

1998 Collision Statistics - City Fleet Vehicles

(City Council on November 23, 24 and 25, 1999, adopted this Clause, without amendment.)

The Administration Committee recommends the adoption of the following report (October 27, 1999) from the Acting Commissioner of Corporate Services:

Purpose:

To provide information on 1998 collision statistics and related costs, for City of Toronto fleet vehicles and the actions being taken to reduce the impact

Financial Implications and Impact Statement:

N/A.

Recommendations:

It is recommended that Fleet Management Services, in consultation with Departments, report annually to the Administration Committee on the previous year's collision statistics, the cost of repairs, actions taken to reduce the number of collisions and recommend further actions that may be required.

Background:

This report provides information on and an analysis of the City's 1998 collision records and fleet safety program.

The Highway Traffic Act (HTA) of Ontario sets out the rules and standards for vehicles when using the public roadways. The provisions of the HTA strictly regulate how the City must administer its fleet, including the certification of its drivers.

The City of Toronto's fleet is governed by the HTA, under the Commercial Vehicle Operators Registration (CVOR) system. The CVOR provides the Ministry of Transportation of Ontario (MTO) with a mechanism to track a Commercial Vehicle Operator's record and suspend or cancel an operator's certificate for poor performance. The CVOR program applies to all commercial vehicles of the City of Toronto, with the exception of Police, Fire and Ambulance vehicles when responding to emergencies.

A commercial motor vehicle recognized for CVOR purposes is any licensed vehicle over 4,500 kg gross vehicle weight (GVW) or vehicles with seating capacity of 10 or more people.

The City must meet the requirements under the CVOR for training and licensing of its drivers and the operating condition of its vehicles. All infractions and collisions involving City commercial motor vehicles are recorded on the City's CVOR record. The MTO monitors the City's performance on a regular basis and the City is subject to random inspections of its garages, records and vehicles. Where the operator's record would indicate a concern, the MTO may impose sanctions that could include:

A significant fine;

A reduction in fleet size;

Impounding a City vehicle;

Suspension of the CVOR certificate (a very serious consequence for the City).

Without our fleet or our CVOR, the City would not be able to deliver essential services to the public. City drivers, therefore, have a significant responsibility in maintaining the City's CVOR.

Comments:

For the purposes of managing its fleet, the City's training and licensing program covers all drivers/operators of City vehicles and equipment. Fleet Safety staff regularly monitor City Permits and Provincial Driver's Licenses to ensure that all driver/operators are properly licensed.

At the core of the City's Fleet Safety Program is the principle of defensive driving. A defensive driver is one who operates in such a manner as to avoid collisions and incidents regardless of the conditions or the actions of others. In order to support this program direction, each new driver will complete the Defensive Driving Program, if they have not completed an approved program within the immediate past three years.

Most fleet safety programs now classify collisions as preventable or non-preventable. A preventable collision is any vehicle or equipment collision that could have been avoided if the City driver had operated the vehicle in such a manner as to avoid the collision, in spite of the actions of others and the conditions under which he/she was operating. Fleet Safety staff undertake the careful review and determination of the preventability of each collision that may occur and where necessary investigate further. In the event of any collision or incident, driver/operators are required to complete an Accident/Incident form. Depending on the severity of the situation, Fleet Safety staff may make recommendations such as suspending or revoking a City Driver/Operator's permit, in cases where the seriousness of the collision may warrant, or make recommendations for additional training, such as Defensive Driving, Professional Driver Improvement, Back-up training, etc., as may be necessary.

Attached in Appendix "C" are the "Preventable Accident Guidelines as per the Transportation Safety Association Ontario and the Insurance Bureau of Ontario".

Collisions/Incidents can include:

serious collisions involving significant vehicle or property damage and/or personal injury including death;

collisions involving vehicle or property damage;

minor collisions including scratches, dents, etc.;

very minor collisions in which no damage is evident;
damage found by Driver/Operators during daily pre-trip inspections.

Collisions/Incidents can occur on any and all fleet units, which include licensed and unlicensed units. They can occur to vehicles such as cars, trucks, garbage packers, street sweepers, snow melters, snow plow attachments, grass cutting equipment, ice surfacing equipment, tractors, backhoes, loaders and miscellaneous vehicle attachments.

During 1998, a total of 854 collisions occurred based on a fleet size of 4,889 units (See Appendix "B" for a breakdown of 1998 City fleet vehicles and equipment). These City fleet units are work vehicles and equipment which are used much differently than a family sedan. In some cases, vehicles are used up to 24 hours per day, seven days per week. Appendix "A" provides the relevant vehicle and collision statistics for 1998.

There are 8,040 driver/operators with permits to operate the City's fleet vehicles and equipment. Collision records indicate that 332 driver/operators had preventable collisions, therefore 7,708, or 96 percent, were free of preventable collisions in 1998.

