

Vehicle Factors

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Vehicle Factors

There were 44,783 vehicles involved in the 28,886 collisions during 2019. This is an average of 1.55 vehicles per collision. This section provides details on the different types of vehicles involved in collisions.

- Passenger cars accounted for 42% of vehicles in all collisions and 18% of the vehicles in fatal collisions.
- Pickup trucks accounted for 23% of vehicles in all collisions and 31% of vehicles in fatal collisions.
- Vans and SUVs accounted for 27% of vehicles in all collisions and 22% of the vehicles in fatal collisions.
- Semi units represented 2% of vehicles involved in all collisions and 12% of vehicles in fatal collisions.
- There were 142 crashes involving a motorcycle/moped/power cycle in 2019. These incidents resulted in 95 injuries and five deaths.

Tables 6.6 to 6.8 show historical data on truck and motorcycle collisions. Similar breakdowns for other vehicle types are available upon request.

Number of Vehicles in Collisions by Vehicle Type and Severity

Table 6.1

| Vehicle Type | Property Damage | Personal Injury | Fatal | Total | % |
|---|-----------------|-----------------|------------|---------------|------------|
| Automobile (Passenger Car) | 16,641 | 2,067 | 19 | 18,727 | 41.8 |
| Pickup Trucks | 9,106 | 1,044 | 32 | 10,182 | 22.7 |
| Panel Van/Mini Van/Sport Utility Vehicles (SUV) | 10,166 | 1,808 | 23 | 11,997 | 26.8 |
| Not Stated | 1,897 | 57 | 1 | 1,955 | 4.4 |
| Semi-Trailer Power Unit | 790 | 147 | 12 | 949 | 2.1 |
| Trucks > 4,500 kg | 171 | 29 | 5 | 205 | 0.5 |
| Motorcycle | 52 | 82 | 3 | 137 | 0.3 |
| Bicycle* | 39 | 114 | 0 | 153 | 0.3 |
| Transit Bus (Urban) | 107 | 10 | 0 | 117 | 0.3 |
| School Bus - Standard Large Type | 37 | 7 | 1 | 45 | 0.1 |
| Construction/Maintenance Equipment | 23 | 7 | 0 | 30 | 0.1 |
| Other Vehicle | 38 | 1 | 1 | 40 | 0.1 |
| Ambulance/Police/Fire | 42 | 18 | 0 | 60 | 0.1 |
| Off Highway Vehicle (3 or 4 Wheel ATVs)* | 3 | 21 | 1 | 25 | 0.1 |
| Snowmobile* | 3 | 10 | 0 | 13 | 0.0 |
| Motorhome | 23 | 2 | 0 | 25 | 0.1 |
| Unregistered Farm Equipment | 15 | 6 | 2 | 23 | 0.1 |
| Other Bus - Unspecified/Private | 29 | 7 | 1 | 37 | 0.1 |
| Inter-City Bus | 43 | 0 | 0 | 43 | 0.1 |
| Moped/Powered Bicycle | 4 | 6 | 2 | 12 | 0.0 |
| School Bus - Van Type | 7 | 1 | 0 | 8 | 0.0 |
| Total | 39,236 | 5,444 | 103 | 44,783 | 100 |

Number of Vehicles in Collisions by Vehicle Type and Road System

Table 6.2

| Vehicle Type | Urban Streets | Provincial Highways | Rural Roads | Other Roads | Total | % |
|---|---------------|---------------------|--------------|-------------|---------------|------------|
| Automobile (Passenger Car) | 15,633 | 2,344 | 587 | 163 | 18,727 | 41.8 |
| Pickup Trucks | 5,355 | 3,004 | 1,542 | 281 | 10,182 | 22.7 |
| Panel Van/Mini Van/Sport Utility Vehicles (SUV) | 7,634 | 3,165 | 941 | 257 | 11,997 | 26.8 |
| Not Stated | 1,822 | 94 | 15 | 24 | 1,955 | 4.4 |
| Semi-Trailer Power Unit | 262 | 537 | 133 | 17 | 949 | 2.1 |
| Trucks > 4,500 kg | 124 | 56 | 20 | 5 | 205 | 0.5 |
| Motorcycle | 68 | 53 | 15 | 1 | 137 | 0.3 |
| Bicycle* | 153 | 0 | 0 | 0 | 153 | 0.3 |
| Transit Bus (Urban) | 111 | 4 | 1 | 1 | 117 | 0.3 |
| School Bus - Standard Large Type | 35 | 6 | 1 | 3 | 45 | 0.1 |
| Construction/Maintenance Equipment | 12 | 9 | 7 | 2 | 30 | 0.1 |
| Other Vehicle | 28 | 6 | 3 | 3 | 40 | 0.1 |
| Ambulance/Police/Fire | 41 | 10 | 1 | 8 | 60 | 0.1 |
| Off Highway Vehicle (3 or 4 Wheel ATVs)* | 4 | 6 | 5 | 10 | 25 | 0.1 |
| Snowmobile* | 1 | 3 | 5 | 4 | 13 | 0.0 |
| Motorhome | 12 | 11 | 1 | 1 | 25 | 0.1 |
| Unregistered Farm Equipment | 4 | 11 | 8 | 0 | 23 | 0.1 |
| Other Bus - Unspecified/Private | 29 | 6 | 1 | 1 | 37 | 0.1 |
| Inter-City Bus | 42 | 1 | 0 | 0 | 43 | 0.1 |
| School Bus - Van Type | 4 | 2 | 0 | 2 | 8 | 0.0 |
| Moped/Powered Bicycle | 10 | 1 | 1 | 0 | 12 | 0.0 |
| Total | 31,384 | 9,329 | 3,287 | 783 | 44,783 | 100 |

