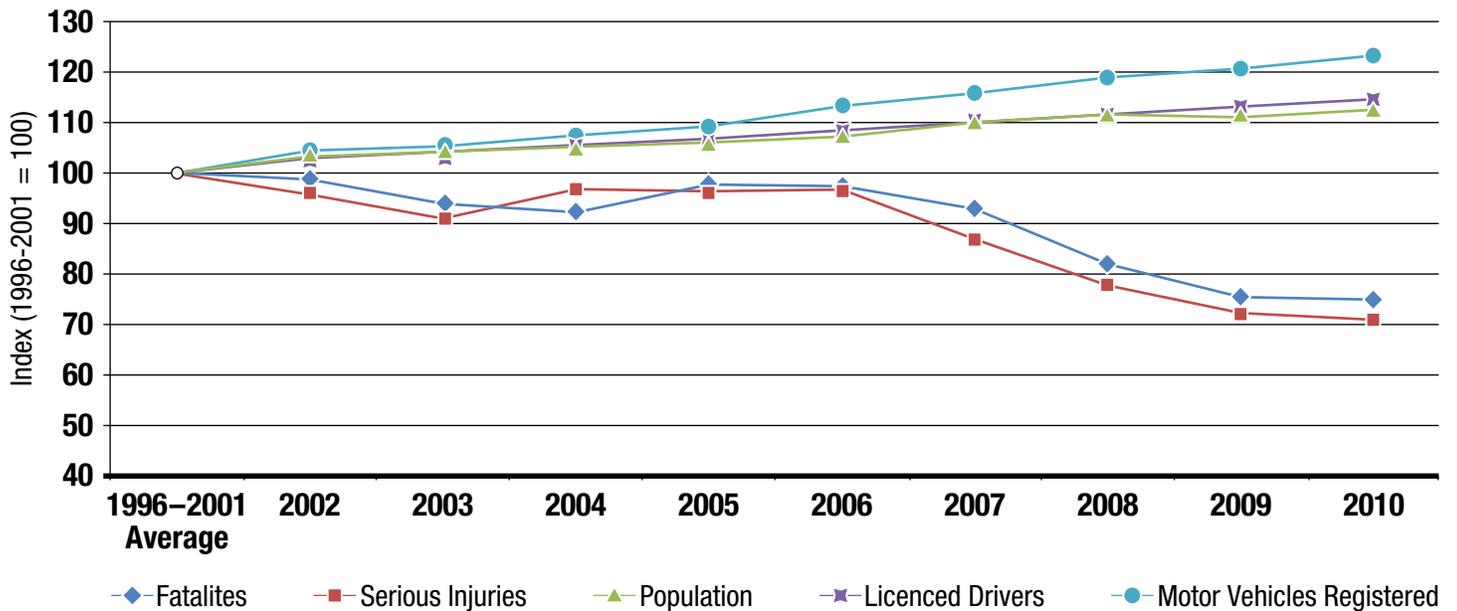
These improvements occurred as use of the road transportation network continually increased. Canada's population ⁽²⁾, licenced drivers and motor vehicles registered ⁽³⁾ all increased by double digit figures between the two comparison periods - by 11.7%, 13.3% and 21.1%, respectively-, while vehicle kilometres travelled ⁽⁴⁾ increased by approximately eight percent during the same period.

It is worth mentioning that progress, in terms of serious casualty reductions, had been slow during the first several years of the RSV 2010 initiative but accelerated during the final years of the plan. The findings of a mid-term review ⁽⁵⁾ of RSV 2010 in 2007 highlighted a need to increase efforts in order to be able to reach the intended targets. The authors of the review cited concerns about the level of support, resources, responsibility and accountability for the initiative and indicated that RSV 2010 was not meeting its overall target for serious casualty reductions. The authors provided a number of recommendations based on successful approaches used in some of the safest countries in the world. The recommendations included suggestions for more effective coordination and management arrangements, increased multi-sectoral involvement, more evaluation and monitoring programs and increased resources for infrastructure programs, enforcement, and vehicle safety promotion.

In response to the report findings, most jurisdictions developed and implemented three-year action plans to 2010 that resulted in heightened intervention efforts on their most critical road safety concerns. The focus of these strategies and action plans in most jurisdictions was on curbing the incidence of drinking and driving and speeding and on increasing occupant restraint use.

As RSV 2010 drew to a close, the combination of renewed efforts in most jurisdictions to diminish these longstanding road safety challenges and the economic downturn that occurred throughout North America were regarded as the main reasons for the considerably improved road safety picture. While the downturn in economic activity may have contributed in part to the impressive decreases in serious casualties that occurred during the final three years of RSV 2010, it is worth noting that Canada's gross domestic product in constant 2002 dollars grew by more than 27% between the two comparison periods.

Figure 1
Fatalities and serious injuries decreased despite a growing and increasingly mobile population



Road Safety Vision 2010 within the International Environment:

Canada's RSV 2010 was launched at a time when a number of the world's safest nations had both visions and targets in place to help guide their road safety improvement efforts. Some of the more notable visions were 'safe road use for the whole community' (Australia), 'one accident is too many' (Denmark), 'sustainable road safety' (The Netherlands), and 'vision zero' (Sweden), which was subsequently adopted in other leading Organization for Economic Cooperation and Development (OECD) member countries such as Norway and Switzerland. Almost all of the OECD member countries with top ranked road safety records had quantitative road safety targets in place. The targets varied in approach (absolute and rated-based improvements) and in duration. Collectively, the targets in the leading OECD countries sought to reduce traffic fatalities, and where applicable, serious injuries by an average of approximately 3.5% annually during the term of their

strategies. Canada's national target objective was consistent with the leading OECD nations, as it sought to reduce deaths and serious injuries by an average of 3.3% annually during the plan's nine-year term.

Noteworthy strategies that were implemented or already in place in selected OECD member countries with the best road safety records during the timeframe of RSV 2010 that contributed to safer road travel included the use of photo radar; the use of random breath testing; the use of year-round high profile road safety public awareness campaigns that highlight numerous issues under one banner to maximize the impact of the overall road safety message; combining enforcement with intense public education campaigns aimed at changing cultural attitudes towards drinking and driving; reducing speed limits on selected urban freeways from 100 km/h to 80 km/h, from 50 km/h to 30 km/h on urban networks, and from 80 km/h to 60 km/h on rural access roads; reducing wintertime speed limits on selected rural roads; matching speed limits to road conditions; promoting driver fatigue management; introducing improved training courses for motorcyclists; introducing road safety audits in the design of road networks; reducing speed tolerance at which sanctions were enforced; constructing roundabouts in urban environments to calm traffic; reducing the legal blood alcohol

concentration limit to 50 mg% from 80 mg%; constructing centreline barriers on existing two- and three-lane country roads to reduce the incidence of head-on crashes; installing rumble strips, shoulders and barriers to prevent vehicles from running off the road; and increasing public education and enforcement in the areas of non-use of seat belts, drinking driving and speeding and introducing more stringent penalties for repeat offenders.

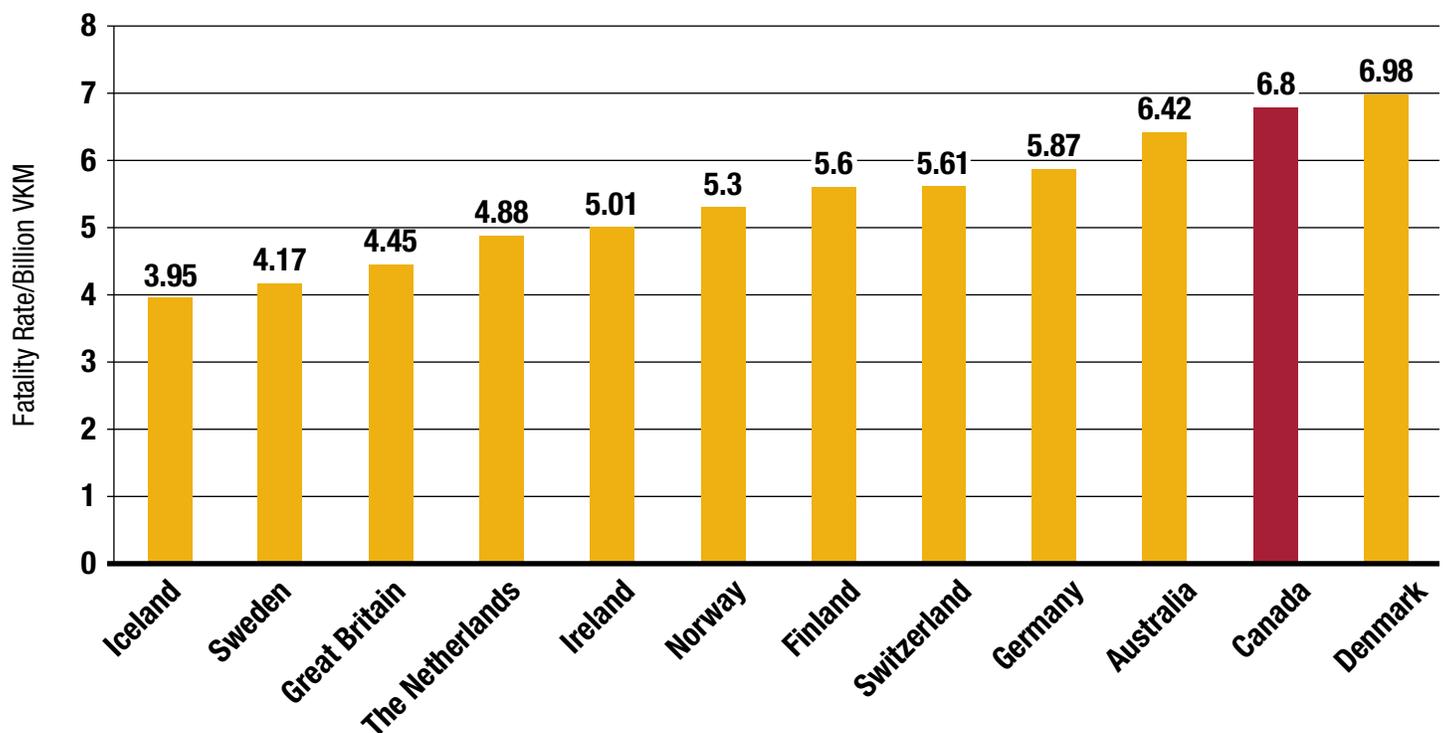
Notwithstanding the benefits accrued from the introduction of focused strategies to target specific road safety challenges, the development and adoption of road safety plans that assumed an integrated road 'safe system' approach gained considerable traction in many nations during the last decade. Whether it was called "Sustainable Safety," "Vision Zero" or "Safe System," the integrated road safe system approach was founded upon three pillars: safe road users, safe motor vehicles and safe roads. This approach postulates that all elements of the road transportation system should be simultaneously considered in determining road safety policies, priorities and program initiatives. This approach encourages the collaboration of stakeholders in addressing divergent aspects of road safety and facilitates an increased understanding of the

