

# PORTLAND WEST BALANCED MOBILITY IMPROVEMENTS STUDY

## *Safety Analysis*

August 2026



**MaineDOT**



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prepared for:



**MaineDOT**

prepared by:





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# 1. INTRODUCTION

This safety analysis report is part of the Portland West Balanced Mobility Improvements Study, a comprehensive and collaborative planning effort to evaluate and improve the area's transportation system. The Portland West Balanced Mobility Improvement Study will update and build upon previous analyses to develop a multimodal approach that enhances mobility and safety while supporting long-term local, regional, and statewide growth and land-use goals.

This report evaluates baseline safety conditions in the study area of this project. The first half of this report evaluates safety trends for the entire study area and breaks the trends into four categories:

- » **Where** are crashes happening
- » **When** are crashes happening
- » **Why** are crashes happening
- » **Who** is involved in crashes

The second half of this report focuses on identified crash hotspots and aims to provide an understanding of factors contributing to safety issues at those specific locations. As a next step, the groundwork laid in this memo will support the evaluation of alternatives and their safety improvements that may address these concerns.

While this report is focused on this project's specific study area, it is in an effort to reduce and eventually eliminate fatalities and serious injuries along these segments and at these intersections. The complete elimination of all fatal and serious injury crashes on the roadway system is part of the U.S. Department of Transportation's (USDOT) National Roadway Safety Strategy known as the [Safe System Approach](#). MaineDOT supports the Safe System Approach from USDOT and shares their goal of working towards preventing deaths and serious injuries on the highway system, as noted in their most recent [Strategic Highway Safety Plan](#).

FIGURE 1 PRINCIPLES OF THE SAFE SYSTEM APPROACH



Source: Federal Highway Administration, 2026.

The majority of this safety analysis uses data from the Maine Department of Transportation (MaineDOT) from a period of 2016 to 2025, a total of 10 years of crash data. This is supplemented with additional data from Maine DOT including analyses and outputs from their [High Crash Locations tool](#), the Maine-specific [Highway Safety Manual \(HSM\)](#) analysis tools, and their [Public Roads database](#), which includes information on Annual Average Daily Traffic (AADT) and speed limits.

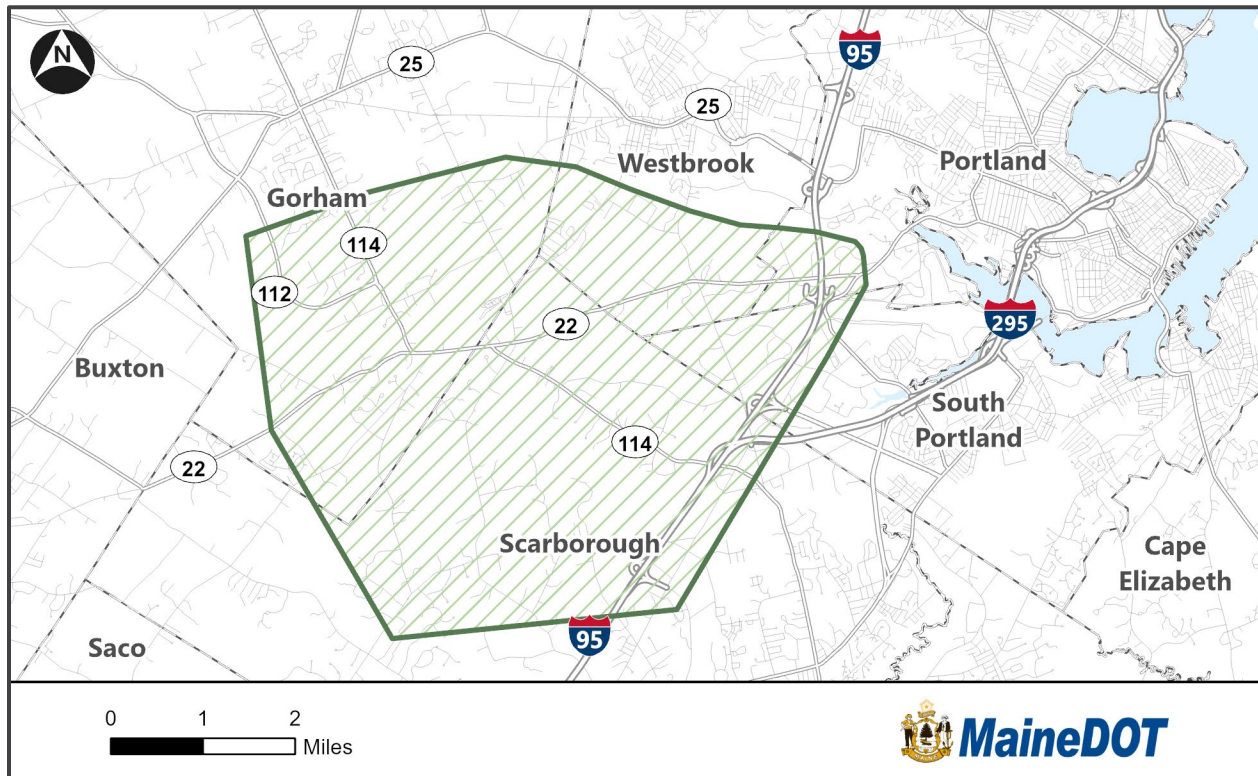
This analysis is an update of the previous Gorham East-West Corridor feasibility study's [safety section](#). The previous study, with an expanded study area compared to this current version<sup>1</sup>, identified and summarized 64 high-crash locations. This update performs a deeper dive into a more narrowed area of high-crash locations and presents a summary of safety trends across the entire study area.

<sup>1</sup> The previous study included high-crash locations in Portland, South Portland, Westbrook, and other areas outside of the current crash study area specified in Figure 2.

## 2. OVERALL SAFETY TRENDS

This report limits the crash analysis to the green striped area seen in Figure 2 below. This is done to concentrate on the core study area and to identify crash trends that are most likely to be affected by alternatives evaluated within that study area. Within this study area, crashes tagged as occurring on Interstates or other freeways/expressways (federal functional classes one and two) were excluded from this analysis except where specifically noted. This was done to concentrate on crash circumstances that are most likely to be affected by the alternatives proposed in later stages of this project.

**FIGURE 2 CRASH STUDY AREA**



Source: MaineDOT, 2026.

Table 1 summarizes crashes by severity based on the highest level of injury reported to be sustained in the crash using the [KABCO Injury Classification and Definition Scale](#). In this study area, there have been 4,454 crashes over the past 10 years. Of those crashes:

- » Less severe crash types causing property damage only (**O**) account for the largest share of crashes with almost three-quarters of the total crashes.
- » Crashes that caused fatalities (**K**) or incapacitating injuries (**A**) accounted for 1.9 percent of crashes (84 in total) with crashes that caused non-incapacitating injuries (**B**) making up another 6.7 percent.
- » Crashes that resulted in a possible injury (**C**) make up 18.3 percent of all crashes.

Crashes generate both tangible (economic costs) and intangible costs (lost quality of life) which are borne by all parties involved in a crash *and* the broader society they live in. Economic costs of a crash include items such as medical and emergency services, work productivity loss, insurance, legal costs, congestion costs, and more. Intangible costs are measured by estimating the value that people put on their lives.

Over time, the net impact of roadway crashes can generate a significant economic cost to communities in both tangible and intangible ways. Table 1 provides estimated crash costs by severity, including both the tangible and intangible costs as estimated by MaineDOT.

In the study area, the 4,454 crashes recorded between 2016 and 2025 generated an estimated total cost of \$361.2 million, of which 50.5 percent (\$182.4 million) is attributable to fatal and incapacitating crashes alone.

**TABLE 1 CRASHES BY INJURY SEVERITY IN THE STUDY AREA (2016 – 2025)**

| Crash Severity                | Crashes      | % of Total Crashes | Cost per Crash | Cumulative Crash Cost | % of Cumulative Crash Cost |
|-------------------------------|--------------|--------------------|----------------|-----------------------|----------------------------|
| Fatality (K)                  | 14           | 0.3%               | \$10,098,000   | \$141,372,000         | 39.1%                      |
| Incapacitating Injury (A)     | 70           | 1.6%               | \$585,600      | \$40,992,000          | 11.3%                      |
| Non-Incapacitating Injury (B) | 298          | 6.7%               | \$177,500      | \$52,895,000          | 14.6%                      |
| Possible Injury (C)           | 814          | 18.3%              | \$112,300      | \$91,412,200          | 25.3%                      |
| Property Damage Only (O)      | 3,258        | 73.1%              | \$10,600       | \$34,534,800          | 9.6%                       |
| <b>Total</b>                  | <b>4,454</b> | <b>100.0%</b>      | <b>–</b>       | <b>\$361,206,000</b>  | <b>100.0%</b>              |

Source: Crashes and Crash Costs from MaineDOT.

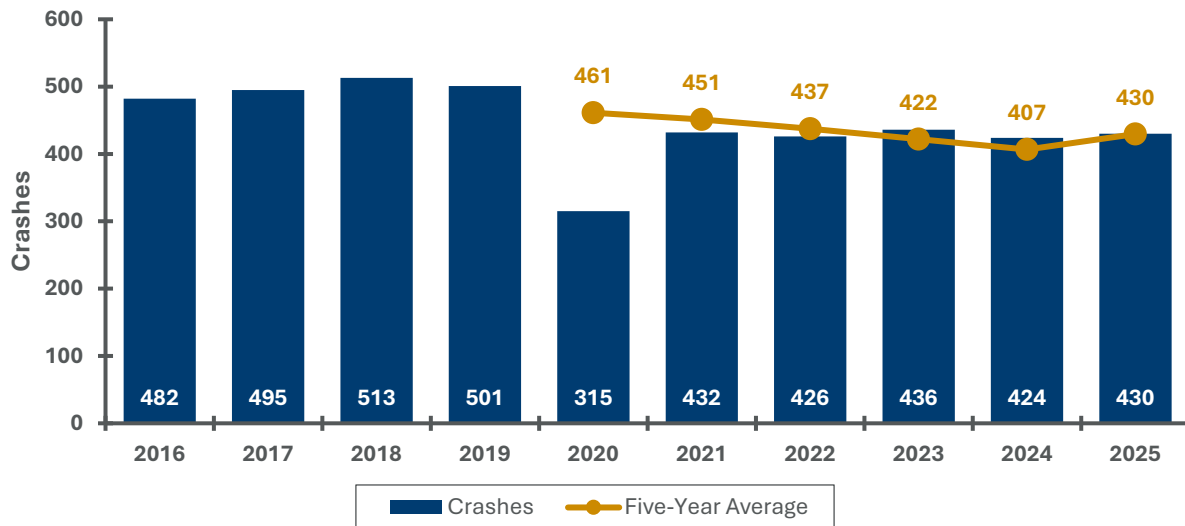
Note: Crash costs expressed in 2019 dollars.

Figure 3 shows crashes by year over the past ten years of full data (excluding 2026). From 2016 to 2019, crashes were rising steadily from 482 crashes in 2016 to 501 in 2019, an increase of 4 percent. In 2020, the year of the COVID-19 pandemic, crashes dropped to 315 annually. This increased back to roughly 430 per year, lower than crash numbers pre-pandemic, where it remained steady from 2021 to 2025. Similar trends are observed in the five-year average, but with a delayed dip in values due to the impacts of the COVID-19 pandemic being reflected over the years following the abrupt reduction of 2020.

The dip in crashes in 2019 is likely due to decreased amounts of highway activity and vehicle-miles-traveled (VMT). Data from FHWA shows that VMT in Maine decreased by 12 percent in 2020 compared to 2019 before increased back to 2019 levels in 2021, mirroring the dip in the crash trend. This trend is similar when looking at the entire state of Maine, although the statewide dip in 2020 (a decrease of 18.4 percent) is not as dramatic as in this study area (a decrease of 42.0 percent). Expanding beyond Maine, this trend of there being fewer crashes in 2020 is seen in other states as well, such as [Tennessee](#), [Texas](#), [Massachusetts](#), and others.



**FIGURE 3** CRASHES BY YEAR (2016 – 2025)



Source: *MaineDOT, 2026.*

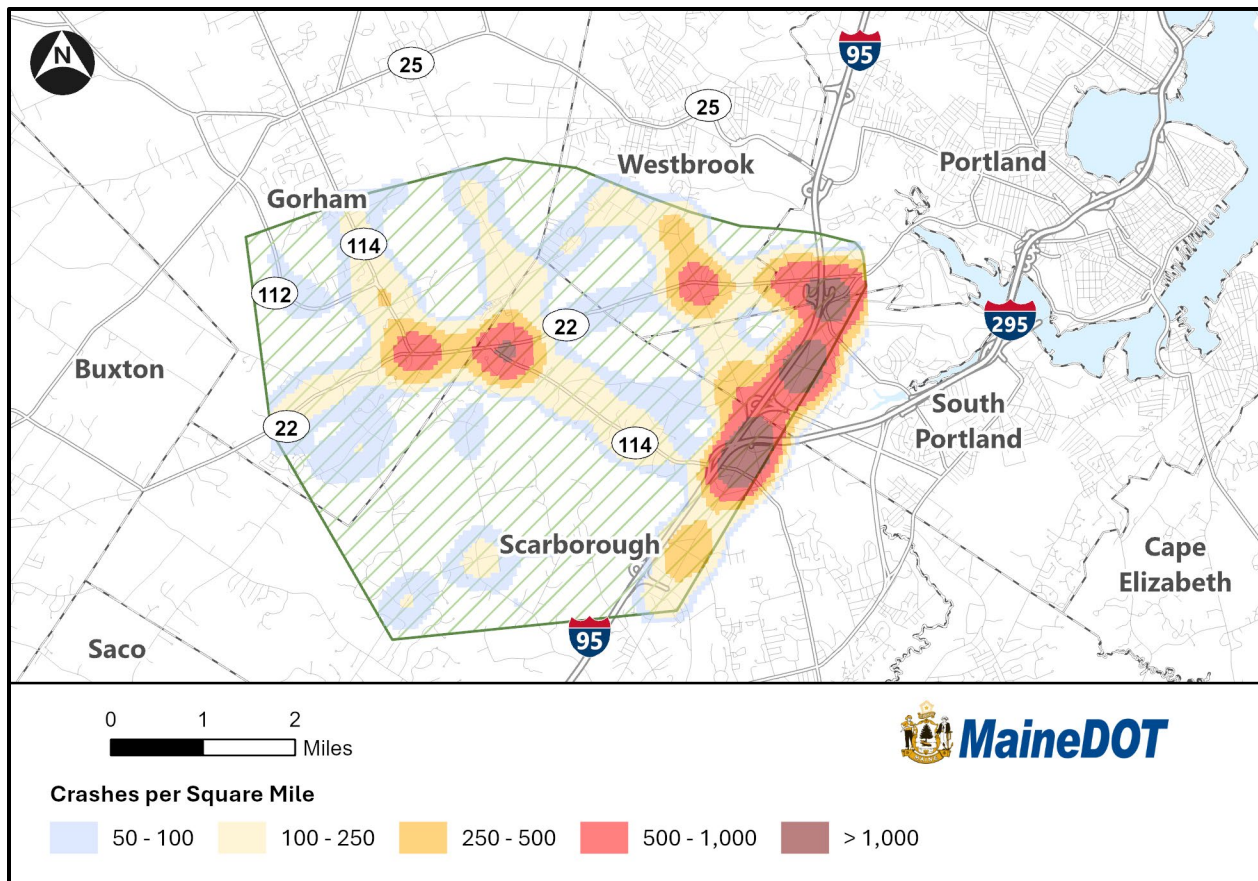
## 2.1 Where Are Crashes Occurring?

This section evaluates the spatial distribution of crashes within the study area to identify locations where crash frequency and severity are most concentrated. By analyzing crash density, roadway ownership, and functional classification, this assessment highlights corridors and facility types that experience a disproportionate share of crashes relative to their extent in the network.

Figure 4 shows a heat map of crashes per square mile in the study area and the surrounding areas. Within the green striped study area, the largest concentrations of crashes are seen in the following areas:

- » The Payne Rd corridor on the east side of I-95 . Over the past 10 years, this area has had over 1,000 crashes per square mile, on average.
- » The area around the Congress St/Skyway Dr and I-95 interchange in the northeast portion of the study area. Over the past 10 years, this area has, on average, experienced between 500 and 1,000 crashes per square mile.
- » Around the intersection of Cummings Rd/Spring St and County Rd in the northeast portion of the study area. Over the past 10 years, this area has had over 500 crashes per square mile, on average.
- » At the eastern and western intersections between SR-22 and SR-114. Both of these areas have seen over 500 crashes per square mile over the past 10 years, on average.

**FIGURE 4 CRASHES IN STUDY & SURROUNDING AREAS (2016 – 2025)**

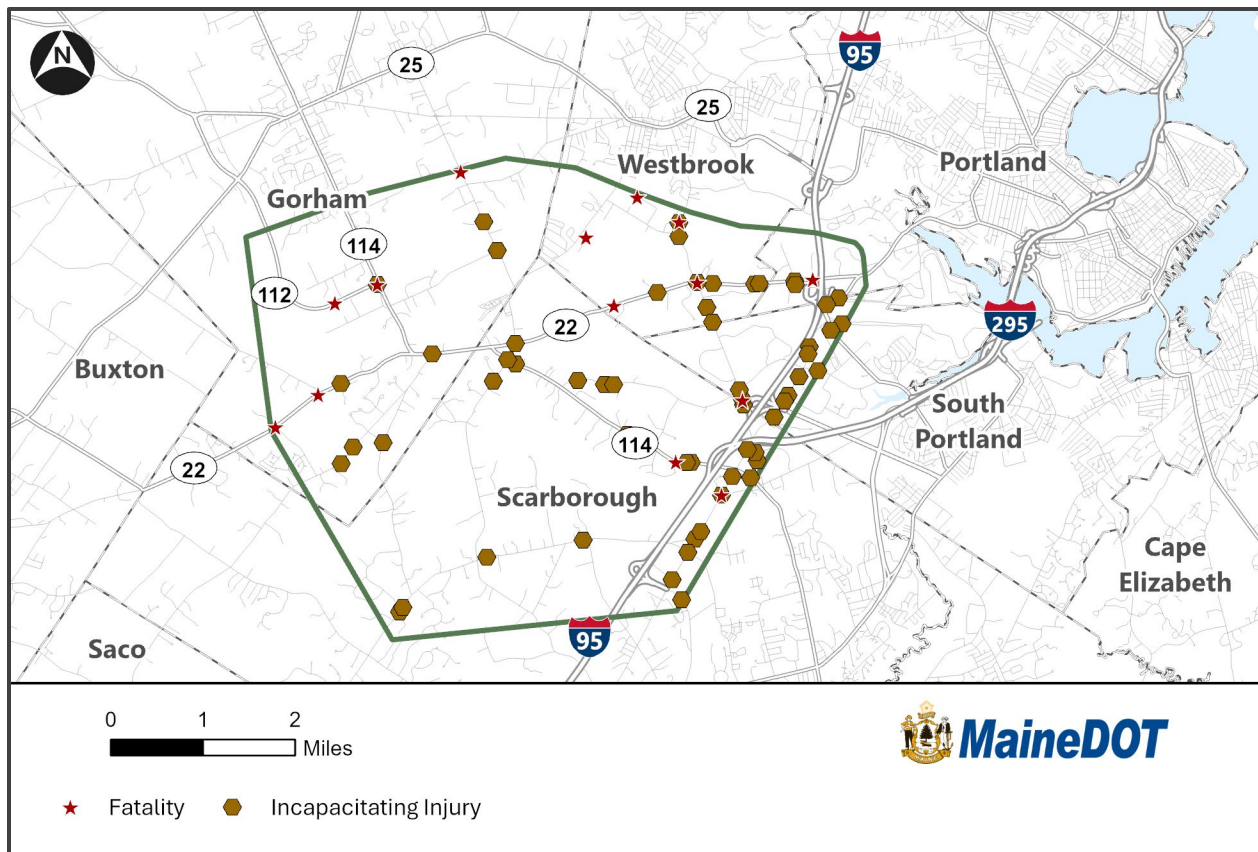


Source: MaineDOT, 2026.

Figure 5 isolates these crashes to solely those that resulted in a fatality or incapacitating injury (also known as a “serious injury”). Focusing on these crashes is important as these crashes are the most severe and costly types of crashes and the most important types to eliminate on the highway system. This is consistent with the Safe System Approach discussed in Section 1. While the spatial pattern of fatalities and serious injuries largely falls along the corridors and locations described above, some areas with high concentrations of crashes did not experience crashes that fall into the most severe injury categories. For example, neither the area around the intersection of County Rd (SR-22) and South St (SR-114), nor the area around the intersection of County Rd (SR-22) and Gorham Rd (SR-114), experience fatal or serious injury crashes. As discussed in Section 3.2 and Section 3.12, these two locations generally have more rear-end crashes and fewer crashes where vehicles fail to yield the right-of-way compared to the other locations studied in Section 3. Rear-end crashes are generally less severe than sideswipes or angle crashes, which are associated with turning movements.



**FIGURE 5 FATAL AND INCAPACITATING INJURY CRASHES (2016 – 2025)**



Source: MaineDOT, 2026

Table 2 shows the distribution of crashes across all functional classes, including Interstates and other freeways or expressways. Minor arterials accounted for the largest share of crashes, with nearly half (47.5 percent) of all crashes occurring on these facilities. Interstates and major collectors also made up a substantial portion of crashes, together representing another 38 percent of all crashes in the study area.

