# Ontario Road Safety

# ANNUAL REPORT 2003









#### ONTARIO ROAD SAFETY ANNUAL REPORT 2003

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Many of the ministry's publications are available at automotive retail outlets and book stores.

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#### MINISTER'S MESSAGE

#### Ontario Leads North America in Road Safety

I am pleased to present The Ontario Road Safety Annual Report (ORSAR) 2003.

In 2003, Ontario had the safest roads in North America as measured by the number of fatalities per 10,000 licensed drivers. The province had the lowest rate ever recorded in Ontario—0.97 fatalities per 10,000 licensed drivers. The number of fatalities dropped even though the number of licensed drivers and registered motor vehicles in Ontario increased.

Other ORSAR 2003 figures include:

- 831 fatalities on the province's roads—42 fewer than in 2002 and the lowest number since 1950;
- Fewer people injured in collisions; and
- A 1.5 per cent increase in licensed drivers and a 2.5 per cent increase in registered motor vehicles from 2002.

Ontario is consistently among the top jurisdictions when it comes to road safety in North America. Our continued success depends on the strength of our partnerships with police, safety organizations, community groups, other levels of government and various provincial ministries.

While Ontario can be proud of its top rating in 2003, more needs to be done. Since 2003, the government has moved aggressively to build on the province's strong record and keep Ontario a leader in road safety. Our measures include passing legislation to make booster seats mandatory for small children, placing passenger restrictions on novice drivers, and improving school bus safety with new equipment and tougher fines.

Most recently, in February 2005, I was honoured to introduce new legislation that, if passed, would deliver a series of measures that will make our roadways safer, ease congestion and improve public transit.

The Government of Ontario continues to work closely with its road safety partners to prevent death and injury on our roads. ORSAR is an important tool in this effort, as we analyze trends and develop effective measures to make our roadways even safer.

Harinder S. Takhar

Ontario Minister of Transportation

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#### FOREWORD

#### Ontario's Roads are North America's Safest in 2003

The Ontario Road Safety Annual Report (ORSAR) provides a comprehensive overview of road safety in the province. For more than 50 years, Ontario has been building a database to track long-term trends in road safety including:

- collision rates;
- fatalities and injuries among drivers, passengers and pedestrians; and
- incidents of drinking and driving.

To create ORSAR, the Ministry of Transportation (MTO) collects data from many different sources, including police services, other ministries, and the Office of the Chief Coroner. The information gathered is critical in tracking trends and developing ways to further improve road safety.

These latest statistics, in the Ontario Road Safety Annual Report, 2003, demonstrate that the ministry's road safety initiatives are working. Based on fatalities per 10,000 licensed drivers in 2003, Ontario's roads are **the safest in North America**. On this basis, Ontario is well ahead of other comparable neighbouring jurisdictions, such as New York (ranked10th), Quebec (11th), Ohio (19th), and Michigan (22nd).

Other highlights of the 2003 ORSAR include:

- A 4.8 per cent reduction in the number of fatalities on Ontario's roads, from 873 in 2002 to 831 in 2003 the lowest level since 1950;
- The number of licensed drivers increased, from 8,413,504 in 2002 to 8,541,555 in 2003, up 1.5 per cent; and
- The number of registered motor vehicles increased, from 7,415,497 in 2002 to 7,603,372 in 2003, up 2.5 per cent.

MTO shares these achievements with its many road safety partners.

Ontario is making great strides, but more can be done. We must continue to be vigilant. Further reductions in the number of deaths and injuries on our roadways can only be achieved by identifying and addressing dangerous driving behaviour or other negative trends.

#### Success Through Partnership

Road user safety is one of the Ministry of Transportation's top priorities. The province's impressive road safety record is due to consistent and determined efforts by the government and our safety partners to continuously improve driver behaviour, vehicle condition and infrastructure safety.

At the provincial level, MTO works with partners such as the Ministry of the Attorney General, the Ministry of Health and Long-Term Care and the Ministry of Community Safety and Correctional Services (including the Ontario Provincial Police).

MTO also works closely with municipal police services, community groups, other levels of government, and various safety organizations, to make our roads safer for all Ontarians.

#### **Road Safety Vision 2010**

In the fall of 2000, with the endorsement of all provincial/territorial ministers of transportation and highway safety, the Canadian Council of Motor Transport Administrators (CCMTA) adopted Road Safety Vision 2010. Ontario is an active partner in the effort to make Canada's roads the safest in the world.

The Road Safety Vision 2010 plan sets a national target of a 30 per cent reduction in the average number of road users killed or seriously injured during the 2008-2010 period compared to the 1996-2001 period.

To do this, the Road Safety Vision 2010 calls for a crackdown/focus in areas where the largest numbers of serious casualties occur. These targeted areas include: seat belt use, drinking and driving, high-risk drivers, collisions involving high-speed and intersection-related crashes, young drivers, commercial vehicle safety, vulnerable road users and rural road users.

Ontario continues to focus its efforts in areas of road safety that complement both the Road Safety Vision 2010 and address the needs of Ontario's road users.

# Record Number of Drivers and Vehicles on Ontario Roads in 2003

In 2003, Ontario was home to 8.5 million licensed drivers, 7.6 million registered motor vehicles and 80,000 registered bus and truck companies. Our roads and highways move more than \$1.2 trillion worth of goods to domestic and international markets each year. Millions of people rely on Ontario's transit systems, including GO Transit, to

get to their destinations safely and on time. Keeping Ontario's people and goods moving safely and efficiently is a priority.

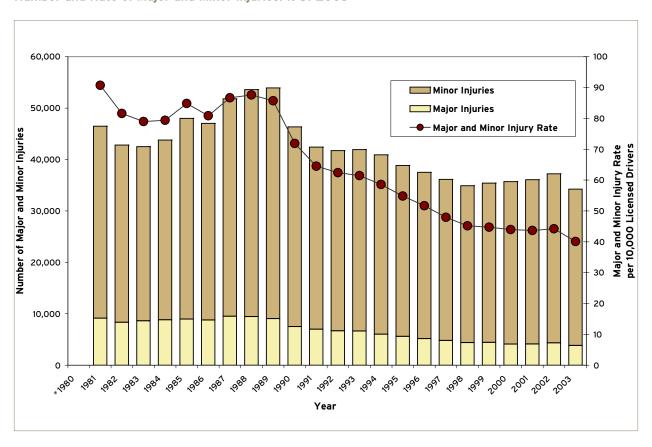
In 2003, the number of fatalities on Ontario's roads dropped to 831, down from 873 in 2002. This represents a 4.8 per cent improvement and puts the number of fatalities on the province's roadways at its lowest level since 1950.

At the same time, the number of serious injuries requiring hospitalization decreased from 4,355 in 2002 to 3,848 in 2003, a drop of 11.6 per cent. The number of minor injuries seen in an emergency room also decreased from 32,863 in 2002 to 30,401 in 2003, a drop of 7.5 per cent.

There is also improvement in the long-term trends related to injuries in motor vehicle collisions. Since 1999, the number of serious injuries decreased by 13.3 per cent, and minor injuries by 1.9 per cent. The 10-year trend is also positive, with a decrease in serious injuries by 36.1 per cent, and minor injuries by 12.9 per cent.

All these indicators point to the fact that, in addition to fatalities, major and minor injuries resulting from motor vehicle collisions are also declining.

#### Number and Rate of Major and Minor Injuries: 1981-2003



**Number and Rate of Injuries: 1981-2003.** Since 1981, the number of serious injuries (require hospitalization) decreased by 58 per cent, and the number of minor injuries (require a visit to the emergency room) decreased by 19 per cent. In 2003, the number of serious and minor injuries per 10,000 licensed drivers decreased to 40, down from 91 in 1981.

<sup>\*</sup>Breakdown of injuries by severity started in 1981.

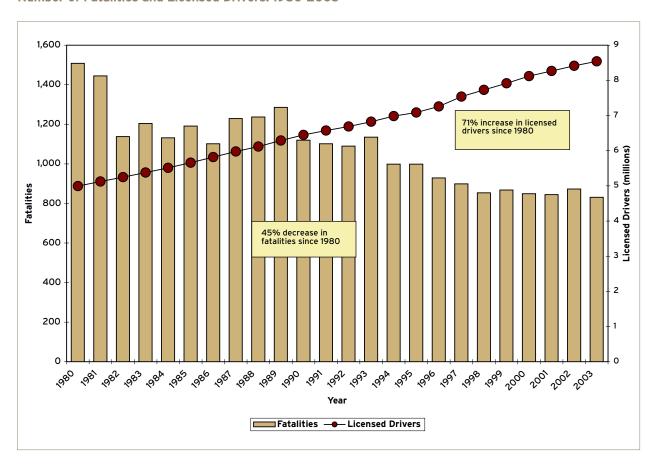
One of the most common ways of assessing road safety is to calculate the number of fatalities during a given period for every 10,000 licensed drivers. Another common measure is the fatality rate per 100 million vehicle kilometres travelled. These measures are used widely in North America and around the world to compare road safety from one jurisdiction to another.

In 2003, the number of persons killed in motor vehicle crashes per 10,000 licensed drivers in Ontario decreased to 0.97, down from 1.04 in 2002. The number of fatalities in motor vehicle collisions

per 100 million vehicle kilometres travelled remained the same in 2002 and 2003 (0.71).

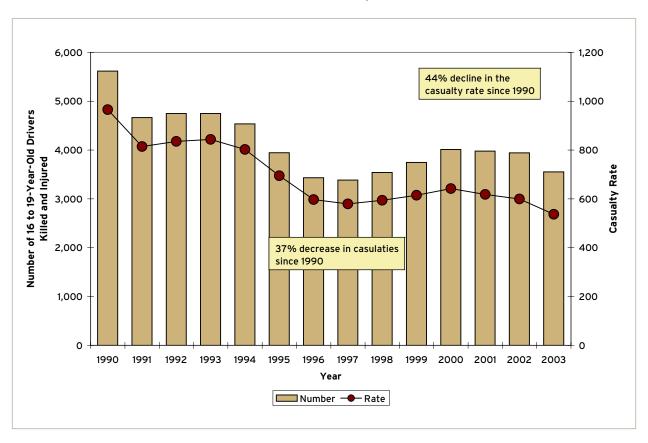
While the year-over-year changes found in ORSAR provide a helpful report card on our progress, short-term changes offer only a brief glimpse into the state of road safety in Ontario. ORSAR's most compelling contribution comes through the critical information it delivers covering a number of years. By looking at long-term trends, the ministry can identify anomalies limited to a single year and better assess and target the most serious threats to safety that we face on our roadways.

#### Number of Fatalities and Licensed Drivers: 1980-2003



**Number of fatalities and licensed drivers: 1980-2003**. The number of licensed drivers increased by 71 per cent from 1980 to 2003; in contrast, the number of fatalities decreased by 45 per cent over this period. From 1980 to 2003, the per-driver fatality rate (number of fatalities per 10,000 licensed drivers) decreased dramatically, by 68 per cent.

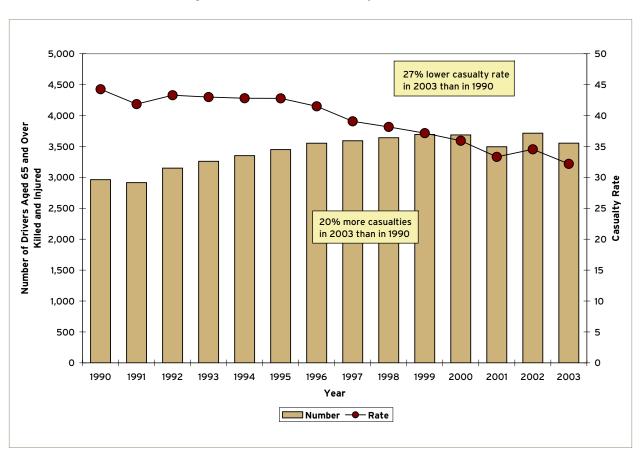
#### Number and Rate\* of 16 to 19-Year-Old Drivers Killed and Injured: 1990-2003



<sup>\*</sup> Number of injuries and fatalities per 100,000 population.

**Number and rate of 16 to 19-year-old drivers killed and injured: 1990-2003.** Both the number and per capita rate of 16 to 19-year-old driver casualties (deaths and injuries) have declined, with a 37 per cent decline in number of casualties and a 44 per cent decline in the casualty rate since 1990.

#### Number and Rate\* of Drivers Aged 65 and Over Killed and Injured: 1990-2003



<sup>\*</sup> Number of fatalities and injuries per 10,000 licensed drivers.

**Number and rate of drivers aged 65 and over killed and injured:** 1990-2003. The number of drivers aged 65 and over killed and injured has increased from 1990 to 2003 by 20 per cent. In contrast, there was a 27 per cent lower casualty rate in 2003 than in 1990. However, the fatal collision involvement rate among drivers aged 65 and over continues to be higher than that of the general driving population.

# Report on 2003 Road Safety Initiatives DRINKING AND DRIVING

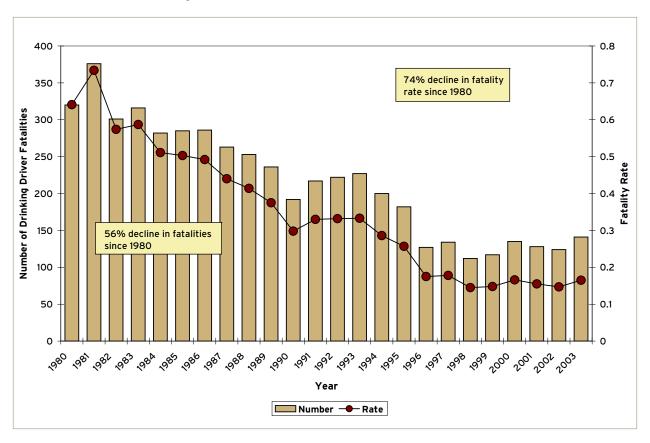
Drinking and driving is still a factor in about onequarter of all fatal collisions in Ontario. In addition to the death and injury caused by this crime, the social and economic costs of drinking and driving have been estimated at over \$2 billion each year in Ontario.

There was an increase in the number of drinking and driving fatalities, from 193 in 2002 to 217 in 2003. However, there continues to be a positive long-term downward trend as significant progress has been made in reducing drinking and driving in the province. During the period from 1980 to 2003, the number of drinking and driving fatalities dropped by 56 per cent in Ontario.

MTO has developed strong partnerships with a variety of drinking and driving stakeholders (e.g., Ontario Community Council on Impaired Driving and Mothers Against Drunk Driving), police services, and other ministries (Attorney General, Community Safety and Correctional Services, and Health and Long-Term Care) to counter drinking and driving. The long-term drop in drinking and driving fatalities is due in large measure to our combined efforts. As well, Ontario has strict sanctions in place to address drinking and driving:

- Zero blood-alcohol level (BAC) for novice drivers;
- Administrative driver's licence suspensions, under which drivers who provide a sample over the legal limit (.08), or refuse a breathalyzer test, will have their driver's licence suspended immediately for 90 days;
- Mandatory assessment, education/treatment and follow-up for drinking drivers;
- Vehicle impoundment for driving while under a Criminal Code suspension; and
- Mandatory Ignition Interlock devices for convicted drinking drivers. The devices prevent a vehicle from starting if it detects alcohol on the breath of the operator.

#### Number and Rate\* of Drinking Driver Fatalities: 1980-2003



<sup>\*</sup> Number of drinking driver fatalities per 10,000 licensed drivers.

Number and rate of drinking driver fatalities: 1980-2003. Both the number of drinking driver fatalities and the number of drinking driver fatalities per 10,000 licensed drivers have declined dramatically from 1980 – by 56 per cent and 74 per cent, respectively. In absolute terms, the number of drinking driver fatalities dropped from 320 in 1980 to 141 in 2003. The number of drinking driver fatalities increased in 2003, although the graph shows a long-term positive trend for both indicators.

Under these tough measures, more than 4,764 lifetime suspensions have been issued since September 1998.

Over 88,825 suspensions have been issued since September 1998 requiring drivers to complete a remedial program.

Over 7,395 vehicles have been impounded since February 1999, when their drivers were caught driving while suspended (all driving-related Criminal Code suspensions; the majority for drinking and driving convictions).

Over 157,303 people have lost their licences for 90 days as a result of Ontario's Administrative Driver's Licence Suspension (ADLS) program since its introduction in November 1996.

As of the end of December 2004, 2,404 ignition interlocks had been installed in vehicles since the program came into effect. In 2003 alone, 887 ignition interlocks were installed in vehicles.

As always, the ministry is exploring new ways to further counter drinking and driving and target those who disregard both the law and the safety of others. For example, offenders who continue to drive a vehicle while their driver's licence is under suspension are a particular concern. The ministry is considering additional measures to stop this intolerable behaviour. How best to deal with drinking drivers at first point of contact with police is another area of active debate.

Under the Road Safety Vision 2010, one of the key targets set by Ontario and other Canadian

jurisdictions is a 40 per cent decrease in the percentage of road users fatally or seriously injured in crashes involving drinking drivers in Canada. This is an ambitious target that we plan to achieve by working closely with our road safety partners.

#### **SEAT BELT SAFETY**

In 1976, Ontario was the first province to make seat belts mandatory. Six years later, legislation was implemented to legally require the use of child car seats.

Transport Canada estimates that, for every one per cent increase in seat belt use in Ontario, five lives are saved.

In September 2003, Transport Canada conducted an observational survey of seat belt use in urban communities across Canada. The results are as follows:

- In 2003, Ontario had an 86.1 per cent seat belt usage rate, down from 92.5 per cent in 2001. (The national average was 87.5 per cent);
- Ontario's 2003 seat belt usage rate for urban areas was 86.1 per cent;
- A 2002 survey of rural Ontario produced an 85.1 per cent usage rate;
- A higher percentage of female drivers wore seat belts (89.3 per cent) than male drivers (86.5 per cent).

MTO is committed to public education programs and targeted campaigns to promote proper seat belt and child car seat use. To achieve this goal, the ministry works with community groups, injury prevention advocates, public health professionals, police services and the private sector. The goal is to continue improving seat belt compliance throughout the province – with the ultimate goal of a compliance rate of 100 per cent.

#### Successful Spring and Fall Seat Belt Campaigns

Ontario conducts two seat belt campaigns every year, one in the spring and the other in fall, to raise awareness and promote compliance with seat belt and child car seat laws.

Ontario's annual Spring Seat Belt Campaign took place from April 12 to 20, 2003 with greater enforcement and community-based public education and child seat inspection clinics. These clinics, which were supported by MTO and staffed by trained inspectors, took place across the province.

