



# Appendix B

## Assessment of Current Conditions

# Assessment of Current Conditions

Brewer Village Partnership Initiative

City of Brewer, Maine

August 21, 2024

Prepared for:

City of Brewer



Prepared by:

Stantec



## Table of Contents

<b>STUDY CONTEXT</b> .....	<b>1</b>
<b>MULTIMODAL TRAFFIC ANALYSIS</b> .....	<b>3</b>
TRAFFIC VOLUMES .....	3
VEHICULAR OPERATIONS .....	10
BICYCLE INFRASTRUCTURE AND OPERATIONS.....	14
PEDESTRIAN INFRASTRUCTURE AND OPERATIONS .....	19
TRANSIT .....	26
<b>ROAD SAFETY ASSESSMENT</b> .....	<b>28</b>
CRASH HISTORY .....	28
HIGH CRASH LOCATIONS .....	33
ROAD SAFETY AUDIT (RSA) .....	35
<b>LAND USE ANALYSIS</b> .....	<b>45</b>
ZONING AND CURRENT LAND USES .....	45
ENVIRONMENTAL AND HISTORIC RESOURCES .....	48

## List of Appendices

<b>APPENDIX A</b>	<b>TRAFFIC DATA</b> .....	<b>A</b>
<b>APPENDIX B</b>	<b>SYNCHRO TRAFFIC ANALYSIS REPORTS</b> .....	<b>B</b>
<b>APPENDIX C</b>	<b>HIGH CRASH LOCATION CRASH DIAGRAMS AND SUMMARIES (FROM MAINEDOT)</b> .....	<b>C</b>
<b>APPENDIX D</b>	<b>ROAD SAFETY AUDIT PRESENTATION AND FIELD VISIT NOTES</b> .....	<b>D</b>

## STUDY CONTEXT

Brewer sits along the Penobscot River, just across from its sister city Bangor. Together, Brewer and Bangor serve as the urban and cultural center of Northern and Eastern Maine. Brewer's rich history of industry and culture in the heart of Maine, central to key regions in the state make it a desirable place to live, work, and visit. This study is a result of Brewer teaming with the Maine Department of Transportation (MaineDOT) under a Village Partnership Initiative (VPI); an effort for the State and City to invest in improvements to transportation for all modes of travel and place-making in the mixed-use environment from small village to city downtowns.

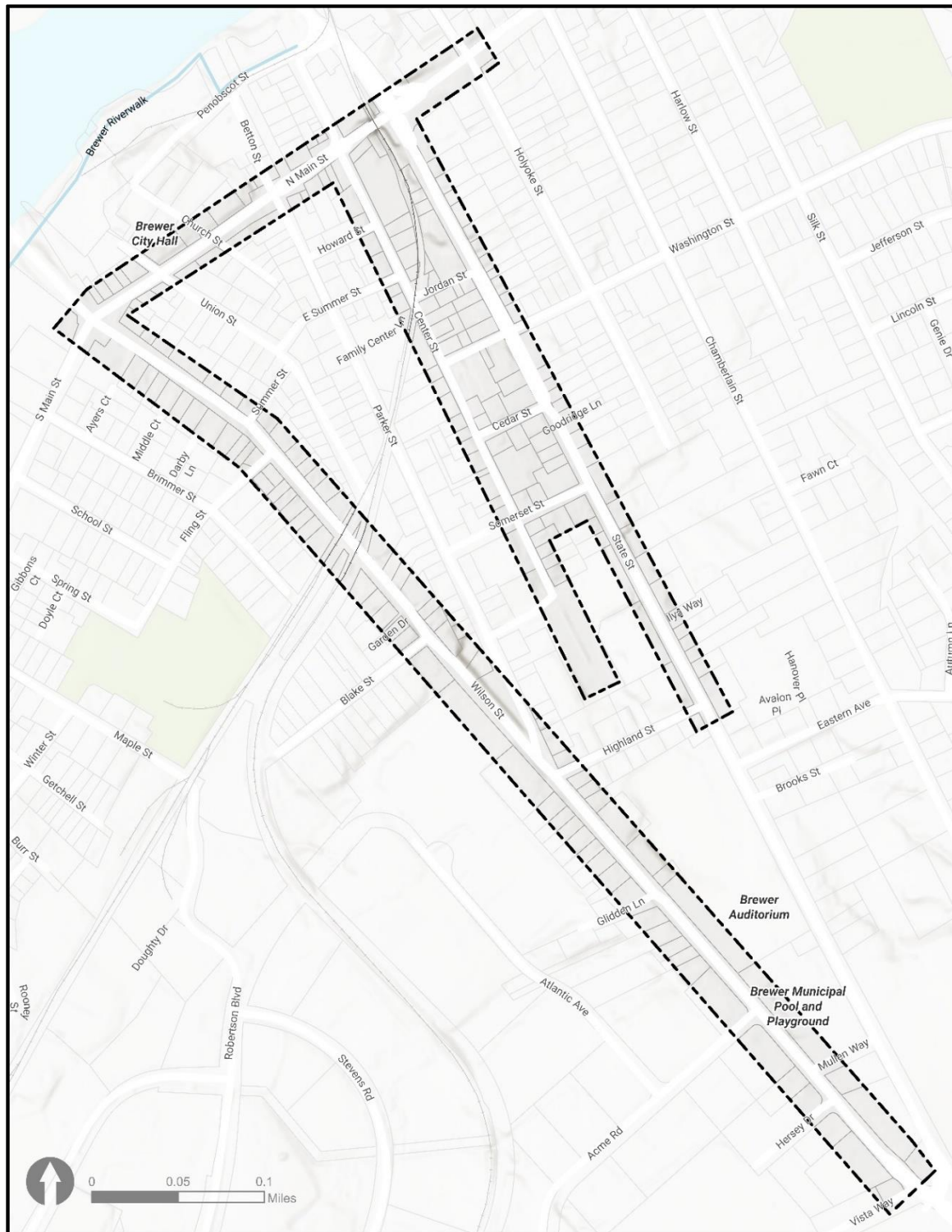
This report intends to detail the current conditions of the study area, defined in the **Figure 1**. The study area for this Village Partnership Initiative encompasses Downtown Brewer, Route 1A (Wilson Street), Route 9 (North Main Street), Center Street, and State Street, as well as Jordan Street and Washington Street.

Included in this assessment are three key elements for a planning-level understanding of the VPI study area's transportation infrastructure:

- Multimodal Traffic Analysis
- Road Safety Audit (RSA) and Field Assessment
- Land Use Analysis



Figure 1 – Brewer Village Partnership Initiative Study Area



## MULTIMODAL TRAFFIC ANALYSIS

### TRAFFIC VOLUMES

Factored Average Annual Daily Traffic Volumes for the Study Area were accessed through the MaineDOT Public Map Viewer. As **Figure 2** shows, traffic volumes are highest along the state corridors (Main Street, State Street, and Willson St) and is significantly lower on the surrounding residential streets.

To further evaluate existing and future traffic operations, Bangor Area Comprehensive Transportation System (BACTS) Metropolitan Planning Organization (MPO) assisted Stantec and the City of Brewer by leading the turning movement count (TMC) data collection at priority intersections within the VPI study area. The traffic data was collected using video-based traffic counting equipment and conducted over twelve-hour, mid-week periods to capture the operations of a general workday. The data collection not only included general vehicle counts, but were distributed by vehicle category (motorcycle, bus, truck, etc.). In addition, pedestrian and bicycle traffic data was collected at the intersections.

Within the Brewer VPI study area, the following intersections were collected by BACTS in the months of April and May of 2024 and between the hours of 7:00 AM and 7:00 PM:

- North Main Street at State Street – Collected April 25, 2024
- North Main Street at Chamberlain Street – Collected May 22, 2024
- North Main Street at Center Street – Collected May 1, 2024
- North Main Street at Betton Street and Parker Street – Collected May 29, 2024
- North Main Street and South Main Street at Wilson Street – Collected April 23, 2024
- Wilson Street at Parker Street – Collected May 23, 2024

From the TMCs collected above, Stantec identified the morning and afternoon peak hour periods for each respective intersection and identified an appropriate seasonal adjustment to adjust the collected data to the sixth highest week, according to the most recent version of MaineDOT's Annual Traffic Count Report and each intersections' roadways' grouping category. As the study area roadways are considered Group 1 (Urban) roadways in Maine, seasonal adjustment factors were applied to each intersection TMC in relation to its gap to the sixth highest volume week for comparable Group 1 roadways. This amounted to the following seasonal adjustments to their respective intersections:

- North Main Street at State Street – Eight percent (8%) increase to counted volumes.
- North Main Street at Chamberlain Street – Two percent (2%) increase to counted volumes.
- North Main Street at Center Street – One percent (1%) increase to counted volumes.



- North Main Street at Betton Street and Parker Street – One percent (1%) increase to counted volumes.
- North Main Street and South Main Street at Wilson Street – Eight percent (8%) increase to counted volumes.
- Wilson Street at Parker Street – Two percent (2%) increase to counted volumes.

Stantec also reviewed MaineDOT's traffic data, available on its public interactive traffic data map, for TMCs and continuous count sites (CCSs) available. The traffic data reviewed from MaineDOT's public map consisted of peak hour intersection TMCs and CCSs from, at a minimum, the most recent five years. Stantec further filtered traffic counts that are likely impacted by COVID pandemic-related policies and practices that would have affected normal traffic volumes and movements in the study area.

Based on the existing information available from MaineDOT, City of Brewer, the data collected from BACTS, and a review of the results that would come from the Brewer VPI Study, Stantec determined the following intersections of public streets within the VPI study area would not be collected as potential recommendations can be provided without capacity analysis:

- North Main Street at Holyoke Street
- State Street Corridor, between North Main Street and Highland Street
- Center Street Corridor, between North Main Street and Center Street's southern terminus
- Wilson Street Corridor, between North / South Main Street and Parker Street and Parker Street and State Street
- North Main Street, between Betton Street / Parker Street and Wilson Street

The raw traffic data collection can be found in **Appendix A**.



**Figure 2 – Factored Average Annual Daily Traffic**

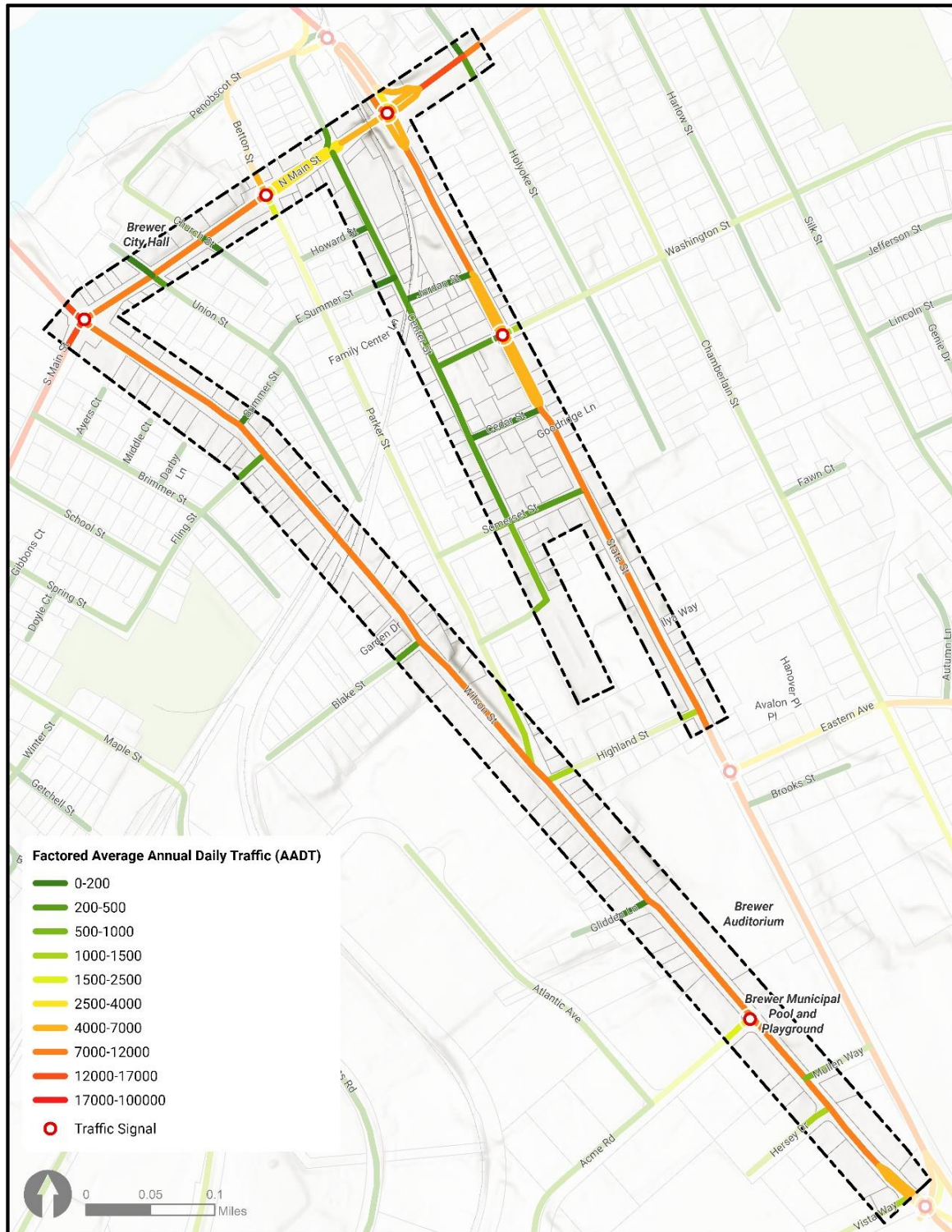




Figure 3 – Morning Peak Hour Vehicle Volumes at Study Area Intersections

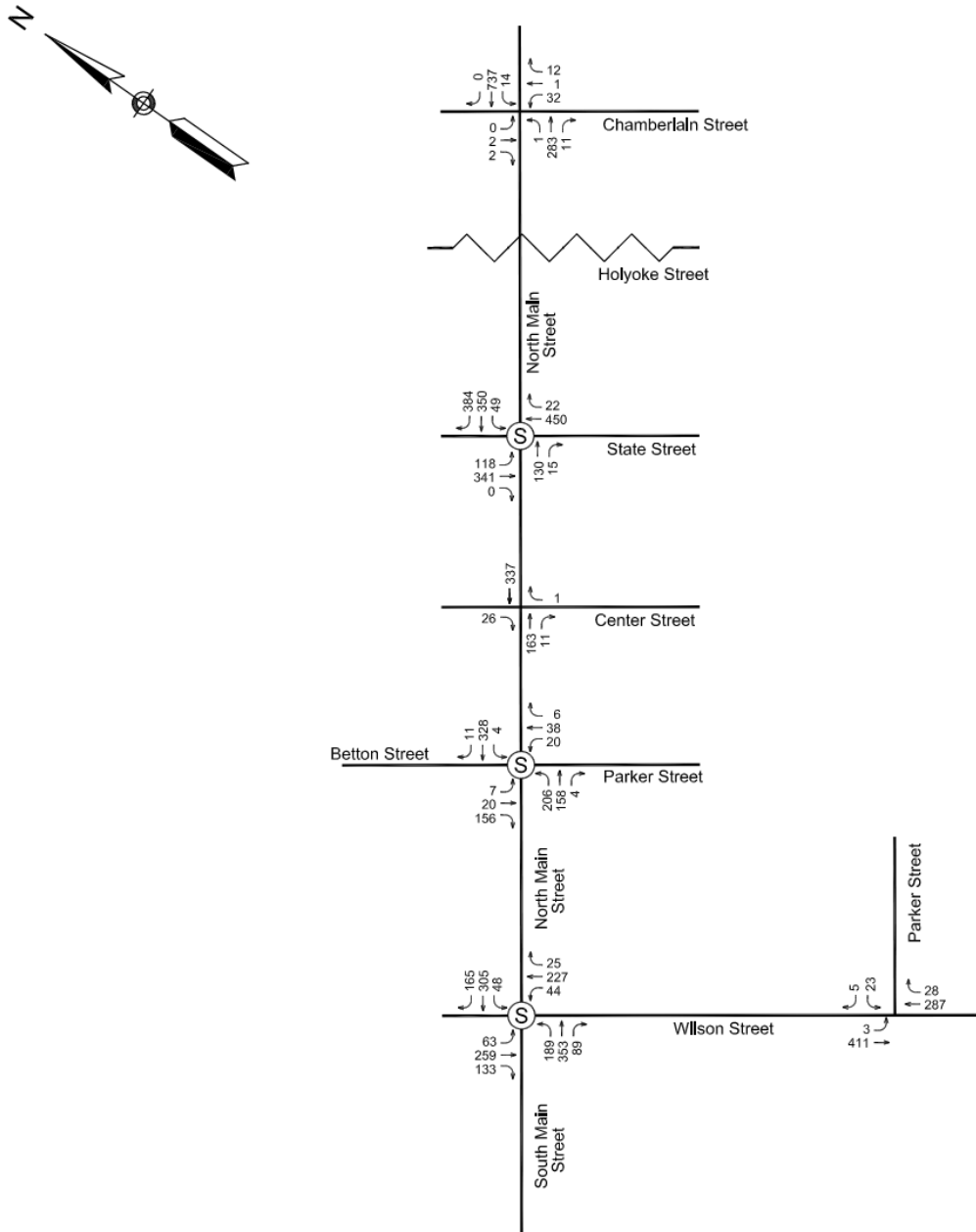


Figure 4 – Morning Peak Hour Truck Volumes at Study Area Intersections

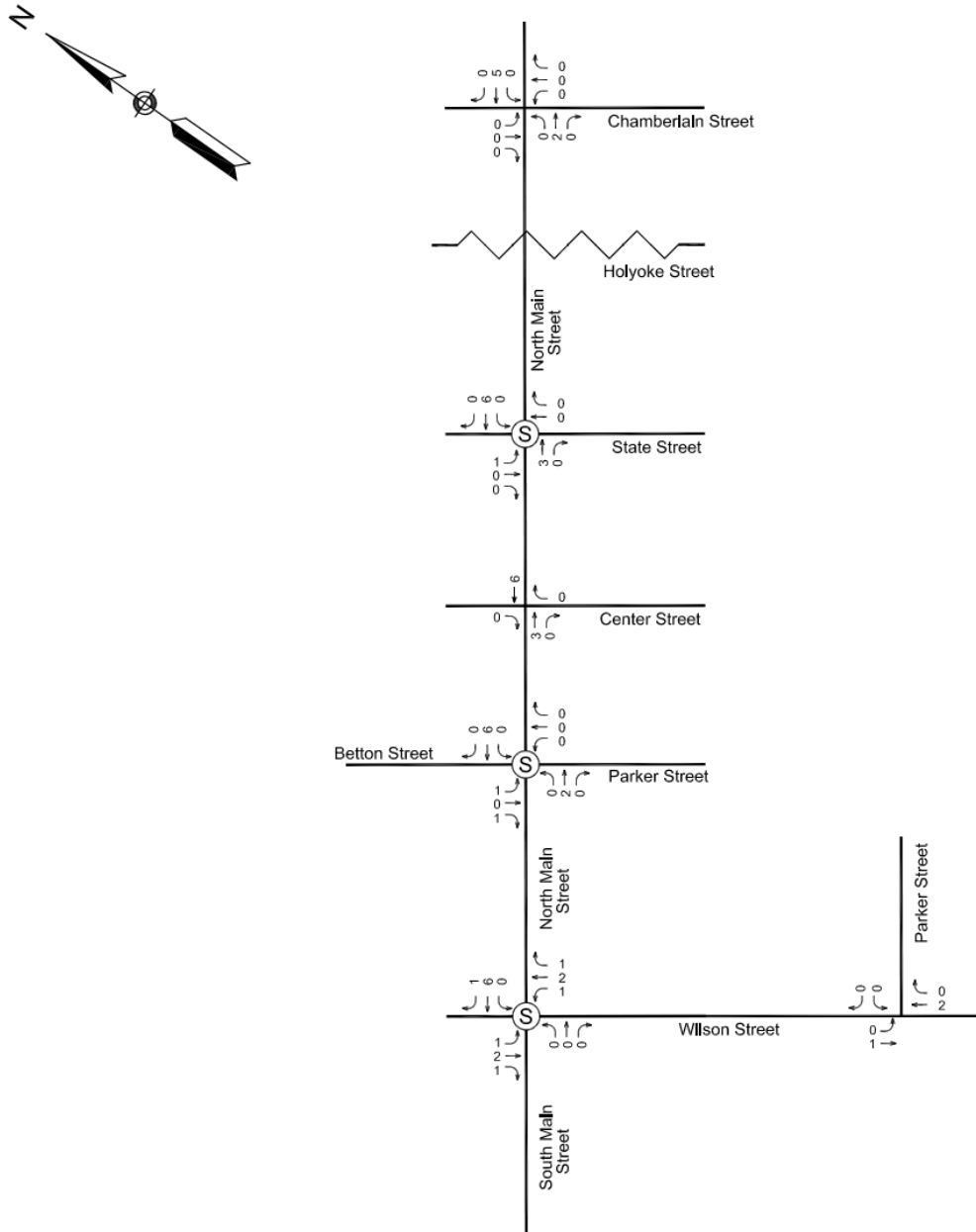


Figure 5 – Evening Peak Hour Vehicle Volumes at Study Area Intersections

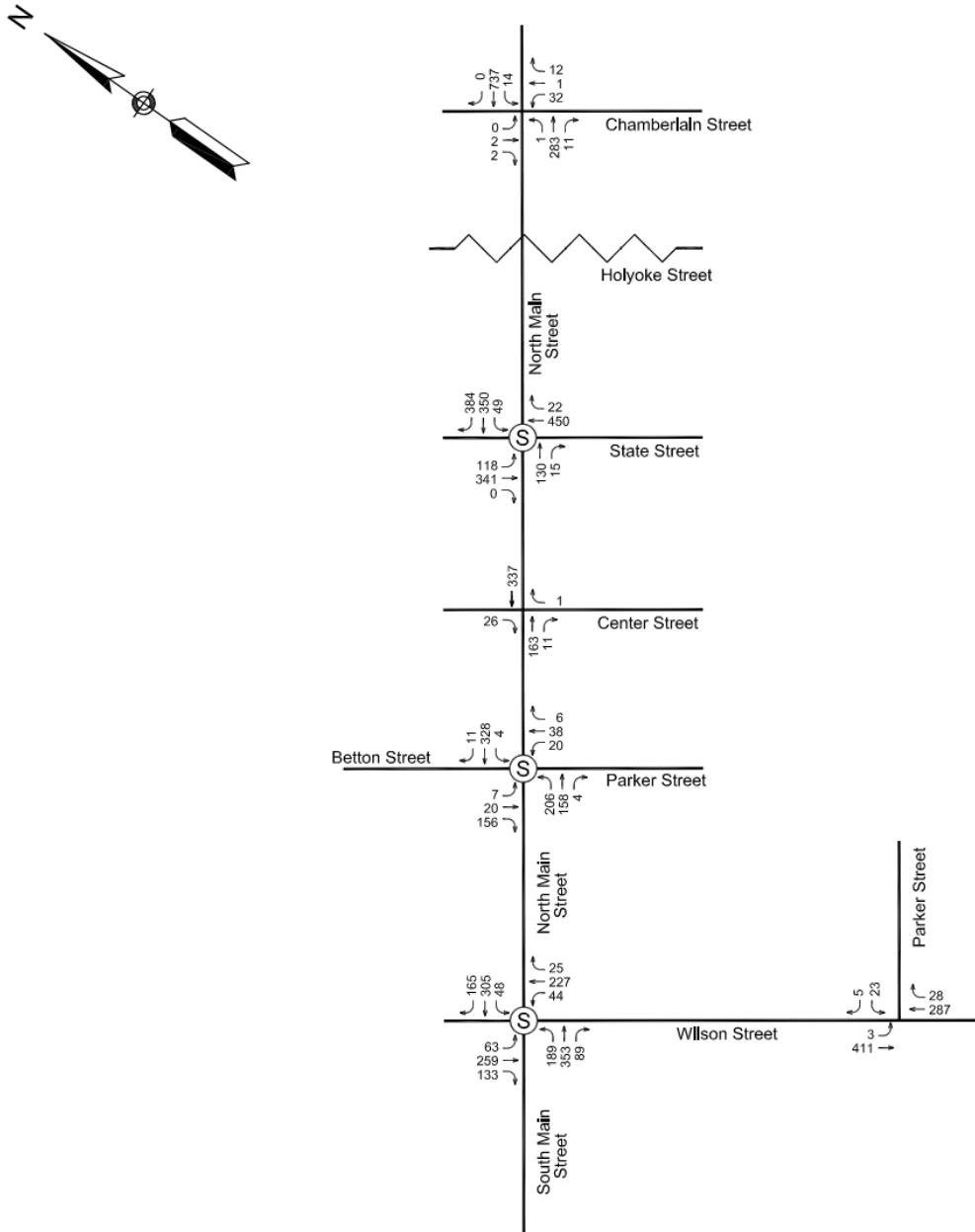
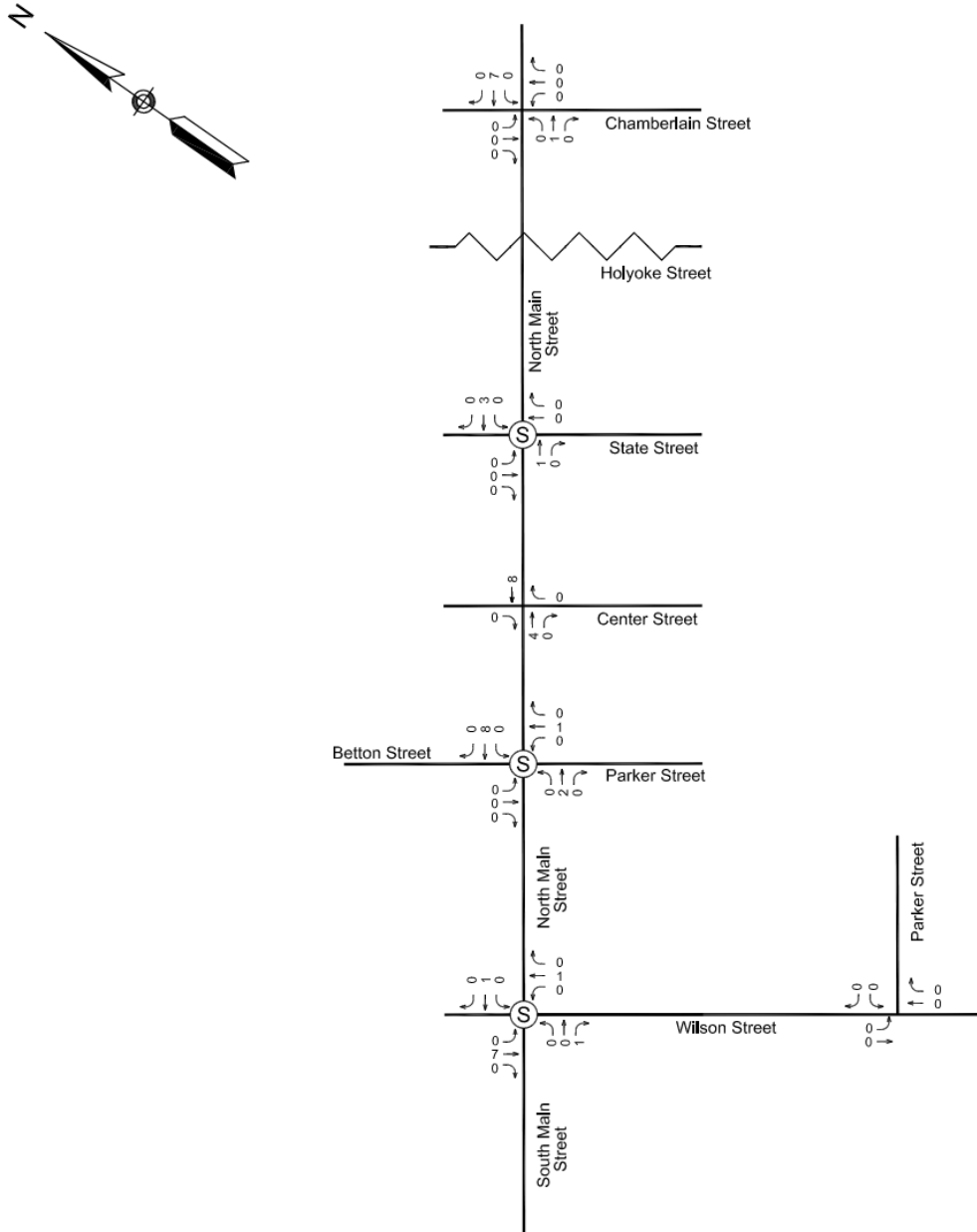


Figure 6 – Evening Peak Hour Truck Volumes at Study Area Intersections



## VEHICULAR OPERATIONS

This section summarizes the existing vehicular conditions and operations for the Brewer VPI study area. Stantec has evaluated the existing conditions and operations of the morning and afternoon peak hour traffic associated with the study area. The Transportation Research Board's (TRB's) Highway Capacity Manual (HCM) was used as reference for the estimation of vehicular delays and queues at intersections. The transportation system within the study area was reviewed according to standard engineering practices to document and understand the flow of traffic related to vehicular (passenger vehicles, buses, and trucks) traffic in the study area.

### Existing Traffic Operating Conditions

Measuring existing traffic volumes alongside the existing geometries and classification of traffic provides calculated traffic flow within a study area. To assess quality of existing traffic flow for vehicles, capacity analyses were conducted for the project intersections under existing traffic volume, traffic control, and intersection geometry. The capacity analyses provide a standardized indication of the ability of the intersections to accommodate traffic demands placed upon them.

### Existing Operating Conditions of Signalized Intersections

On May 24, 2024, Stantec and the City of Brewer entered traffic signal controller cabinets at intersections within the Brewer VPI study area to inventory existing conditions of the signal hardware and software, including comparisons of recorded design or as-built engineering plans with controller timing programming.

During the Road Safety Audit, held on May 23, 2024, the City of Brewer noted that the North Main Street at State Street signalized intersection is included in a coordinated traffic signal system branch with Bangor and an adaptive signal project was to be activated in the weeks following. The traffic signal timings of this intersection assessed for this report are those identified as the base traffic signal timings that the adaptive signal controls can fall back on in case of interruptions or deactivation of the adaptive signal system.

The signalized intersections of North Main Street at Parker Street and Betton Street, North and South Main Street at Wilson Street, and State Street at Washington Street (not analyzed for operations or capacity) were reviewed for their current signal phasing and timings in addition to any time-of-day plans for use in operations and capacity analysis for the VPI Study. This information was used in establishing the existing conditions of these intersections while serving as the foundation for assessing impacts of potential recommendations. Overall, the intersections' signal equipment is in acceptable to good working order and replacement or upgrades to the equipment will not be included in assessment of future conditions or recommendations unless linked to other safety-based improvements to the intersections requiring modifications to the existing signal systems. The City's recent efforts for "low-hanging fruit" improvements to its intersections (North Main Street at State Street visibility and turn prohibitions) are successful applications of safety-based improvements to existing signalized systems.



## Level of Service Criteria

Level of Service (LOS), an expression of traffic flow, is a commonly used and accepted measure of effectiveness of peak-hour traffic operating conditions. It considers such factors as automobile and truck volumes, roadway width, speed, grades, parking restrictions, pedestrian activity, and traffic control devices.

LOS is designated in a range from Level “A”, which is where a roadway’s operating conditions are at their least delayed and congested, to Level “F”, which indicates excessive delays and typically jamming level of congestion. Levels “A” through “D” are typically associated with acceptable levels of peak-hour traffic operation within urban areas. At Level “E”, the ratio of the approach volume to capacity, or v/c ratio, of an intersection is between 90 and 100 percent of its theoretical capacity. When approach volumes reach or exceed the v/c ratio of 1.00, or 100 percent, this approach is designated as LOS “F”, regardless of the delays reported.

All capacity analysis for this study was performed in accordance with the methodologies set forth in the Highway Capacity Manual. As defined in the Highway Capacity Manual, LOS for unsignalized intersections is defined in terms of the average control delay in seconds per vehicle approaching the intersection for the peak 15-minute analysis period of a peak hour. The thresholds are different for unsignalized intersections than signalized intersections. The delay criteria and their associated LOS rankings for unsignalized intersections are given in **Table 1** and signalized intersections are given in **Table 2**.

The Synchro traffic analysis software package (Version 11) was employed to evaluate operating conditions at Study area signalized intersections for existing traffic analyses. The analysis methodology is based on HCM to conduct the analyses and is widely accepted for use by MaineDOT.

**Table 1 – Level of Service Criteria for Unsignalized Intersections**

Level of Service	Average Control Delay (s/veh)
<b>A</b>	[ 10.0
<b>B</b>	10.1 to 15.0
<b>C</b>	15.1 to 25.0
<b>D</b>	25.1 to 35.0
<b>E</b>	35.1 to 50.0
<b>F</b>	> 50.0
Source: Highway Capacity Manual 2010, TRB	



**Table 2 – Level of Service Criteria for Signalized Intersections**

Level of Service	Average Control Delay (s/veh)
<b>A</b>	[ 10.0
<b>B</b>	10.1 to 20.0
<b>C</b>	20.1 to 35.0
<b>D</b>	35.1 to 55.0
<b>E</b>	55.1 to 80.0
<b>F</b>	> 80.0
Source: Highway Capacity Manual 2010, TRB	

### Existing Traffic Operating Conditions

The existing (2024) weekday morning and afternoon peak hour traffic volumes, shown in **Figure 3** and **Figure 5**, were used in the capacity analyses conducted on the study area intersections where traffic data was available. The peak hour truck volumes (**Figure 4** and **Figure 6**) were used as percentages of heavy vehicles per approach. Pedestrian and bicycle volumes (**Figure 8**, and **Figure 16**), approach grades, and general roadway geometries were included in the capacity analysis. The results of this analysis are summarized in **Table 3** and Synchro reports profiled in **Appendix B**.