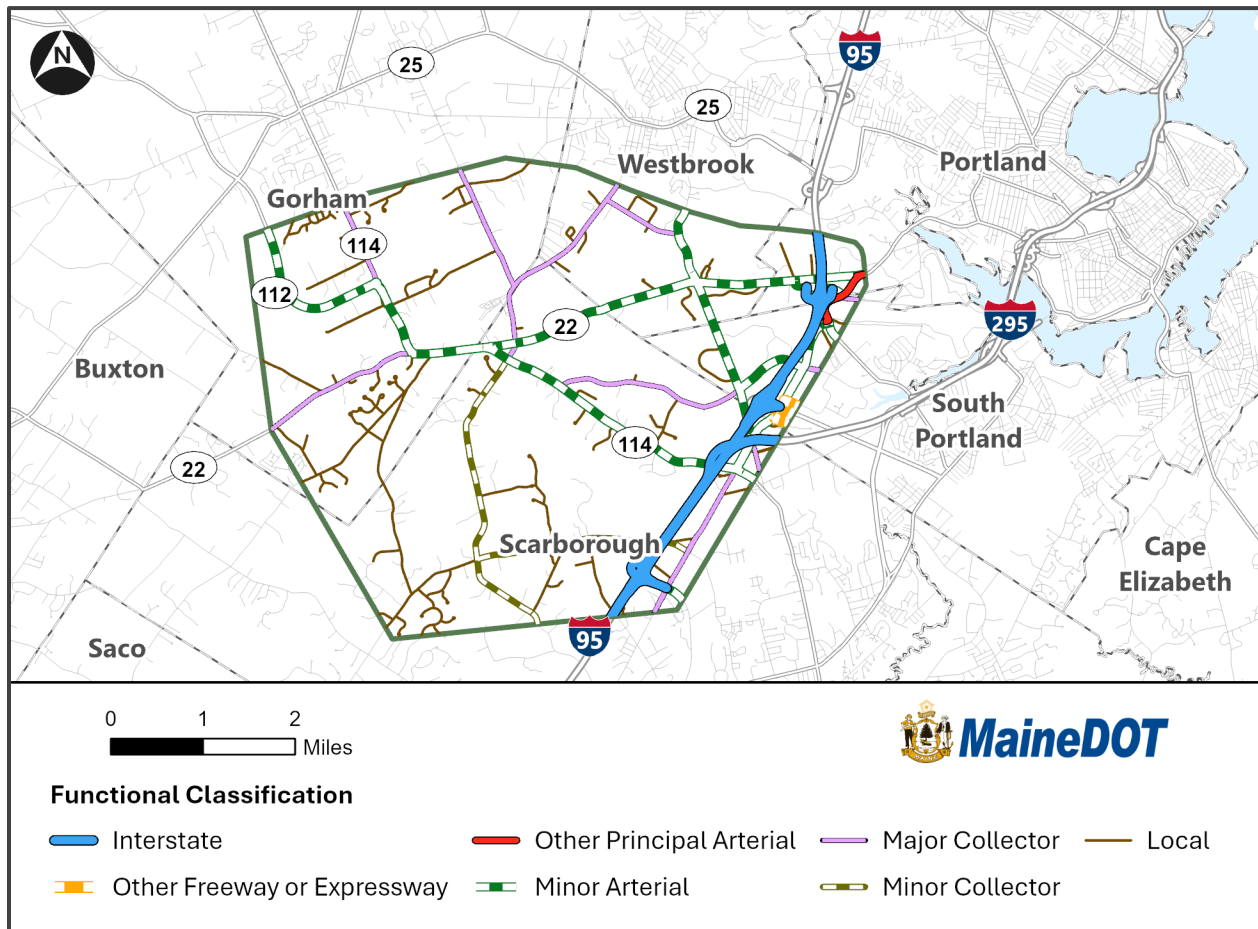
Table 2 also shows the number of crashes for functional class standardized by the amount of driving done on each roadway type. This is measured in hundreds of millions of vehicle-miles travelled (100M VMT), a commonly-used transportation safety statistic. A higher crash rate per 100M VMT indicates that driving on that road is more unsafe on a per-mile basis. This statistic is augmented by one more: the percentage of crashes that result in a fatality or serious injury. A higher value here means one is more likely to suffer serious harm *if a crash occurs*.

Maine's statewide fatal and serious injury rate has held steady in recent years between roughly [5.50](#) and [6.00](#). Other freeways and expressways (of which there are only 1.5 miles of ramps serving I-95) and minor arterials are the only functional class types at or above this mark. A surprising result is seen in the proportion of crashes that result in a fatality or serious injury; local roads have the highest mark of 3.0 percent. This may be due to the higher proportions of lane departure and pedestrian-related crashes, which account for 63 percent and 13 percent of all fatal and serious injury crashes on local roads, respectively. Given the general lack of shoulders, medians, and roadside barriers, as well as lower roadway design standards, these types of crashes may be more severe on local roads.



For reference, a map of roadways by functional class can be viewed in Figure 6 or by visiting the [MaineDOT Public Map Viewer](#) and adding the *Federal Functional Class* layer to the map.

**FIGURE 6 ROADWAY FUNCTIONAL CLASS**



Source: MaineDOT, 2026.

**TABLE 2 CRASHES BY FUNCTIONAL CLASS (2016 – 2025)**

| Functional Class            | Miles        | All Crashes  |              | Fatal and Serious Injury Crashes |              | % of Crashes Resulting in Fatal or Serious Injuries |
|-----------------------------|--------------|--------------|--------------|----------------------------------|--------------|-----------------------------------------------------|
|                             |              | #            | Per 100M VMT | #                                | Per 100M VMT |                                                     |
| Interstate                  | 23.2         | 1,145        | 79.8         | 19                               | 1.23         | 1.7%                                                |
| Other Freeway or Expressway | 1.5          | 179          | 379.2        | 4                                | 8.47         | 2.2%                                                |
| Other Principal Arterial    | 2.1          | 278          | 538.7        | 2                                | 3.88         | 0.7%                                                |
| Minor Arterial              | 27.8         | 2,750        | 338.9        | 51                               | 6.29         | 1.9%                                                |
| Major Collector             | 17.8         | 1,032        | 267.3        | 20                               | 5.18         | 1.9%                                                |
| Minor Collector             | 7.9          | 131          | 139.8        | 3                                | 3.20         | 2.3%                                                |
| Local Road                  | 51.2         | 263          | 162.2        | 8                                | 4.93         | 3.0%                                                |
| <b>Total</b>                | <b>131.5</b> | <b>5,778</b> | <b>193.5</b> | <b>107</b>                       | <b>3.58</b>  | <b>1.9%</b>                                         |

Source: MaineDOT, 2026.

Note: This table includes Interstates and Other Freeways or Expressways.

**TABLE 3 CRASHES BY OWNERSHIP (2016 – 2025)**

| Jurisdiction                      | Miles        | All Crashes  |              | Fatal and Serious Injury Crashes |              | % of Crashes Resulting in Fatal or Serious Injuries |
|-----------------------------------|--------------|--------------|--------------|----------------------------------|--------------|-----------------------------------------------------|
|                                   |              | #            | Per 100M VMT | #                                | Per 100M VMT |                                                     |
| State Highway                     | 29.9         | 3,028        | 242.4        | 53                               | 4.79         | 1.8%                                                |
| State Aid Highways                | 25.7         | 1,163        | 350.9        | 23                               | 6.14         | 2.0%                                                |
| Town Maintained Way (Local Roads) | 51.2         | 263          | 166.1        | 8                                | 5.07         | 3.0%                                                |
| <b>Total</b>                      | <b>106.7</b> | <b>4,454</b> | <b>296.0</b> | <b>84</b>                        | <b>5.58</b>  | <b>1.9%</b>                                         |

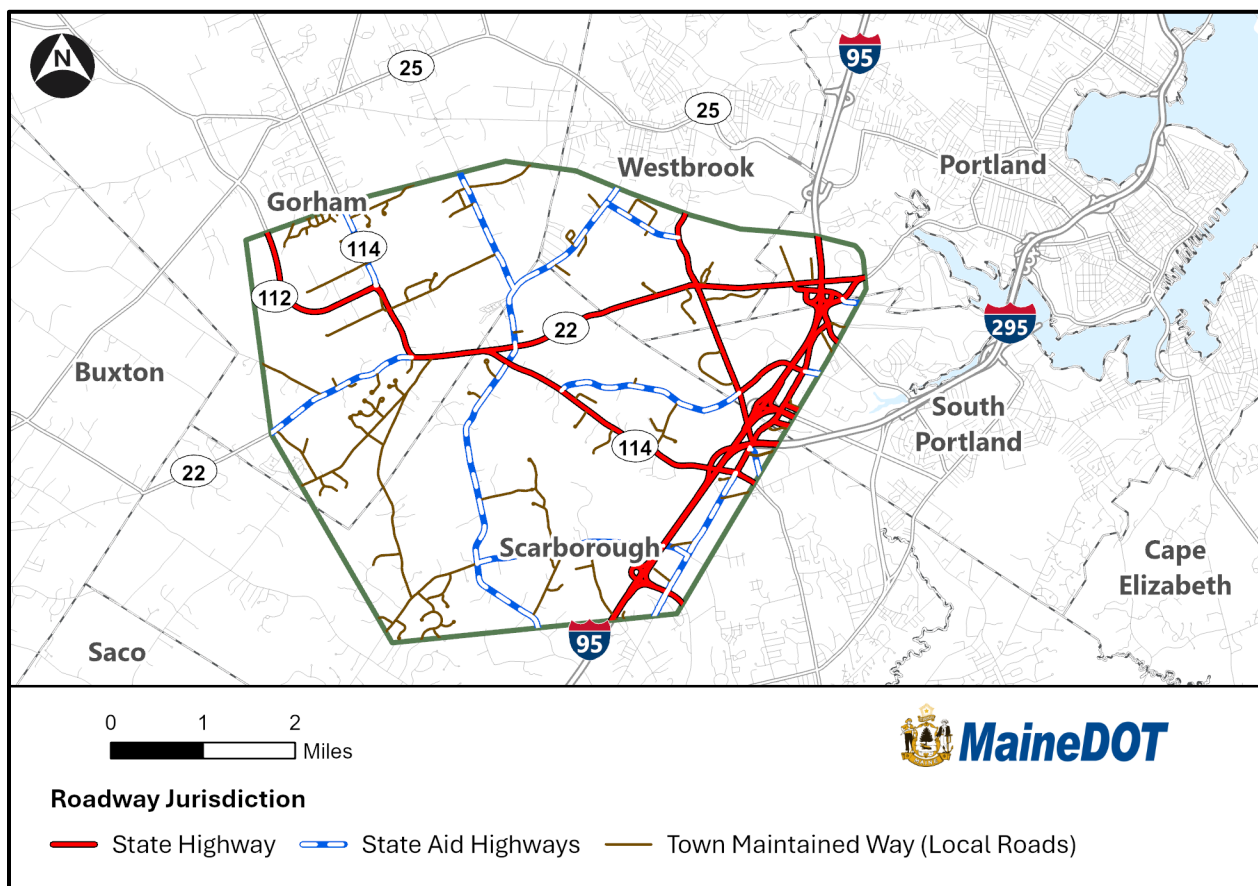
Source: MaineDOT, 2026

To better understand the coordinated safety effort needed by all agencies responsible for roads in this study area, Table 3 summarizes crashes by roadway jurisdiction after excluding Interstates and other freeways or expressways. Local roads tend to experience the lowest rate of crashes per 100M VMT (166.1), but experience the highest percentage of crashes that result in fatal or serious injuries (3.0 percent). This is compared to the state highway and state aid highways, which experience higher rates of 242.4 and 350.9 crashes per VMT and lower percentages of crashes that result in fatal or serious injuries (1.8 percent and 2.0 percent).

State aid highways also have the highest rate of fatal and serious injury crashes per 100 M VMT of 6.14, which is approximately 20 percent higher than the rate for state highways (4.79) and local roads (5.07). State aid roads in this study area include Saco St/Beechridge Rd, Running Hill Rd, County Rd west of the intersection with SR-114, and Payne Rd south of SR-114. Portions of these roadways are discussed in more detail in Sections 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, and 3.9.

For reference, a map of roadways by ownership can be viewed in Figure 7 or by visiting the [MaineDOT Public Map Viewer](#) and adding the *Jurisdiction* layer to the map.

**FIGURE 7 ROADWAY JURISDICTION**



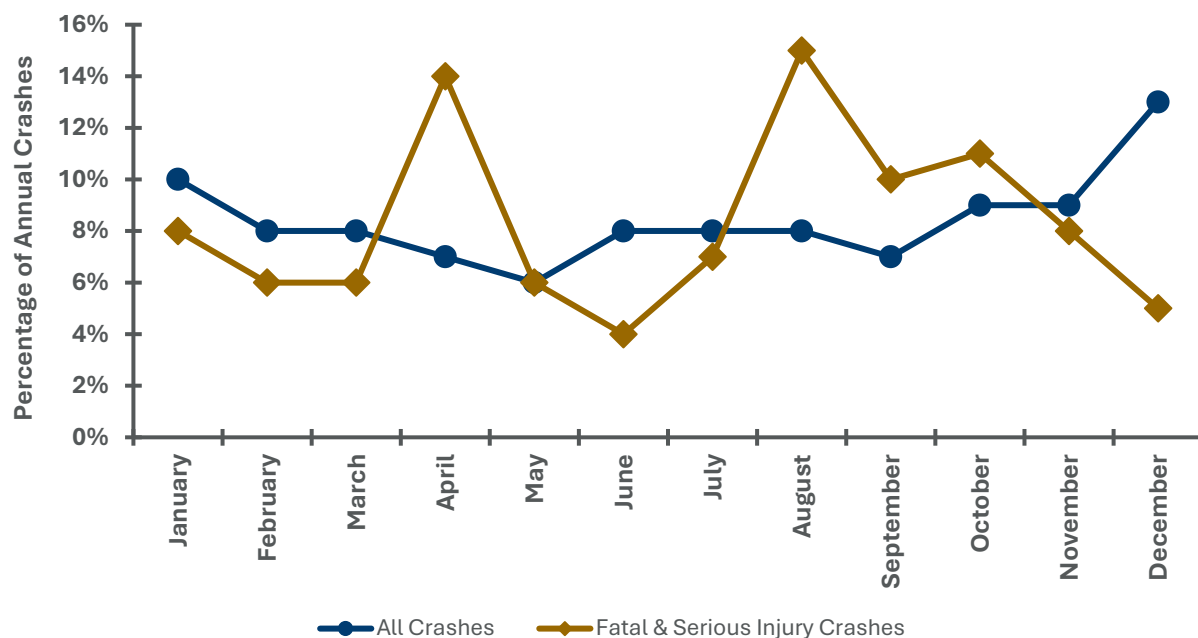
Source: MaineDOT, 2026.

## 2.2 When Are Crashes Occurring?

This section examines the temporal distribution of crashes to understand how crash occurrence varies by month, day of week, and time of day. Figure 8 summarizes monthly crash distribution by severity between 2016 and 2025. Overall crash occurrence, shown in blue, was relatively evenly distributed throughout the year, with each month accounting for around 6 to 13 percent of all crashes. December had the highest proportion of crashes, representing 13 percent of all crashes in the study area, followed by January at 10 percent. In contrast, fatal and serious injury crashes, shown in orange, exhibited greater seasonal variation. Despite representing only 8 percent of all crashes, August accounted for 15 percent of severe crashes, nearly double its share of total crashes. A similar pattern was observed in April, which accounted for 14 percent of severe crashes while representing only 7 percent of all crashes.

Overall, severe crashes were more prevalent during the spring and summer months, particularly between April and October. During the summer months, there are generally higher concentrations of crashes that involve pedestrians, bicyclists, motorcyclists, and impaired driving. All of these crash types are more likely to result in fatalities or serious injuries (see Table 4).

**FIGURE 8 CRASHES BY MONTH (2016 – 2025)**



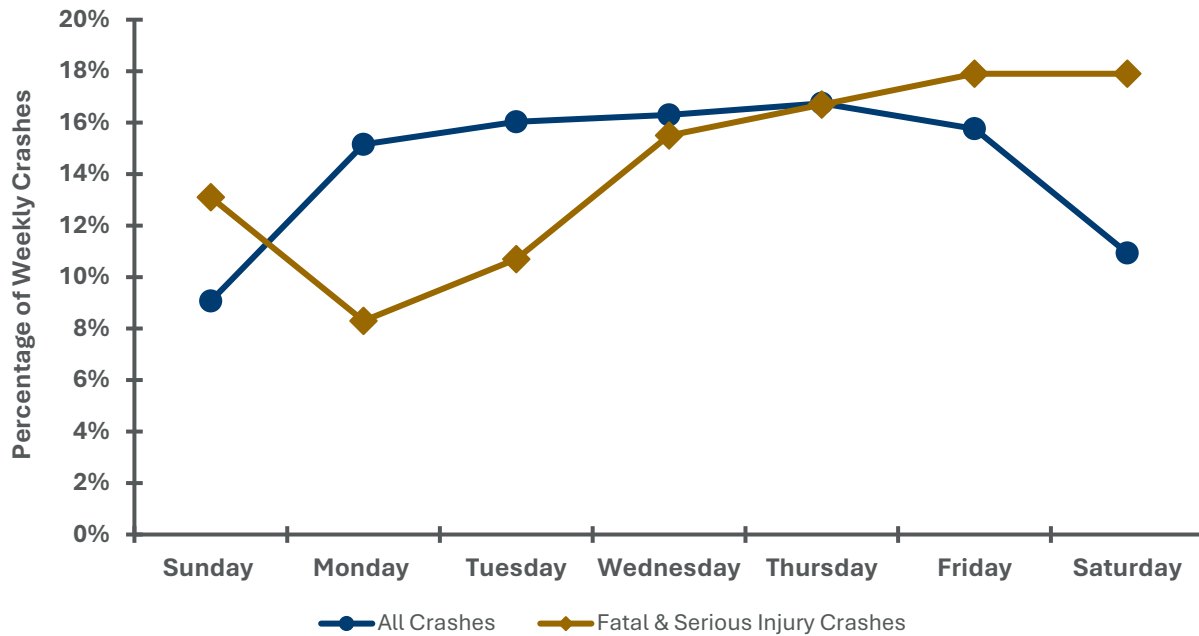
Source: MaineDOT, 2026.

Crash distribution by day of week was also analyzed and is shown in Figure 9. Across weekdays, crashes were evenly distributed, with the share of crashes gradually increasing from 15 percent on Mondays to 16 percent on Fridays. While weekend days accounted for a smaller share of total crashes than weekdays, they represented a greater share of fatal and serious injury crashes. Together, Saturdays and Sundays made up 31 percent of severe crashes compared to only 20 percent of all crashes, indicating a disproportionate concentration of severe crashes on weekends in the study area. Similar to the summer months in Figure 5,



there are proportionally more motorcyclist, pedestrian, bicyclist, and impaired driving crashes on the weekends, which may explain why crashes on the weekends are more likely to result in severe outcomes.

**FIGURE 9** CRASHES BY DAY OF WEEK (2016 – 2025)



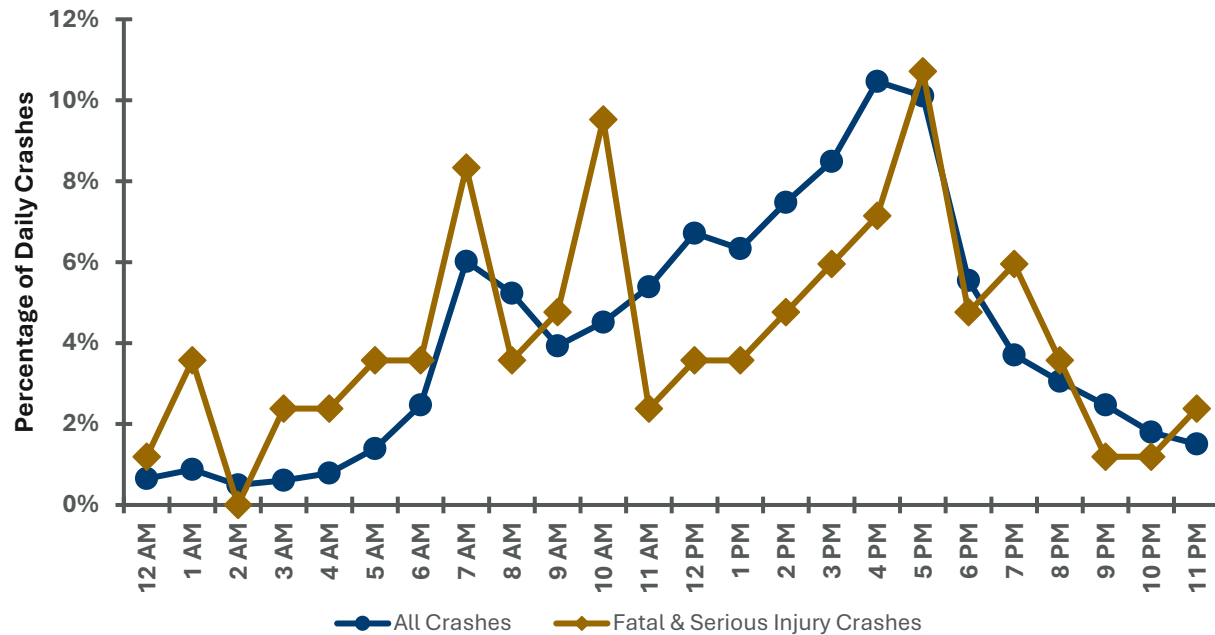
Source: *MaineDOT, 2026.*

In addition, the analysis of crash distribution by time of day showed that crash occurrence generally followed daily travel patterns, with the highest concentration occurring during the afternoon period between 2 PM and 5 PM. However, fatal and serious injury crashes showed a different pattern. While 5 PM remained the hour with the highest proportion of severe crashes, a notable spike occurred at 10 AM, where the share of severe crashes was more than double its share of all crashes.

The late-night and early-morning hours also showed a relatively high proportion of severe crashes, particularly between 11PM and 5 AM. Crash patterns also differed by time of day. During the late morning, intersection movement crashes were the most common severe crash type, whereas run-off-road crashes and pedestrian crashes were more prevalent during the overnight period. These three crash types are all generally more likely to result in severe outcomes.



FIGURE 10 CRASHES BY TIME OF DAY (2016 – 2025)



Source: MaineDOT, 2026.

## 2.3 Why Are Crashes Occurring?

Table 4 summarizes crash characteristics in the study area using the focus areas identified in MaineDOT's most recent [Strategic Highway Safety Plan](#) (SHSP), providing a consistent framework for benchmarking local conditions against statewide trends. The table is broken into three parts; the leftmost is for *all crashes* regardless of severity, the middle is for *only fatal and serious injury crashes*, and the rightmost shows the percentage of all crashes that result in a fatality or serious injury. In the first two parts, each contains three summaries:

- » The number of crashes in the study area that fall within that focus area
- » The proportion of crashes in the study area that fall within that focus area
- » The proportion of crashes in *the entire State of Maine* that fall within that focus area, which provides an understanding of what crash types are over-represented in this project's study area

A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

Of note, a specific crash may fall into multiple focus areas. For example, a crash may be a *lane departure* crash that involves a *pedestrian* and a *younger driver*; in this example, this crash would be counted in three focus areas. Focus area definitions are consistent with those used in the most recent SHSP and subsequent SHSP reporting and performance tracking.

**TABLE 4 SHSP FOCUS AREA SUMMARY (2016 – 2025)**

| Focus Area                       | All Crashes  |                          |                     | Fatal & Serious Injury Crashes |                          |                     | % of Crashes Resulting in Fatal or Serious Injuries |
|----------------------------------|--------------|--------------------------|---------------------|--------------------------------|--------------------------|---------------------|-----------------------------------------------------|
|                                  | Crashes      | % of Total in Study Area | % of Total in Maine | Crashes                        | % of Total in Study Area | % of Total in Maine |                                                     |
| Lane Departure                   | 700          | 15.7%*                   | 15.2%               | 31                             | 36.9%*                   | 36.2%               | 4.4%                                                |
| Intersections                    | 2,080        | 46.7%*                   | 43.0%               | 38                             | 45.2%*                   | 39.9%               | 1.8%                                                |
| Pedestrians                      | 22           | 0.5%                     | 1.5%                | 8                              | 9.5%                     | 19.7%               | 36.4%                                               |
| Bicyclists                       | 22           | 0.5%                     | 1.1%                | 1                              | 1.2%                     | 6.6%                | 4.5%                                                |
| Commercial Vehicles              | 161          | 3.6%*                    | 2.4%                | 7                              | 8.3%*                    | 5.6%                | 4.3%                                                |
| Motorcyclists                    | 59           | 1.3%*                    | 1.2%                | 16                             | 19.0%*                   | 17.3%               | 27.1%                                               |
| Large Animals                    | 301          | 6.8%*                    | 5.7%                | 1                              | 1.2%*                    | 0.4%                | 0.3%                                                |
| Winter Driving                   | 418          | 9.4%*                    | 7.3%                | 5                              | 6.0%*                    | 5.4%                | 1.2%                                                |
| Work Zones                       | 45           | 1.0%                     | 1.5%                | 0                              | 0.0%                     | 1.0%                | 0.0%                                                |
| Illegal / Unsafe Speed           | 376          | 8.4%*                    | 6.0%                | 10                             | 11.9%                    | 13.1%               | 2.7%                                                |
| Impaired Driving                 | 131          | 2.9%                     | 3.5%                | 10                             | 11.9%                    | 13.4%               | 7.6%                                                |
| Distracted Driving               | 370          | 8.3%*                    | 7.9%                | 3                              | 3.6%                     | 6.6%                | 0.8%                                                |
| Occupant Protection <sup>1</sup> | 83           | 1.9%*                    | 1.8%                | 14                             | 16.7%*                   | 15.8%               | 16.9%                                               |
| Younger Drivers                  | 1,507        | 33.8%*                   | 29.5%               | 17                             | 20.2%                    | 23.9%               | 1.1%                                                |
| Mature Drivers                   | 918          | 20.6%*                   | 19.2%               | 19                             | 22.6%*                   | 21.5%               | 2.1%                                                |
| <b>Total</b>                     | <b>4,454</b> | <b>100.0%</b>            | <b>100.0%</b>       | <b>84</b>                      | <b>100.0%</b>            | <b>100.0%</b>       | <b>1.9%</b>                                         |

Source: MaineDOT, 2026.