Of the 854 collisions recorded in 1998, 460 (54 percent) did not incur any repair costs. It is important to monitor minor and no damage collisions since they could indicate a need for further training or identify other potentially serious situations. Fleet Safety staff use that information to design their program schedule and monitor driver activity (including driver inattentiveness) in an attempt to mitigate the City's liability costs.

The cost of repairs resulting from the 394 collisions, in which damage occurred, was \$440,778, of the 394 collisions, 380 incidents, or 97 percent, incurred damage of less than \$5,000. The average was \$866. The remaining 14 collisions with damage exceeding \$5,000, resulted in repairs totalling \$111,802, or an average of \$7,986 per collision. Cost of repairs are impacted by a number of factors including driving conditions, traffic, types of vehicles in the fleet, vehicle equipment or options and types of collisions. In one case, a new City van was hit head on resulting in the inflation of the air bags for the driver and passenger. The cost of repairs related to the air bags alone was more than \$2,500.

With the implementation of the new M/4 Fleet Management Information System and the full chargeback of repair costs effective January 1, 2000, Departments will be provided with information that will put them in a better position to manage their costs and take further actions to reduce collisions and costs.

Conclusions:

The goal of the City's Fleet Safety Program is to reduce vehicle and equipment collisions to ensure the safety of City staff and the public, reduce the City's liability exposure and protect its CVOR. Monitoring collision reports and driver activity is an important part of attempting to reduce the City's liability.

As part of the monitoring process, Fleet Management Services, in consultation with Departments, should report annually to the Administration Committee on the previous year's

collision statistics, the cost of repairs, actions taken to reduce the number of collisions and recommend further actions that may be required.

The statistics noted in this report suggest that employees must continue to be diligent in their collision reduction activities. At this time however, statistics do not suggest that a fundamental problem exists within the City driver/operator ranks that would require that additional measures be taken.

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List of Attachments:

- Appendix "A" - Vehicle and Collision Statistics for 1998
- Appendix "B" - City Fleet Vehicles and Equipment
- Appendix "C" - Preventable Accident Guidelines as per the Transportation Safety Association Ontario and the Insurance Bureau of Ontario

Appendix "A"

Vehicle and Collision Statistics for 1998

Number of City Vehicle and Equipment Operators Permit Holders	8,040
• Number of Driver/Operators with Preventable Collisions	332
• Number of Driver/Operators Preventable Collision Free	7,708
Total Number of Fleet Vehicle and Equipment Units	4,889
• Number of Licensed Units	3,088
• Number of Unlicensed Units	1,801
Total Number of Collisions	854
• Number of Preventable Collisions	513
• Number of Non-Preventable Collisions	341
• Number of Collisions With No Repair Costs	460

• Number of Collisions With Repair Costs	394
• Number of Collisions With Damage Exceeding \$5,000	14
• Number of Collisions With Damage Below \$5,000	380
Total Cost of Collision Repairs	\$440,778
• Average Cost of Repairs Based on Total Collisions	\$516
• Average Cost of Repairs Based on Collisions With Repair Costs	\$1,119
• Cost of Repairs for Preventable Collisions	\$273,723
• Cost of Repairs for Non-Preventable Collisions	\$167,055
• Total Cost of Collisions With Damage Exceeding \$5,000	\$111,802
• Average Cost of Repairs Based on Collisions With Damage Exceeding \$5,000	\$7,986
• Total Cost of Collisions With Damage Below \$5,000	\$328,976
• Average Cost of Repairs Based on Collisions With Damage Below \$5,000	\$866

Appendix "B"

City Fleet Vehicles and Equipment

Vehicle Type	Number of Units 1998
Automobiles	262
Light Trucks	1387
Heavy Trucks	619
Refuse Packers	311
Aerial Trucks	40
Trailers	374
Attachments and miscellaneous units valued at more than \$5,000	95
Grounds Maintenance Equipment	712
Earth Moving Equipment	201

Lifting Equipment	29
Tractors	145
Sweepers (Full Size)	57
Sweepers (Compact)	23
Plows/Melters	142
Ice Surfacing Equipment	107
Sewer Dredgers, Pressure Washers, Thaw Machines, Cement Mixers, etc.	385
Total	4889

Appendix “C”

Preventable Accident Guidelines as Per the Transportation Safety Association Ontario and the Insurance Bureau of Ontario

The heart of the Safe Driving Program is the careful determination of the preventability of each accident in which a driver is involved.

Despite the fact that each accident must be judged individually, experience in Fleet Safety suggests that certain types are generally non-preventable on the part of the professional driver and that certain others, in the absence of extenuating circumstances and conditions, are preventable. The types of accidents listed below cannot cover every accident that may occur, but are intended to provide guidance in determining the preventability of an accident.