interrelationships among the three pillars. The publication of *Towards Zero: Ambitious Road Safety Targets and the Safe System Approach* by ⁽⁶⁾ the OECD in 2008, which highlighted the institutional management changes required in many countries to implement effective strategies and interventions, contributed to the adoption of key elements or principles of this road safety framework into many OECD member countries' national road safety plans.

When RSV 2010 was launched, Canada ranked fifth among developed countries in road safety. OECD member countries with better road safety records than Canada in 2002 based on the 'deaths per billion vehicle kilometres travelled' indicator included Great Britain, Sweden, The Netherlands and Norway.

During the 2008-2010-period, Canada's road crash fatality rate on a 'deaths per billion kilometres travelled' basis was 24.6% lower than during the 2000-2001-period. By the 2008-2010-period, 10 OECD member countries (Iceland, Sweden, Great Britain, The Netherlands, Ireland, Norway, Finland, Germany, Switzerland and Australia) had lower death rates than Canada using the same basis of comparison. Collectively, the fatality rate on a 'deaths per billion

Figure 2
Fatality Rate Per Billion Vehicle Kilometres Travelled,
Selected OECD Member Countries 2008–2010 Average



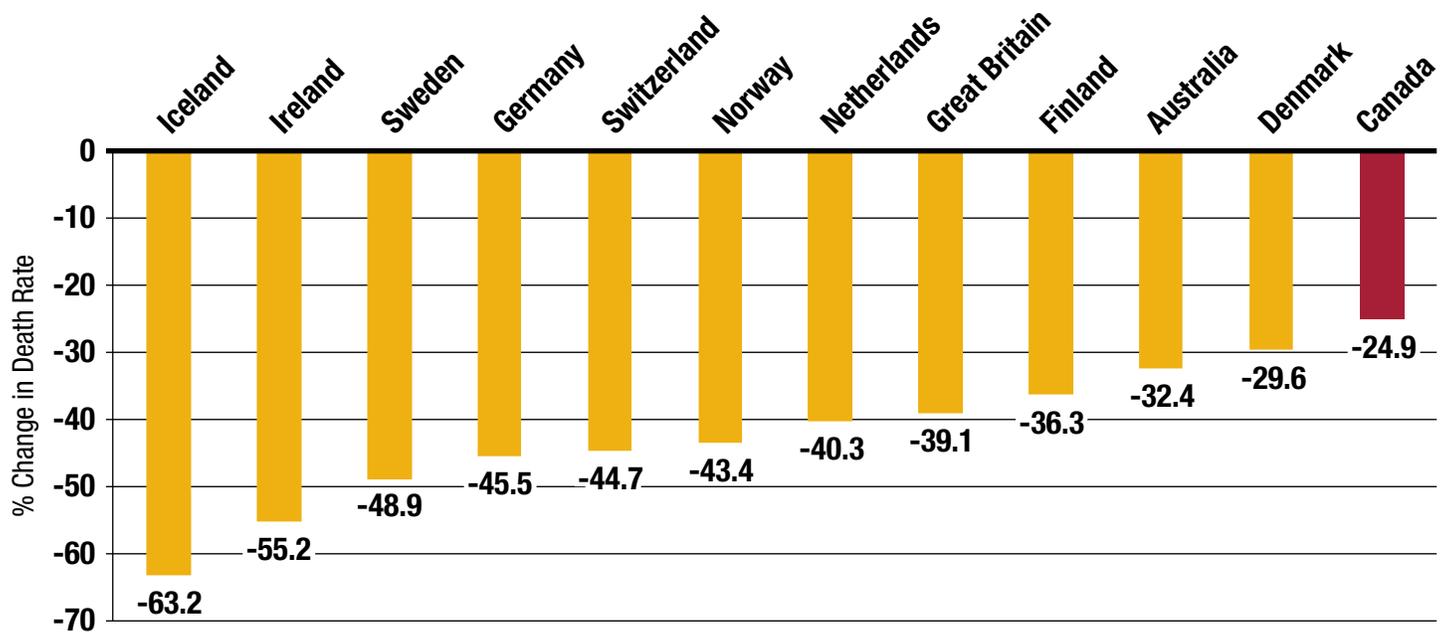
kilometres travelled' basis in the OECD's safest nations was 44% lower than during the 2000-2001-comparison period ⁽⁷⁾.

During the timeframe of RSV 2010, all of the world's safest countries made steady progress and some nations that previously did not have top ranked road safety records but that had placed a high priority on improving their level of road safety achieved impressive gains.

While Figure 3 demonstrates that the safest OECD member nations achieved notable improvements in their road safety records during the timeframe of RSV 2010, it is worth mentioning that with the exception of Great Britain and the Netherlands, no other country fully achieved its target objectives for fatality and serious injury reductions. Nevertheless, all of the countries whose road safety programs recently expired have adopted ambitious medium- to long-term road safety plans for the current decade or beyond that include the use of key themes, interim- or long-term targets, monitoring and to a lesser degree evaluation of strategies. For example, Great Britain's new strategic framework ⁽⁸⁾ includes targets for fatality and serious injury reductions to 2020 and 2030. The goals for reduced fatalities are 37% and

41%, respectively, during 2020 and 2030 compared with the 2005-2009 average death tolls. The target objectives for serious injuries reductions by 2020 and 2030 are 40% and 55%, respectively. The key themes of Great Britain's new national strategy focus on improving road safety through increased partnerships particularly at the local level, improved initial and remedial education programs and tougher and more efficient enforcement measures and sanctions against serious offenders.

Figure 3
Percent Change in Death Rates Per Billion Kilometres Travelled,
Selected OECD Member Countries 2000-2001 Average vs. 2008-2010 Average



RSV 2010: Sub-Targets' Progress

Occupant restraint use and unbelted occupant casualties:

National efforts to get vehicle occupants to buckle up more frequently were first undertaken in 1989 through the development and implementation of the National Occupant Restraint Program (NORP). NORP set a goal of getting 95% of occupants to wear seat belts by 1995. The NORP program was integrated into the Road Safety Vision 2001 program with an expanded objective of 95% motorist seat belt use and properly restrained children by 2001. The same occupant restraint use target was subsequently included in the RSV 2010 framework.⁽⁹⁾

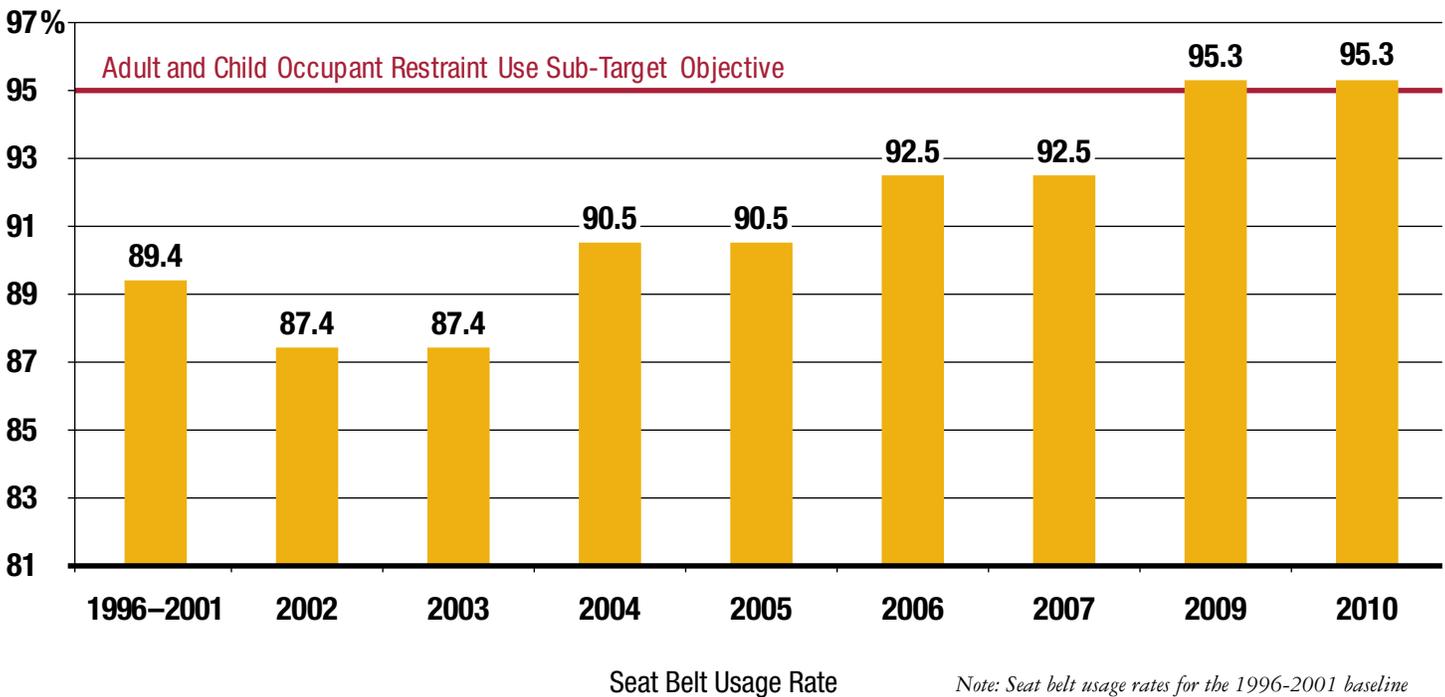
Under RSV 2010, a target was also established for a 40% reduction in the number of unrestrained motor vehicle occupants killed or seriously injured in crashes during the final three years of the program compared to comparable figures during the 1996-2001-period. During the six-year period prior to the establishment of this target, an average of 40% of fatally injured motorists and 20% of those seriously injured were unrestrained at the time of the crash. These percentages translated into approximately 890 unrestrained occupants that were killed and slightly more than 2600 that were seriously injured in collisions each year.⁽¹⁰⁾