<sup>1</sup> The Occupant Protection focus area records crashes that involved drivers or passengers that did not use seatbelts.

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.



Within the study area, lane departure crashes account for 700 total crashes (15.7 percent of all crashes) and 31 fatal and serious injury crashes (36.9 percent of all fatal and serious injury crashes), slightly exceeding the statewide shares of 15.2 percent and 36.2 percent, respectively. This overrepresentation, particularly for severe outcomes, indicates that roadway departure contributing factors such as speed, horizontal/vertical alignment, or roadside hazards, are a primary driver of high-severity crashes in the study area. Intersection-related crashes represent 2,080 crashes (46.7 percent) and 38 fatal and serious injury crashes (45.2 percent). Compared with statewide averages (43.0 percent of all crashes and 39.9 percent of fatal and serious injury crashes), intersection-related crashes were overrepresented, particularly among fatal and serious injury crashes, reinforcing the importance of conflict management at key intersections.

Several additional emphasis areas are also over-represented compared to statewide averages, including winter driving (9.4 percent vs. 7.3 percent), illegal or unsafe speed (8.4 percent vs. 6.0 percent), distracted driving (8.3 percent vs. 7.9 percent), and occupant protection (1.9 percent vs. 1.8 percent), suggesting that environmental conditions and driver behaviors contribute disproportionately to crash occurrence in the study area. Crashes involving large animals (6.8 percent vs. 5.7 percent) and commercial vehicles (8.3 percent vs. 5.6 percent for severe crashes) also demonstrate slightly elevated shares, indicating corridor-specific exposure factors associated with rural and freight activity. In contrast, impaired driving (2.9 percent vs. 3.5 percent) are slightly underrepresented, suggesting these behaviors, while still important, are not the distinguishing contributors relative to statewide trends.

While non-motorist crashes, inclusive of pedestrians (0.5 percent) and bicyclists (0.5 percent), constitute a small share of total crashes, they account for a disproportionate share of severe outcomes (9.5 percent and 1.2 percent, respectively), though still below statewide averages. Similarly, motorcyclists represent 1.3 percent of total crashes, but 19.0 percent of fatal and serious injury crashes, exceeding the statewide severe crash share (17.3 percent), further emphasizing the elevated risk associated with less-protected users.

Collectively, these findings indicate that severe crash risk in the study area is driven primarily by roadway departure and intersection-related crashes, with additional contributions from commercial vehicle activity, winter driving, speeding, and large-animal crashes. In addition, the disproportionate severity of crashes involving vulnerable road users further underscores the importance of targeted safety strategies. These findings align with SHSP priorities and identify the emphasis areas where safety investments may yield the greatest benefit.

## 2.4 Who is Involved in Crashes

Figure 11 illustrates the distribution of crash severity by involved mode from 2016 to 2025, ranked by the proportion of fatal and serious injury crashes. Among all modes, crashes involving pedestrians and motorcyclists experienced the highest proportion of severe crashes, with more than 25 percent of crashes in each category resulting in a fatality or serious injury. Pedestrians were particularly at-risk, as all pedestrian-involved crashes were injury crashes. While bicyclist-involved crashes had a relatively lower proportion of severe crashes, more than 95 percent resulted in an injury.<sup>2</sup> In contrast, fewer than 3 percent of crashes

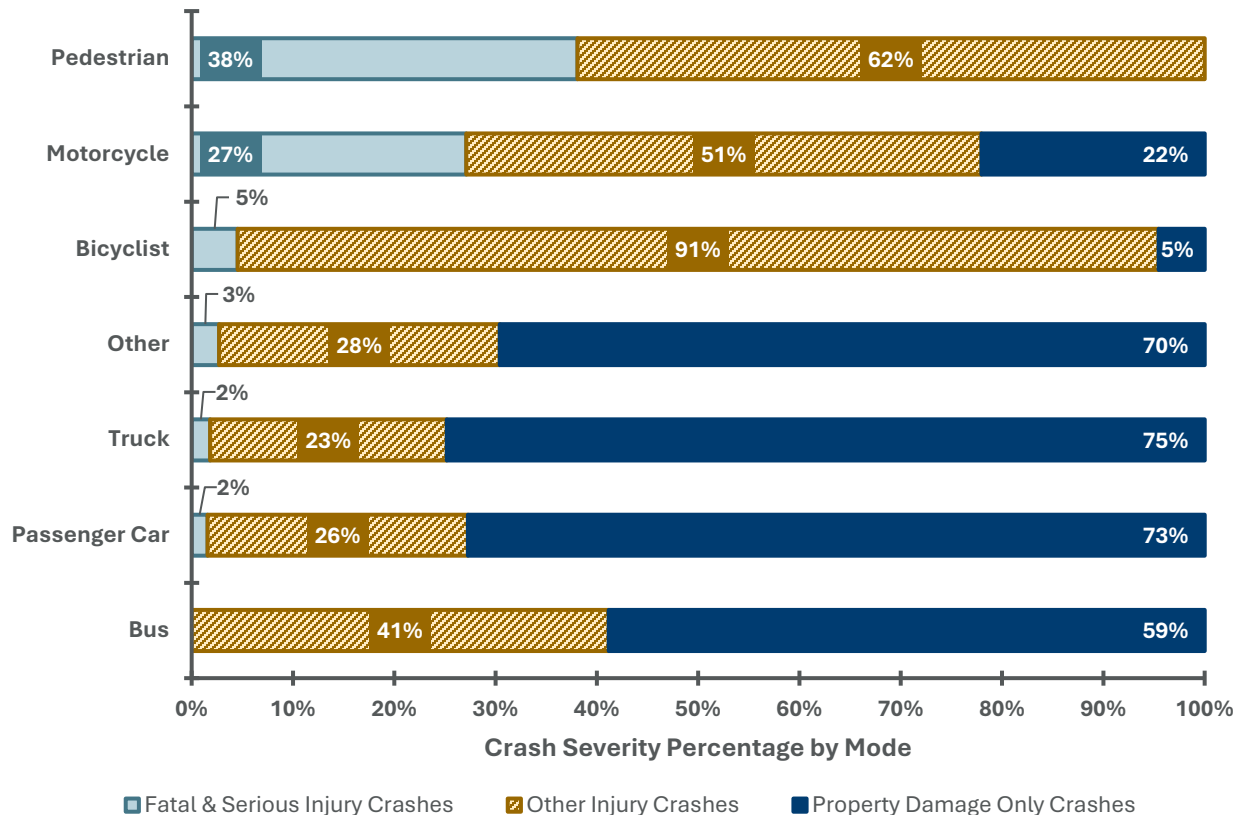
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<sup>2</sup> Crashes involving pedestrians and bicyclists, especially crashes with less severe outcomes or those not resulting in injuries, [are likely under-reported](#).



involving passenger cars or trucks resulted in a fatality or serious injury, highlighting the disproportionate severity of crashes involving vulnerable road users.

**FIGURE 11 CRASHES BY INVOLVED MODE (2016 – 2025)**



Source: *MaineDOT, 2026.*

## *Pedestrians and Bicyclists*

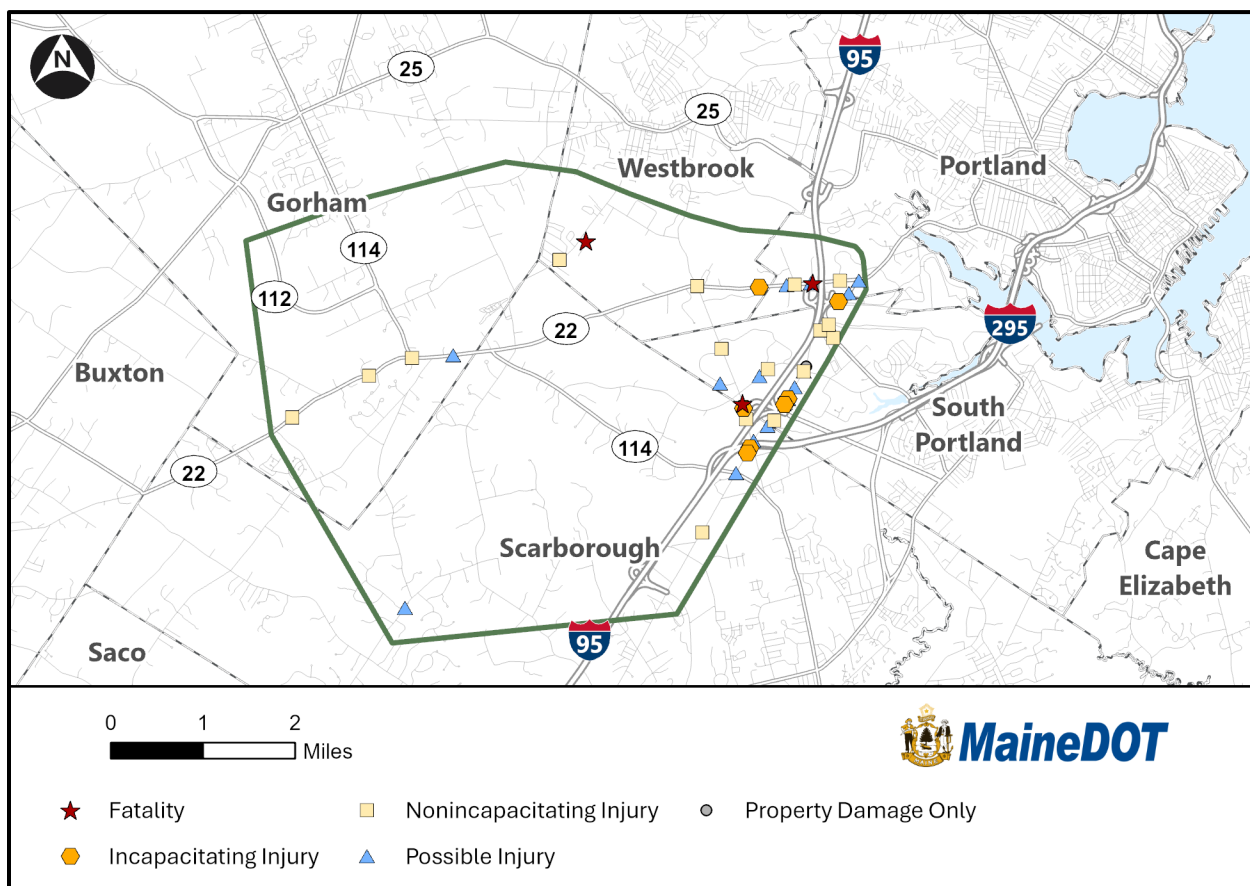
Figure 12 shows specifically pedestrian and bicyclist crashes. These are colored by their severity. In general, there are fewer concentrations of crashes compared concentrations of motorist crashes. The highest-concentrations include:

- » Cummings Rd between Running Hill Rd and I-95
- » Payne Rd between SR-114 and the Maine Mall
- » County Rd between Thomas Dr and I-95

There are three ped/bike fatalities in the study area (Congress St & Blueberry Rd, Cummings Rd next to the shopping center on Running Hill Rd, and Spiller Dr off Saco Rd, next to a collection of warehouses and industrial properties). There are seven more ped/bike incapacitating injuries, but these are all concentrated on the extreme northeastern portion of the study area.

Deeper dives into pedestrian and bicyclist crashes that are coincident with crash hotspots are discussed in the site-by-site locations in Sections 3.2, 3.7, 3.8, and 3.10.

**FIGURE 12 PEDESTRIAN AND BICYCLIST CRASHES (2016 – 2025)**



Source: MaineDOT, 2026.

Further analysis of non-motorist crashes provides insight into factors associated with an increased risk of fatal and serious injury crashes.

- » **Posted Speed Limit:** Excluding the seven non-motorist crashes with unknown speed limits, 83 percent of fatal and serious injury crashes involving non-motorists occurred on minor arterials with a posted speed limit of 35 MPH. These facilities also accounted for 50 percent of all non-motorist crashes. Minor arterials with speed limits of 40 MPH and major collectors with speed limits of 45 MPH represented the next largest shares of non-motorist crashes. There was one fatal crash on a 25 MPH road that occurred on Spiller Dr; it was at night and the driver ran off the road.
- » **Location:** Using the [MaineDOT Roadway Context Classification](#) layer, 93 percent of non-motorist crashes occurred in suburban areas, with minor arterials accounting for the majority of non-motorist crashes within these areas. While 35 percent of non-motorist crashes occurred at intersections, these locations accounted for only 22 percent of severe crashes. In contrast, most severe non-motorist crashes occurred within travel lanes (44 percent) and along shoulders or roadsides (33 percent). These findings suggest that improving non-motorist safety may require addressing risks beyond intersections,



including evaluating whether safe and accessible pedestrian crossing opportunities are available along corridors.

- » **Lighting Condition:** Although nearly half of all non-motorist injury crashes occurred during daylight hours, 89 percent of fatal and serious injury non-motorist crashes occurred under dark conditions. In particular, dark, unlighted conditions alone represented 67 percent of non-motorist severe crashes, compared to just 14 percent of severe crashes in the study area that occurred under dark, unlighted conditions. This underscores the importance of roadway lighting and visibility improvement for enhancing non-motorist safety, particularly during nighttime hours.

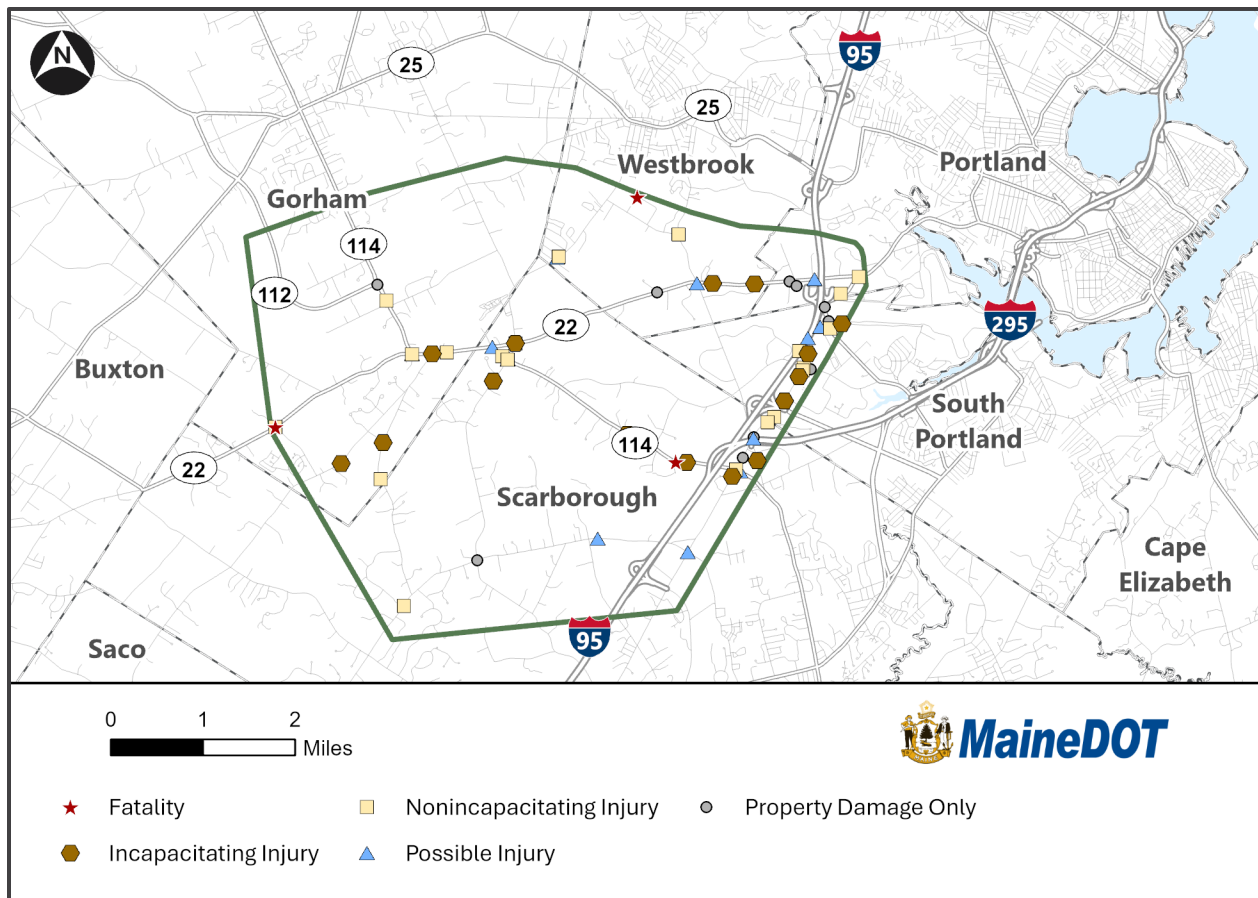
## Motorcyclists

In addition to pedestrians and bicyclists, motorcyclists were also at high risk of severe injuries when crashes occurred. Between 2016 and 2025, 59 motorcyclist crashes occurred within the study area, 16 of which resulted in fatal or serious injuries. Figure 13 shows these crashes in the study area. In general, the three most common corridors for motorcycle crashes are:

- » SR-22 from its intersection with South St (SR-114) and I-95
- » Payne Rd/Maine Mall Rd between SR-114 and Western Ave
- » The area of overlap between SR-114 and SR-22

Intersection movement crashes were the most common crash type, representing 36 percent of all motorcyclist crashes and 63 percent of fatal and serious injury crashes. Although run-off-road crashes accounted for only 12 percent of all motorcyclist crashes, they had the highest percentage resulting in a fatality or serious injury (57 percent).

**FIGURE 13 MOTORCYCLIST CRASHES (2016 – 2025)**



Source: MaineDOT, 2026.

To better understand the potential factors associated with motorcyclist crash frequency and severity, the additional analyses of roadway and behavioral characteristics were performed, and results are summarized below.

- » **Posted Speed Limit:** Excluding the 8 crashes with unknown speed limits, 42 percent of fatal and serious injury crashes involving motorcyclists occurred on minor arterials with posted speed limits of 40 MPH to 45 MPH, despite these facilities accounting for only 30 percent of all motorcyclist crashes. When considering the proportion of crashes resulting in fatal or serious injuries, minor arterials with a posted speed limit of 45 MPH had the highest proportion, with all crashes resulting in fatal or serious injuries, followed by major collectors with speed limits of 35 MPH.
- » **Location:** 86 percent of motorcyclist crashes occurred in suburban areas. Within suburban areas, minor arterials accounted for the largest share of crashes, while local roads were the most common roadway type in rural areas. Nearly half of all motorcyclist crashes occurred at intersections, but three-leg intersections, particularly the stop-controlled and non-controlled ones, were the most common intersection type among severe motorcyclist crashes. In addition, driveways and curved roads had the highest proportions of crashes resulting in fatal or serious injuries, suggesting these locations may be priorities for motorcycle safety improvements.



- » **Helmet Use:** In the study area, 61 percent of motorcyclist crashes involved riders wearing a helmet, 30 percent involved riders who were not wearing a helmet, and 9 percent had no recorded helmet use information. Compared to helmeted riders, crashes involving un-helmeted riders were more likely to result in fatal or serious injuries (37 percent versus 26 percent). This highlights the importance of helmet use in reducing the severity of motorcyclist crashes.

## 2.5 Key Takeaways

### KEY TAKEAWAYS

- » Each year, on average, crashes in this study area cost the region roughly \$36 million in both economic cost and loss of life. Half of this is due to fatalities and serious injuries only.
- » Since the COVID-19 pandemic, crashes per year have remained fairly constant with between 420 and 440 crashes happening each year.
- » Crash occurrence is spatially concentrated along key arterial corridors and major intersections, particularly along Payne Rd, SR-22, and SR-114 corridors, where both total crashes and serious injury crashes cluster.
- » Crash frequency is relatively consistent over time, but severity varies by season, day, and time, with severe crashes overrepresented in spring/summer months, on weekends, and during late-night/early-morning hours.
- » Crash types and contributing factors are dominated by intersection and lane departure crashes, with elevated contributions from speeding, winter conditions, distracted driving, and other driver behaviors, many of which exceed statewide averages and point to systemic safety risks.
- » Severe crash outcomes disproportionately involve vulnerable users and less-protected modes such as pedestrians, bicyclists, and motorcyclists. This suggests that, while most of this area is classified as suburban or rural, multimodal considerations will still need to be evaluated.



### 3. CRASH HOTSPOTS

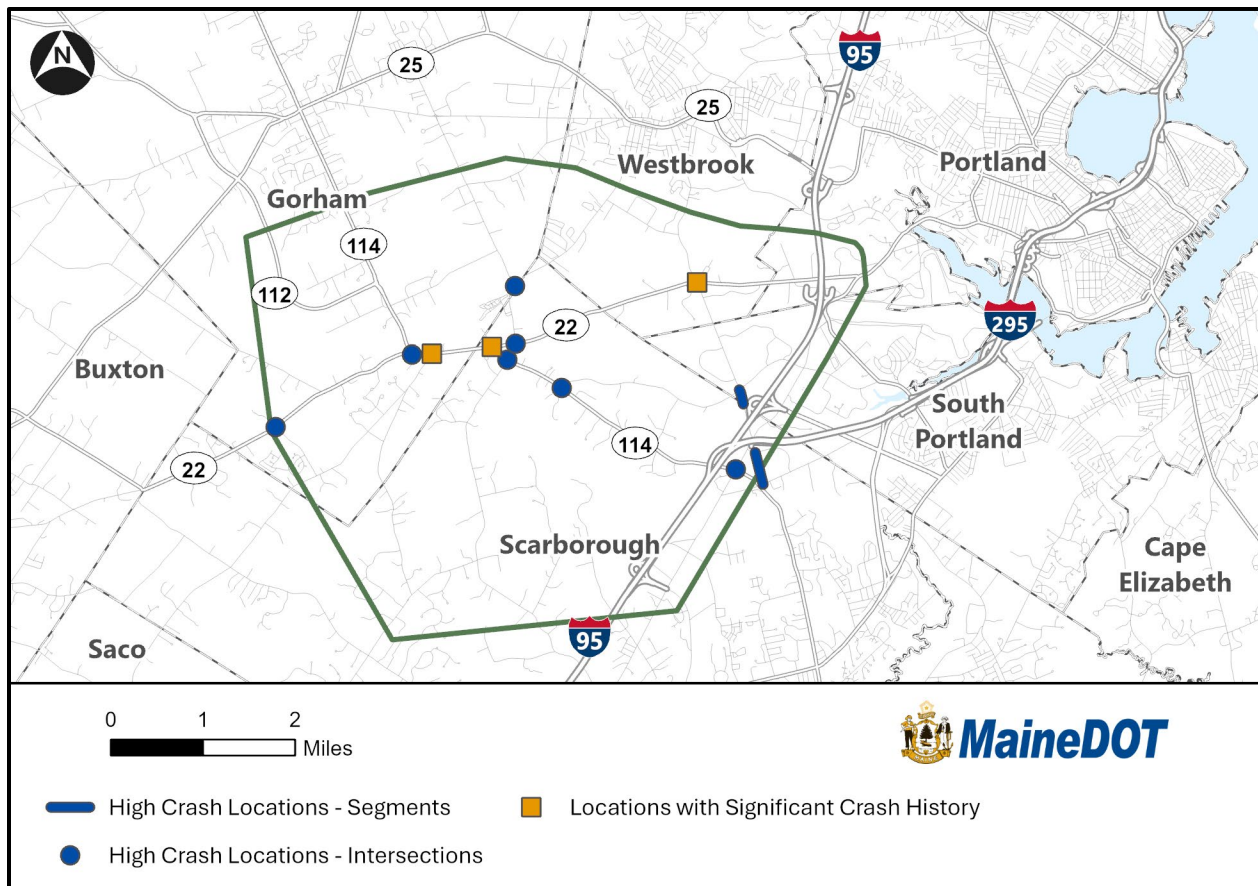
Building on the safety trends identified in Section 2, individual locations with significant crash history in the study area were examined to better understand existing safety concerns. These will inform future potential safety improvements and countermeasures.