* TAIS records only traffic collisions on public roads. Therefore, many collisions involving snowmobiles and off-highway vehicles are not included in this number. Bicycle collisions are recorded only if there was contact with a motor vehicle on the roadway.

The standard passenger car, pickup truck, van and SUV are involved in 88% of all collisions. Other special categories, such as all-terrain vehicles, large trucks and school buses, are of special interest to various groups and users.

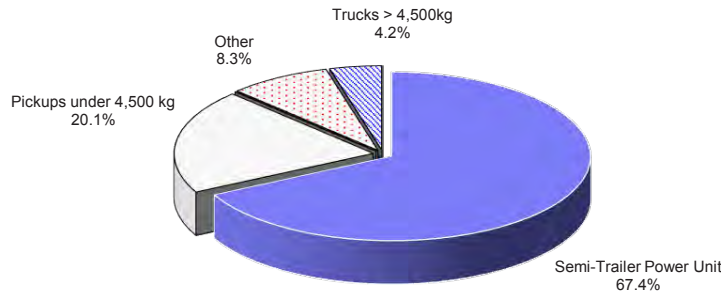
Number of Vehicles in Collisions Involving Trailers by Vehicle Type and Type of Towed Trailer

Table 6.3

| Vehicle Type | No Trailer | Recreation | Utility | Farm | Maint/Const | Towed Vehicle | Single Semi | A * Train | C * Train | B * Train | Over Sized | Other | Not Stated | Trailer | | |
|----------------------------|---------------|------------|-----------|-----------|-------------|---------------|-------------|-----------|-----------|-----------|------------|-----------|------------|------------|------------|-----|
| | | | | | | | | | | | | | | Total | % | |
| Semi-Trailer Power Unit | 421 | 0 | 0 | 1 | 5 | 1 | 111 | 7 | 2 | 8 | 1 | 16 | 376 | 528 | 67.4 | |
| Pickup Trucks | 10,025 | 13 | 26 | 7 | 9 | 4 | 17 | 0 | 0 | 0 | 0 | 10 | 71 | 157 | 20.1 | |
| Trucks > 4,500 kg | 172 | 0 | 3 | 0 | 1 | 5 | 9 | 1 | 0 | 1 | 1 | 0 | 12 | 33 | 4.2 | |
| Other Vehicle | 421 | 2 | 5 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 19 | 2.4 |
| Not Stated | 1,943 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 12 | 1.5 |
| Automobile (Passenger Car) | 18,712 | 2 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 15 | 1.9 |
| Panel Van/Mini Van/SUV | 11,990 | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 0.9 | |
| Farm Equipment | 17 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0.8 | |
| Bus - All Types | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0.5 | |
| Const./Maintenance Equip. | 29 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | |
| Motorhome | 24 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | |
| Total | 44,000 | 20 | 42 | 12 | 17 | 13 | 146 | 8 | 2 | 9 | 2 | 27 | 485 | 783 | 100 | |

* An "A" train is a single hitch drawbar. A "B" train is connected by a fifth wheel. A "C" train is a double hitch drawbar.