All studied intersections within the Brewer VPI area operate acceptably at LOS C or better during the morning peak hour period. Some left-turn lanes throughout the study area’s intersections operate at LOS D due to their projected average vehicular delays but see low v/c ratios and relatively low 95th percentile queues (when compared to their available storage). The South Main Street northbound left-turn lane onto Wilson Street towards the Chamberlain Bridge operates at LOS E, with average vehicle delays estimated at 56.5 seconds and 95th percentile queue of 276 feet (approximately eleven vehicles).

During the afternoon peak hour period, all studied intersections within the Brewer VPI area operate acceptably at LOS C or better, except for the signalized intersection of North / South Main Street at Wilson Street which operates at LOS D, with an average vehicular delay of 37.9 seconds. For operations of lanes of this intersection, the worst performing lane is the Wilson Street eastbound left-turn lane operates at LOS F, with an average vehicular delay of 93.6 seconds, v/c ratio of 0.98, and 95th percentile queue of 313 feet, exceeding the existing storage by approximately 100 feet. These excess impacts the operations of the other lanes approaching this intersection from the Chamberlain Bridge. The next worse performing lanes of this intersection during the afternoon peak hour period are the Wilson Street left-turn lane, Wilson Street westbound through-right lane, North Main Street southbound left-turn lane, and Main Street southbound through lane, which all operate at LOS D.



**Table 3 – Existing Weekday Peak Hour Intersection Level of Service**

Approach	Direction/ Turning Movement	AM Peak				PM Peak			
		Delay <sup>1</sup>	LOS <sup>2</sup>	v/c <sup>3</sup>	Queue <sup>4</sup> 95 <sup>th</sup> %	Delay <sup>1</sup>	LOS <sup>2</sup>	v/c <sup>3</sup>	Queue <sup>4</sup> 95 <sup>th</sup> %
<b>North Main Street @ State Street (Signalized)</b>									
State St	EB L (2 Lanes)	44.0	D	0.36	70	43.7	D	0.67	180
State St	EB T/R	10.6	B	0.35	235	13.1	B	0.51	374
State St	WB T T/R	19.0	B	0.36	196	25.7	C	0.46	226
N. Main St	NB T T/R	35.0	C	0.23	65	39.5	D	0.66	167
N. Main St	SB L	46.1	D	0.34	70	46.1	D	0.37	78
N. Main St	SB T	33.6	C	0.67	259	27.1	C	0.39	162
N. Main St	SB R	28.7	C	0.43	103	24.8	C	0.17	45
<b>OVERALL</b>		<b>25.7</b>	<b>C</b>			<b>28.9</b>	<b>C</b>		
<b>North Main Street / South Main Street @ Wilson Street (Signalized)</b>									
Wilson St	EB L	36.5	D	0.35	84	93.6	F	0.98	313
Wilson St	EB T	25.2	C	0.51	231	29.7	C	0.61	266
Wilson St	EB R	11.8	B	0.09	31	16.0	B	0.35	124
Wilson St	WB L	40.5	D	0.41	64	42.0	D	0.55	120
Wilson St	WB T/R	29.6	C	0.60	219	36.6	D	0.77	294
S. Main St	NB L	56.5	E	0.83	276	63.9	E	0.85	278
S. Main St	NB T/R	27.2	C	0.71	450	31.9	C	0.72	435
N. Main St	SB L	40.6	D	0.40	67	41.4	D	0.34	73
N. Main St	SB T	27.6	C	0.59	265	36.3	D	0.75	367
N. Main St	SB R	13.5	B	0.11	36	14.5	B	0.08	35
<b>OVERALL</b>		<b>28.9</b>	<b>C</b>			<b>37.9</b>	<b>D</b>		
<b>Wilson Street @ Parker Street (Stop-Controlled)</b>									
Wilson St	EB L	8.1	A	0.00	0	8.4	A	0.01	0
Parker St	SB L/R	16.1	C	0.10	8	19.1	C	0.13	10
<b>OVERALL</b>		<b>0.7</b>	<b>A</b>			<b>0.7</b>	<b>A</b>		
<b>North Main Street @ Center Street (Stop-Controlled)</b>									
Center St	NB R	9.1	A	0.01	0	11.0	B	0.02	3
Center St	SB R	10.7	B	0.05	5	9.8	A	0.06	5
<b>OVERALL</b>		<b>0.7</b>	<b>A</b>			<b>0.8</b>	<b>A</b>		
<b>North Main Street @ Parker Street and Betton Street (Signalized)</b>									
Betton St	EB L/T	19.8	B	0.02	28	15.5	B	0.02	34
Betton St	EB R	19.9	B	0.02	41	15.9	B	0.04	52
Parker St	WB L/T/R	20.9	C	0.28	47	16.0	B	0.21	55
N. Main St	NB L	19.7	B	0.55	151	20.2	C	0.55	118
N. Main St	NB T/R	3.2	A	0.15	55	5.4	A	0.40	135
N. Main St	SB L/T/R	18.8	B	0.70	222	15.3	B	0.58	201
<b>OVERALL</b>		<b>16.8</b>	<b>B</b>			<b>12.9</b>	<b>B</b>		
<b>North Main Street @ Chamberlain Street (Stop-controlled)</b>									
N. Main St	NB L	9.6	A	0.00	0	8.3	A	0.00	0
N. Main St	SB L	8.0	A	0.01	0	9.6	A	0.01	0
Chamberlain St	WB L/T/R	31.3	D	0.26	25	34.8	D	0.43	50
Chamberlain St	EB L/T/R	21.3	C	0.04	3	11.2	B	0.01	0
<b>OVERALL</b>		<b>1.5</b>	<b>A</b>			<b>2.3</b>	<b>A</b>		

1. Delay in seconds per vehicle    2. Level of Service according to HCM    3. Volume to Capacity Ratio  
 4. Queue in feet per lane: 95<sup>th</sup> percentile (25 feet per vehicle)





## BICYCLE INFRASTRUCTURE AND OPERATIONS

One of Downtown Brewer’s highlights in transportation infrastructure is the Brewer Riverwalk, a multiuse path along the Penobscot River, beginning at the intersection of Betton Street and Penobscot Street to the north and Burr Street and South Main Street at its southern terminus, approximately 0.60 miles long. However, there are no on-street or off-street bicycle facilities provided strictly within the bounds of the Brewer VPI study area. The City has shown tremendous interest to expand their bicycle infrastructure off of the success of the Brewer Riverwalk trail and encourage multi-use transportation through the Downtown area.

The East Coast Greenway, a 3,000-mile continuous multi-use route for biking, walking, and other activities between Florida and Maine, passes through Brewer via the Riverwalk trail, as well as an alternate route continuing on Betton Street, North Main Street between Betton Street and Wilson Street, and Wilson Street to Bangor. **Figure 7** is a map of the East Coast Greenway and Brewer Riverwalk within and around the Brewer VPI study area.

**Figure 8** and **Figure 9** represent the peak hour bicycle volumes along the roadways within the Brewer VPI study area for the morning and afternoon periods, respectively.

**Figure 10** shows a heatmap from Strava, a fitness-based geospatial service for tracking exercises and commutes related to running, biking, and other physical modes of travel. The “Global Heatmap” provided by Strava aggregates public activities from the past calendar year. The heatmap shows the priority roadways and pathways used by cyclists in Brewer and neighboring towns for bicycle modes of travel. The heatmap shows a prioritization of cyclists on multimodal popular roadways in the study area, such as State Street, Penobscot Street, Betton Street, North Main Street, and the Brewer Riverwalk Trail, but is also highlighting the importance of the other Downtown minor streets for cyclists to navigate Brewer, including Parker Street, Chamberlain Street, Union Street, and others.



Figure 7 – East Coast Greenway Map – Brewer VPI Study Area

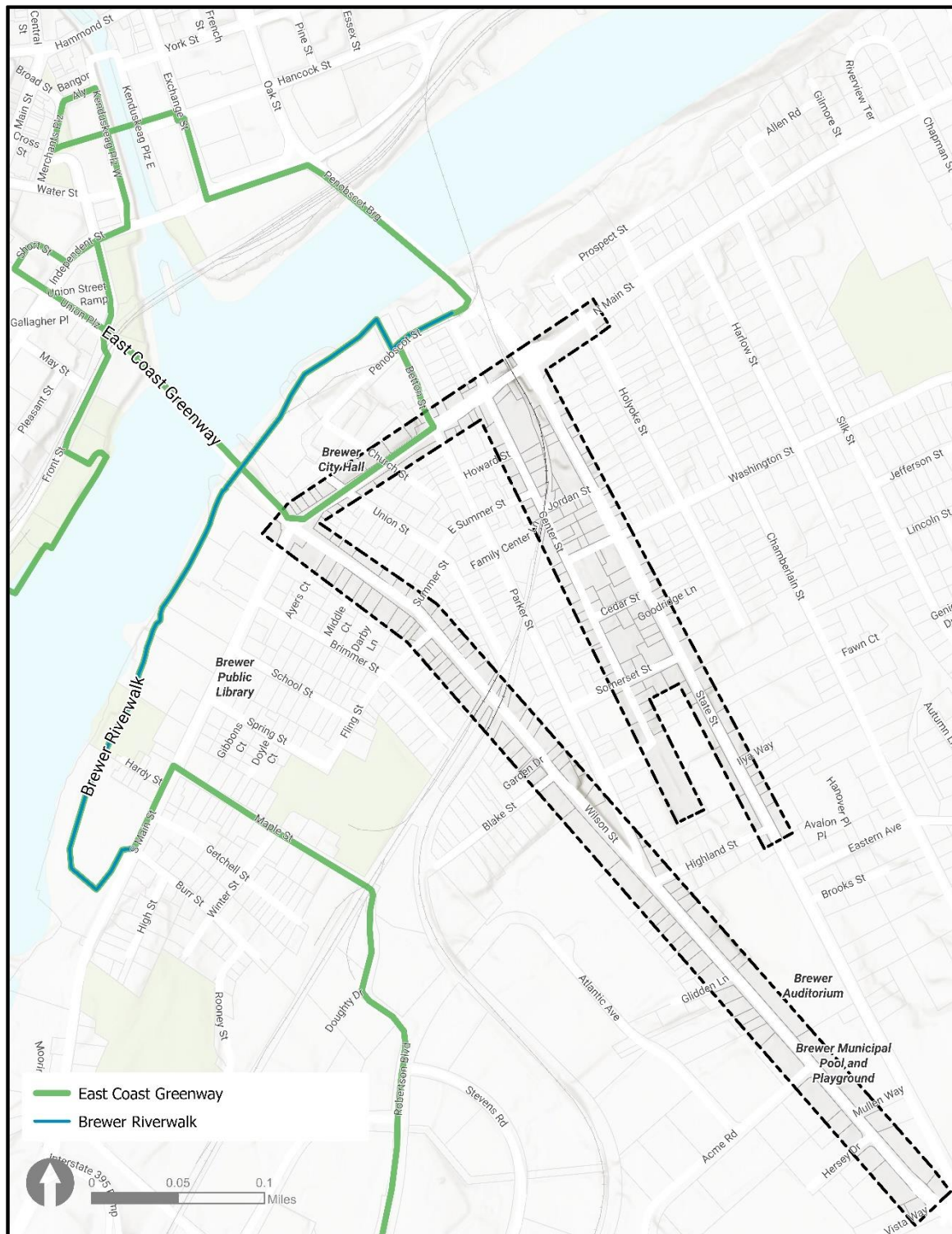


Figure 8 – Morning Peak Hour Bicycle Volumes at Study Area Intersections

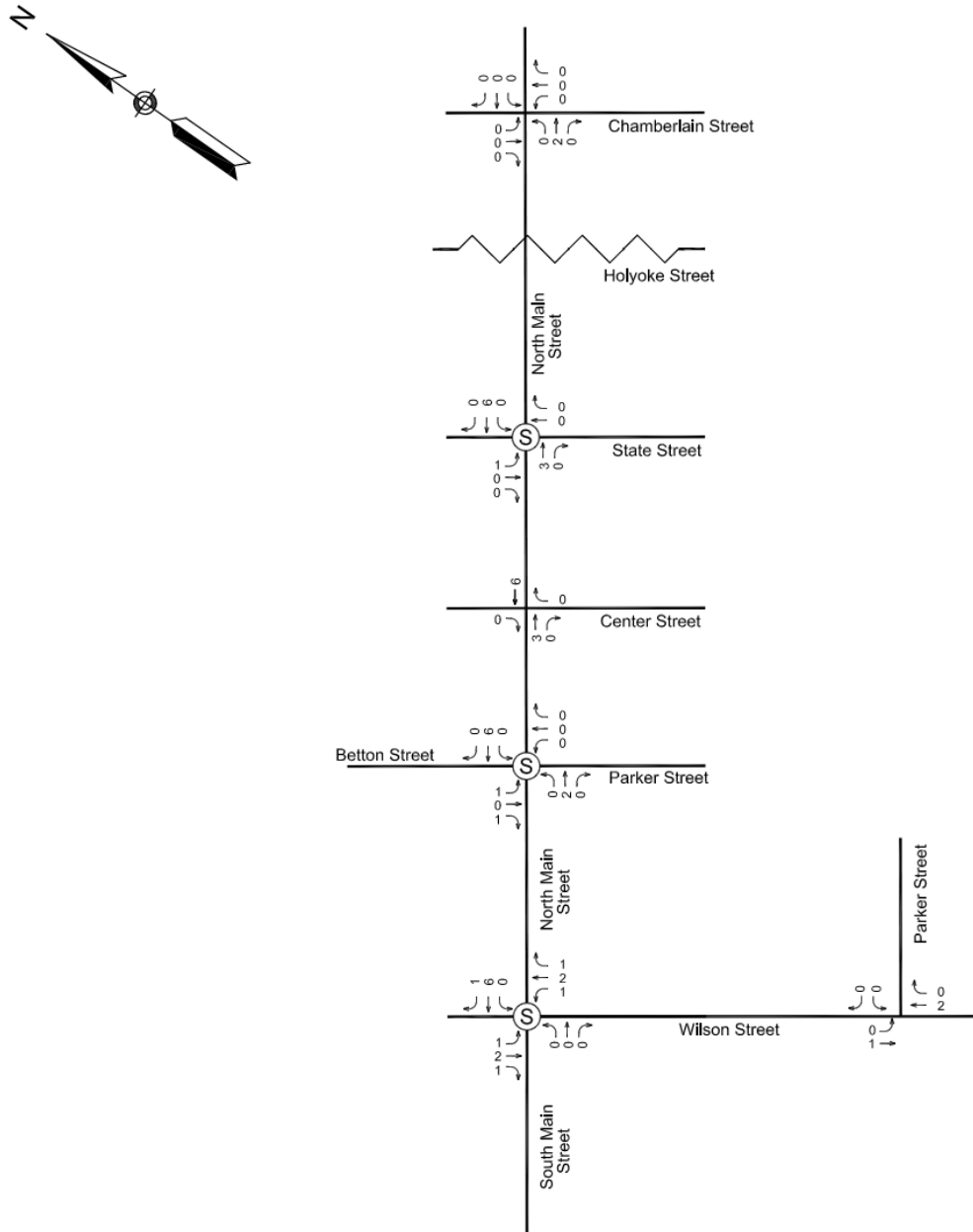


Figure 9 – Evening Peak Hour Bicycle Volumes at Study Area Intersections

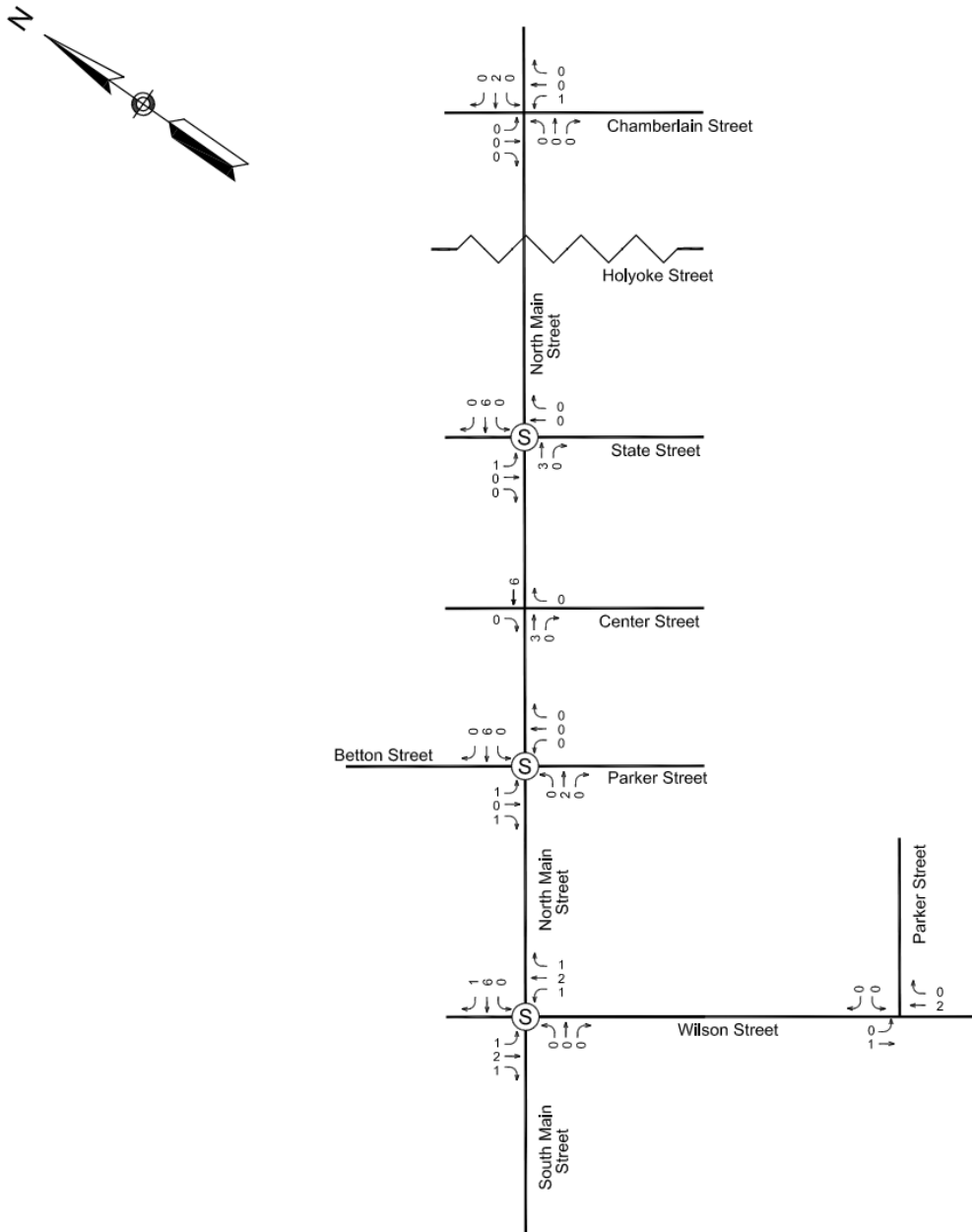


Figure 10 – Strava Heatmap of Local Bicycle Activity



## PEDESTRIAN INFRASTRUCTURE AND OPERATIONS

To gain a holistic understanding of the infrastructure in the study area affecting pedestrians, a desktop asset analysis was completed, identifying sidewalk gaps, crosswalks, curb cuts, on-street parking, and wayfinding signage. **Figure 11, Figure 12, Figure 13, and Figure 14**, show this analysis, divided into three sections. Significant sidewalk gaps are present on North Main Street between Center Street and State Street, as well as along Center Street, Jordan Street and Washington Street. There are also many large curb cuts, particularly on Wilson Street and State Street, which makes the environment less safe for pedestrians.

The presence of sidewalks does not mean conformance to the most current PROWAG for accessibility, MUTCD for signing, and access management of driveways along the major roadways, as there are many areas where some of the guidelines identified are not met:

- Four feet of continuous clear width of a pedestrian access route
  - Some sidewalks are noted to have less than four feet available for navigating utility poles, signs, and other impedances to pedestrians.
- Grades of sidewalks and curb ramps
- Detectable warning surfaces at pedestrian crossings of the roadway
- Minimum seven-foot clearance to the bottom of signs along pedestrian access routes / sidewalks and crosswalks
- Excessive access driveway openings onto the roadways with no curbing or delineation of roadway and sidewalk.

Due to recent safety-based work of the traffic signals in Brewer, it is notable that steps were made by the City to improve accessibility of pedestrian push buttons throughout the Brewer VPI study area.

**Figure 15** and **Figure 16** represent the peak hour pedestrian crossing volumes along the roadways within the Brewer VPI study area for the morning and afternoon periods, respectively.

Figure 11 – Brewer VPI Asset Map



Figure 12 – Brewer VPI Asset Map – Area 1

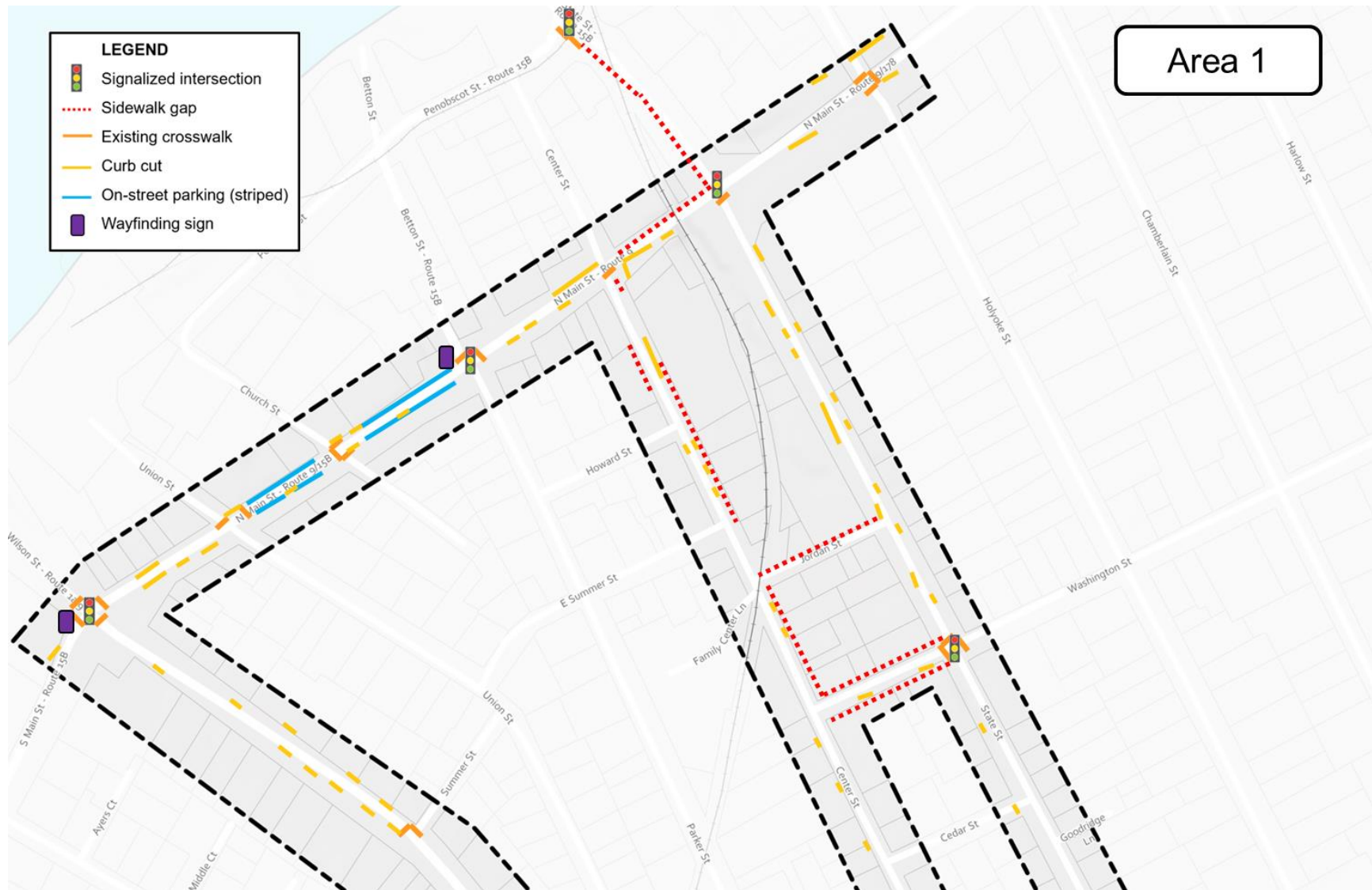




Figure 13 – Brewer VPI Asset Map – Area 2



Figure 14 – Brewer VPI Asset Map – Area 3



**Figure 15 – Morning Peak Hour Pedestrian Crossings at Study Area Intersections**

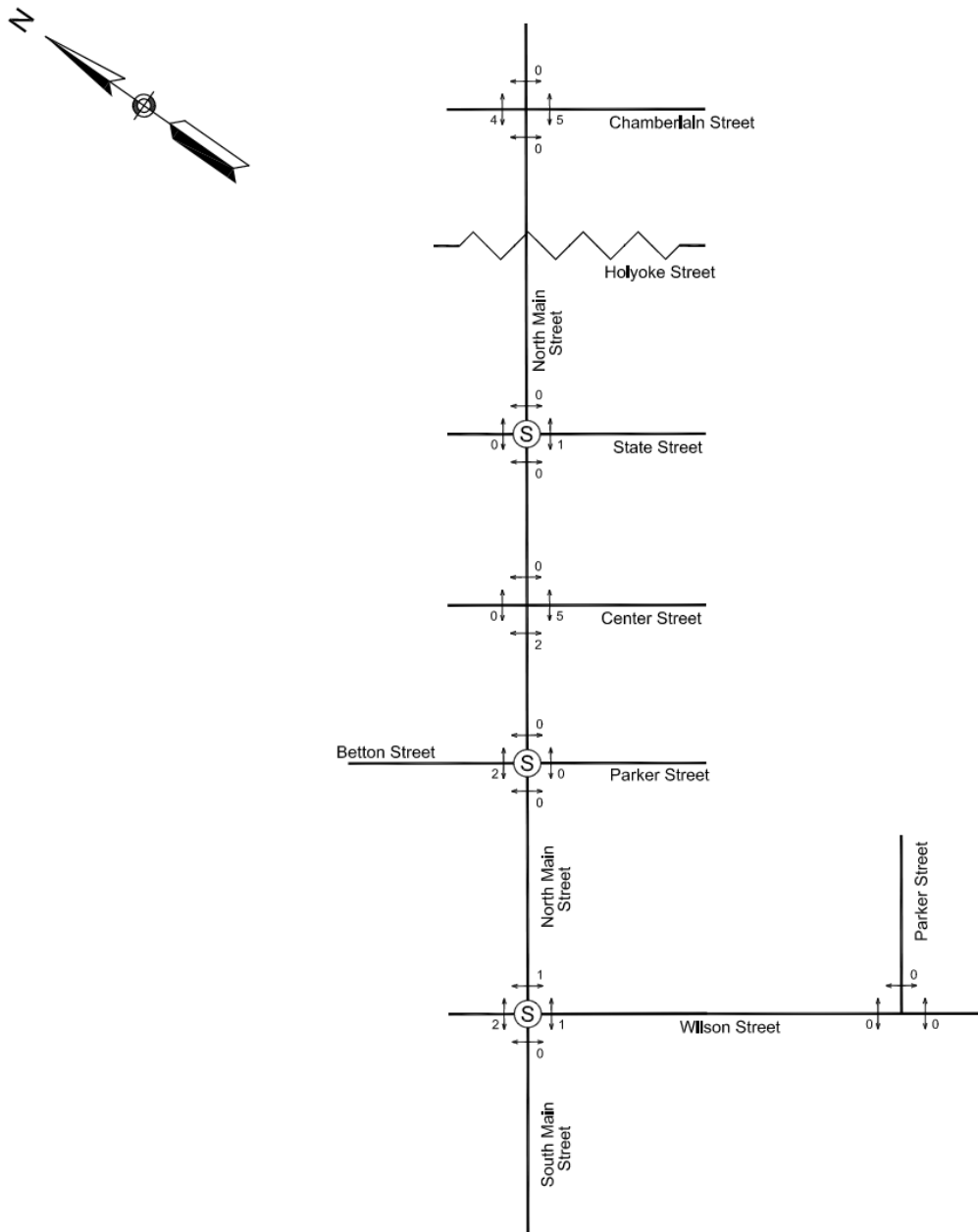
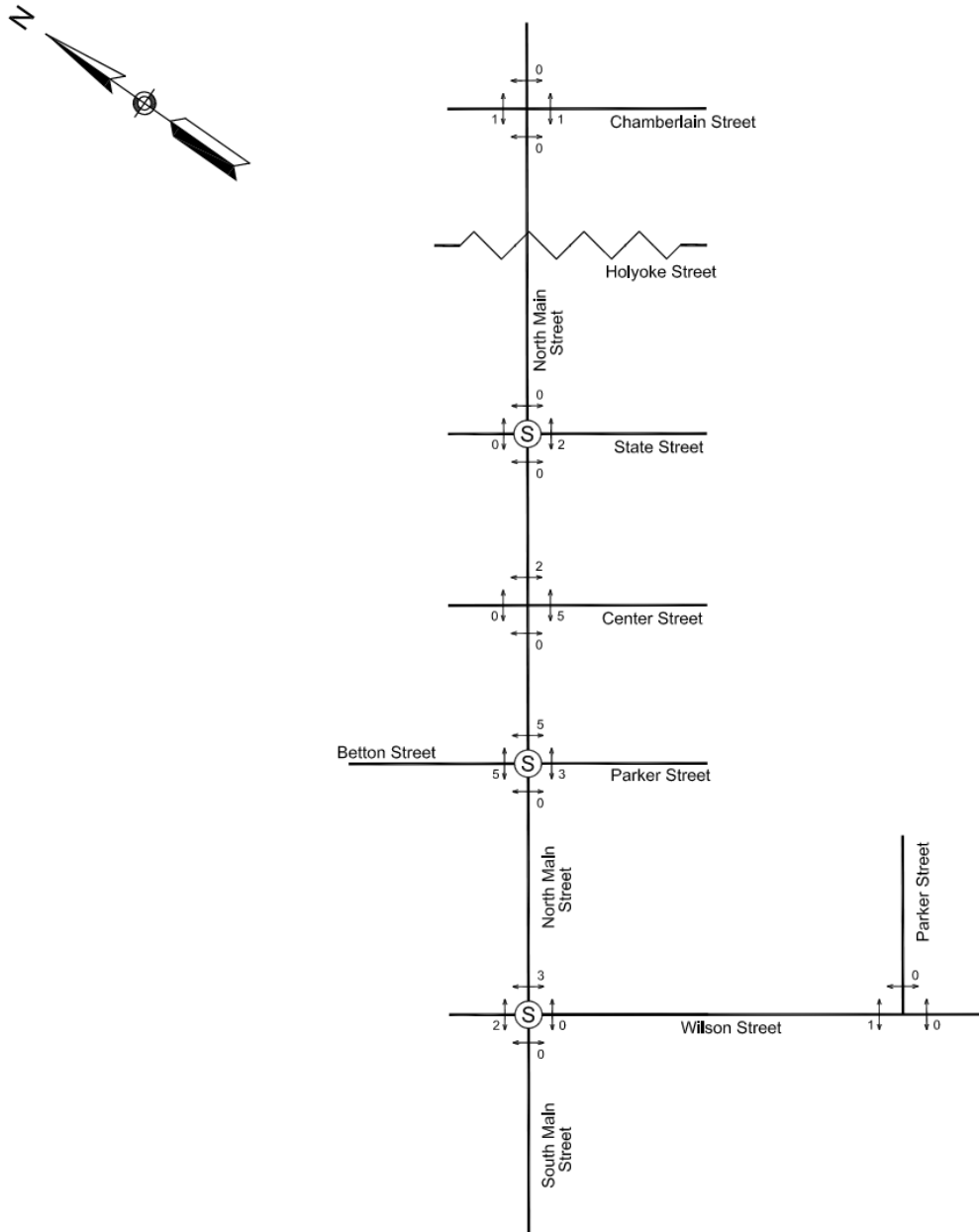


Figure 16 – Evening Peak Hour Pedestrian Crossings at Study Area Intersections



## TRANSIT

The only public transportation in Brewer is the Community Connector Bus based in Bangor, which has two routes in Brewer: Brewer North and Brewer South. Brewer South is in the study area at the intersection of Wilson and North/South Main Street. Brewer North is in the study area along the length of North Main Street and in the southern portion of State Street. In June 2024, the Community Connector transitioned from a flagging system to having fixed stops across its entire system. Both routes in Brewer have hourly service. The only bus shelter in the project area is on State Street in front of the Village Centre apartment complex. Ridership on both routes declined from 2019 to 2023 but is starting to increase again in 2024. Given the Covid 19 pandemic, this dip in ridership is expected and consistent with national trends. **Table 4** and **Table 5** show annual ridership since 2019 for each route. **Figure 17** shows a map of the Brewer North and Brewer South bus routes and bus stops.