These locations include all the High Crash Locations (HCLs) identified through the MaineDOT Public Map Viewer within the study area, including seven intersections and two segments. These HCLs are locations that have experienced eight or more crashes during the three-year period from 2022 to 2024 and have crash frequencies above the statewide average for similar facility types. These locations are seen in Figure 14 in blue and include:

- » Intersection of County Rd (SR-22) & Hodgdon Rd
- » Intersection of County Rd (SR-22) & Blue Ledge Rd/South St (SR-114)
- » Intersection of Gorham Rd (SR-114) & Beech Ridge Rd/Saco St
- » Intersection of County Rd (SR-22) & Saco St
- » Intersection of Saco St & Brackett Rd
- » Intersection of Gorham Rd (SR-114) & Running Hill Rd
- » Intersection of Gorham Rd (SR-114) & Payne Rd
- » Cummings Rd between Running Hill Rd and Scarborough Town Boundary
- » Spring St between Gallery Blvd and Mussey Rd

In addition, three additional intersections were added to this analysis (seen in yellow in Figure 14), that were not originally identified as HCLs. These locations come from a review of Maine-specific HSM analysis outputs, which show locations in which there are “excess expected” crashes compared to predicted crash frequencies for that site type. The three locations are:

- » County Rd (SR-22) & Spring St
- » County Rd (SR-22/SR-114) & Burnham Rd.
- » County Rd (SR-22) & Gorham Rd (SR-114)/Lady Slipper Way

**FIGURE 14 CRASH HOTSPOTS**


Source: MaineDOT, 2026.

In the next set of pages, each of these 12 locations has a three-page profile. The first page contains aerial imagery of the location, a description of current infrastructure conditions and any recent updates to them, and narrative describing any fatal, incapacitating, bicycle, or pedestrian crash at this location. The second page contains a number of tables that show:

- » Crash counts per year and their severity
- » The cardinal directions that vehicles involved in crashes are travelling at each location to give an idea of which approaches or directions experience the most crashes
- » A comprehensive list of contributing circumstances and factors, as noted in the crash reports, for each location. This list was sourced from roadway condition, environmental condition, driver actions, non-motorist actions, noted contributing factors, SHSP definitions, and other variables in the crash data. This is compared to the relative frequency in the entire state of Maine to give context as to whether each factor is more or less than could be expected. Anything denoted with an asterisk has a higher frequency than the entire state. The full list of 26 factors that were considered for this table is available in Appendix A.

The final page contains the crash diagram sourced from the most recent HCL report and a summary of crash patterns from that diagram. These diagrams are only available for three-year spans, so they do not cover all the crashes over the 10-year period analyzed.



## County Rd (SR-22) & Hodgdon Rd



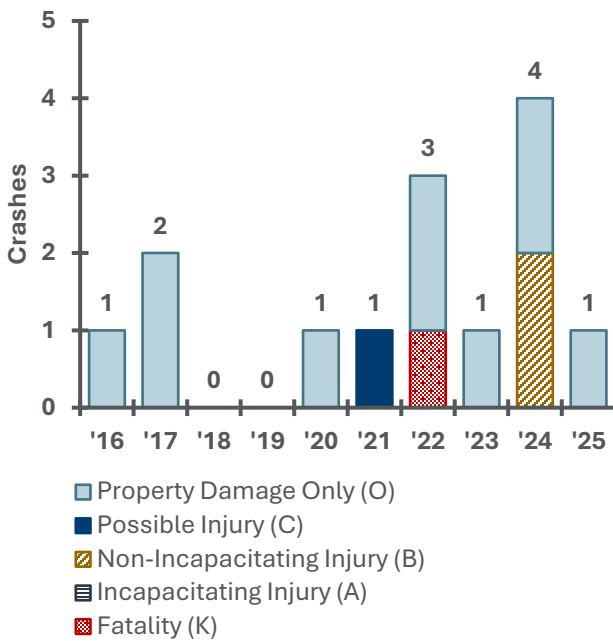
Source: Google Earth, 2026.

The intersection of County Rd (SR-22) and Hodgdon Rd is located in the Town of Gorham. SR-22, a two-lane road, has a functional classification of major collector at this location, an AADT of approximately 10,000 vehicles per day, and a speed limit of 45 mph. Hodgdon Rd is two lanes as well, although the lanes are not marked. It has an AADT of approximately 400 vehicles per day and a speed limit of 35 mph.

This t-intersection is in a rural, predominantly residential area with a number of residences and one commercial business in the area (a total of nine driveways within 500 feet of the intersection). In late 2024 or early 2025, an island stop sign in the middle of the terminus of Hodgdon Rd was removed, the stop sign being moved to the side of the road.

There was one fatal crash at this location in 2022 where a pickup truck driver was making a left-turn from SR-22 westbound to Hodgdon Rd and collided with a motorcyclist who was traveling eastbound on SR-22. The responding officer reported that the truck driver failed to yield the right-of-way to the motorcyclist and the motorcyclist was not wearing a helmet. No other contributing circumstances were noted.

## County Rd (SR-22) & Hodgdon Rd



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 1         |
| Incapacitating Injury (A)     | 0         |
| Non-Incapacitating Injury (B) | 2         |
| Possible Injury (C)           | 1         |
| Property Damage Only (O)      | 10        |
| <b>Total</b>                  | <b>14</b> |

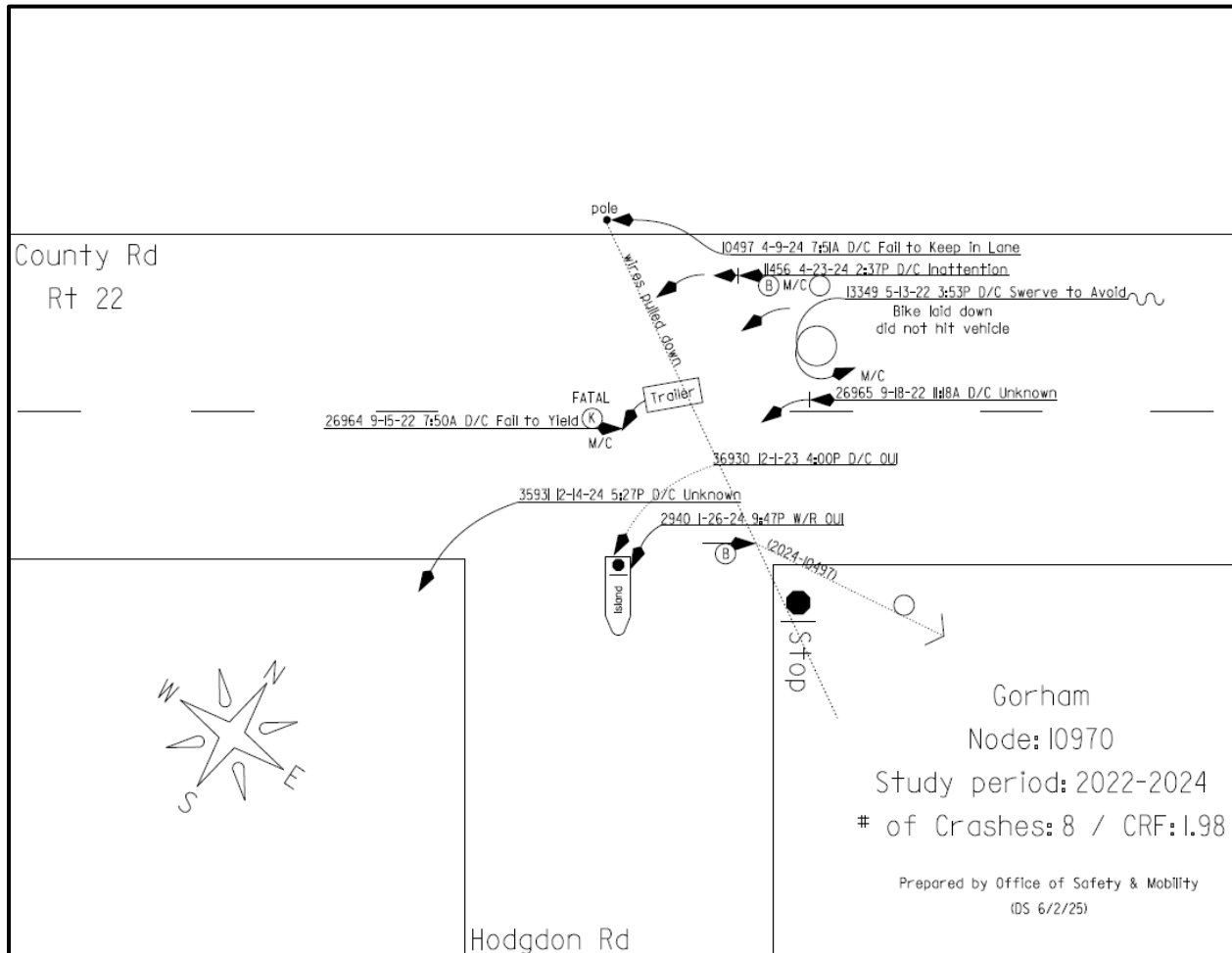
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 0                     |
| Eastbound           | 5                     |
| Southbound          | 1                     |
| Westbound           | 15                    |
| Other               | 0                     |

| Contributing Factors  | # | % of Crashes at this Location | % of Crashes in All of Maine |
|-----------------------|---|-------------------------------|------------------------------|
| Lane Departure        | 5 | 35.7%*                        | 14.9%                        |
| Younger Drivers       | 4 | 28.6%                         | 29.0%                        |
| Mature Drivers        | 3 | 21.4%*                        | 18.9%                        |
| Motorcyclists         | 3 | 21.4%*                        | 1.2%                         |
| Rear-Ends             | 3 | 21.4%                         | 51.7%                        |
| Failure to Yield ROW  | 2 | 14.3%                         | 20.7%                        |
| Following Too Closely | 2 | 14.3%                         | 22.4%                        |
| Impaired Driving      | 2 | 14.3%*                        | 3.4%                         |
| Commercial Vehicles   | 1 | 7.1%*                         | 2.3%                         |
| Dark Conditions       | 1 | 7.1%                          | 8.1%                         |
| Driveways             | 1 | 7.1%                          | 13.3%                        |
| Fatigued Driving      | 1 | 7.1%*                         | 1.2%                         |
| Large Animals         | 1 | 7.1%*                         | 5.6%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

## County Rd (SR-22) & Hodgdon Rd

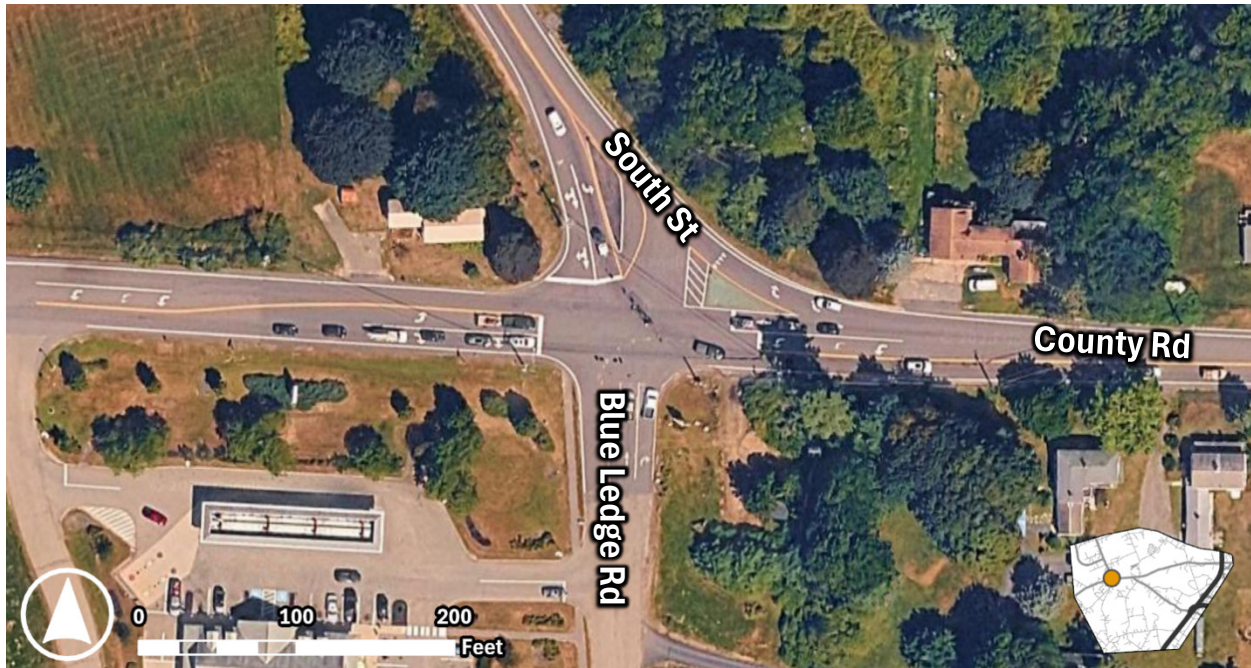
**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 8 crashes occurred at this intersection. Seven crashes involved vehicles turning left from County Rd onto Hodgdon Rd. Of these, 4 involved collisions with fixed objects, including 2 OUI-related crashes in which the vehicle struck the median island, and one crash with a reported contributing factor of failure to keep in lane. Two rear-end crashes also occurred on County Rd, one of which was attributed to driver inattention.



## County Rd (SR-22) & Blue Ledge Rd/South St (SR-114)



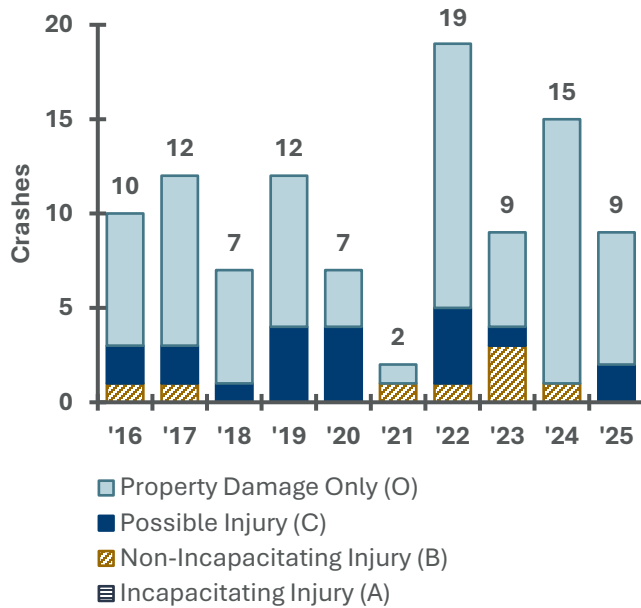
Source: Google Earth, 2026.

The intersection of County Rd (SR-22) and Blue Ledge Rd / South St (SR-114) is located in the Town of Gorham. SR-22, a two-lane road, has a functional classification of major collector east of this location and minor arterial west of this location, an AADT of approximately 10,000 vehicles per day, and a speed limit of 45 mph. SR-114 is two lanes as well and has an AADT of approximately 13,000 vehicles per day and a posted speed limit of 45 mph.

The intersection is in a rural residential area with a moderate number of homes and several commercial businesses along the corridors. Within 500 feet of the intersection, there are four residential driveways and three commercial driveways. The intersection is signalized and has right-turn channelization for the SR-22 westbound approach leg. All directions except the northbound Blue Ledge Rd leg have protected left-turns. Right-turns on red are permitted on all approaches. There is also a gore in the median of the southbound SR-114 leg. There is one sidewalk at the southwest corner of the intersection, but no ramps, marked crosswalks, or pedestrian signals.

There have been no fatal or incapacitating crashes at this location, but there was one crash involving a bicyclist who suffered a non-incapacitating injury. During a rainy day, the bicyclist was making a right-turn from SR-22 westbound to South St northbound while a vehicle was making a left-turn to also head northbound. The parties collided at a point past the yield sign. The bicyclist was cited for the failure to the right-of-way. No other contributing circumstances were noted.

## County Rd (SR-22) & Blue Ledge Rd/South St (SR-114)



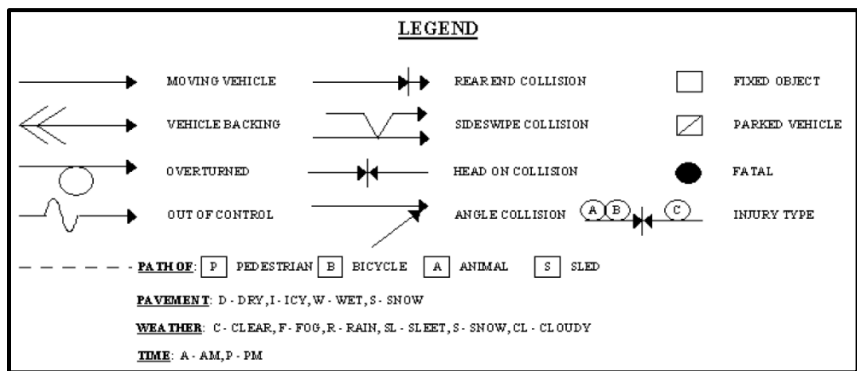
| Crash Severity                | #          |
|-------------------------------|------------|
| Fatality (K)                  | 0          |
| Incapacitating Injury (A)     | 0          |
| Non-Incapacitating Injury (B) | 8          |
| Possible Injury (C)           | 20         |
| Property Damage Only (O)      | 74         |
| <b>Total</b>                  | <b>102</b> |

| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 48                    |
| Eastbound           | 55                    |
| Southbound          | 40                    |
| Westbound           | 56                    |
| Other               | 2                     |

| Contributing Factors    | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|-------------------------|----|-------------------------------|------------------------------|
| Rear-Ends               | 63 | 61.8%*                        | 51.7%                        |
| Younger Drivers         | 41 | 40.2%*                        | 29.0%                        |
| Failure to Yield ROW    | 36 | 35.3%*                        | 20.7%                        |
| Following Too Closely   | 34 | 33.3%*                        | 22.4%                        |
| Mature Drivers          | 23 | 22.5%*                        | 18.9%                        |
| Wet or Icy Conditions   | 9  | 8.8%*                         | 7.2%                         |
| Dark Conditions         | 7  | 6.9%                          | 8.1%                         |
| Distracted Driving      | 7  | 6.9%                          | 7.7%                         |
| Speeding                | 7  | 6.9%*                         | 5.9%                         |
| Lane Departure          | 5  | 4.9%                          | 14.9%                        |
| Aggressive Driving      | 4  | 3.9%*                         | 3.8%                         |
| Impaired Driving        | 3  | 2.9%                          | 3.4%                         |
| Motorcyclists           | 3  | 2.9%*                         | 1.2%                         |
| Commercial Vehicles     | 2  | 2.0%                          | 2.3%                         |
| Not Wearing a Seat Belt | 2  | 2.0%*                         | 1.7%                         |
| Bicyclists              | 1  | 1.0%                          | 1.1%                         |
| Fatigued Driving        | 1  | 1.0%                          | 1.2%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

**Most Recent Crash Diagram** *(The crash diagram is only available for crashes from 2022 to 2024)*



**MaineDOT**



## Gorham Rd (SR-114) & Beech Ridge Rd/Saco St



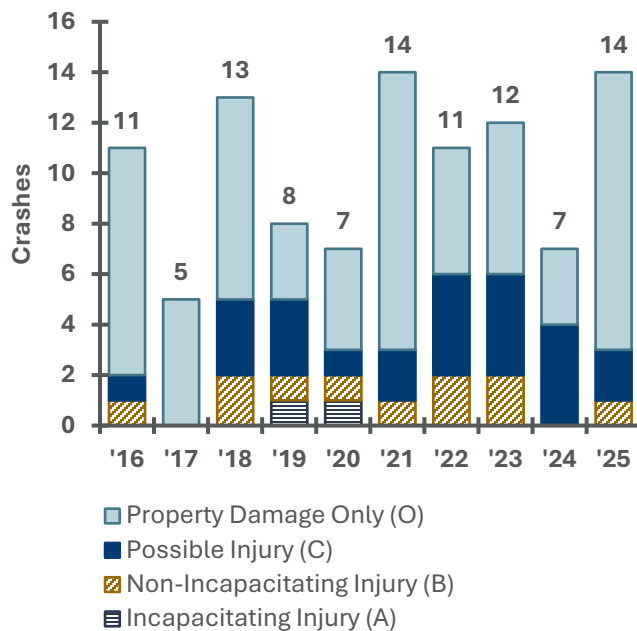
Source: Google Earth, 2026.

The intersection of Gorham Rd (SR-114) and Beech Ridge Rd / Saco St is located in the Town of Scarborough. SR-114, a two-lane road, has a functional classification of minor collector, an AADT of approximately 17,000 vehicles per day, and a speed limit of 35 mph. Both Beech Ridge Rd and Saco St are two lanes as well and have AADTs of approximately 3,500 and 6,000 vehicles per day, respectively. Beech Ridge Rd has a posted speed limit of 30 mph, while Saco St has posted speed limit of 40 mph.

The intersection is in a rural residential area with a moderate number of homes along the corridors. Within 500 feet of the intersection, there are eight residential driveways and two commercial driveways. The intersection is signalized, with permissive left-turn lanes and dedicated right-turn lanes on the Saco St and westbound SR-114 approach legs. Right-turns on red are permitted on all approaches. The Saco St configuration was recently implemented in 2025; the previous configuration consisted of only a single approach lane. There are no crosswalks, ramps, pedestrian crossings, or bike lanes at this location.

