

Staff Report

Report To: Operations Committee
Report From: Lara Widdifield, Director of Public Works
Meeting Date: March 20, 2025
Report Code: OP-25-011
Subject: 2024 Collision Statistics

Recommendations:

THAT in consideration of Staff Report OP-25-011 respecting 2024 Collision Statistics, the Operations Committee recommends that City Council receive the report for information purposes.

Highlights:

- Overall, 2024 had more collision incidents than 2023 but still fewer than 2022.
- It was determined that a significant portion of the total incidents are likely irrelevant to the topic of road safety as they involve private property and/or unknown damage to unattended vehicles. In the future, a much deeper analysis would be required to judge the “safety” of City streets more fairly.
- In the 2024 collision statistics, the behaviour of Pedestrians and Cyclists was not provided. Therefore, it is impossible to derive conclusions on the cause of these cases.
- Most collisions are reported in clear, dry conditions, with few extenuating conditions. This indicates that driver distraction is likely a significant contributing factor but cannot be verified, especially for self-reported incidents.
- The highest collision intersections tend to lie along the highest traffic count routes, such as 10th Street, 9th Avenue and 16th Street.

Strategic Plan Alignment:

[Strategic Plan](#) Priority: Safe City.

Before changes can be made to improve the safety of the City's road and active transportation network, it is critical first to understand its current state.

Climate and Environmental Implications:

This supports the City's Climate Mitigation Plan objective to promote a culture of awareness and action through education and continuous improvement.

Striving to improve the safety of the city's transportation networks could eventually increase the use of active forms of transportation.

Previous Report/Authority:

This is the second annual report on this topic.

Background:

The Operations Committee informally requested a report on collision incident statistics compiled annually by the Owen Sound Police Services. This report responds to that request. The analysis is generated from the collision statistics provided by the Owen Sound Police Services.

Analysis:

As this is the second time Staff have analysed the collision statistics, it was decided to delve more deeply into the information to understand better what it means for the City's road network.

The data showed that a large portion (37%) of collisions occur on private property and should, therefore, not be included in discussions about the City's collision or road safety statistics, as they may artificially increase the apparent scale of the issue.

Specifically, 203 collisions occurred in either parking lot or were listed as other (off highway), whereas 341 collisions were recorded as being on a roadway.

While the above equals 544 incidents, **Attachment 1** shows 537 collisions. The Owen Sound Police Services (OSPS) provided the above numbers in response to an email requesting clarification on the split between private property and roadways. The discrepancy of 7 incidents has been assumed inconsequential to the trends discussed herein. For simplicity, from this point on, the analysis shall use the data provided in the presentation slides.

The cover page of the collision report acknowledges that conflicting statements in self-reported statements and parameters that allow multiple inputs will result in slight discrepancies in the reported data.

Upon receipt of detailed, tabular data, in combination with the 203 collisions on non-roadways, 237 incidents were reported as "single motor vehicle, unattended vehicle" which would suggest that this was a case of damage to a parked vehicle and therefore, also arguably tangential to telling the story of road safety. By that logic, a more realistic number of traffic incidents on public roadways within the City of Owen Sound in 2024 would be closer to 300, or about 45% of the gross total.

Using the gross 2024 numbers provided in Attachment 1, Owen Sound Police Services (OSPS) recorded 537 vehicular incidents with 942 involved vehicles, reported through self-reporting and on-scene responses. This represents a 9% increase from 2023's total of 490 incidents. However, 2024's incident total is still lower than the 560 recorded in 2022.

On-scene response statistics

There were no fatalities in 2022, 2023 or 2024.

52 non-fatal injuries were reported in 2024, up 20% from 42 incidents in 2023; however, this is still lower than 2022, which had 60.

74% of incidents (181) in 2024 had only property damage. This appears consistent with 2023's 188, which decreased from 237 in 2022.

Non-reportable incidents tripled from three (3) in 2022 to nine (9) in 2023 and rose again to 11 in 2024. "Other" incidents decreased to 0 after decreasing from two (2) incidents in 2022 to one (1) in 2023.

Collision Trends

This is the second year of analysing this report, and it is now evident that more data points would be required to determine valid trends; the sample sizes are too small, or too much relies on interpreting the definitions or

results. The highest and lowest parameters from 2023 do not correlate with 2024 results; this will be explored in more detail.

In 2023, the months with the highest collision rates were May, January, August, and November, in descending order. In 2024, this ranking was December, November, October, and May. Only May and November are common to both lists but feature in different places.