Some of the noteworthy activities implemented to help achieve these occupant restraint use objectives included the provision of improved education material directed at road safety experts as well as motorists; the introduction of a regulation governing lower universal anchorage systems, which enabled child seats to be more firmly attached to vehicles; the development of the National Child Passenger Safety Training Program on the proper use of child safety seats and conducting child restraint use education and inspection clinics; the use of rollover simulators to demonstrate the consequences of being unbelted; regulatory amendments limiting the number of vehicle occupants to the number of seat belts in the vehicle; the removal or amendment of exemptions regarding restraint use and the introduction of increased fines and demerit points for non-use of seat belts;

the development of a national rural seat belt wearing survey to complement the national survey that was being conducted annually in predominantly urban areas; and carrying out seasonal seat belt use enforcement and public education campaigns as part of national police services efforts such as Canada Road Safety Week each May and Operation Impact each October.

Collectively, these strategies introduced to increase occupant restraint use were very effective. Adult seat belt use increased steadily throughout the term of RSV 2010, until the 95% occupant restraint use target was achieved in 2009-2010. National estimates of seat belt use were derived by utilizing weighted results of surveys that were conducted on alternating years in rural and urban communities of Canada.⁽¹¹⁾ Aside from achieving the overall 95% seat belt use target, the 2009-2010 survey results revealed that noteworthy increases in seat belt use occurred in rural areas, among males less than 25 years of age, among drivers of pickup trucks and among back seat occupants when compared with results of the previous rural and urban seat belt use surveys in 2006 and 2007.⁽¹¹⁾ While the target objective for seat belt use among adult passenger vehicle occupants was achieved, it must be mentioned that the results of two national child restraint use surveys, which were carried out in 2006 and 2010, revealed considerably different wearing rates. The 2006 survey of children aged 14 and under revealed that 59.8% of children were properly restrained, based on children's age weight and height groups criteria while weighted estimates of the 2010 survey revealed that 64.2% of children were properly restrained based on children's' age group criteria alone.^(12,13)

Figure 4
RSV 2010 Seat Belt Use Sub-Target
National Estimates of Seat Belt Use - 2002-2010 versus 1996-2001 Baseline



Note: Seat belt usage rates for the 1996-2001 baseline period are not directly comparable to usage rates cited during 2002 and beyond due to differences in survey methodologies. A national restraint use survey was not conducted during 2008.

The steady increases in the level of occupant restraint use during the 2002-2010 period enabled the 40% target for reductions in the number of motorists seriously injured in crashes to be surpassed and the target for reductions in unbelted fatally injured occupants to almost be attained, with reductions of 46.7% and 34.4% fewer unrestrained occupants, respectively, who were seriously injured or killed during the final three years of the RSV 2010 plan than during the baseline comparison period. These improvements accounted for an average of approximately 1200 fewer unbelted occupants seriously injured and about 300 fewer unbelted motorists killed each year during the final three years of RSV 2010.

of 20-44 year old fatally injured occupants and 23% of those seriously injured were unrestrained at the time of the crash. Road safety experts must continue to develop strategies and focus intervention efforts on the small percentage of motorists who do not wear seat belts and who are overrepresented as victims in serious crashes.

Although noteworthy decreases occurred in the number of unbelted motor vehicle occupant casualties during the 2008-2010 period, there is still considerable room for improvement. Almost 600 occupants that died and slightly more than 1,400 of those seriously injured in crashes were not wearing seat belts at the time of collision occurrence. Approximately 43%

Drinking and Driving:

Canadian road safety experts have had a national program in place to combat drinking and driving for more than two decades. First introduced in 1990, the Strategy to Reduce Impaired Driving (STRID) program had the objective of reducing the number of traffic fatalities involving alcohol impaired drivers by 20% by 1995. The program was then included in the Road Safety Vision 2001 program with the objective of reducing the percent of fatalities and serious injuries involving a drinking driver by 20% by 2001. The initiative was subsequently integrated into RSV 2010 with an overall objective of reducing the percent of fatalities and serious injuries involving a drinking driver by 40% during the 2008-2010-period when compared with the baseline period.

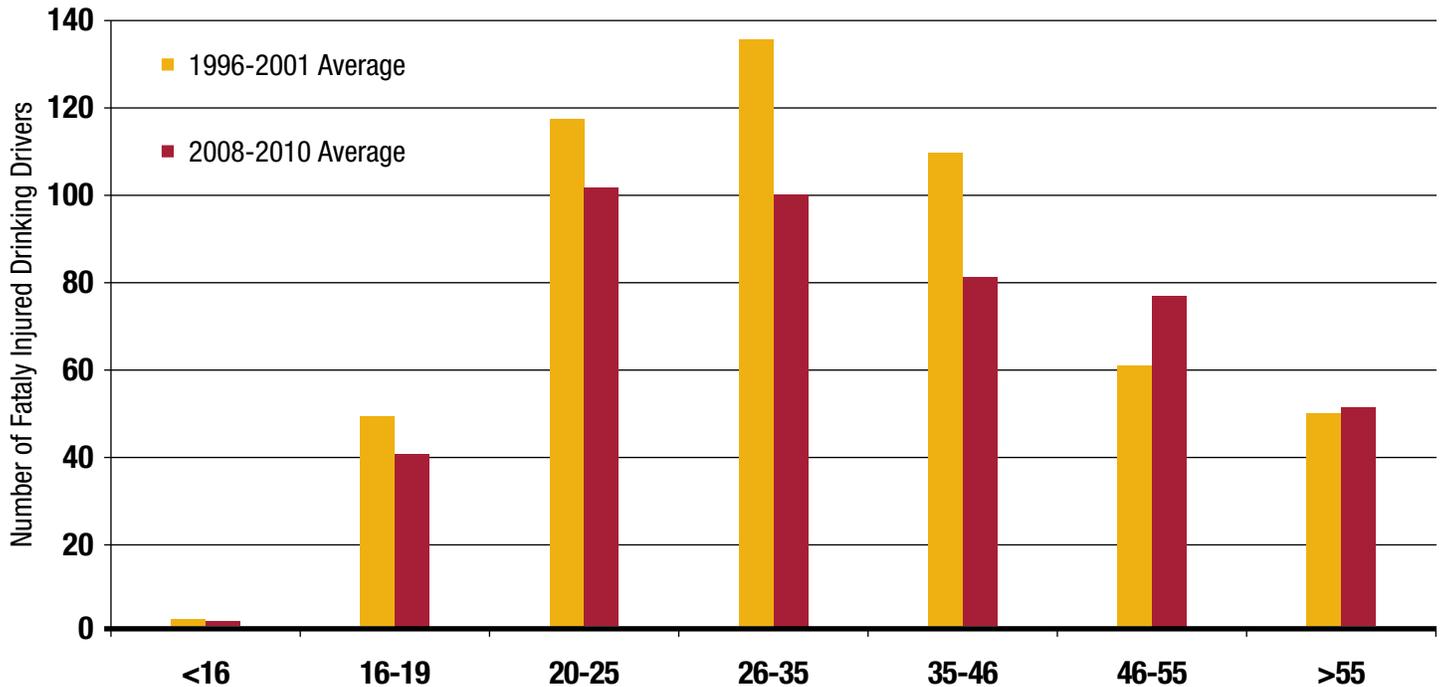
During the term of RSV 2010, the STRID 2010 Task Force in partnership with interested stakeholders introduced a number of education and awareness, enforcement and legislative initiatives that targeted hardcore drinking drivers, new and young drivers, social drinkers, and first sanctioned drivers.⁽¹⁴⁾ Some of the more noteworthy initiatives included undertaking high visibility drinking and driving education and enforcement campaigns during peak seasons and during national police services initiatives such as Canada Road Safety Week and Operation Impact; extending the search (look-back) window for drinking and driving sanctions to 10 years; introducing or modifying graduated driver licencing (GDL) programs to include a low or zero blood alcohol concentration (BAC) requirement for novice drivers and drivers less than 21 years of age regardless of their licence status until they exit the GDL program; and implementing tough interventions such as administrative licence suspensions, vehicle impoundments, ignition interlock systems, assessment and rehabilitation programs, and short-term roadside licence suspensions for drivers caught driving with blood alcohol concentrations between 50 and 80 mg/dl.