During the 2003 Fall Seat Belt Campaign, held from September 27 to October 5, 87 per cent of drivers were wearing seat belts, down slightly from 88 per cent the previous year. The Ontario Provincial Police checked 580,822 vehicles and laid 12,976 charges for seat belt and child car seat violations.

Both the Spring and Fall seat belt campaigns feature a "Love Me – Buckle Me Right Day" during which community groups across the province hold child car seat inspection clinics to give parents and caregivers hands-on instruction in the proper installation and use of child car seats, including booster seats. Child car seat inspection clinic coordinators were encouraged to hold "Boost Me Up!" booster seat clinics as well. "Boost Me Up!" clinics help parents decide whether their child is ready to use a seat belt, or whether their child would be safer using a booster seat.

#### PEDESTRIAN SAFETY

In 2003, there was an 8.4 per cent decline in the number of pedestrian fatalities in the province, dropping to 120 from 131 in 2002. While this is encouraging, pedestrian fatalities still made up 14.4 per cent of all motor vehicle fatalities in Ontario.

Between 1999 and 2003, almost 15,500 pedestrians were killed or injured while crossing the road in Ontario. Further, in 2003, 50 per cent of pedestrian fatalities occurred at intersections and pedestrian crossings, up from 45 per cent in 2002.

These numbers demonstrate that more work needs to be done to make drivers aware of pedestrian crossings and to target those drivers who put others at risk.

The issue of pedestrian safety has been an especially big one in some of the province's largest urban centres, such as the City of Toronto.

The Ministry of Transportation is working with police, municipalities and more than 130 community groups across the province to promote road user safety, including partnerships that focus on pedestrian safety.

In March 2003, the ministry provided financial support for a major pedestrian safety campaign headed by a Greater Toronto Area group – The Injury Prevention Coalition (TIPC). The campaign included posters, brochures, media ads and bus shelter ads that depicted a fatal pedestrian collision and the slogan "Cross the street as if your life depends on it, because it does."

Ontario's aging population brings new challenges to pedestrian safety. Along with children, seniors have statistically been the most vulnerable group of pedestrians. It is estimated that the over-75-year-old population will double by 2031 and account for more than 10 per cent of the total population of Ontario. To keep the positive downward trend in pedestrian fatalities, it will be important to consider the needs of an aging population.

#### **SPEEDING**

Speed is one of the biggest killers on Ontario's roads.

In 2003, more than 363 people were killed, and almost 20,000 injured in the province by drivers who were speeding, going too fast for road conditions, or who lost control of their vehicle. Over the last five years, there were more than 1,900 fatalities and close to 100,000 injuries resulting from such collisions.

Based on Ontario's collision data, we know that drivers who exceed the speed limit by 30 km/h or more are about 6 times more likely to kill or injure themselves or other road users as compared to drivers who obey the speed limits.

Clearly, speeding is a significant contributing factor with respect to injuries and fatalities in the province. That's why the Ministry continues to investigate and develop new measures to counter speeding, including higher fines and demerit points, as well as driver's licence suspensions for those who drive at excessive speeds with no serious regard for human life.

#### **MOTORCYCLE SAFETY**

In 2003, there were 52 motorcycle fatalities in Ontario, up from 38 in 2002. However, during that same period, the number of motorcycle injuries decreased from 1,472 to 1,355, a decline of eight per cent.

Over the long term, between 1988 and 2003, there has been a positive 67 per cent decline in the casualty rate per 10,000 motorcycle registrations.

While the long-term trend is encouraging, the Ministry continues to monitor the fatality and injury rates for motorcyclists.

#### TRUCK SAFETY

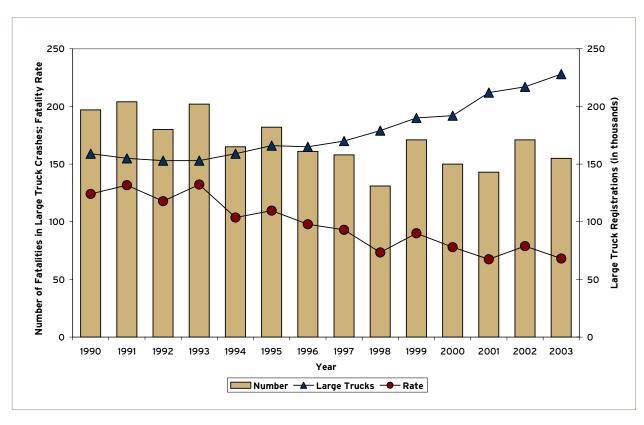
Ontario is a leader in commercial vehicle safety standards and enforcement with some of the most stringent truck safety laws in North America, including:

- Fines of up to \$20,000 for unsafe trucks;
- Commercial Vehicle Impoundment for trucks and trailers with critical defects; and,
- Fines of up to \$50,000 for wheel separation offences.

Between 2002 and 2003, the large truck population grew from 216,778 to 227,557 (up five per cent). During this same period, the number of fatalities resulting from collisions involving large trucks, dropped from 171 to 155, or 9.4 per cent.

In 2003/04, MTO conducted 144,420 commercial vehicle and driver inspections and carried out 797 facility audits on carriers' records. To date, more than 1,280 commercial vehicles have been impounded since the program began in 1998.

#### Number and Rate\* of Fatalities in Large Truck Crashes; Large Truck Registrations: 1990-2003



<sup>\*</sup> Number of fatalities per 100,000 large truck registrations.

**Number and rate of fatalities in large truck crashes: 1990-2003.** Although the number of large trucks increased by 43 per cent, fatalities in large truck crashes have actually decreased by 21 per cent since 1990. Consequently, the number of fatalities per 100,000 large trucks has declined over this period by 45 per cent.

#### **ROADCHECK 2003**

RoadCheck 2003, an international truck-safety inspection blitz, was held from June 3 through June 5, across Ontario. As in past years, the annual 72-hour safety blitz of commercial motor vehicles was carried out simultaneously by officials in Canada, the United States and Mexico.

RoadCheck's results are measured by the out-ofservice rate – which is the number of vehicles taken off the road for having mechanical defects. It is expressed as a percentage of the total number of vehicles inspected.

During the blitz, MTO enforcement officers at 33 truck inspection stations province-wide completed 4,113 safety inspections. Ontario's RoadCheck compliance rate in 2003 was 79.9 per cent. Since the mid-1990s, the compliance rate in Ontario has improved by 41 per cent.

#### **OPERATION AIR BRAKE 2003**

Operation Air Brake is an international truck safety initiative focusing on the inspection of commercial vehicle air brake systems. Every year, Ontario conducts two 12-hour air brake inspection blitzes for commercial vehicles.

In the 2003 Operation Air Brake initiative, Ontario had a 6.2 per cent out-of-service rate for brake adjustment. This compares to an identical 6.2 per cent average within Canada and 12 per cent throughout North America. In 2003, Ontario enforcement officers inspected more trucks during this event than any other Canadian jurisdiction (1,854 of the 6,013 inspections – 31 per cent.)

### CREATING A BALANCED TRANSPORTATION SYSTEM

Ontario's economy depends on a balanced transportation system which can move people and goods safely and efficiently. That's why it's critical for the government to invest in the province's highways and public transit systems in order to ease congestion and increase transit ridership.

#### Investing in Transit

According to the Canadian Urban Transit Association, transit is the safest mode of urban travel. By distance travelled, the fatality rate for transit passengers in Canadian cities is five per cent of that for automobile passengers. In addition to promoting safety, transit also helps ease congestion, protects the environment and helps Ontario's economy.

During 2003, the Ontario government made significant progress in expanding and promoting public transit. Some of the highlights are listed below.

- **GTA Transit Fare Card:** The GTA Transit Fare Card partnership will introduce a region-wide fare card that will offer a seamless trip for riders using multiple transit systems.
- Bus Rapid Transit System: The province has committed \$67 million to help build the first phase of a bus rapid transit system across the Greater Toronto Area.
- 10-Year Capital Plan: The GO Transit 10-Year Capital Expansion Plan addresses ridership and growth pressures, and includes building

new stations, improvements to Union Station, expanding parking lots and additional trains to support future expansion of rail service across the Golden Horseshoe.

In 2003, the province also invested \$100.3 million to improve and renew public transit in 43 municipalities. This included incentive funding for municipalities that had been successful in increasing transit ridership and incorporating alternatively fuelled/low emission vehicles into their transit fleets.

MTO continues to work on a number of other ideas designed to improve the efficiency of transit and transportation systems. These programs include:

- Investing in dedicated lanes for high occupancy vehicles;
- Investing in bus bypass shoulders;
- Planning for and investing in needed carpool lots;
- Planning for future opportunities to integrate multi-modal corridors; and
- Developing legislation to support public transit.

#### Infrastructure Investments

Ensuring that Ontario's highways are safe and in good condition is a priority of MTO.

The ministry oversees the maintenance and operation of 16,500 kilometres of highways; more than 2,500 bridges/structures; 29 remote airports and eight ferry services.

In 2003, the Ontario Government invested more than \$1 billion to expand and rehabilitate Ontario's highway network.

Several key highway projects included:

- Widening sections of Highway 401 in Southwestern and Eastern Ontario;
- Widening Highway 11 from Huntsville to North Bay;
- Widening Highway 69 from Parry Sound to Sudbury;
- Adding lanes to Highway 401 through Toronto;
- Widening portions of Highway 8 and making interchange improvements in Kitchener; and
- Extending Highway 417 in the Ottawa area.

#### Partnership With The Federal Government

In 2003, the governments of Canada and Ontario announced more than \$1.8 billion in joint-funding for transportation improvements in the province, including highways, public transit and border crossings.

In November of 2003, the governments of Canada and Ontario signed a \$336 million infrastructure agreement that will greatly improve the overall condition of the province's highways.

Under the Strategic Highway Infrastruture Program (SHIP), the two levels of government agreed to provide equal shares of \$168 million for 10 highway improvement projects designed to increase safety, ease gridlock, and support economic development across the province.

The 10 projects are being carried out on Highway 401, Highway 69/400, and Highway 17, covering southern, eastern, central and northern Ontario.

The improvements focus on expansions to highway capacity and improvements to safety by delivering: new lanes, divided highways, new highway alignments, and a major safety initiative to construct a concrete barrier wall.

#### **Border Crossings**

The safe and efficient flow of traffic at our border crossings is critical to Ontario's future prosperity. That's why we are constantly working with all levels of government in both Canada and the United States to invest in new infrastruture and technologies to speed up the flow of cross-border traffic.

2003 was a critical year. Increased security issues and a shift from air to road travel put increased pressure on Ontario's crossings into the United States. Ontario worked hard with neighbouring jurisdictions and other governments to relieve congestion at our borders.

The discussions and work done in 2003 contributed significantly to a series of announcements, made the following year, designed to improve highways and bridges that make up our border infrastructure. These initiatives included:

- The signing of a joint \$300 million Memorandum of Understanding for a package of projects to help improve the Windsor Gateway;
- The signing of agreements totalling \$323 million in funding to expand and improve highways and bridges in the Niagara, Sarnia and London areas;
- The signing of a Memorandum of Agreement that will lead to traffic and safety improvements at the Sarnia/Point Edward border crossing.

Investing in new technology is also proving vital to ensuring the smooth operation of our border crossings. For example, over the past few years, when the United States Customs and the bridge authorities were at capacity in processing trucks at crossings in the Niagara Peninsula, long truck queues would develop. Significant queue lengths can present safety concerns as drivers may be unable to stop safely before the end of a queue, resulting in serious collisions.

The solution was a Queue-end Warning system (QWS) to provide accurate and effective warnings to motorists. Flashing beacons on static message boards that indicate, "Watch for Slow Traffic" are activated and a dynamic message at the bottom of the sign shows the distance to the end of queue.

Queue End Warning Systems were installed on the Queen Elizabeth Way (QEW) towards the Peace Bridge and on Highway 405 towards the Queenston Lewiston Bridge.

With the events of September 11, 2001, the issue of driver licensing and identification, safety and security has received much attention within Ontario, as well as internationally. This is mainly because a driver's licence is one of the few government issued documents with a photograph and is commonly used for identification purposes.

Given the serious implications of having fraudulent driver's licences used either as identification or for driving illegally, there is a pressing need to further safeguard public interest. Ontario has worked closely with other North American licensing authorities on establishing standards for enhanced security features on driver's licence cards as well as recommendations for improving driver's licence issuing and production processes.

Based on the new framework, Ontario has already incorporated new security features on the current driver's licence card, strengthening licensing business processes, and developing a new, more secure driver's licence, to be introduced in 2006.

By ensuring greater integrity of the licence card and the issuing process, the Ministry of Transportation is fostering greater reciprocity between jurisdictions and mobility of Ontario road users within North America.

#### ITS INVESTMENTS

Intelligent Transportation Systems (ITS) is an expanding field. It represents the marriage of high-tech communications and information systems with transportation. The goal of these investments is to improve safety and efficiency on our roadways. Ontario is a leader in this area, and the ministry is continuing to invest in ITS technologies which result in better service for road users.

For example, in 2003, MTO continued to expand the COMPASS freeway traffic management system. The system enables MTO to detect and respond to incidents on major provincial freeways in the greater Toronto and Ottawa areas, quickly improving both safety and efficiency of these vital corridors. The public can view images of current traffic conditions along Highway 401 and on the Queen Elizabeth Way (QEW), as well as receive traffic reports on provincial highways from MTO's TRIS (Traffic and Road Information System), by logging on to MTO's website: <a href="https://www.compass.gov.on.ca">www.compass.gov.on.ca</a>.

Also in 2003, the ministry took significant steps toward improving the way it provides traffic information to drivers. It did this by installing seven new Changeable Message Signs (CMS) on Highway 401 between Birchmount Road and Morningside Avenue and one on Highway 400 northbound in Barrie, south of the Highway 11/Highway 400 split.

#### PLANNING FOR THE FUTURE

To prepare for growth and ensure that Ontario can meet its future transportation needs, the ministry initiated the environmental assessment process for several key transportation corridors. This includes the Environmental Assessment Terms of Reference for the Greater Toronto Area to Niagara Transportation Corridor and the Highway 407 East Completion.

## ONTARIO'S NEWEST ROAD SAFETY INITIATIVES

# 1. An Act to Enhance the Safety of Children and Youth on Ontario's Roads (Bill 73)

While ORSAR has reported Ontario's declining fatality rate in previous years, other sources have suggested motor vehicle collisions are still the leading cause of death and injury for children and youth.

To protect children and youth, the Minister of Transportation introduced Bill 73. The key elements of the legislation, which passed, in the Legislature, in December 2004, are identified below.

#### Making Booster Seats Mandatory

In 1976, Ontario was the first province in Canada to make the use of seat belts mandatory. Research shows booster seats protect against serious injury 3.5 times better than seat belts and protect against head injury four times better than seat belts. The province continues to be a leader in promoting seat belt safety through this new legislation, which requires infants, toddlers, pre-schoolers and primary grade-age children to be buckled up in the appropriate child seat, including booster seats.

#### Passenger Restrictions for Novice Drivers

Research shows that younger novice drivers operating a motor vehicle with teenaged

companions as passengers are at an increased risk of death or injury due to a collision. To further protect youth on our roads, regulations proposed under this new Act would further strengthen the province's successful Graduated Licensing System (GLS) by placing restrictions on the number of young passengers a G2 driver can have in the car at certain times of the day.

Initially, G2 drivers 19 and under would only be able to carry one passenger. After six months, or until the driver turns 20, up to three passengers aged 19 and under would be allowed. Under a proposed regulation, these new restrictions would apply between midnight and 5 a.m. However, they would not apply to G2 drivers accompanied by a fully licenced driver with at least four years driving experience, or if the passengers are family members.

The specific details of these proposed restrictions are pending, through the development of regulation changes under the Highway Traffic Act.

#### Improving School Bus Safety

Finally, this new law will improve school bus safety by allowing vehicle owners to be charged when their vehicle illegally passes a stopped school bus. As well, all new school buses will have new safety features including a safety-crossing arm to prevent children from walking into the vehicle's blind spot at the front of the bus, as of January 2005.

#### 2. Transit & Road Safety Bill

The Transit and Road Safety Bill was introduced in the Legislature on February 21, 2005, by the Minister of Transportation. It proposes wideranging changes that will improve safety and reduce congestion on roads and highways across the province. The Transit and Road Safety Bill would, if passed:

- Improve safety on local roads by increasing fines and harmonizing demerit points for drivers who do not stop or yield the right of way at pedestrian and school crossings;
- Enhance safety by requiring motorists to remain stopped at school crossings;
- Improve safety for construction workers by doubling speeding fines in construction zones, allowing municipal staff to set speed limits in municipal construction zones, and creating an offence for disobeying a traffic slow and stop sign;
- Increase safety and reduce congestion by allowing Variable Speed Limit systems to suit road and weather conditions;
- Increase fines for speeding 30-34 km/h over the posted speed limit and allow the courts to impose longer driver licence suspensions for convicted repeat offenders who speed 50 km/h over the limit;
- Allow all municipalities to set 30 km/h speed limit in areas where traffic calming measures are in place (e.g., speed bumps);
- Create an offence for flying vehicle parts;
- Improve daily commercial vehicle inspection standards;
- Introduce demerit points for using speed measuring warning devices;
- Clear the way to designate and enforce High Occupancy Vehicle lanes to encourage carpooling;
- Provide the authority to designate Bus Bypass Shoulders;
- Allow land to be dedicated for new carpool lots and transit stations during planning stages;
- Improve transit commute times by allowing transit vehicles to pre-empt traffic signals to lengthen a green light or change a red light to green sooner;
- Introduce higher penalties for the fraudulent use of a driver's licence;

- Allow for the use of studded tires by residents of Northern Ontario;
- Allow for faster clearance of highway incidents by clarifying police powers to remove, or order the removal of vehicles and debris;
- Provide authority to gather data through roadside surveys in support of transportation planning;
- Create an offence for taxi/limousine owners, arrangers and drivers to carry passengers without required permits/licences;
- Recover the cost of demerit point interviews from drivers who must attend these interviews due to poor driving behaviour; and
- Make enhancements to driver education.

#### 3. iDRIVE

In 2004, the Ministry of Transportation, Ontario Community Council on Impaired Driving (OCCID), Ontario Students Against Impaired Driving (OSAID) and The Student Life Education Company launched a new public education program called iDRIVE.

iDRIVE is intended to raise awareness among drivers under the age of 25 about the risks and consequences of aggressive and unsafe driving practices.

The road safety content of the iDRIVE program includes: impaired driving, aggressive driving, driver distraction, and drowsy driving.

The program includes a video presentation and presenter's guide to be used in regional showcase presentations to promote the program. As well, 1,000 copies have been distributed to police, public health and road safety groups for use in classroom presentations across Ontario.