Non-Preventable Accidents

Struck in rear by other vehicle:

driver was proceeding in his/her own lane of traffic at a safe and lawful speed;

driver was stopped in traffic due to existing conditions or was stopped in compliance with traffic sign or signal, or the directions of a police officer, or other person legitimately controlling traffic; or

driver was in a proper lane and waiting to make a turn.

Struck while parked:

driver was properly parked in a location where parking was permitted; or

vehicle was protected by emergency warning devices as required by federal, provincial

and municipal regulations, or if a driver was in the process of setting out, or retrieving signals. These provisions shall apply to the use of turn signals as emergency warning lights under provincial regulations.

Preventable Accidents

Accidents at intersections:

driver failed to control his/her speed so that he/she could stop within available sight distance;

driver failed to check cross traffic and wait for it to clear before entering the intersection;

driver pulled out from a side street in the face of oncoming traffic;

driver collided with a person, vehicle or object while making a right or left turn; or

driver collided with vehicle making a turn in front of him/her.

Striking a vehicle in the rear:

driver failed to maintain safe following distance and have his/her vehicle under control;

driver failed to keep alert to traffic conditions and note slowdowns;

driver failed to ascertain whether the vehicle ahead was moving slowly, stopped or slowing down for any reason;

driver misjudged rate of overtaking;

driver came too close before pulling out to pass;

driver failed to wait for the car ahead to move into the clear before starting up; or driver failed to leave sufficient room for passing a vehicle to get back into line.

Sideswipe and head on collision:

driver was not entirely in own lane of traffic; or

driver did not pull to the right and slow down and stop for vehicle encroaching on his/her own lane of travel when such action could have been taken without additional danger.

Struck in rear by other vehicle:

driver was passing slower traffic near an intersection and had to make a sudden stop;

driver made a sudden stop to park, load or unload;

vehicle was improperly parked; or

driver rolled back into a vehicle while starting on a grade.

Squeeze plays and shutouts:

driver failed to yield right of way when necessary to avoid an accident.

Backing accidents:

driver reversed when it could have been avoided by planning a better route;

driver backed into a traffic stream when such backing could have been avoided;

driver failed to get out of cab and check proposed path of travel;

driver depended solely on mirrors when it was practical to look back;

driver failed to get out of the cab periodically and recheck conditions when backing a long distance;

driver failed to sound horn while backing;

driver failed to check behind vehicle parked at a curb before attempting to leave parking space;

driver relied solely on a guide to help his/her backing up; or

driver backed from blind side when he/she could have made a slight angle approach.

Accident involving rail operated vehicles:

driver attempted to cross tracks directly ahead of train or streetcar;

driver ran into the side of train or streetcar; or

driver stopped or parked on or too close to train tracks.

Accidents while passing:

driver passed where view of the road ahead was obstructed by a hill, curves, vegetation, traffic, adverse weather conditions, etc.;

driver attempted to pass in the face of closely approaching traffic;

driver failed to warn the driver of a vehicle being passed;

driver failed to signal a change of lanes;

driver pulled out in front of other traffic overtaking from rear; or

driver cut in short returning to right lane.

Accidents while being passed:

driver failed to stay in own lane and hold or reduce speed to permit safe passing.

Accidents while entering traffic stream:

driver failed to signal when pulling out from the curb;

driver failed to check traffic before pulling out from the curb;

driver failed to look back to check traffic if in a position where mirrors did not show traffic condition;

driver attempted to pull out in a manner which forced other vehicle(s) to change speed or direction;

driver failed to make a full stop before entering from a side street, alley or driveway; or driver failed to yield right of way to approaching traffic.

Pedestrian accident:

driver did not reduce speed in an area of heavy pedestrian traffic;

driver was not prepared to stop; or

driver failed to yield right-of-way to a pedestrian.

Mechanical defects accidents:

defect was of a type that a driver should have detected it when performing the pre-trip or in-trip inspections of the vehicle; or

defect was of a type that a driver should have detected it during the normal operation of the vehicle.

All types of accidents:

driver was not operating at a speed consistent with the existing conditions of the road, weather, and traffic;

driver failed to control speed so that he/she could stop within an assured clear distance;

driver misjudged available clearance;

driver failed to yield right of way to avoid the accident;

driver failed to accurately observe existing conditions; or

driver was in violation of City operating rules or special instructions, the regulations of any federal, provincial, or municipal regulatory agency, or any applicable traffic laws.

This guide, while designed to assist in determining the preventability of accidents, cannot list every type of accident that may be encountered, nor can it list all of the factors that may be involved in a given accident. It does however cover the most common aspects of the principal types of accidents and, as such, can serve as a guide for consideration of each accident, and as a point of departure for assessing preventability.

While evidence of a violation of the law is a clear-cut indication of the preventability of an accident, the absence of any violation does not make the accident non-preventable. There are many steps that the professional driver can, and must, take to avoid an accident which is above and beyond the requirements of the law. It is the extent to which the driver could and did take such steps which must be determined and evaluated on the basis of the facts of the accident.