In spite of the considerable efforts made by the legislators, police services and other key partners to implement tougher sanctions, focused enforcement initiatives, public education and awareness campaigns and health promotion activities in order to reduce drinking and driving, the problem persists. During the 2008-2010-period, 33% of motor vehicle deaths involved a drinking driver while almost 38% of all fatally injured drivers had positive BACs. Among fatally injured

drivers who had been drinking prior to crashes, more than half (53%) had BAC levels that were more than twice the legal limit. In addition, more than half (51.5%) of fatally injured drivers of light duty pickup trucks and drivers aged 20-35 years (51%) had been drinking prior to crash involvement.^(15,16)

The sub-target that was established to reduce drinking driving was one of the least successful under Road Safety Vision 2010, based on the objective that was created when the strategy was developed. The percent of road users killed in crashes involving drinking or impaired drivers increased by 0.3%, while the percent of drinking drivers involved in serious crashes decreased by 7.4% between the 1996-2001 and the 2008-2010 periods, when changes were measured. However, it is worth noting that this was the only sub-target that called for a percent decrease in the percentage of road users killed or seriously injured between the 1996-2001 and the 2008-2010 periods. All other sub-targets sought to achieve percent reductions in number of victims killed or seriously injured in crashes during the same timeframes. If the drinking-driving sub-target had sought to achieve reductions in the number of serious casualties resulting from crashes involving drinking drivers, considerably more progress would have been reported. Between the 1996-2001 and the 2008-2010 periods, 22.4% fewer road users were killed in alcohol-related road crashes and 31.9% fewer drivers were involved in serious crashes that involved alcohol. The number of fatally injured drivers who tested positive for alcohol was 16.1% lower during 2008-2010 than during the baseline period.^(15,16) These improvements occurred despite a considerable increase in the number of drivers on our roads, as the average number of licenced drivers increased by 13.3% between the two comparison periods. Notwithstanding the lower number of alcohol-crash related fatalities, it must be mentioned that the number of non-alcohol related fatalities decreased as well so it is not clear that the decline in alcohol related fatalities was due solely to drinking driving countermeasures that were introduced during the timeframe of RSV 2010.

Figure 5
Number of Fatally Injured Drinking Drivers, 1996-2001 Ave. vs. 2008-2010 Ave.



While this sub-target experienced progress in numerical terms among all driver age groups except the ever-increasing older driver population during the timeframe of RSV 2010, drinking driving remains one of the longstanding challenges faced by policy makers, the enforcement community and road safety experts in Canada. Road safety partners must remain committed to the development and implementation of innovative and effective initiatives in order to reduce the drinking driving problem.

Speeding and Intersection Safety:

A review of the magnitude of speed- and intersection-related traffic collisions by the CCMTA Standing Committee on Road Safety Research and Policies led to the establishment of the Task Force on Speed and Intersection Safety Management (SISM) in 1999. The Task Force's principle mandate was to develop a multifaceted strategy that would help reduce the incidence of serious crashes involving speed or those occurring at intersections through the development and implementation of initiatives that supported its core strategies: education/awareness, research, road infrastructure/standards and enforcement. ⁽¹⁷⁾ Shortly after its establishment, SISM

proposed the establishment of modest 5%-10% targets over a five year period for reductions in speed- and intersection-related crashes. The renewal of Canada's national road safety plan with quantitative targets facilitated the integration of the SISM strategy into the RSV 2010 framework. Targets were established for 20% decreases in the number of road users killed or seriously injured in speed- or intersection-related crashes.

Crashes involving inappropriate or excess speed and those that occurred at intersections accounted for 24.1% and 29.1%, respectively, of victims that were killed and 16.6% and 42.3%, respectively, of victims that were seriously injured in traffic collisions during the 1996-2001 period.

Detailed analyses of crash data where excess speed was cited as a contributing factor revealed that drivers aged 16-24 years were over represented as fatally injured victims.⁽¹⁸⁾ Fatal crashes involving these victims tended to occur in urban areas at night. The connection between alcohol use and speeding was also noteworthy in urban areas, where more than forty percent of all speeding drivers involved in fatal crashes had been drinking.

In-depth analyses of intersection-related crashes showed that more than half of fatally injured victims and approximately 70% of those seriously injured incurred their injuries at urban locations. In addition, more than 40% of drivers involved in fatal crashes and approximately 30% of drivers involved in serious injury collisions at intersections had committed a driving infraction prior to collision involvement. Drivers aged 16-24 years and those 75 years or older were the age categories most likely to have committed driving infractions prior to fatal crash involvement.⁽¹⁹⁾

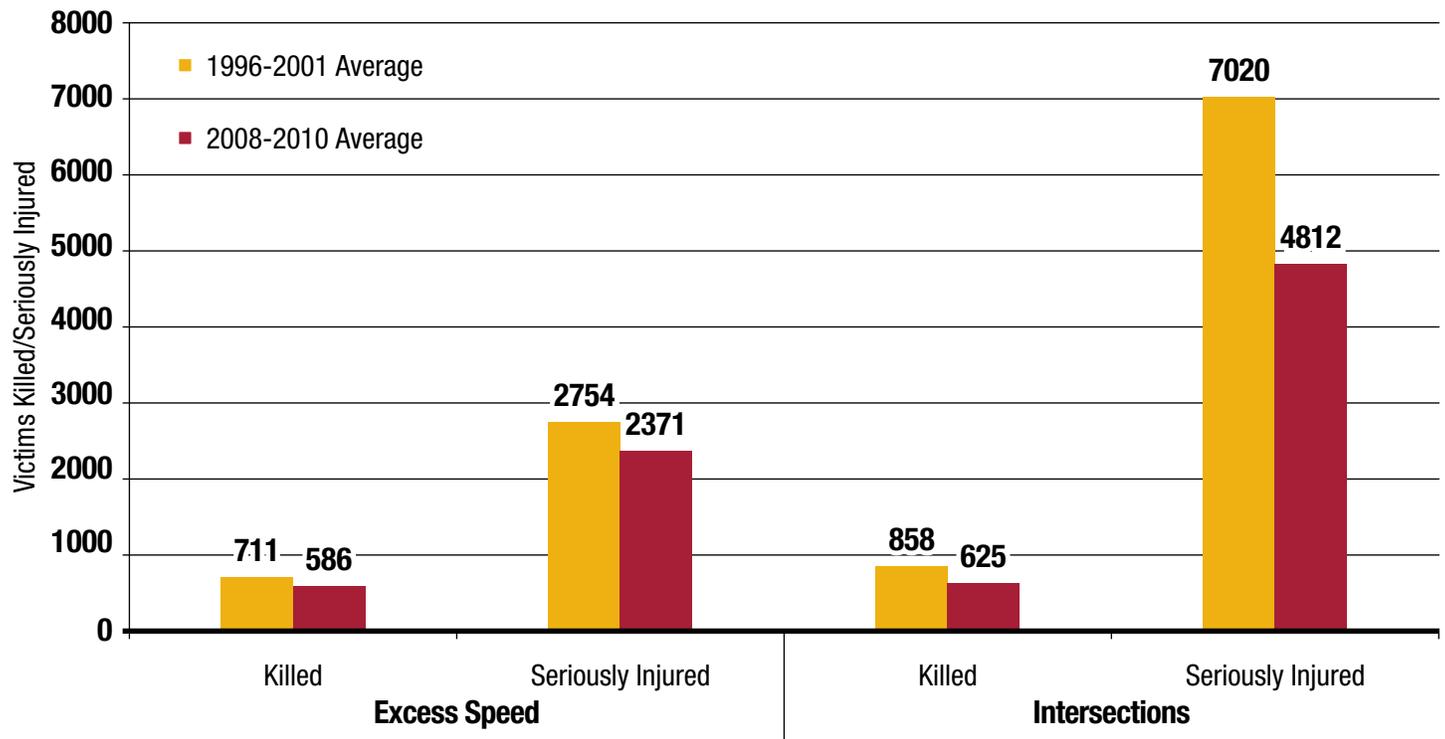
Noteworthy initiatives undertaken in various jurisdictions during the term of RSV 2010 to support the core strategies of SISIM included developing public education campaigns and disseminating information that focused on the dangers of aggressive driving and street racing; conducting research to determine the motivation behind unsafe driving practices; introducing severe sanctions for stunt driving (50 km/hr or more over the posted speed limit) or street racing; implementing legislation aimed at reducing speeds in construction or school zones or when passing emergency vehicles or tow trucks and introducing tougher sanctions for violators; introducing variable speed limit systems and message signs to reduce speed limits in adverse conditions; developing public education campaigns on intersection safety that targeted both vulnerable road users and motorists; increasing fines for intersection-related convictions; conducting research to identify rural intersection safety issues as well as low-cost and easy to implement countermeasures to address these challenges; conducting a literature review of the effectiveness of intersection safety cameras; installing roundabouts to reduce speeds and crashes at intersections in urban areas; installing rumble strips at high-risk intersection locations; upgrading signage, traffic light configurations and traffic lanes at high-crash intersection locations; making targeted enforcement at high-risk intersections a regular part of enforcement activities; making speed and intersection safety the focus of national traffic services initiatives (e.g. Operation Impact and Canada Road Safety Week).

The collective efforts of road safety stakeholders to support the core strategies of SISIM were successful. The RSV 2010 target pertaining to reductions in the number of road users that were killed or seriously injured in intersection-related collisions was surpassed, as the average number of victims that died during

the 2008-2010 period decreased by 27.2% and the number of victims seriously injured declined by 31.5% over the baseline comparison period.

The target established for decreases in serious casualties resulting from crashes involving excess speed experienced considerable progress but was not fully achieved. However, given that both the numbers of fatally and seriously injured victims of speed-related crashes were considerably higher during the mid-term (2005-2007) period of RSV 2010 than during the 1996-2001 baseline-period, the progress that was achieved by the expiration of the strategy was noteworthy. One of the recommendations that emanated from the mid-term review of RSV 2010⁽⁵⁾ was that the components of existing programs supporting the targets of the strategy should be results focused. This suggestion and others led to renewed efforts by stakeholders in most jurisdictions to develop and implement strategies aimed at curbing the incidence of speeding. The end result was a 17.5% decrease in the number of victims that died and a 13.9% reduction in the number of victims that were seriously injured in collisions involving speed during the 2008-2010-period.