#### 4. Gas Tax Funding for Public Transit

The government is investing more than \$1 billion over the next five years in public transit across Ontario through provincial gas tax funding. 83 transit systems, serving 110 municipalities, are currently benefiting from this investment, helping to lead to more than 33 million new transit riders by 2007.

This provincial gas tax funding gives municipalities stable, long term funding so they can better plan, and improve their transit systems so that more people will choose transit.

#### Conclusion

Ontario has the safest roads in North America, as measured by the number of fatalities per 10,000 licensed drivers. But the ministry continues to face road safety challenges due to a variety of issues, including the growing number of drivers and vehicles on our roadways.

The ministry is improving road safety and mobility by promoting and regulating driver licensing and fitness, responsible driving behaviour, vehicle fitness and infrastructure improvement. Working in close partnership with police, community groups, industry, municipalities and safety organizations, the ministry will continue to make our roads even safer. With initiatives such as the recently passed measures that increase school bus safety, require the use of booster seats and strengthen the rules for novice drivers, we will help make our roads safer for young Ontarians.

Through innovative and effective education, legislation and enforcement, we will continue in our efforts to save the users of Ontario's roadways from preventable death and injury.

#### Recommendations for Promoting Further Improvements to Road Safety in Ontario

The ministry will continue to promote new ways to improve safety on our roads. Based on the results of the 2003 Ontario Road Safety Annual Report, MTO is actively working on many related initiatives.

Issues Targeted in the Transit & Road Safety Bill (Introduced February 21, 2005):

- Reducing the number of pedestrians who are killed on our roadways;
- Considering benefits of tougher penalties to counter aggressive driving behaviour, including higher fines and/or demerit points for those who travel at excessive speeds;
- Working to improve construction zone safety on municipal roads and provincial highways;
- Supporting initiatives aimed at improving public transit to relieve congestion and improve traffic flow and safety on our roadways; and
- Working with the trucking industry on initiatives that will support Ontario's position as a leader in commercial vehicle safety.

#### Other issues MTO is working on include:

- Considering ways to strengthen the consequences for repeat drinking and driving offences and for operating a vehicle while driving under licence suspension due to a drinking and driving offence;
- Working with other ministries to find ways of reducing the courtroom backlog that exists because of drinking and driving cases before the court;
- Supporting other ministries such as the Ministry of Community Safety and Correctional Services with its front-line activities that address drinking and driving;

- Polling the provinces and other jurisdictions to uncover new and innovative public education practices that could be adopted or imported for use in Ontario. The jurisdictions selected have a reputation for being leaders in addressing drinking and driving;
- Working with police and our other road safety partners to develop the appropriate sanctions, deterrents and effective counter measures against drug-impaired driving;
- Continuing to work with road safety partners to determine what can be done to increase seat belt use and to promote the use of child seats and booster seats;
- Building on the measures contained in Bill 73, An
  Act to Enhance the Safety of Children and Youth
  on Ontario's Roads, to further improve road
  safety for young people, including reviewing input
  received from the Chief Coroner and stakeholder
  groups on enhancing school bus safety;
- Continuing to monitor the fatality and injury rates for motorcyclists;
- Continuing to work on research and initiatives to address the dangers of driver distraction and driver fatigue;
- Investing in a balanced transportation system that supports safe and efficient provincial highways and public transit;
- Continuing to use state-of-the-art information and communications technologies for safer and more efficient travel;
- Working with federal and municipal partners to continue to improve the safe flow of people and goods at international crossings; and
- Working toward achievement of the goals identified in Road Safety Vision 2010's national strategy for safer roads.



#### OVERVIEW

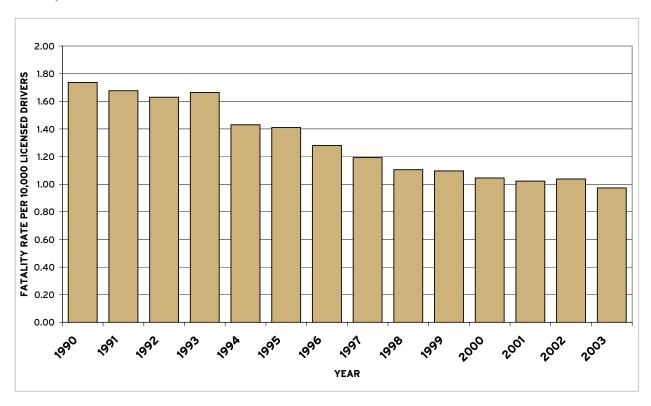
The first part of this section (synopsis) provides a brief overview of road safety in the province. The second part presents selected characteristics of motor vehicle collisions from a *health perspective*.

The primary measure of road user safety in Ontario is the *number of fatalities per 10,000 licensed drivers*. This is a commonly used measure of road user safety in North America and elsewhere.

It allows Ontario to compare its performance against that of other jurisdictions. In Ontario in 2003, there were 0.97 fatalities per 10,000 licensed drivers, a 6.7 per cent decrease as compared to 2002.

The 2003 fatality rate is the lowest number since Ontario began collecting collision data. Based on this measure, Ontario's roads are the safest in Canada and in North America.

Figure 1
Fatality Rate Per 10,000 Licensed Drivers in Ontario, 1990-2003



### 1A. SYNOPSIS

Total Reportable Collisions	246.463
Total Drivers Involved in Collisions	438.121
Total Vehicles Involved in Collisions	455,182
Fatal Collisions	754
Personal Injury Collisions	52,757
Property Damage Collisions	192,952
Persons Killed	831
Drivers Killed (excludes All Terrain Vehicle and Snow Vehicle Drivers)	486
Drivers Killed (Impaired or Had Been Drinking)	141
Passengers Killed	222
Pedestrians Killed	120
Other Road Users Killed	3
Persons Injured	77,879
Estimated Ontario Population (2003)	12,293,700
Licensed Drivers	8,541,555
Registered Motor Vehicles	7,603,372
Estimated Vehicle Kilometres Travelled (in millions)	116,322
Number of Persons Killed in Motor Vehicle Collisions per 100,000 People in Ontario	6.8
Number of Persons Killed in Motor Vehicle Collisions per 100 Million Kilometres Travelled	0.71
Collision Rate per 100 Million Kilometres Travelled	211.9
Fatal Collision Rate per 100 Million Kilometres Travelled	0.6
Number of Persons Killed in Motor Vehicle Collisions per 10,000 Licensed Drivers	0.97

#### 1B. HEALTH PERSPECTIVE

Table 1.1
Selected Diagnoses of Motor Vehicle Collision Injuries Hospitalized in Ontario, 2002/2003 Fiscal Year

Selected Diagnoses	Hospital Admissions	Hospital Days of Stay
Fracture of head	230	1,584
Fracture of neck and trunk	988	8,851
Fracture of upper limb	534	2,545
Fracture of lower limb	1,346	11,697
Fractures involving multiple body regions	15	388
Dislocation, sprains, and strain	175	650
Dislocations, sprains, and strains involving multiple body regions	_ *	- *
Intracranial injury	775	11,998
Internal injury of chest, abdomen, and pelvis	521	5,161
Open wound of head, neck, or trunk	97	227
Open wound of upper limb	29	198
Open wound of lower limb	28	221
Open wounds involving multiple body regions	7	33
Other diagnoses	1,330	11,715

Source: Ministry of Health and Long-Term Care, Integrated Policy and Planning Division, Health Data & Decision Support Unit \*Small cell count (a value of less than 5); small cell counts are not to be published.

Table 1.2
Selected Surgical Procedures for Motor Vehicle Collision Injuries Hospitalized in Ontario, 2002/2003 Fiscal Year

Selected Procedure	<b>Hospital Admissions</b>	Hospital Days of Stay
Head, brain, and cerebral meninges	129	3,069
Spinal cord, spinal canal, and meninges	7	79
Nose, mouth, and pharynx	34	172
Chest wall, pleura, mediastinum, and diaphragm	81	987
Bone marrow and spleen	72	1,398
Kidney	_ *	101
Facial bones and joints	85	715
Reduction of fracture/dislocation with or without fixation (excluding head and facial bones)	1,758	16,723
Repair joint structures (excluding head or facial bones)	27	229
Skin and subcutaneous tissue	102	674
Other diagnostic and therapeutic interventions	1,359	19,949
Sub-total of surgical admissions and days	3,654	44,096
No interventions performed	2,421	11,175

Source: Ministry of Health and Long-Term Care, Integrated Policy and Planning Division, Health Data & Decision Support Unit

<sup>\*</sup>Small cell count (a value of less than 5); small cell counts are not to be published.

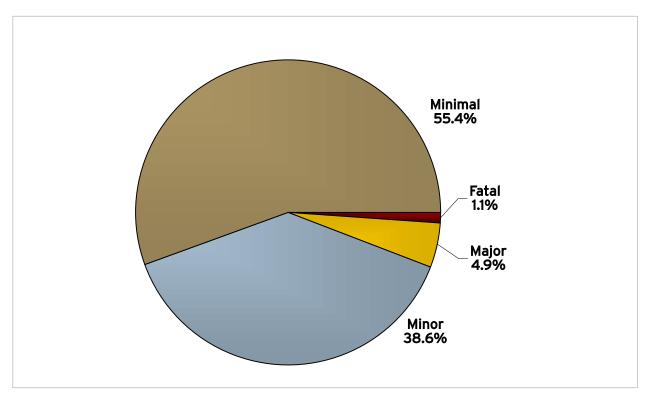


#### 2. THE PEOPLE

This section highlights injuries by severity and the characteristics of the road user involved in collisions. Data is broken down by age, gender, driver

condition and driver action. Seventy-two years of key historical collision data, covering the years 1931 to 2003, are provided.

Figure 2
Per Cent of Injured Persons in Collisions by Severity of Injury, 2003



<sup>\*</sup> These figures do not add up to 100 per cent.

#### 2A. PEOPLE IN COLLISIONS

Table 2.1

Category of Involved Person by Severity of Injury in Fatal and Personal Injury Collisions 2003

Category of Involved Person	Severity of Injury							
	None	Minimal	Minor	Major	Fatal			
Driver	42,137	25,220	17,147	1,845	425	86,774		
Passenger*	24,122	14,496	8,897	1,020	216	48,751		
Pedestrian	154	1,968	2,264	526	120	5,032		
Bicyclist	33	1,221	1,040	137	13	2,444		
Bicycle Passenger	10	97	92	13	0	212		
All Terrain Vehicle Driver	8	9	17	4	1	39		
All Terrain Vehicle Passenger	5	4	4	2	0	15		
Snow Vehicle Driver	1	9	9	11	2	32		
Snow Vehicle Passenger	0	6	3	1	0	10		
Motorcycle Driver	78	284	582	221	46	1,211		
Motorcycle Passenger	40	70	156	42	6	314		
Moped Driver	11	14	15	3	0	43		
Moped Passenger	1	4	4	0	0	9		
Hanger On	43	90	104	16	0	253		
Other	453	138	67	7	2	667		
Total	67,096	43,630	30,401	3,848	831	145,806		

<sup>\*</sup> Includes bus passengers

HTA (Highway Traffic Act) reportable collisions. For more information on special vehicles, see Chapter 6.

Due to a change in the method of tabulating collision statistics, this table excludes individuals involved in property-damage-only collisions.

**Fatal:** Person killed immediately or within 30 days of the motor vehicle collision.

**Major:** Person admitted to hospital. Includes person admitted for observation.

**Minor:** Person went to hospital and was treated in the emergency room but was not admitted.

Minimal: Person did not go to hospital when leaving the scene of the collision. Includes minor abrasions, bruises and complaint of pain.

**None:** Uninjured person.

Table 2.2 Category of Person Killed by Age Groups 2003

Category of Person	Age Groups													Total			
	0-4	5-9	10-15	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	UK	
Driver	0	0	2	0	11	15	13	13	45	72	79	69	42	33	31	0	425
Passenger*	3	5	16	15	13	9	7	11	19	23	21	21	4	21	28	0	216
Pedestrian	2	2	6	1	0	4	0	3	2	9	16	27	11	19	18	0	120
Bicyclist	0	0	3	1	1	1	0	0	0	2	0	2	3	0	0	0	13
Bicycle Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Terrain Vehicle Driver	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
All Terrain Vehicle Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Snow Vehicle Driver	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Snow Vehicle Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycle Driver	0	0	1	0	0	1	2	0	5	17	10	8	2	0	0	0	46
Motorcycle Passenger	0	0	0	0	0	0	0	0	0	2	1	2	1	0	0	0	6
Moped Driver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moped Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Total	5	7	28	18	25	30	22	27	71	126	130	129	63	73	77	0	831

<sup>\*</sup> Includes hangers on

UK = Unknown

HTA (Highway Traffic Act) reportable collisions. For more information on special vehicles, see Chapter 6.

Table 2.3
Category of Persons Injured by Age Groups 2003

Category of Person								Age	Groups								Total
	0-4	5-9	10-15	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	UK	
Driver	0	0	37	226	936	1,152	1,200	1,208	4,436	9,551	10,182	7,550	4,092	2,199	1,388	55	44,212
Passenger*	902	1,372	2,138	673	907	903	838	785	2,568	3,641	3,016	2,347	1,601	1,092	844	936	24,563
Pedestrian	105	228	649	129	110	78	123	107	348	679	630	525	380	296	255	116	4,758
Bicyclist	0	32	112	25	19	11	17	24	60	111	118	69	36	19	9	1,736	2,398
Bicycle Passenger	6	21	44	7	9	3	15	6	23	34	38	20	8	6	1	2	243
All Terrain Vehicle Driver	0	2	6	2	3	1	0	1	2	3	3	3	3	1	0	0	30
All Terrain Vehicle Passenger	0	1	2	0	3	1	0	0	0	1	1	0	1	0	0	0	10
Snow Vehicle Driver	0	0	5	3	1	1	0	1	2	6	6	0	1	0	0	3	29
Snow Vehicle Passenger	0	0	4	1	1	0	0	1	1	1	0	1	0	0	0	0	10
Motorcycle Driver	0	0	3	19	10	12	24	20	137	318	247	198	86	9	2	2	1,087
Motorcycle Passenger	1	6	8	3	6	6	11	9	33	67	57	45	26	0	0	5	283
Moped Driver	0	0	0	0	3	0	1	0	3	6	8	2	5	3	1	0	32
Moped Passenger	0	0	1	0	1	0	0	0	1	4	0	1	0	0	0	0	8
Other	9	4	5	1	2	7	1	2	12	37	44	43	19	9	13	8	216
Total	1,023	1,666	3,014	1,089	2,011	2,175	2,230	2,164	7,626	14,459	14,350	10,804	6,258	3,634	2,513	2,863	77,879

<sup>\*</sup> Includes hangers on

UK = Unknown

HTA (Highway Traffic Act) reportable collisions. For more information on special vehicles, see Chapter 6.

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Table 2.4
Sex of Driver by Class of Collision 2003

Sex of Driver		Total		
		Personal	Property	
	Fatal	Injury	Damage	
Male	945	59,478	207,671	268,094
Female	285	34,656	108,325	143,266
Unknown*	24	4,654	22,083	26,761
Total	1,254	98,788	338,079	438,121

<sup>\*</sup> This includes situations where the enforcement officer is unable to make a determination, e.g., hit and run.

**Fatal Collision:** A motor vehicle collision in which at least one person sustains bodily injury resulting in death. Prior to January 1, 1982, fatal collision statistics included deaths attributed to injuries sustained in the collision for up to one year after the collision. Since that date, only deaths within 30 days of the collision have been included.

**Personal Injury Collision:** A motor vehicle collision in which at least one person involved sustains bodily injury not resulting in death.

**Property Damage:** A motor vehicle collision in which no person sustains bodily injury, but in which there is damage to any public property or damage to private property including damage to the motor vehicle or its load.

The minimum reportable level for property-damage-only collision rose from \$200 to \$400 on January 1, 1978, and rose again to \$700 on January 1, 1985. As of January 1, 1998, the minimum reportable level for property-damage-only collisions is \$1,000.

On January 1, 1997, Collision Self-Reporting for property-damage-only collisions was introduced. See Appendix for further explanation of Collision Self-Reporting.

Table 2.5

Driver Condition by Class of Collision 2003

Condition of Driver	CI	ass of Coll	ision	Total
		Personal	Property	
	Fatal	Injury	Damage	
Normal	834	78,017	268,283	347,134
Had Been Drinking	50	1,305	2,468	3,823
Ability Impaired -				
Alcohol over .08	130	934	1,854	2,918
Ability Impaired Alcohol	14	457	871	1,342
Ability Impaired Drugs	30	79	136	245
Fatigue	14	607	1,124	1,745
Medical/Physical Disability	11	538	521	1,070
Inattentive	70	9,732	22,061	31,863
Other	8	284	798	1,090
Unknown*	93	6,835	39,963	46,891
Total	1,254	98,788	338,079	438,121

**Had Been Drinking:** Driver had consumed alcohol but his/her physical condition was not legally impaired.

**Ability Impaired Alcohol over .08:** Driver had consumed alcohol and upon testing was found to have a blood alcohol level in excess of .08 grams of alcohol per 100 millilitres of blood.

**Ability Impaired Alcohol:** Driver had consumed sufficient amount of alcohol to warrant being charged with a drinking and driving offence.

**Inattentive:** Driver was operating a motor vehicle without due care and attention or placing less than full concentration on driving, e.g., changing radio stations, consuming food, reading, talking on phone or two-way radio, using headphones.

Table 2.6
Driver Age by Driver Condition In All Collisions 2003\*

Driver Age	Driver Condition						Total								
	Normal	Had Been Drinking	Impaired Alcohol over .08	Ability Impaired Alcohol	Other	Unknown									
								Under 16	239	8	5	2	133	50	437
								16	1,524	21	8	2	293	129	1,977
17	6,941	67	19	14	1,214	490	8,745								
18	8,270	86	50	18	1,268	624	10,316								
19	8,034	159	101	36	1,231	633	10,194								
20	8,121	175	92	42	1,111	636	10,177								
21-24	31,121	631	356	172	3,678	2,232	38,190								
25-34	75,163	908	719	315	6,969	5,235	89,309								
35-44	84,547	782	750	347	7,176	5,765	99,367								
45-54	61,794	494	497	230	5,212	4,119	72,346								
55-64	33,916	266	224	100	3,236	2,228	39,970								
65-74	15,997	89	69	29	1,923	1,108	19,215								
75 & over	8,633	27	17	6	1,775	659	11,117								
Unknown	2,834	110	11	29	794	22,983	26,761								
Total	347,134	3,823	2,918	1,342	36,013	46,891	438,121								

<sup>\*</sup> Includes bicyclists, drivers of all-terrain vehicles, etc.