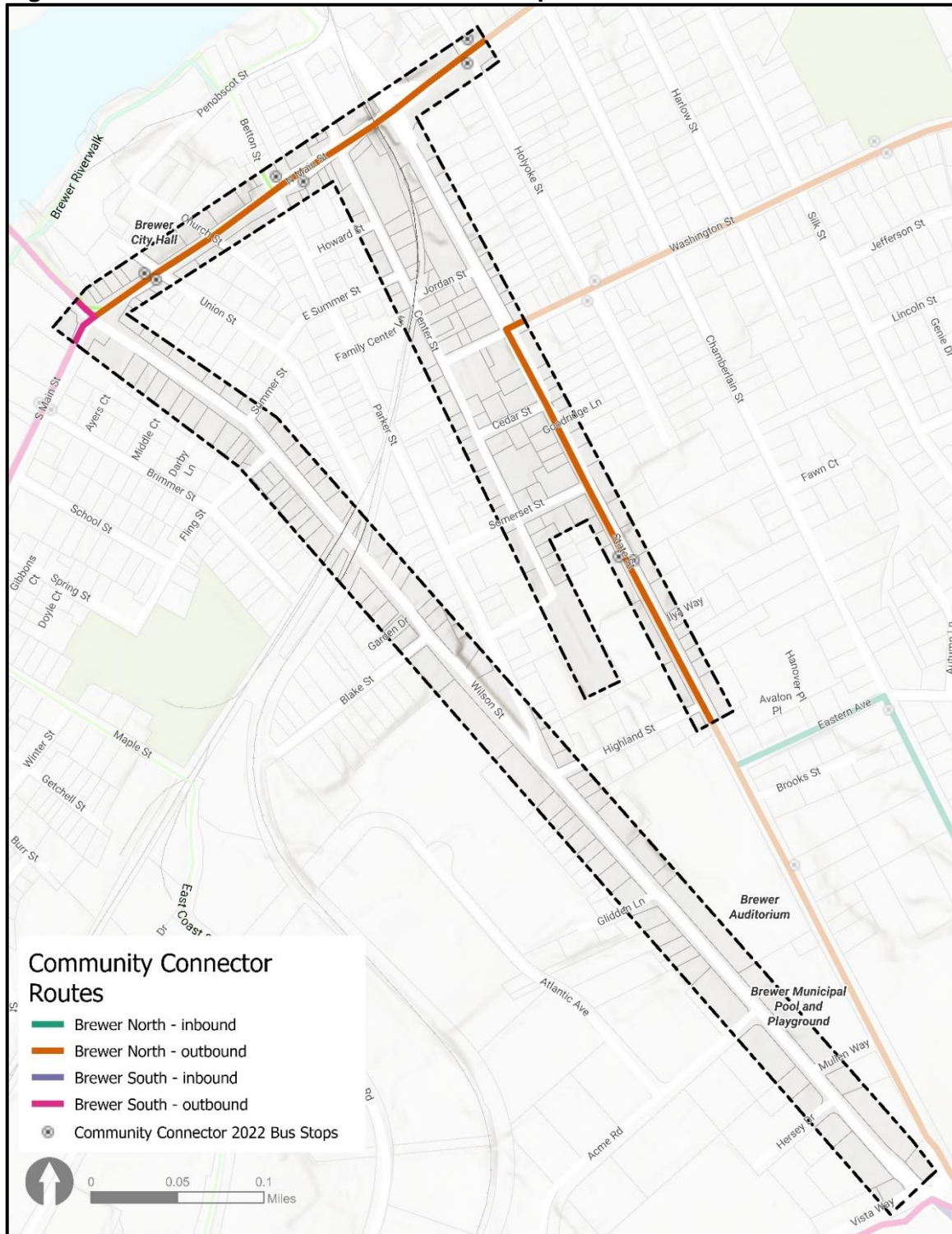
**Table 4 – Annual Transit Ridership – Brewer North**

Fiscal Year	Annual Ridership
2019	53,272
2020	48,652
2021	31,853
2022	30,936
2023	28,510
2024	40,506
Source: BACTS	

**Table 5 – Annual Transit Ridership – Brewer South**

Fiscal Year	Annual Ridership
2019	46,997
2020	40,822
2021	30,849
2022	30,909
2023	28,855
2024	37,269
Source: BACTS	

**Figure 17 – Brewer VPI Transit Routes and Stops**



## ROAD SAFETY ASSESSMENT

Included in the scope of the Brewer VPI study is the analysis of safety for all modes of travel within Downtown Brewer, which included the review of available crash data and conducting a road safety audit.

MaineDOT provides a public map, called the Maine Public Crash Query Tool, using Geographic Information Systems (GIS) to identify and make available crash data throughout the State of Maine for download and analysis, as well as identifying High Crash Locations (HCLs) as indicated through calculations of recent crash histories, average daily traffic, and comparison to similar intersection of roadway attributes.

### CRASH HISTORY

The most recent complete ten-year period, from 2014 was reviewed using the MaineDOT's Public Crash Query Tool and GIS files downloaded. A heatmap of crashes in the Study Area is show in **Figure 18**. An analysis of the crash data for all reported crashes available through the Tool in the past 5 years (2019-2023) along the Brewer VPI corridors and intersections is summarized in **Table 6**.





**Table 6 – Crash Data & Analysis (2019 – 2023)**

	North Main Street at State Street	North Main Street – State Street to Chamberlain Street	North Main Street – State Street to Betton Street / Parker Street	North Main Street / South Main Street at Wilson Street
2019	13	6	13	9
2020	11	9	1	10
2021	10	1	5	13
2022	11	2	3	11
2023	10	4	1	10
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>
<i>Average crashes per year</i>	11.00	4.30	4.60	13.25
<i>Intersection Crash Rate (crashes per million entering vehicles)</i>	1.43	-	-	1.30
<b>Crash Severity</b>				
Property Damage Only	46	20	14	42
Non-Fatal Injury	9	2	9	11
Fatal Injury	0	0	0	0
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>
<b>Crash Type</b>				
Intersection Movement	22	1	10	17
Rear-End / Sideswipe	30	17	11	34
Went Off Road	1	3	1	0
Bicycle	1	0	1	1
Head-On	0	0	0	1
Other	1	1	0	0
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>

**Table 6 – Crash Data & Analysis (2019 – 2023) – Continued**

	<b>North Main Street at State Street</b>	<b>North Main Street – State Street to Chamberlain Street</b>	<b>North Main Street – State Street to Betton Street / Parker Street</b>	<b>North Main Street / South Main Street at Wilson Street</b>
<b>Crash by Month</b>				
January	9	0	2	3
February	2	0	3	3
March	7	1	1	3
April	6	1	3	6
May	6	4	2	4
June	5	2	2	3
July	5	2	1	3
August	1	5	0	6
September	4	4	4	8
October	4	0	2	5
November	2	2	1	5
December	4	1	2	4
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>
<b>Crash by Time of Day</b>				
12 AM – 2 AM	0	0	0	0
2 AM – 4 AM	1	0	0	0
4 AM – 6 AM	0	1	1	0
6 AM – 8 AM	5	0	3	2
8 AM – 10 AM	6	5	1	4
10 AM – 12 PM	10	1	3	5
12 PM – 2 PM	6	2	4	9
2 PM – 4 PM	3	5	3	6
4 PM – 6 PM	17	7	5	17
6 PM – 8 PM	3	0	1	8
8 PM – 10 PM	2	1	2	2
10 PM – 12 AM	2	0	0	0
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>

**Table 6 – Crash Data & Analysis (2019 – 2023) – Continued**

	North Main Street at State Street	North Main Street – State Street to Chamberlain Street	North Main Street – State Street to Betton Street / Parker Street	North Main Street / South Main Street at Wilson Street
<b>Crash by Day of Week</b>				
Sunday	5	2	1	3
Monday	8	1	1	7
Tuesday	8	4	5	9
Wednesday	8	5	2	12
Thursday	12	4	6	9
Friday	8	4	5	7
Saturday	6	2	3	6
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>
<b>Crash Road Surface</b>				
Dry	46	21	19	38
Wet	5	1	2	12
Snow	4	0	2	3
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>
<b>Crash Light Condition</b>				
Daylight	42	21	18	41
Dark – Lighted	10	1	4	5
Dark – Not Lighted	1	0	0	1
Dusk	2	0	0	6
Dawn	0	0	1	0
<b>Total</b>	<b>55</b>	<b>22</b>	<b>23</b>	<b>53</b>

## HIGH CRASH LOCATIONS

As referenced by the Androscoggin Transportation Resource Center, High Crash Locations (HCLs) are locations that have eight or more traffic crashes and a Critical Rate Factor (CRF) greater than 1.00 in a three-year period. A highway location with a CRF greater than 1.00 has a frequency of crashes that is greater than the statewide average for similar locations. A CRF is a statistical measure to determine the "expected crash rate" as compared to similar intersections in the State of Maine.

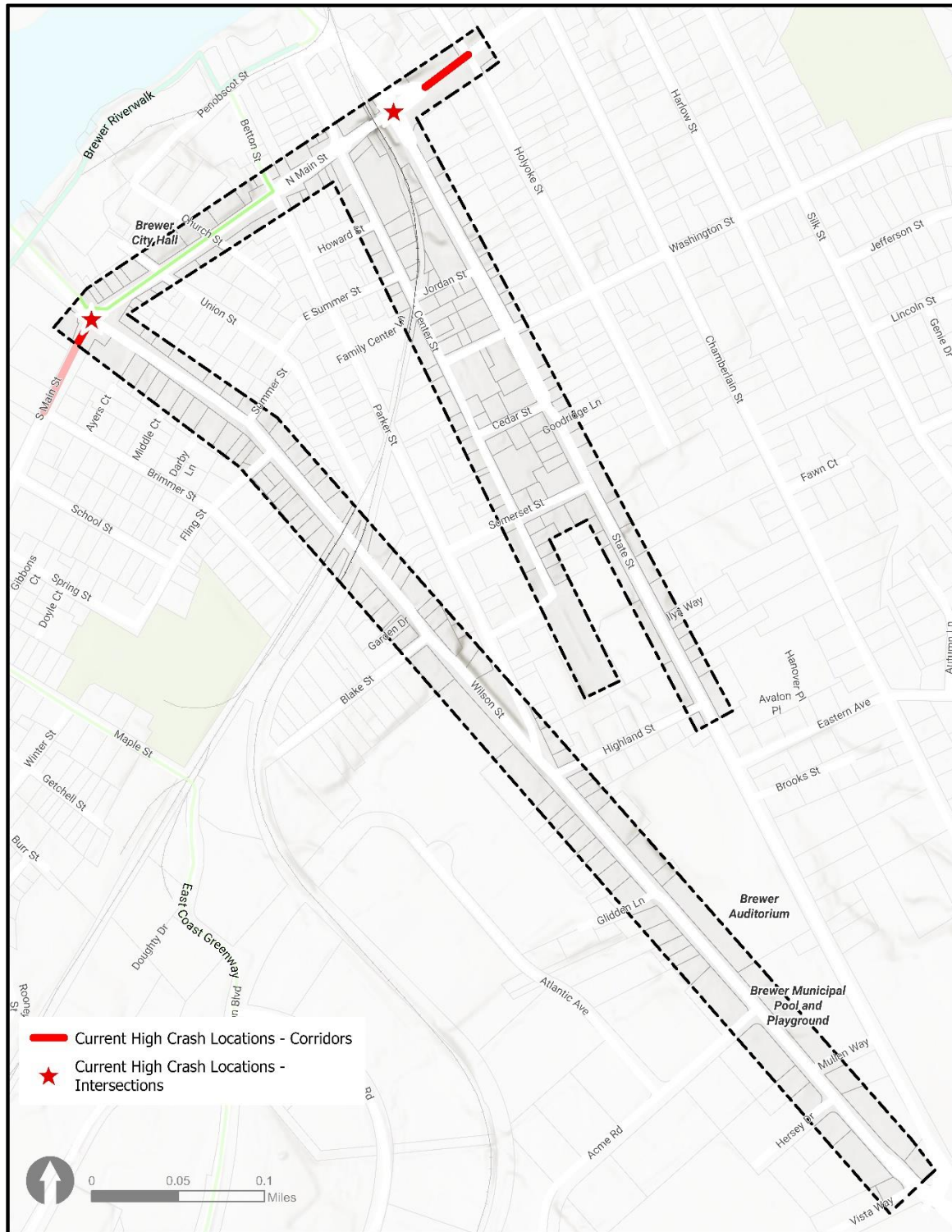
For the years of 2020 through 2023, the following locations were identified as HCLs in the Brewer VPI Study area:

- North Main Street at State Street (Intersection)
- North Main Street, between State Street and Holyoke Street (Segment)
- North Main Street / South Main Street at Wilson Street (Intersection)

A map of high crash locations is shown in **Figure 19**.

MaineDOT provides crash diagrams for identified HCLs and these were collected from Maine's GIS website after the RSA, so they were not available during the RSA for discussion. The crash diagrams can be found in **Appendix C**.

Figure 19 – Brewer VPI High Crash Locations



## ROAD SAFETY AUDIT (RSA)

The Road Safety Audit (RSA) was conducted on May 24, 2024 for both the Brewer VPI project and South Main Street Corridor Study, where representatives from MaineDOT, the City of Brewer, and Stantec met at the Joseph L. Ferris Community Center at 318 Wilson Street. After introductions and presenting the data collected before the RSA, the RSA team conducted a site visit to evaluate and observe four locations along North Main Street prioritized for the audit. After visiting the locations, participants discussed their observations of the areas and identified positive elements of the existing infrastructure as well as safety concerns and deficiencies.

The following locations were visited during the RSA field audit and discussed later in the return to the Community Center:

- Site 1 – North Main Street at State Street
- Site 2 – North Main Street, between State Street and Holyoke Street
- Site 3 – North Main Street, between State Street to Benton Street / Parker Street
- Site 4 – North Main Street / South Main Street at Wilson Street

### Site 1 – North Main Street at State Street



*Figure 20 – Aerial View of North Main Street at State Street Intersection.*

North Main Street at State Street is a signalized intersection. The State Street (eastbound), State Street (westbound) and North Main Street (northbound) approaches all consist of one through lane and one shared right/through lane. North Main Street (southbound) consists of a left turn lane, a through lane and a right-turn, yield controlled slip lane. This slip lane is provided pedestrian crossing signs with LED-enhancements when a pedestrian push button is actuated. There are no bike lanes present for any approach. This segment is shown in **Figure 20**.

The North Main Street (northbound) receiving lanes receive two left-turn lanes from State Street (eastbound), however, one of these lanes is a right-turn only lane onto Chamberlain Street, approximately

685 feet north on North Main Street. Two State Street (westbound) receiving lanes are present, however only one through lane is provided from State Street.

Critical information derived from the crash data analysis provides that most crashes occur in dry conditions during the day, with a significant peak of crashes occurring between 4 PM and 6 PM. Ninety five percent (95%) of all crashes are either rear end/side swipe or intersection movement type crashes.

The City of Brewer and MaineDOT have implemented pedestrian improvements recently using “No Right Turn on Red” signs and signal equipment as well as restricting left turns at the north, east, and south legs of the intersection. Actuated pedestrian crossings are available at the same legs providing concurrent pedestrian crossings along their adjacent vehicular through movements.



*Figure 21 – Drainage issues at Southeast Corner of State St and North Main Street.*

The State Street eastbound approach, North Main Street northbound approach, and State Street westbound approach have high degrees of approach grading, at seven percent (7%), eight percent (8%), and negative six percent (-6%) which impact approach speeds and sightlines between vehicles and between vehicles and other travel modes.

Uneven queuing was observed for left turning vehicles from State Street to North Main Street and N. Main St. (northbound) through and through/right lane which causes traffic to back up in the area. The ramps at all corners could use a review of conformance with the most current Public Right-of-Way Accessibility Guidelines (PROWAG and MaineDOT’s “Minimum ADA Requirements for Pedestrian Facilities” Design Guidance) for accessibility. As the field walk for the RSA was conducted after a storm, existing drainage issues were able to be documented and discussed by the RSA team, as reflected in **Figure 21**.

## Site 2 – North Main Street between State Street and Chamberlain St



**Figure 22 – North Main Street between State Street and Chamberlain Street.**

The HCL segment north of State Street along North Main Street was reviewed, which included the unsignalized intersections with Holyoke Street, Prospect Street, and Chamberlain Street, as well as two access driveways for the Irving / Circle K. This segment is shown in **Figure 22**.

Holyoke Street and Prospect Street are stop-controlled approaches to North Main Street, located approximately 300 feet north of the State Street intersection. Both minor roadways are primarily residential streets with low traffic volumes daily. Both approaches of Chamberlain Street to North Main Street at stop-controlled, located approximately 700 feet north of the intersection with State Street.

North Main Street has two uncontrolled travel lanes and a single southbound lane through the intersection with Holyoke Street and Prospect Street northbound. At the North Main Street northbound. There are no bike lanes at any approaches.

Based on crash data, most crashes occur in dry conditions during the day, with a peak between 4 PM and 6 PM during the summer months. Seventy-seven percent (77%) of all crashes are rear end/side swipe and fourteen (14%) are from vehicles running off of the road.

The crossing at Holyoke Street was noted by local RSA attendees as a relatively frequent pedestrian crossing by residents in the adjacent neighborhoods and the access to the Irving / Circle K convenience store. There exists pedestrian crossing signing at painted crosswalks at both intersection in the segment.



During the RSA, it was observed that the pedestrian and STOP signing in the area needs to be updated to meet MUTCD guidelines, including sign dimensions, such as the minimum seven feet above the adjacent grade where pedestrians are active, and improved crosswalk markings. The paved roadway of this section North Main Street was considered by attendees to be rather wide, especially for the mid-bloc pedestrian crossings available at the intersections and geometric ways to reduce the paved area for shorter crossings and positive guidance for speed regulation should be considered. These noted features are represented in **Figure 23**.

The existing lighting along North Main Street are high mast luminaires that provide lighting for the travel way but does not provide enough pedestrian scale lighting at night. The existing travel way, pedestrian sidewalks, and crosswalks geometries at the intersection with Holyoke Street were noted to be affected by the access driveways from the Irving / Circle K.



*Figure 23 – Crosswalk at Holyoke Street across North Main Street*

### Site 3 – North Main Street from State Street to Betton Street and Parker Street

The other HCL segment on North Main Street is south of State Street to the intersection with Parker Street and Betton Street, including the intersection with Center Street. This segment represents the major north-south roadway accessing the City's Historic Downtown and is in close proximity to mixing of all mode types of transportation for the City, from parking available along Center Street and in lots between Downtown businesses and along the Brewer Riverwalk, as well as pedestrian and bicycle connections between business, neighborhoods, and the Riverwalk. This segment is shown in **Figure 24**.

Due to left-turn restrictions at the intersection of North Main Street and State Street, vehicular traffic originating from Bangor and destined for points south on North Main Street are required to take a right-turning movement from State Street onto Penobscot Street then Betton Street along the northwest and west perimeter of Brewer's Downtown, where vehicles can make another right turning movement to continue travel on North Main Street. Vehicular traffic traveling northeast on North Main Street destined for Bangor via State Street will take this same route, but in reverse, with left-turning movements at the signalized intersections of North Main Street at Betton Street and Penobscot Street at State Street.



**Figure 24 – North Main Street between State Street and Betton/Parker Street**



*Figure 25 – North Main Street median and Center Street (West) showing the painted gore and raised media, as well as the Historic Downtown Brewer.*

North Main Street has a raised concrete median for the length of this section with a break for full movements entering and exiting the of the OHI Brewer Area Food Pantry and Little Jay’s Auto Repair. Center Street’s eastbound approach to North Main Street is a one-way eastbound traveled way through the Historic Downtown, with stop-controlled right-turns allowed onto North Main Street. A painted gore is provided as guidance for North Main Street southbound traffic to not commit right turns into Center Street. Center Street’s east leg of the intersection with North Main Street is a stop-controlled approach, only allowing right turns onto North Main Street, but northbound North Main Street traffic is permitted to turn right into Center Street. No left turns are allowed from North Main Street into either leg of Center Street due to the median. These features are shown in **Figure 25**.

Parker Street is an east-west roadway primarily providing access to residential neighborhoods and the arterial roadway of North Main Street. This roadway terminates to the east at an unsignalized intersection with Wilson Street, approximately ½ mile from the western terminus with North Main Street.

Pedestrian crossing facilities are only provided at the signalized intersection of North Main Street at Parker Street and Betton Street and sidewalks are provided along both side of North Main Street through this segment, with continuation of sidewalks provided along both sides of Center Street, Betton Street, and Parker Street. No bike lanes or paths were present along any of the reviewed roadways.

The intersection of North Main Street at Parker Street and Betton Street is a signalized intersection. The Betton Street eastbound approach is provided a shared left/through lane and right-turn lane and North Main Street northbound is provided a left-turn lane and through/right lane, with the protected turning movements programmed to operate with overlap during active green turn signals. All other approaches at this intersection are single left/through/right lanes.

Based on available crash data, most crashes occur in dry conditions during the day, with a peak between 4 PM and 6 PM. Ninety-one percent (91%) of all crashes are either rear end/side swipe or intersection movements. There is a recorded bicycle crash at this location. As mentioned for the North Main Street at State Street intersection, the City has already implemented “low-hanging fruit” safety improvements by prohibiting high-risk turning movements, specifically at the Center Street approach in this study segment. By implementing right turn only at side streets there is reductions required in intersection sight distance for intersection movements, while also reducing the number of conflicts at the intersection.

During the RSA and confirmed a common occurrence from the local members of the RSA team, pedestrians commonly jaywalk at the Center Street intersection with North Main Street, even without pedestrian facilities provided for the crossing. This is due to the residential neighborhoods east of North Main Street accessing the Historic Downtown District and not extending their trip by walking south to the Parker Street signalized pedestrian crossing or walking north, up a relatively steep grade, to the intersection with State Street and committing three additional roadway crossings. There appears to be limited stopping sight distance available due to the grades required to provide an elevated roadway over the active railroad. As seen in the North Main Street segment north of State Street, this segment of North Main Street is provided high mast luminaires for travelled way lighting, although no pedestrian level lighting is provided along this segment. Pedestrian-level lighting is provided along Center Street through the Downtown and shows noticeable contrast during low-light conditions than compared to pedestrian infrastructure along North Main Street, as seen in **Figure 26** and **Figure 27**.

One of the City’s goals through the VPI study is to accommodate safe multi-modal connections through this segment, with a vision of a multi-use path and crossing improvements made to Center Street to establish a dedicated connection between the Brewer Riverwalk, Downtown Brewer, and residential neighborhoods to the east. The local stakeholders identified the primary interest of providing pedestrian and bicycle connections Through Center Street, but also interests and substantiating multi-use connections on Parker Street. Center Street and Parker Street will need to be reviewed in



*Figure 26 – Center Street pedestrian-scale lighting*



*Figure 27 – North Main Street at Center Street low-light conditions. This intersection commonly sees pedestrian crossings although no crossings provided*

more engineering detail evaluated to improve pedestrian and bicycle circulation and connection to the Riverwalk.

It was observed that the pavement markings and signing in the area needs to be updated to meet MUTCD guidelines, including sign dimensions and crosswalk conditions. The roadway segment's sidewalks were observed to needing further PROWAG and MaineDOT review for accessibility, including pedestrian ramp grades and placement of existing utility poles and lighting poles not allowing for minimum passage. The paved roadway of this section North Main Street was considered by attendees to be rather wide, especially for the mid-block pedestrian crossings available at the intersections and geometric ways to reduce the paved area for shorter crossings and positive guidance for speed regulation should be considered.

The RSA team observed vehicles entering North Main Street southbound via Downtown Brewer from Center Street right-turn movements, traveling the 50 feet south to the break in the North Main Street raised median in this segment, then making a U-turn movement at the break to continue travel on North Main Street northbound.

Local members of the RSA teams noted incidents of North Main Street southbound vehicles making right turns into Center Street to access the Historic Downtown. However, this is a prohibited movement as Center Street is an eastbound-only roadway in this area and the vehicles are illegally travelling westbound. The only notice of this prohibition is a sign showing this prohibition at the intersection and a painted gore supplementing this message, however there is no physical barrier (curbing or raised island) that further prevents this movement.

## Site 4 – North Main Street / South Main Street at Wilson Street



*Figure 28 – North Main Street/South Main Street at Wilson Street Intersection.*

The fourth HCL identified in the VPI study area is the North / South Main Street at Wilson Street signalized intersection. The North Main Street and Wilson Street westbound approaches consist of a left turn lane, a through lane and a right turn lane. South Main Street and Wilson Street eastbound consist of one left turn lane and one shared through/right lane. A public parking lot is provided at the northeast corner of the intersection and the parking lot at the southwest corner of the intersection is for the High Tide Restaurant and Bar. This intersection is shown in **Figure 28**.

Sidewalks are present along both sides of along all four legs of the intersection, with signalized pedestrian crossings provided across all four controlled legs of the intersection. A direct pedestrian

walkway is provided between the southwest corner of the intersection to the Brewer Riverwalk. There are no bike lanes provided for any approaches.

Based on crash data, most crashes occur in dry conditions during the day, with a peak between 4 PM and 6 PM. Ninety-six percent (96%) of all crashes are either rear end/side swipe or intersection movement crashes. There is a recorded bicycle crash at this location. Majority of the crashes occur mid-week in this location.

The City of Brewer has invested in wayfinding signs at the intersection, as well as beautification and brick pavers to define the pedestrian placemaking of the intersection. The City has also invested in improvements to the pavement surface, pavement markings, and pedestrian crossings along North Main Street between this intersection and the signalized intersection with Betton Street and Parker Street.

A driveway is located at the northeast corner of the intersection, with access located within the North Main Street approach to the signalized intersection. The driveway is uncontrolled, with no intersection control sign provided, nor inclusion into the signal system. Observed during the RSA visit and noted by local stakeholders, access into and out of the driveway is difficult for vehicles that require access to the businesses and residences which utilize this roadway (**Figure 29**). Providing a controlled access to the

intersection was discussed by the RSA attendees and would require further engineering review for inclusion into the existing signalized intersection. Another alternative discussed was to provide improved access through other access points provided farther north on North Main Street or access points onto Union Street.

Although there is ample access for pedestrians in the area, lighting is lacking for safe crossings at night. The curb ramps at this site are causing drainage issues. The intersection is very wide which allows for options for possible reworking of intersection.



*Figure 29 – Uncontrolled driveway at northwest corner of the North Main Street at Wilson Street intersection.*

## LAND USE ANALYSIS

### ZONING AND CURRENT LAND USES

Existing zoning and current land uses were reviewed to gain an understanding of both the current and potential future uses. The North Main Street Corridor is primarily zoned Convenience Business. Center Street north of North Main Street is zoned Downtown Development. Most of the rest of the study area is zoned for residential use, with pockets of business zoning within the residential zone. Current land use largely conforms to existing zoning, with a variety of commercial and retail uses along North Main Street, and mostly residential uses in the rest of the study area. **Figure 30** shows zoning in and around the study area, and **Figure 31** show current land uses.



**Figure 30 – Brewer VPI Zoning**

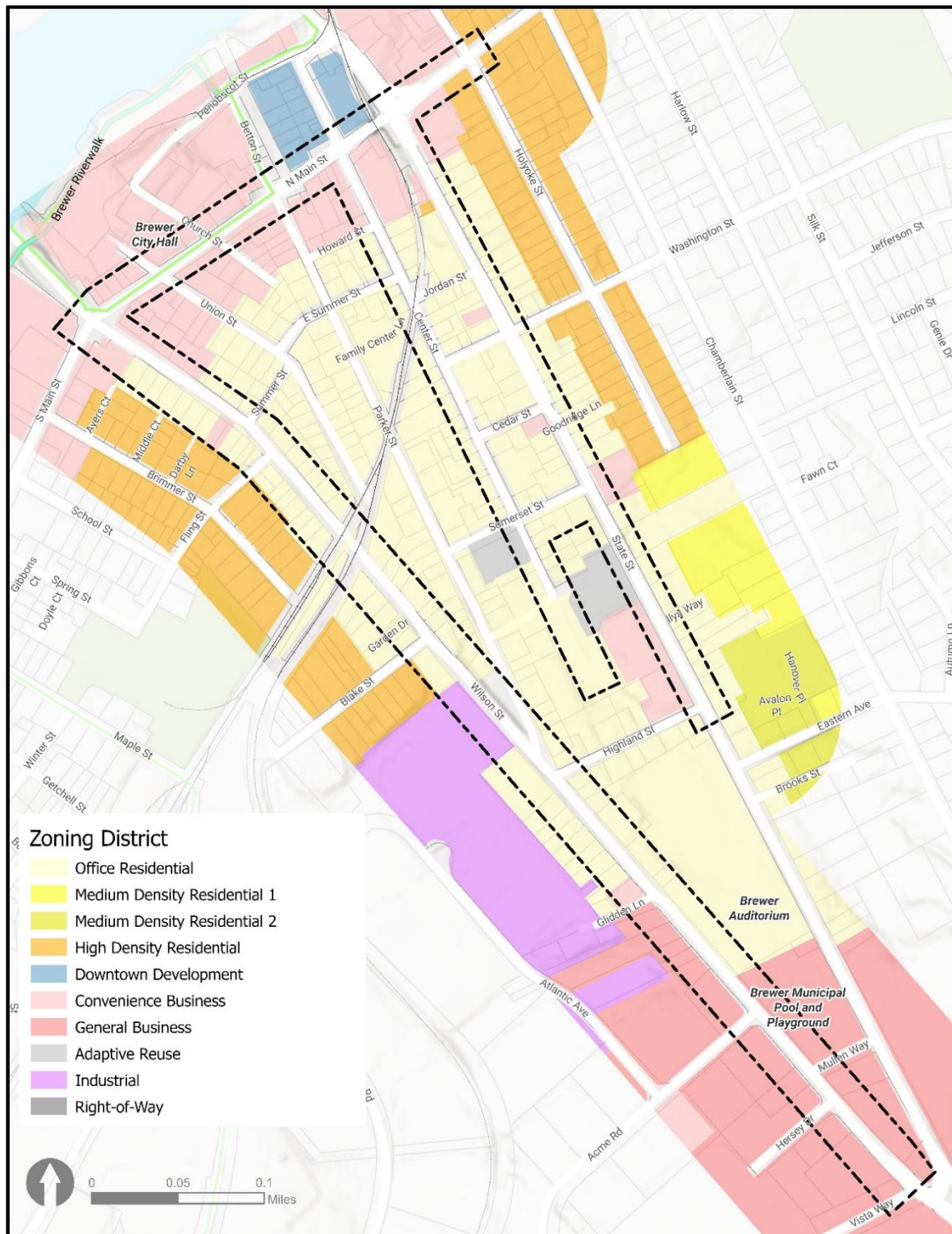


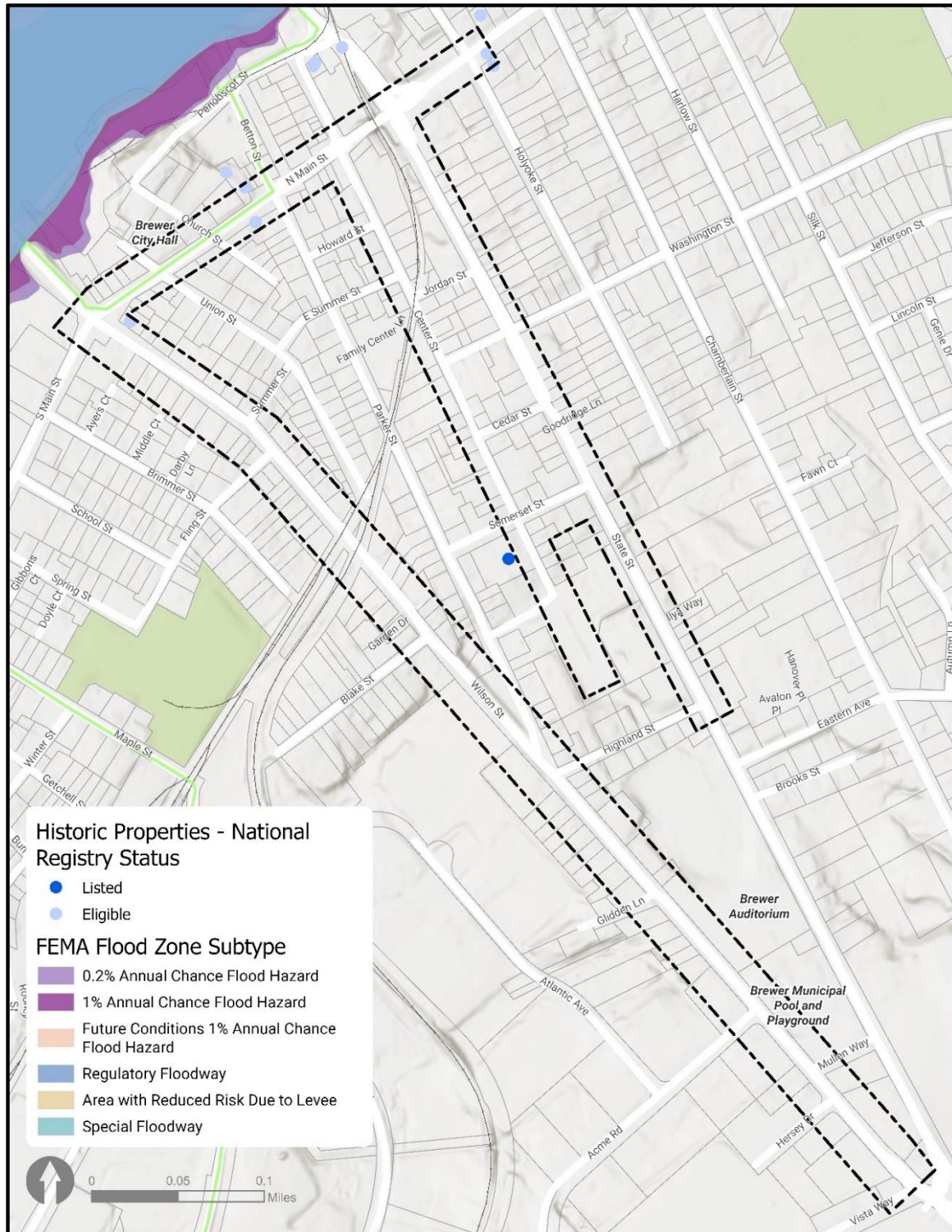
Figure 31 – Brewer VPI Current Land Uses



## ENVIRONMENTAL AND HISTORIC RESOURCES

A desktop environmental and historic resources screening was performed for the study area to identify any environmental characteristics in or around the project boundary limits. The characteristics searched for include historic properties, aquifers, wildlife habitats, FEMA flood zones, conservation zones, and wetlands. The characteristics found came from the following sources: Maine Department of Environmental Protection data maps, Maine Fish and Wildlife maps, the National Register of Historic Places and the City of Brewer's Axis GIS Map. While none of the project area itself is in a FEMA Flood Zone, the area near the river, including the Brewer Riverwalk is in the FEMA Flood Zone Subtype with a 1% Annual Chance Flood Hazard. Additionally, there are several properties eligible for the National Historic Registry in and around the study area, but the only listed property is the former Brewer High School located at 5 Somerset Street. **Figure 32** show the environmental and historic resources in and around the study area.