Figure 6
Road Users Killed/Seriously Injured in Speed- & Intersection-Related Crashes
1996-2001 Ave. vs 2008-2010 Ave.



Notwithstanding the impressive decrease that occurred in the number of victims that were killed or seriously injured in crashes at intersections, and to a lesser extent, the serious casualty reductions that occurred in collisions where speed was a factor, considerable effort is still required to reduce serious casualties involving these factors even further as current crash data indicate that approximately 25% of fatally injured victims died in crashes where speed was cited as a contributing factor and 25% of victims were killed in intersection-related collisions.

Vulnerable Road Users:

Pedestrians, motorcyclists and cyclists are considered vulnerable road users because of the dangers they face when they are involved in traffic conflicts with motorists (i.e., they are not protected by the structure of vehicle and restraint systems as are occupants). Collectively, vulnerable road users accounted for approximately 21% of road users killed and 20% of victims seriously injured in collisions during the 1996-2001-period.

A number of risk factors were observed in crashes involving vulnerable road users. Alcohol use was cited as a contributing factor for a minimum of 25% of pedestrians killed and more than 30% of fatally injured motorcyclists during the 1996-2001-period.^(15,16) Intersections, particularly those in urban environments, were also a concern, as approximately half of pedestrian and cyclist fatalities and approximately 40% of motorcyclist deaths occurred in crashes at these locations. More than 40% of all vulnerable road user serious injuries occurred at intersection locations. Conspicuity was also a risk factor for pedestrians. More than half of the pedestrians that died in crashes and more than 40% of those that were seriously injured incurred their injuries at night or in artificial lighting conditions which underscores the need for pedestrians to wear reflective clothing at night. Adhering to the rules of safe road use was also an issue for pedestrians, as approximately half of all pedestrians killed or seriously injured were deemed to have been at fault.⁽²⁰⁾

One of the positive developments that resulted from the establishment of a target for serious casualty reductions for this group of road users under RSV 2010 was the creation of

the Vulnerable Road User (VRU) Task Force in 2003. The principle mandate of the VRU Task Force was to develop and promote national strategies/initiatives that focused on vulnerable road user problem areas, to identify and share jurisdictional best practices on vulnerable road user issues nationally and to work with other national stakeholders (e.g. road infrastructure) whose mandate included making road use safer for vulnerable road users. ⁽²¹⁾

The quantitative target that was established for serious casualty reductions among vulnerable road users within the RSV 2010 framework was a 30% decrease in the average number of fatally or seriously injured vulnerable road users during the final three years of RSV 2010 compared to the 1996-2001 baseline period.

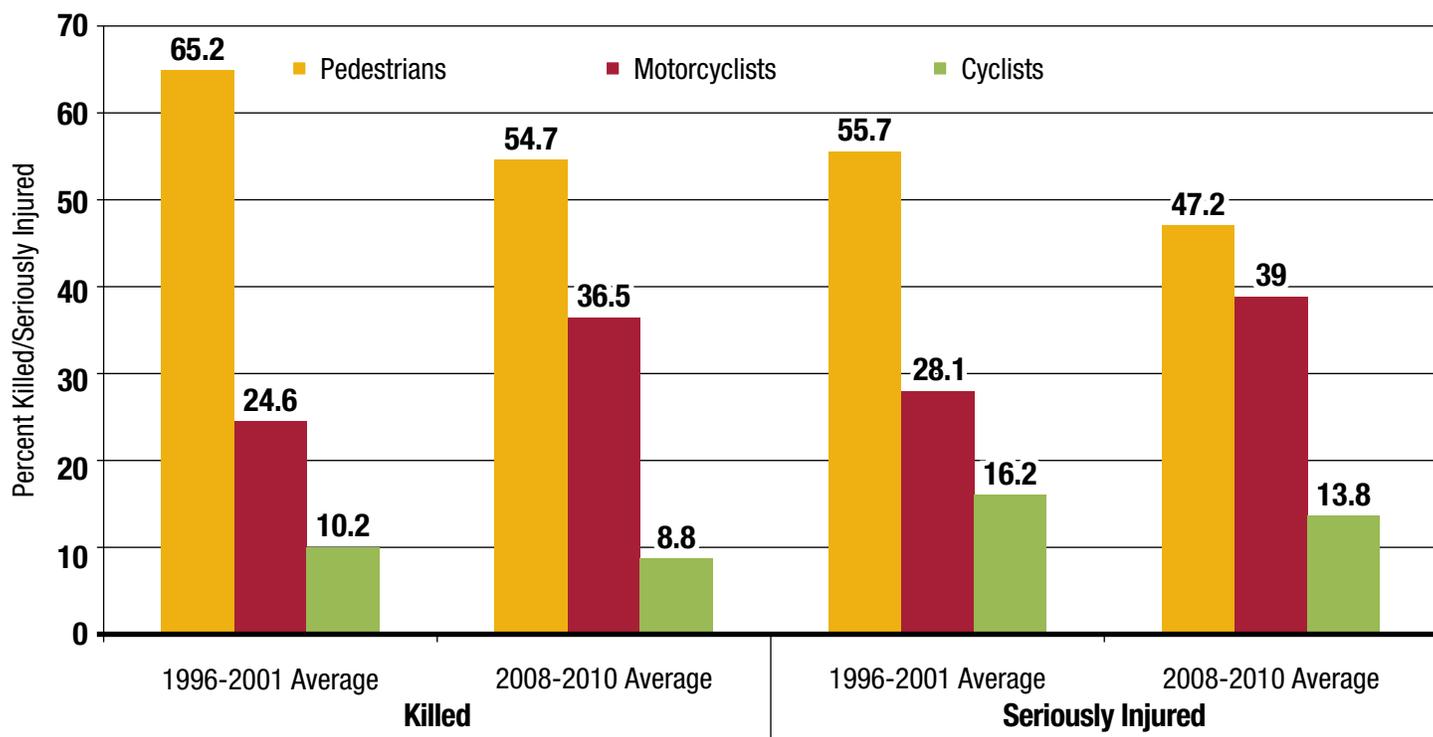
Noteworthy research, education and awareness, enforcement and road infrastructure initiatives that were undertaken in selected jurisdictions to make walking or riding safer included conducting pedestrian and driver awareness campaigns reminding each road user of their respective responsibilities; introducing public education material on vulnerable road user safety into school curriculums; delivering presentations on pedestrian safety for seniors' organizations and associations; offering motorcycle safety courses in rural communities; combining focused education and enforcement campaigns that targeted both vulnerable road users and motorists; introducing legislative amendments pertaining to pedestrian safety that resulted in increased fines or licence suspensions for repeat offenders who sped in school zones or at pedestrian crossings; replacing high-crash location pedestrian crosswalks with traffic signals; installing audible indicators on traffic signals at selected urban locations; installing cycling lanes on urban streets; conducting road safety audits of city intersections to identify existing and potential safety issues, with particular regard to pedestrians and cyclists; and developing road infrastructure guidelines and standards for municipal use that met safe pedestrian use and safe cycling requirements.

Overall, it appeared that the considerable efforts undertaken by stakeholders to improve vulnerable road user safety resulted in limited success. Vulnerable road user fatalities decreased by 9.0% between the baseline period and final three years of the national plan, while the number of seriously injured vulnerable road users decreased marginally,

by 3.4% during the same period. Notwithstanding the limited improvement that occurred when examining VRU serious casualties as a single road user group, it must be mentioned that very different results were observed when the changes in pedestrian, cyclist and motorcyclist serious casualty victims were examined separately. Both pedestrian and cyclist fatalities experienced substantial decreases, by 23.8% and by 21.6%, respectively, during the term of RSV 2010, while motorcyclist casualties increased substantially, by 34.5%, during the same period, in large part due to increased motorcycle travel that resulted from the 92.6% increase in the number of motorcycles registered between the two comparison periods. ⁽³⁾ Effectively, the considerable improvement that occurred in pedestrian and cyclist fatalities was offset by the large increase in motorcyclist fatalities. A very similar pattern was observed among seriously injured vulnerable road users. The average number of pedestrians and cyclists injured decreased by 18.1%, respectively, during the final three years of RSV 2010 when compare to the same figures during the baseline period, while the number of motorcyclists injured increased by 34.1% during the same comparison periods.

Figure 7 demonstrates the change in the percent distributions of vulnerable road user casualties during the two comparison periods.

Figure 7
Vulnerable Road Users Killed/Seriously Injured (%) by Victim Type
1996-2001 Average vs. 2008-2010 Average



Rural Road Safety

Canada's broad network of rural two lane undivided roads with speed limits that are typically from 80-90 kph facilitates daily travel throughout the country's vast areas of low population. However, travel on these roads comes at a price. During the 1996-2001-period, slightly more than half (50.9%) of all road user fatalities and more than one-third (35.1%) of victims seriously injured sustained their injuries in crashes on rural undivided roads.

National task forces were in place to guide stakeholders' intervention efforts for most areas targeted under RSV 2010. The establishment of an ambitious sub-target for serious casualty reductions on rural roads within the RSV 2010 framework highlighted the need for the creation of a comparable mechanism to address this issue. The Rural Road Safety Task Force was created in 2005. Its principle mandate was to raise awareness of the most prevalent rural road safety issues among road safety advocates and the general public, to identify and report on successful jurisdictional strategies/ programs/initiatives, which addressed rural road safety

issues that could be implemented on a national scale, and to establish formal links and information exchange protocols with national stakeholders, particularly in the area of road design and operations.