Table 2.7

Recorded Occurrence of Driver Condition In Drivers Killed 2003\*

Recorded Occurrence	Number of Drivers	%
Normal	258	52.8
Had Been Drinking	33	6.7
Ability Impaired - Alcohol over .08	108	22.1
Ability Impaired Alcohol	0	0.0
Ability Impaired Drugs	29	5.9
Fatigue	7	1.4
Medical/Physical Disability	10	2.0
Inattentive	21	4.3
Other	4	0.8
Unknown	19	3.9
Total	489	100.0

<sup>\*</sup> Total includes drivers of all vehicle types killed in HTA reportable collisions.

<sup>\*</sup> In years prior to 1996, Table 2.7 only included fatally injured drivers who were either normal or had been drinking. In order to better examine the other pre-crash factors related to deaths of all drivers, this table has now been expanded to include the driver conditions of all fatally injured drivers. These data can be recombined into the older format by recalculating the percentages using only the alcohol-involved and normal drivers' data.

Table 2.8
Apparent Driver Action by Class of Collision 2003

Apparent Driver Action		Class of Collision		Total
	Fatal	Personal Injury	Property Damage	
Driving Properly	522	47,215	168,650	216,387
Following Too Close	7	9,033	27,083	36,123
Speed Too Fast	71	1,163	2,092	3,326
Speed Too Fast for Conditions	101	5,083	16,732	21,916
Speed Too Slow	4	70	270	344
Improper Turn	16	4,009	13,383	17,408
Disobey Traffic Control	69	4,553	6,960	11,582
Fail to Yield Right of Way	76	9,644	23,901	33,621
Improper Passing	22	669	2,895	3,586
Lost Control	166	7,509	21,612	29,287
Wrong Way on One Way Road	4	107	214	325
Improper Lane Change	17	1,639	9,811	11,467
Other*	123	5,690	18,928	24,741
Unknown	56	2,404	25,548	28,008
Total	1,254	98,788	338,079	438,121

<sup>\*</sup> Includes actions defined as careless driving, fell asleep, hit and run, driving on wrong side of road, improper parking, illegal parking, dangerous driving, road rage, inexperience, etc.

Table 2.9
Seat Belt Usage by Severity of Driver Injury in Fatal and Personal Injury Collisions 2003

Safety Equipment Used	Severity of Injury								
	Killed	Major	Minor	Minimal	Not Injured	Total			
Seat Belt Used	256	1,373	14,949	23,238	38,197	78,013			
Other Equipment*	14	104	624	611	354	1,707			
Equipment Not used	121	186	406	237	143	1,093			
No Safety Equipment	3	7	30	27	73	140			
Use Unknown	31	175	1,138	1,107	3,370	5,821			
Total	425	1,845	17,147	25,220	42,137	86,774			

<sup>\*</sup> Other equipment includes the use of airbags. Seat belt usage in conjunction with airbag deployment is unknown.

The tables on the next two pages include only seat belt usage in collisions in which there were fatalities and personal injuries. Property-damage-only collisions are excluded. ORSARs published prior to 1988 included seat belt usage in all collisions.

Table 2.10
Seat Belt Usage by Severity of Passenger Injury in Fatal and Personal Injury Collisions 2003

Safety Equipment Used	Severity of Injury								
	Killed	Major	Minor	Minimal	Not Injured				
Seat Belt Used	123	674	7,176	12,458	19,403	39,834			
Child Safety Seat Used Incorrectly	1	4	11	18	89	123			
Child Safety Seat Used Correctly	2	13	140	330	1,440	1,925			
Other Equipment*	2	36	205	148	113	504			
Equipment Not used	56	147	464	273	183	1,123			
No Safety Equipment	11	50	421	678	1,383	2,543			
Use Unknown	21	106	519	567	1,461	2,674			
Total	216	1,030	8,936	14,472	24,072	48,726			

<sup>\*</sup> Other equipment includes construction helmets, etc., used in a motor vehicle. It also includes the use of airbags. Seat belt usage in conjunction with airbag deployment is unknown.

Table 2.11

Restraint Use for Children (0 - 4 Years) Killed in Collisions 1999-2003

Year	Child Restraint	Child Restraint	Lap/Lap &	Restraint	Available	Use	Tota
Used	Used Correctly	Used Incorrectly	Shoulder Belt	Not Available	Not Used	Unknown	
1999	3	1	3	0	0	0	7
2000	1	0	3	0	0	1	5
2001	5	0	2	1	2	1	11
2002	1	2	4	0	0	0	7
2003	2	1	0	0	0	0	3

Table 2.12

Restraint Use for Children (0 - 4 Years) Involved in

Fatal and Personal Injury Collisions by Severity of Injury 2003

Restraint Used		Injury Level	
	Major / Fatal %	Minimal/Minor %	No Injuries %
Child Restraint Used Correctly	40.0	47.7	51.2
Child Restraint Used Incorrectly	13.3	3.3	2.9
Lap/Lap-Shoulder Belt	33.3	39.7	37.7
Not Available	3.3	4.0	4.0
Available/Not Used	3.3	1.5	0.5
Other	0.0	0.5	0.4
Unknown	6.7	3.4	3.2
Total	100.0	100.0	100.0

It is known from observational surveys that many child safety seats are not used correctly. This is not clear in these tables since children are often removed from the child safety seat before the police officer arrives on the scene. Both correct installation of the seats according to the manufacturer's instructions and correct use of the device in the vehicle are important for the child's protection.

Table 2.13
Pedestrian Condition by
Severity of Injury 2003

Condition of Pedestrian	Killed	Injured
Normal	79	3,177
Had Been Drinking	3	207
Ability Impaired Alcohol over .08	18	3
Ability Impaired Alcohol	0	54
Ability Impaired Drugs	4	13
Fatigue	0	4
Medical / Physical Disability	3	88
Inattentive	9	686
Other	1	98
Unknown	3	428
Total	120	4,758

Table 2.14
Apparent Pedestrian Action
by Severity of Injury 2003

Apparent Pedestrian Action	Killed	Injured
Crossing Intersection With Right of Way	17	1,687
Crossing Intersection Without Right of Way	22	720
Crossing Intersection No Traffic Control	14	392
Crossing Pedestrian Crossover	4	129
Crossing Marked Crosswalk Without Right of Way	3	130
Walking on Roadway With Traffic	6	133
Walking on Roadway Against Traffic	5	69
On Sidewalk or Shoulder	4	305
Playing or Working on Highway	2	79
Coming from Behind Parked Vehicle or Object	2	129
Running onto Roadway	14	411
Getting On/Off School Bus*	0	0
Getting On/Off Vehicle	0	49
Pushing/Working on Vehicle	0	21
Other	27	504
Unknown	0	0
Total	120	4,758

<sup>\*</sup> Calendar Year

### 2B. PUTTING THE PEOPLE IN CONTEXT

Table 2.15
Category of Persons Killed and Injured 1988-2003

Year	Ontario	Dr	iver	Pass	enger*	Pede	strian	All C	thers	Persor	s Killed	Person	s Injured
	Population									In All	Classes	In All	Classes
	(Est.)**										Rate Per		Rate Per
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Number	100,000	Number	100,000
1988	9,439,600	563	63,339	350	39,157	186	6,344	138	9,318	1,237	13.1	118,158	1,251.7
1989	9,598,600	627	66,334	369	39,950	161	6,187	129	8,181	1,286	13.4	120,652	1,257.0
1990	9,743,300	540	55,073	321	33,606	154	5,839	105	7,057	1,120	11.5	101,575	1,042.5
1991	10,084,900	542	48,021	298	30,230	157	5,352	105	6,916	1,102	10.9	90,519	897.6
1992	10,098,600	548	49,259	317	30,567	140	5,177	85	6,022	1,090	10.8	91,025	901.4
1993	10,813,200	595	49,628	296	30,584	146	5,181	98	5,756	1,135	10.5	91,149	842.9
1994	10,927,800	508	49,632	273	29,570	127	5,344	91	5,484	999	9.1	90,030	823.9
1995	11,100,000	527	49,916	276	29,440	126	5,261	70	4,955	999	9.0	89,572	807.0
1996	11,320,456	459	49,614	270	28,997	144	5,336	55	4,458	928	8.2	88,405	780.9
1997	11,500,329	474	47,861	224	27,915	133	5,154	68	4,597	899	7.8	85,527	743.7
1998	11,675,497	437	47,088	222	26,422	121	4,978	74	4,704	854	7.3	83,192	712.5
1999	11,513,700	452	47,943	221	26,774	132	4,894	63	4,451	868	7.5	84,062	730.1
2000	11,695,110	437	48,068	243	27,206	112	5,190	57	4,544	849	7.3	85,009	726.9
2001	11,966,960	430	45,758	224	26,510	119	5,063	72	4,451	845	7.1	81,782	683.4
2002	12,027,900	450	47,909	227	26,742	131	4,990	65	4,551	873	7.3	84,192	700.0
2003	12,293,700	425	44,212	216	24,563	120	4,758	70	4,346	831	6.8	77,879	633.5

 $<sup>^{</sup>st}$  Excludes motorcycle passengers, who are included with "All Others".

<sup>\*\*</sup> Source: Ministry of Finance

Table 2.16
Sex of Driver Population by Age Groups 2003

Sex of Driver		Age Groups									
	16-19	20-24	25-34	35-44	45-54	55-64	65+				
Male	243,571	370,072	811,092	1,010,950	862,701	593,110	615,595	4,507,091			
Female	213,478	334,648	764,253	929,946	790,903	512,616	488,620	4,034,464			
Total	457,049	704.720	1,575,345	1,940,896	1.653.604	1,105,726	1,104,215	8,541,555			

Table 2.17
Driver Population by Age Groups 1988-2003

Year				Age Grou	ps			Total
	16-19	20-24	25-34	35-44	45-54	55-64	65+	
1988	310,764	643,691	1,588,516	1,353,841	898,103	714,266	608,931	6,118,112
1989	323,109	631,470	1,634,187	1,409,053	931,991	720,788	639,826	6,290,424
1990	322,542	629,478	1,666,474	1,467,699	964,925	728,380	669,385	6,448,883
1991	319,584	627,931	1,673,502	1,501,765	1,018,365	736,652	696,432	6,574,231
1992	314,685	623,707	1,665,433	1,528,726	1,082,883	745,759	727,568	6,688,761
1993	326,389	621,934	1,655,573	1,566,083	1,136,365	758,840	758,244	6,823,428
1994	358,817	622,704	1,645,962	1,611,972	1,190,442	770,882	783,181	6,983,960
1995	360,847	614,094	1,621,989	1,659,749	1,240,072	782,871	806,396	7,086,018
1996	361,571	612,060	1,608,567	1,717,050	1,297,289	805,486	856,144	7,258,167
1997	394,512	624,532	1,611,708	1,789,110	1,360,555	837,606	919,584	7,537,607
1998	412,589	634,053	1,593,744	1,845,474	1,415,258	872,426	954,212	7,727,756
1999	426,643	642,808	1,576,673	1,895,323	1,475,588	907,235	994,044	7,918,314
2000	438,170	659,331	1,582,207	1,935,150	1,540,499	939,838	1,026,179	8,121,374
2001	449,853	671,424	1,580,758	1,946,713	1,577,920	990,745	1,049,203	8,266,616
2002	458,627	686,561	1,580,837	1,945,944	1,612,219	1,053,877	1,075,439	8,413,504
2003	457,049	704,720	1,575,345	1,940,896	1,653,604	1,105,726	1,104,215	8,541,555

Table 2.18 (continued on next page)
Driver Licence Class by Sex 2003

Licence Class		Driv	er Sex		Total	%
	Male	%	Female	%		
A	93,832	2.08	2,048	0.05	95,880	1.12
AB	4,566	0.10	580	0.01	5,146	0.06
ABM	2,611	0.06	143	0.00	2,754	0.03
ABM1	69	0.00	25	0.00	94	0.00
ABM2	126	0.00	21	0.00	147	0.00
AC	21,460	0.48	753	0.02	22,213	0.26
ACM	9,336	0.21	132	0.00	9,468	0.11
ACM1	476	0.01	16	0.00	492	0.01
ACM2	774	0.02	31	0.00	805	0.01
AM	29,451	0.65	209	0.01	29,660	0.35
AM1	1,667	0.04	23	0.00	1,690	0.02
AM2	2,567	0.06	59	0.00	2,626	0.03
В	16,640	0.37	16,778	0.42	33,418	0.39
ВМ	4,570	0.10	914	0.02	5,484	0.06
BM1	133	0.00	88	0.00	221	0.00
BM2	279	0.01	195	0.00	474	0.01
С	6,235	0.14	669	0.02	6,904	0.08
СМ	1,691	0.04	60	0.00	1,751	0.02
CM1	81	0.00	10	0.00	91	0.00
CM2	150	0.00	13	0.00	163	0.00
D	220,735	4.90	18,809	0.47	239,544	2.80
DE	103	0.00	20	0.00	123	0.00
DEM	29	0.00	2	0.00	31	0.00
DEM1	1	0.00	0	0.00	1	0.00
DEM2	2	0.00	0	0.00	2	0.00
DF	2,031	0.05	115	0.00	2,146	0.03
DFM	880	0.02	20	0.00	900	0.01
DFM1	32	0.00	4	0.00	36	0.00
DFM2	76	0.00	7	0.00	83	0.00

Table 2.18 continued
Driver Licence Class by Sex 2003

Licence Class		Driv	er Sex		Total	%
	Male	%	Female	%		
DM	57,906	1.28	1,287	0.03	59,193	0.69
DM1	1,848	0.04	88	0.00	1,936	0.02
DM2	3,322	0.07	187	0.00	3,509	0.04
E	1,314	0.03	2,064	0.05	3,378	0.04
EM	167	0.00	48	0.00	215	0.00
EM1	2	0.00	4	0.00	6	0.00
EM2	12	0.00	7	0.00	19	0.00
F	6,777	0.15	5,280	0.13	12,057	0.14
FM	1,428	0.03	223	0.01	1,651	0.02
FM1	94	0.00	36	0.00	130	0.00
FM2	196	0.00	89	0.00	285	0.00
G	3,046,680	67.60	3,283,410	81.38	6,330,090	74.11
G1	210,026	4.66	291,177	7.22	501,203	5.87
G1M	47	0.00	8	0.00	55	0.00
G1M1	1,210	0.03	178	0.00	1,388	0.02
G1M2	748	0.02	138	0.00	886	0.01
G2	348,333	7.73	337,147	8.36	685,480	8.03
G2M	346	0.01	48	0.00	394	0.00
G2M1	3,200	0.07	327	0.00	3,527	0.04
G2M2	3,325	0.07	378	0.01	3,703	0.04
GM	332,687	7.38	53,413	1.32	386,100	4.52
GM1	25,968	0.58	6,359	0.16	32,327	0.38
GM2	39,033	0.87	10,453	0.26	49,486	0.58
M	936	0.02	183	0.00	1,119	0.01
M1	311	0.01	53	0.00	364	0.00
M2	572	0.01	135	0.00	707	0.01
Other .	0	0.00	0	0.00	0	0.00
Total	4,507,091	100.00	4,034,464	100.00	8,541,555	100.00

Table 2.19 (continued on next page)
Licensed Drivers, Total Collisions, Persons Killed and Injured 1931 - 2003

Year	Licensed Drivers	Total Collisions	Persons Killed	Persons Injured
1931	666,266	9,241	571	8,494
1932	648,710	9,171	502	8,231
1933	638,710	8,634	403	7,877
1934	665,743	9,645	512	8,990
1935	707,457	10,648	560	9,839
1936	755,765	11,388	546	10,251
1937	802,765	13,906	766	12,092
1938	866,729	13,715	640	11,683
1939	899,572	13,710	652	11,638
1940	937,551	16,921	716	13,715
1941	986,773	18,167	801	14,275
1942	961,883	13,490	567	10,205
1943	919,457	11,025	549	8,628
1944	905,650	11,004	498	8,373
1945	971,852	13,458	598	9,804
1946	1,087,445	17,356	688	12,228
1947	1,144,291	22,293	734	13,056
1948	1,209,408	27,406	740	14,970
1949	1,278,584	34,472	830	17,469
1950	1,366,388	43,681	791	19,940
1951	1,461,538	54,920	949	22,557
1952	1,556,559	58,515	1,010	23,643
1953	1,656,259	65,866	1,082	24,353
1954	1,747,567	62,509	1,045	24,607
1955	1,856,845	63,219	1,111	26,246
1956	1,967,789	71,399	1,180	28,626
1957	2,088,551	76,302	1,279	30,414
1958	2,176,417	76,884	1,112	30,106
1959	2,270,246	81,518	1,187	31,602
1960	2,355,567	87,186	1,166	34,436
1961	2,414,615	85,577	1,268	37,146
1962	2,469,425	94,231	1,383	41,766
1963	2,555,015	104,919	1,421	47,801
1964	2,694,023	111,232	1,424	54,560
1965	2,739,138	128,462	1,611	60,917
1966	2,821,648	139,781	1,596	65,210

Table 2.19 continued Licensed Drivers, Total Collisions, Persons Killed and Injured 1931 - 2003

Year	Licensed Drivers	Total Collisions	Persons Killed	Persons Injured
1967	3,004,654	145,008	1,719	67,280
1968	3,128,509	155,127	1,586	71,520
1969	3,247,979	169,395	1,683	74,902
1970	3,422,892	141,609	1,535	75,126
1971	3,563,197	158,831	1,769	84,650
1972	3,688,541	189,494	1,934	95,181
1973	3,841,628	193,021	1,959	97,790
1974	3,972,980	204,271	1,748	98,673
1975	4,160,623	213,689	1,800	97,034
1976	4,315,925	211,865	1,511	83,736
1977	4,562,903	218,567	1,420	95,664
1978	4,725,546	186,363	1,450	94,979
1979	4,858,351	197,196	1,560	101,321
1980	4,993,531	196,501	1,508	101,367
1981	5,123,177	198,372	1,445	100,321
1982	5,247,198	187,943	1,138	92,815
1983	5,380,259	181,999	1,204	91,706
1984	5,513,911	194,782	1,132	97,230
1985	5,660,422	189,750	1,191	109,169
1986	5,817,799	187,286	1,102	108,839
1987	5,978,105	203,431	1,229	121,089
1988	6,118,112	228,398	1,237	118,158
1989	6,290,424	247,038	1,286	120,652
1990	6,448,883	220,188	1,120	101,575
1991	6,574,231	213,669	1,102	90,519
1992	6,688,761	224,249	1,090	91,025
1993	6,823,428	228,834	1,135	91,149
1994	6,983,960	226,996	999	90,030
1995	7,086,018	219,085	999	89,572
1996	7,258,167	215,024	929	88,445
1997	7,537,607	221,500	899	85,527
1998	7,727,756	213,356	854	83,192
1999	7,918,314	221,962	868	84,062
2000	8,121,374	240,630	849	85,009
2001	8,266,616	234,004	845	81,782
2002	8,413,504	244,642	873	84,192
2003	8,541,555	246,463	831	77,879

Table 2.20
Driver Age Groups - Number Licensed, Collision Involvement and Per Cent Involved in Collisions 2003

Orivers Age	Dr	ivers Licens	ed	Drivers I	nvolved in C	ollisions*	% of Drivers of Each Age Involved in Collisions		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 16	0	0	0	149	54	203	0	0	0
16	45,356	38,849	84,205	1,225	692	1,917	2.7	1.8	2.3
17	59,886	51,951	111,837	5,389	3,311	8,700	9.0	6.4	7.8
18	66,640	58,933	125,573	6,476	3,810	10,286	9.7	6.5	8.2
19	71,689	63,745	135,434	6,584	3,571	10,155	9.2	5.6	7.5
20	73,499	64,849	138,348	6,518	3,610	10,128	8.9	5.6	7.3
21-24	296,573	269,799	566,372	24,276	13,761	38,037	8.2	5.1	6.7
25-34	811,092	764,253	1,575,345	57,525	31,368	88,893	7.1	4.1	5.6
35-44	1,010,950	929,946	1,940,896	63,313	35,475	98,788	6.3	3.8	5.1
45-54	862,701	790,903	1,653,604	46,981	24,903	71,884	5.4	3.1	4.3
55-64	593,110	512,616	1,105,726	27,184	12,548	39,732	4.6	2.4	3.6
65-74	378,269	298,694	676,963	13,195	5,935	19,130	3.5	2.0	2.8
75 & over	237,326	189,926	427,252	7,213	3,873	11,086	3.0	2.0	2.6
Unknown	0	0	0	41,225	0	41,225	0.0	0.0	0.0
Total	4,507,091	4,034,464	8,541,555	307,253	142,911	450,164	6.8	3.5	5.3

<sup>\*</sup> This table includes collisions with parked vehicles and excludes drivers of some non-motor vehicles, i. e. bicyclists, snow vehicle operators, etc.