**Figure 32 – Brewer VPI Environmental and Historic Resources**



**APPENDIX A TRAFFIC DATA**

Study Name  
Start Date  
Start Time  
Site Code

\*\*\*Combination  
Vehicles and Trucks

Start Time	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
Movement	1	1	1	1	1	1	1	1	1	1	1	1
7:00 AM	0	62	20	63	66	13	5	56	0	4	26	0
7:15 AM	1	60	23	82	62	9	1	78	0	4	22	0
7:30 AM	0	86	22	109	88	16	3	101	1	4	28	0
7:45 AM	0	83	27	107	86	5	3	132	0	2	36	0
8:00 AM	0	71	32	76	75	8	7	89	0	3	28	0
8:15 AM	0	66	28	64	75	16	7	95	0	5	28	0
	0	316	109	356	324	45	20	417	1	14	120	0
8:30 AM	0	86	28	58	57	5	5	93	2	6	35	0
8:45 AM	2	68	36	67	44	8	4	94	0	9	37	0
9:00 AM	1	76	27	68	48	8	6	76	1	5	30	0
9:15 AM	3	65	32	47	40	11	5	84	0	2	39	0
9:30 AM	1	72	30	53	33	12	8	96	0	7	20	0
9:45 AM	1	91	35	58	46	8	9	86	0	7	37	0
10:00 AM	4	90	32	50	33	8	6	88	0	3	39	0
10:15 AM	3	74	31	56	39	6	5	111	0	5	35	0
10:30 AM	0	75	29	58	54	12	8	89	0	5	21	1
10:45 AM	1	107	42	56	42	11	9	108	0	3	42	0
11:00 AM	3	93	40	37	35	5	5	99	0	7	28	0
11:15 AM	3	104	54	37	37	4	12	72	0	0	39	0
11:30 AM	3	109	51	62	38	14	11	95	0	5	48	1
11:45 AM	4	109	53	61	43	10	8	93	0	4	45	0
12:00 PM	10	97	50	54	44	11	15	106	0	14	34	0
12:15 PM	1	75	63	45	54	12	11	84	0	7	47	0
12:30 PM	3	88	51	59	30	10	15	87	0	3	39	0
12:45 PM	0	82	45	58	52	14	11	98	1	6	45	0
1:00 PM	2	110	37	47	45	2	14	92	0	3	36	1
1:15 PM	5	95	64	60	40	16	8	93	0	3	48	0
1:30 PM	4	111	47	50	35	16	5	112	0	2	37	0
1:45 PM	4	103	60	53	55	14	16	98	0	3	35	0
2:00 PM	9	107	65	43	47	9	6	90	0	4	50	1
2:15 PM	2	110	48	44	46	12	8	103	0	6	51	0
2:30 PM	3	111	76	63	53	15	6	90	0	9	60	0
2:45 PM	2	107	69	46	56	8	8	85	0	12	43	1
3:00 PM	1	107	89	38	49	5	15	91	0	6	64	1
3:15 PM	1	101	56	52	53	12	5	103	0	6	53	0
3:30 PM	5	117	73	50	51	10	15	123	0	9	71	0
3:45 PM	2	104	73	47	40	8	13	113	0	11	56	0
4:00 PM	2	116	52	48	47	8	6	101	0	5	55	0
4:15 PM	4	116	68	58	51	11	11	81	0	12	66	1
4:30 PM	5	119	65	70	60	7	9	98	0	4	67	2
4:45 PM	2	106	83	59	43	14	5	89	0	6	83	0
5:00 PM	5	105	74	47	64	13	16	122	0	12	79	0
5:15 PM	5	105	106	54	38	17	17	114	0	12	104	0
	17	435	328	230	205	51	49	423	0	34	333	2
5:30 PM	4	78	67	62	59	12	21	98	0	8	84	1
5:45 PM	4	96	60	52	41	10	12	97	0	7	63	0
6:00 PM	2	87	51	40	39	13	13	58	0	8	53	0
6:15 PM	4	84	51	53	31	7	7	67	0	8	47	1
6:30 PM	0	64	38	45	36	14	9	65	0	4	41	0
6:45 PM	1	57	46	42	43	4	12	68	0	2	26	0

PHF Southbound 0.89 Westbound 0.85 Northbound 0.81 Eastbound 0.88

K Factor 2107 21589 0.10

PHF Southbound 0.9 Westbound 0.89 Northbound 0.84 Eastbound 0.79

\*\*\*NewClass  
Articulated Trucks

Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
Movement	1	1	1	1	1	1	1	1	1	1	1	1
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	2	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	2	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	1	0	1	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0	0	0	2	0
9:00 AM	0	0	0	0	1	0	0	0	0	0	1	0
9:15 AM	0	0	0	0	1	0	0	0	0	0	1	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
9:45 AM	0	0	0	0	2	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	1	0	0	0	0	0
10:15 AM	0	0	1	0	1	0	0	0	0	0	0	0
10:30 AM	0	0	1	0	3	0	0	0	0	0	0	0
10:45 AM	0	0	1	0	2	1	1	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
11:15 AM	0	0	0	0	1	0	0	1	0	0	0	0
11:30 AM	0	1	0	0	1	0	0	0	0	0	1	0
11:45 AM	0	1	0	0	1	0	0	0	0	0	0	0
12:00 PM	0	1	0	0	1	0	0	1	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	1	0	0	0	0	0	1	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
2:15 PM	0	0	0	0	2	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	1	0	0	0	0	0	1	0
2:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
3:00 PM	1	0	0	0	1	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	2	0	0	0	0	0	2	0
3:30 PM	0	0	0	0	2	0	0	0	0	0	2	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	2	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	1	0	0	0	0	0	1	0
6:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
6:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	1	0	0	0	0	0	0	0

%Trucks Southbound 0.00 Westbound 0.01 Northbound 0.00 Eastbound 0.02

%Trucks Southbound 0.00 Westbound 0.02 Northbound 0.00 Eastbound 0.00

\*\*\*NewClass

Bicycles on Road

Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
Movement	1	1	1	1	1	1	1	1	1	1	1	1
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0

\*\*\*NewClass

Bicycles on Crosswalk

Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
Movement	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												
9:00 AM												
9:15 AM												
9:30 AM												
9:45 AM												
10:00 AM												
10:15 AM												
10:30 AM												
10:45 AM												
11:00 AM												
11:15 AM												
11:30 AM												
11:45 AM												
12:00 PM												
12:15 PM												
12:30 PM												
12:45 PM												
1:00 PM												
1:15 PM												
1:30 PM												
1:45 PM												
2:00 PM												
2:15 PM												
2:30 PM												
2:45 PM												
3:00 PM												
3:15 PM												
3:30 PM												
3:45 PM												
4:00 PM												
4:15 PM												
4:30 PM												
4:45 PM												
5:00 PM												
5:15 PM												
5:30 PM												
5:45 PM												
6:00 PM												
6:15 PM												
6:30 PM												
6:45 PM												

\*\*\*NewClass

Pedestrians

Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
Movement	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												

9:00 AM  
9:15 AM  
9:30 AM  
9:45 AM  
10:00 AM  
10:15 AM  
10:30 AM  
10:45 AM  
11:00 AM  
11:15 AM  
11:30 AM  
11:45 AM  
12:00 PM  
12:15 PM  
12:30 PM  
12:45 PM  
1:00 PM  
1:15 PM  
1:30 PM  
1:45 PM  
2:00 PM  
2:15 PM  
2:30 PM  
2:45 PM  
3:00 PM  
3:15 PM  
3:30 PM  
3:45 PM  
4:00 PM  
4:15 PM  
4:30 PM  
4:45 PM  
5:00 PM  
5:15 PM  
5:30 PM  
5:45 PM  
6:00 PM  
6:15 PM  
6:30 PM  
6:45 PM



Study Name  
 Start Date  
 Start Time  
 Site Code

\*\*\*Combination

Start Time	Southbound				Westbound			
	Approach				Approach			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
Movement	1	1	1	1	1	1	1	1
7:00 AM	0	122	3	0	3	0	0	10
7:15 AM	0	191	2	0	3	0	0	7
7:30 AM	0	210	6	0	2	0	0	8
7:45 AM	0	204	4	0	5	0	0	7
8:00 AM	0	118	2	0	2	1	0	9
	0	723	14	0	12	1	0	31
8:15 AM	0	141	4	0	6	0	0	5
8:30 AM	0	131	2	1	1	0	0	4
8:45 AM	0	117	4	0	2	0	0	4
9:00 AM	0	102	1	0	3	0	0	2
9:15 AM	0	112	3	0	2	0	0	5
9:30 AM	0	107	3	0	2	0	0	2
9:45 AM	0	115	2	0	4	0	0	2
10:00 AM	0	98	1	0	4	1	0	0
10:15 AM	0	97	2	0	0	1	0	7
10:30 AM	2	102	1	0	6	0	0	6
10:45 AM	0	105	9	0	2	0	0	7
11:00 AM	0	89	4	0	5	0	0	5
11:15 AM	1	100	2	0	3	0	0	4
11:30 AM	0	97	1	0	6	0	0	8
11:45 AM	1	105	2	0	6	0	0	5
12:00 PM	0	103	4	0	5	0	0	6
12:15 PM	0	92	3	0	3	0	0	5
12:30 PM	0	92	1	0	7	0	0	7
12:45 PM	0	73	4	0	4	0	0	10
1:00 PM	0	92	5	0	3	2	0	6
1:15 PM	0	89	5	0	3	0	0	9
1:30 PM	0	109	1	0	7	0	0	5
1:45 PM	0	112	4	0	3	0	0	6
2:00 PM	0	100	0	0	0	0	0	0

1:00 PM	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	1	0	0	1	0	0
6:45 PM	0	0	0	0	0	0	0

\*\*NewClass  
Bicycles on Crosswalk

Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
Movement	0	0	0	0	0	0	0	0
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
9:00 AM								
9:15 AM								
9:30 AM								
9:45 AM								
10:00 AM								
10:15 AM								

Study Name  
 Start Date  
 Start Time  
 Site Code

\*\*\*Combination

Vehicles and Trucks

Start Time	Southbound			Westbound			Northbound Eastbound				Total	PHF	Southbound	Westbound	Northbound	Eastbound
	Right	Thru	Left	Right	Thru	Left	U-Turn	Right	Right	Thru						
Movement	1	1	1	1	0	1	1	1	1	1	1	1				
7:00 AM	0	0	0	0	0	52	0	0	0	0	1	20				
7:15 AM	3	0	0	0	0	97	0	0	1	2	26					
7:30 AM	5	0	0	0	0	92	0	0	0	4	37					
7:45 AM	8	0	0	0	0	88	0	0	0	4	41	481	7:00 AM			
8:00 AM	6	0	0	0	0	87	0	0	1	2	39	543	7:15 AM			
8:15 AM	7	0	0	0	0	67	0	0	0	1	44	533	7:30 AM			
	26	0	0	0	0	334	0	0	1	11	161					
8:30 AM	6	0	0	0	0	50	0	0	1	5	30	487	7:45 AM			
8:45 AM	6	0	0	0	0	70	0	0	2	5	35	464	8:00 AM			
9:00 AM	9	0	0	0	0	30	0	0	1	2	36	407	8:15 AM			
9:15 AM	10	0	0	0	0	49	0	0	1	3	33	384	8:30 AM			
9:30 AM	8	0	0	0	0	47	0	0	2	2	46	397	8:45 AM			
9:45 AM	6	0	0	0	0	47	0	0	1	6	33	372	9:00 AM			
10:00 AM	9	0	0	0	0	40	0	0	1	5	38	387	9:15 AM			
10:15 AM	5	0	0	0	0	50	0	0	0	4	40	390	9:30 AM			
10:30 AM	6	0	0	0	0	49	0	0	1	4	42	387	9:45 AM			
10:45 AM	11	0	0	0	0	50	0	0	0	3	28	386	10:00 AM			
11:00 AM	3	0	1	0	0	33	0	0	3	4	33	370	10:15 AM			
11:15 AM	8	0	1	0	0	46	0	0	2	6	44	378	10:30 AM			
11:30 AM	2	0	0	0	0	53	0	0	7	3	42	383	10:45 AM			
11:45 AM	13	0	0	0	0	62	0	0	3	7	52	428	11:00 AM			
12:00 PM	6	0	0	0	0	42	0	0	2	5	52	458	11:15 AM			
12:15 PM	7	0	0	0	0	42	0	0	0	8	60	468	11:30 AM			
12:30 PM	10	0	1	0	0	44	0	0	0	2	44	462	11:45 AM			
12:45 PM	10	0	1	0	0	55	0	0	2	8	37	438	12:00 PM			
1:00 PM	8	0	0	0	0	36	0	0	4	4	43	426	12:15 PM			
1:15 PM	2	0	0	0	0	54	0	0	1	5	46	417	12:30 PM			
1:30 PM	7	0	0	0	0	50	0	0	3	6	49	431	12:45 PM			
1:45 PM	6	0	0	0	0	48	0	0	2	5	50	429	1:00 PM			
2:00 PM	4	0	0	0	0	62	0	0	6	2	59	467	1:15 PM			
2:15 PM	11	0	0	0	0	41	0	0	4	3	55	473	1:30 PM			
2:30 PM	12	0	0	0	0	51	0	0	1	5	51	478	1:45 PM			
2:45 PM	8	0	0	0	0	54	0	0	4	3	75	511	2:00 PM			
3:00 PM	9	0	0	0	0	44	0	0	2	5	65	503	2:15 PM			
3:15 PM	14	0	1	0	0	49	0	0	1	3	76	533	2:30 PM			
3:30 PM	25	1	0	0	0	48	0	0	1	3	84	575	2:45 PM			
3:45 PM	18	0	1	0	0	56	0	0	2	3	89	600	3:00 PM			
4:00 PM	13	0	0	0	0	39	0	0	0	1	73	601	3:15 PM			
4:15 PM	7	0	0	0	0	50	0	0	2	2	74	592	3:30 PM			
4:30 PM	8	0	0	0	0	49	0	0	0	5	80	572	3:45 PM			
4:45 PM	7	0	1	0	0	59	0	0	3	5	81	559	4:00 PM			
5:00 PM	6	0	0	0	0	54	0	0	2	6	81	582	4:15 PM			
5:15 PM	12	0	1	0	0	53	0	0	1	6	110	630	4:30 PM			
	33	0	2	0	0	215	0	0	6	22	352					
5:30 PM	7	0	0	0	0	52	0	0	2	7	71	1257	4:45 PM			
5:45 PM	8	0	0	0	0	39	0	0	0	2	69	1219	5:00 PM			
6:00 PM	13	0	0	0	0	49	0	0	2	2	53	1189	5:15 PM			
6:15 PM	3	0	0	0	0	33	0	0	1	3	60	476	5:30 PM			
6:30 PM	4	0	0	0	0	32	0	0	0	5	51	429	5:45 PM			
6:45 PM	2	0	0	0	0	30	0	0	0	4	42	389	6:00 PM			

\*\*\*NewClass

Articulated Trucks

Start Time	Right	Thru	Left	Right	Thru	Left	U-Turn	Right	Right	Thru	Total
Movement	1	1	1	1	0	1	1	1	1	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	4	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0
8:15 AM	0	0	0	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	2	0	0	0	0	0	0
9:30 AM	0	0	0	0	3	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	0	0	0	2
10:15 AM	1	0	0	0	1	0	0	0	0	1	0
10:30 AM	0	0	0	0	2	0	0	0	0	0	1
10:45 AM	0	0	0	0	2	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	1	0	0	0	0	0	0
11:30 AM	0	0	0	0	1	0	0	0	0	0	0
11:45 AM	0	0	0	0	2	0	0	0	0	0	1
12:00 PM	0	0	0	0	1	0	0	0	0	0	0
12:15 PM	0	0	0	0	1	0	0	0	0	0	0
12:30 PM	0	0	0	0	1	0	0	0	0	0	1
12:45 PM	0	0	0	0	1	0	0	0	0	0	1
1:00 PM	0	0	0	0	1	0	0	0	0	0	0
1:15 PM	0	0	0	0	2	0	0	0	0	0	0
1:30 PM	0	0	0	0	2	0	0	0	0	0	0
1:45 PM	0	0	0	0	2	0	0	0	0	0	0
2:00 PM	0	0	0	0	1	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	3	0	0	0	0	0	0
3:30 PM	0	0	0	0	1	0	0	0	0	0	1
3:45 PM	0	0	0	0	1	0	0	0	0	0	1
4:00 PM	0	0	0	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	5	0	0	0	0	0	1
5:30 PM	0	0	0	0	2	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	2	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0

\*\*\*NewClass

Bicycles on Road

Start Time	Right	Thru	Left	Right	Thru	Left	U-Turn	Right	Right	Thru
Movement	1	1	1	0	1	1	1	1	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0
8:45 AM	2	0	0	0	0	0	0	0	1	0
9:00 AM	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	1	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	1	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0

\*\*\*NewClass  
Bicycles on Crosswalk

Start Time	Right	Thru	Left	Right	Thru	Left	U-Turn	Right	Right	Thru
Movement	0	0	0	0	0	0	0	0	0	0
7:00 AM										
7:15 AM										
7:30 AM										
7:45 AM										
8:00 AM										
8:15 AM										
8:30 AM										
8:45 AM										
9:00 AM										
9:15 AM										
9:30 AM										
9:45 AM										
10:00 AM										
10:15 AM										
10:30 AM										
10:45 AM										
11:00 AM										
11:15 AM										
11:30 AM										
11:45 AM										
12:00 PM										
12:15 PM										
12:30 PM										
12:45 PM										
1:00 PM										
1:15 PM										
1:30 PM										
1:45 PM										
2:00 PM										
2:15 PM										
2:30 PM										
2:45 PM										
3:00 PM										
3:15 PM										
3:30 PM										
3:45 PM										
4:00 PM										
4:15 PM										
4:30 PM										
4:45 PM										
5:00 PM										
5:15 PM										
5:30 PM										
5:45 PM										
6:00 PM										
6:15 PM										
6:30 PM										
6:45 PM										

\*\*\*NewClass  
Pedestrians

Start Time	Right	Thru	Left	Right	Thru	Left	U-Turn	Right	Right	Thru
Movement	0	0	0	0	0	0	0	0	0	0
7:00 AM										
7:15 AM										
7:30 AM										
7:45 AM										
8:00 AM										
8:15 AM										
8:30 AM										
8:45 AM										
9:00 AM										

9:15 AM  
9:30 AM  
9:45 AM  
10:00 AM  
10:15 AM  
10:30 AM  
10:45 AM  
11:00 AM  
11:15 AM  
11:30 AM  
11:45 AM  
12:00 PM  
12:15 PM  
12:30 PM  
12:45 PM  
1:00 PM  
1:15 PM  
1:30 PM  
1:45 PM  
2:00 PM  
2:15 PM  
2:30 PM  
2:45 PM  
3:00 PM  
3:15 PM  
3:30 PM  
3:45 PM  
4:00 PM  
4:15 PM  
4:30 PM  
4:45 PM  
5:00 PM  
5:15 PM  
5:30 PM  
5:45 PM  
6:00 PM  
6:15 PM  
6:30 PM  
6:45 PM

Study Name  
Start Date  
Start Time  
Site Code

\*\*\*Combination

Vehicles and Trucks

Start Time	Southbound				Westbound				Northbound				Eastbound			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7:15 AM	22	2	1	0	3	82	1	0	3	5	3	0	0	27	43	0
7:30 AM	27	2	0	0	1	79	1	0	1	5	4	0	1	31	51	0
7:45 AM	34	8	3	0	2	78	0	0	1	10	4	0	0	34	53	0
8:00 AM	32	3	2	0	5	110	4	1	1	11	10	0	2	45	63	0
8:15 AM	46	4	0	0	3	76	0	0	2	9	1	0	1	32	46	0
8:30 AM	42	5	2	0	1	61	0	0	2	8	5	0	1	45	42	0
8:45 AM	154	20	7	0	11	325	4	1	6	38	20	0	4	158	204	0
9:00 AM	34	1	0	0	0	66	0	0	2	5	3	0	4	48	54	0
9:15 AM	37	8	1	0	3	82	4	1	2	8	2	0	0	37	41	0
9:30 AM	30	3	1	0	3	48	2	0	0	7	3	0	3	33	37	0
9:45 AM	42	8	2	0	3	50	0	0	0	4	4	0	4	35	27	0
10:00 AM	39	5	1	0	2	44	2	1	4	6	3	0	1	27	32	0
10:15 AM	27	1	3	0	6	43	1	0	4	3	1	0	3	25	32	0
10:30 AM	35	4	2	0	2	63	0	0	3	14	5	0	5	44	41	0
10:45 AM	34	1	3	0	5	45	0	0	1	6	2	0	0	38	54	0
11:00 AM	43	2	3	0	6	51	1	0	2	5	6	0	4	39	37	0
11:15 AM	44	4	0	0	9	68	3	0	3	8	3	0	3	36	44	0
11:30 AM	38	8	3	0	2	75	3	0	5	10	3	0	3	40	30	0
11:45 AM	31	1	3	0	4	44	2	0	1	7	3	0	1	52	47	0
12:00 PM	38	5	6	0	7	51	1	0	3	7	9	0	5	51	33	0
12:15 PM	40	6	0	0	6	55	1	0	2	5	5	0	2	54	32	0
12:30 PM	28	9	3	0	3	50	1	0	2	4	6	0	0	50	32	0
12:45 PM	41	3	1	0	4	49	2	0	3	8	2	0	2	50	39	0
1:00 PM	31	2	1	0	5	60	3	0	1	8	5	0	1	48	42	0
1:15 PM	46	7	2	0	5	60	3	0	2	7	9	0	4	47	41	0
1:30 PM	47	6	5	0	3	49	2	0	2	6	12	0	3	64	27	0
1:45 PM	40	5	1	0	7	67	1	0	0	5	5	0	3	34	35	0
2:00 PM	54	4	4	0	5	53	3	0	0	6	7	0	2	50	43	0
2:15 PM	46	4	1	0	6	61	3	0	5	4	4	0	1	47	41	0
2:30 PM	37	1	0	0	5	47	2	0	7	6	5	0	1	61	31	0
2:45 PM	50	0	6	0	5	49	3	0	7	15	4	0	4	54	38	0
3:00 PM	47	5	2	0	4	52	0	0	1	9	7	0	4	66	53	0
3:15 PM	63	2	2	0	3	62	0	0	3	6	3	0	6	48	48	0
3:30 PM	54	11	2	0	2	52	0	0	3	4	6	0	4	68	48	0
3:45 PM	50	7	2	0	4	66	0	0	3	10	2	0	0	77	49	0
4:00 PM	62	5	1	0	1	66	1	0	0	7	3	0	1	87	39	0
4:15 PM	34	5	1	0	5	73	4	0	1	6	2	0	0	76	50	0
4:30 PM	58	10	2	0	2	70	1	0	1	7	6	0	3	75	44	0
4:45 PM	59	10	2	0	4	48	0	0	2	8	7	0	2	78	46	0
5:00 PM	74	6	4	0	3	59	1	0	5	10	6	0	1	87	32	0
5:15 PM	77	4	0	0	1	62	0	0	2	9	9	0	5	84	35	0
5:30 PM	64	3	0	0	1	62	1	0	3	13	0	0	1	82	38	0
5:45 PM	61	9	1	0	4	82	1	0	1	9	3	0	2	108	52	0
6:00 PM	276	30	8	0	9	285	3	0	11	41	24	0	9	371	157	0
6:15 PM	44	8	6	0	4	52	1	0	5	6	6	0	4	72	42	0
6:30 PM	54	2	2	0	78	1	0	0	11	6	0	5	69	39	0	
6:45 PM	56	7	3	0	4	55	0	0	3	4	3	0	5	61	30	0
7:00 PM	46	8	1	0	0	35	2	0	1	6	3	0	2	55	41	0
7:15 PM	22	12	6	0	3	33	7	0	1	7	2	0	5	51	27	0
7:30 PM	23	10	2	0	2	26	6	0	5	14	2	0	4	54	33	0

PHF	0.91	0.71	0.73	0.83
Southbound		Westbound	Northbound	Eastbound
PHF	0.97	0.85	0.86	0.83
Southbound		Westbound	Northbound	Eastbound

\*\*\*NewClass

Bicycles on Road

Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
7:00 AM	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
6:00 PM	0	0	0	0												



Study Nam Main Street at Wilson Street  
 Start Date 4/23/2024  
 Start Time 7:00 AM  
 Site Code

\*\*\*NewClass

Start Time	Combined Cars and Trucks															
	Southbound Approach				Westbound Approach				Northbound Approach				Eastbound Approach			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
Movement	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7:00 AM	24	65	6	0	3	34	5	0	4	56	33	0	27	36	12	0
7:15 AM	25	73	7	0	2	43	6	0	14	69	36	0	17	49	13	0
7:30 AM	33	82	10	0	6	59	8	0	24	87	48	0	33	61	19	0
7:45 AM	38	78	13	0	5	69	8	0	18	92	48	0	36	63	22	0
8:00 AM	41	66	10	0	5	38	9	0	21	61	45	0	29	79	11	0
8:15 AM	41	56	11	0	7	44	15	0	19	87	34	0	25	47	15	0
	153	282	44	0	23	210	41	0	82	327	175	0	123	240	58	0
8:30 AM	25	51	9	0	3	41	5	0	11	66	45	0	23	67	11	0
8:45 AM	36	54	13	0	4	36	12	0	27	50	31	0	23	45	26	0
9:00 AM	10	36	15	0	4	42	11	0	19	41	32	0	22	65	13	0
9:15 AM	22	40	17	0	5	47	11	0	9	60	20	0	23	55	16	0
9:30 AM	21	32	8	0	11	56	10	0	13	54	26	0	31	43	13	0
9:45 AM	23	66	4	0	7	68	18	0	9	64	35	0	35	55	18	0
10:00 AM	30	43	7	0	2	57	15	0	8	46	20	0	32	54	20	0
10:15 AM	21	41	9	0	9	52	11	0	10	60	33	0	25	59	26	0
10:30 AM	21	37	12	0	6	53	11	0	14	45	37	0	27	61	26	0
10:45 AM	25	51	8	0	11	47	10	0	16	53	29	0	34	68	27	0
11:00 AM	15	59	10	0	9	52	12	0	12	54	27	0	23	63	26	0
11:15 AM	15	48	14	0	7	53	16	0	21	57	48	0	38	68	28	0
11:30 AM	16	58	10	0	11	51	15	0	14	59	23	0	36	46	18	0
11:45 AM	12	58	11	0	5	47	15	0	17	65	27	0	40	64	28	0
12:00 PM	18	58	17	0	6	69	18	0	11	64	33	0	40	66	23	0
12:15 PM	17	63	17	0	15	68	19	0	17	46	27	0	33	59	14	0
12:30 PM	15	52	9	0	8	54	15	0	17	65	48	0	38	72	23	0
12:45 PM	23	59	18	0	7	53	18	0	23	58	26	0	42	58	35	0
1:00 PM	32	53	10	0	3	60	17	0	19	53	34	0	45	70	20	0
1:15 PM	30	63	11	0	7	40	16	0	20	55	47	0	43	68	25	0
1:30 PM	21	47	10	0	15	68	19	0	14	59	27	0	33	59	14	0
1:45 PM	31	54	8	0	8	56	12	0	16	46	39	0	52	64	25	0
2:00 PM	21	61	17	0	3	65	10	0	21	59	40	0	36	83	24	0
2:15 PM	29	50	11	0	14	70	19	0	13	55	36	0	49	78	37	0
2:30 PM	22	65	18	0	8	60	13	0	15	66	42	0	51	66	24	0
2:45 PM	27	46	12	0	3	51	14	0	21	65	45	0	45	53	20	0
3:00 PM	20	63	15	0	10	65	11	0	12	75	53	0	48	66	25	0
3:15 PM	23	76	9	0	8	51	17	0	24	62	47	0	55	72	36	0
3:30 PM	20	82	13	0	10	53	23	0	23	82	39	0	64	44	39	0
3:45 PM	25	82	21	0	8	58	14	0	18	78	20	0	53	69	27	0
4:00 PM	27	72	17	0	3	56	19	0	16	88	43	0	56	74	18	0
4:15 PM	36	81	5	0	4	66	17	0	25	78	43	0	64	81	42	0
4:30 PM	33	96	8	0	10	68	14	0	15	91	39	0	62	44	44	0
4:45 PM	29	95	16	0	9	58	22	0	18	64	39	0	77	92	49	0
5:00 PM	31	80	12	0	7	99	19	0	20	85	40	0	84	74	36	0
5:15 PM	29	66	12	0	5	68	30	0	14	74	48	0	74	70	49	0
	122	367	48	0	31	283	85	0	67	314	168	0	297	260	178	0
5:30 PM	26	82	14	0	4	44	17	0	25	68	31	0	48	59	34	0
5:45 PM	25	70	17	0	7	49	16	0	19	66	37	0	45	55	26	0
6:00 PM	15	50	13	0	5	47	17	0	13	65	45	0	39	39	19	0
6:15 PM	17	46	12	0	2	50	12	0	13	69	39	0	37	20	0	0
6:30 PM	11	64	13	0	6	31	8	0	18	50	39	0	34	32	23	0
6:45 PM	9	38	8	0	8	37	11	0	15	38	16	0	28	46	20	0

PHF	0.93	Westbound	0.84	Northbound	0.92	Eastbound	0.88
PHF	0.98	Westbound	0.80	Northbound	0.94	Eastbound	0.87

\*\*\*NewClass

Start Time	Articulated Trucks															
	Southbound Approach				Westbound Approach				Northbound Approach				Eastbound Approach			
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
Movement	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	1	0	0	0	0	0	0	1	0	1	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
8:15 AM	0	3	0	0	1	1	0	0	0	0	0	0	0	1	0	0
8:30 AM	0	3	0	0	0	1	0	0	0	0	0	0	1	0	0	0
8:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0
9:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0
10:00 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
10:15 AM	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0
10:30 AM	0	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0
10:45 AM	1	1	0	0	1	1	0	0	0	1	2	0	0	1	0	0
11:00 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
11:45 AM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0
12:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0
12:45 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	0	0	0	5	30	0	14	74	48	0	74	70	49	0
1:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0
2:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0
3:15 PM	0	2	0	0	0	0	0	0	1	0	0	0	0	1	0	0
3:30 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	3	0	0	0	1	0	0	0	1	0	0	1	0	0	0
5:00 PM</																