The quantitative target that was established for serious casualty reductions on rural roads within the RSV 2010 framework was a 40% decrease in the average number of fatally or seriously injured road users during the final three years of RSV 2010 compared to the 1996-2001 baseline period.

In depth analyses of data on rural road crashes that occurred during the baseline period indicated that most victims died in single vehicle (35%) or head-on (35%) collisions, and to a lesser extent in crashes at intersections (22%). Comparable serious injury figures for these three crash configurations were 44%, 20% and 28%, respectively.

High-risk driver behaviors that were frequently cited as contributing factors in these rural road collisions included non-use of occupant restraints and speeding in combination with drinking driving among single vehicle night-time crash

victims and the high incidence of driving infractions among fatally or seriously injured drivers that were involved in head-on or intersection collisions.⁽²²⁾

Noteworthy activities undertaken to support the mandate of the Rural Road Safety Task force included the completion of a report on national collision trends and recommended strategies to reduce serious casualties on rural roads⁽²²⁾; funding research to carry out a national survey that benchmarked rural road safety strategies throughout Canada and that identified successful jurisdictional strategies that could be implemented nationally⁽²³⁾; conducting bi-annual national rural seat belt use surveys to complement the national urban restraint use surveys that were carried out on alternating years; analysing regional seat belt use survey results to develop plans that targeted high-risk groups; the development of a rural intersection safety handbook that included low-cost and easy to implement countermeasures; training technicians for the National Child Passenger Safety Training Program and conducting child restraint use education and inspection clinics in rural communities; implementing regional and national public education and enforcement campaigns in rural areas aimed at increasing occupant restraint use, discouraging drinking driving and reducing speeding; providing demonstrations on rollover simulators and airbag deployments at rural community events; conducting black spot analysis and road safety audits to identify road design problems; improving signage at high-crash locations, constructing roundabouts at selected high-risk intersections, and installing rumble strips on selected sections of roadways on paved shoulders, centre lines, and transversal strips to alert drivers to upcoming stop sign.

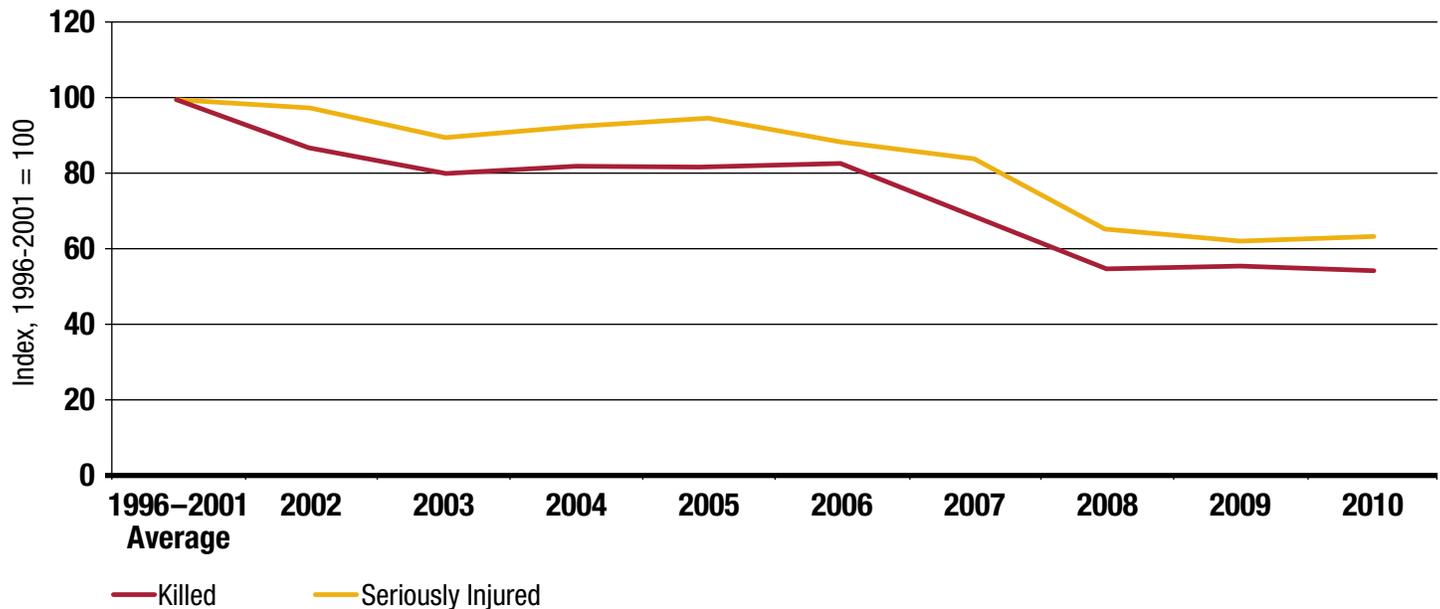
The research, public education, and enforcement and road design and operations strategies that were developed and implemented during the term of RSV 2010 to make travel on rural roads safer were very effective. The steady improvement in the level of occupant restraint use in rural communities is an example of effectiveness of these strategies. When compared with the results of the previous national survey of seat belt use in rural Canada in 2006, the most recent national survey (2009) revealed that noteworthy increases occurred in seat belt use among males less than 25 years of age who were driving light duty trucks (7.8 percentage points higher) as well as among back seat occupants (7.6 percentage points

higher).⁽¹¹⁾ The percentage of fatally injured drivers who were unrestrained at the time of the crash was 4.3 percentage points lower during the 2008-2010 period than the comparable figure during the 1996-2001 period.

During the final three years of the RSV 2010 plan, the number of road users killed in rural road collisions decreased by 35.7%, almost achieving the 40% goal, while the improvement in serious injury casualties during the same period, at 44.4%, exceeded the target objective.

Figure 8 demonstrates that rural road travel became considerably safer following the establishment of a task force in 2005 that guided the development and implementation of focused strategies and interventions. Nevertheless, road safety experts should continue to educate the public about the risks of rural road travel (e.g. wildlife, poor driving conditions and driver fatigue) and enforcement agencies should continue to carry out focused campaigns that target drinking driving, speeding and non-use of seat belts, which still account for large numbers of serious casualties annually on rural roads.

Figure 8
Road Users Killed in Crashes on Rural Roads, 1996-2001 -2010



Commercial Vehicle Safety:

Commercial vehicles travel almost three times more kilometres each year than passenger vehicles.⁽⁴⁾ When commercial vehicles are involved in collisions, the outcomes are often serious due in part to size disparity of the involved vehicles. Commercial vehicles with gross vehicle weight ratings in excess of 4,536 kg were involved in crashes that resulted in approximately 20% of fatalities and 10% of victims seriously injured during the 1996-2001-period. The death rate per billion kilometres travelled by commercial vehicles during the 2000-2001 period (the only years during the baseline period that vehicle kilometrage data were captured in Canada) was more than two times higher than the comparable rate for the entire vehicle population. However, using the same basis for comparison, commercial vehicles were involved only half as often as light duty vehicles in personal injury crashes.

Noteworthy characteristics of an analysis of collision data involving commercial vehicles included the high frequency of fatalities resulting from crashes that occurred on rural undivided roads, the prevalence of fatalities that occurred in collisions at intersections and the strong likelihood that other involved drivers had committed driving infractions in multi-vehicle fatal collisions.⁽²⁴⁾

The quantitative target that was established for serious casualty reductions resulting from crashes involving commercial vehicles within the RSV 2010 framework was a 20% decrease in the average number of fatally or seriously injured road users during the final three years of RSV 2010 compared to the 1996-2001 baseline period.

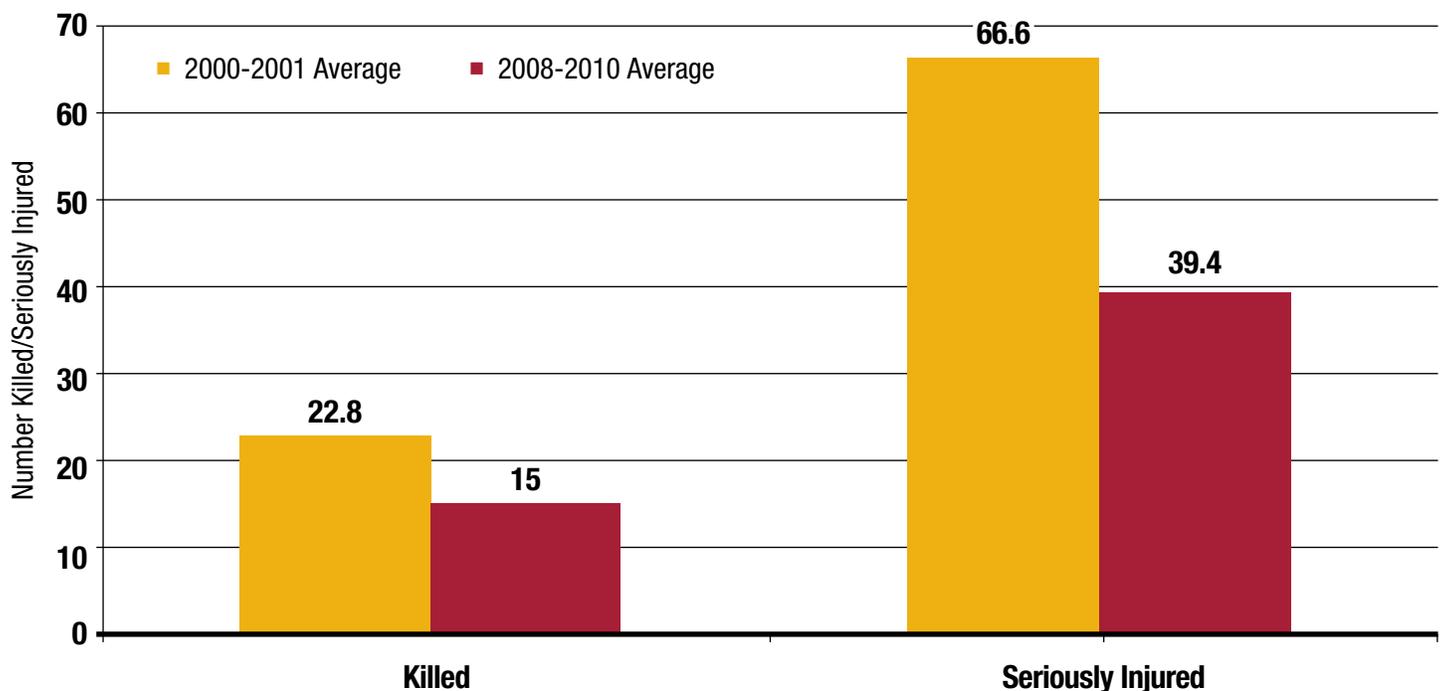
The CCMTA Standing Committee of Compliance and Regulatory Affairs (CRA), which is concerned with compliance activities related to commercial drivers and vehicles, the transportation of dangerous goods and motor carrier operations, assumed responsibility for developing and implementing regulations and strategies aimed at improving commercial vehicle safety.