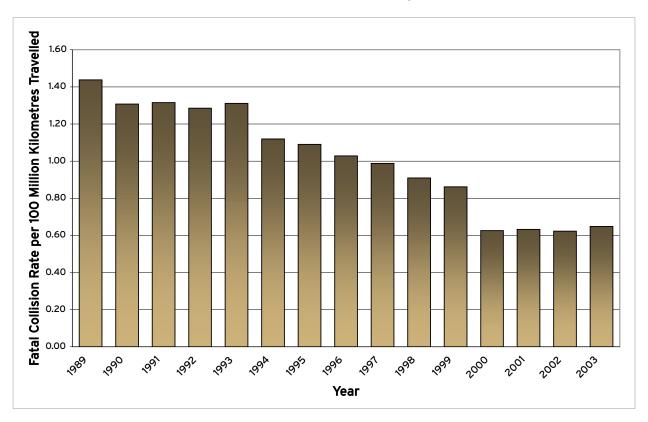


#### 3. THE COLLISION

Key statistics in this section include number of collisions by class, collision rate per kilometres travelled, breakdown of collisions by month, day of week and hour of occurrence, the nature of the impact, as well as a description of environmental conditions at time of occurrence.

While the total number of collisions increased in 2003, the fatal collision rate per one million kilometres travelled is one of the lowest rates over the last 15 years.

Figure 3
Fatal Collision Rate Per 100 Million Kilometres Travelled in Ontario, 1989 - 2003



<sup>\*</sup>Since 2000, the Numbers of Vehicle Kilometres Travelled are based on Estimates from Statistics Canada.

# 3A. TYPES OF COLLISIONS

Table 3.1 Class of Collision 1988 - 2003

Year		Class of Col	lision	Total
	Fatal	Personal Injury	Property Damage	
1988	1,076	76,724	150,598	228,398
1989	1,106	77,852	168,080	247,038
1990	959	65,912	153,317	220,188
1991	956	59,242	153,471	213,669
1992	942	58,889	164,418	224,249
1993	987	58,932	168,915	228,834
1994	875	58,525	167,596	226,996
1995	860	58,273	159,952	219,085
1996	816	57,791	156,417	215,024
1997	807	56,121	164,572	221,500
1998	768	55,441	157,147	213,356
1999	763	55,764	165,435	221,962
2000	737	57,279	182,614	240,630
2001	733	54,479	178,792	234,004
2002	770	56,516	187,356	244,642
2003	754	52,757	192,952	246,463

Table 3.2
Collision Rate Per One Million Kilometres
Travelled 1988 - 2003

Year	Collision Rate
1988	3.2
1989	3.2
1990	3.0
1991	2.9
1992	3.1
1993	3.0
1994	2.9
1995	2.8
1996	2.7
1997	2.7
1998	2.5
1999	2.5
2000	2.0*
2001	2.0*
2002	2.0*
2003	2.1*

<sup>\*</sup> Based on Statistics Canada Estimates of Vehicle Kilometres Travelled.

Table 3.3 (continued on next page)
Motor Vehicles Involved in Collisions Based on Initial Impact 2003

Motor Vehicle in Collision		Class of Collis	ion	
Involving Moveable Objects:	Fatal	Personal Injury	Property Damage	Total
Other Motor Vehicles	751	78,399	279,447	358,597
Unattended Vehicles	2	609	14,681	15,292
Pedestrian	112	4,377	262	4,751
Cyclist	12	2,519	527	3,058
Railway Train	2	26	29	57
Street Car	0	40	266	306
Farm Tractor	0	31	71	102
Domestic Animal	0	82	656	738
Wild Animal	4	510	13,321	13,835
Other Moveable Objects	3	50	247	300
Sub-total	886	86,643	309,507	397,036
·				
Fixed Objects:				
Cable Guide Rail	2	60	366	428
Concrete Guide Rail	2	313	1,037	1,352
Steel Guide Rail	5	205	917	1,127
Pole (Utility Tower)	8	328	1,375	1,711
Pole (Sign/Parking Meter)	0	115	826	941
Fence/Noise Barrier	0	21	201	222
Culvert	0	20	34	54
Bridge Support	3	31	105	139
Rock Face	0	15	31	46
Snow Bank or Drift	0	57	260	317
Ditch	7	292	823	1,122
Curb	9	465	1,628	2,102
Crash Cushion	0	20	55	75
Building or Wall	0	35	199	234
Water Course	1	0	12	13
Construction Marker	1	7	41	49
Tree, Shrub, or Stump	3	110	458	571
Other Fixed Object	3	260	1,607	1,870
Sub-total	44	2,354	9,975	12,373

Table 3.3 continued

Motor Vehicles Involved in Collisions Based on Initial Impact 2003

Motor Vehicle in Collision		Class of Collis	ion	
Involving Moveable Objects:	Fatal	Personal Injury	Property Damage	Total
Other Events:				
Ran Off Road	133	3,515	8,790	12,438
Skidding/Sliding	157	5,459	18,464	24,080
Jack-knifing	3	25	132	160
Load Spill	0	13	103	116
Fire/Explosion	0	3	305	308
Submersion	0	3	8	11
Rollover	4	253	329	586
Debris on Road	3	99	904	1,006
Debris off Vehicle	5	141	1,372	1,518
Other Non-Collision Event	32	1,336	4,182	5,550
Sub-total	337	10,847	34,589	45,773
Total	1,267	99,844	354,071	455,182

Table 3.4
Initial Impact Type by Class of Collision 2003

Initial Impact Type	Class of Collision					
	Fatal	Personal Injury	Property Damage			
Approaching	146	1,694	3,187	5,027		
Angle	85	7,247	18,226	25,558		
Rear End	36	14,853	48,480	63,369		
Sideswipe	44	3,961	28,000	32,005		
Turning Movement	58	8,750	28,591	37,399		
With Unattended Motor Vehicle	3	660	14,952	15,615		
Single Motor Vehicle	382	15,488	49,761	65,631		
Other	0	104	1,755	1,859		
Unknown	0	0	0	0		
Total	754	52,757	192,952	246,463		

## 3B. TIME AND ENVIRONMENT

Table 3.5
Month of Occurrence by Class of Collision 2003

	Class of Collision							
Month of Occurrence	Fatal	%	Personal Injury	%	Property Damage	%	Total	%
January	66	8.8	5,580	10.6	23,873	12.4	29,519	12.0
February	36	4.8	4,310	8.2	18,100	9.4	22,446	9.1
March	46	6.1	3,702	7.0	14,853	7.7	18,601	7.5
April	62	8.2	3,731	7.1	14,342	7.4	18,135	7.4
May	65	8.6	4,074	7.7	13,131	6.8	17,270	7.0
June	67	8.9	4,535	8.6	14,124	7.3	18,726	7.6
July	79	10.5	4,428	8.4	13,513	7.0	18,020	7.3
August	69	9.2	4,451	8.4	13,010	6.7	17,530	7.1
September	68	9.0	4,499	8.5	13,829	7.2	18,396	7.5
October	75	9.9	4,459	8.5	16,069	8.3	20,603	8.4
November	60	8.0	4,492	8.5	18,736	9.7	23,288	9.4
December	61	8.1	4,496	8.5	19,372	10.0	23,929	9.7
Total	754	100.0	52,757	100.0	192,952	100.0	246,463	100.0

Table 3.6
Day of Week by Class of Collision 2003

Day of Occurrence								
	Fatal	%	Personal Injury	%	Property Damage	%	Total	%
Monday	102	13.5	7,676	14.5	28,615	14.8	36,393	14.8
Tuesday	93	12.3	7,782	14.8	29,194	15.1	37,069	15.0
Wednesday	107	14.2	7,393	14.0	27,524	14.3	35,024	14.2
Thursday	90	11.9	7,915	15.0	29,245	15.2	37,250	15.1
Friday	121	16.0	8,799	16.7	32,742	17.0	41,662	16.9
Saturday	118	15.6	7,092	13.4	25,241	13.1	32,451	13.2
Sunday	123	16.3	6,100	11.6	20,391	10.6	26,614	10.8
Total	754	100.0	52,757	100.0	192,952	100.0	246,463	100.0

Table 3.7 Hour of Occurrence by Class of Collision 2003

Hour of			Class of C	Collision				
Occurrence A.M.	Fatal	%	Personal Injury	%	Property Damage	%	Total	%
12 to 1 a.m.	22	2.9	748	1.4	2,840	1.5	3,610	1.5
1 to 2 a.m.	20	2.7	686	1.3	2,850	1.5	3,556	1.4
2 to 3 a.m.	27	3.6	725	1.4	2,687	1.4	3,439	1.4
3 to 4 a.m.	21	2.8	649	1.2	2,392	1.2	3,062	1.2
4 to 5 a.m.	14	1.9	409	0.8	1,811	0.9	2,234	0.9
5 to 6 a.m.	20	2.7	525	1.0	2,369	1.2	2,914	1.2
Sub-total	124	16.4	3,742	7.1	14,949	7.7	18,815	7.6
6 to 7 a.m.	31	4.1	1,316	2.5	5,264	2.7	6,611	2.7
7 to 8 a.m.	26	3.4	2,076	3.9	8,605	4.5	10,707	4.3
8 to 9 a.m.	32	4.2	3,286	6.2	12,969	6.7	16,287	6.6
9 to 10 a.m.	29	3.8	2,399	4.5	9,671	5.0	12,099	4.9
10 to 11 a.m.	36	4.8	2,365	4.5	9,029	4.7	11,430	4.6
11 to 12 noon	27	3.6	2,858	5.4	9,987	5.2	12,872	5.2
Sub-total	181	24.0	14,300	27.1	55,525	28.8	70,006	28.4
Hour of			Class of C	Collision				
Occurrence P.M.	Fatal	%	Personal Injury	%	Property Damage	%	Total	%
12 to 1 p.m.	33	4.4	3,247	6.2	11,205	5.8	14,485	5.9
1 to 2 p.m.	43	5.7	3,073	5.8	10,596	5.5	13,712	5.6
2 to 3 p.m.	36	4.8	3,394	6.4	11,391	5.9	14,821	6.0
3 to 4 p.m.	53	7.0	4,306	8.2	14,323	7.4	18,682	7.6
4 to 5 p.m.	42	5.6	4,248	8.1	14,716	7.6	19,006	7.7
5 to 6 p.m.	43	5.7	4,116	7.8	15,075	7.8	19,234	7.8
Sub-total	250	33.2	22,384	42.4	77,306	40.1	99,940	40.5
6 to 7 p.m.	33	4.4	3,356	6.4	11,650	6.0	15,039	6.1
7 to 8 p.m.	42	5.6	2,448	4.6	8,617	4.5	11,107	4.5
8 to 9 p.m.	24	3.2	1,886	3.6	6,720	3.5	8,630	3.5
9 to 10 p.m.	41	5.4	1,712	3.2	6,541	3.4	8,294	3.4
10 to 11 p.m.	39	5.2	1,483	2.8	5,229	2.7	6,751	2.7
11 to 12 midnight	18	2.4	1,157	2.2	4,337	2.2	5,512	2.2
Sub-total	197	26.1	12,042	22.8	43,094	22.3	55,333	22.5
Unknown	2	0.3	289	0.5	2,078	1.1	2,369	1.0
Total	754	100.0	52,757	100.0	192,952	100.0	246,463	100.0

Table 3.8
Statutory Holidays, Holiday Weekends - Fatal Collisions, Persons Killed and Injured 2003

Statutory	Number of Fatal	Dri	vers	Pass	engers	Oth	ners	To	tal
Holiday*	Collisions	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Easter Weekend	8	6	2	0	1	2	0	8	3
Victoria Day	9	6	3	1	6	2	2	9	11
Canada Day	10	5	6	2	13	4	2	11	21
Civic Holiday (Simcoe Day)	6	4	1	3	4	0	0	7	5
Labour Day	8	5	7	4	12	0	0	9	19
Thanksgiving Day	6	3	4	2	1	1	0	6	5
Christmas/Boxing Day	5	3	3	2	0	0	0	5	3

<sup>\*</sup> Actual length may vary depending on the calendar year. For certain holidays, it might include the whole weekend.

Table 3.9 Light Condition by Class of Collision 2003

Light			Class of	Collision				
Condition	Fatal	%	Personal Injury	%	Property Damage	%	Total	%
Daylight	420	55.7	37,407	70.9	130,931	67.9	168,758	68.5
Dawn	17	2.3	761	1.4	3,926	2.0	4,704	1.9
Dusk	24	3.2	1,661	3.1	6,785	3.5	8,470	3.4
Darkness	293	38.9	12,917	24.5	50,975	26.4	64,185	26.0
Other	0	0.0	11	0.0	335	0.2	346	0.1
Total	754	100.0	52,757	100.0	192,952	100.0	246,463	100.0

Table 3.10 Visibility by Class of Collision 2003

Visibility	Fatal	%	Personal Injury	%	Property Damage	%	Total	%
Clear	597	79.2	41,245	78.2	144,135	74.7	185,977	75.5
Rain	65	8.6	5,653	10.7	19,930	10.3	25,648	10.4
Snow	53	7.0	4,017	7.6	20,364	10.6	24,434	9.9
Freezing Rain	7	0.9	534	1.0	2,657	1.4	3,198	1.3
Drifting Snow	13	1.7	495	0.9	2,060	1.1	2,568	1.0
Strong Wind	4	0.5	190	0.4	834	0.4	1,028	0.4
Fog, Mist, Smoke, or Dust	15	2.0	491	0.9	2,013	1.0	2,519	1.0
Other	0	0.0	132	0.3	959	0.5	1,091	0.4
Total	754	100.0	52,757	100.0	192,952	100.0	246,463	100.0

### 3C. THE COLLISION LOCATION

Table 3.11
Road Jurisdiction by Class of Collision 2003

Road		Class of Collision		
Jurisdiction	Fatal	Personal Injury	Property Damage	Total
Municipal (Excl.Twp. Rd.)	265	32,982	116,063	149,310
Provincial Highway	235	8,553	33,730	42,518
Township	53	1,813	7,280	9,146
County or District	102	2,822	11,276	14,200
Regional Municipality	99	6,475	24,157	30,731
Federal	0	85	338	423
Other	0	27	108	135
Total	754	52,757	192,952	246.463

Table 3.12
Road Jurisdiction for All Collisions 1994 - 2003

Road					Y	ear					
Jurisdiction*	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	[%]
Municipal	117,478	114,848	112,980	123,423	123,112	126,063	136,499	143,951	149,533	149,310	56.8
Provincial	48,895	46,365	46,867	41,947	33,590	37,139	38,366	36,511	39,579	42,518	18.0
Township	10,497	9,774	9,236	9,557	8,696	8,672	9,844	8,678	9,602	9,146	4.1
County or District	8,839	8,815	8,381	9,574	11,114	11,217	12,847	12,692	13,773	14,200	4.9
Regional Municipality	40,165	38,279	36,738	36,341	36,295	38,360	42,464	31,659	31,628	30,731	15.9
Federal**	825	753	662	504	392	400	439	354	425	423	0.2
Other	297	251	160	154	157	111	171	159	102	135	0.1
Total	226,996	219,085	215,024	221,500	213,356	221,962	240,630	234,004	244,642	246,463	100.0

<sup>\*</sup> Collisions may not be comaparable across the different years due to transfer of highways between jurisdictions.

<sup>\*\*</sup> Since January 1, 1988 the Motor Vehicle Accident Report form allows the recording of jurisdiction for federal roads.