There were two incapacitating crashes at this location within the last 10 years. One was in 2019 and involved a driver travelling eastbound on Gorham Rd who rear-ended another vehicle stopped in traffic. Another was in 2020 and involved a driver travelled westbound on Gorham Rd and attempted to make a left-turn onto Beech Ridge Rd, colliding with a vehicle traveling straight, eastbound on Gorham Rd. The driver turning left was cited as failing to yield and for “making an improper turn”.

## Gorham Rd (SR-114) & Beech Ridge Rd/Saco St



| Crash Severity                | #          |
|-------------------------------|------------|
| Fatality (K)                  | 0          |
| Incapacitating Injury (A)     | 2          |
| Non-Incapacitating Injury (B) | 11         |
| Possible Injury (C)           | 24         |
| Property Damage Only (O)      | 65         |
| <b>Total</b>                  | <b>102</b> |

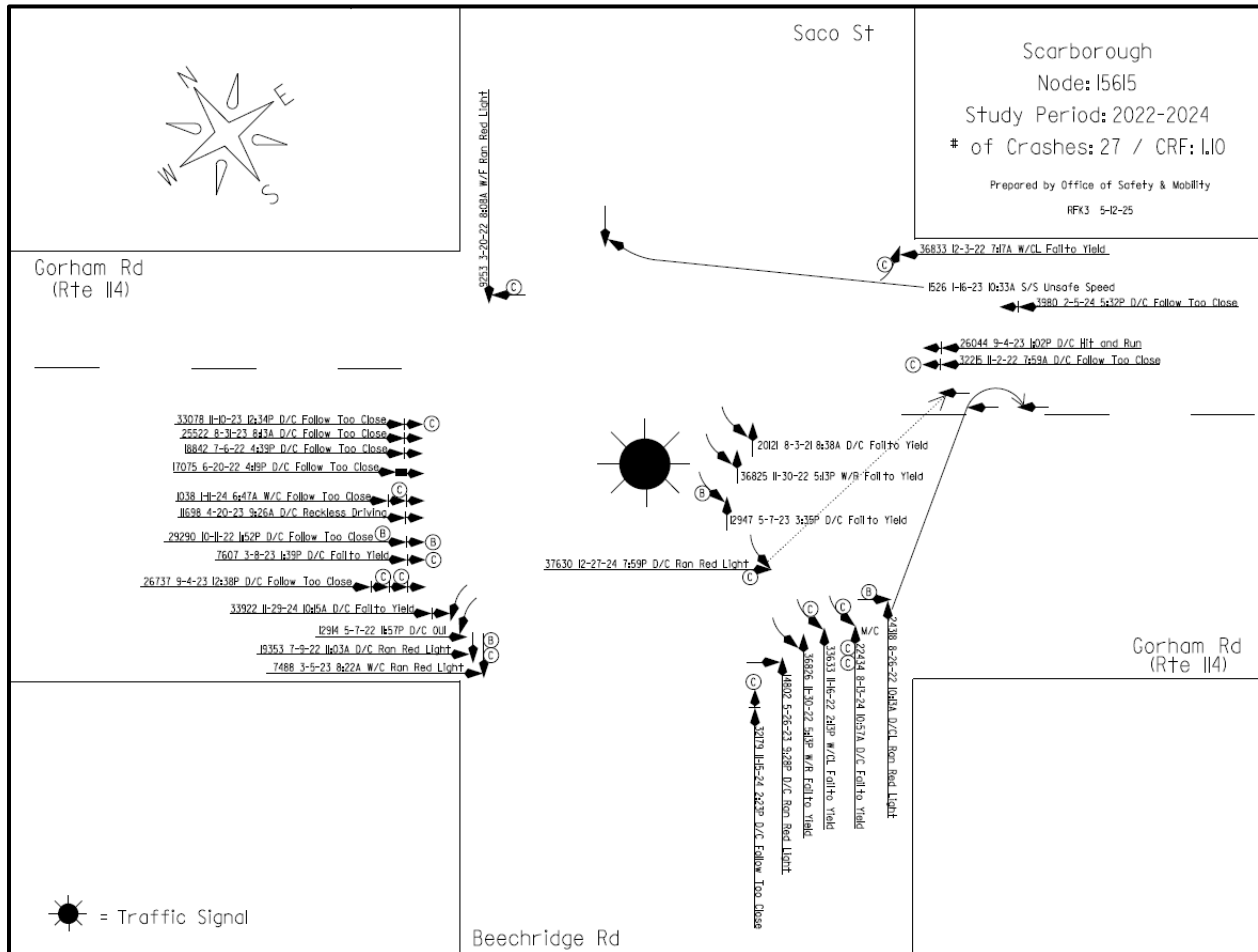
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 42                    |
| Eastbound           | 79                    |
| Southbound          | 38                    |
| Westbound           | 52                    |
| Other               | 1                     |

| Contributing Factors       | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|----------------------------|----|-------------------------------|------------------------------|
| Rear-Ends                  | 58 | 56.9%*                        | 51.7%                        |
| Younger Drivers            | 49 | 48.0%*                        | 29.0%                        |
| Following Too Closely      | 44 | 43.1%*                        | 22.4%                        |
| Failure to Yield ROW       | 28 | 27.5%*                        | 20.7%                        |
| Mature Drivers             | 20 | 19.6%*                        | 18.9%                        |
| Ran Red Light or Stop Sign | 19 | 18.6%*                        | 3.3%                         |
| Distracted Driving         | 13 | 12.7%*                        | 7.7%                         |
| Dark Conditions            | 6  | 5.9%                          | 8.1%                         |
| Commercial Vehicles        | 5  | 4.9%*                         | 2.3%                         |
| Lane Departure             | 4  | 3.9%                          | 14.9%                        |
| Speeding                   | 4  | 3.9%                          | 5.9%                         |
| Wet or Icy Conditions      | 4  | 3.9%                          | 7.2%                         |
| Aggressive Driving         | 3  | 2.9%                          | 3.8%                         |
| Fatigued Driving           | 3  | 2.9%*                         | 1.2%                         |
| Impaired Driving           | 3  | 2.9%                          | 3.4%                         |
| Improper Passing           | 2  | 2.0%                          | 2.4%                         |
| Motorcyclists              | 2  | 2.0%*                         | 1.2%                         |
| Work Zones                 | 1  | 1.0%                          | 1.5%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

# Gorham Rd (SR-114) & Beech Ridge Rd/Saco St

**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 27 crashes occurred at this intersection. The predominant crash types were rear-end and left-turn crashes. Rear-end crashes were concentrated on Gorham Rd, with 10 on the eastbound approach and 2 on the westbound approach, most commonly attributed to following too closely. Of the 10 left-turn crashes, 6 involved vehicles turning from Saco St onto Gorham Rd, all with reported contributing factors of failure to yield. In addition, 5 right-angle crashes involved through movements on Gorham Rd, where the reported contributing factor was running red lights.



## County Rd (SR-22) & Saco St



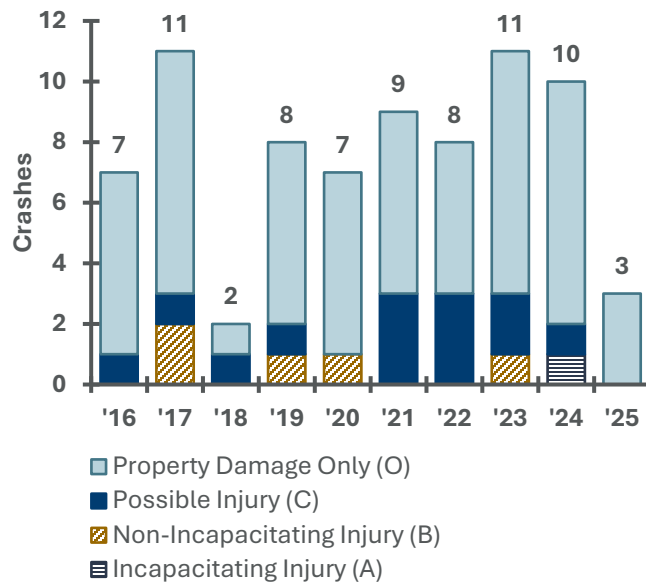
Source: Google Earth, 2026.

The intersection of County Rd (SR-22) and Saco St is located in the Town of Scarborough. SR-22 is a two-lane minor arterial road to the east of the intersection with three lanes on the west side of the intersection. On the west side, the middle lane is a two-way left-hand turn lane that transitions into a left-hand turn lane. At this location, SR-22 experiences approximately 9,000 vehicles per day and has a speed limit of 35 mph. Saco St is similar in that, heading southbound, it contains three lanes with a left-hand turn lane while the northbound approach only has two lanes. Saco St is a major collector, experiences just over 9,000 vehicles per day, and has a slightly higher speed limit of 40 mph.

This specific intersection is in a commercial area and is controlled by a traffic signal, although none of the left-turning movements are protected. Right-turns on red are permitted on all approaches. There are 20 driveways within 500 feet of the intersection. The northbound approach of Saco St has a curve that ends 150 feet before the signal's stop bar. There is no pedestrian or bicyclist infrastructure at this location, including any dedicated signals, sidewalks, ramps, or bike lanes.

There was one incapacitating crash at this intersection that occurred in 2024. A motorcyclist was travelling westbound on County Rd, attempting to make a left-turn on to Saco St southbound. They collided with a vehicle travelling straight through the intersection, heading eastbound. The motorcyclist experienced the incapacitating injury and was cited for a failure to yield the right-of-way. This collision occurred during nighttime hours (9:30pm) and the road was not illuminated at the time.

## County Rd (SR-22) & Saco St



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 0         |
| Incapacitating Injury (A)     | 1         |
| Non-Incapacitating Injury (B) | 5         |
| Possible Injury (C)           | 13        |
| Property Damage Only (O)      | 57        |
| <b>Total</b>                  | <b>76</b> |

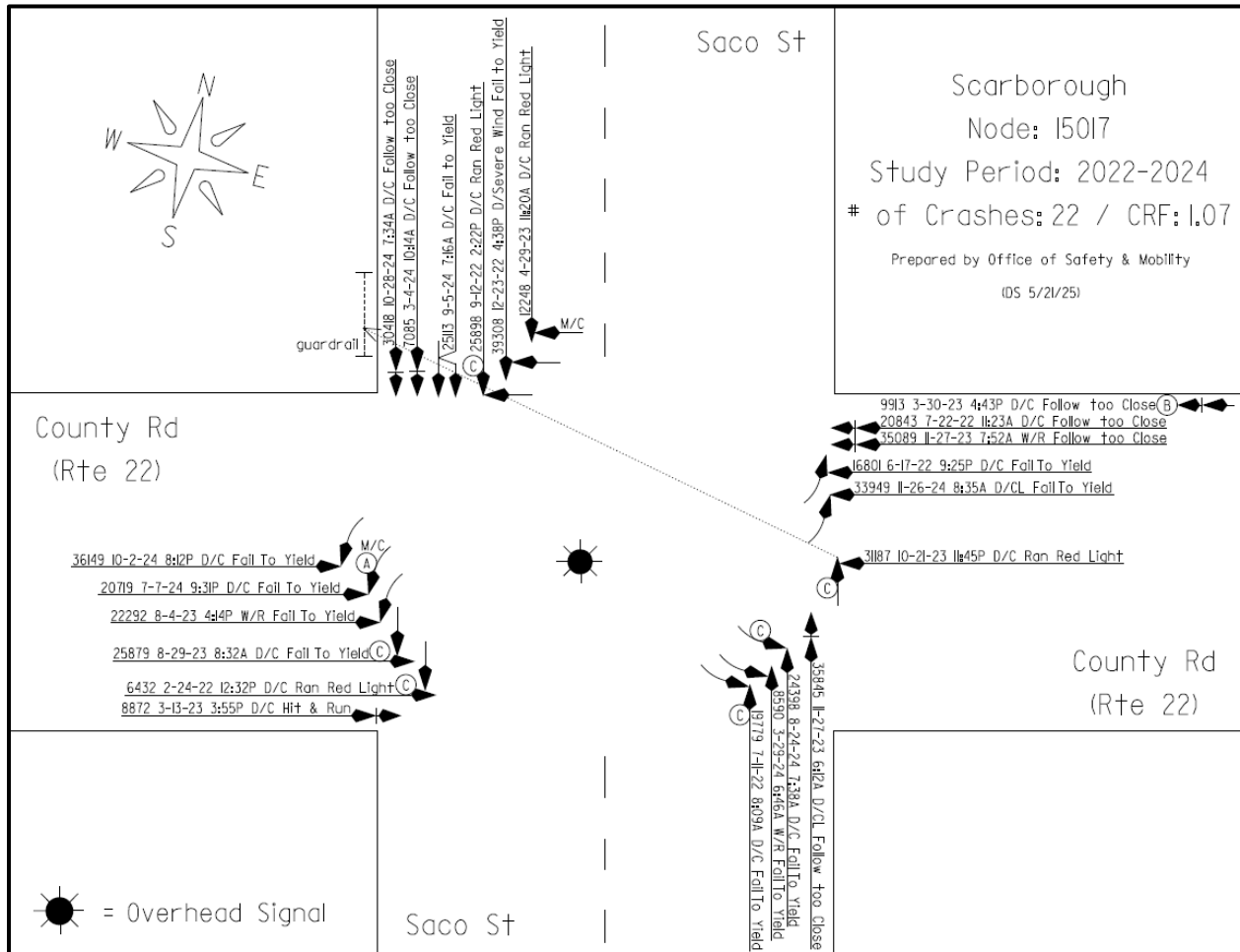
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 33                    |
| Eastbound           | 35                    |
| Southbound          | 45                    |
| Westbound           | 33                    |
| Other               | 0                     |

| Contributing Factors       | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|----------------------------|----|-------------------------------|------------------------------|
| Failure to Yield ROW       | 39 | 51.3%*                        | 20.7%                        |
| Rear-Ends                  | 31 | 40.8%                         | 51.7%                        |
| Younger Drivers            | 28 | 36.8%*                        | 29.0%                        |
| Mature Drivers             | 16 | 21.1%                         | 18.9%                        |
| Driveways                  | 14 | 18.4%*                        | 13.3%                        |
| Following Too Closely      | 14 | 18.4%                         | 22.4%                        |
| Ran Red Light or Stop Sign | 7  | 9.2%*                         | 3.3%                         |
| Commercial Vehicles        | 6  | 7.9%                          | 2.3%                         |
| Aggressive Driving         | 4  | 5.3%*                         | 3.8%                         |
| Lane Departure             | 4  | 5.3%                          | 14.9%                        |
| Improper Passing           | 3  | 3.9%*                         | 2.4%                         |
| Motorcyclists              | 3  | 3.9%*                         | 1.2%                         |
| Not Wearing a Seat Belt    | 3  | 3.9%*                         | 1.7%                         |
| Dark Conditions            | 2  | 2.6%                          | 8.1%                         |
| Distracted Driving         | 2  | 2.6%                          | 7.7%                         |
| Fatigued Driving           | 1  | 1.3%*                         | 1.2%                         |
| Ruts, Holes, or Bumps      | 1  | 1.3%*                         | 0.1%                         |
| Speeding                   | 1  | 1.3%                          | 5.9%                         |
| Wet or Icy Conditions      | 1  | 1.3%                          | 7.2%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

## County Rd (SR-22) & Saco St

**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 22 crashes occurred at this intersection. Left-turn crashes were the predominant crash type, with 3 involving vehicles turning from County Rd onto southbound Saco St, 3 turning from Saco St onto eastbound County Rd, and 2 turning from County Rd onto northbound Saco St. All left-turn crashes were attributed to failure to yield. Right-angle crashes were the second most common crash type and were primarily attributed to failure to yield or running red lights. Six rear-end crashes also occurred during the analysis period and were relatively evenly distributed among the four approaches.



## Saco St & Brackett Rd



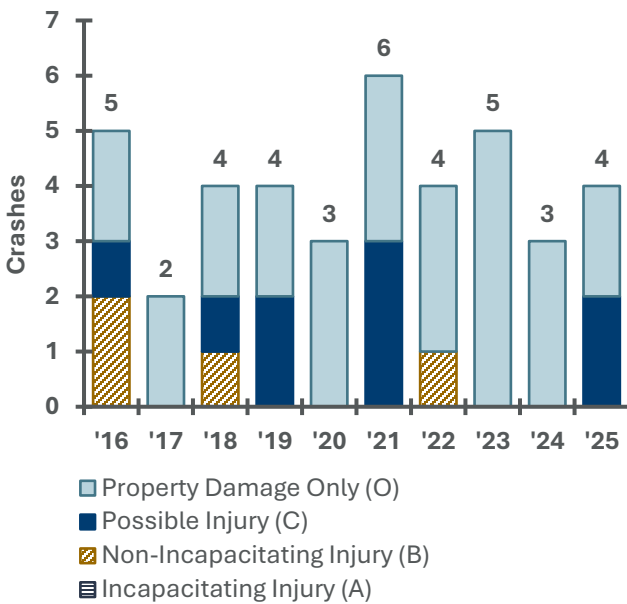
Source: Google Earth, 2026.

The intersection of Saco St and Brackett Rd is located in the Town of Gorham. Saco St northbound is a three-lane road at this intersection with a left-hand turn lane on to Brackett Rd while Brackett Rd also has three lanes with separate approaches for left- and right-hand turns on to Saco St. Both roads are considered major collectors and have AADTs of just over 7,000 vehicles per day. Saco St has a 45 mph speed limit while Brackett Rd has a 40 mph speed limit.

The Brackett Rd approach is controlled by a stop sign. Within 500 feet of the intersection, Brackett Rd has two residential driveways while Saco St has none. There are two horizontal curves on Saco St, roughly 400 feet on either side of the intersection. There is no pedestrian or bicyclist infrastructure at this location.

In the past 10 years, there have been no non-motorist crashes at this location, nor any fatal or incapacitating crashes.

## Saco St & Brackett Rd



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 0         |
| Incapacitating Injury (A)     | 1         |
| Non-Incapacitating Injury (B) | 5         |
| Possible Injury (C)           | 13        |
| Property Damage Only (O)      | 57        |
| <b>Total</b>                  | <b>76</b> |

| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 33                    |
| Eastbound           | 35                    |
| Southbound          | 45                    |
| Westbound           | 33                    |
| Other               | 0                     |

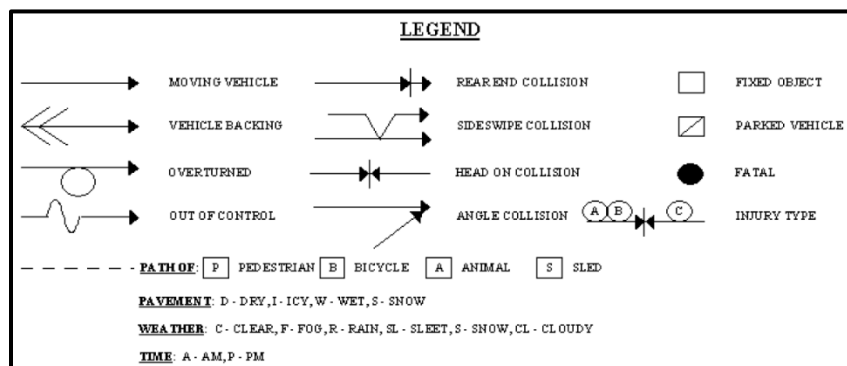
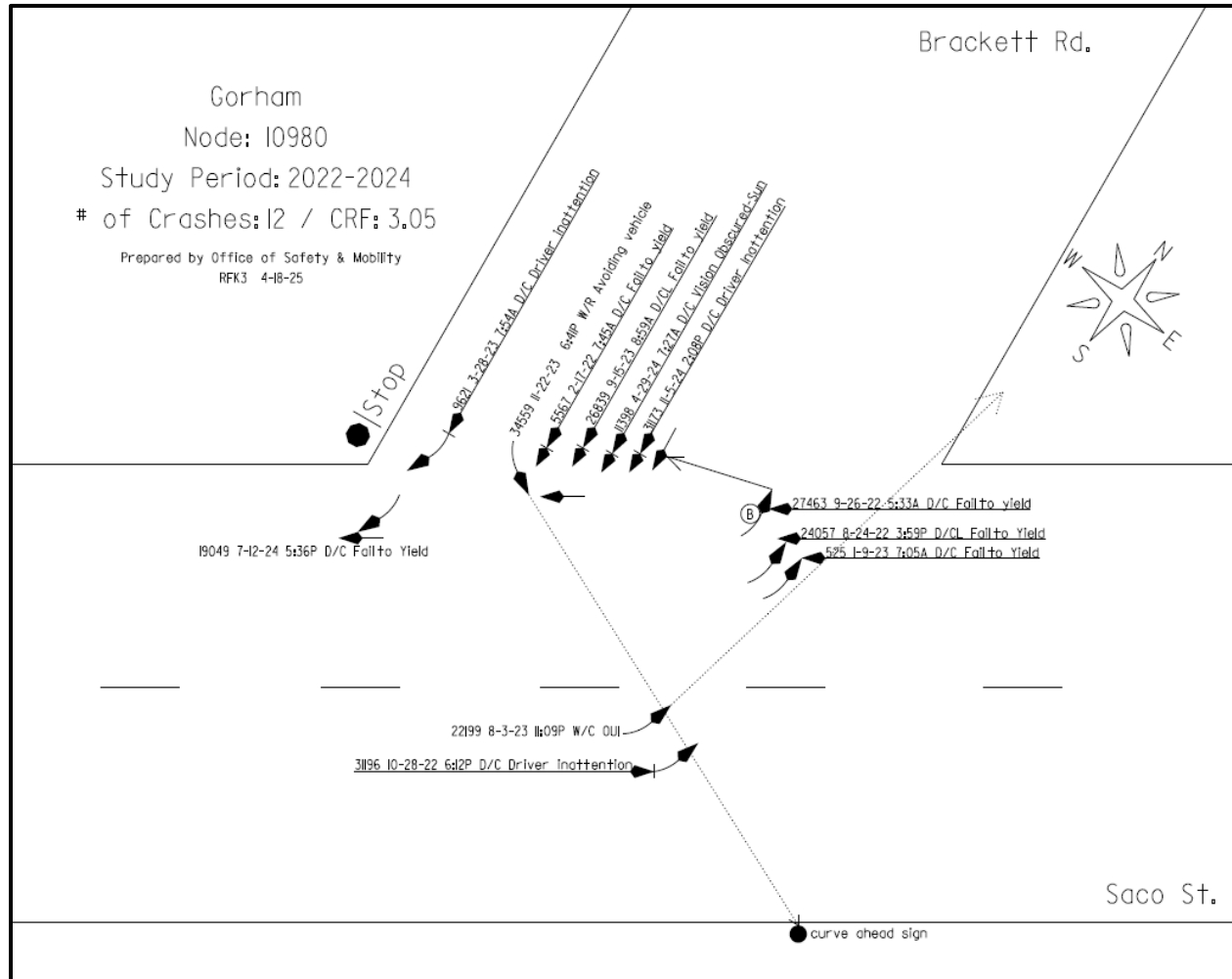
| Contributing Factors       | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|----------------------------|----|-------------------------------|------------------------------|
| Younger Drivers            | 22 | 55.0%*                        | 29.0%                        |
| Failure to Yield ROW       | 17 | 42.5%*                        | 20.7%                        |
| Rear-Ends                  | 17 | 42.5%                         | 51.7%                        |
| Following Too Closely      | 9  | 22.5%*                        | 22.4%                        |
| Lane Departure             | 7  | 17.5%*                        | 14.9%                        |
| Mature Drivers             | 7  | 17.5%                         | 18.9%                        |
| Dark Conditions            | 3  | 7.5%                          | 8.1%                         |
| Impaired Driving           | 3  | 7.5%*                         | 3.4%                         |
| Ran Red Light or Stop Sign | 3  | 7.5%*                         | 3.3%                         |
| Aggressive Driving         | 2  | 5.0%*                         | 3.8%                         |
| Distracted Driving         | 2  | 5.0%                          | 7.7%                         |
| Commercial Vehicles        | 1  | 2.5%*                         | 2.3%                         |
| Not Wearing a Seat Belt    | 1  | 2.5%*                         | 1.7%                         |
| Speeding                   | 1  | 2.5%                          | 5.9%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.