CRA has developed or implemented a number of important initiatives based on the National Safety Code's minimum performance standards that apply to all persons responsible for the safe operation of commercial vehicles.⁽²⁵⁾ During the term of RSV 2010, commercial vehicle safety improvements such as the hours of service regulation,⁽²⁶⁾ which provides drivers with greater opportunity to obtain additional rest, the national safety ratings system regulation,⁽²⁷⁾ which ensures that comparable safety performance results in similar safety ratings across Canada and revisions to the trip inspection standard,⁽²⁸⁾ which reflect changes to maintenance and

inspection standards have contributed to safer commercial vehicle movements. Examples of other noteworthy activities carried out to support the achievement of the sub-target for serious casualty reductions resulting from collisions involving commercial vehicles included the mandatory fitment of speed limiters on commercial vehicles in some jurisdictions; the development of a national public awareness campaign, called Share the Road, to alert drivers of passenger vehicles not to drive in certain areas around tractor-trailers, which are in effect blind spots for truck operators; the development of comprehensive new driver training programs or enhancement of existing courses to provide better training for commercial vehicle drivers; and undertaking an in-depth assessment of the principle human factors associated with commercial vehicle crashes and the development of a best practices strategy to mitigate these occurrences.⁽²⁹⁾

The implementation of new regulations and strategies as well as the slight reduction in commercial vehicle travel that occurred due to the economic downturn during the 2008-2010-period when compared with travel during the mid-2000s resulted in substantial decreases in number of serious casualties during the final three years of the RSV 2010 plan. Fatalities decreased by 21.9% while the number of victims seriously injured declined by 29.8% when compared with the 1996-2001-period. Aside from exceeding the RSV 2010 target objective for a 20% reduction in the absolute number of serious casualties in crashes involving commercial vehicles, the number of road users killed and seriously injured were 34.2% and 40.8% lower, respectively, per billion kilometres travelled by commercial vehicles during the final years of RSV 2010 than during the baseline comparison period.

Figure 9
Number of Road Users Killed/Seriously Injured in Commercial Vehicle Collisions Per Billion VKM, 2000-2001 Average vs. 2008-2010 Average



Young Drivers:

Young inexperienced drivers, aged 16-19 years, are overrepresented as serious crash victims. During the 1996-2001-period, they represented approximately 5% of all licenced drivers in Canada but accounted for approximately 10% of all fatally or seriously injured drivers. During the baseline period, 36% of all fatally injured young drivers had been drinking or were impaired^(15, 16) and approximately one third of fatally injured young drivers were unrestrained at the time of the collision.⁽¹⁰⁾ Vehicle travel data captured during 2000-2001 according to driver age categories revealed that the fatality rate among young drivers was three times higher per billion kilometres travelled than the average fatality rate for all drivers.⁽⁴⁾

The target objective that was established within the RSV 2010 framework for young drivers/riders, aged 16-19 years, was a 20% decrease in the number of young drivers/riders that were killed or seriously injured in crashes during the final three years of RSV 2010 compared to the 1996-2001 baseline period.

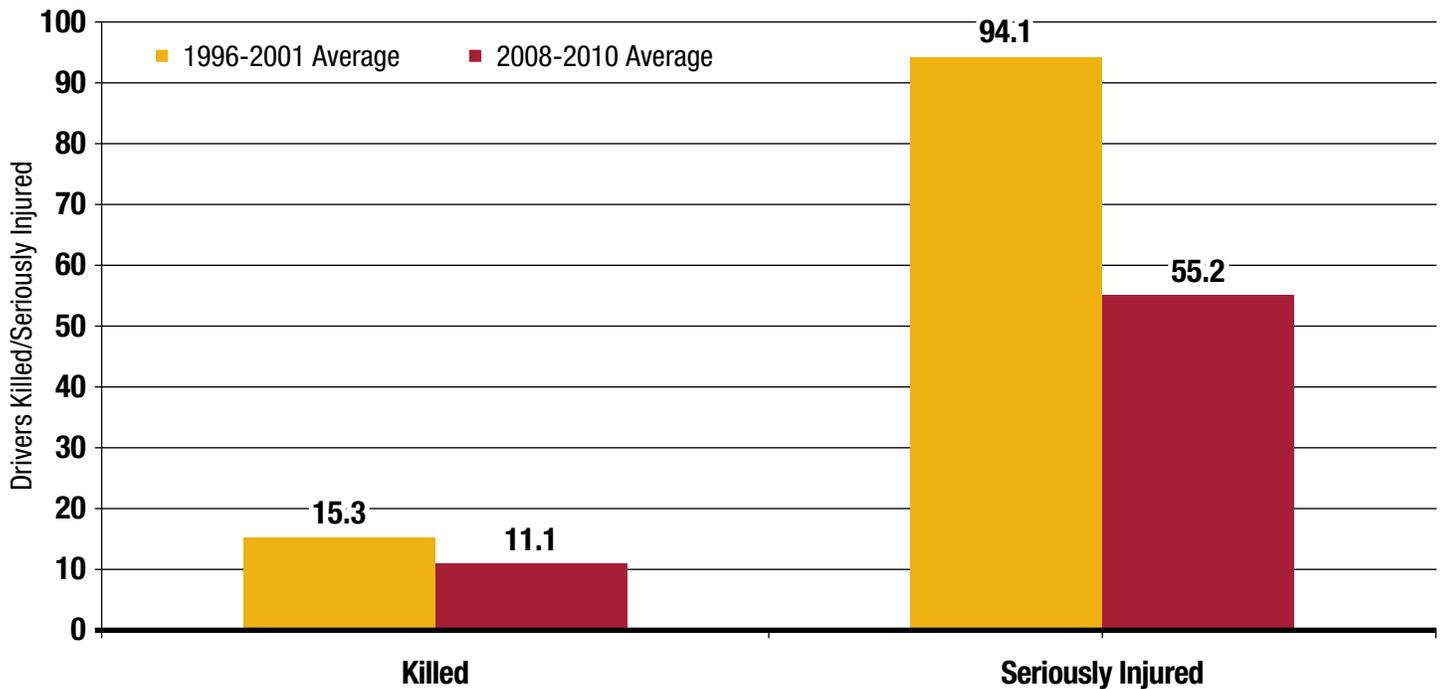
During the term of RSV 2010, efforts to improve driving behaviour among young drivers/riders were undertaken by a number of national task forces. The NORP 2010, SISM, and STRID 2010 Task Forces developed and implemented strategies and activities that aimed to reduce the incidence of such high-risk behaviours as non-use of seat belts, speeding and aggressive driving and driving after drinking among all motorists including young drivers/riders. The STRID 2010 Task Force also created the Zero BAC for Young and/or Novice Drivers Working Group to examine the traffic safety benefits of adopting zero BAC limits for young and/or novice drivers 21 years of age or under (e.g., Ontario, Quebec) and to provide recommendations for options on various methods of implementing zero BAC limits for these drivers.

Examples of noteworthy initiatives that were adopted during the 2002-2010-period by stakeholders to reduce serious casualties among young drivers or riders included the development and wide distribution of public education materials such as the iDrive video, which helps young drivers to recognize factors that contribute to unsafe driving and to develop strategies to avoid them; the passage of legislation in some jurisdictions requiring all drivers 21 and under to maintain a zero blood alcohol concentration level while

driving; the adoption of GDL programs and their inherent restrictions including a zero blood alcohol concentration threshold, a lower driver penalty point threshold, night time driving restrictions, passenger restrictions and road restrictions in all but one jurisdiction where GDL programs did not previously exist; enhancing GDL programs and introducing tougher restrictions in jurisdictions where the programs were already in place; developing a driving experience teacher's guide, activity booklet and brochure to educate teens about the requirements and restrictions, including revisions of GDL programs; reviewing motorcycle licencing policy and standards to make recommendations to enhance rider safety; and conducting research on risk-taking and driver skills among new drivers.

Collectively, the combination of the strategies implemented by road safety stakeholders and the reduced travel (-13%) by young drivers and riders during the final years of RSV 2010 when compared with the middle of the decade due to the economic downturn contributed to impressive casualty reductions. The 20% target objective for fatality and serious injury reductions was surpassed, as deaths decreased by 23.5% and seriously injured victims declined by 37.9%.

Although the RSV 2010 target objective for serious casualty reductions among young motorists was surpassed, considerable effort must still be undertaken to mitigate high-risk behaviours such as drinking driving and non-use of seat belts that are still very prevalent among young driver/rider serious casualties.