6:45 PM

Study Nam Wilson Street at Parker Street

Start Date 5/23/2024

Start Time 7:00 AM

Site Code

\*\*\*Combination

Vehicles and Trucks

Start Time	Southbound Wilson Street			Southwestbound Parker Street			Northbound Wilson Street				SB	SWB	NB
	Thru	Hard Left	U-Turn	Hard Right	Bear Left	U-Turn	Bear Right	Thru	U-Turn				
Movement	1	1	1	1	1	1	1	1	1	1			
7:00 AM	62	0	0	0	6	0	3	39	0				
7:15 AM	81	0	0	1	7	0	4	58	0				
7:30 AM	100	0	0	0	6	0	9	57	0				
7:45 AM	117	1	0	2	7	0	5	79	0	644			
8:00 AM	96	1	0	2	5	0	4	58	0	700			
8:15 AM	90	1	0	1	5	0	9	87	0	742	0.86	0.78	0.8
	403	3	0	5	23	0	27	281	0				
8:30 AM	86	0	0	0	9	0	8	56	0	1471			
8:45 AM	116	0	0	0	7	0	6	67	0	1456			
9:00 AM	99	1	0	0	3	0	3	66	0	1462			
9:15 AM	83	1	0	3	1	0	7	65	0	687			
9:30 AM	116	0	0	0	1	0	6	57	0	708			
9:45 AM	86	1	0	1	5	0	6	81	0	692			
10:00 AM	86	0	0	0	2	0	7	90	0	705			
10:15 AM	75	2	0	0	7	0	14	96	0	739			
10:30 AM	78	0	0	0	5	0	16	83	0	741			
10:45 AM	91	0	0	3	5	0	8	57	0	725			
11:00 AM	91	0	1	2	9	0	7	85	0	735			
11:15 AM	74	1	0	0	6	0	4	80	0	706			
11:30 AM	94	2	0	1	3	0	5	69	0	698			
11:45 AM	107	1	0	0	5	0	8	81	0	736			
12:00 PM	107	1	0	0	2	0	4	82	0	737			
12:15 PM	107	2	0	0	6	0	4	84	0	775			
12:30 PM	95	0	0	0	5	0	8	77	0	786			
12:45 PM	88	0	0	2	5	0	10	82	0	771			
1:00 PM	108	1	0	0	3	0	4	92	0	783			
1:15 PM	112	0	0	0	4	0	4	85	0	785			
1:30 PM	89	1	0	0	5	0	11	100	0	806			
1:45 PM	119	0	0	2	5	0	3	72	0	820			
2:00 PM	103	0	0	2	5	0	5	96	0	823			
2:15 PM	117	1	0	1	4	0	12	96	0	849			
2:30 PM	103	1	0	1	9	0	9	102	0	868			
2:45 PM	85	2	0	1	2	0	4	87	0	848			
3:00 PM	106	0	0	2	5	0	13	86	0	849			
3:15 PM	117	3	0	1	9	0	5	75	0	828			
3:30 PM	105	2	0	0	3	0	12	105	0	830			
3:45 PM	80	2	0	1	6	0	10	83	0	831			
4:00 PM	106	1	0	4	10	0	14	81	0	835			
4:15 PM	116	2	0	0	5	0	6	97	0	851			
4:30 PM	98	2	0	0	4	0	5	98	0	831	SB	SWB	NB
4:45 PM	98	2	0	1	5	0	4	98	0	857	0.9	0.52	0.98
	418	7	0	5	24	0	29	374	0				
5:00 PM	95	2	0	0	7	0	14	95	0	1711			
5:15 PM	104	0	0	0	6	0	10	88	0	1693			
5:30 PM	73	0	0	1	5	0	5	70	0	1640			
5:45 PM	74	0	0	1	9	0	5	64	0	728			
6:00 PM	74	0	0	0	4	0	4	70	0	667			
6:15 PM	50	0	0	0	4	0	9	59	0	581			
6:30 PM	49	1	0	0	7	0	7	47	0	538			
6:45 PM	52	0	0	1	2	0	5	37	0	482			

\*\*\*NewClass







2:45 PM  
3:00 PM  
3:15 PM  
3:30 PM  
3:45 PM  
4:00 PM  
4:15 PM  
4:30 PM  
4:45 PM  
5:00 PM  
5:15 PM  
5:30 PM  
5:45 PM  
6:00 PM  
6:15 PM  
6:30 PM  
6:45 PM

**APPENDIX B      SYNCHRO TRAFFIC ANALYSIS REPORTS**



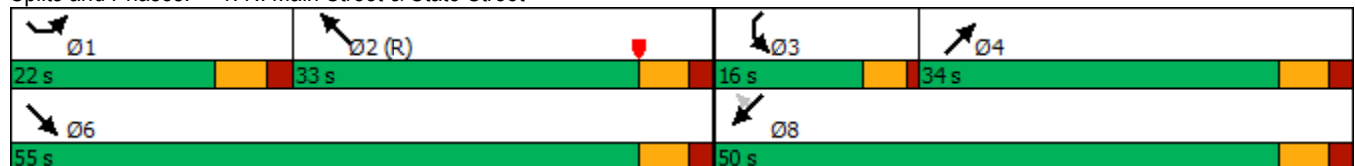
























Lane Group	SEL	SET	NWT	NET	SWL	SWT	SWR
Lane Configurations	↔↔	↔	↔↔	↔↔	↔	↔	↔
Traffic Volume (vph)	109	316	417	120	45	324	356
Future Volume (vph)	109	316	417	120	45	324	356
Lane Group Flow (vph)	132	383	583	164	57	412	452
Turn Type	Prot	NA	NA	NA	Prot	NA	Perm
Protected Phases	1	6	2	4	3	8	
Permitted Phases							8
Detector Phase	1	6	2	4	3	8	8
Switch Phase							
Minimum Initial (s)	5.0	10.0	10.0	8.0	5.0	8.0	8.0
Minimum Split (s)	11.0	16.0	33.0	34.0	9.5	14.0	14.0
Total Split (s)	22.0	55.0	33.0	34.0	16.0	50.0	50.0
Total Split (%)	21.0%	52.4%	31.4%	32.4%	15.2%	47.6%	47.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	2.5	4.0	4.0
Lead/Lag	Lead		Lag	Lag	Lead		
Lead-Lag Optimize?							
Recall Mode	None	Min	C-Min	None	None	None	None
v/c Ratio	0.36	0.34	0.35	0.24	0.31	0.69	0.61
Control Delay	45.7	12.8	20.9	32.3	47.5	36.8	10.5
Queue Delay	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Total Delay	45.7	13.7	20.9	32.3	47.5	36.8	10.5
Queue Length 50th (ft)	43	114	125	46	36	244	59
Queue Length 95th (ft)	70	235	196	65	70	259	103
Internal Link Dist (ft)		329	936	184		298	
Turn Bay Length (ft)					100		100
Base Capacity (vph)	579	1124	1663	963	236	849	909
Starvation Cap Reductn	0	471	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.59	0.35	0.17	0.24	0.49	0.50

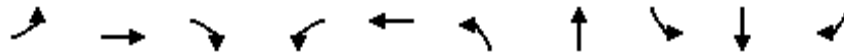
**Intersection Summary**

Cycle Length: 105  
 Actuated Cycle Length: 105  
 Offset: 11 (10%), Referenced to phase 2:NWT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Main Street & State Street



												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	 				 			 				
Traffic Volume (vph)	109	316	0	0	417	20	0	120	14	45	324	356
Future Volume (vph)	109	316	0	0	417	20	0	120	14	45	324	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		7%			1%			8%			-6%	
Total Lost time (s)	4.0	4.0			4.0			4.0		2.5	4.0	4.0
Lane Util. Factor	0.97	1.00			0.95			0.95		1.00	1.00	1.00
Frt	1.00	1.00			0.99			0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00			1.00		0.95	1.00	1.00
Satd. Flow (prot)	3379	1834			3567			3345		1841	1938	1647
Flt Permitted	0.95	1.00			1.00			1.00		0.95	1.00	1.00
Satd. Flow (perm)	3379	1834			3567			3345		1841	1938	1647
Peak-hour factor, PHF	0.89	0.89	0.89	0.81	0.81	0.81	0.88	0.88	0.88	0.85	0.85	0.85
Growth Factor (vph)	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Adj. Flow (vph)	132	383	0	0	556	27	0	147	17	57	412	452
RTOR Reduction (vph)	0	0	0	0	0	0	0	10	0	0	0	228
Lane Group Flow (vph)	132	383	0	0	583	0	0	154	0	57	412	224
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	1%	1%	1%
Turn Type	Prot	NA			NA			NA		Prot	NA	Perm
Protected Phases	1	6			2			4		3	8	
Permitted Phases												8
Actuated Green, G (s)	9.4	61.5			46.1			19.5		7.5	31.5	31.5
Effective Green, g (s)	11.4	63.5			48.1			21.5		9.5	33.5	33.5
Actuated g/C Ratio	0.11	0.60			0.46			0.20		0.09	0.32	0.32
Clearance Time (s)	6.0	6.0			6.0			6.0		4.5	6.0	6.0
Vehicle Extension (s)	3.0	3.0			3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	366	1109			1634			684		166	618	525
v/s Ratio Prot	0.04	c0.21			0.16			0.05		0.03	c0.21	
v/s Ratio Perm												0.14
v/c Ratio	0.36	0.35			0.36			0.23		0.34	0.67	0.43
Uniform Delay, d1	43.4	10.4			18.4			34.8		44.8	30.9	28.2
Progression Factor	1.00	1.00			1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	0.2			0.6			0.2		1.2	2.7	0.6
Delay (s)	44.0	10.6			19.0			35.0		46.1	33.6	28.7
Level of Service	D	B			B			C		D	C	C
Approach Delay (s)		19.1			19.0			35.0			32.0	
Approach LOS		B			B			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			25.7									HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio			0.49									
Actuated Cycle Length (s)			105.0							14.5		
Intersection Capacity Utilization			45.7%									ICU Level of Service A
Analysis Period (min)			15									
c Critical Lane Group												

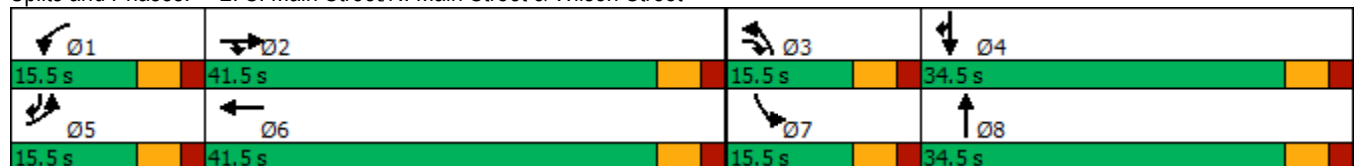


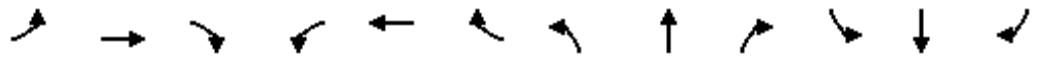
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	58	240	123	41	210	175	327	44	282	153
Future Volume (vph)	58	240	123	41	210	175	327	44	282	153
Lane Group Flow (vph)	71	295	151	53	300	205	480	51	327	178
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	NA	Prot	NA	pt+ov
Protected Phases	5	2	2 3	1	6	3	8	7	4	4 5
Permitted Phases										
Detector Phase	5	2	2 3	1	6	3	8	7	4	4 5
Switch Phase										
Minimum Initial (s)	5.0	8.0		5.0	8.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	34.5		10.5	34.5	10.5	29.5	10.5	29.5	
Total Split (s)	15.5	41.5		15.5	41.5	15.5	34.5	15.5	34.5	
Total Split (%)	14.5%	38.8%		14.5%	38.8%	14.5%	32.2%	14.5%	32.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.5	-1.5		-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None		None	None	None	None	None	None	
v/c Ratio	0.33	0.48	0.17	0.26	0.64	0.78	0.67	0.25	0.62	0.22
Control Delay	41.8	28.7	3.3	41.0	34.8	60.3	30.1	40.9	31.9	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.8	28.7	3.3	41.0	34.8	60.3	30.1	40.9	31.9	3.1
Queue Length 50th (ft)	36	144	0	27	147	111	220	26	144	0
Queue Length 95th (ft)	84	231	31	64	219	#276	#450	67	265	36
Internal Link Dist (ft)		1706			2618		355		855	
Turn Bay Length (ft)	150		150					150		150
Base Capacity (vph)	259	891	911	259	880	262	727	259	724	850
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.33	0.17	0.20	0.34	0.78	0.66	0.20	0.45	0.21

Intersection Summary

Cycle Length: 107  
 Actuated Cycle Length: 82  
 Natural Cycle: 85  
 Control Type: Actuated-Uncoordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: S. Main Street/N. Main Street & Wilson Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↑	↗
Traffic Volume (vph)	58	240	123	41	210	23	175	327	82	44	282	153
Future Volume (vph)	58	240	123	41	210	23	175	327	82	44	282	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	1881	1599	1787	1853		1805	1843		1787	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1787	1881	1599	1787	1853		1805	1843		1787	1881	1599
Peak-hour factor, PHF	0.88	0.88	0.88	0.84	0.84	0.84	0.92	0.92	0.92	0.93	0.93	0.93
Growth Factor (vph)	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Adj. Flow (vph)	71	295	151	53	270	30	205	384	96	51	327	178
RTOR Reduction (vph)	0	0	77	0	4	0	0	8	0	0	0	97
Lane Group Flow (vph)	71	295	74	53	296	0	205	472	0	51	327	81
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	1%	1%	1%
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	pt+ov
Protected Phases	5	2	2 3	1	6		3	8		7	4	4 5
Permitted Phases												
Actuated Green, G (s)	8.4	25.3	41.2	4.8	21.7		10.4	29.9		4.7	24.2	38.1
Effective Green, g (s)	9.9	26.8	42.7	6.3	23.2		11.9	31.4		6.2	25.7	39.6
Actuated g/C Ratio	0.11	0.31	0.49	0.07	0.27		0.14	0.36		0.07	0.30	0.46
Clearance Time (s)	5.5	5.5		5.5	5.5		5.5	5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	581	787	129	495		247	667		127	557	730
v/s Ratio Prot	c0.04	c0.16	0.05	0.03	c0.16		c0.11	c0.26		0.03	0.17	0.05
v/s Ratio Perm												
v/c Ratio	0.35	0.51	0.09	0.41	0.60		0.83	0.71		0.40	0.59	0.11
Uniform Delay, d1	35.4	24.5	11.7	38.4	27.7		36.4	23.7		38.5	26.0	13.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.7	0.1	2.1	1.9		20.1	3.4		2.1	1.6	0.1
Delay (s)	36.5	25.2	11.8	40.5	29.6		56.5	27.2		40.6	27.6	13.5
Level of Service	D	C	B	D	C		E	C		D	C	B
Approach Delay (s)		22.8			31.3			35.9			24.3	
Approach LOS		C			C			D			C	

Intersection Summary		
HCM 2000 Control Delay	28.9	HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.66	
Actuated Cycle Length (s)	86.7	Sum of lost time (s) 16.0
Intersection Capacity Utilization	59.3%	ICU Level of Service B
Analysis Period (min)	15	

c Critical Lane Group



Lane Group	NBT	SBT	SWL
Lane Configurations			
Traffic Volume (vph)	281	403	23
Future Volume (vph)	281	403	23
Lane Group Flow (vph)	392	482	37
Sign Control	Free	Free	Stop

**Intersection Summary**

Control Type: Unsignalized

**Intersection**

Int Delay, s/veh 0.7

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	281	27	3	403	23	5
Future Vol, veh/h	281	27	3	403	23	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	86	86	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	358	34	4	478	30	7

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	392	0	861
Stage 1	-	-	-	-	375
Stage 2	-	-	-	-	486
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1178	-	329
Stage 1	-	-	-	-	699
Stage 2	-	-	-	-	623
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1178	-	327
Mov Cap-2 Maneuver	-	-	-	-	327
Stage 1	-	-	-	-	699
Stage 2	-	-	-	-	620

Approach	NB	SB	SW
HCM Control Delay, s	0	0.1	16.1
HCM LOS			C

Minor Lane/Major Mvmt	NBT	NBR	SBL	SBT	SWLn1
Capacity (veh/h)	-	-	1178	-	360
HCM Lane V/C Ratio	-	-	0.003	-	0.102
HCM Control Delay (s)	-	-	8.1	0	16.1
HCM Lane LOS	-	-	A	A	C
HCM 95th %tile Q(veh)	-	-	0	-	0.3



Lane Group	SER	NWR	NET	SWT
Lane Configurations				
Traffic Volume (vph)	26	1	161	334
Future Volume (vph)	26	1	161	334
Lane Group Flow (vph)	32	4	181	371
Sign Control			Free	Free

**Intersection Summary**

Control Type: Unsignalized

**Intersection**

Int Delay, s/veh 0.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations			↑			↑		↑			↑	
Traffic Vol, veh/h	0	0	26	0	0	1	0	161	11	0	334	0
Future Vol, veh/h	0	0	26	0	0	1	0	161	11	0	334	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	1	-	-	-8	-
Peak Hour Factor	81	81	81	25	25	25	96	96	96	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	1	1	1
Mvmt Flow	0	0	32	0	0	4	0	169	12	0	371	0

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	-	-	371	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	3.3	-
Pot Cap-1 Maneuver	0	0	665	0
Stage 1	0	0	-	0
Stage 2	0	0	-	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	665	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	10.7	9.1	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NET	NERNWLn1	SELn1	SWT
Capacity (veh/h)	-	-	874	665
HCM Lane V/C Ratio	-	-	0.005	0.049
HCM Control Delay (s)	-	-	9.1	10.7
HCM Lane LOS	-	-	A	B
HCM 95th %tile Q(veh)	-	-	0	0.2





Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations		↕	↕		↕	↕	↕		↕
Traffic Volume (vph)	7	20	154	20	38	204	156	4	325
Future Volume (vph)	7	20	154	20	38	204	156	4	325
Lane Group Flow (vph)	0	30	171	0	89	248	195	0	471
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	NA
Protected Phases		4			8	5	2		6
Permitted Phases	4		4	8				6	
Detector Phase	4	4	4	8	8	5	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	24.5	24.5	24.5	24.5	24.5	15.0	15.0	22.5	22.5
Total Split (s)	25.0	25.0	25.0	25.0	25.0	21.0	47.0	26.0	26.0
Total Split (%)	34.7%	34.7%	34.7%	34.7%	34.7%	29.2%	65.3%	36.1%	36.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	2.0	2.0	2.5	2.5
Lost Time Adjust (s)		-2.5	-2.5		-2.5	-1.0	-1.0		-1.5
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0		4.0
Lead/Lag						Lead		Lag	Lag
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	Min	Min	Min
v/c Ratio		0.08	0.36		0.24	0.53	0.14		0.69
Control Delay		20.3	6.4		20.9	25.5	4.7		24.9
Queue Delay		0.0	0.0		0.0	0.0	0.0		0.0
Total Delay		20.3	6.4		20.9	25.5	4.7		24.9
Queue Length 50th (ft)		9	0		25	77	19		135
Queue Length 95th (ft)		28	41		47	151	55		222
Internal Link Dist (ft)		361			312		855		227
Turn Bay Length (ft)			50			50			
Base Capacity (vph)		685	746		680	583	1434		797
Starvation Cap Reductn		0	0		0	0	0		0
Spillback Cap Reductn		0	0		0	0	0		0
Storage Cap Reductn		0	0		0	0	0		0
Reduced v/c Ratio		0.04	0.23		0.13	0.43	0.14		0.59

Intersection Summary

Cycle Length: 72  
 Actuated Cycle Length: 55.6  
 Natural Cycle: 65  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 22: N. Main Street & Parker Street/Betton Street





Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↗		↕		↖	↔			↕	↔
Traffic Volume (vph)	7	20	154	20	38	6	204	156	4	4	325	11
Future Volume (vph)	7	20	154	20	38	6	204	156	4	4	325	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			0%			1%				-1%
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		0.99		1.00	1.00			1.00	
Flt Protected		0.99	1.00		0.98		0.95	1.00			1.00	
Satd. Flow (prot)		1847	1591		1848		1778	1865			1881	
Flt Permitted		0.90	1.00		0.89		0.95	1.00			1.00	
Satd. Flow (perm)		1690	1591		1668		1778	1865			1875	
Peak-hour factor, PHF	0.91	0.91	0.91	0.73	0.73	0.73	0.83	0.83	0.83	0.73	0.73	0.73
Growth Factor (vph)	101%	101%	101%	101%	101%	101%	101%	101%	101%	101%	101%	101%
Adj. Flow (vph)	8	22	171	28	53	8	248	190	5	6	450	15
RTOR Reduction (vph)	0	0	141	0	6	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	30	30	0	83	0	248	194	0	0	470	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Actuated Green, G (s)		7.5	7.5		7.5		13.5	37.9			18.9	
Effective Green, g (s)		10.0	10.0		10.0		14.5	38.9			20.4	
Actuated g/C Ratio		0.18	0.18		0.18		0.25	0.68			0.36	
Clearance Time (s)		6.5	6.5		6.5		5.0	5.0			5.5	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		297	279		293		453	1275			672	
v/s Ratio Prot							c0.14	0.10				
v/s Ratio Perm		0.02	0.02		c0.05						c0.25	
v/c Ratio		0.10	0.11		0.28		0.55	0.15			0.70	
Uniform Delay, d1		19.7	19.7		20.3		18.4	3.2			15.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.1	0.2		0.5		1.4	0.1			3.2	
Delay (s)		19.8	19.9		20.9		19.7	3.2			18.8	
Level of Service		B	B		C		B	A			B	
Approach Delay (s)		19.9			20.9			12.5			18.8	
Approach LOS		B			C			B			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			16.8				HCM 2000 Level of Service				B	
HCM 2000 Volume to Capacity ratio			0.56									
Actuated Cycle Length (s)			56.9				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			49.8%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

---

Lane Group

Lane Configurations

Traffic Volume (vph)

Future Volume (vph)

Lane Group Flow (vph)

Sign Control

---

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	0											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor1		Minor2		Major1			Major2			
Conflicting Flow All	1	1	0	1	1	1	-	0	0	0	0
Stage 1	0	0	-	1	1	-	-	-	-	-	-
Stage 2	1	1	-	0	0	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	-	-	-	4.13	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	-	-	-	2.219	-
Pot Cap-1 Maneuver	1021	895	-	1021	895	1083	0	-	-	-	-
Stage 1	-	-	-	1022	895	-	0	-	-	-	-
Stage 2	1022	895	-	-	-	-	0	-	-	-	-
Platoon blocked, %							-	-	-	-	-
Mov Cap-1 Maneuver	1021	895	-	-	895	1083	-	-	-	-	-
Mov Cap-2 Maneuver	1021	895	-	-	895	-	-	-	-	-	-
Stage 1	-	-	-	1022	895	-	-	-	-	-	-
Stage 2	1022	895	-	-	-	-	-	-	-	-	-

Approach	NB		SB		NE			SW		
HCM Control Delay, s	0		0		0			0		
HCM LOS	A		A							

Minor Lane/Major Mvmt	NET	NER	NBLn1	SBLn1	SWL	SWT	SWR
Capacity (veh/h)	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0	-	-
HCM Lane LOS	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-	-	-



Lane Group	SET	NWT	NET	NER	SWT
Lane Configurations					
Traffic Volume (vph)	2	1	277	11	723
Future Volume (vph)	2	1	277	11	723
Lane Group Flow (vph)	8	48	337	13	885
Sign Control	Stop	Stop	Free		Free

**Intersection Summary**

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	1.5											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕	↗		↕	
Traffic Vol, veh/h	0	2	2	31	1	12	1	277	11	14	723	0
Future Vol, veh/h	0	2	2	31	1	12	1	277	11	14	723	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	92	92	92	84	84	84	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	4	4	34	1	13	1	336	13	17	868	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1254	1253	868	1244	1240	336	868	0	0	349	0	0
Stage 1	902	902	-	338	338	-	-	-	-	-	-	-
Stage 2	352	351	-	906	902	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	150	174	355	152	177	711	785	-	-	1215	-	-
Stage 1	335	359	-	681	644	-	-	-	-	-	-	-
Stage 2	669	636	-	333	359	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	143	169	355	144	172	711	785	-	-	1215	-	-
Mov Cap-2 Maneuver	143	169	-	144	172	-	-	-	-	-	-	-
Stage 1	334	349	-	680	643	-	-	-	-	-	-	-
Stage 2	654	635	-	317	349	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	21.3	31.3	0	0.2
HCM LOS	C	D		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	785	-	-	185	229	1215	-
HCM Lane V/C Ratio	0.002	-	-	0.264	0.036	0.014	-
HCM Control Delay (s)	9.6	0	-	31.3	21.3	8	0
HCM Lane LOS	A	A	-	D	C	A	A
HCM 95th %tile Q(veh)	0	-	-	1	0.1	0	-

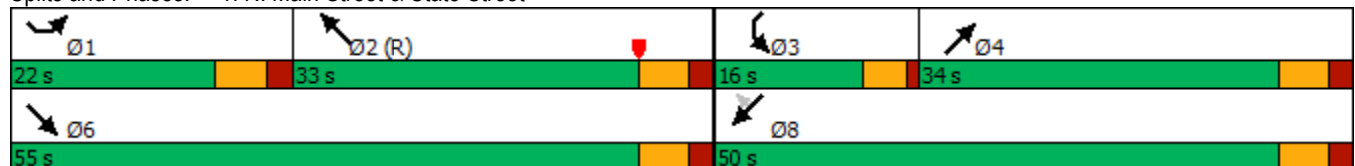
























Lane Group	SEL	SET	NWT	NET	SWL	SWT	SWR
Lane Configurations	↔↔	↔	↔↔	↔↔	↔	↔	↔
Traffic Volume (vph)	328	438	423	333	51	205	230
Future Volume (vph)	328	438	423	333	51	205	230
Lane Group Flow (vph)	394	546	607	501	62	249	279
Turn Type	Prot	NA	NA	NA	Prot	NA	Perm
Protected Phases	1	6	2	4	3	8	
Permitted Phases							8
Detector Phase	1	6	2	4	3	8	8
Switch Phase							
Minimum Initial (s)	5.0	10.0	10.0	8.0	5.0	8.0	8.0
Minimum Split (s)	11.0	16.0	33.0	34.0	9.5	14.0	14.0
Total Split (s)	22.0	55.0	33.0	34.0	16.0	50.0	50.0
Total Split (%)	21.0%	52.4%	31.4%	32.4%	15.2%	47.6%	47.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	2.5	4.0	4.0
Lead/Lag	Lead		Lag	Lag	Lead		
Lead-Lag Optimize?							
Recall Mode	None	Min	C-Min	None	None	None	None
v/c Ratio	0.67	0.50	0.45	0.66	0.33	0.40	0.39
Control Delay	46.8	16.4	27.8	40.6	47.9	27.5	4.0
Queue Delay	0.0	1.9	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	18.3	27.8	40.6	47.9	27.5	4.0
Queue Length 50th (ft)	127	205	163	161	39	126	0
Queue Length 95th (ft)	180	374	226	167	78	162	45
Internal Link Dist (ft)		329	936	184		298	
Turn Bay Length (ft)					100		100
Base Capacity (vph)	607	1089	1364	983	234	840	862
Starvation Cap Reductn	0	376	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.77	0.45	0.51	0.26	0.30	0.32

**Intersection Summary**

Cycle Length: 105  
 Actuated Cycle Length: 105  
 Offset: 11 (10%), Referenced to phase 2:NWT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated

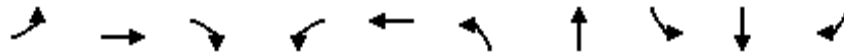
Splits and Phases: 1: N. Main Street & State Street



												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	 				 			 				
Traffic Volume (vph)	328	438	17	0	423	49	0	333	34	51	205	230
Future Volume (vph)	328	438	17	0	423	49	0	333	34	51	205	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		7%			1%			8%			-6%	
Total Lost time (s)	4.0	4.0			4.0			4.0		2.5	4.0	4.0
Lane Util. Factor	0.97	1.00			0.95			0.95		1.00	1.00	1.00
Frbp, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			1.00			1.00		1.00	1.00	1.00
Frt	1.00	0.99			0.98			0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00			1.00		0.95	1.00	1.00
Satd. Flow (prot)	3379	1823			3536			3418		1823	1919	1610
Flt Permitted	0.95	1.00			1.00			1.00		0.95	1.00	1.00
Satd. Flow (perm)	3379	1823			3536			3418		1823	1919	1610
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.79	0.79	0.79	0.89	0.89	0.89
Growth Factor (vph)	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Adj. Flow (vph)	394	526	20	0	544	63	0	455	46	62	249	279
RTOR Reduction (vph)	0	0	0	0	0	0	0	8	0	0	0	185
Lane Group Flow (vph)	394	546	0	0	607	0	0	493	0	62	249	94
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Turn Type	Prot	NA			NA			NA		Prot	NA	Perm
Protected Phases	1	6			2			4		3	8	
Permitted Phases												8
Actuated Green, G (s)	16.2	59.8			37.6			21.0		7.7	33.2	33.2
Effective Green, g (s)	18.2	61.8			39.6			23.0		9.7	35.2	35.2
Actuated g/C Ratio	0.17	0.59			0.38			0.22		0.09	0.34	0.34
Clearance Time (s)	6.0	6.0			6.0			6.0		4.5	6.0	6.0
Vehicle Extension (s)	3.0	3.0			3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	585	1072			1333			748		168	643	539
v/s Ratio Prot	c0.12	c0.30			0.17			c0.14		0.03	c0.13	
v/s Ratio Perm												0.06
v/c Ratio	0.67	0.51			0.46			0.66		0.37	0.39	0.17
Uniform Delay, d1	40.6	12.7			24.6			37.4		44.8	26.7	24.6
Progression Factor	1.00	1.00			1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	3.1	0.4			1.1			2.1		1.4	0.4	0.2
Delay (s)	43.7	13.1			25.7			39.5		46.1	27.1	24.8
Level of Service	D	B			C			D		D	C	C
Approach Delay (s)		25.9			25.7			39.5			28.0	
Approach LOS		C			C			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			28.9									C
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			105.0							14.5		
Intersection Capacity Utilization			53.0%									A
Analysis Period (min)			15									

c Critical Lane Group





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	178	280	297	85	283	166	314	48	367	122
Future Volume (vph)	178	280	297	85	283	166	314	48	367	122
Lane Group Flow (vph)	221	348	369	115	424	191	438	53	404	134
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	NA	Prot	NA	pt+ov
Protected Phases	5	2	2 3	1	6	3	8	7	4	4 5
Permitted Phases										
Detector Phase	5	2	2 3	1	6	3	8	7	4	4 5
Switch Phase										
Minimum Initial (s)	5.0	8.0		5.0	8.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.5	34.5		10.5	34.5	10.5	29.5	10.5	29.5	
Total Split (s)	15.5	41.5		15.5	41.5	15.5	34.5	15.5	34.5	
Total Split (%)	14.5%	38.8%		14.5%	38.8%	14.5%	32.2%	14.5%	32.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-1.5	-1.5		-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?										
Recall Mode	None	None		None	None	None	None	None	None	
v/c Ratio	0.97	0.60	0.42	0.55	0.76	0.83	0.71	0.29	0.78	0.17
Control Delay	95.8	32.7	9.1	52.0	39.2	72.5	37.2	46.0	43.7	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.8	32.7	9.1	52.0	39.2	72.5	37.2	46.0	43.7	3.8
Queue Length 50th (ft)	~135	179	61	65	226	114	229	30	217	0
Queue Length 95th (ft)	#313	266	124	120	294	#278	#435	73	367	35
Internal Link Dist (ft)		1706			2618		355		855	
Turn Bay Length (ft)	150		150					150		150
Base Capacity (vph)	229	787	877	229	779	229	642	227	634	783
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.44	0.42	0.50	0.54	0.83	0.68	0.23	0.64	0.17

Intersection Summary

Cycle Length: 107

Actuated Cycle Length: 92.2

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

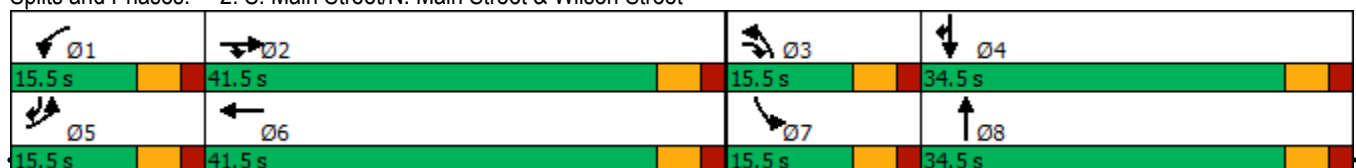
~ Volume exceeds capacity, queue is theoretically infinite.