Table 3.13
Collision Location by Class of Collision 2003

			Class of C	Collision				
Road Location	Fatal	%	Personal	%	Property	%	Total	%
			Injury		Damage			
Non-intersection	475	63.0	19,976	37.9	85,102	44.1	105,553	42.8
Intersection Related	103	13.7	13,530	25.6	46,760	24.2	60,393	24.5
At Intersection	111	14.7	13,501	25.6	33,682	17.5	47,294	19.2
At/Near Private Drive	51	6.8	5,278	10.0	25,013	13.0	30,342	12.3
At Railway	5	0.7	91	0.2	351	0.2	447	0.2
Underpass or Tunnel	2	0.3	58	0.1	293	0.2	353	0.1
Overpass or Bridge	7	0.9	270	0.5	1,251	0.6	1,528	0.6
Other	0	0.0	53	0.1	500	0.3	553	0.2
Total	754	100.0	52,757	100.0	192,952	100.0	246,463	100.0

Table 3.14
Road Surface Condition by Class of Collision 2003

			Class of C	Collision				
Road Surface			Personal		Property			
Condition	Fatal	%	Injury	%	Damage	%	Total	%
Dry	523	69.4	34,981	66.3	118,273	61.3	153,777	62.4
Wet	132	17.5	10,474	19.9	38,081	19.7	48,687	19.8
Loose Snow	22	2.9	2,169	4.1	11,413	5.9	13,604	5.5
Slush	19	2.5	1,249	2.4	5,755	3.0	7,023	2.8
Packed Snow	23	3.1	1,273	2.4	7,257	3.8	8,553	3.5
Ice	27	3.6	2,141	4.1	10,256	5.3	12,424	5.0
Mud	1	0.1	12	0.0	108	0.1	121	0.0
Loose Sand or Gravel	4	0.5	288	0.5	798	0.4	1,090	0.4
Spilled Liquid	0	0.0	15	0.0	47	0.0	62	0.0
Other	3	0.4	155	0.3	964	0.5	1,122	0.5
Total	754	100.0	52.757	100.0	192,952	100.0	246,463	100.0



#### 4. PLACE OF COLLISION

This section lists the number and class of collisions, and the number of persons killed and injured by place of collision in Ontario. The number of collisions and injuries are highlighted against motor vehicle registrations in each jurisdiction.

Please note that, as a result of changes in municipal composition, the statistics found in Table 4.1 are not necessarily comparable from year to year. To obtain fatality or injury rates per capita, the population figures by municipality may be obtained through Statistics Canada's web site at: www.statcan.ca.



Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		С	lass of Collisi	on			Motor Vehicl
	Total		Personal	Property	Per	sons	Registration
	Collisions	Fatal	Injury	Damage	Killed	Injured	
ONTARIO	246,463	754	52,757	192,952	831	77,879	7,868,553
BLIND RIVER T	11	0	4	7	0	5	
ELLIOT LAKE C	41	0	10	31	0	13	
MICHIPICOTEN TP	4	0	0	4	0	0	
SAULT STE. MARIE C	1383	0	312	1071	0	465	
PROVINCIAL HIGHWAY	619	5	139	475	6	218	
OTHER AREAS	450	2	82	366	2	111	
ALGOMA	2,508	7	547	1,954	8	812	106,976
BRANTFORD C	1624	3	356	1265	3	506	
PROVINCIAL HIGHWAY	246	1	62	183	1	84	
OTHER AREAS	576	5	135	436	5	211	
BRANT	2,446	9	553	1,884	9	801	85,665
KINCARDINE M	200	0	29	171	0	42	
PROVINCIAL HIGHWAY	213	1	45	167	1	65	
OTHER AREAS	959	2	185	772	2	279	
BRUCE	1,372	3	259	1,110	3	386	61,827
COCHRANE T	63	0	13	50	0	17	
HEARST T	63	0	16	47	0	19	
KAPUSKASING T	92	0	9	83	0	11	
SMOOTH ROCK FALLS T	1	0	0	1	0	0	
TIMMINS C	646	1	151	494	1	217	
PROVINCIAL HIGHWAY	375	7	103	265	7	167	
OTHER AREAS	264	2	47	215	2	61	
COCHRANE	1,504	10	339	1,155	10	492	81,463
AMARANTH TP	104	0	27	77	0	51	
MELANCTHON TP	86	0	11	75	0	16	
MONO T	10	0	2	8	0	7	
MULMUR TP	101	0	23	78	0	25	
ORANGEVILLE T	295	0	41	254	0	56	
SHELBURNE T	59	0	10	49	0	13	
PROVINCIAL HIGHWAY	191	3	46	142	3	84	
OTHER AREAS	528	3	108	417	3	156	
DUFFERIN	1,374	6	268	1.100	6	408	40.804

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		С	lass of Collis	ion			Motor Vehicl
	Total		Personal	Property	Per	sons	Registration
	Collisions	Fatal	Injury	Damage	Killed	Injured	
AJAX T	919	1	167	751	1	247	
BROCK TP	108	1	21	86	1	35	
OSHAWA C	2386	6	448	1932	7	635	
PICKERING C	971	1	188	782	1	285	
SCUGOG TP	321	4	82	235	5	115	
UXBRIDGE TP	316	3	62	251	3	97	
WHITBY T	1404	1	260	1143	1	404	
PROVINCIAL HIGHWAY	1908	9	332	1567	12	497	
OTHER AREAS	802	5	185	612	5	265	
DURHAM	9,135	31	1,745	7,359	36	2,580	368,873
AYLMER T	80	1	13	66	1	22	
BAYHAM M	93	1	24	68	1	35	
MALAHIDE TP	132	0	34	98	0	50	
ST. THOMAS C	340	0	103	237	0	160	
PROVINCIAL HIGHWAY	196	1	55	140	1	94	
OTHER AREAS	556	6	100	450	7	161	
ELGIN	1,397	9	329	1,059	10	522	67,046
AMHERSTBURG T	254	1	58	195	1	85	
ESSEX T	297	2	54	241	2	73	
KINGSVILLE T	8	0	2	6	0	2	
LEAMINGTON M	471	0	83	388	0	118	
TECUMSEH T	324	2	59	263	2	83	
WINDSOR C	5676	9	1002	4665	9	1435	
PROVINCIAL HIGHWAY	346	3	93	250	3	157	
OTHER AREAS	935	7	219	709	7	334	
ESSEX	8,311	24	1,570	6,717	24	2,287	261,410
KINGSTON C	1789	5	372	1412	5	493	
PROVINCIAL HIGHWAY	320	2	83	235	2	129	
OTHER AREAS	471	1	111	359	1	150	
FRONTENAC	2,580	8	566	2,006	8	772	100,017

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		C	lass of Collisi	ion			Motor Vehicle
	Total		Personal	Property	Per	sons	Registrations
	Collisions	Fatal	Injury	Damage	Killed	Injured	
CHATSWORTH TP	84	0	12	72	0	15	
HANOVER T	122	1	19	102	1	30	
OWEN SOUND C	405	1	87	317	1	129	
SOUTHGATE TP	92	0	15	77	0	18	
WEST GREY TP	200	0	46	154	0	65	
PROVINCIAL HIGHWAY	369	4	73	292	5	147	
OTHER AREAS	765	7	167	591	9	272	
GREY	2,037	13	419	1,605	16	676	69,645
PROVINCIAL HIGHWAY	243	6	75	162	6	119	
OTHER AREAS	1446	8	353	1085	8	542	
HALDIMAND-NORFOLK	1,689	14	428	1,247	14	661	90,681
MINDEN HILLS TP	35	0	6	29	0	8	
DYSART ET AL TP	96	0	15	81	0	21	
PROVINCIAL HIGHWAY	200	3	40	157	3	70	
OTHER AREAS	214	0	35	179	0	50	
HALIBURTON	545	3	96	446	3	149	18,939
BURLINGTON C	2126	6	457	1663	6	673	
HALTON HILLS T	708	2	164	542	3	256	
MILTON T	807	6	213	588	6	320	
OAKVILLE T	2078	6	347	1725	7	497	
PROVINCIAL HIGHWAY	2150	3	321	1826	3	478	
OTHER AREAS	67	0	26	41	0	32	
HALTON	7,936	23	1,528	6,385	25	2,256	289,227
HAMILTON C	6826	16	1832	4978	17	2623	
PROVINCIAL HIGHWAY	978	4	227	747	4	329	
OTHER AREAS	273	2	95	176	2	149	
HAMILTON-WENTWORTH	8,077	22	2,154	5,901	23	3,101	294,342

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		C	lass of Collis	ion			Motor Vehicle
	Total		Personal	Property	Per	sons	Registrations
	Collisions	Fatal	Injury	Damage	Killed	Injured	
BANCROFT T	87	0	15	72	0	23	
BELLEVILLE C	1011	1	228	782	1	340	
DESERONTO T	11	0	3	8	0	3	
MARMORA AND LAKE M	31	0	6	25	0	11	
TYENDINAGA TP	61	0	15	46	0	21	
PROVINCIAL HIGHWAY	594	6	116	472	7	181	
OTHER AREAS	916	4	161	751	4	226	
HASTINGS	2,711	11	544	2,156	12	805	106,872
ASHFIELD-COLBORNE-WAWANOSH TP	59	2	6	51	2	8	
CENTRAL HURON M	27	2	7	18	2	13	
HOWICK TP	72	0	10	62	0	18	
HURON EAST M	26	0	1	25	0	5	
MORRIS-TURNBERRY M	68	0	8	60	0	11	
NORTH HURON TP	16	0	1	15	0	2	
SOUTH HURON M	6	0	1	5	0	1	
PROVINCIAL HIGHWAY	244	5	45	194	5	80	
OTHER AREAS	651	10	116	525	12	176	
HURON	1,169	19	195	955	21	314	48,663
DRYDEN C	155	0	11	144	0	14	
IGNACE TP	3	0	0	3	0	0	
KENORA C	0	0	0	0	0	0	
RED LAKE M	25	0	5	20	0	6	
SIOUX LOOKOUT T	54	0	12	42	0	17	
PROVINCIAL HIGHWAY	827	11	135	681	11	240	
OTHER AREAS	491	2	80	409	4	132	
KENORA	1,555	13	243	1,299	15	409	51,262
PROVINCIAL HIGHWAY	195	1	65	129	2	94	
OTHER AREAS	1428	11	374	1043	12	547	
KENT	1,623	12	439	1,172	14	641	86,388

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		C	lass of Collis	ion			Motor Vehicle
	Total		Personal	Property	Per	sons	Registrations
	Collisions	Fatal	Injury	Damage	Killed	Injured	
BROOKE-ALVINSTON M	37	1	6	30	1	9	
ENNISKILLEN TP	104	0	18	86	0	31	
PETROLIA T	60	0	6	54	0	6	
PLYMPTON-WYOMING T	87	0	21	66	0	33	
POINT EDWARD V	30	0	5	25	0	8	
SARNIA C	1017	3	203	811	3	288	
ST. CLAIR TP	6	0	2	4	0	2	
WARWICK TP	68	0	15	53	0	17	
PROVINCIAL HIGHWAY	307	4	60	243	5	101	
OTHER AREAS	372	6	78	288	7	111	
LAMBTON	2,088	14	414	1,660	16	606	96,802
CARLETON PLACE T	100	0	13	87	0	14	
MONTAGUE TP	80	0	6	74	0	8	
PERTH T	218	0	42	176	0	61	
SMITHS FALLS ST	223	0	34	189	0	40	
PROVINCIAL HIGHWAY	267	3	45	219	4	85	
OTHER AREAS	798	5	85	708	5	128	
LANARK	1,686	8	225	1,453	9	336	52,870
AUGUSTA TP	120	1	24	95	1	37	
BROCKVILLE C	408	0	85	323	0	119	
EDWARDSBURGH/CARDINAL TP	119	1	20	98	1	33	
ELIZABETHTOWN-KITLEY TP	159	0	19	140	0	29	
FRONT OF YONGE TP	23	0	5	18	0	5	
PRESCOTT ST	79	0	17	62	0	23	
PROVINCIAL HIGHWAY	646	1	125	520	1	203	
OTHER AREAS	820	2	136	682	2	193	
LEEDS & GRENVILLE	2,374	5	431	1,938	5	642	80,401
PROVINCIAL HIGHWAY	324	5	73	246	5	144	
OTHER AREAS	613	4	126	483	5	187	
LENNOX & ADDINGTON	937	9	199	729	10	331	29.500

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		Class of Collision					Motor Vehicle
	Total		Personal	Property	Persons		Registrations
	Collisions	Fatal	Injury	Damage	Killed	Injured	
PROVINCIAL HIGHWAY	267	2	23	242	2	31	
OTHER AREAS	157	1	31	125	1	52	
MANITOULIN	424	3	54	367	3	83	13,228
ADELAIDE-METCALFE TP	53	1	15	37	1	26	
LUCAN BIDDULPH TP	61	2	13	46	2	29	
LONDON C	7548	13	1655	5880	14	2415	
SOUTHWEST MIDDLESEX M	34	0	9	25	0	12	
STRATHROY-CARADOC TP	242	1	66	175	2	95	
PROVINCIAL HIGHWAY	471	6	96	369	9	151	
OTHER AREAS	875	13	198	664	14	315	
MIDDLESEX	9,284	36	2,052	7,196	42	3,043	266,460
BRACEBRIDGE T	244	0	42	202	0	61	
GRAVENHURST T	163	0	33	130	0	44	
HUNTSVILLE T	303	0	45	258	0	54	
LAKE OF BAYS TP	37	1	6	30	1	8	
MUSKOKA LAKES TP	141	0	27	114	0	38	
PROVINCIAL HIGHWAY	603	6	125	472	8	184	
OTHER AREAS	100	0	24	76	0	31	
MUSKOKA	1,591	7	302	1,282	9	420	60,136
FORT ERIE T	400	1	76	323	1	97	
GRIMSBY T	229	1	51	177	1	77	
LINCOLN T	227	1	41	185	1	56	
NIAGARA-ON-THE-LAKE T	262	3	71	188	3	113	
NIAGARA FALLS C	1727	1	294	1432	2	430	
PELHAM T	205	2	49	154	2	75	
PORT COLBORNE C	190	1	37	152	1	46	
ST. CATHARINES C	2141	2	381	1758	2	559	
THOROLD C	268	3	42	223	3	72	
WAINFLEET TP	60	1	18	41	1	27	
WELLAND C	725	1	123	601	2	176	
WEST LINCOLN TP	152	2	33	117	3	49	
PROVINCIAL HIGHWAY	1405	9	339	1057	9	536	
OTHER AREAS	198	0	34	164	0	51	
NIAGARA	8.189	28	1,589	6,572	31	2,364	299,933

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		Class of Collision					Motor Vehicl
	Total Collisions	Fatal	Personal	Property	Persons		Registrations
			Injury	Damage	Killed	Injured	
EAST FERRIS TP	20	0	7	13	0	12	
MATTAWA T	13	0	0	13	0	0	
NORTH BAY C	930	1	145	784	1	212	
PROVINCIAL HIGHWAY	741	4	185	552	4	292	
OTHER AREAS	210	0	38	172	0	58	
NIPISSING	1,914	5	375	1,534	5	574	72,839
BRIGHTON M	110	0	25	85	0	39	
COBOURG T	276	1	70	205	1	101	
CRAMAHE TP	60	0	15	45	0	22	
ALNWICK-HALDIMAND TP	99	0	26	73	0	35	
PORT HOPE M	232	1	40	191	1	52	
PROVINCIAL HIGHWAY	474	3	98	373	3	155	
OTHER AREAS	415	4	75	336	7	120	
NORTHUMBERLAND	1,666	9	349	1,308	12	524	66,153
OTTAWA	13331	24	2803	10504	27	3810	
PROVINCIAL HIGHWAY	1493	7	303	1183	8	452	
OTHER AREAS	0	0	0	0	0	0	
OTTAWA	14,824	31	3,106	11,687	35	4,262	461,348
INGERSOLL T	111	0	18	93	0	23	
TILLSONBURG T	195	1	30	164	1	42	
WOODSTOCK C	569	1	122	446	1	200	
ZORRA TP	178	1	34	143	1	46	
PROVINCIAL HIGHWAY	425	1	103	321	1	155	
OTHER AREAS	560	9	121	430	11	186	
OXFORD	2,038	13	428	1,597	15	652	80,334
MCDOUGALL TP	24	0	5	19	0	7	
PERRY TP	9	0	4	5	0	5	
PROVINCIAL HIGHWAY	753	12	154	587	16	250	
OTHER AREAS	325	0	51	274	0	75	
PARRY SOUND	1,111	12	214	885	16	337	48,947

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		Class of Collision					Motor Vehicle
	Total Collisions	Fatal	Personal	Property	Persons		Registrations
			Injury	Damage	Killed	Injured	
BRAMPTON C	6157	15	826	5316	16	1,186	
CALEDON T	1208	8	247	953	8	359	
MISSISSAUGA C	9268	20	1178	8070	22	1,635	
PROVINCIAL HIGHWAY	3639	5	466	3168	6	682	
OTHER AREAS	410	0	7	403	0	11	
PEEL	20,682	48	2,724	17,910	52	3,873	676,796
ST. MARYS ST	57	0	9	48	0	12	
STRATFORD C	477	0	97	380	0	153	
PROVINCIAL HIGHWAY	243	1	66	176	1	104	
OTHER AREAS	636	7	151	478	8	237	
PERTH	1,413	8	323	1,082	9	506	56,500
SMITH-ENNISMORE-LAKEFIELD TP	154	0	38	116	0	65	
PETERBOROUGH C	612	4	349	259	5	506	
PROVINCIAL HIGHWAY	404	3	102	299	4	168	
OTHER AREAS	689	6	160	523	6	242	
PETERBOROUGH	1,859	13	649	1,197	15	981	100,171
CASSELMAN V	28	0	5	23	0	5	
EAST HAWKESBURY TP	38	1	13	24	1	16	
HAWKESBURY T	188	0	36	152	0	43	
RUSSELL TP	143	0	41	102	0	53	
PROVINCIAL HIGHWAY	331	0	77	254	0	96	
OTHER AREAS	543	2	133	408	2	215	
PRESCOTT & RUSSELL	1,271	3	305	963	3	428	75,001
PROVINCIAL HIGHWAY	63	0	14	49	0	31	
OTHER AREAS	465	1	90	374	3	133	
PRINCE EDWARD	528	1	104	423	3	164	21,433
ATIKOKAN TP	13	0	3	10	0	4	
FORT FRANCES T	139	0	19	120	0	29	
PROVINCIAL HIGHWAY	315	4	28	283	4	47	
OTHER AREAS	78	1	9	68	1	18	
RAINY RIVER	545	5	59	481	5	98	22.151