Percent of Vehicles in Collisions Involving Trailers



Number of Vehicles in Collisions by Pre-Collision Vehicle Action and Severity

Table 6.4

| Pre-Collision Action | Severity | | | Total | % |
|---|-----------------|-----------------|------------|---------------|------------|
| | Property Damage | Personal Injury | Fatal | | |
| Going Straight Ahead | 21,706 | 3,202 | 88 | 24,996 | 55.8 |
| Parked Legally | 3,178 | 122 | 3 | 3,303 | 7.4 |
| Turning Left | 2,701 | 541 | 3 | 3,245 | 7.2 |
| Stopped in Traffic (Incl. Mechanical Breakdown) | 1,983 | 559 | 2 | 2,544 | 5.7 |
| Not Stated | 2,159 | 139 | 2 | 2,300 | 5.1 |
| Slowing or Stopping on the Roadway (Decelerating) | 2,170 | 284 | 0 | 2,454 | 5.5 |
| Turning Right | 1,470 | 160 | 3 | 1,633 | 3.6 |
| Reversing | 1,040 | 34 | 0 | 1,074 | 2.4 |
| Changing Lanes | 807 | 78 | 1 | 886 | 2.0 |
| Starting in Traffic (Accelerating) | 348 | 124 | 1 | 473 | 1.1 |
| Merging | 458 | 94 | 0 | 552 | 1.2 |
| Overtaking, Passing on Left or Right | 165 | 40 | 0 | 205 | 0.5 |
| Making U-Turn | 151 | 26 | 0 | 177 | 0.4 |
| Other | 481 | 19 | 0 | 500 | 1.1 |
| Starting from Parked Position, Leaving Roadside | 171 | 14 | 0 | 185 | 0.4 |
| Parked Illegally | 70 | 4 | 0 | 74 | 0.2 |
| Entering Parked Position, Stopping On Roadside | 178 | 4 | 0 | 182 | 0.4 |
| Total | 39,236 | 5,444 | 103 | 44,783 | 100 |

Collisions Involving Dangerous Goods

Table 6.5

| Dangerous Goods Class | Spilled | | Total | % Spilled | % of Total |
|---|-------------|-------------|--------------|-------------|------------|
| | Yes | No | | | |
| Class 1 Explosives | 0 | 3 | 3 | 0.0 | 5.5 |
| Class 2 Compressed Gases | 1 | 4 | 5 | 0.0 | 9.1 |
| Class 3 Flammable Liquids | 5 | 7 | 12 | 41.7 | 21.8 |
| Class 4 Flammable Solids | 0 | 0 | 0 | 0.0 | 0.0 |
| Class 5 Oxidizers & Organic Substances | 1 | 29 | 30 | 0.0 | 54.5 |
| Class 6 Poisonous & Infectious Substances | 0 | 0 | 0 | 0.0 | 0.0 |
| Class 7 Radioactive Materials | 0 | 0 | 0 | 0.0 | 0.0 |
| Class 8 Corrosive Substances | 0 | 0 | 0 | 0.0 | 0.0 |
| Class 9 Miscellaneous Substances | 3 | 2 | 5 | 60 | 9.1 |
| Total | 10 | 45 | 55 | 18.2 | 100 |
| % of Total | 18.2 | 81.8 | 100.0 | | |

Truck Collisions by Year

Table 6.6

| Year | Total Number of Trucks Involved | Number of Truck Collisions | | | | Number Injured | Number Killed |
|------|---------------------------------|----------------------------|-----------------|-------|-------|----------------|---------------|
| | | Property Damage | Personal Injury | Fatal | Total | | |
| 2008 | 1,600 | 1,249 | 268 | 18 | 1,535 | 371 | 24 |
| 2009 | 1,599 | 1,251 | 263 | 23 | 1,537 | 369 | 26 |
| 2010 | 1,583 | 1,211 | 263 | 30 | 1,504 | 383 | 33 |
| 2011 | 1,753 | 1,323 | 306 | 32 | 1,661 | 390 | 33 |
| 2012 | 1,703 | 1,244 | 324 | 34 | 1,602 | 442 | 38 |
| 2013 | 2,076 | 1,615 | 305 | 23 | 1,943 | 443 | 30 |
| 2014 | 1,679 | 1,274 | 278 | 19 | 1,571 | 373 | 21 |
| 2015 | 1,597 | 1,266 | 236 | 29 | 1,531 | 318 | 34 |
| 2016 | 1,762 | 1,449 | 210 | 22 | 1,681 | 299 | 26 |
| 2017 | 1,414 | 1,153 | 189 | 23 | 1,365 | 243 | 28 |
| 2018 | 1,401 | 1,095 | 228 | 13 | 1,336 | 321 | 29 |
| 2019 | 1,154 | 938 | 164 | 17 | 1,119 | 214 | 18 |

Trucks Involved In Collisions by Truck Type

Table 6.7

| Year | Single Unit (Straight) Trucks | | | Articulated/Tractor-Trailer Trucks | | |
|------|-------------------------------|-----------------|-------|------------------------------------|-----------------|-------|
| | Property Damage | Personal Injury | Fatal | Property Damage Only | Personal Injury | Fatal |
| 2008 | 542 | 122 | 4 | 764 | 153 | 15 |
| 2009 | 546 | 103 | 3 | 752 | 175 | 20 |
| 2010 | 391 | 77 | 6 | 884 | 199 | 26 |
| 2011 | 357 | 84 | 9 | 1,037 | 241 | 25 |
| 2012 | 287 | 60 | 5 | 1,029 | 292 | 30 |
| 2013 | 423 | 62 | 3 | 1,292 | 275 | 21 |
| 2014 | 367 | 61 | 1 | 990 | 241 | 19 |
| 2015 | 302 | 39 | 0 | 1,015 | 211 | 30 |
| 2016 | 645 | 35 | 0 | 869 | 190 | 23 |
| 2017 | 304 | 29 | 5 | 887 | 170 | 19 |
| 2018 | 234 | 41 | 0 | 918 | 195 | 13 |
| 2019 | 171 | 29 | 5 | 790 | 147 | 12 |