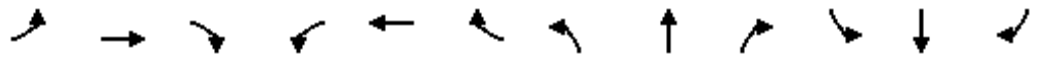
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: S. Main Street/N. Main Street & Wilson Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	178	280	297	85	283	31	166	314	67	48	367	122
Future Volume (vph)	178	280	297	85	283	31	166	314	67	48	367	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1805	1900	1615	1805	1872		1805	1850		1787	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1805	1900	1615	1805	1872		1805	1850		1787	1881	1599
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.94	0.94	0.94	0.98	0.98	0.98
Growth Factor (vph)	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%	108%
Adj. Flow (vph)	221	348	369	115	382	42	191	361	77	53	404	134
RTOR Reduction (vph)	0	0	103	0	4	0	0	7	0	0	0	73
Lane Group Flow (vph)	221	348	266	115	420	0	191	431	0	53	404	61
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	pt+ov
Protected Phases	5	2	2 3	1	6		3	8		7	4	4 5
Permitted Phases												
Actuated Green, G (s)	10.2	26.6	42.3	9.3	25.7		10.2	28.7		6.6	25.1	40.8
Effective Green, g (s)	11.7	28.1	43.8	10.8	27.2		11.7	30.2		8.1	26.6	42.3
Actuated g/C Ratio	0.13	0.30	0.47	0.12	0.29		0.13	0.32		0.09	0.29	0.45
Clearance Time (s)	5.5	5.5		5.5	5.5		5.5	5.5		5.5	5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	226	572	758	209	546		226	599		155	536	725
v/s Ratio Prot	c0.12	0.18	0.16	0.06	c0.22		c0.11	c0.23		0.03	0.21	0.04
v/s Ratio Perm												
v/c Ratio	0.98	0.61	0.35	0.55	0.77		0.85	0.72		0.34	0.75	0.08
Uniform Delay, d1	40.6	27.8	15.7	38.9	30.1		39.9	27.8		40.0	30.3	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	53.0	1.8	0.3	3.1	6.4		24.0	4.1		1.3	6.0	0.1
Delay (s)	93.6	29.7	16.0	42.0	36.6		63.9	31.9		41.4	36.3	14.5
Level of Service	F	C	B	D	D		E	C		D	D	B
Approach Delay (s)		39.3			37.7			41.6			31.8	
Approach LOS		D			D			D			C	

Intersection Summary		
HCM 2000 Control Delay	37.9	HCM 2000 Level of Service D
HCM 2000 Volume to Capacity ratio	0.80	
Actuated Cycle Length (s)	93.2	Sum of lost time (s) 16.0
Intersection Capacity Utilization	72.9%	ICU Level of Service C
Analysis Period (min)	15	

c Critical Lane Group



Lane Group	NBT	SBT	SWL
Lane Configurations			
Traffic Volume (vph)	374	418	24
Future Volume (vph)	374	418	24
Lane Group Flow (vph)	514	504	38
Sign Control	Free	Free	Stop

**Intersection Summary**

Control Type: Unsignalized

**Intersection**

Int Delay, s/veh 0.7

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	374	29	7	418	24	5
Future Vol, veh/h	374	29	7	418	24	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	86	86	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	477	37	8	496	31	7

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	514	0	1008
Stage 1	-	-	-	-	496
Stage 2	-	-	-	-	512
Critical Hdwy	-	-	4.1	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1062	-	269
Stage 1	-	-	-	-	616
Stage 2	-	-	-	-	606
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1062	-	266
Mov Cap-2 Maneuver	-	-	-	-	266
Stage 1	-	-	-	-	616
Stage 2	-	-	-	-	600

Approach	NB	SB	SW
HCM Control Delay, s	0	0.1	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NBT	NBR	SBL	SBT	SWLn1
Capacity (veh/h)	-	-	1062	-	293
HCM Lane V/C Ratio	-	-	0.008	-	0.129
HCM Control Delay (s)	-	-	8.4	0	19.1
HCM Lane LOS	-	-	A	A	C
HCM 95th %tile Q(veh)	-	-	0	-	0.4



Lane Group	SER	NWR	NET	SWT
Lane Configurations				
Traffic Volume (vph)	33	6	352	215
Future Volume (vph)	33	6	352	215
Lane Group Flow (vph)	50	12	466	239
Sign Control			Free	Free

**Intersection Summary**

Control Type: Unsignalized

**Intersection**

Int Delay, s/veh 0.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations			↕			↕		↕			↕	
Traffic Vol, veh/h	0	0	33	0	0	6	0	352	22	0	215	0
Future Vol, veh/h	0	0	33	0	0	6	0	352	22	0	215	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	1	-	-	-8	-
Peak Hour Factor	67	67	67	50	50	50	81	81	81	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	4	4	4
Mvmt Flow	0	0	50	0	0	12	0	439	27	0	239	0

Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	-	-	239	-	-	453	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.4	-	-	6.2	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.3	-	-	3.3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	794	0	0	611	0	-	-	0	-	0
Stage 1	0	0	-	0	0	-	0	-	-	0	-	0
Stage 2	0	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	-	794	-	-	611	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	9.8	11	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NET	NERNWLn1	SELn1	SWT
Capacity (veh/h)	-	-	611	794
HCM Lane V/C Ratio	-	-	0.02	0.063
HCM Control Delay (s)	-	-	11	9.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0.2

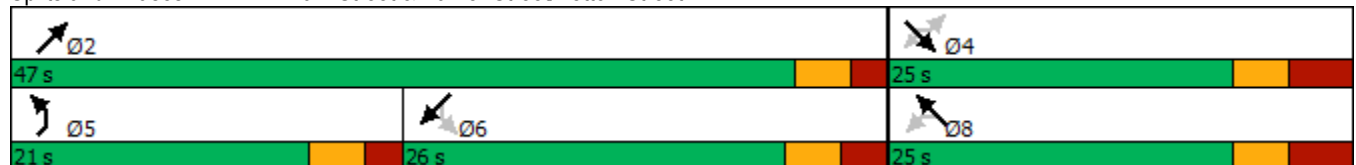


Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations		↕	↕		↕	↕	↕		↕
Traffic Volume (vph)	8	30	276	24	41	157	371	3	285
Future Volume (vph)	8	30	276	24	41	157	371	3	285
Lane Group Flow (vph)	0	39	287	0	89	191	462	0	354
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	NA
Protected Phases		4			8	5	2		6
Permitted Phases	4		4	8				6	
Detector Phase	4	4	4	8	8	5	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0	10.0
Minimum Split (s)	24.5	24.5	24.5	24.5	24.5	15.0	15.0	22.5	22.5
Total Split (s)	25.0	25.0	25.0	25.0	25.0	21.0	47.0	26.0	26.0
Total Split (%)	34.7%	34.7%	34.7%	34.7%	34.7%	29.2%	65.3%	36.1%	36.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	2.0	2.0	2.5	2.5
Lost Time Adjust (s)		-2.5	-2.5		-2.5	-1.0	-1.0		-1.5
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0		4.0
Lead/Lag						Lead		Lag	Lag
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	Min	Min	Min
v/c Ratio		0.09	0.48		0.22	0.40	0.42		0.57
Control Delay		18.9	6.1		18.1	22.2	6.9		20.7
Queue Delay		0.0	0.0		0.0	0.0	0.0		0.0
Total Delay		18.9	6.1		18.1	22.2	6.9		20.7
Queue Length 50th (ft)		10	0		19	49	52		86
Queue Length 95th (ft)		34	52		55	118	135		201
Internal Link Dist (ft)		361			312		855		227
Turn Bay Length (ft)			50			50			
Base Capacity (vph)		799	883		772	658	1537		872
Starvation Cap Reductn		0	0		0	0	0		0
Spillback Cap Reductn		0	0		0	0	0		0
Storage Cap Reductn		0	0		0	0	0		0
Reduced v/c Ratio		0.05	0.33		0.12	0.29	0.30		0.41

Intersection Summary

Cycle Length: 72  
 Actuated Cycle Length: 50.8  
 Natural Cycle: 65  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 22: N. Main Street & Parker Street/Betton Street





Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕	↕		↕		↕	↕			↕	
Traffic Volume (vph)	8	30	276	24	41	11	157	371	9	3	285	9
Future Volume (vph)	8	30	276	24	41	11	157	371	9	3	285	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			0%			1%			-1%	
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Frbp, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00			1.00	
Frt		1.00	0.85		0.98		1.00	1.00			1.00	
Flt Protected		0.99	1.00		0.98		0.95	1.00			1.00	
Satd. Flow (prot)		1852	1591		1834		1778	1864			1826	
Flt Permitted		0.93	1.00		0.90		0.95	1.00			0.99	
Satd. Flow (perm)		1746	1591		1672		1778	1864			1816	
Peak-hour factor, PHF	0.97	0.97	0.97	0.86	0.86	0.86	0.83	0.83	0.83	0.85	0.85	0.85
Growth Factor (vph)	101%	101%	101%	101%	101%	101%	101%	101%	101%	101%	101%	101%
Adj. Flow (vph)	8	31	287	28	48	13	191	451	11	4	339	11
RTOR Reduction (vph)	0	0	220	0	9	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	39	67	0	80	0	191	461	0	0	353	0
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	1%	1%	4%	4%	4%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Actuated Green, G (s)		9.3	9.3		9.3		9.0	30.1			15.6	
Effective Green, g (s)		11.8	11.8		11.8		10.0	31.1			17.1	
Actuated g/C Ratio		0.23	0.23		0.23		0.20	0.61			0.34	
Clearance Time (s)		6.5	6.5		6.5		5.0	5.0			5.5	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		404	368		387		349	1138			610	
v/s Ratio Prot							c0.11	0.25				
v/s Ratio Perm		0.02	0.04		c0.05						c0.19	
v/c Ratio		0.10	0.18		0.21		0.55	0.40			0.58	
Uniform Delay, d1		15.4	15.7		15.8		18.4	5.1			13.9	
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.1	0.2		0.3		1.8	0.2			1.3	
Delay (s)		15.5	15.9		16.0		20.2	5.4			15.3	
Level of Service		B	B		B		C	A			B	
Approach Delay (s)		15.9			16.0			9.7			15.3	
Approach LOS		B			B			A			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			12.9				HCM 2000 Level of Service				B	
HCM 2000 Volume to Capacity ratio			0.46									
Actuated Cycle Length (s)			50.9				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			57.0%				ICU Level of Service			B		
Analysis Period (min)			15									

c Critical Lane Group



---

Lane Group

Lane Configurations

Traffic Volume (vph)

Future Volume (vph)

Lane Group Flow (vph)

Sign Control

---

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	0											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor1		Minor2		Major1			Major2				
Conflicting Flow All	1	1	0	1	1	1	-	0	0	0	0	0
Stage 1	0	0	-	1	1	-	-	-	-	-	-	-
Stage 2	1	1	-	0	0	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.93	7.33	6.53	6.23	-	-	-	4.13	-	-
Critical Hdwy Stg 1	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	-	-	-	2.219	-	-
Pot Cap-1 Maneuver	1021	895	-	1021	895	1083	0	-	-	-	-	-
Stage 1	-	-	-	1022	895	-	0	-	-	-	-	-
Stage 2	1022	895	-	-	-	-	0	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	1021	895	-	-	895	1083	-	-	-	-	-	-
Mov Cap-2 Maneuver	1021	895	-	-	895	-	-	-	-	-	-	-
Stage 1	-	-	-	1022	895	-	-	-	-	-	-	-
Stage 2	1022	895	-	-	-	-	-	-	-	-	-	-

Approach	NB		SB		NE			SW		
HCM Control Delay, s	0		0		0			0		
HCM LOS	A		A							

Minor Lane/Major Mvmt	NET	NER	NBLn1	SBLn1	SWL	SWT	SWR
Capacity (veh/h)	-	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	0	-	-
HCM Lane LOS	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-	-	-



Lane Group	SET	NWT	NET	NER	SWT
Lane Configurations					
Traffic Volume (vph)	0	3	733	37	459
Future Volume (vph)	0	3	733	37	459
Lane Group Flow (vph)	4	90	808	41	499
Sign Control	Stop	Stop	Free		Free

**Intersection Summary**

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	2.3											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕	↗		↕	
Traffic Vol, veh/h	0	0	2	34	3	44	4	733	37	8	459	8
Future Vol, veh/h	0	0	2	34	3	44	4	733	37	8	459	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	92	92	92	93	93	93	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	1	1	1
Mvmt Flow	0	0	4	38	3	49	4	804	41	8	483	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1362	1356	487	1317	1319	804	491	0	0	845	0	0
Stage 1	503	503	-	812	812	-	-	-	-	-	-	-
Stage 2	859	853	-	505	507	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	126	151	585	136	158	386	1083	-	-	796	-	-
Stage 1	555	545	-	376	395	-	-	-	-	-	-	-
Stage 2	354	378	-	553	543	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	107	148	585	133	155	386	1083	-	-	796	-	-
Mov Cap-2 Maneuver	107	148	-	133	155	-	-	-	-	-	-	-
Stage 1	551	537	-	373	392	-	-	-	-	-	-	-
Stage 2	304	375	-	541	535	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	11.2	34.8	0	0.2
HCM LOS	B	D		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1083	-	-	208	585	796	-
HCM Lane V/C Ratio	0.004	-	-	0.432	0.007	0.011	-
HCM Control Delay (s)	8.3	0	-	34.8	11.2	9.6	0
HCM Lane LOS	A	A	-	D	B	A	A
HCM 95th %tile Q(veh)	0	-	-	2	0	0	-

## **APPENDIX C HIGH CRASH LOCATION CRASH DIAGRAMS AND SUMMARIES (FROM MAINEDOT)**

---

# H. C. L. CRASH COLLISION DIAGRAM DATA PACKAGE

---

COUNTY: **PENOBSCOT**

TOWN: **BREWER**

LOW NODE: **39690** HIGH NODE: **0000**

REGION: **4**

U/R: **URBAN**

DESCRIPTION: **Int of N Main St and State St**

RTE # / RD #: **0009W**

DATE DRAWN: **10/10/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020**

STUDY TO: **12/31/2022**

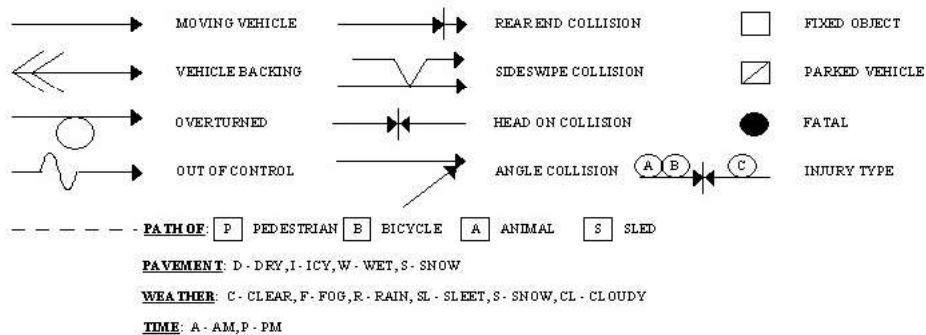
CRASH RATE: **1.33**

CRF: **1.28**

% INJURY: **15.6**

TOTAL CRASHES: **32**

## LEGEND





State St.

N. Main St.  
Route 9

39690

guardrail

99034 7-5-22 9:45A D/C Improper turn

17706 6-18-22 5:58P D/C Reckless driving

22415 9-16-20 10:25A D/C Unknown

12451 5-24-21 7:05A D/C Ran Red Light

9311 3-24-20 3:30A S/S Unscrie Speed

12178 5-15-20 4:20P D/CL Unknown

75933 11-4-22 8:25P D/C Follow too close

20764 7-22-22 5:48P D/C Follow too close

31012 12-9-20 5:30P D/CL Unsafe backing

63614

63613

93209 3-11-20 10:20A D/C Driver Inattention  
26631 9-20-21 6:30A D/C Internal Distraction  
13501 5-15-22 12:49P D/CL Follow too close  
4179 1-31-22 2:42P W/C Follow too close

30654 10-21-22 8:30A D/C Hit & Run

10294 4-24-21 11:45A D/C Follow Too Close

184 1-2-20 5:20P D/C Hit and run

24575 10-8-20 10:40A D/C Unsafe lane change

sign ●



sign ●

11022 4-4-22 5:00P D/C Follow Too Close

8046 3-5-22 4:30P D/C Follow too close

913 1-11-21 10:21A D/C Ran Red Light

32182 12-16-20 8:44A D/C Vision obscured-sun

6357 2-25-22 4:30P S/S Follow too close

60 1-2-20 5:35P D/C Driver inattention

14651 6-12-21 7:35P D/C Wheelie M/C

11771 5-17-21 11:0A D/C Fail to Keep In Lane

N. Main St.  
Route 9/178

= Traffic Signal

State St.

Brewer

Nodes: 39690(P)

63613(A) & 63614(A)

Study Period: 2020-2022

# of Crashes: 32 / CRF: 1.28

Prepared by Office of Safety & Mobility  
RFK3 10-10-23

1075 1-13-21 5:08P D/C Fail to Yield  
16838 7-1-21 5:23P D/C Speed  
23302 9-24-20 117P D/C Follow too close  
28733 11-20-20 8:44A D/CL Follow too close  
18928 7-15-21 12:23P D/C Internal  
30880 11-10-21 5:30P D/C Follow Too Close  
29705 10-6-22 4:21P D/C Follow Too Close





# Crash Summary Report

## Report Selections and Input Parameters

REPORT SELECTIONS

- Crash Summary I - Single Node**
- Section Detail**
- Crash Summary II**
- 1320 Public**
- 1320 Private**
- 1320 Summary**

REPORT DESCRIPTION

Brewer  
Int State St & N Main St

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: **0009W**      Start Node: **39690**      Start Offset: **0**       **Exclude First Node**  
End Node: **39690**      End Offset: **0**       **Exclude Last Node**

---

## Crash Summary I

### Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes					Percent Annual M Injury Ent-Veh	Crash Rate	Critical Rate	CRF	
					K	A	B	C	PD					
P39690	0009W - 0.17	Int of N MAIN ST STATE ST	9	32	0	0	0	5	27	15.6	7.992	1.33	1.04	1.28
				<i>Statewide Crash Rate: 0.64</i>										
<b>Study Years:</b> 3.00		<b>NODE TOTALS:</b>		32	0	0	0	5	27	15.6	7.992	1.33	1.04	1.28

## Crash Summary II - Characteristics

### Crashes by Day and Hour

Day Of Week	AM											PM											Un	Tot			
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9			10	11	
SUNDAY	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
MONDAY	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	6
TUESDAY	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
WEDNESDAY	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	6
THURSDAY	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	3	0	0	0	0	0	0	0	0	7
FRIDAY	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	0	6
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0	0	0	4
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	

### Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	21	23-Bicyclist	0
2-(Sport) Utility Vehicle	25	24-Witness	6
3-Passenger Van	1	25-Other	1
4-Cargo Van (10K lbs or Less)	1	26-Construction	0
5-Pickup	10	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	<b>Total</b>	<b>68</b>
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	1		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	2		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

## Crash Summary II - Characteristics

### Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	4	28	0	0	0	0	32
Ran Off Roadway	1	0	0	0	0	0	1
Failed to Yield Right-of-Way	1	0	0	0	0	0	1
Ran Red Light	2	0	0	0	0	0	2
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	2	0	0	0	0	0	2
Improper Turn	1	0	0	0	0	0	1
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	10	1	0	0	0	0	11
Failed to Keep in Proper Lane	1	0	0	0	0	0	1
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	2	0	0	0	0	0	2
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	5	0	0	0	0	0	5
Unknown	2	1	0	0	0	0	3
<b>Total</b>	<b>31</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>

### Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	30	29	0	0	0	0	59
Physically Impaired	0	1	0	0	0	0	1
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	1	0	0	0	0	0	1
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>31</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>

### Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	1	0	0	0	0	1
20-24	8	0	0	0	0	8
25-29	4	0	0	0	0	4
30-39	10	0	0	0	0	10
40-49	13	0	0	0	0	13
50-59	6	0	0	0	0	6
60-69	11	0	0	0	0	11
70-79	8	0	0	0	0	8
80-Over	0	0	0	0	0	0
Unknown	1	0	0	0	0	1
<b>Total</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62</b>

## Crash Summary II - Characteristics

Most Harmful Event			
Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	0	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	<b>Total</b>	<b>62</b>
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	1		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	35		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	25		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	1		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Traffic Control Devices		
Traffic Control Device	Total	
1-Traffic Signals (Stop & Go)	27	
2-Traffic Signals (Flashing)	1	
3-Advisory/Warning Sign	0	
4-Stop Signs - All Approaches	0	
5-Stop Signs - Other	0	
6-Yield Sign	4	
7-Curve Warning Sign	0	
8-Officer, Flagman, School Patrol	0	
9-School Bus Stop Arm	0	
10-School Zone Sign	0	
11-R.R. Crossing Device	0	
12-No Passing Zone	0	
13-None	0	
14-Other	0	
<b>Total</b>	<b>32</b>	

Injury Data		
Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	0	0
C	5	5
PD	27	0
<b>Total</b>	<b>32</b>	<b>5</b>

Road Character	
Road Grade	Total
1-Level	7
2-On Grade	13
3-Top of Hill	12
4-Bottom of Hill	0
5-Other	0
<b>Total</b>	<b>32</b>

Light	
Light Condition	Total
1-Daylight	25
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	6
5-Dark - Not Lighted	1
6-Dark - Unknown Lighting	0
7-Unknown	0
<b>Total</b>	<b>32</b>

## Crash Summary II - Characteristics

### Crashes by Year and Month

Month	2020	2021	2022	Total
JANUARY	2	2	2	6
FEBRUARY	0	0	1	1
MARCH	2	0	1	3
APRIL	0	1	1	2
MAY	1	2	1	4
JUNE	0	1	1	2
JULY	0	2	2	4
AUGUST	0	0	0	0
SEPTEMBER	2	1	0	3
OCTOBER	1	0	2	3
NOVEMBER	1	1	0	2
DECEMBER	2	0	0	2
<b>Total</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>32</b>

Report is limited to the last 10 years of data.

## Crash Summary II - Characteristics

### Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	0	0	4	16	0	0	0	0	0	0	0	0	0	0	20
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>

Maine Department Of Transportation - Office of Safety, Crash Records Section

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Blowing Sand, Soil, Dirt</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Blowing Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Clear</b>												
Dark - Lighted	4	0	0	0	0	0	0	0	0	0	0	4
Dark - Not Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	20	0	0	0	0	0	0	0	0	0	1	21
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cloudy</b>												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	3	0	0	0	0	0	0	0	0	0	0	3
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0



## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Fog, Smog, Smoke</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Rain</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Severe Crosswinds</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Sleet, Hail (Freezing Rain or Drizzle)</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	1	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	1	0	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>32</b>

---

# H. C. L. CRASH COLLISION DIAGRAM DATA PACKAGE

---

COUNTY: **PENOBSCOT**

TOWN: **BREWER**

LOW NODE: **39112** HIGH NODE: **63613**

REGION: **4**

U/R: **URBAN**

DESCRIPTION: **N Main St from Holyoke St from cut to State St**

RTE # / RD #: **0009X**

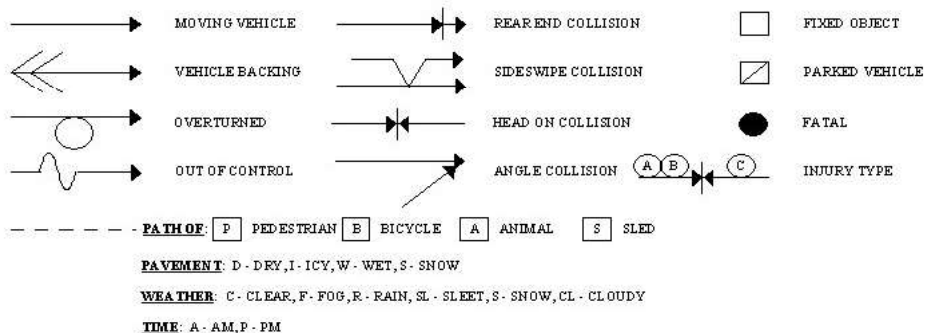
DATE DRAWN: **10/11/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020**

STUDY TO: **12/31/2022**

CRASH RATE: **2070.08** CRF: **3.59** % INJURY: **9.1** TOTAL CRASHES: **11**

### LEGEND



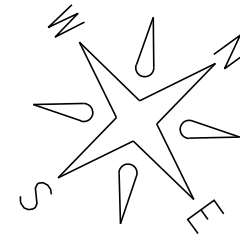
# Brewer

Link: 39112-63613

Element: 4041934

Study Period: 2020-2022

# of Crashes: 11 / CRF: 3.59



23303 9-29-20 10:25A D/CL  
No Parking Brake  
rolled across street



10845 5-1-21 9:50A D/CL  
Slipped out of Park  
rolled across street

63613

ped sign  
curb

Circle K  
parking lot

Circle K

39112

## North Main St. Rt 9

27383 11-10-20 1:42P D/C Improper pass

8363 3-11-20 4:50P D/C Follow too close

22292 9-18-20 4:18P D/C Driver inattention

13483 5-31-20 3:01P  
D/C Follow Too Close

20898 8-30-20 8:05A D/C Fail to keep in lane

23301 9-23-20 8:45A D/C Driver distracted

36295 12-1-22 2:11P D/C Fail to yield

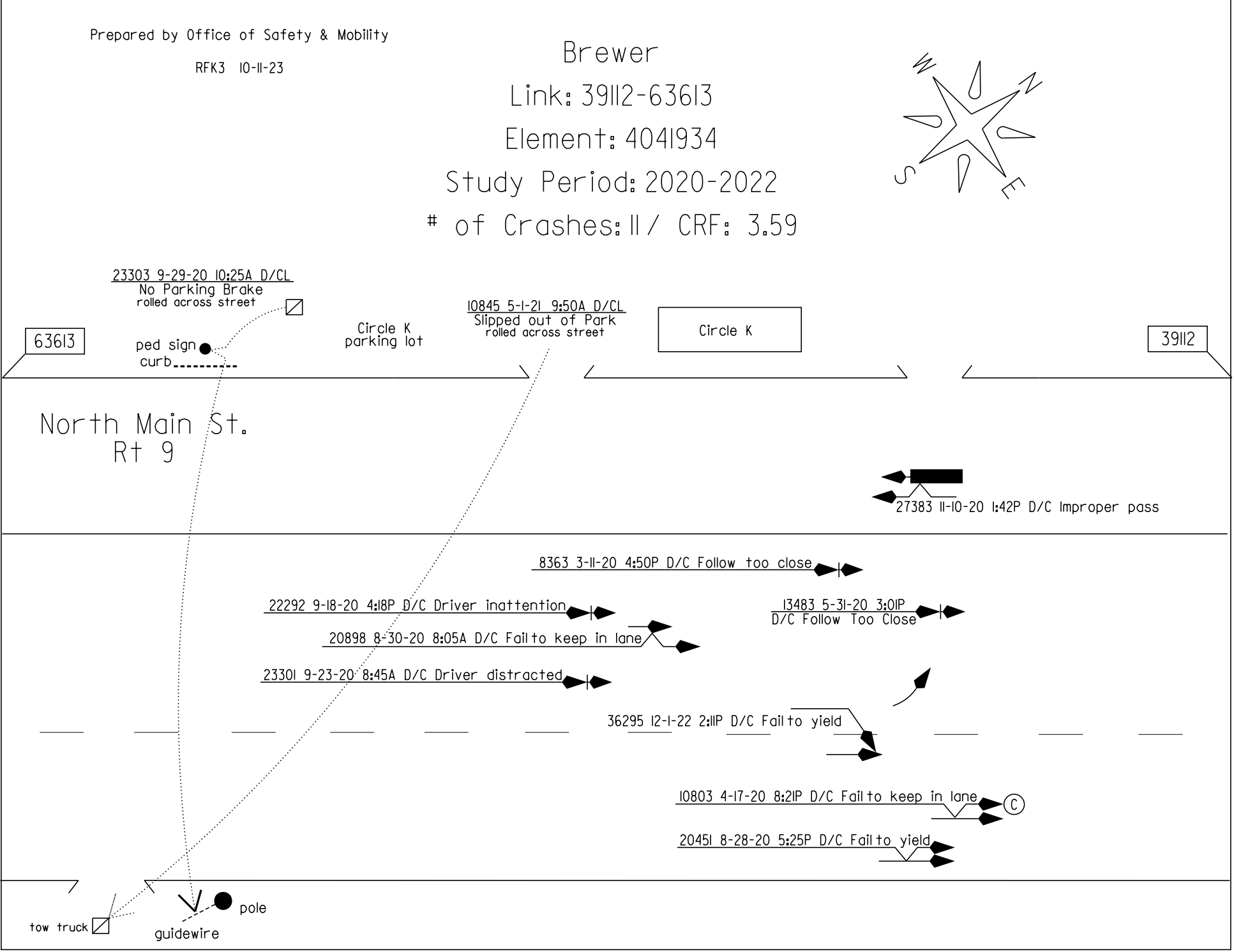
10803 4-17-20 8:21P D/C Fail to keep in lane

20451 8-28-20 5:25P D/C Fail to yield

tow truck

guidewire

pole





# Crash Summary Report

## Report Selections and Input Parameters

REPORT SELECTIONS

- Crash Summary I - Single Element**
- Section Detail**
- Crash Summary II**
- 1320 Public**
- 1320 Private**
- 1320 Summary**

REPORT DESCRIPTION

Brewer  
N Main St from Holyoke St to State St cut

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: **0009X**      Start Node: **63613**      Start Offset: **0**       **Exclude First Node**  
End Node: **39112**      End Offset: **0**       **Exclude Last Node**

---

# Crash Summary I

## Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
									A	B	C	PD					
39112	63613	4041934	0 - 0.04	0009X - 194.51 ST RTE 9	0.04	2	11	0	0	0	1	8	11.1	0.00177	2070.08	576.90	3.59
Int of HOLYOKE ST N MAIN ST		Statewide Crash Rate: 187.33															
<b>Study Years:</b>		3.00	<b>Section Totals:</b>		0.04		11	0	0	0	1	8	9.1	0.00177	2070.08	576.90	3.59

## Crash Summary

### Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes				Crash Report	Crash Date	Crash Mile Point	Injury Degree	
						K	A	B	C					PD
39112	63613	4041934	0 - 0.04	0009X - 194.51	11	0	0	0	1	8	2020-23303	09/29/2020	194.52	
											2021-10845	05/01/2021	194.53	
											2020-20898	08/30/2020	194.53	PD
											2020-23301	09/23/2020	194.53	PD
											2020-22292	09/18/2020	194.53	PD
											2020-10803	04/17/2020	194.54	C
											2020-20451	08/28/2020	194.54	PD
											2020-27383	11/10/2020	194.54	PD
											2020-8363	03/11/2020	194.54	PD
											2020-13483	05/31/2020	194.54	PD
											2022-36295	12/01/2022	194.54	PD
<b>Totals:</b>					11	0	0	0	1	8				



## Crash Summary II - Characteristics

### Crashes by Day and Hour

Day Of Week	AM											PM											Un	Tot		
	Hour of Day											Hour of Day														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11		
SUNDAY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUESDAY	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
WEDNESDAY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
THURSDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
FRIDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	3
SATURDAY	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Totals</b>	0	0	0	0	0	0	0	0	2	1	1	0	0	1	1	1	2	1	0	0	1	0	0	0	0	<b>11</b>

### Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	9	23-Bicyclist	0
2-(Sport) Utility Vehicle	5	24-Witness	2
3-Passenger Van	0	25-Other	0
4-Cargo Van (10K lbs or Less)	1	26-Construction	0
5-Pickup	5	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	<b>Total</b>	<b>23</b>
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	1		
17-Medium/Heavy Trucks (More than 10,000 lbs)	0		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Maine Department Of Transportation - Office of Safety, Crash Records Section

## Crash Summary II - Characteristics

### Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	1	9	0	0	0	0	10
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	2	0	0	0	0	0	2
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	1	0	0	0	0	0	1
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	2	0	0	0	0	0	2
Failed to Keep in Proper Lane	2	0	0	0	0	0	2
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	0	0	0	0	0	0	0
Unknown	2	0	0	0	0	0	2
<b>Total</b>	<b>10</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>

### Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	9	8	0	0	0	0	17
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	1	1	0	0	0	0	2
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>

### Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	2	0	0	0	0	2
20-24	1	0	0	0	0	1
25-29	1	0	0	0	0	1
30-39	4	0	0	0	0	4
40-49	2	0	0	0	0	2
50-59	4	0	0	0	0	4
60-69	3	0	0	0	0	3
70-79	4	0	0	0	0	4
80-Over	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>

## Crash Summary II - Characteristics

Most Harmful Event			
Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	0	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	2
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	<b>Total</b>	<b>21</b>
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	9		
14-Parked Motor Vehicle	1		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	9		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Traffic Control Devices		
Traffic Control Device	Total	
1-Traffic Signals (Stop & Go)	1	
2-Traffic Signals (Flashing)	0	
3-Advisory/Warning Sign	0	
4-Stop Signs - All Approaches	0	
5-Stop Signs - Other	0	
6-Yield Sign	0	
7-Curve Warning Sign	0	
8-Officer, Flagman, School Patrol	0	
9-School Bus Stop Arm	0	
10-School Zone Sign	0	
11-R.R. Crossing Device	0	
12-No Passing Zone	0	
13-None	9	
14-Other	1	
<b>Total</b>	<b>11</b>	

Injury Data		
Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	0	0
C	1	1
PD	8	0
<b>Total</b>	<b>9</b>	<b>1</b>

Road Character	
Road Grade	Total
1-Level	3
2-On Grade	8
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
<b>Total</b>	<b>11</b>

Light	
Light Condition	Total
1-Daylight	11
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	0
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	0
7-Unknown	0
<b>Total</b>	<b>11</b>

### Crash Summary II - Characteristics

**Crashes by Year and Month**

Month	2020	2021	2022	Total
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	1	0	0	1
APRIL	1	0	0	1
MAY	1	1	0	2
JUNE	0	0	0	0
JULY	0	0	0	0
AUGUST	2	0	0	2
SEPTEMBER	3	0	0	3
OCTOBER	0	0	0	0
NOVEMBER	1	0	0	1
DECEMBER	0	0	1	1
<b>Total</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>11</b>

Report is limited to the last 10 years of data.