## Saco St & Brackett Rd

### Most Recent Crash Diagram (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 12 crashes occurred at this intersection. There is a pattern of rear-end crashes seen on Brackett Rd, with 5 occurring during the analysis period, all with reported contributing factors of following too closely. There were also 5 left-turn crashes involving vehicles turning from Saco St onto Brackett Rd, three of which were attributed to westbound through traffic failing to yield to turning traffic.



## Gorham Rd (SR-114) & Running Hill Rd



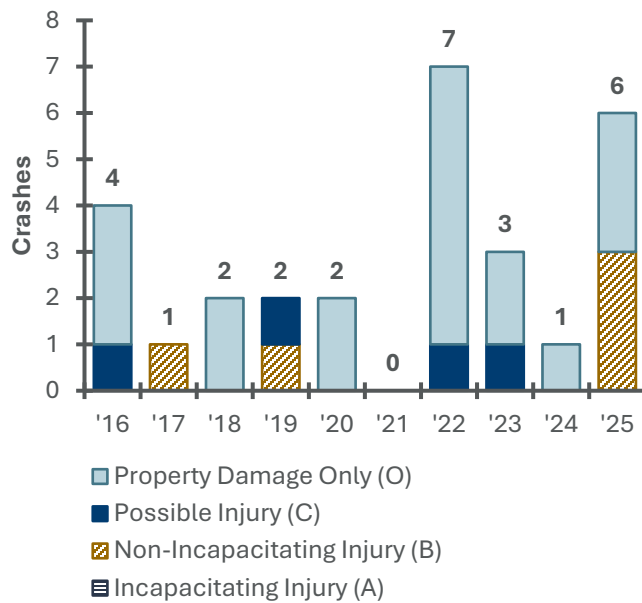
Source: Google Earth, 2026.

The intersection of Gorham Rd (SR-114) and Running Hill Rd is located in the Town of Scarborough. SR-114, a road with two through lanes with a left-turn lane on to Running Hill Rd, has a functional classification of minor arterial, an AADT of approximately 16,000 vehicles per day, and a speed limit of 35 mph. Running Hill Rd, a major collector, also has a speed limit of 35 mph and experiences approximately 6,000 vehicles per day. Larrabee Farm Rd also connects to this intersection, but it is most likely a low-travelled road (there is no traffic count information available) given that it is a dead-end road without any pavement markings that serves a total of four houses.

This intersection is surrounded by a mix of both commercial and residential land uses, with 13 driveways within 500 feet. Running Hill Rd and Larrabee Farm Rd (the minor legs) are both stop-controlled and have permanently-installed flashing red beacons installed above the intersection. SR-114 has permanently-installed flashing yellow beacons in each direction above the intersection. Additionally, the eastern side of Gorham Rd at this intersection contains a median inlaid with brick pavers. It is not striped to serve as regular left-hand turn lane nor a two-way left-hand turn lane, but tire marks on the road indicate that drivers use it as a receiving lane when making a left-turn from Running Hill Rd to eastbound Gorham Rd. There is no pedestrian or bicyclist infrastructure at this intersection.

In the past 10 years, there have been no non-motorist crashes at this location, nor any fatal or incapacitating crashes.

## Gorham Rd (SR-114) & Running Hill Rd



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 0         |
| Incapacitating Injury (A)     | 0         |
| Non-Incapacitating Injury (B) | 5         |
| Possible Injury (C)           | 4         |
| Property Damage Only (O)      | 19        |
| <b>Total</b>                  | <b>28</b> |

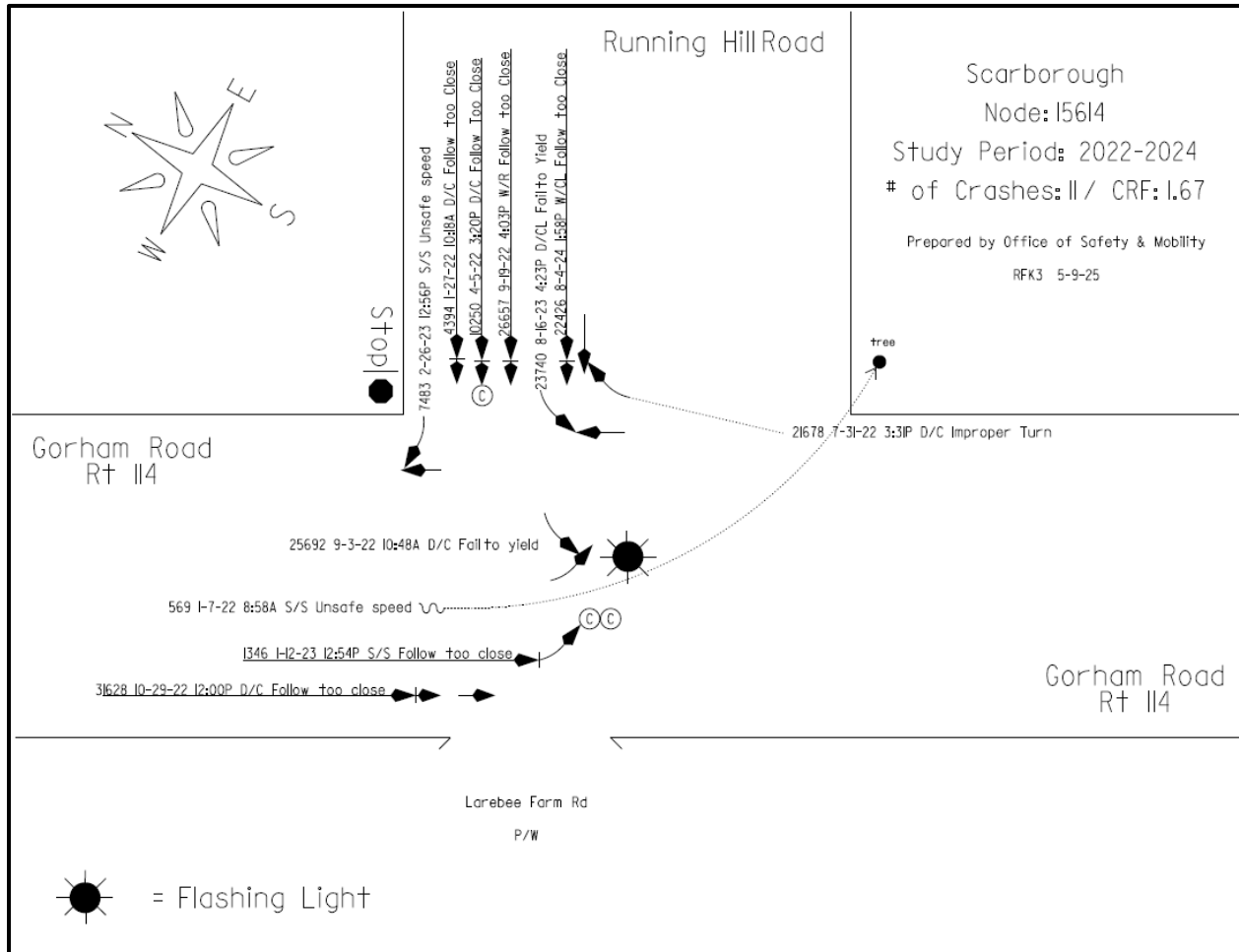
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 10                    |
| Eastbound           | 12                    |
| Southbound          | 17                    |
| Westbound           | 16                    |
| Other               | 0                     |

| Contributing Factors  | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|-----------------------|----|-------------------------------|------------------------------|
| Rear-Ends             | 16 | 57.1%*                        | 51.7%                        |
| Following Too Closely | 14 | 50.0%*                        | 22.4%                        |
| Failure to Yield ROW  | 12 | 42.9%*                        | 20.7%                        |
| Younger Drivers       | 12 | 42.9%*                        | 29.0%                        |
| Mature Drivers        | 8  | 28.6%*                        | 18.9%                        |
| Wet or Icy Conditions | 5  | 17.9%*                        | 7.2%                         |
| Distracted Driving    | 2  | 7.1%                          | 7.7%                         |
| Driveways             | 2  | 7.1%                          | 13.3%                        |
| Lane Departure        | 2  | 7.1%                          | 14.9%                        |
| Speeding              | 2  | 7.1%*                         | 5.9%                         |
| Impaired Driving      | 1  | 3.6%*                         | 3.4%                         |
| Improper Passing      | 1  | 3.6%*                         | 2.4%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

## Gorham Rd (SR-114) & Running Hill Rd

**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 11 crashes occurred at this intersection. There is a pattern of rear-end crashes at this intersection, with 4 occurring on Running Hill Rd and 2 on Gorham Rd. The reported contributing factor for these crashes was following too closely, and 2 resulted in possible injuries. Two right-turn crashes also occurred during the analysis period, one involving unsafe speed by a vehicle turning from Running Hill Rd onto Gorham Rd and the other involving an improper turn from Gorham Rd onto Running Hill Rd.

## Gorham Rd (SR-114) & Payne Rd



Source: Google Earth, 2026.

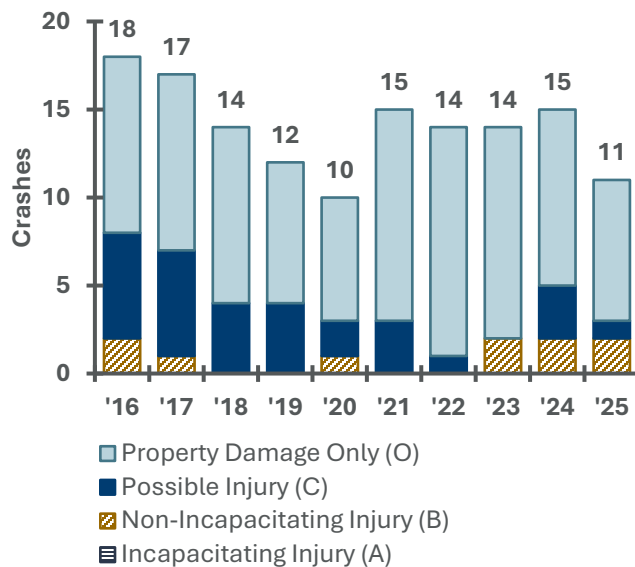
The intersection of Gorham Rd (SR-114) and Payne Rd is located in the Town of Scarborough. SR-114, which forms the westbound and eastbound approaches to the intersection, is a minor arterial with an AADT of approximately 14,000 vehicles per day and a speed limit of 35 mph. It has two dedicated left-turn lanes on the eastbound approach and one on the westbound approach. Payne Rd, classified as a minor arterial north of the intersection and major collector south of the intersection, has two through lanes and one dedicated left-turn lane at the intersection. Payne Rd has an AADT of approximately 16,000 vehicles per day and a speed limit of 35 mph.

The intersection is signalized 4-leg intersection without pedestrian crosswalks. All approaches have protected left-turns and allow right-turns on red. The southbound approach on Payne Rd also has the ability to have a protected right-turn signal phase with a dedicated right-arrow.

This intersection is surrounded by major commercial establishments, with seven large driveways serving those establishments within 500 feet of the intersection. Each approach has a raised median that separates the travel directions. The location currently does not have dotted line extensions through the intersection to guide left-turn vehicles into the receiving lanes. It also has no bike or pedestrian infrastructure.

There have been no fatal or incapacitating crashes at this location, but there was one crash involving a bicyclist who suffered a possible injury. The bicyclist was on Payne Rd, traveling south through the intersection when a vehicle traveling westbound collided with the bicyclist. The bicyclist was cited as failing to yield the right-of-way, but the driver left the scene of the crash in a hit-and-run. No other contributing circumstances were noted.

## Gorham Rd (SR-114) & Payne Rd



| Crash Severity                | #          |
|-------------------------------|------------|
| Fatality (K)                  | 0          |
| Incapacitating Injury (A)     | 0          |
| Non-Incapacitating Injury (B) | 10         |
| Possible Injury (C)           | 30         |
| Property Damage Only (O)      | 100        |
| <b>Total</b>                  | <b>140</b> |

| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 56                    |
| Eastbound           | 111                   |
| Southbound          | 67                    |
| Westbound           | 51                    |
| Other               | 1                     |

| Contributing Factors       | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|----------------------------|----|-------------------------------|------------------------------|
| Rear-Ends                  | 93 | 66.4%*                        | 51.7%                        |
| Following Too Closely      | 56 | 40.0%*                        | 22.4%                        |
| Younger Drivers            | 49 | 35.0%*                        | 29.0%                        |
| Failure to Yield ROW       | 38 | 27.1%*                        | 20.7%                        |
| Mature Drivers             | 32 | 22.9%*                        | 18.9%                        |
| Ran Red Light or Stop Sign | 16 | 11.4%*                        | 3.3%                         |
| Distracted Driving         | 12 | 8.6%*                         | 7.7%                         |
| Commercial Vehicles        | 8  | 5.7%*                         | 2.3%                         |
| Speeding                   | 7  | 5.0%                          | 5.9%                         |
| Improper Passing           | 5  | 3.6%*                         | 2.4%                         |
| Aggressive Driving         | 4  | 2.9%                          | 3.8%                         |
| Impaired Driving           | 4  | 2.9%                          | 3.4%                         |
| Wet or Icy Conditions      | 4  | 2.9%                          | 7.2%                         |
| Lane Departure             | 3  | 2.1%                          | 14.9%                        |
| Motorcyclists              | 3  | 2.1%*                         | 1.2%                         |
| Not Wearing a Seat Belt    | 3  | 2.1%*                         | 1.7%                         |
| Bicyclists                 | 1  | 0.7%                          | 1.1%                         |
| Fatigued Driving           | 1  | 0.7%                          | 1.2%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

[illegible]

**LEGEND**

|                                                                                     |                 |                                                                                     |                     |                                                                                     |                |
|-------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|----------------|
|  | MOVING VEHICLE  |  | REAR END COLLISION  |  | FIXED OBJECT   |
|  | VEHICLE BACKING |  | SIDESWIPe COLLISION |  | PARKED VEHICLE |
|  | OVERTURNED      |  | HEAD ON COLLISION   |  | FATAL          |
|  | OUT OF CONTROL  |  | ANGLE COLLISION     |  | INJURY TYPE    |

--- **PATH OF:** P PEDESTRIAN B BICYCLE A ANIMAL S SLED

**PAVEMENT:** D - DRY, I - ICY, W - WET, S - SNOW

**WEATHER:** C - CLEAR, F - FOG, R - RAIN, SL - SLEET, S - SNOW, CL - CLOUDY

**TIME:** A - AM, P - PM

Between 2022 and 2024, a total of 42 crashes occurred here. Crashes were concentrated on the southbound approach of Gorham Rd, with 10 rear-end crashes and 9 left-turn crashes. Of the rear-end crashes, 8 were attributed to following too closely and two to driver inattention. All left-turn crashes involved through traffic on Gorham Rd failing to yield to left-turning vehicles. Four rear-end crashes also occurred on the westbound approach of Payne Rd, with reported contributing factors of inattention, unsafe speed, and failure to yield. Three more rear-end crashes occurred on the eastbound approach of Payne Rd, all attributed to following too close.

## Cummings Rd between Running Hill Rd & Scarborough Town



Source: Google Earth, 2026.

The segment of Cummings Rd between Running Hill Rd and the Scarborough town boundary is located in the City of South Portland. The segment is a minor arterial with an AADT of approximately 12,000 vehicles per day and a posted speed limit of 35 mph. It is an urban two-way, two-lane undivided roadway with a paved shoulder on both sides.

The segment is adjacent to a commercial area and includes a driveway intersection that provides access to nearby establishments. The driveway approach at this intersection is stop-controlled. A sidewalk is present on the east side of the road between the Running Hill Rd intersection and the driveway intersection. At the Running Hill Rd intersection, there is a ramp and crosswalk to cross to the southwest corner, and at the driveway intersection, the sidewalk turns and follow the driveway into the shopping center; there is crosswalk and the sidewalk does not continue south. Along this sidewalk, there is a bus stop roughly 50 feet from the Running Hill Rd intersection.

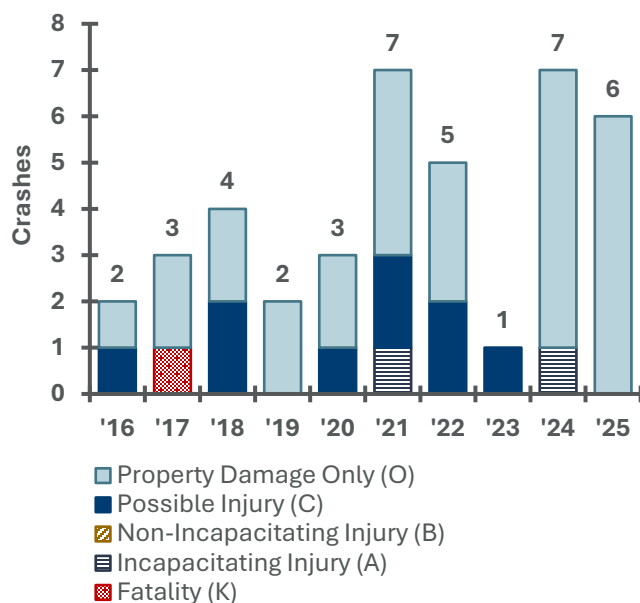
There was one fatal crash and two incapacitating crashes at this intersection in the past ten years. The 2017 fatal crash occurred 50 feet south of the driveway intersection and involved a driver travelling southbound, under in the influence, who hit and killed a pedestrian who was described as walking the wrong-way on the road or shoulder. This crash occurred at night and the intersection was not illuminated.

There was another incapacitating crash at the town boundary that involved a pedestrian in 2021. This crash again occurred at night but involved a driver traveling north, who collided with the pedestrian who was crossing the road at an area without a crosswalk. This section of the road was not illuminated and the pedestrian was cited as failing to yield the right-of-way.

There was one final incapacitating crash at this location at the intersection with the driveway. A driver was making a turn from the driveway and collided with a driver traveling northbound. There were rainy conditions at the time of the crash.

Overall, half of the crashes (regardless of severity) occur at the intersection with the driveway (20 out of 40). 12 occur south of this node, and 8 occur north of this node.

## Cummings Rd between Running Hill Rd & Scarborough Town



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 1         |
| Incapacitating Injury (A)     | 2         |
| Non-Incapacitating Injury (B) | 0         |
| Possible Injury (C)           | 9         |
| Property Damage Only (O)      | 28        |
| <b>Total</b>                  | <b>40</b> |

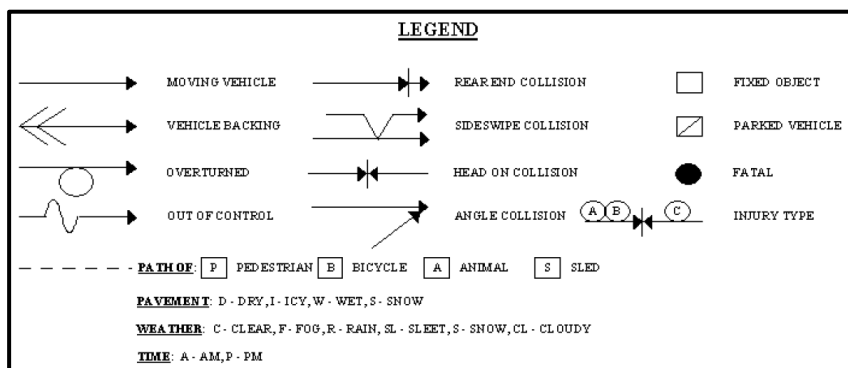
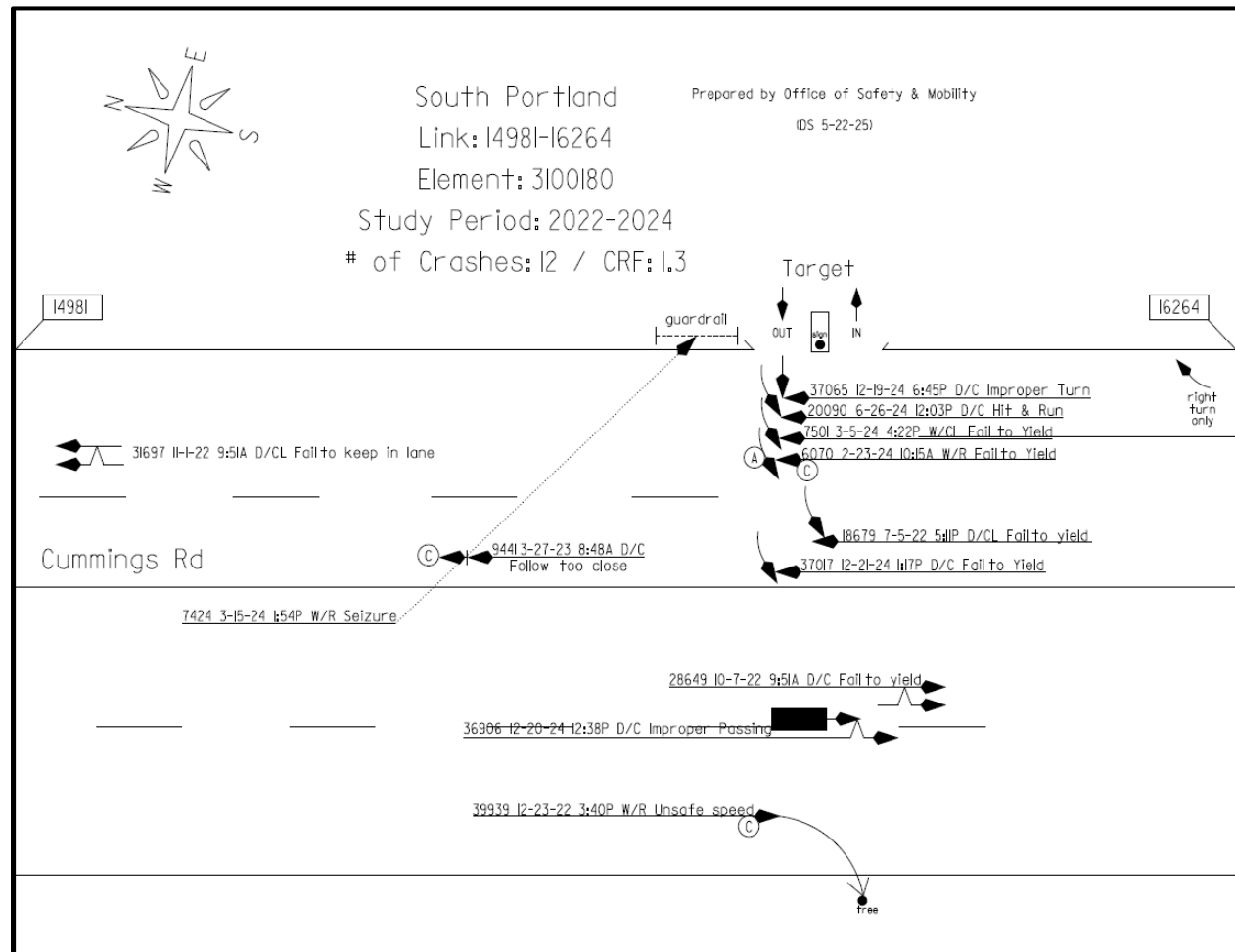
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 22                    |
| Eastbound           | 11                    |
| Southbound          | 14                    |
| Westbound           | 22                    |
| Other               | 2                     |

| Contributing Factors  | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|-----------------------|----|-------------------------------|------------------------------|
| Intersection-Related  | 20 | 50.0%*                        | 42.3%                        |
| Rear-Ends             | 16 | 40.0%                         | 51.7%                        |
| Failure to Yield ROW  | 15 | 37.5%*                        | 20.7%                        |
| Younger Drivers       | 11 | 27.5%                         | 29.0%                        |
| Lane Departure        | 8  | 20.0%*                        | 14.9%                        |
| Following Too Closely | 7  | 17.5%                         | 22.4%                        |
| Mature Drivers        | 5  | 12.5%                         | 18.9%                        |
| Dark Conditions       | 4  | 10.0%*                        | 8.1%                         |
| Distracted Driving    | 3  | 7.5%                          | 7.7%                         |
| Speeding              | 3  | 7.5%*                         | 5.9%                         |
| Impaired Driving      | 3  | 7.5%*                         | 3.4%                         |
| Wet or Icy Conditions | 3  | 7.5%*                         | 7.2%                         |
| Improper Passing      | 2  | 5.0%*                         | 2.4%                         |
| Aggressive Driving    | 2  | 5.0%*                         | 3.8%                         |
| Pedestrians           | 2  | 5.0%*                         | 1.5%                         |
| Work Zones            | 2  | 5.0%*                         | 1.5%                         |
| Commercial Vehicles   | 1  | 2.5%*                         | 2.3%                         |
| Fatigued Driving      | 1  | 2.5%*                         | 1.2%                         |
| Large Animals         | 1  | 2.5%                          | 5.6%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

# Cummings Rd between Running Hill Rd & Scarborough Town

**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 12 crashes occurred along this segment. There is a pattern of left-turn crashes concentrated near the driveway intersection on the northbound approach. Five left-turn crashes involved vehicles exiting the driveway onto Cummings Rd, most of which were attributed to northbound through traffic failing to yield to left-turning vehicles. One additional crash involved a vehicle striking a tree on the southbound approach and was attributed to unsafe speed, resulting in a possible injury.