Figure 10**Young Drivers/Riders Killed/Seriously Injured in Crashes Per 100,000 Licenced Drivers 1996-2001 Ave. vs. 2008-2010 Ave.**

Safer vehicles and safer roads:

The collective efforts of national task forces in guiding the development and implementation of strategies that contributed to the progress achieved among the RSV 2010 targets have already been established. It must also be mentioned that noteworthy safety improvements occurred to vehicles and to road infrastructure during the timeframe of RSV 2010 that also contributed to the successes that were achieved among the areas targeted under the national road safety plan.

Research demonstrating the safety benefits of Electronic Stability Control (ESC) led motor vehicle manufacturers' to voluntarily fit ESC on many higher-end vehicles several years prior to its mandatory regulatory requirement on new passenger vehicles manufactured on or after September 1st, 2011. This safety feature helps motorists stay in control of their vehicle when swerving or braking suddenly to avoid obstacles. A federal government study that analysed 2006 crash data estimated that almost 30% fewer motorists would have been killed or seriously injured in loss of control crashes if all passenger vehicles had been equipped with ESC that year. A Memorandum of Understanding between the federal

government and motor vehicle manufacturers that resulted in side door and curtain air bag systems to be increasingly included as standard or optional safety equipment on new motor vehicles reduced the risk of serious injury to occupants of struck vehicles in side impact collisions. An estimated 30% fewer occupants will be killed in side impact collisions once all passenger vehicles are equipped with this crashworthiness safety feature. Other noteworthy vehicle safety advancements that were made during this period included the introduction of a regulation on rear underride safety for commercial trailers to prevent the front of passenger vehicles from sliding underneath semitrailers in rear end crashes; load limiting seat belts to allow the seat belt force applied to the chest to increase only to a point where serious injury is unlikely; airbag systems with occupant size discrimination controls; new child safety seat attachment requirements; and tire inflation monitors. Noteworthy vehicle safety research initiatives that were carried out by the federal government included studying driver distraction, intelligent speed adaptation, and collision mitigation braking systems.

The Transportation Association of Canada (TAC) is a national association that gathers and promotes the exchange of information and knowledge on technical guidelines and best

practices, primarily for road and road-related transportation matters. During the tenure of RSV 2010, TAC published a number of reports that were intended to provide Canadian road safety authorities and engineering practitioners with enhanced safety elements for the planning, designing or rehabilitation of roads. Some of the notable areas addressed in these publications included the development of guidelines for uniform lighting of roadways and related outdoor lighting systems; the design and application of transverse rumble strips to warn drivers of imminent or unusual changes in the driving environment; updating the geometric design guide for Canadian roads with an emphasis on design speed and design consistency; describing the basic requirements for managing road safety in an engineering context and identifying linkages to other road safety stakeholders; providing guidelines to traffic practitioners on how to upgrade the operational and physical characteristics of existing in-service roads to be more compatible with current traffic conditions and safety knowledge; and developing guidelines for network screening of collision prone locations to identify road infrastructure deficiencies and traffic operations and control features that may have contributed to the collisions and to establish appropriate remedial measures.

RSV 2010: A Successful Stakeholder Initiative

This report has documented the success of the Road Safety Vision 2010 plan and provided details regarding the considerable success that was achieved among the main road safety challenges that were addressed as part of the plan.

The plan was successful for a number of reasons. First, it had high-level political buy-in. Prior to being launched in 2002, the plan was endorsed by all ministers of transportation and highway safety. Ministers and deputy ministers of transportation were regularly informed about the road safety activities being carried out throughout the country and about the progress being made towards the achievement of the targets. When progress among the areas identified for

improvement in the strategy was deemed slower than necessary to achieve the established goals midway through the timeframe of RSV 2010, the plan's political endorsement served to facilitate the undertaking of increased levels of effort by road safety stakeholders during the final years of the initiative in order to accelerate progress toward the target objectives.

Second, the national task forces comprised of road safety experts from government and non-government organisations that were already in place to address longstanding road safety challenges took active ownership of most of the wide-ranging set of the targets intrinsic to RSV 2010. Increased knowledge and awareness of the key issues and more extensive collaboration between task force members and other stakeholders facilitated the development and implementation of strategies that reduced crash risks among the targeted areas. New national task forces were also created to develop and implement focused intervention efforts in important areas that previously did not have national direction. In addition, project groups and working groups comprised of experts from national task forces were formed to address particularly topical road safety issues among the targeted areas such as zero BAC for young and/or novice drivers, alcohol ignition interlock reciprocity and the use of electronic on-board recorders for commercial vehicles.

Finally, strong buy-in to the strategic objectives and targets of the national road safety plan by major police services in Canada during the term of RSV 2010 contributed to safer travel on Canada's roadways. During this period, the Royal Canadian Mounted Police, who provide police services in most Canadian jurisdictions, and the Ontario Provincial Police who provide police services in Canada's most populous province adopted elements of Canada's national road safety strategy into their business plans. Better informed police services focused public education and enforcement activities in the areas where the greatest challenges to road safety existed. The Canadian Association of Chiefs of Police Traffic Safety Committee led annual national police services public education and enforcement initiatives such as Operation Impact and Canada Road Safety Week, in which such high risk areas as drinking driving, non-use of seat belts, speeding and aggressive driving were regularly targeted.

The collective efforts of Canadian road safety stakeholders resulted in a safer road environment. A number of the targets established for fatality reductions were exceeded (intersections, commercial vehicles, young drivers) while significant progress was achieved towards the objectives of others (unbelted occupants, speed and rural roads). Considerable progress also occurred among the targets established for reductions in the number of seriously injured victims, as the objectives for unbelted occupants, rural roads, intersections, commercial vehicles and young drivers were surpassed. Overall, the 22% reduction in fatalities and the 26% decrease in the number of seriously injured victims that occurred during the last decade despite steady growth in Canada's population, vehicles and licenced drivers was a validation of the plan's success even though the target objectives were not fully achieved.

Canada's Road Safety Successor Plan: Road Safety Strategy 2015

Canada's current national road safety strategy, called Road Safety Strategy (RSS) 2015,⁽³⁰⁾ was created following extensive consultations among government members, the engineering and police communities and key industry stakeholders. The five-year strategy was endorsed by the Council of Ministers Responsible for Transportation and Highway Safety and was launched in early 2011.

RSS 2015 represents a new direction for Canadian road safety stakeholders that contains both familiar and new program elements. The familiar elements that were carried over from previous national road safety plans include the vision and the strategic objectives. Canada's longstanding vision is to eventually have the safest roads in the world. The strategic objectives, which were enhanced to have greater impact, include raising public awareness and commitment to road safety; improving communication, cooperation and collaboration among all stakeholders; enhancing enforcement; and improving road safety information in support of research and evaluation.

The new features of the RSS 2015 include its flexibility, its holistic approach and its use of a framework of 'best practices'.

The strategy provides jurisdictions with the flexibility to adopt best practice initiatives depending on their suitability, feasibility and acceptability within their respective environments. Jurisdictions are also able to determine the level of ambition of their respective road safety action plans. The new strategy does not include quantitative targets for serious casualty reductions. However, jurisdictions may adopt quantitative targets as part of their road safety strategy if they wish to do so.

RSS 2015 provides a coordinated approach to road safety progress, as the framework of best practices includes road user, infrastructure and vehicle related strategies to address road safety challenges. This approach acknowledges the interdependencies that exist between road users, road infrastructure and vehicle design and moves RSS 2015 to more of a 'safe systems' framework.

The framework of 'best practice' strategies was developed from a comprehensive environmental scan of road safety initiatives that were effective in addressing road safety challenges in Canada or in other OCED member countries. The best practice strategies were compiled to provide jurisdictions with tools to address their key target groups and the main factors that contribute to fatalities and serious injuries. The key target groups identified in RSS 2015 include young drivers less than 25 years of age, medically-at-risk-drivers whose existing medical condition may affect the safe operation of their vehicles, commercial vehicle operators or carriers, high-risk drivers and the general population. The main causes of collisions that are targeted under RSS 2015 include all forms of impaired driving (alcohol, drugs, fatigue and distraction), speed and aggressive driving, occupant protection including issues pertaining to road users, vehicle technology enhancements and safer road infrastructure, and environmental factors that may affect the likelihood of crash occurrence (e.g., weather conditions, urban and rural infrastructure). The framework is being regularly updated as evaluations of the effectiveness of existing strategies in reducing serious casualties are established or as successful new road safety strategies are developed.

The ultimate objective of RSS 2015 is to achieve steady decreases in fatalities and serious injuries resulting from traffic collisions on Canada's roads throughout the term of RSS 2015. Progress towards Canada's ultimate goal of having the safest roads in the world is measured annually against benchmark indicators from the OECD's best performing countries.

Although not explicitly stipulated in RSS 2015, the principles inherent to the strategy serve to encourage jurisdictions to identify their main road safety challenges through crash data compilation, analysis and reporting, to develop unique road

safety plans and, if desired, targets, and to adopt or adapt strategies and initiatives most appropriate to address their specific road safety challenges from the framework of best practices. A number of Canada's jurisdictions have already created their road safety action plans while in others, plans are still being developed in support of RSS 2015.

The Way Ahead

Canada's road safety performance improved considerably during the timeframe of RSV 2010, but so too did the road safety records of the OECD's best performing nations. Despite Canada's progress, longstanding road safety challenges still exist. High-risk road users continue to drink and drive, to travel at unsafe speeds and to refrain from wearing seat belts. Issues such as drug impairment and distracted driving are being increasingly cited as contributing factors in serious collisions.

Canada's current national road safety plan provides its road safety community with the mechanism to address these challenges. The flexible nature, broad scope and core strategic objectives inherent to Road Safety Strategy 2015 provide jurisdictional road safety experts from government, industry and non-governmental organizations with a best practices framework of proven and promising strategies with which to target their key risk groups in order to continue to make Canada's roads as safe as possible and to endeavour to eventually have the safest roads in the world.



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