## Crash Summary II - Characteristics

### Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	6	0	0	0	0	3	0	0	0	0	0	0	0	0	9
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Blowing Sand, Soil, Dirt</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Blowing Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Clear</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	9	0	0	0	0	0	0	0	0	0	0	9
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cloudy</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	2	0	0	0	0	0	0	0	0	0	0	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Fog, Smog, Smoke</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Rain</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Severe Crosswinds</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Sleet, Hail (Freezing Rain or Drizzle)</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>



---

# H. C. L. CRASH COLLISION DIAGRAM DATA PACKAGE

---

COUNTY: **PENOBSCOT**

TOWN: **BREWER**

LOW NODE: **38327** HIGH NODE: **0000**

REGION: **4**

U/R: **URBAN**

DESCRIPTION: **Int of Betton St and N Main St**

RTE # / RD #: **0009W**

DATE DRAWN: **8/31/2022** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2019**

STUDY TO: **12/31/2021**

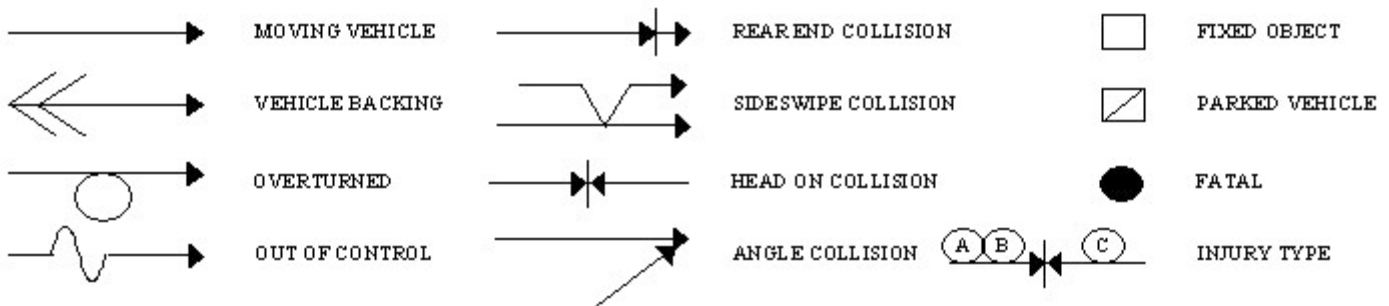
CRASH RATE: **1.22**

CRF: **1.03**

% INJURY: **43.8**

TOTAL CRASHES: **16**

## LEGEND



--- 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

Brewer

Node: 38327

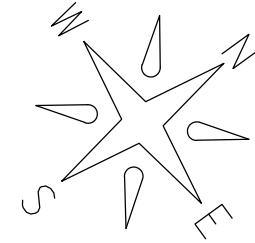
Study Period: 2019-2021

# of Crashes: 16 / CRF: 1.03

Prepared by Office of Safety & Mobility

RFK3 8-31-22

Betton St



36934 12-21-21 9:35A D/C  
Follow Too Close

No Main St

54552 6-6-19 4:35P D/C Bike Error

64716 9-7-19 10:43A W/R Fail To Yield

54068 6-8-19 1:54P D/C Fail To Yield

71526 11-14-19 5:47A D/C Inattention



4075 2-16-21 11:33A S/S Road conditions

57492 7-9-19 4:47P D/C Inattention (C)

45437 3-12-19 7:48A D/C Follow Too Close

42715 2-15-19 3:39P S/S Ran Red Light

9674 4-18-21 12:50P D/C Ran Red Light

4708 2-7-19 5:08P W/C Ran Red Light

48462 4-5-19 8:35P D/CL Ran Red Light (C)

13482 5-29-20 3:30P D/C Unknown

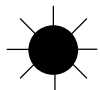
52329 5-22-19 6:45A D/C Phone

9332 4-15-21 5:38P D/C Unknown

65448 9-19-19 10:49A D/C  
Ran Red Light

No Main St

#185



= Traffic Signal

Parker St



# Crash Summary Report

## Report Selections and Input Parameters

### REPORT SELECTIONS

- Crash Summary I - Single Node**       **Section Detail**       **Crash Summary II**       **1320 Public**       **1320 Private**       **1320 Summary**

### REPORT DESCRIPTION

Brewer  
Jct of N Main St & Parker St/Betton St

### REPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

Route: **0009W**      Start Node: **38327**      Start Offset: **0**       **Exclude First Node**  
End Node: **38327**      End Offset: **0**       **Exclude Last Node**

---

## Crash Summary I

### Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes				PD	Percent Annual M Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
					K	A	B	C						
38327	0009W - 0.24	Int of BETTON ST N MAIN ST PARKER ST	9	16	0	0	0	7	9	43.8	4.375	1.22	1.19	1.03
				<i>Statewide Crash Rate: 0.65</i>										
<b>Study Years:</b> 3.00		<b>NODE TOTALS:</b>		16	0	0	0	7	9	43.8	4.375	1.22	1.19	1.03

## Crash Summary II - Characteristics

### Crashes by Day and Hour

Day Of Week	AM											PM											Un	Tot			
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9			10	11	
SUNDAY	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUESDAY	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4
WEDNESDAY	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
THURSDAY	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	5
FRIDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	3
SATURDAY	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	

### Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	15	23-Bicyclist	1
2-(Sport) Utility Vehicle	12	24-Witness	6
3-Passenger Van	1	25-Other	0
4-Cargo Van (10K lbs or Less)	0	26-Construction	0
5-Pickup	5	27-Farm Vehicle	0
6-Motor Home	0	<b>Total</b>	<b>41</b>
7-School Bus	0		
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	1		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

## Crash Summary II - Characteristics

### Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	5	14	2	1	0	0	22
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	2	0	0	0	0	0	2
Ran Red Light	5	0	0	0	0	0	5
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	1	1	0	0	0	0	2
Failed to Keep in Proper Lane	0	0	0	0	0	0	0
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	2	0	0	0	0	0	2
Unknown	1	0	0	0	0	0	1
<b>Total</b>	<b>16</b>	<b>15</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>34</b>

### Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	15	15	2	1	0	1	34
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	1	0	0	0	0	0	1
<b>Total</b>	<b>16</b>	<b>15</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>35</b>

### Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	5	0	0	0	0	5
20-24	4	0	0	0	0	4
25-29	1	0	0	0	0	1
30-39	7	0	0	0	0	7
40-49	5	0	0	0	0	5
50-59	3	0	0	0	0	3
60-69	4	0	0	0	0	4
70-79	4	0	0	0	0	4
80-Over	1	0	0	0	0	1
Unknown	0	1	0	0	0	1
<b>Total</b>	<b>34</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>

## Crash Summary II - Characteristics

Most Harmful Event			
Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	0	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0		
6-Fell / Jumped from Motor Vehicle	0	<b>Total</b>	<b>34</b>
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	27		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	7		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Traffic Control Devices		
Traffic Control Device	Total	
1-Traffic Signals (Stop & Go)	16	
2-Traffic Signals (Flashing)	0	
3-Advisory/Warning Sign	0	
4-Stop Signs - All Approaches	0	
5-Stop Signs - Other	0	
6-Yield Sign	0	
7-Curve Warning Sign	0	
8-Officer, Flagman, School Patrol	0	
9-School Bus Stop Arm	0	
10-School Zone Sign	0	
11-R.R. Crossing Device	0	
12-No Passing Zone	0	
13-None	0	
14-Other	0	
<b>Total</b>	<b>16</b>	

Injury Data		
Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	0	0
C	7	9
PD	9	0
<b>Total</b>	<b>16</b>	<b>9</b>

Road Character	
Road Grade	Total
1-Level	15
2-On Grade	1
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
<b>Total</b>	<b>16</b>

Light	
Light Condition	Total
1-Daylight	13
2-Dawn	1
3-Dusk	0
4-Dark - Lighted	2
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	0
7-Unknown	0
<b>Total</b>	<b>16</b>



## Crash Summary II - Characteristics

### Crashes by Year and Month

Month	2019	2020	2021	Total
JANUARY	0	0	0	0
FEBRUARY	2	0	1	3
MARCH	1	0	0	1
APRIL	1	0	2	3
MAY	1	1	0	2
JUNE	2	0	0	2
JULY	1	0	0	1
AUGUST	0	0	0	0
SEPTEMBER	2	0	0	2
OCTOBER	0	0	0	0
NOVEMBER	1	0	0	1
DECEMBER	0	0	1	1
<b>Total</b>	<b>11</b>	<b>1</b>	<b>4</b>	<b>16</b>

Report is limited to the last 10 years of data.

## Crash Summary II - Characteristics

### Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Blowing Sand, Soil, Dirt</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Blowing Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Clear</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	1	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	1	0	0	0	0	0	0	0	0	0	0	1
Daylight	10	0	0	0	0	0	0	0	0	0	0	10
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cloudy</b>												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Fog, Smog, Smoke</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Rain</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	1	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Severe Crosswinds</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Sleet, Hail (Freezing Rain or Drizzle)</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	2	0	0	0	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>16</b>

---

# H. C. L. CRASH COLLISION DIAGRAM DATA PACKAGE

---

COUNTY: **PENOBSCOT**

TOWN: **BREWER**

LOW NODE: **39685** HIGH NODE: **0000**

REGION: **4**

U/R: **URBAN**

DESCRIPTION: **Int of Wilson St & N Main St/S Main St**

RTE # / RD #: **0001A**

DATE DRAWN: **10/10/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020**

STUDY TO: **12/31/2022**

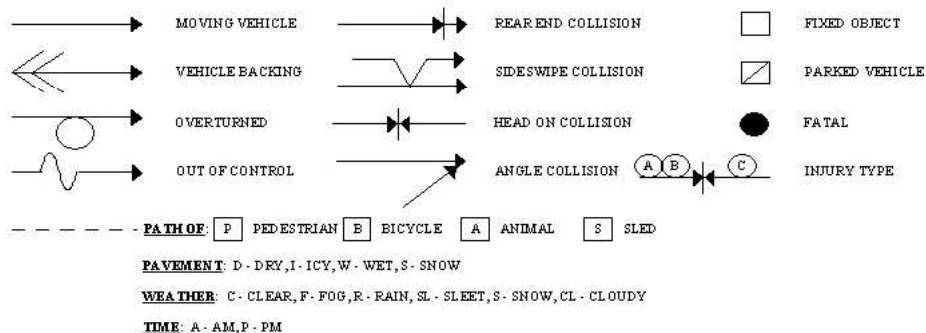
CRASH RATE: **1.35**

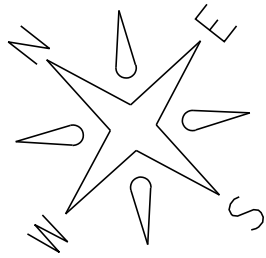
CRF: **1.29**

% INJURY: **25.0**

TOTAL CRASHES: **32**

## LEGEND





North Main St.

Brewer

Node: 39685

Study Period: 2020-2022

# of Crashes: 32 / CRF: 1.20

Prepared by Office of Safety & Mobility

RFK3 10-10-23

Wilson St.

30968 10-19-22 5:42P D/C Hit and run

31143 12-10-20 8:30P D/CL Ran red light

22753 8-5-21 4:21P W/R Follow Too Close

15150 6-19-21 4:30P W/C Follow Too Close

5376 2-17-20 12:45P D/C Follow Too Close

11174 5-7-20 4:50P D/C Ran red light

23770 10-3-20 7:55P D/C Fail to yield

36593 12-8-21 4:23P S/S Road conditions

170217-6-21 8:20A D/CL Defective brakes (bike)

18737 8-5-20 11:34A D/C Fail To Yield

11485 5-14-21 12:45P D/C Inattention

91770 4-21-21 4:55P W/CL Follow Too Close

19235 8-13-20 7:50A D/C Follow Too Close

14679 6-7-21 8:05A D/C DUI

4180 1-31-22 3:41P W/C Fail to Keep in Lane

16671 7-14-20 11:44A D/CL Ran red light

19620 8-18-20 8:41P D/C Fail To Yield

26106 9-7-22 4:47P D/C Fail To Yield

24431 9-8-21 5:46P D/C Improper turn

27705 9-28-22 6:11P D/C Fail To Yield

12052 4-28-22 3:45P W/R Follow Too Close

22757 8-28-21 12:20P D/C Follow Too Close

1346 1-19-21 7:45A D/C Follow Too Close

24313 10-12-20 10:45A D/C Fail to keep in lane

Wilson St.

33202 11-12-22 3:47P D/C Follow Too Close

13164 5-8-22 8:30A D/C Ran red light

27875 9-30-22 5:15P D/C Follow Too Close

39235 12-28-22 8:03A D/C Fell asleep

20762 6-7-22 5:21P D/C Follow Too Close

34738 12-9-21 2:43P W/C Inattention

6151 3-5-21 11:58A D/C Foot slipped

33620 11-16-22 5:43P W/R Hit & Run

Tiller & Rye

wall sign

= Traffic Signal

South Main St.

Search...



BANGOR

Penobscot River

73939

38331

39686

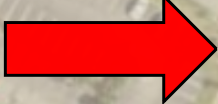
WILSON ST

15B

BREWER

72576

9



39685

780919

TA

S MAIN ST

38303

Scale: 1:2250

100ft





# Crash Summary Report

## Report Selections and Input Parameters

REPORT SELECTIONS

- Crash Summary I - Single Node**
- Section Detail**
- Crash Summary II**
- 1320 Public**
- 1320 Private**
- 1320 Summary**

REPORT DESCRIPTION

Brewer  
Int Wilson St & N Main St/S Main St

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: **0001A**      Start Node: **39685**      Start Offset: **0**       **Exclude First Node**  
End Node: **39685**      End Offset: **0**       **Exclude Last Node**

---

## Crash Summary I

Nodes															
Node	Route - MP	Node Description		U/R	Total Crashes	Injury Crashes				Percent Annual M Injury Ent-Veh		Crash Rate	Critical Rate	CRF	
						K	A	B	C	PD					
39685	0001A - 39.08	Int of N MAIN ST	S MAIN ST WILSON ST	9	32	0	0	4	4	24	25.0	7.925	1.35	1.04	1.29
														Statewide Crash Rate: 0.64	
<b>Study Years:</b> 3.00		<b>NODE TOTALS:</b>			32	0	0	4	4	24	25.0	7.925	1.35	1.04	1.29

## Crash Summary II - Characteristics

### Crashes by Day and Hour

Day Of Week	AM											PM											Un	Tot		
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9			10	11
SUNDAY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
MONDAY	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	4
TUESDAY	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	5
WEDNESDAY	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	3	1	0	0	0	0	0	0	9
THURSDAY	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	2	0	0	0	1	0	0	0	0	6
FRIDAY	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	3
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	0	4
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	

### Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	31	23-Bicyclist	1
2-(Sport) Utility Vehicle	24	24-Witness	6
3-Passenger Van	0	25-Other	1
4-Cargo Van (10K lbs or Less)	0	26-Construction	0
5-Pickup	6	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	<b>Total</b>	<b>70</b>
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	1		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	0		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Maine Department Of Transportation - Office of Safety, Crash Records Section

## Crash Summary II - Characteristics

### Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	5	30	0	0	0	0	35
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	5	0	0	0	0	0	5
Ran Red Light	4	0	0	0	0	0	4
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	1	0	0	0	0	0	1
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	10	0	0	0	0	0	10
Failed to Keep in Proper Lane	2	0	0	0	0	0	2
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	1	0	0	0	0	0	1
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	2	0	0	0	0	0	2
Unknown	1	1	0	0	0	0	2
<b>Total</b>	<b>31</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62</b>

### Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	26	30	0	0	0	1	57
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	1	0	0	0	0	0	1
Under the Influence of Medications/Drugs/Alcohol	2	0	0	0	0	0	2
Other	2	1	0	0	0	0	3
<b>Total</b>	<b>31</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>63</b>

### Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	6	0	0	0	0	6
20-24	10	0	0	0	0	10
25-29	6	0	0	0	0	6
30-39	10	0	0	0	0	10
40-49	9	0	0	0	0	9
50-59	11	0	0	0	0	11
60-69	5	0	0	0	0	5
70-79	2	0	0	0	0	2
80-Over	2	0	0	0	0	2
Unknown	2	1	0	0	0	3
<b>Total</b>	<b>63</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>

## Crash Summary II - Characteristics

Most Harmful Event			
Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	1	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	2
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0		
6-Fell / Jumped from Motor Vehicle	0	<b>Total</b>	<b>62</b>
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	45		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	14		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Traffic Control Devices		
Traffic Control Device	Total	
1-Traffic Signals (Stop & Go)	31	
2-Traffic Signals (Flashing)	0	
3-Advisory/Warning Sign	0	
4-Stop Signs - All Approaches	0	
5-Stop Signs - Other	0	
6-Yield Sign	0	
7-Curve Warning Sign	0	
8-Officer, Flagman, School Patrol	0	
9-School Bus Stop Arm	0	
10-School Zone Sign	0	
11-R.R. Crossing Device	0	
12-No Passing Zone	0	
13-None	1	
14-Other	0	
<b>Total</b>	<b>32</b>	

Injury Data		
Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	4	7
C	4	8
PD	24	0
<b>Total</b>	<b>32</b>	<b>15</b>

Road Character	
Road Grade	Total
1-Level	32
2-On Grade	0
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
<b>Total</b>	<b>32</b>

Light	
Light Condition	Total
1-Daylight	26
2-Dawn	0
3-Dusk	3
4-Dark - Lighted	2
5-Dark - Not Lighted	1
6-Dark - Unknown Lighting	0
7-Unknown	0
<b>Total</b>	<b>32</b>

## Crash Summary II - Characteristics

### Crashes by Year and Month

Month	2020	2021	2022	Total
JANUARY	0	1	1	2
FEBRUARY	1	0	0	1
MARCH	0	1	0	1
APRIL	0	1	1	2
MAY	1	1	1	3
JUNE	0	2	1	3
JULY	1	1	0	2
AUGUST	3	2	0	5
SEPTEMBER	0	1	3	4
OCTOBER	2	0	1	3
NOVEMBER	0	0	2	2
DECEMBER	1	2	1	4
<b>Total</b>	<b>9</b>	<b>12</b>	<b>11</b>	<b>32</b>

Report is limited to the last 10 years of data.

## Crash Summary II - Characteristics

### Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	0	0	0	20	0	0	0	0	0	0	0	0	0	0	20
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	11	0	0	0	0	0	0	0	0	0	0	11
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>

Maine Department Of Transportation - Office of Safety, Crash Records Section

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Blowing Sand, Soil, Dirt</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Blowing Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Clear</b>												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	18	0	0	0	0	0	0	0	0	0	3	21
Dusk	2	0	0	0	0	0	0	0	0	0	0	2
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cloudy</b>												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	2	0	0	0	0	0	0	0	0	0	1	3
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0



## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Fog, Smog, Smoke</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Rain</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	1	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	2	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Severe Crosswinds</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Sleet, Hail (Freezing Rain or Drizzle)</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	1	0	0	0	1
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>32</b>

---

# H. C. L. CRASH COLLISION DIAGRAM DATA PACKAGE

---

COUNTY: **PENOBSCOT**

TOWN: **BREWER**

LOW NODE: **39684** HIGH NODE: **39685**

REGION: **4**

U/R: **URBAN**

DESCRIPTION: **S Main St from Brimmer St to Wilson St**

RTE # / RD #: **0015B**

DATE DRAWN: **10/11/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020**

STUDY TO: **12/31/2022**

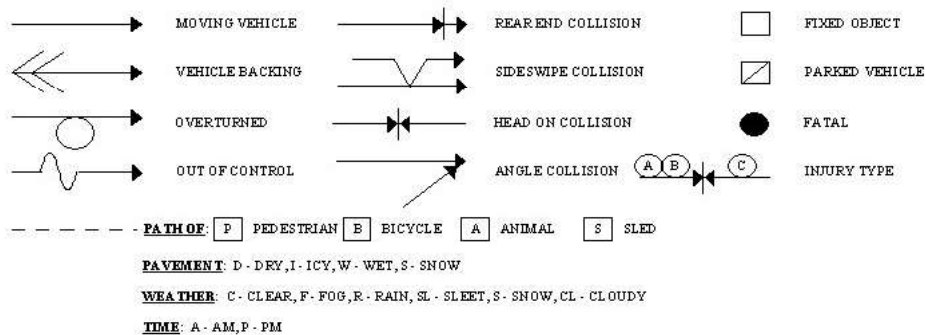
CRASH RATE: **916.98**

CRF: **1.91**

% INJURY: **20**

TOTAL CRASHES: **10**

## LEGEND



# Brewer

Link: 39684-39685

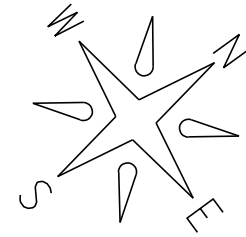
Element: 3111000

Study Period: 2020-2022

# of Crashes: 10 / CRF: 1.91

Prepared by Office of Safety & Mobility

RFK3 10-11-23



High Tide  
Rand & Rand Dentistry

39684

39685

Chapel

pole

South Main St  
Rt 15

17399 7-23-20 3:40P D/CL Fail to yield

14771 6-23-20 10:09A D/C Avoiding vehicle  
street sweeper going opposite way

35933 12-18-21 1:05A  
D/C Ran red light

36293 11-28-22 1:54P D/C Unknown

20816 8-11-21 5:13P D/CL Fail to yield

28099 10-15-21 4:55P D/C Fail to yield

22769 8-4-22 3:23P D/C Unknown

12034 4-28-22 4:37P D/C Ped error



18014 6-14-22 3:05P D/C Hit and run

10250 4-28-21 3:45P D/C Fail to yield

Church

Tiller & Rye Grocer

Search...



Penobscot River

73939

39686

72576

39685

780919

9

15B

1A

BREWER

WILSON ST

S MAIN ST

38303

39684

AYERS CT

38304

BRIMMER ST

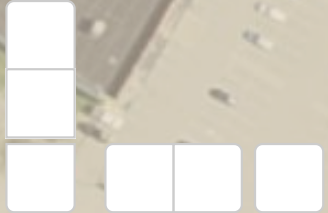
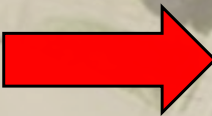
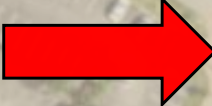
38302

MIDDLE CT

38305

Scale: 1:2087

100ft



# Crash Summary Report

## Report Selections and Input Parameters

REPORT SELECTIONS

- Crash Summary I - Single Element**
- Section Detail**
- Crash Summary II**
- 1320 Public**
- 1320 Private**
- 1320 Summary**

REPORT DESCRIPTION

Brewer  
S Main St from Brimmer St to Wilson St

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: **0015B**      Start Node: **39684**      Start Offset: **0**       **Exclude First Node**  
End Node: **39685**      End Offset: **0**       **Exclude Last Node**

---

# Crash Summary I

## Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF	
								A	B	C	PD						
39684	39685	3111000	0 - 0.08	0015B - 0.64	0.08	2	10	0	0	1	1	8	20.0	0.00364	916.98	479.10	1.91
Int of BRIMMER ST		S MAIN ST		ST RTE 15B		Statewide Crash Rate: 187.33											
<b>Study Years:</b>		3.00		<b>Section Totals:</b>		0.08	10	0	0	1	1	8	20.0	0.00364	916.98	479.10	1.91

## Crash Summary

### Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	K	Injury Crashes				Crash Report	Crash Date	Crash Mile Point	Injury Degree
							A	B	C	PD				
39684	39685	3111000	0 - 0.08	0015B - 0.64	10	0	0	1	1	8	2022-12034	04/28/2022	0.67	B
											2021-28099	10/15/2021	0.68	PD
											2020-17399	07/23/2020	0.68	PD
											2021-10250	04/28/2021	0.68	PD
											2021-20816	08/11/2021	0.68	PD
											2022-36293	11/28/2022	0.68	PD
											2022-22769	08/04/2022	0.68	PD
											2022-18014	06/14/2022	0.69	PD
											2020-14771	06/23/2020	0.70	PD
											2021-35933	12/18/2021	0.71	C

---

**Totals:**    10    0    0    1    1    8



## Crash Summary II - Characteristics

### Crashes by Day and Hour

Day Of Week	AM											PM											Un	Tot		
	Hour of Day											Hour of Day														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11		
SUNDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
TUESDAY	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
WEDNESDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
THURSDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
FRIDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
SATURDAY	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Totals</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	

### Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	5	23-Bicyclist	0
2-(Sport) Utility Vehicle	7	24-Witness	1
3-Passenger Van	0	25-Other	1
4-Cargo Van (10K lbs or Less)	0	26-Construction	0
5-Pickup	3	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	<b>Total</b>	<b>19</b>
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	1		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	1		

## Crash Summary II - Characteristics

### Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	2	6	0	0	0	0	8
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	3	0	0	0	0	0	3
Ran Red Light	1	0	0	0	0	0	1
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	1	0	0	0	0	0	1
Followed Too Closely	0	0	0	0	0	0	0
Failed to Keep in Proper Lane	0	0	0	0	0	0	0
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	3	0	0	0	0	0	3
Unknown	0	0	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>

### Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	9	6	0	0	0	1	16
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	1	0	0	0	0	0	1
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>17</b>

### Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	2	0	0	0	0	2
20-24	2	0	0	0	0	2
25-29	1	0	0	0	0	1
30-39	5	0	0	0	0	5
40-49	2	0	0	0	0	2
50-59	2	0	0	0	0	2
60-69	1	0	0	0	0	1
70-79	1	0	0	0	0	1
80-Over	0	0	0	0	0	0
Unknown	1	0	0	1	0	2
<b>Total</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>18</b>

## Crash Summary II - Characteristics

Most Harmful Event			
Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	0	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0		
6-Fell / Jumped from Motor Vehicle	0	<b>Total</b>	<b>16</b>
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	1		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	13		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	2		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Traffic Control Devices		
Traffic Control Device	Total	
1-Traffic Signals (Stop & Go)	3	
2-Traffic Signals (Flashing)	1	
3-Advisory/Warning Sign	0	
4-Stop Signs - All Approaches	0	
5-Stop Signs - Other	0	
6-Yield Sign	0	
7-Curve Warning Sign	0	
8-Officer, Flagman, School Patrol	0	
9-School Bus Stop Arm	0	
10-School Zone Sign	0	
11-R.R. Crossing Device	0	
12-No Passing Zone	0	
13-None	5	
14-Other	1	
<b>Total</b>	<b>10</b>	

Injury Data		
Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	1	1
C	1	1
PD	8	0
<b>Total</b>	<b>10</b>	<b>2</b>

Road Character	
Road Grade	Total
1-Level	10
2-On Grade	0
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
<b>Total</b>	<b>10</b>

Light	
Light Condition	Total
1-Daylight	9
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	1
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	0
7-Unknown	0
<b>Total</b>	<b>10</b>

### Crash Summary II - Characteristics

**Crashes by Year and Month**

Month	2020	2021	2022	Total
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	0	0	0	0
APRIL	0	1	1	2
MAY	0	0	0	0
JUNE	1	0	1	2
JULY	1	0	0	1
AUGUST	0	1	1	2
SEPTEMBER	0	0	0	0
OCTOBER	0	1	0	1
NOVEMBER	0	0	1	1
DECEMBER	0	1	0	1
<b>Total</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>10</b>

Report is limited to the last 10 years of data.

## Crash Summary II - Characteristics

### Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
Pedestrians	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>

Maine Department Of Transportation - Office of Safety, Crash Records Section

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Blowing Sand, Soil, Dirt</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Blowing Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Clear</b>												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	7	0	0	0	0	0	0	0	0	0	0	7
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cloudy</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	2	0	0	0	0	0	0	0	0	0	0	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Fog, Smog, Smoke</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Rain</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Severe Crosswinds</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Sleet, Hail (Freezing Rain or Drizzle)</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>



---

# H. C. L. CRASH COLLISION DIAGRAM DATA PACKAGE

---

COUNTY: **PENOBSCOT**

TOWN: **BREWER**

LOW NODE: **40457** HIGH NODE: **0000**

REGION: **4**

U/R: **URBAN**

DESCRIPTION: **Int of 395EB offramp to Main St and Main St**

RTE # / RD #: **0015X**

DATE DRAWN: **10/10/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020**

STUDY TO: **12/31/2022**

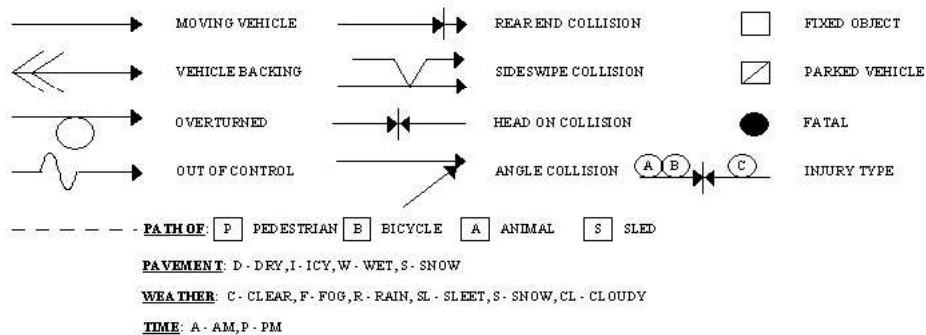
CRASH RATE: **1.31**

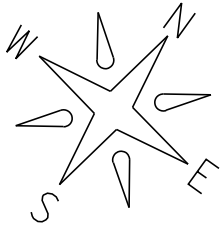
CRF: **4.26**

% INJURY: **30.8**

TOTAL CRASHES: **13**

### LEGEND





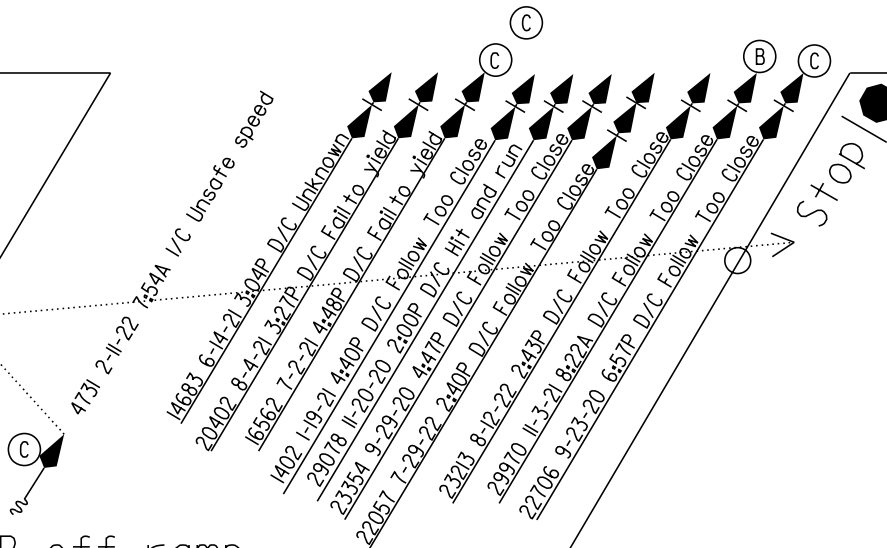
S. Main St.

16286 6-23-21 9:16A D/C Swerved to Avoid

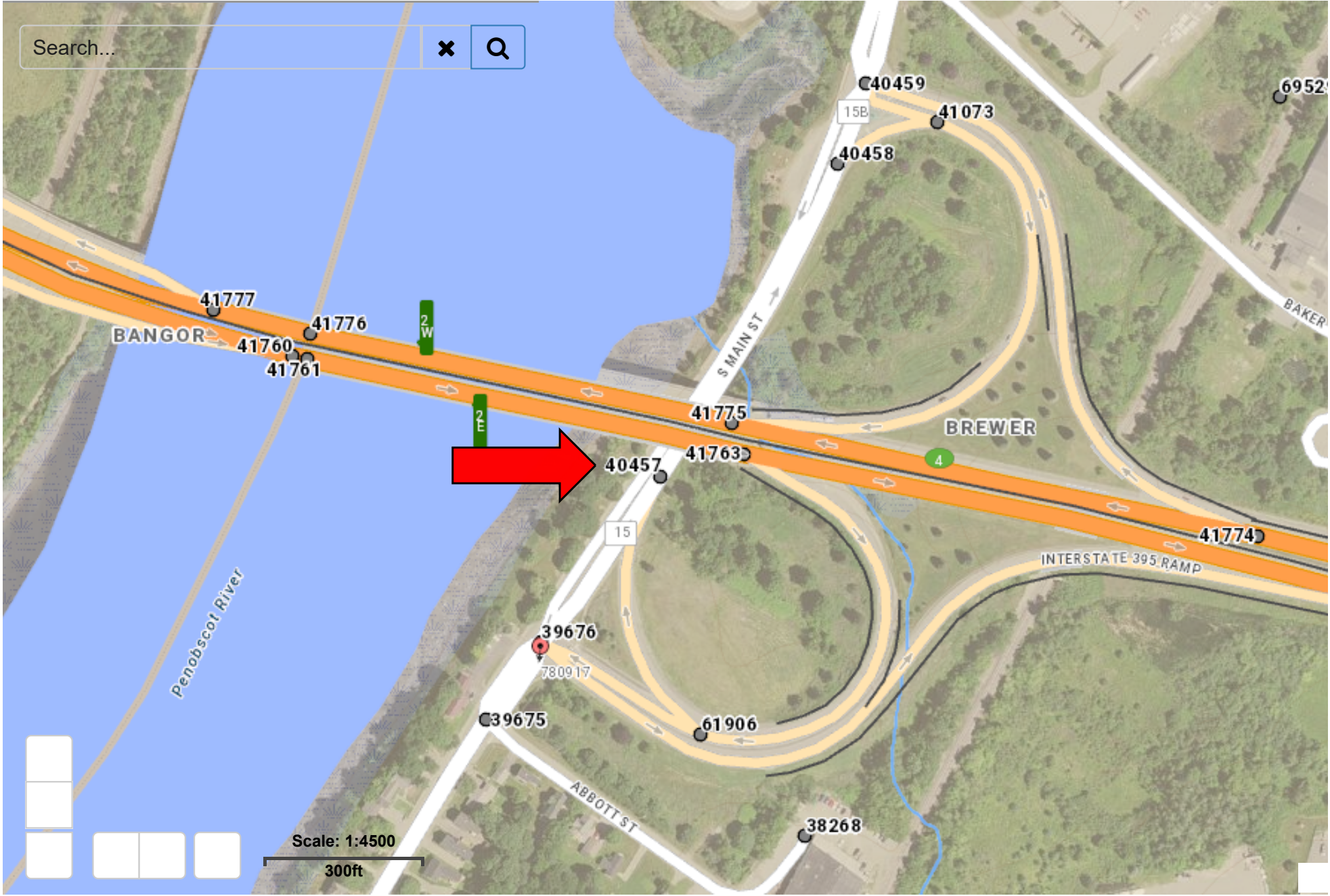
12131 5-20-21 8:05A D/C Fail to keep in lane

S. Main St.

I-395 EB off ramp



Search...