In 2023, the lowest collision months are February and July, followed by June and December. In 2024, the lowest collision rates were found in August, March, June and February. Again, only two are common in both years and are in different positions.

The weekday collision distribution in 2024 was much flatter. While in 2023, the worst day of the week was Thursday and the bulk of collisions occurred in a pronounced mid-week peak, in 2024, Friday was the worst day, but only slightly so. In 2024, the five weekdays had a differential of only 20 collisions per day from highest to lowest, with more incidents on Wednesday through Friday. Sunday had the lowest number of incidents of the week.

Like 2023, the worst time of day is 14:00 (2:00 pm). However, in 2024, like the weekly distribution, the hourly distribution was much more drawn out compared to 2023. To clarify, the highest collision hours in 2023 were condensed between the hours of 10:00-17:00, whereas in 2024, collisions were distributed primarily throughout the hours of 8:00-17:00. Interestingly, the peak incident hour of 14:00 was very similar between the two studied years; 58 in 2024 and 62 in 2023. It appears to be the “shoulder” hours that vary significantly; for example, 8:00 was 19 in 2023 and 35 in 2024.

2023 and 2024 had identical distributions of environmental conditions; the vast majority occurred in clear and dry conditions, so weather would not be considered a factor. Given the context of the large number of incidents that involved stationary vehicles, this does seem to make sense. Refer to the significant outlier of “single motor vehicle, unattended vehicle” on slide 11, Initial Impact Type.

The lack of information under the Specified Driver Conditions heading is a somewhat troubling parameter in the data. While the overwhelming majority is listed as “normal”, most of the rest of the data is recorded as non-information (“N/A”, “other,” and “unknown”). This is likely a result of damage reported to an unattended vehicle where the guilty party was never found. It could also result from the large ratio of self-reported incidents, as

there is very little control over how much time can pass between the incident and reporting it (i.e., the next day). In this way, the number of intoxication, fatigue or distraction-related incidents may be substantially underrepresented.

Staff noted that self-reported and on-scene records may be unreliable as the locations could be inaccurate. For example, some of the sites are referred to as intersections when they are, in fact, private driveways.

In both 2023 and 2024, the majority recorded the driver's action as "driving properly," so it's unclear how the collisions occurred in the first place. It also further highlights the subjectivity of data like this. It is only as reliable as the interpretation of the person recording it. Then, when analyzing it, it must be interpreted a second time, so one should never take individual numbers as gospel. The overarching trends paint a more reliable picture when outliers can be evened out or disregarded or, when appropriate, singled out as specific and noteworthy one-off situations.

Failure to remain incidents

As alluded to throughout the analysis, incidents of "failure to remain" typically involve property damage only; most occur in commercial parking lots. There were 85 incidents in 2024, down from 99 in 2023. As with the overall results, the single worst hour of the day is 14:00, but Wednesday is the worst day. So many incidents occurred in this category that it skewed the entire data set for the time-of-day parameter. Only when looking at individual intersections does the time of day correspond with traffic volume peaks.

Incidents involving pedestrians

There were 12 incidents involving pedestrians in 2024, up from seven (7) in 2023. The detailed statistics changed slightly from 2023:

In 2024, two (2) incidents were listed as "intersection-related", the same as in 2023. However, four (4) were recorded as "four-way," which would also seem to indicate an intersection. It is further confused by the fact that this designation has been used inconsistently, as two examples were used at a three-way intersection with a private driveway.

In 2024, there were three (3) at parking lots, whereas in 2023, there was only one (1).

The worst months were September through November, but the geographic distribution does not appear to suggest that the collisions are related to school zones.

Six (6) of the 12 were attributed to pedestrian error, such as crossing between parked cars or crossing without right-of-way. In half of the cases, the driver was directly at fault (i.e. speed, passing, right-of-way).

Two (2) pedestrian actions and four (4) driver actions were listed as "other", so it is impossible to tell whose fault the conflict was in those cases. Also, 1/3 of the cases had unknown driver conditions.

Thursday and Friday shared the highest number of incidents. Last year, it was only on Thursday.

Collisions involving cyclists

There were 10 total incidents in 2024, up two from 2023. Of these, most appear to be at intersections. However, it is unclear what the difference is between the two specific intersection types ("four-way" and "T intersection") and the generic "intersection-related" as they appear to be used interchangeably.

Four (4) were attributed to driver fault, and one was listed as "other". Like with the pedestrian data, this year, no condition or action information was provided for the other party in the conflict (i.e. the cyclist or pedestrian), so it is impossible to conclude whose actions caused the incident.