Motorcycle/Moped/Power Bicycle Collisions by Year

Table 6.8

| Year | Property Damage | Personal Injury | Fatal | Total | Persons Injured | Persons Killed |
|------|-----------------|-----------------|-------|-------|-----------------|----------------|
| 2003 | 60 | 169 | 2 | 231 | 183 | 4 |
| 2004 | 66 | 156 | 2 | 224 | 172 | 2 |
| 2005 | 91 | 145 | 4 | 240 | 157 | 4 |
| 2006 | 97 | 189 | 5 | 291 | 204 | 5 |
| 2007 | 106 | 192 | 8 | 306 | 208 | 9 |
| 2008 | 133 | 205 | 5 | 343 | 233 | 5 |
| 2009 | 119 | 191 | 2 | 312 | 204 | 2 |
| 2010 | 119 | 185 | 5 | 309 | 202 | 5 |
| 2011 | 100 | 195 | 4 | 299 | 214 | 4 |
| 2012 | 90 | 202 | 6 | 298 | 220 | 6 |
| 2013 | 59 | 173 | 6 | 238 | 190 | 6 |
| 2014 | 57 | 133 | 3 | 193 | 140 | 3 |
| 2015 | 69 | 122 | 4 | 195 | 136 | 4 |
| 2016 | 42 | 121 | 6 | 169 | 137 | 6 |
| 2017 | 52 | 82 | 3 | 137 | 85 | 3 |
| 2018 | 28 | 79 | 4 | 111 | 90 | 4 |
| 2019 | 53 | 84 | 5 | 142 | 95 | 5 |

Vehicle Registrations (Insured Years*)

Table 6.9

| Type of Vehicle | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|-----------|-----------|-----------|-----------|-----------|
| Passenger Cars - Excludes Special Use | 276,144 | 267,681 | 258,216 | 248,548 | 240,918 |
| Sport Utility Vehicles | 195,595 | 211,180 | 225,594 | 239,680 | 253,172 |
| Light Private Trucks - <5,001 kg Class PV | 209,075 | 209,574 | 209,267 | 208,942 | 208,280 |
| Vans (Light & Heavy, Commercial & Private) | 63,172 | 60,885 | 58,724 | 56,565 | 54,888 |
| Commercial & Farm Straight Trucks | 128,737 | 128,717 | 127,927 | 126,399 | 124,880 |
| Truck Tractors (Semi Power Units) | 26,803 | 26,872 | 27,345 | 27,768 | 28,097 |
| School Buses - Bus Use Only Class PS | 3,190 | 3,161 | 3,090 | 2,946 | 2,897 |
| Transit Buses - Class PC | 379 | 366 | 347 | 368 | 350 |
| Inter-City, Tour & Private Buses | 661 | 659 | 616 | 531 | 535 |
| Motorcycles | 9,828 | 9,168 | 8,610 | 7,801 | 7,483 |
| Pedal Cycles | 6 | 9 | 10 | 7 | 9 |
| Motorhomes | 4,995 | 4,906 | 4,788 | 4,560 | 4,389 |
| Ambulance | 303 | 303 | 306 | 295 | 291 |
| Hearse | 143 | 138 | 131 | 131 | 124 |
| Police - All Vehicles with Police Use | 575 | 575 | 593 | 589 | 579 |
| Taxis | 789 | 781 | 765 | 775 | 736 |
| Trailers (Commercial, Private & Farm) | 215,456 | 217,344 | 218,976 | 219,674 | 220,604 |
| Snowmobiles | 6,058 | 4,577 | 4,617 | 4,297 | 4,446 |
| Other - No Assigned Vehicle Type | 4,040 | 4,027 | 3,998 | 4,019 | 4,009 |
| Total Insured Years (including Trailers) | 1,145,949 | 1,150,922 | 1,153,918 | 1,153,895 | 1,156,687 |
| Total Motor Vehicles | 912,879 | 924,435 | 930,326 | 929,924 | 931,637 |

* Insured years is the portion of the year the vehicle is registered. This method of counting registrations was implemented due to short-term registrations.

Example: When three separate motorcycles are registered for six months each out of a complete year, they are counted as 18 months or 1.5 insured years.