## Spring St between Gallery Blvd and Mussey Rd



Source: Google Earth, 2026.

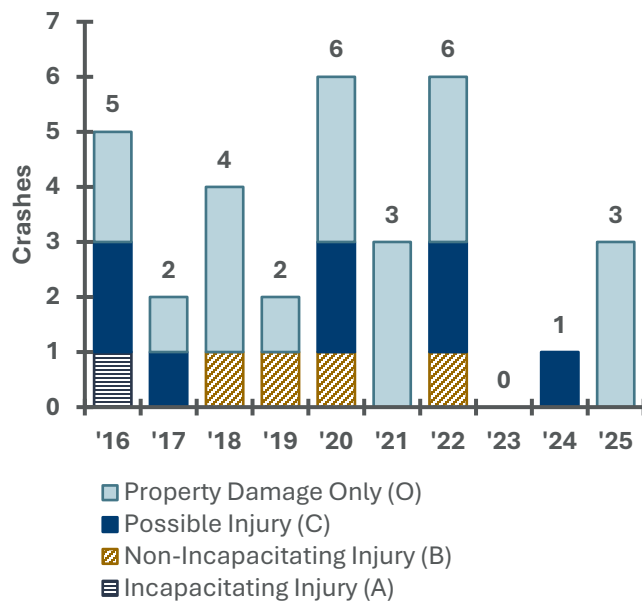
The segment of Spring St between Gallery Blvd and Mussey Rd is located in the Town of Scarborough. The segment is a major collector with an AADT of approximately 3,700 vehicles per day and a speed limit of 35 mph. It is a two-way road, predominantly undivided segment except a roughly 250-foot stretch centered on the driveway intersection connecting to the nearby Walmart or Marden's shopping center. This intersection was re-configured in 2025; previously it had left-hand turn lanes for both the north and south directions and stop signs on the minor approaches. It is now fully stop controlled in all directions, contains no turn lanes, and contains crosswalks on the north side crossing Spring St and on the east side crossing the driveway.

The segment is dominated by commercial land uses to the north and a mix of residential and commercial in the south. It includes 12 driveways providing access to these properties. Sidewalks exist on both sides of the segment between Gallery Blvd and the shopping center driveway intersection. Pedestrian warning signs are installed in advance of the crosswalks, and the newly-installed stop signs on the Spring St approaches have flashing outlines. Other driveways along the segment are uncontrolled.

There was one incapacitating crash along this segment. In 2016, a motorcyclist was traveling north at the intersection with the shopping centers. A westbound vehicle failed to yield the right-of-way while turning from a stop-controlled approach, colliding with a motorcyclist who sustained incapacitating injuries.

Overall, 26 crashes happened at this intersection with the shopping centers, 1 crash occurred north of it, and 5 occurred south.

## Spring St between Gallery Blvd and Mussey Rd



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 0         |
| Incapacitating Injury (A)     | 1         |
| Non-Incapacitating Injury (B) | 4         |
| Possible Injury (C)           | 8         |
| Property Damage Only (O)      | 19        |
| <b>Total</b>                  | <b>32</b> |

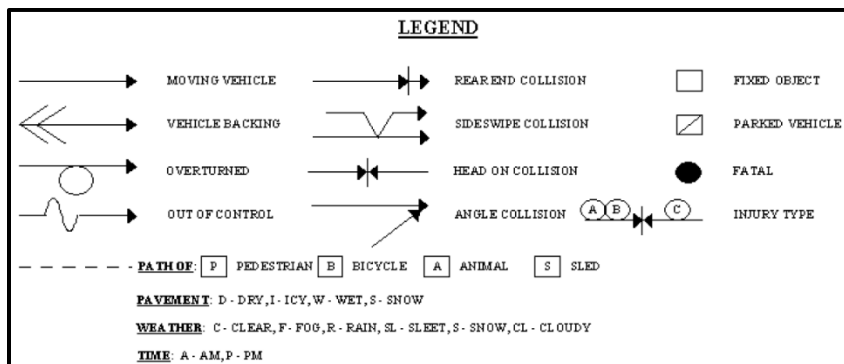
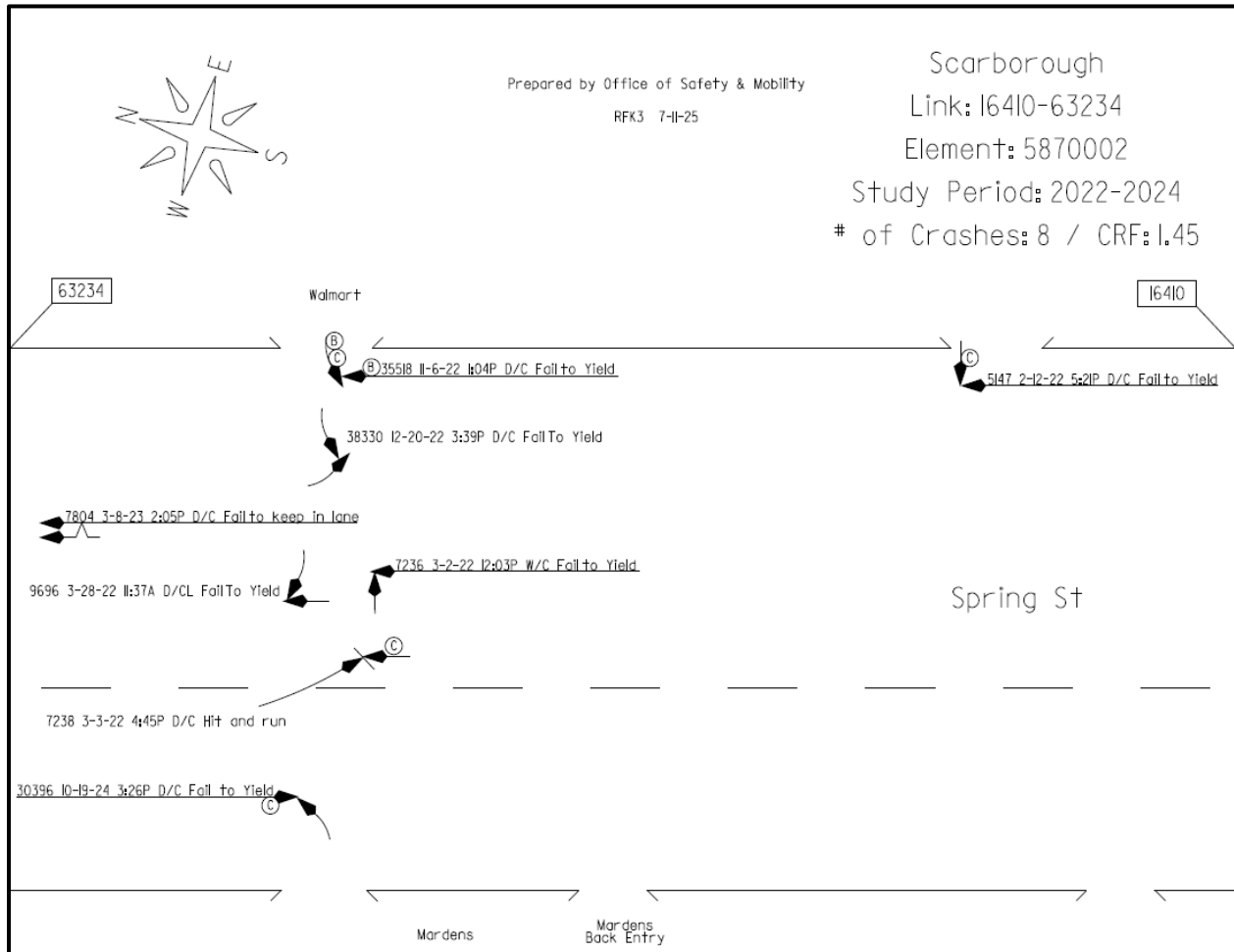
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 14                    |
| Eastbound           | 12                    |
| Southbound          | 22                    |
| Westbound           | 15                    |
| Other               | 1                     |

| Contributing Factors       | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|----------------------------|----|-------------------------------|------------------------------|
| Driveways                  | 29 | 90.6%*                        | 13.3%                        |
| Failure to Yield ROW       | 26 | 81.3%*                        | 20.7%                        |
| Mature Drivers             | 15 | 46.9%*                        | 18.9%                        |
| Younger Drivers            | 9  | 28.1%                         | 29.0%                        |
| Distracted Driving         | 3  | 9.4%*                         | 7.7%                         |
| Lane Departure             | 3  | 9.4%                          | 14.9%                        |
| Ran Red Light or Stop Sign | 3  | 9.4%*                         | 3.3%                         |
| Commercial Vehicles        | 2  | 6.3%*                         | 2.3%                         |
| Following Too Closely      | 1  | 3.1%                          | 22.4%                        |
| Motorcyclists              | 1  | 3.1%*                         | 1.2%                         |
| Rear-Ends                  | 1  | 3.1%                          | 51.7%                        |
| Speeding                   | 1  | 3.1%                          | 5.9%                         |
| Wet or Icy Conditions      | 1  | 3.1%                          | 7.2%                         |
| Work Zones                 | 1  | 3.1%*                         | 1.5%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

## Spring St between Gallery Blvd and Mussey Rd

**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 8 crashes occurred along this segment. The majority involved vehicles turning from shopping center driveways onto Spring St and colliding with through traffic on Spring St, including 3 left-turn crashes, 2 right-angle crashes, and 1 right-turn crash. All were attributed to failure to yield.

## County Rd (SR-22) & Spring St



Source: Google Earth, 2026.

The intersection of County Rd (SR-22) and Spring St is located in the City of Westbrook. County Rd (SR-22) is a minor arterial with an AADT of approximately 13,000 vehicles per day and a speed limit of 35 mph. It has two through lanes and dedicated left-turn and right-turn lanes on both approaches to the intersection. Spring St is also a minor arterial, but with a higher AADT of approximately 15,000 vehicles per day. The southbound approach of Spring St has a speed limit of 35 mph, while the northbound approach has a lower speed limit of 30 mph. Spring St has one through lane, one dedicated left-turn lane, and one shared through/right-turn lane on each approach.

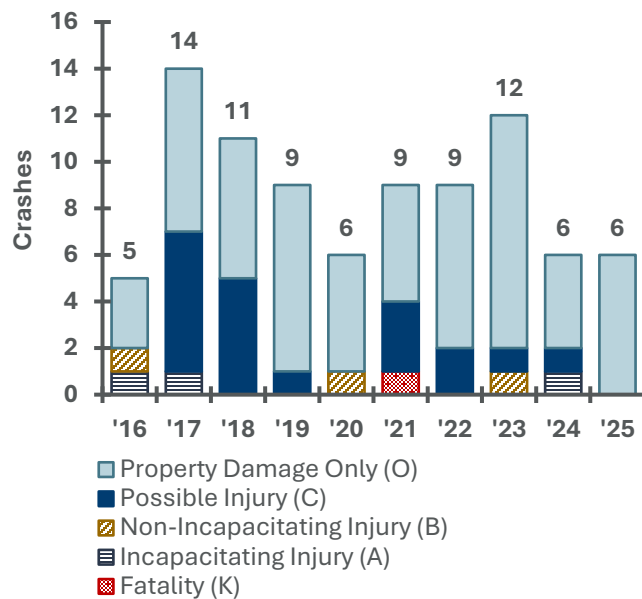
The intersection is a signalized 4-leg intersection located in a mixed commercial and residential area. All directions have protected left-turn signal phases and right-turns on red are permitted. A marked crosswalk is provided only on the northbound approach of Spring St, with pedestrian signals installed on that approach. The intersection has clear pavement markings and a dotted lane extension to guide left-turn movements on the southbound approach of Spring St. All intersection approaches have raised medians separating the directions of traffic.

There have been four fatal or incapacitating crashes at this intersection. The first, in 2016 involved a driver travelling north who was under the influence and failed to yield the right-of-way at the intersection to a driver travelling eastbound. The second, in 2017, involved a driver heading eastbound, making a left-turn on to Spring St. A driver heading north on Spring St ran the red light and collided with the first driver.

In 2021, a driver travelling southbound on Spring St collided with a driver travelling westbound. The southbound driver was cited for not yielding the right-of-way, and the passenger in their vehicle passed away. The most recent incident occurred in 2024 and involved a driver traveling westbound, running a red light, colliding with a vehicle travelling southbound, then finally colliding with a vehicle stopped on the west side of the intersection, waiting at the traffic signal. The westbound driver was cited for operating a vehicle in an erratic, reckless, careless, negligent, or aggressive manner.

There was one bicyclist-involved crash at this intersection. Limited information is available in the crash data, but two bicyclists were attempting to cross the roadway at 9:40PM, failed to yield the right-of-way, and one experienced a non-incapacitating injury. The intersection was illuminated at this time. No information is given about other vehicles involved in the crash.

## County Rd (SR-22) & Spring St



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 1         |
| Incapacitating Injury (A)     | 3         |
| Non-Incapacitating Injury (B) | 3         |
| Possible Injury (C)           | 19        |
| Property Damage Only (O)      | 61        |
| <b>Total</b>                  | <b>87</b> |

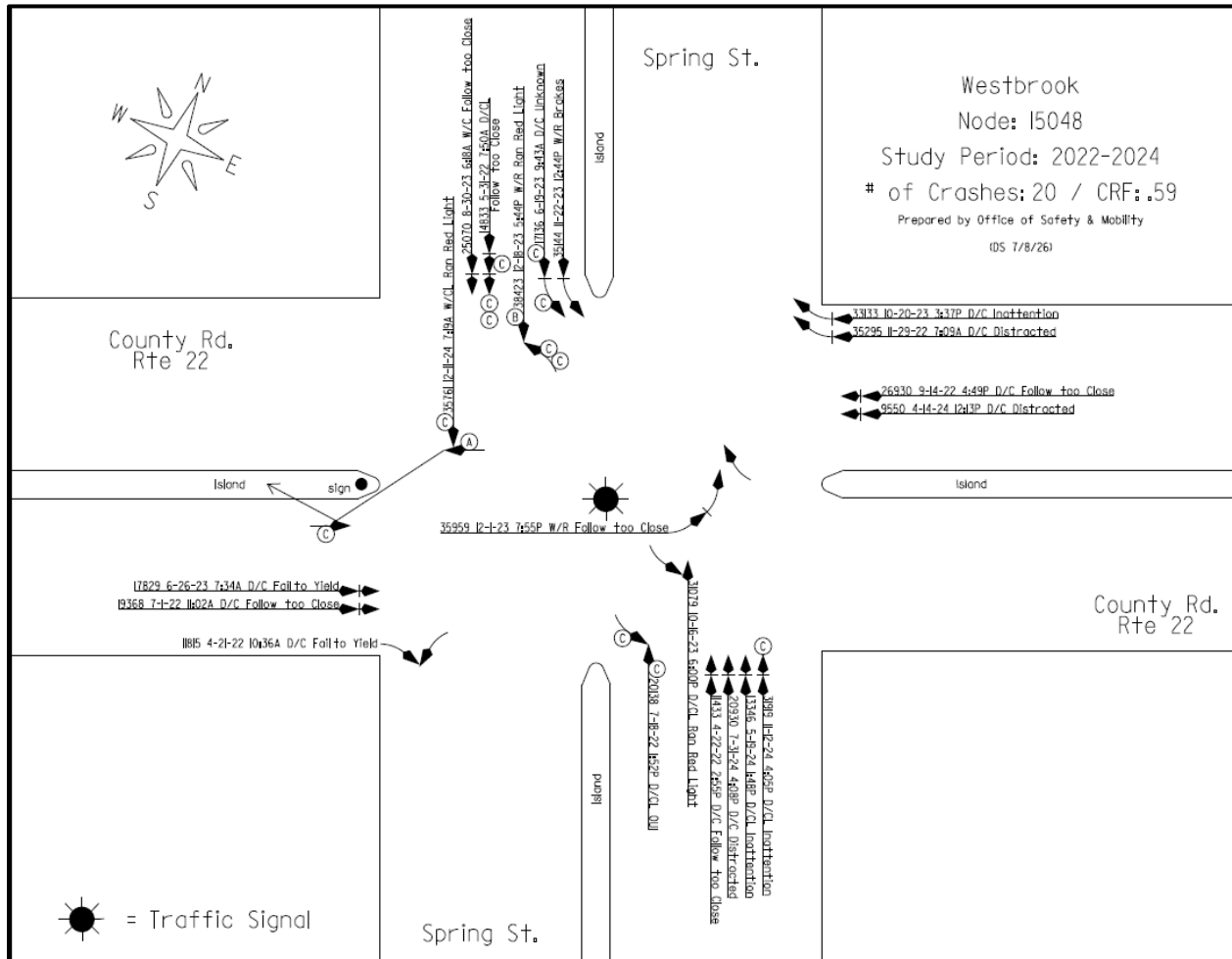
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 61                    |
| Eastbound           | 25                    |
| Southbound          | 48                    |
| Westbound           | 40                    |
| Other               | 2                     |

| Contributing Factors       | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|----------------------------|----|-------------------------------|------------------------------|
| Rear-Ends                  | 62 | 71.3%*                        | 51.7%                        |
| Following Too Closely      | 27 | 31.0%*                        | 22.4%                        |
| Younger Drivers            | 25 | 28.7%                         | 29.0%                        |
| Failure to Yield ROW       | 18 | 20.7%*                        | 20.7%                        |
| Mature Drivers             | 18 | 20.7%*                        | 18.9%                        |
| Ran Red Light or Stop Sign | 11 | 12.6%*                        | 3.3%                         |
| Commercial Vehicles        | 7  | 8.0%*                         | 2.3%                         |
| Wet or Icy Conditions      | 7  | 8.0%*                         | 7.2%                         |
| Distracted Driving         | 6  | 6.9%                          | 7.7%                         |
| Lane Departure             | 3  | 3.4%                          | 14.9%                        |
| Not Wearing a Seat Belt    | 3  | 3.4%*                         | 1.7%                         |
| Aggressive Driving         | 2  | 2.3%                          | 3.8%                         |
| Dark Conditions            | 2  | 2.3%                          | 8.1%                         |
| Impaired Driving           | 2  | 2.3%                          | 3.4%                         |
| Improper Passing           | 2  | 2.3%                          | 2.4%                         |
| Speeding                   | 2  | 2.3%                          | 5.9%                         |
| Bicyclists                 | 1  | 1.1%*                         | 1.1%                         |
| Motorcyclists              | 1  | 1.1%                          | 1.2%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

## County Rd (SR-22) & Spring St

**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 20 crashes occurred at this intersection. Rear-end crashes were the predominant crash type, with 4 on each approach of Spring St and 4 on the westbound approach and 3 on the eastbound approach of County Rd. Driver inattention and distraction were the most common reported contributing factors, particularly on the westbound County Rd and northbound Spring St approaches. Five additional crashes involved left-turn movements, two of which were running a red light and one operating under the influence.

## County Rd (SR-22/SR-114) & Burnham Rd



Source: Google Earth, 2026.

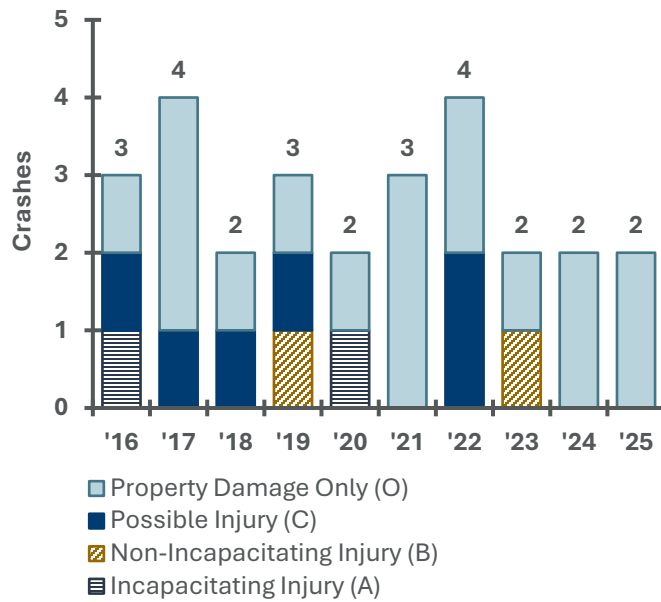
The intersection of County Rd (SR-22/SR-114) & Burnham Rd is located in the Town of Gorham. County Rd (SR-22/SR-114) is a minor arterial with an AADT of approximately 21,000 vehicles per day and a speed limit of 40 mph. At this intersection it has one through lane in each direction and a dedicated left-hand turn lane heading west to southbound Burnham Rd. Burnham Rd is a local road with 3,000 vehicles per day and a speed limit of 30 mph. Burnham Rd is one lane up until this intersection, where the last 20 feet split into a left-hand turn lane and right-hand turn lane with a raised concrete median.