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		Class of Collision					Motor Vehicle
	Total Collisions		Personal Injury	Property Damage	Persons		Registrations
		Fatal			Killed	Injured	
ARNPRIOR T	107	0	18	89	0	26	
DEEP RIVER T	18	0	4	14	0	5	
HORTON TP	54	0	10	44	0	13	
LAURENTIAN VALLEY TP	113	0	31	82	0	45	
PEMBROKE C	238	0	67	171	0	95	
PETAWAWA T	89	0	18	71	0	28	
RENFREW T	150	0	28	122	0	36	
WHITEWATER REGION TP	7	0	1	6	0	3	
PROVINCIAL HIGHWAY	505	7	98	400	7	156	
OTHER AREAS	494	4	88	402	4	125	
RENFREW	1,775	11	363	1,401	11	532	86,342
BARRIE C	2267	2	411	1854	2	588	
COLLINGWOOD T	340	0	66	274	0	97	
ESSA TP	274	2	46	226	2	83	
INNISFIL T	445	1	119	325	1	196	
MIDLAND T	292	0	46	246	0	60	
ORILLIA C	377	0	93	284	0	140	
TINY TP	154	0	32	122	0	46	
WASAGA BEACH T	169	0	34	135	0	47	
PROVINCIAL HIGHWAY	1941	13	367	1561	14	635	
OTHER AREAS	2556	18	505	2033	21	779	
SIMCOE	8,815	36	1,719	7,060	40	2,671	312,556
CORNWALL C	1010	2	222	786	3	341	
PROVINCIAL HIGHWAY	428	6	83	339	6	126	
OTHER AREAS	737	7	113	617	7	158	
STORMONT DUNDAS & GLENGARRY	2,175	15	418	1,742	16	625	86,461
ESPANOLA T	39	0	8	31	0	10	
GREATER SUDBURY C	2143	3	562	1578	5	821	
PROVINCIAL HIGHWAY	749	10	227	512	10	345	
OTHER AREAS	485	1	120	364	1	166	
SUDBURY	3,416	14	917	2,485	16	1,342	161,292

Table 4.1 (continued on next page)
Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		С	lass of Collis	ion			Motor Vehicle
	Total		Personal	Property	Per	sons	Registrations
	Collisions	Fatal	Injury	Damage	Killed	Injured	
GREENSTONE M	28	0	7	21	0	8	
MANITOUWADGE TP	10	0	1	9	0	3	
MARATHON T	24	0	5	19	0	8	
NIPIGON TP	11	0	0	11	0	0	
SCHREIBER TP	7	0	1	6	0	1	
TERRACE BAY TP	6	0	1	5	0	1	
THUNDER BAY C	2317	3	454	1860	3	637	
PROVINCIAL HIGHWAY	1096	10	198	888	10	301	
OTHER AREAS	173	0	30	143	0	56	
THUNDER BAY	3,672	13	697	2,962	13	1,015	135,266
ENGLEHART T	8	0	4	4	0	6	
HAILEYBURY T	48	0	7	41	0	21	
KIRKLAND LAKE T	87	0	10	77	0	12	
NEW LISKEARD T	77	0	7	70	0	12	
PROVINCIAL HIGHWAY	304	0	82	222	0	127	
OTHER AREAS	119	0	29	90	0	40	
TIMISKAMING	643	0	139	504	0	218	34,681
TORONTO C	53457	72	14283	39102	74	21217	
PROVINCIAL HIGHWAY	9781	13	2137	7631	15	3254	
OTHER AREAS	0	0	0	0	0	0	
TORONTO	63,238	85	16,420	46,733	89	24,471	1,160,742
KAWARTHA LAKES C	1157	4	239	914	4	353	
PROVINCIAL HIGHWAY	332	6	83	243	6	165	
OTHER AREAS	35	0	8	27	0	9	
VICTORIA	1,524	10	330	1,184	10	527	65,284
CAMBRIDGE C	2429	6	531	1892	7	731	
KITCHENER C	4108	6	835	3267	8	1169	
NORTH DUMFRIES TP	189	0	45	144	0	72	
WATERLOO C	2102	1	437	1664	1	612	
WELLESLEY TP	116	1	28	87	1	43	
WILMOT TP	192	1	48	143	1	75	
WOOLWICH TP	445	2	110	333	2	173	
PROVINCIAL HIGHWAY	1261	7	200	1054	7	304	
OTHER AREAS	54	0	7	47	0	8	
WATERLOO	10,896	24	2,241	8.631	27	3,187	308.528

Table 4.1 continued

Place of Collision - Class of Collision, Persons Killed, Injured and Motor Vehicle Registrations

Location		Class of Collision					Motor Vehicle
	Total		Personal	Property	Persons		Registrations
	Collisions	Fatal	Injury	Damage	Killed	Injured	
ERIN T	207	3	39	165	4	59	
GUELPH C	1500	5	474	1021	5	679	
MINTO T	110	0	20	90	0	26	
PROVINCIAL HIGHWAY	768	5	162	601	6	246	
OTHER AREAS	1368	12	247	1109	14	381	
WELLINGTON	3,953	25	942	2,986	29	1,391	139,248
AURORA T	455	2	70	383	3	99	
GEORGINA T	435	2	105	328	2	140	
EAST GWILLIMBURY T	331	0	77	254	0	132	
KING TP	421	2	88	331	2	134	
MARKHAM T	3024	0	489	2535	0	737	
NEWMARKET T	859	0	154	705	0	229	
RICHMOND HILL T	2002	4	329	1669	4	467	
VAUGHAN C	3732	8	618	3106	8	907	
WHITCHURCH STOUFFVILLE TP	607	1	111	495	1	166	
PROVINCIAL HIGHWAY	2097	7	406	1684	8	593	
OTHER AREAS	0	0	0	0	0	0	
YORK	13,963	26	2,447	11,490	28	3,604	567,050

#### LEGEND

T = Town C = City
ST = Separated Town TP= Township
M = Municipality V = Village

Other Areas: Jurisdictions with less than 1,500 population.

Table 4.1 is not comparable to previous years.

<sup>\*</sup> This number matches the vehicle population in Table 5.5, however, it does not include 11,696 vehicles, which are not associated with a county or region in Ontario.

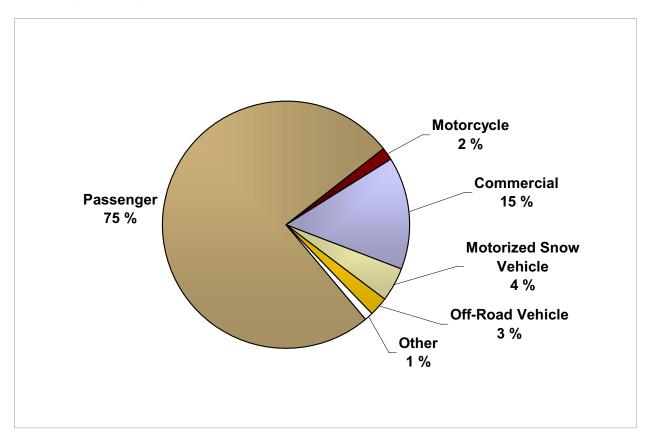


## 5. THE VEHICLE

This section examines vehicles involved in reportable motor vehicle collisions in Ontario. Passenger vehicles make up 76 per cent of the vehicle population in Ontario and comprise 80 per cent of all vehicles involved in collisions.

Statistics provided here indicate that 91 per cent of all vehicles involved in collisions had no apparent defects. Approximately 36 per cent of all vehicles involved in fatal collisions were ten years or older.

Figure 5
Vehicle Population by Vehicle Class in Ontario, 2003



# 5A. VEHICLES IN COLLISIONS

Table 5.1
Vehicles Involved in Collisions 2003

	Number	of Vehicles Involve	ed in Collisions	
Type of Vehicle*	Fatal	Personal Injury	Property Damage	Total
Passenger Car	710	70,964	245,901	317,575
Passenger Van	119	10,203	35,756	46,078
Motorcycle & Moped	53	1,392	815	2,260
Pick-up Truck	163	7,564	30,795	38,522
Delivery Van	14	1,404	5,779	7,197
Tow Truck	2	162	551	715
Truck	149	2,884	14,650	17,683
Bus	6	696	2,375	3,077
School Vehicle	9	236	1,243	1,488
Off-Road Vehicle	1	43	174	218
Snowmobile	2	39	50	91
Snow Plow	0	16	104	120
Emergency Vehicle	7	464	1,586	2,057
Farm Vehicle	1	78	159	238
Construction Equipment	3	41	225	269
Motor Home	2	24	133	159
Railway Train	4	32	34	70
Street Car	1	86	389	476
Bicycle	15	2,735	600	3,350
Other	0	0	2	2
Other Non-Motor Vehicle	1	116	270	387
Unknown	5	665	12,480	13,150
Total	1,267	99,844	354,071	455,182

<sup>\*</sup> Categories in this table are not comparable to years prior to 1998.

Table 5.2 Condition of Vehicle by Class of Collision 2003

	Class of Collision				
Condition of Vehicle	Fatal	Personal Injury	Property Damage	Total	
No Apparent Defect	1,185	95,989	318,474	415,648	
Service Brakes Defective	4	44	153	201	
Steering Defective	0	4	28	32	
Tire Puncture or Blow Out	0	18	67	85	
Tire Tread Insufficient	2	7	24	33	
Headlamps Defective	0	4	16	20	
Other Lamps or Reflectors Defective	1	0	19	20	
Engine Controls Defective	1	8	29	38	
Wheels or Suspension Defective	1	5	43	49	
Vision Obscured	0	6	29	35	
Trailer Hitch Defective	0	1	3	4	
Other Defects	11	572	4,828	5,411	
Unknown	62	3,186	30,358	33,606	
Total	1,267	99,844	354,071	455,182	

Table 5.3 Model Year of Vehicle by Class of Collision 2003

Model Year of Vehicle	Fatal	Personal Injury	Property Damage	Total
2004	5	749	2,898	3,652
2003	92	6,401	24,628	31,121
2002	85	8,086	30,534	38,705
2001	95	7,322	27,275	34,692
2000	106	7,823	29,435	37,364
1999	90	6,852	24,869	31,811
1998	100	6,645	24,799	31,544
1997	91	6,200	21,931	28,222
1996	49	4,871	17,260	22,180
1995	71	5,805	19,862	25,738
1994 and earlier	457	33,916	108,721	143,094
Unknown	26	5,174	21,859	27,059
Total	1,267	99,844	354,071	455,182

Table 5.4
Insurance Status of Vehicle by Class of Collision 2003

Insurance	Fatal	Personal Injury	Property Damage	Total
Insured	1,216	93,781	331,858	426,855
Not Insured	31	706	1,359	2,096
Unknown	20	5,357	20,854	26,231
Total	1,267	99,844	354,071	455,182

# 5B. PUTTING THE VEHICLE IN CONTEXT

Table 5.5
Vehicle Population by Type of Vehicle 2003

Vehicle Class	Vehicle Population
Passenger	5,964,822
Motorcycle	128,114
Moped	2,019
Commercial*	1,162,734
Bus	21,320
School Bus	8,307
Motorized Snow Vehicle	331,704
Off-Road Vehicle	211,073
Road Building Machinery	566
Permanent Apparatus	2,952
Farm Trucks	46,638
Total	7,880,249

<sup>\*</sup> Excludes Single Application Vehicle Registrations (SAVR - 54,827 vehicles).

Table 5.6
Selected Types of Vehicles by Model Year 2003

Vehicle Class	Model Years											
	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994+	Total
Passenger	152,101	519,920	520,804	450,083	489,625	398,400	410,248	375,533	292,138	341,343	2,014,627	5,964,822
Motorcycle	544	12,017	11,562	11,024	10,284	6,835	4,491	3,670	3,044	2,362	62,281	128,114
Moped	6	61	153	492	165	72	5	10	4	2	1,049	2,019
Commercial*	25,709	94,870	80,329	75,547	91,230	82,694	81,371	68,139	50,972	64,601	497,428	1,212,890
Bus	1,092	2,134	1,911	2,315	2,605	2,343	1,942	1,547	1,897	1,786	10,055	29,627
Motorized Snow Vehicle	6,939	9,530	11,507	8,340	11,473	12,453	15,614	14,582	12,647	11,742	216,877	331,704
Off-Road Vehicle	7,245	18,084	15,705	18,308	14,967	10,299	6,961	4,933	5,770	5,525	103,276	211,073
Total	193,636	656,616	641,971	566.109	620,349	513,096	520,632	468,414	366.472	427,361	2.905.593	7,880,249

<sup>\*</sup> Excludes Single Application Vehicle Registrations (SAVR - 54,827 vehicles).

Table 5.7 Vehicle Damage Level 2003

Damage		Class of Co	Ilision	
	Fatal	Personal Injury	Property Damage	Total
None	58	9,133	20,538	29,729
Light	108	27,160	148,942	176,210
Moderate	136	26,271	105,565	131,972
Severe	230	21,461	32,911	54,602
Demolished	693	10,263	6,224	17,180
Unknown	42	5,556	39,891	45,489
Total	1,267	99,844	354,071	455,182

#### **VEHICLE DAMAGE**

None: No visible damage.

**Light:** Slight or superficial damage. Includes scratches, small dents, minor cracks in glass that do not affect safety or performance of vehicle.

**Moderate:** Unsafe conditions result from damage. Vehicle must be repaired to make its condition meet requirements of law. Vehicle can be driven off road or limited distance but doing so would be unsafe. **Severe:** Vehicle cannot be driven. Requires towing. Would normally be repaired.

**Demolished:** Vehicle damaged to the extent that repairs would not be feasible.



# 6. SPECIAL VEHICLES

This section takes a look at special vehicles such as motorcycles, school buses, large trucks, snowmobiles, off-road vehicles and bicycles. There were 155 fatalities in large truck collisions in 2003. However, the

number of large trucks involved in fatal collisions decreased by 25 per cent between 1988 and 2003, despite the fact that the large truck population grew by 45 per cent during the same period.



# 6A. MOTORCYCLES

Table 6.1 Motorcyclists\* Killed and Injured 1999 - 2003

Year	Driv	/ers	Passengers		
	Killed	Injured	Killed	Injured	
1999	38	1,115	3	223	
2000	37	1,161	1	257	
2001	49	1,166	3	318	
2002	35	1,161	3	311	
2003	46	1,087	6	268	

<sup>\*</sup> Excludes hangers on, moped drivers and passengers.

Table 6.2
Selected Factors Relevant to Fatal Motorcycle
Collisions 2003

Factors (not mutually exclusive)	%
Unlicensed Motorcycle Drivers	4
Under 25 Years Old	18
Alcohol Used	
Ability Impaired Alcohol > .08	4
Had Been Drinking	12
Unknown	0
Helmet Not Worn (Fatalities)	6
Motorcycle Driver Error	
Speed Too Fast/Lost Control	45
Other Error	25
Single Vehicle Collisions	48
Day/Night	80/20
Weekend	34

# 6B. SCHOOL VEHICLES

Table 6.3

Pupils Transported Daily, and Total Number of School Vehicles Involved in Collisions Years 1998/99-2002/03

School Year	Pupils Transported Daily	Total Number of	
		School Vehicles in Collisions	
1998/99	Not Available	903	
1999/2000	Not Available	1,218	
2000/2001	778,108*	1,084	
2001/2002	708,294*	1,015	
2002/2003	721,680	1,283	

<sup>\*</sup> Estimated number

Table 6.4 School Vehicle Type by Nature of Collision 2002/03

		Nature	of Collision			
		Pupil	Non-Pupil	Property	Total Number of School	Five Year Total
School Vehicle Type	Fatal	Injury	Injury	Damage	Vehicles in Collisions	(1998/99 - 2002/03)
School Bus	3	71	103	953	1,130	4,537
School Van	0	8	7	42	57	290
Other School Vehicles	0	3	2	91	96	405
Total	3	82	112	1,086	1,283	5,232

Table 6.5
Pupil Injury by Collision Event and Vehicle Type 2002/2003 (Number of Persons)

School Vehicle			Collisi	on Event					Five `	Year Total
Type	Cro	ssing	Wi	thin					(1998/99	9 - 2002/03
	R	oad	School \	Vehicle	Ot	her	Tot	:al		
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
School Bus	0	1	0	104	0	0	0	105	4	588
School Van	0	0	0	1	0	0	0	1	0	47
Other School Vehicles	0	0	0	4	0	0	0	4	1	11
Total	0	1	0	109	0	0	0	110	5	646

# 6C. TRUCKS

Table 6.6

Number of Persons Killed in Collisions Involving Large Trucks 1999-2003

	Person	ns Killed in Truck Col	lisions	
Year	Where Truck	% Where Truck	All Truck	% of
	Driver Not Driving	<b>Driver Not Driving</b>	Collisions	Total Deaths
	Properly	Properly		
1999	53	31.0	171	19.7
2000	43	28.7	150	17.7
2001	39	27.3	143	16.9
2002	66	38.6	171	19.6
2003	51	32.9	155	18.7
Total	252	31.7	790	18.5

Table 6.7

Number of Large Trucks in All Classes of Collisions 2003

		Class of Collision	n	
Truck Types	Fatal	Personal Injury	Property Damage	Total
Straight Truck	37	1,183	6,227	7,447
Straight Truck & Trailer	6	116	550	672
Tractor Only	10	493	2,890	3,393
Tractor & Semi-Trailer	84	866	3,897	4,847
"A-C" Train Double	1	16	69	86
"B" Train Double	6	43	154	203
Other/Unknown	7	329	1,414	1,750
Total	151	3,046	15,201	18,398

Table 6.8
Registered Trucks 2003

Driver Licence Required	Registered Trucks
G	1,040,160
D	57,291
A*	170,266**
Total	1,267,717

<sup>\*</sup> Tractor/trailer combination only.

Class G trucks refers to trucks that have a gross weight less than 11,000 kilograms e.g. pickups.

Data for truck/trailer combinations requiring Class "A" driver licence are not reported in the Vehicle Registration System (VRS).

Table 6.9
Selected Factors Relevant to Fatal Large Truck Collisions 2003

Factors in Fatal Collisions:	%
Drivers	
Alcohol Involved	0.7
Driving Properly	68.2
Collisions	
Single Vehicle	27.9
Weather Condition - Clear	77.1
Daylight	60.0
Vehicles	
Vehicle Defect Present*	4.0

<sup>\*</sup> Excludes unknown category

<sup>\*\*</sup>Includes 54,827 vehicles – Single Application Vehicle Registrations (SAVR).

## 6D. OFF-ROAD VEHICLES

For the purposes of this publication, off-road vehicles include dune buggies, off-road motorcycles (dirt bikes), and three-and-four-wheeled all-terrain vehicles. Off-road vehicles were first required to be registered on June 1, 1984; (one-time registration requirement).

Table 6.10
Collision Location by Off-Road Vehicle Drivers Killed and Injured 1999-2003

			Killed					Injured		
Location	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
On-Highway	2	1	0	6	1	14	28	32	26	30
Off-Highway	3	6	8	9	3	44	71	87	99	101
Total	5	7	8	15	4	58	99	119	125	131

Table 6.11
Collision Location by Off-Road Vehicle Passengers Killed and Injured 1999-2003

	Killed						Injured				
Location	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003	
On-Highway	0	1	0	0	0	9	18	17	19	10	
Off-Highway	0	2	0	0	0	17	24	45	56	55	
Total	0	3	0	0	0	26	42	62	75	65	

<sup>\*</sup>The number of pedestrians injured/killed by off-road vehicles are not provided in ORSAR.