The two timeslots that tied for the most incidents (only two each) were 11:00 and 15:00. In 2023, the majority occurred at 16:00.

Collisions involving driver impairment

This section was interesting as the data included a collision southwest of Alvanley on Bruce Road 10 near Concession Road 12 East that would be outside the OSPS jurisdiction. In the detailed data, this was recorded as an on-site response, so it is unclear if it was a response out of being the closest to the scene or if it was an error. Either way, this should not be included in the statistics as it is not within the jurisdictional boundary of Owen Sound.

Disregarding the above incident, there were seven (7) incidents in 2024, down one from 2023. Three (3) could be considered involved with private property.

No time of day appears to be incident-free; the incidents coincide with traffic patterns. Essentially, if there are cars on the road, there could be an impaired driver. Friday stands out as the worst day for impaired driving, however.

It is assumed that “had been drinking” was used in cases that were self-reported, when a breath assessment wasn’t administered, or when one was administered but not beyond the threshold of 0.08% blood alcohol. Regardless of the exact interpretation, the overwhelming cause points to impairment by alcohol.

The age demographic is quite interesting as well. A common stereotype is that impaired driving is a young people’s crime; however, the median age of the 2024 data is 39. Most of the incidents involved only property damage.

In 2023, the most common driver action was the driver “lost control;” in 2024, it was due to a wide variety of driving errors.

Top intersections

The top three worst intersections by the number of incidents remained the same compared to 2023, just in a slightly different order due to differences in the number of involved persons. It should be noted that the number of injuries at these intersections has gone down.

- 10th St East at 9th Ave East – 15 incidents and zero injuries (compared to 13 incidents and four injuries in 2023).
- 10th St East at 2nd Avenue East – 15 incidents and one injury (compared to 11 incidents and two injuries in 2023).
- 10th St. East at 3rd Ave East – 8 incidents with one injury. Last year, this was listed as the worst intersection, with 13 incidents and no injuries.

By percentage of casualties, the worst intersections changed entirely. In 2023, the data indicated the following:

- 4th Ave East at 8th St East – three (3) incidents, six (6) persons with three (3) injured.
- 16th St East at 20th Ave East – four (4) incidents, six (6) persons with two (2) injured.
- 19th St West at 4th Ave West – three (3) incidents, seven (7) persons with two (2) injured.

In 2024, the top intersections for injuries were:

- 10th St West at 6th Ave West – four (4) incidents, seven (7) persons with four (4) injured.
- 16th Ave East at 20th St East – three (3) incidents, six (6) persons with three (3) injured.
- 14th St West at 2nd Ave West (County intersection) – four (4) incidents, eight (8) persons with three (3) injured.

The final two slides of Attachment 1 provide more detailed insight into the top two incident-prone intersections. Please note that this does not denote the severity of incidents (i.e. number of injuries) but remarks only on the number of incidents reported at these locations.

10th Street East at 9th Avenue East had a high number of collisions throughout 2024. While in 2023, the collisions mainly occurred on Sundays, Tuesdays, and Wednesdays, typically around 17:00, in 2024, the worst time was 17:00 on Friday. Inattention appears to be the leading cause, as 2/3 of the collisions were rear-ending impacts.

The document also shows details for 10th Street East at 2nd Avenue East; this intersection was not among last year's top two. The particulars for this intersection are very similar to the intersection above, which makes sense as they are on the same corridor. The collisions fell mostly on Fridays at 15:00. Inattention can also be pointed to as the leading cause; most collisions were rear-ending impacts or sideswipes (typically an inappropriate lane change).

As in 2023, the peak incidents correlate with traffic volume peaks. When there are more vehicles on the road, the likelihood of collisions increases statistically, in addition to the intangible factors of additional complexity caused by the “busyness” of the roads and intersections.

Financial Implications:

There are no financial impacts directly arising from this report.

Communication Strategy:

No public communication strategy is proposed at this time. If a public awareness campaign were to be undertaken regarding road crossing safety, bicycle safety, defensive driving, etc., it would be within the purview of the Owen Sound Police Services rather than the Public Works and Engineering Department.

Consultation:

As this report is for information purposes, no consultation is proposed at this time.

Attachments:

Owen Sound Police Service Collision Statistics (January 1st–December 31st)

Recommended by:

Lara Widdifield, Director of Public Works and Engineering

Submission approved by:

Tim Simmonds, City Manager

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