The intersection is controlled by a stop sign on Burnham Rd, and there are also 12 driveway entrances and exits in the area 500 feet from this intersection. The establishment to the southeast of the intersection has two driveways onto Burnham Rd right before the intersection and two driveways on County Rd. There are other driveways on the northeastern, northwestern, and southwestern corners of the intersection as well.

There have been two incapacitating crashes occurring at this location in the past 10 years. The first occurred in 2016 and involved a driver making a left-turn from Burnham Rd to County Rd. They collided with a motorcyclist heading eastbound; the motorcyclist was ejected from their vehicle and sustained an incapacitating injury. The turning driver was cited for a failure to yield the right-of-way.

The other incapacitating crash, occurring in 2020, involved in a vehicle traveling westbound on County Rd. This was a single-vehicle crash in which the driver, cited for exceeding the posted speed limit, was attempting to pass another vehicle and ultimately exited the roadway and collided with a fixed object on the north side of the intersection.

## County Rd (SR-22/SR-114) & Burnham Rd



| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 0         |
| Incapacitating Injury (A)     | 2         |
| Non-Incapacitating Injury (B) | 2         |
| Possible Injury (C)           | 6         |
| Property Damage Only (O)      | 17        |
| <b>Total</b>                  | <b>27</b> |

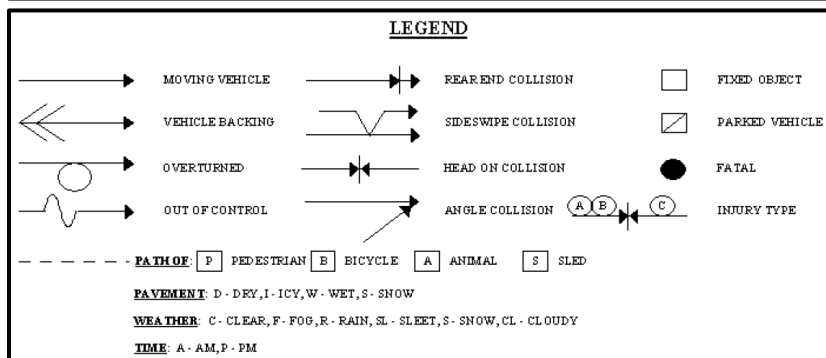
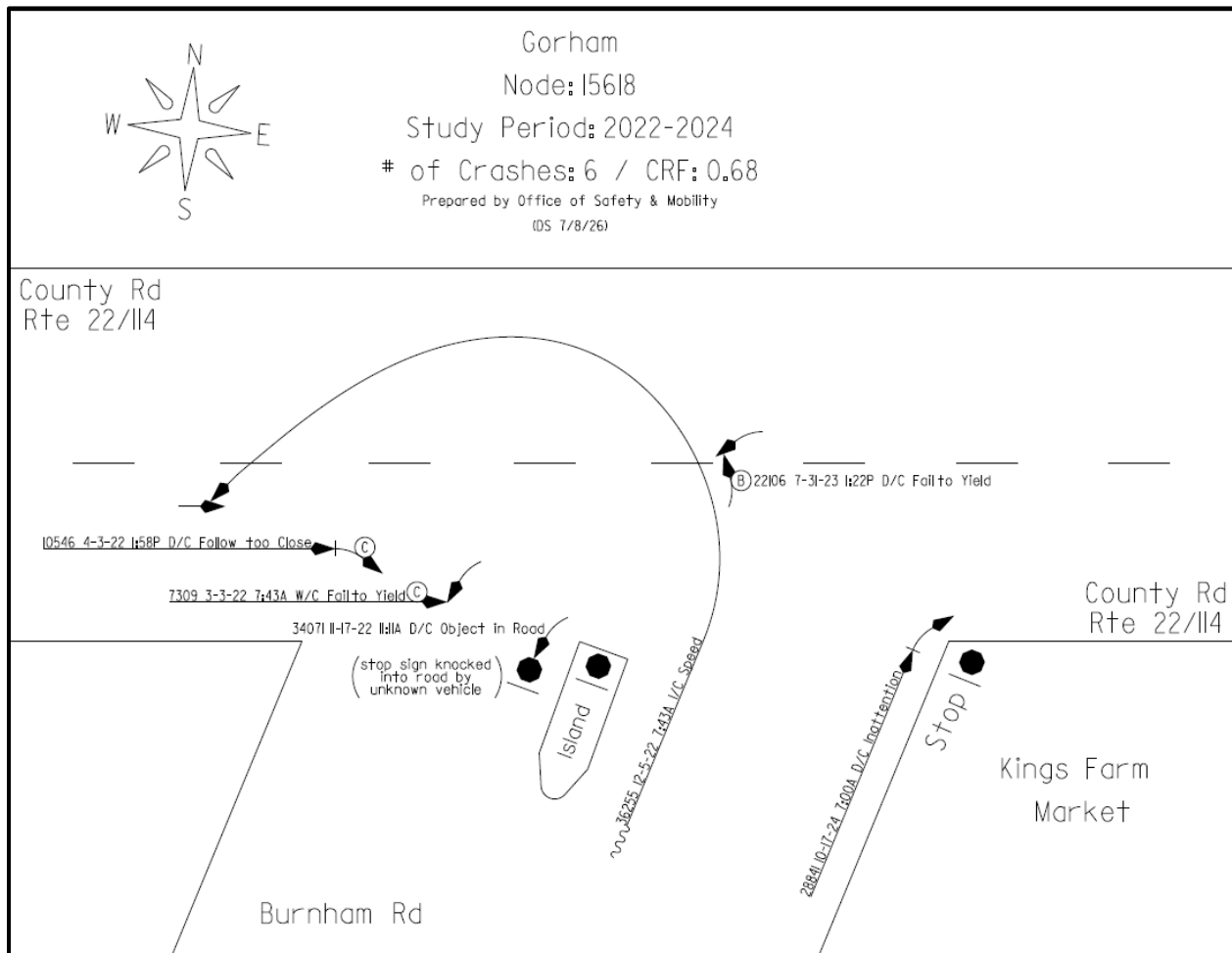
| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 8                     |
| Eastbound           | 19                    |
| Southbound          | 1                     |
| Westbound           | 26                    |
| Other               | 0                     |

| Contributing Factors    | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|-------------------------|----|-------------------------------|------------------------------|
| Rear-Ends               | 14 | 51.9%*                        | 51.7%                        |
| Failure to Yield ROW    | 10 | 37.0%*                        | 20.7%                        |
| Younger Drivers         | 10 | 37.0%*                        | 29.0%                        |
| Following Too Closely   | 9  | 33.3%*                        | 22.4%                        |
| Mature Drivers          | 6  | 22.2%*                        | 18.9%                        |
| Dark Conditions         | 3  | 11.1%*                        | 8.1%                         |
| Speeding                | 3  | 11.1%*                        | 5.9%                         |
| Improper Passing        | 2  | 7.4%*                         | 2.4%                         |
| Lane Departure          | 2  | 7.4%                          | 14.9%                        |
| Commercial Vehicles     | 1  | 3.7%*                         | 2.3%                         |
| Distracted Driving      | 1  | 3.7%                          | 7.7%                         |
| Large Animals           | 1  | 3.7%                          | 5.6%                         |
| Motorcyclists           | 1  | 3.7%*                         | 1.2%                         |
| Not Wearing a Seat Belt | 1  | 3.7%*                         | 1.7%                         |
| Wet or Icy Conditions   | 1  | 3.7%                          | 7.2%                         |
| Work Zones              | 1  | 3.7%*                         | 1.5%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

## County Rd (SR-22/SR-114) & Burnham Rd

**Most Recent Crash Diagram** (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 6 crashes occurred at this intersection. Three were left-turn crashes, including 2 involving vehicles turning from County Rd onto Burnham Rd that were attributed to failure to yield, and 1 involving a vehicle turning from Burnham Rd onto County Rd that was attributed to unsafe speed. Two rear-end crashes also occurred during the analysis period, 1 on the eastbound approach of County Rd attributed to following too closely, and 1 on the northbound approach of Burnham Rd involving driver inattention. One additional crash involved a vehicle striking a stop sign that had been knocked into the roadway by another vehicle.



## County Rd (SR-22) & Gorham Rd (SR-114)/Lady Slipper Way



Source: Google Earth, 2026.

The intersection of County Rd (SR-22), Gorham Rd (SR-114), and Lady Slipper Way is located in the Town of Scarborough. County Rd west of the intersection is a minor arterial with approximately 22,000 vehicles per day while County Rd east of the intersection experiences only 9,000 vehicles per day. Gorham Rd, another minor arterial, experiences approximately 14,000 vehicles per day and Lady Slipper Way, a dead-end street, serves six houses that use it as an access road.

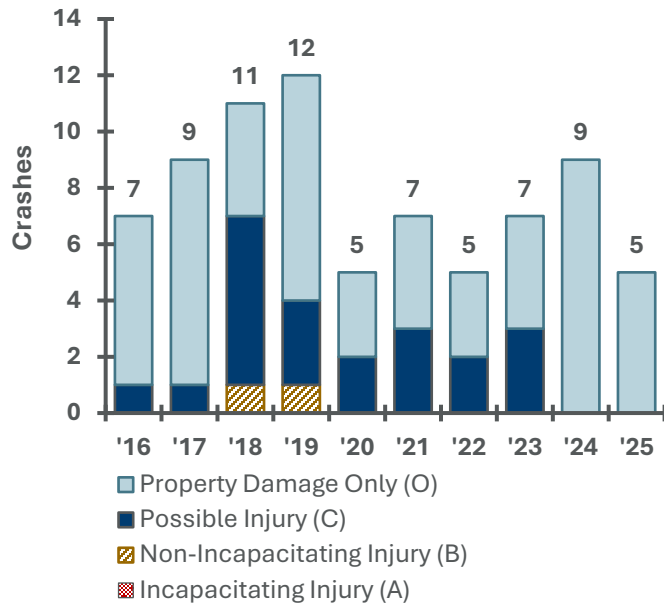
The primary node of the intersection contains a traffic signal with many traffic flow patterns not seen in the other locations in this report. Vehicles heading eastbound on County Rd may use an extended slip lane to bypass the signal and continue on Gorham Rd southbound, or can continue eastbound on County Rd and either turn right at the signal or continue traveling eastbound. Vehicles traveling westbound on County Rd can either use a dedicated through lane or a shared through/left-turn lane to travel southbound on Gorham Rd. If travelling south on Gorham Rd after making this turn, the intersection of with the slip lane is controlled by a stop sign; the slip lane traffic is uncontrolled and the other approach is controlled by the stop sign.

Vehicles traveling north on Gorham Rd have two approaches: a dedicated left-turn lane and a shared left-turn and right-turn lane. The left-turn from Gorham Rd to County Rd is controlled by a signal with a dedicated left-turn phase.

After vehicles either make a left-turn from Gorham Rd to westbound County Rd or continue straight through the intersection on County Rd, there is an “alternate merging zone” where vehicles must immediately merge two lanes to one in a span of approximately 500 feet from the center of the intersection. This “alternate merging zone” is newly signed and marked as of late 2024/early 2025, along with additional signals at many of the approaches.

Lady Slipper Way is slightly offset from the other approaches at the traffic signal and is controlled by a signal that was installed at the same time as the alternate merging zone, but there is also still a stop sign present as of September 2025. There are a limited number of driveways in the “alternate merging” zone, but there are no business entrances or highly-used driveways in the immediate vicinity of the intersection.

## County Rd (SR-22) & Gorham Rd (SR-114)/Lady Slipper Way



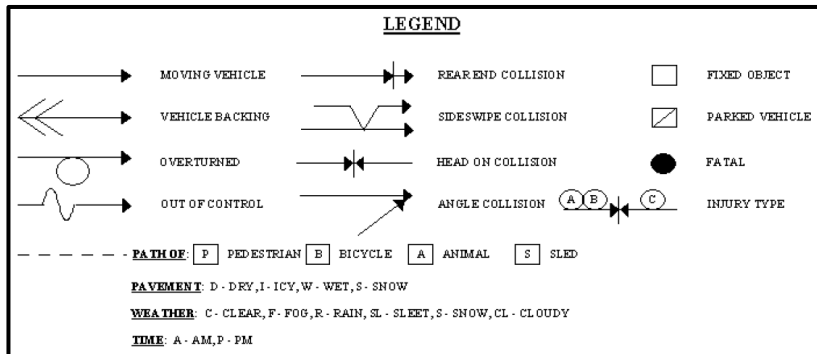
| Crash Severity                | #         |
|-------------------------------|-----------|
| Fatality (K)                  | 0         |
| Incapacitating Injury (A)     | 0         |
| Non-Incapacitating Injury (B) | 2         |
| Possible Injury (C)           | 21        |
| Property Damage Only (O)      | 54        |
| <b>Total</b>                  | <b>77</b> |

| Direction of Travel | # of Units in Crashes |
|---------------------|-----------------------|
| Northbound          | 25                    |
| Eastbound           | 27                    |
| Southbound          | 2                     |
| Westbound           | 92                    |
| Other               | 0                     |

| Contributing Factors       | #  | % of Crashes at this Location | % of Crashes in All of Maine |
|----------------------------|----|-------------------------------|------------------------------|
| Rear-Ends                  | 61 | 79.2%*                        | 51.7%                        |
| Following Too Closely      | 33 | 42.9%*                        | 22.4%                        |
| Younger Drivers            | 30 | 39.0%*                        | 29.0%                        |
| Failure to Yield ROW       | 17 | 22.1%*                        | 20.7%                        |
| Distracted Driving         | 15 | 19.5%*                        | 7.7%                         |
| Mature Drivers             | 14 | 18.2%                         | 18.9%                        |
| Lane Departure             | 10 | 13.0%                         | 14.9%                        |
| Aggressive Driving         | 6  | 7.8%*                         | 3.8%                         |
| Dark Conditions            | 5  | 6.5%                          | 8.1%                         |
| Speeding                   | 5  | 6.5%*                         | 5.9%                         |
| Wet or Icy Conditions      | 5  | 6.5%                          | 7.2%                         |
| Impaired Driving           | 4  | 5.2%*                         | 3.4%                         |
| Improper Passing           | 4  | 5.2%*                         | 2.4%                         |
| Ran Red Light or Stop Sign | 4  | 5.2%*                         | 3.3%                         |
| Not Wearing a Seat Belt    | 3  | 3.9%*                         | 1.7%                         |
| Commercial Vehicles        | 2  | 2.6%*                         | 2.3%                         |
| Driveways                  | 1  | 1.3%                          | 13.3%                        |
| Fatigued Driving           | 1  | 1.3%*                         | 1.2%                         |
| Motorcyclists              | 1  | 1.3%*                         | 1.2%                         |

\* A crash proportion is denoted with an asterisk if the share in the study area is higher than the proportion in the entire state.

### Most Recent Crash Diagram (The crash diagram is only available for crashes from 2022 to 2024)



Between 2022 and 2024, a total of 14 crashes occurred at this intersection. Crashes were concentrated on the northbound approach of Gorham Rd, including 6 rear-end crashes, 1 left-turn crash, 1 right-turn crash, and 2 single-vehicle crashes. Of the rear-end crashes, 5 were attributed to following too closely and 1 to driver distraction. The 2 turning-movement crashes were attributed to running a red light. The 2 single-vehicle crashes involved striking a tree and a utility pole, with the latter attributed to operating under the influence. Three rear-end crashes also occurred on County Rd, with 1 attributed to unsafe speed and the remaining 2 to following too closely.



## 4. NEXT STEPS

Building on the safety trends and site-specific findings presented in this memorandum, the project team will advance these results into the alternatives development and evaluation process. The identified crash patterns, high-crash locations, and systemic risk factors will directly inform the refinement of corridor alternatives, ensuring that safety considerations are embedded alongside mobility, operational, and other multimodal objectives.

As alternatives are developed, their safety performance will be assessed using a combination of predictive, Maine-specific Highway Safety Manual (HSM) methodologies and the [FHWA Safe System Project-Based Alignment Framework tool](#) to estimate changes in crash frequency, severity, and risk exposure across the network and at specific locations. These analyses will be integrated with travel demand modeling outputs and other evaluation criteria to enable a comprehensive, data-driven comparison of alternatives. The results will be used to identify strategies that most effectively reduce fatalities and serious injuries while supporting the project's broader goals, and will be communicated through the public and stakeholder engagement process to support informed decision-making and selection of a recommended path forward.

## APPENDIX A. CONTRIBUTING FACTORS AND CIRCUMSTANCES

Below is a list of contributing factors and circumstances considered in the analysis of the twelve crash hotspots in Section 3. The query necessary to identify these crashes from the data is shown, with the **fields** and **values** highlighted.

**TABLE 5** CONTRIBUTING FACTORS AND CIRCUMSTANCES

| Factor or Circumstance | Crash Query                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rear-Ends              | Where <b>TYPE_OF_CRASH_DESCR</b> is <b>Rear End / Sideswipe</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Intersection-Related   | Where <b>TYPE_OF_LOCATION_DESCR</b> is one of three options: <ul style="list-style-type: none"> <li>▪ <b>Three Leg Intersection</b></li> <li>▪ <b>Four Leg Intersection</b></li> <li>▪ <b>Five or More Leg Intersection</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                            |
| Younger Drivers        | Where <b>PERSON_TYPE_DESCR</b> is <b>Driver</b> or <b>Driver/Owner</b> and the <b>PERSON_AGE</b> is between <b>16</b> and <b>24</b> , inclusive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Following Too Closely  | Where <b>DRIVER_ACTION1_DESCR</b> or <b>DRIVER_ACTION2_DESCR</b> is <b>Followed Too Closely</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Failure to Yield ROW   | Where <b>DRIVER_ACTION1_DESCR</b> or <b>DRIVER_ACTION2_DESCR</b> is <b>Failed to Yield Right-of-Way</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Mature Drivers         | Where <b>PERSON_TYPE_DESCR</b> is <b>Driver</b> or <b>Driver/Owner</b> and the <b>PERSON_AGE</b> is at least <b>65</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Lane Departure         | Where <b>TYPE_OF_CRASH_DESCR</b> is <b>Went Off Road</b> or <b>Head-on / Sideswipe</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Driveways              | Where <b>TYPE_OF_LOCATION_DESCR</b> is <b>Driveways</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Dark Conditions        | Where <b>LIGHT_CONDITION_DESCR</b> is <b>Dark – Not Lighted</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Distracted Driving     | Where <b>DRIVER_DISTRACTED_DESCR</b> is one of the following options: <ul style="list-style-type: none"> <li>▪ <b>Outside the Vehicle (includes unspecified external distractions)</b></li> <li>▪ <b>Other Inside the Vehicle (eating, personal hygiene, etc.)</b></li> <li>▪ <b>Other Activity, Electronic Device</b></li> <li>▪ <b>Manually Operating an Electronic Communication Device (texting, typing, dialing)</b></li> <li>▪ <b>Talking on Hand-Held Electronic Device</b></li> <li>▪ <b>Distracted by Unknown Cause</b></li> <li>▪ <b>Passenger</b></li> <li>▪ <b>Talking on Hands-Free Electronic Device</b></li> </ul> |



| Factor or Circumstance     | Crash Query                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wet or Icy Conditions      | Where <b>CONTRIB_CIRC_ROAD1_DESCR</b> or <b>CONTRIB_CIRC_ROAD2_DESCR</b> is <b>Road Surface Condition (Wet, Icy, Snow, Slush, etc.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Speeding                   | Where <b>PERSON_TYPE_DESCR</b> is <b>Driver</b> or <b>Driver/Owner</b> and <b>DRIVER_ACTION1_DESCR</b> or <b>DRIVER_ACTION2_DESCR</b> is either <b>Exceeded Posted Speed Limit</b> or <b>Drove Too Fast For Conditions</b>                                                                                                                                                                                                                                                                                                                                                                       |
| Large Animals              | Where <b>TYPE_OF_CRASH_DESCR</b> is <b>Deer</b> or <b>Moose</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Aggressive Driving         | Where <b>DRIVER_ACTION1_DESCR</b> or <b>DRIVER_ACTION2_DESCR</b> is <b>Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Impaired Driving           | Where <b>PERSON_TYPE_DESCR</b> is <b>Driver</b> or <b>Driver/Owner</b> and <b>COND_TIME_OF_CRASH_DESCR</b> is <b>Under the Influence of Medications/Drugs/Alcohol</b>                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Ran Red Light or Stop Sign | Where <b>DRIVER_ACTION1_DESCR</b> or <b>DRIVER_ACTION2_DESCR</b> is <b>Ran Red Light</b> or <b>Ran Stop Sign</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Improper Passing           | Where <b>DRIVER_ACTION1_DESCR</b> or <b>DRIVER_ACTION2_DESCR</b> is <b>Improper Passing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Commercial Vehicles        | Where <b>CARGO_BODYTYPE_DESCR</b> is not <b>NULL</b> or <b>Not Applicable/No Cargo Body</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Not Wearing a Seat Belt    | Where <b>RESTRAINT_SYSTEM_DESCR</b> is <b>None Used - Motor Vehicle Occupant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Work Zones                 | Where at least one of the following is true: <ul style="list-style-type: none"> <li>Where <b>WORKZONE_IN_OR_NEAR_DESCR</b> is <b>Yes</b></li> <li>Where <b>WORKZONE_WORKERS_PRESENT_DESCR</b> is <b>Yes</b></li> <li>Where <b>WORKZONE_TYPE_DESCR</b> is not <b>NULL</b></li> <li>Where <b>WORKZONE_LOCATION_DESCR</b> is one of the following: <ul style="list-style-type: none"> <li><b>Activity Area</b></li> <li><b>Advance Warning Area</b></li> <li><b>Before the First Work Zone Warning Sign</b></li> <li><b>Termination Area</b></li> <li><b>Transition Area</b></li> </ul> </li> </ul> |
| Pedestrians                | Where one of the following is true: <ul style="list-style-type: none"> <li>Where <b>UNIT_TYPE_DESCR</b> is <b>Pedestrian</b></li> <li>Where <b>PERSON_TYPE_DESCR</b> is <b>Pedestrian</b></li> <li>Where <b>TYPE_OF_CRASH_DESCR</b> is <b>Pedestrians</b></li> </ul>                                                                                                                                                                                                                                                                                                                             |
| Fatigued Driving           | Where <b>COND_TIME_OF_CRASH_DESCR</b> is <b>Asleep or Fatigued</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Motorcyclists              | Where <b>UNIT_TYPE_DESCR</b> is <b>Motorcycle</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



| Factor or Circumstance | Crash Query                                                                                                                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bicyclists             | Where one of the following is true: <ul style="list-style-type: none"><li>▪ Where <b>UNIT_TYPE_DESCR</b> is <b>Bicyclist</b></li><li>▪ Where <b>PERSON_TYPE_DESCR</b> is <b>Bicycle</b></li><li>▪ Where <b>TYPE_OF_CRASH_DESCR</b> is <b>Bicycles</b></li></ul> |
| Wrong-Way Driving      | Where <b>DRIVER_ACTION1_DESCR</b> or <b>DRIVER_ACTION2_DESCR</b> is <b>Wrong Way</b>                                                                                                                                                                            |
| Ruts, Holes, or Bumps  | Where <b>CONTRIB_CIRC_ROAD1_DESCR</b> or <b>CONTRIB_CIRC_ROAD2_DESCR</b> is <b>Rut, Holes, Bumps</b>                                                                                                                                                            |