Table 6.12
Registered Off-Road Vehicles 1999-2003

Year	Vehicles Registered
1999	136,832
2000	152,570
2001	169,987
2002	189,180
2003	211,073

Table 6.13
Selected Factors Relevant to All Off-Road
Vehicle Collisions 2003

Factors	%
Privers Under 25 Years of Age	49
Alcohol Used	17
Speeding	21
Helmet Not Worn	43
Daytime	77
wo-Wheeled	21
Three-Wheeled	7
our-Wheeled	72



## 6E. MOTORIZED SNOW VEHICLES

Table 6.14
Collision Location by Motorized Snow Vehicle\* Drivers Killed and Injured Riding Seasons 1998/99 - 2002/03

Killed								Injured		
Location	98/99	99/00	00/01	01/02	02/03	98/99	99/00	00/01	01/02	02/03
On-Highway	2	3	3	1	2	41	22	47	24	32
Off-Highway	20	8	26	11	26	247	208	272	142	160
Total	22	11	29	12	28	288	230	319	166	192

<sup>\*</sup>The number of pedestrians injured/killed by motorized snow vehicles are not provided in ORSAR.

The numbers in the table exclude HTA non-reportable collisions with location coded "on highway."

Table 6.15
Collision Location by Motorized Snow Vehicle\* Passengers Killed and Injured Riding Seasons 1998/99 - 2002/03

			Killed		l l				jured		
Location	98/99	99/00	00/01	01/02	02/03	98/99	99/00	00/01	01/02	02/03	
On-Highway	0	0	1	0	0	14	9	19	8	7	
Off-Highway	3	2	1	1	2	81	63	83	86	79	
Total	3	2	2	1	2	95	72	102	94	86	

<sup>\*</sup>The number of pedestrians injured/killed by motorized snow vehicles are not provided in ORSAR.

The numbers in the table exclude HTA non-reportable collisions with location coded "on highway."

Table 6.16
Registered Motorized Snow Vehicles 1999 - 2003

Year	Registered Motorized
	Snow Vehicles
1999	364,200
2000	332,446
2001	334,129
2002	321,582
2003	331,704

Table 6.17
All Motorized Snow Vehicle Collisions 2002/03

Factors	%
Unlicensed Operators	6
Rider Error; Speed too Fast	33
Alcohol Used	20
Surface Condition; Icy or Packed Snow	52

<sup>\*</sup> The numbers in these tables are captured under the Motorized Snow Vehicles Act (MSVA) and the Highway Traffic Act (HTA), therefore, they are not comparable with the numbers in Tables 2.2 and 2.3, which are HTA reportable collisions only.

# 6F. BICYCLES

Only collisions involving a bicycle and a moving motor vehicle or a streetcar are required to be reported. These tables do not include bicycle only, bicycle/ bicycle, or bicycle/pedestrian collisions.

Table 6.18
Bicyclists Killed and Injured 1999 - 2003

	Drivers		Passe	sengers	
Year	Killed	Injured	Killed	Injured	
1999	17	2,702	0	136	
2000	9	2,694	0	105	
2001	16	2,349	0	254	
2002	13	2,478	0	241	
2003	13	2,398	0	243	

Table 6.19

Age of Bicyclists Involved in Collisions by Light Condition 2003

Light		Age Groups					
Condition	0-5	6 - 15	16 - 30	31 - 60	61+	UK	Total
Daylight	7	180	243	284	46	1,979	2,739
Dawn	0	0	2	4	1	28	35
Dusk	0	6	16	7	0	84	113
Dark	0	14	61	63	2	322	462
Total	7	200	322	358	49	2,413	3,349

Table 6.20 Selected Factors Relevant to All Bicycle Collisions 2003

Factors	%
Driving Properly (Bicyclist)	39
Driving Properly (Motor Vehicle Driver)	49
Intersection Related	67
Going Ahead (Bicyclist)	82
Alcohol Related (Bicyclist)	3
No Apparent Vehicle Defect (Bicycle)	89
Clear Visibility	92
Weekend	21



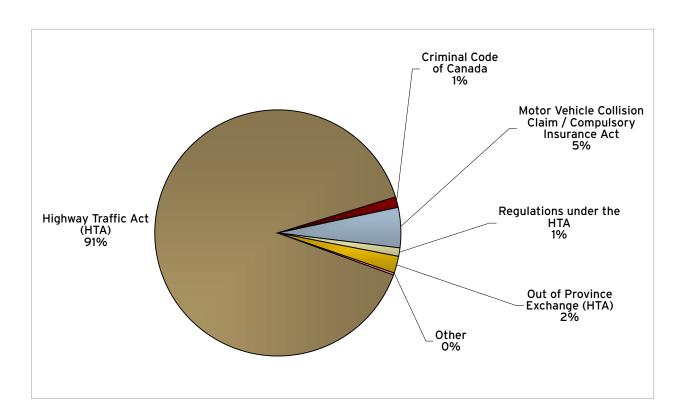
# 7. CONVICTION, OFFENCE AND SUSPENSION DATA

This section takes a look at convictions related to both the *Highway Traffic Act* and the *Criminal Code of Canada*.

Since December 1996, drivers whose Blood Alcohol Concentration (BAC) is over the legal limit (.08), or who fail or refuse a breath test have had their driver's

licences suspended immediately for 90 days under the Administrative Driver's Licence Suspension (ADLS) Program. This 90-day suspension is separate and distinct from any criminal charges a driver faces in court. ADLS suspensions issued decreased from 19,930 in 2002 to 18,367 in 2003.

Figure 7
Per Cent of Motor Vehicle Convictions in Ontario, 2003



# 7A. CONVICTION DATA

Table 7.1
Summary of Motor Vehicle Related Convictions 2003

Convictions*	Number
Highway Traffic Act	1,136,076
Regulations under the H.T.A	13,364
Criminal Code of Canada**	18,266
Municipal By-Law***	35
Motor Vehicle Collision Claim/Compulsory Insurance Act	65,918
Motorized Snow Vehicles Act	2,395
Off-Road Vehicles Act	1,472
Out of Province Exchange (HTA)	27,499
Others***	365
Total	1,265,390

- \* Includes manually recorded convictions.
- \*\* This figure does not include 395 convictions for young offenders under the Criminal Code.
- \*\*\* In previous years a large portion of convictions under H.T.A. Regulations were allocated to convictions under Municipal By-Law.
- \*\*\*\* Others may include acts not listed above, such as Fuel Tax Act, Truck Transport Act, Dangerous Goods Transport Act and Motor Vehicle Transportation Act.

Table 7.2 Motor Vehicle Convictions Related to the Highway Traffic Act 2003

Convictions	Number
Equipment	23,362
Administrative*	143,029
Seat Belt (Driver & Passenger)**	62,685
Other Non-Pointable Convictions ***	40,055
Speeding	716,120
Other Pointable Convictions (2 - 4 pts)	128,518
Other Pointable Convictions (5 - 7 pts)	13,026
Driving While Suspended	9,281
Total	1,136,076

<sup>\*</sup> Non-moving, weight, vehicle registration, licence renewal, etc.

Table 7.3

Motor Vehicle Convictions Related to the Criminal Code 2003\*

Convictions	Number
Alcohol Related**	14,336
Criminal Negligence	20
Fail to Remain at Collision	620
Fail to Stop for Police Officer	393
Driving While Disqualified	1,817
Dangerous Driving	1,080
Motor Manslaughter	0
Total	18,266

<sup>\*</sup> Does not include 395 convictions for young offenders.

<sup>\*\*</sup> Failure to wear seat belt convictions registered against passengers over 16 are no longer included.

<sup>\*\*\*</sup> Now includes some out-of-province convictions.

<sup>\*\*</sup> Includes some out-of-province convictions.

# **7B. OFFENCE DATA**

Table 7.4

Number of Convicted Drivers\* with Criminal Code of Canada Offences, During the Specified Years

Conviction Type	1998	1999	2000	2001	2002	2003
0	24	21	47	10	10	
Criminal Negligence	34	31	17	18	18	5
Fail to Remain	437	242	234	196	169	92
Dangerous Driving	1,150	1,009	959	1,021	860	514
Impaired Driving	9,532	9,103	9,224	8,743	7,603	4535
Blood/Alcohol over .08	7,366	7,150	7,095	7,043	5,905	3471
Fail to Provide Breath Sample	1,269	1,362	1,270	1,201	964	493
Driving While Disqualified	2,339	2,027	1,976	1,777	1,677	1161
Motor Manslaughter	0	0	0	0	0	1
Undefined	0	0	0	0	0	1
Total	22,127	20.924	20.775	19.999	17.196	10.273

<sup>\*</sup> The same driver can be represented in this table more than once.

As of March 25, 2004, there were 10,273 Criminal Code offences recorded for 2003. The 2003 breakdown will be updated in the 2004 annual report to accommodate the lag time in the recording of offences (offences are only recorded on driver records upon conviction).

Table 7.5

Adminstrative Driver Licence Suspension (ADLS) Monthly Suspensions Issued 2003\*

Suspensions	1998	1999	2000	2001	2002	2003
January	1,337	1,352	1,550	1,500	1,416	1,349
February	1,471	1,567	1,487	1,450	1,452	1,391
March	1,608	1,664	1,662	1,874	1,683	1,566
April	1,681	1,592	1,799	1,816	1,574	1,412
May	1,801	1,763	1,634	1,752	1,756	1,578
June	1,665	1,531	1,646	1,768	1,811	1,608
July	1,665	1,720	1,854	1,795	1,712	1,589
August	1,750	1,660	1,808	1,699	1,675	1,639
September	1,609	1,570	1,699	1,837	1,720	1,498
October	1,663	1,839	1,724	1,691	1,671	1,568
November	1,617	1,686	1,624	1,790	1,668	1,591
December	1,810	1,760	1,879	1,986	1,792	1,578
Total	19,677	19,704	20,366	20,958	19,930	18,367

<sup>\*</sup> Adminstrative Driver License Suspension (ADLS) began on November 29, 1996. See Appendix for a more detailed explanation of ADLS.

## 7C. SUSPENSION DATA

Table 7.6

Demerit Point Suspensions by Driver Age 2003

Driver Age	Demerit Point Suspensions							
		Novice	Novice	Regular	Regular Second			
		First	Second	First				
	Probationary	Accumulation	Accumulation	Accumulation	Accumulation			
16	0	1	0	0	0			
17	0	36	1	0	0			
18	0	303	8	5	0			
19	0	649	40	24	0			
20-24	0	1,928	231	448	33			
25-34	2	621	101	697	53			
35-44	1	224	16	374	31			
45-54	2	80	7	160	7			
55-64	0	11	6	63	3			
65-74	0	1	0	7	0			
75 +	0	1	0	0	0			
Total	5	3,855	410	1,778	127			

Since 1994, novice drivers have been under the Graduated Licensing System. These drivers are subject to escalating actions, from a warning letter at 2 to 5 demerit points, an interview at 6 to 8 points and a 60-day suspension for a first accumulation of 9 points. After a first suspension, the demerit points are reduced to 4. If a driver attains 9 points again, the subsequent suspension is 6 months. Drivers who have obtained a full Class G licence are suspended for 30 days on the first accumulation of 15 demerit points and are suspended for 6 months on the second accumulation of 15 points within 2 years.

Until 1994, newly licensed drivers were covered by the probationary licence system until they had successfully completed two one-year periods of suspension-free driving. Probationary drivers were suspended for 30 days after accumulating 6 or more demerit points. The probationary licensing system ended on March 31, 1994. Drivers were grandfathered into the new Graduated Licensing System.



## 8. APPENDIX

## 8A. GLOSSARY

#### **Ability Impaired - Alcohol:**

Driving while one's ability is impaired by alcohol or driving with a blood alcohol concentration exceeding 80 milligrams in 100 millilitres of blood.

#### Administrative Driver's Licence Suspension (ADLS):

This program, designed to reduce drinking and driving, started November 29, 1996. Under this program, provincial law permits the immediate suspension of a driver's licence for 90 days upon evidence gathered by a police officer that the driver (a) was shown to have a concentration of alcohol in excess of 80 milligrams per 100 millilitres of blood or (b) the driver failed or refused to provide a breath or blood sample.

## **Alcohol Involved:**

This category includes both drivers reported as ability impaired by alcohol and drivers reported as "had been drinking".

#### Class G1 Driver's Licence:

A holder of a Class G1 driver's licence:

- must have a zero blood alcohol content while driving;
- must have only one passenger in the front seat. That person, the accompanying driver, must be a fully licensed driver (Class A, B, C, D, E, F and G) with at least four years driving experience. That person's blood alcohol content must be less than .05;
- unless accompanied by a licensed driving instructor, must not drive on Ontario's "400series" highways or on high speed expressways such as the Queen Elizabeth Way, the Don Valley Parkway, E.C. Row Expressway and the Conestoga Parkway;
- must limit the number of back seat passengers

- they carry to the number of seat belts in the back seat of the vehicle;
- must not drive between the hours of midnight and 5 a.m;
- may drive Class G vehicle only.

Level One lasts 12 months, but that time can be reduced to eight months by completing an approved driver education course. For information about approved courses, contact any Ministry of Transportation licensing office. At the end of the level, drivers must pass a road test before proceeding to Level Two.

#### Class G2 Driver's Licence:

A holder of a Class G2 driver's licence:

- must have a zero blood alcohol content while driving;
- is allowed to drive any motor vehicle that requires a Class G driver's licence (e.g. an automobile) on the road;
- must limit the number of back seat passengers they carry to the number of seat belts in the back seat of the vehicle.

Level Two lasts 12 months. After completing this level, drivers are eligible to take a comprehensive test to qualify for full licence privileges.

#### Class M1 Motorcycle Driver's Licence:

A holder of a Class M1 motorcycle driver's licence:

- allows the holder to operate a motorcycle for the purposes of training;
- must have a zero blood alcohol content while driving;
- is only allowed to drive during daylight hours (one-half hour before sunrise to one-half hour after sunset);

- is only allowed to drive on roads with speed limits of 80 km/h or less, except where there is no other route to take. Class M1 Motorcycle Driver's Licence holders may drive on highways 11, 17, 61, 69, 71, 101, 102, 144, and 655;
- may not carry passengers.

Level One lasts at least 60 days, and the licence is valid for 90 days. Level One drivers must pass a motorcycle road test before proceeding to Level Two. Alternatively, during Level One they may take an approved motorcycle safety course that includes a road test, instead of the ministry road test.

#### Class M2 Motorcycle Driver's Licence:

A holder of a Class M2 motorcycle driver's licence:

 must have a zero blood alcohol content while driving.

After completing Level Two, drivers will be eligible to take a comprehensive test to qualify for full licence privileges.

#### Conviction:

Registered when a person pleads guilty to, or is found guilty of, an offence related to a motor vehicle under any Act of the Ontario Legislature or its accompanying regulations, under the Parliament of Canada or any accompanying order, or under any municipal bylaw.

#### **Driver:**

Unless specified otherwise, any person, whether licensed or not, considered to be in care and control of a vehicle at the time of a collision.

#### Had Been Drinking:

Driving after having consumed an amount of alcohol not considered sufficient to be legally impaired or with a measured blood alcohol count of greater than zero but less than 80 milligrams per 100 millilitres of blood. Blood alcohol concentration between .05 and .08 results in a 12-hour suspension.

#### Hanger-on:

Hangers-on are persons hanging on to a moving motor vehicle's fenders, bumpers, doors or other parts of the vehicle and not located inside, e.g., riding in back of pick-up.

#### Highway:

A common and public highway, street, avenue etc., any part of which is intended for public use or used by the general public for the passage of vehicles and including the area between the property lines.

#### Kilometres Travelled:

Prior to 2000, vehicle fleet mileage was estimated on the basis of taxed gasoline and motor fuel sales. Total litres sold were converted to kilometers travelled based on a conversion factor of 22.0 kilometers per gallon. Starting in 2000, vehicle kilometers travelled are based on estimates provided by Statistics Canada and Transport Canada.

#### Major Injury:

A non-fatal injury severe enough to require that the injured person be admitted to hospital, even if for observation only.

#### Minimal Injury:

A non-fatal injury, including minor abrasions and bruises, which does not necessitate the injured person going to a hospital.

#### **Minor Injury:**

A non-fatal injury requiring medical treatment at a hospital emergency room, but not requiring hospitalization of the involved person.

#### **Motor Vehicle Collision:**

Any incident in which bodily injury or damage to property is sustained as a result of the movement of a motor vehicle, or of its load while a motor vehicle is in motion.

## **Off-Highway Collisions:**

An off-highway collision involving any of the motorized vehicles which are covered by legislation under the *Highway Traffic Act*, the Motorized Snow Vehicles Act, and the Off-Road Vehicles Act.

#### **On-Highway Collisions:**

A motor vehicle collision which occurs on the highway between the property lines.

#### Pedestrian:

Any person not riding in or on a vehicle involved in a motor vehicle collision.

#### **Fatal Collision:**

A motor vehicle collision in which at least one person sustains bodily injuries resulting in death. Prior to January 1, 1982, fatal collision statistics included deaths attributed to injuries sustained in the collision, for up to one year after the collision. Since that date, only deaths occurring within 30 days of the collision have been included.

#### **Personal Injury Collision:**

A motor vehicle collision in which at least one person involved sustains bodily injuries not resulting in death.

#### **Property Damage Collision:**

A motor vehicle collision in which no person sustains bodily injury, but in which there is damage to any public property or damage to private property\* including damage to the motor vehicle or its load.

#### **Reportable Collision:**

Any collision involving injury or damage to private property in excess of a monetary value prescribed by regulation.\*

## Self-Reporting of a Collision:

Under the *Highway Traffic Act* [s.199 (1.1)], when one is in a collision in which there is only property damage (no injury or death, and, among other conditions, no criminal activities such as impaired driving) the involved person(s) may report the collision immediately by proceeding with one's vehicle to a Collision Reporting Centre. Self-Reporting of a collision was introduced on January 1, 1997.

#### **Suspension:**

Withdrawal of a driver's privilege to operate motor vehicle for a prescribed period of time.

\* The minimum reportable level for property damage only collisions rose from \$200 to \$400 on January 1, 1978 and rose again to \$700 on January 1, 1985. As of January 1, 1998, the minimum reportable level for property damage only collision is \$1,000.

## 8B. ACKNOWLEDGEMENTS

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# Information Planning & Court Statistics Program Development Branch Ministry of the Attorney General

## **Knowledge Management Unit** Information Planning and Evaluation Branch Ministry of Health and Long-Term Care

## Ministry of Municipal Affairs & Housing

## **Ministry of Education**

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