BANGOR

BREWER

INTERSTATE 395 RAMP

Penobscot River

S MAIN ST

ABBOTT ST

Scale: 1:4500

300ft

# Crash Summary Report

## Report Selections and Input Parameters

### REPORT SELECTIONS

- Crash Summary I - Single Node**       **Section Detail**       **Crash Summary II**       **1320 Public**       **1320 Private**       **1320 Summary**

### REPORT DESCRIPTION

Brewer  
Int I-395 EB off to Main St & Main St

### REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: **0015X**      Start Node: **40457**      Start Offset: **0**       **Exclude First Node**  
End Node: **40457**      End Offset: **0**       **Exclude Last Node**

---

## Crash Summary I

### Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes				PD	Percent Annual M Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF	
					K	A	B	C							
40457	0015X - 58.04	Int of RD INV 3201090 S MAIN ST	2	13	0	0	1	3	9	30.8	3.296	1.31	0.31	4.26	
				<i>Statewide Crash Rate: 0.10</i>											
<b>Study Years:</b>		3.00	<b>NODE TOTALS:</b>		13	0	0	1	3	9	30.8	3.296	1.31	0.31	4.26

## Crash Summary II - Characteristics

### Crashes by Day and Hour

Day Of Week	AM											PM											Un	Tot		
	Hour of Day											Hour of Day														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11		
SUNDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
TUESDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
WEDNESDAY	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4
THURSDAY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FRIDAY	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	5
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	

### Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	8	23-Bicyclist	0
2-(Sport) Utility Vehicle	7	24-Witness	1
3-Passenger Van	1	25-Other	1
4-Cargo Van (10K lbs or Less)	0	26-Construction	0
5-Pickup	7	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	<b>Total</b>	<b>27</b>
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	1		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	1		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

## Crash Summary II - Characteristics

### Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	2	10	1	0	0	0	13
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	1	1	0	0	0	0	2
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	1	0	0	0	0	0	1
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	6	0	0	0	0	0	6
Failed to Keep in Proper Lane	1	0	0	0	0	0	1
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	1	0	0	0	0	0	1
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	1	0	0	0	0	0	1
Unknown	0	0	0	0	0	0	0
<b>Total</b>	<b>13</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>

### Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	13	11	1	0	0	0	25
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>13</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>

### Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	0	0	0	0	0	0
20-24	3	0	0	0	0	3
25-29	1	0	0	0	0	1
30-39	2	0	0	0	0	2
40-49	4	0	0	0	0	4
50-59	10	0	0	0	0	10
60-69	5	0	0	0	0	5
70-79	0	0	0	0	0	0
80-Over	0	0	0	0	0	0
Unknown	1	0	0	0	0	1
<b>Total</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>

## Crash Summary II - Characteristics

Most Harmful Event			
Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	1	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	<b>Total</b>	<b>25</b>
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	24		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Traffic Control Devices		
Traffic Control Device	Total	
1-Traffic Signals (Stop & Go)	0	
2-Traffic Signals (Flashing)	0	
3-Advisory/Warning Sign	0	
4-Stop Signs - All Approaches	0	
5-Stop Signs - Other	0	
6-Yield Sign	10	
7-Curve Warning Sign	0	
8-Officer, Flagman, School Patrol	0	
9-School Bus Stop Arm	0	
10-School Zone Sign	0	
11-R.R. Crossing Device	0	
12-No Passing Zone	0	
13-None	3	
14-Other	0	
<b>Total</b>	<b>13</b>	

Injury Data		
Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	1	1
C	3	4
PD	9	0
<b>Total</b>	<b>13</b>	<b>5</b>

Road Character	
Road Grade	Total
1-Level	9
2-On Grade	3
3-Top of Hill	0
4-Bottom of Hill	1
5-Other	0
<b>Total</b>	<b>13</b>

Light	
Light Condition	Total
1-Daylight	11
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	2
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	0
7-Unknown	0
<b>Total</b>	<b>13</b>



### Crash Summary II - Characteristics

**Crashes by Year and Month**

Month	2020	2021	2022	Total
JANUARY	0	1	0	1
FEBRUARY	0	0	1	1
MARCH	0	0	0	0
APRIL	0	0	0	0
MAY	0	1	0	1
JUNE	0	2	0	2
JULY	0	1	1	2
AUGUST	0	1	1	2
SEPTEMBER	2	0	0	2
OCTOBER	0	0	0	0
NOVEMBER	1	1	0	2
DECEMBER	0	0	0	0
<b>Total</b>	<b>3</b>	<b>7</b>	<b>3</b>	<b>13</b>

Report is limited to the last 10 years of data.

## Crash Summary II - Characteristics

### Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>

Maine Department Of Transportation - Office of Safety, Crash Records Section

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Blowing Sand, Soil, Dirt</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Blowing Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Clear</b>												
Dark - Lighted	2	0	0	0	0	0	0	0	0	0	0	2
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	10	1	0	0	0	0	0	0	0	0	0	11
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Cloudy</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Fog, Smog, Smoke</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Rain</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Severe Crosswinds</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

## Crash Summary II - Characteristics

### Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
<b>Sleet, Hail (Freezing Rain or Drizzle)</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>Snow</b>												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>

## **APPENDIX D ROAD SAFETY AUDIT PRESENTATION AND FIELD VISIT NOTES**

# BREWER VILLAGE PARTNERSHIP INITIATIVE & SOUTH MAIN STREET STUDY

## ROAD SAFETY AUDIT



Joseph L. Ferris Community Center, Brewer, ME  
May 23, 2024





# Brewer VPI & South Main Street Road Safety Audit

## Agenda



- ▶ Study Team Introductions and Agenda
- ▶ Introductions to Road Safety Audits
- ▶ Initial Data Presentation
- ▶ Highlighting Audit Locations
  - Including Local/Regional Perspectives and Discussion
- ▶ Field Visit
- ▶ Recap Observations (Pros and Cons, Things to Keep, Things to Change/Add)
- ▶ Next Steps and Schedule of Projects





STANTEC MOMENT

## HSSE: Safety

### What is Situational Awareness?



Situational Awareness involves being aware of what is happening around you to understand how information, events, and your own actions will impact your goals and objectives.

Ask questions about your work environment and consider the consequences:

1. **LOOK** – What is happening?
2. **THINK** – What will happen next and how will it affect me?
3. **ACT** – Identify a hazard and do something about it.

*Remember to communicate with your team and others involved.*

SaferTogether™



# What is a Road Safety Audit?

## BREWER VPI & SOUTH MAIN STREET ROAD SAFETY AUDIT

### Per Federal Highway Administration (FHWA):

“The formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users.”

**Holistic review by all stakeholders (local and regional) with expertise to assist but work with the team.**

**No “putting the cart before the horse” until fully discussed and reviewed.**





# The Costs of Crashes

## BREWER VPI & SOUTH MAIN STREET ROAD SAFETY AUDIT

ASHES	AMOUNT OF LOSS	INJURY (A) CRASHES	AMOUNT OF LOSS	INJURY (B) CRASHES	AMOUNT OF LOSS	INJURY (C) CRASHES	AMOUNT OF LOSS	ONLY CRASHES	AMOUNT OF LOSS	ANNUAL COST
127	\$1,282,446,000	593	\$347,260,800	1977	\$350,917,500	5430	\$609,789,000	27105	\$287,313,000	\$2,877,726,3

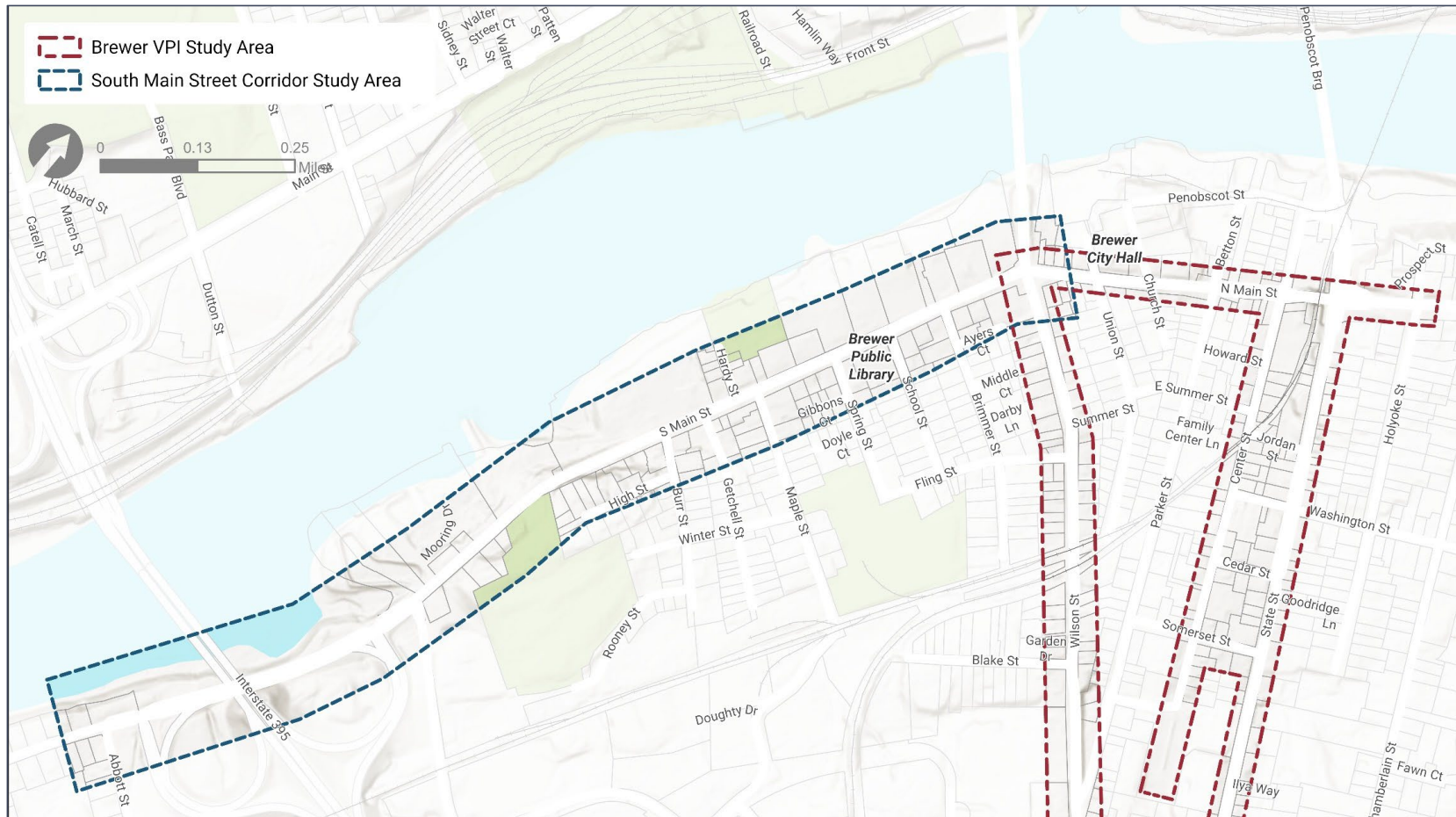
**K**  
**A**  
**B**  
**C**  
**PD**

Average Comprehensive Costs are based on 2018 Federal Highway Administration estimates.

Death (Per Crash)	\$10,098,000
Suspected serious injury (Per Crash)	\$585,600
Suspected minor injury (Per Crash)	\$177,500
Possible injury (Per Crash)	\$112,300
Property damage only (Per Crash)	\$10,600

# Study Areas

## BREWER VPI & SOUTH MAIN STREET ROAD SAFETY AUDIT



# Study Areas

## BREWER VPI & SOUTH MAIN STREET ROAD SAFETY AUDIT

The screenshot shows the 'Maine Public Crash Query Tool' interface. The search criteria are set to 'Year: 2021 To 2023 City or Town: Brewer - Intersections'. The results table lists three locations with their respective crash statistics:

Location	Total Crashes	Percent Injury	Fatalities (FARS)	Injuries
Int of N MAIN ST S MAIN ST WILSON ST	33	21.2	0	11
Int of N MAIN ST STATE ST	31	19.4	0	7
Int of RD INV 3201090 S MAIN ST	12	25.0	0	4

The interface also includes a sidebar with search steps: Step 1 (Select a location), Step 2 (Select year: 2023), Step 3 (Select intersections or sections: Intersections), and Step 4 (Submit Query). A 'Helpful Tips' button is also visible.

**High Crash Locations (HCLs):** “A High Crash Location (HCL) is a location that has had eight or more traffic crashes and a Critical Rate Factor (CRF) greater than 1.00 in a three-year period. A highway location with a CRF greater than 1.00 has a frequency of crashes that is greater than the statewide average for similar locations... to determine the "expected crash rate" as compared to similar intersections in the State of Maine...”

– *Androscoggin Transportation Resource Center*

# Study Areas

## BREWER VPI & SOUTH MAIN STREET ROAD SAFETY AUDIT



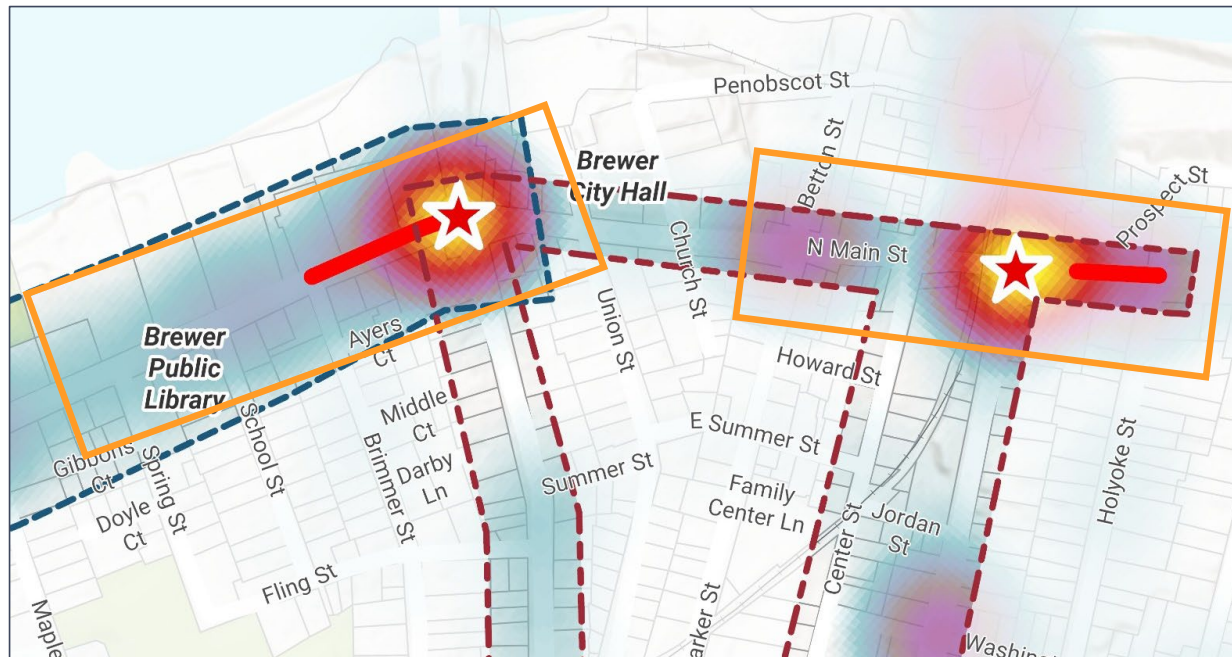
### High Crash Locations in Study Areas (2020 – 2023):

- North Main Street / South Main Street at Wilson Street
- North Main Street at State Street
- North Main Street between State Street and Holyoke Street
- South Main Street between Wilson Street and Brimmer Street
- South Main Street at I-395 Exit 4 Interchange

*Heat Map is most recent 10 years of data (2014-2023)*

# Study Areas – Focus of RSA

## BREWER VPI & SOUTH MAIN STREET ROAD SAFETY AUDIT



### Morning Field Visit Area

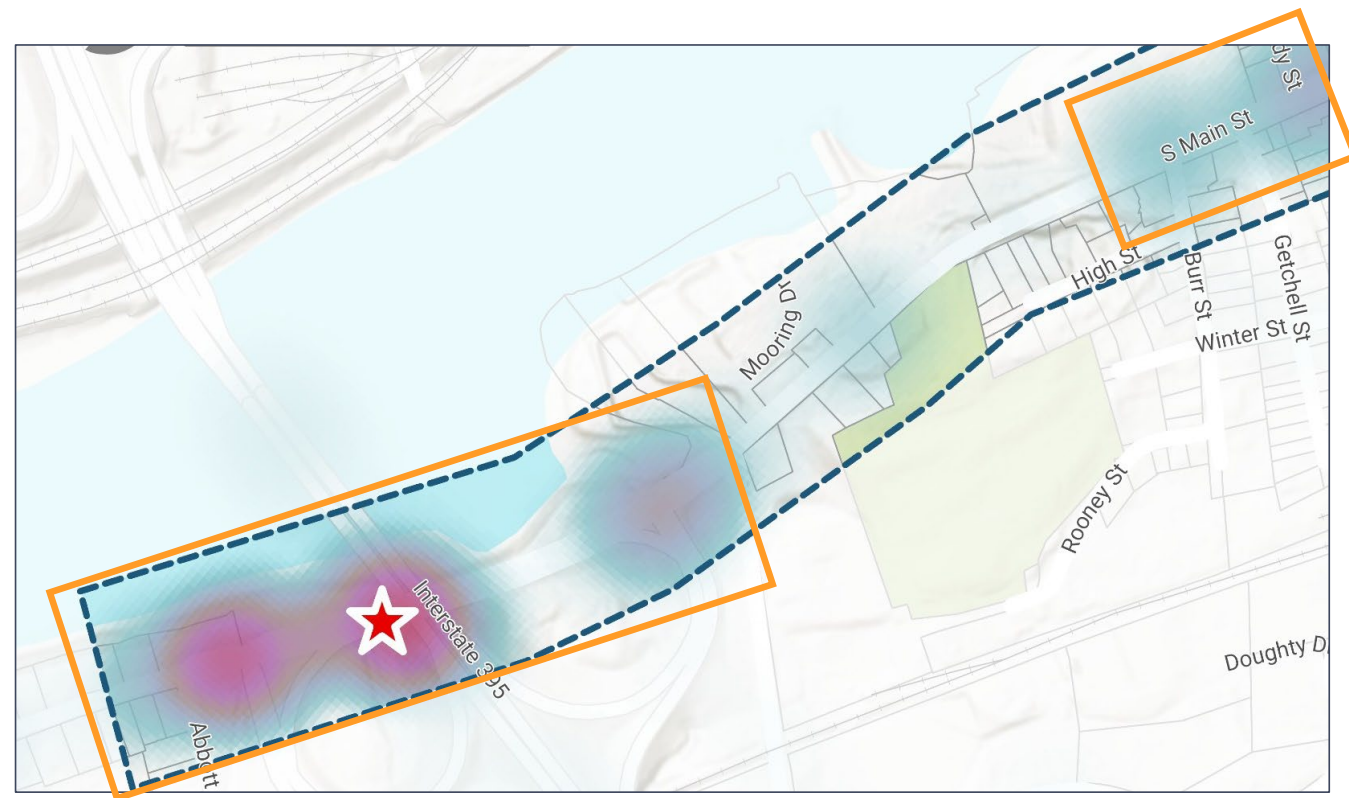
- North Main Street at State Street
- North Main Street between State Street and Holyoke Street
- North Main Street at Center Street
- North Main Street and Benton Street / Parker Street

### Afternoon Field Visit Area

- Main Street at Wilson Street
- South Main Street at Brimmer Street

# Study Areas – Focus of RSA

BREWER VPI & SOUTH MAIN STREET ROAD SAFETY AUDIT

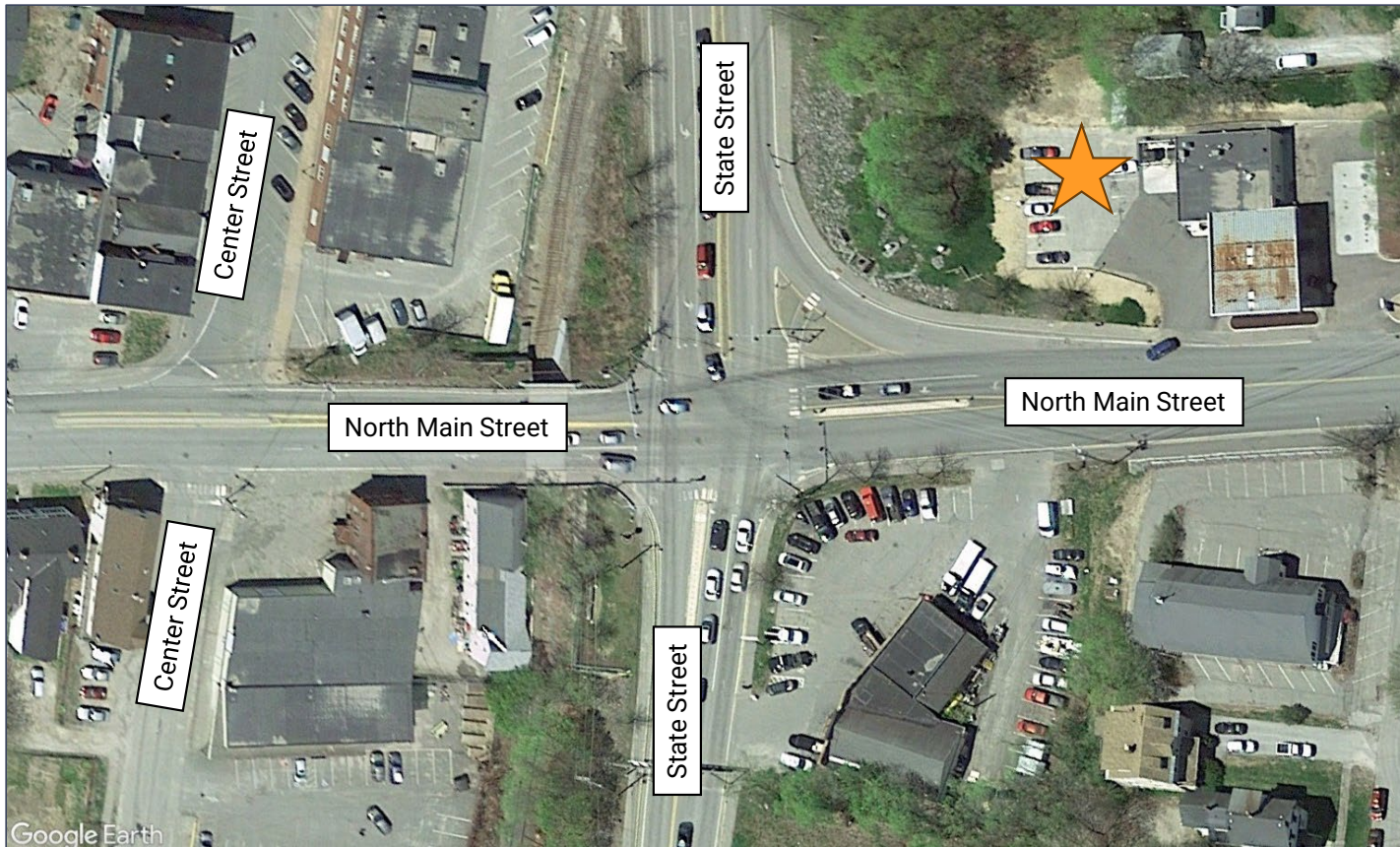


## Afternoon Field Visit Area (cont.)

- South Main Street at Maple Street / Hardy Street / Gretchell Street / Burr Street (Segment)
- South Main Street, from Industrial Park to Abbott Street (incl. I-395 Exit 4 Interchange)



# Study Area – North Main Street at State Street



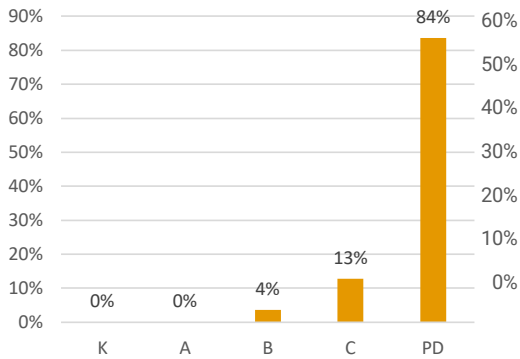
## Crash Summary (2019 – 2023):

- 55 total crashes
  - 13.75 crashes per year
- 9 injury Crashes
  - 16.4 percent

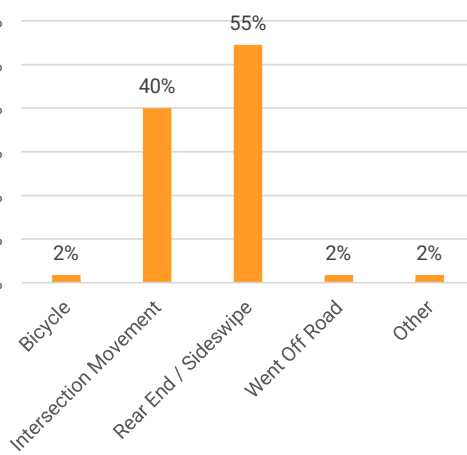
# Study Area – North Main Street at State Street



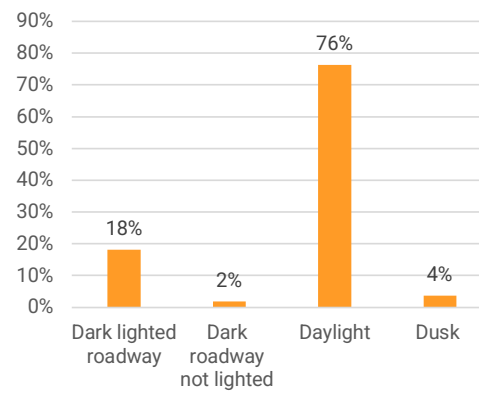
CRASH SEVERITY



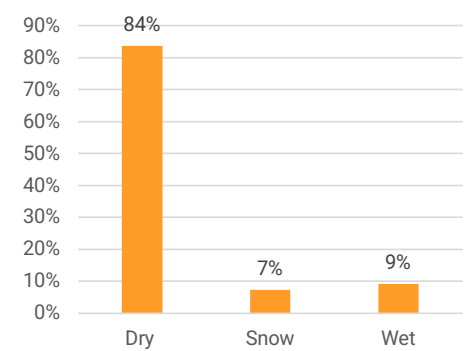
TYPE OF CRASH



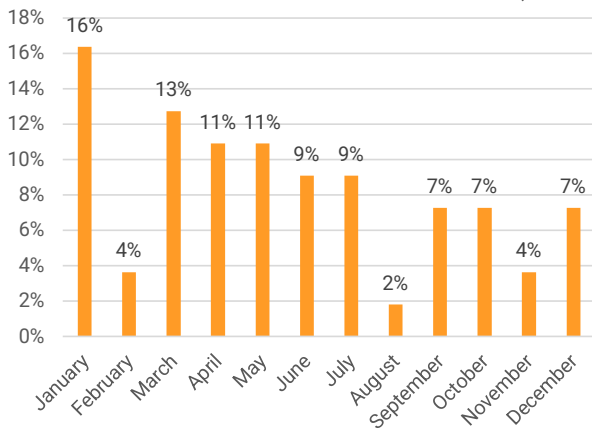
CRASH LIGHT CONDITION



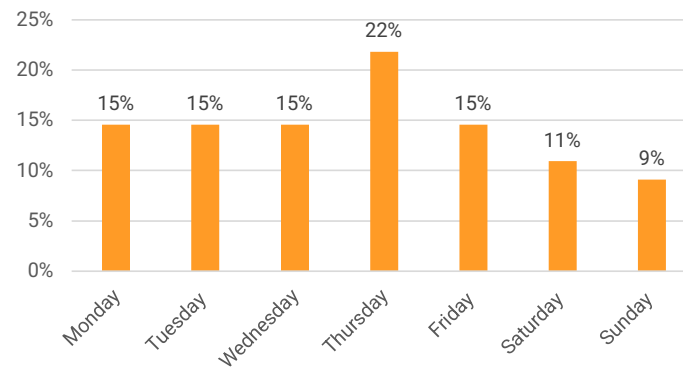
CRASH ROAD SURFACE



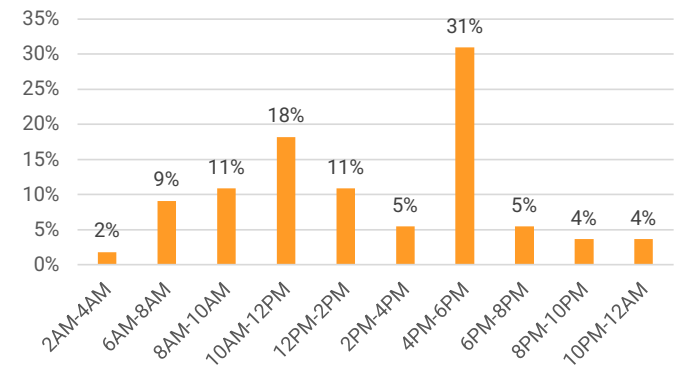
CRASH MONTH



DAY OF WEEK



CRASH TIME OF DAY





# Study Area – North Main Street from State Street to Chamberlain Street



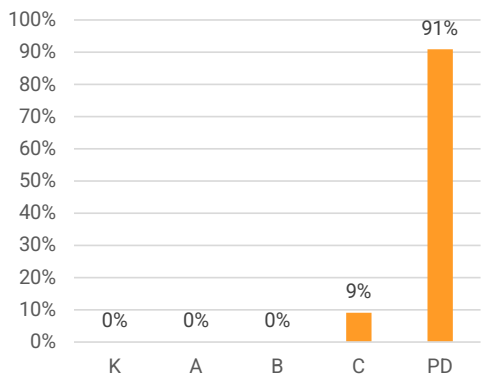
## Crash Summary (2019 – 2023):

- 22 total crashes
  - 5.5 crashes per year
- 2 injury crashes
  - 9 percent

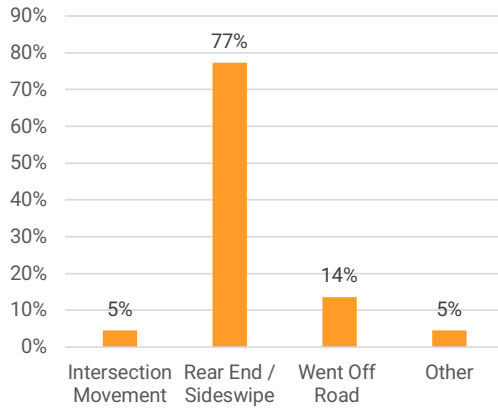


# Study Area – North Main Street from State Street to Chamberlain Street

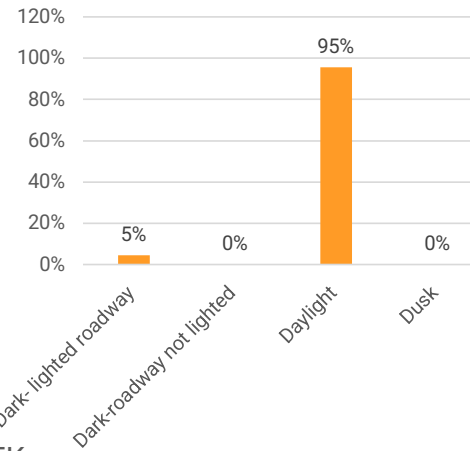
### CRASH SEVERITY



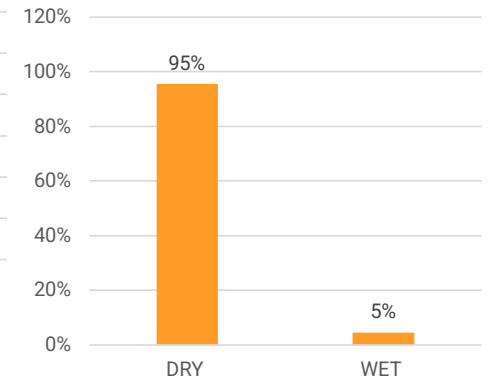
### TYPE OF CRASH



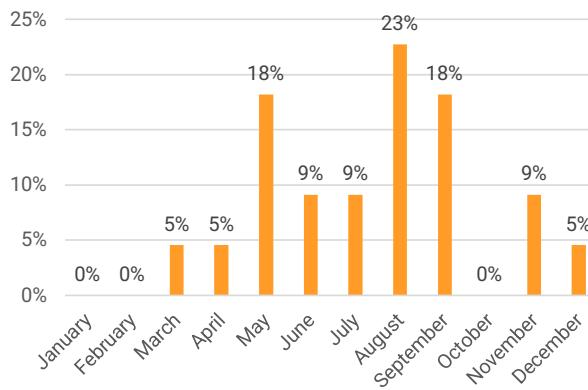
### CRASH LIGHT CONDITION



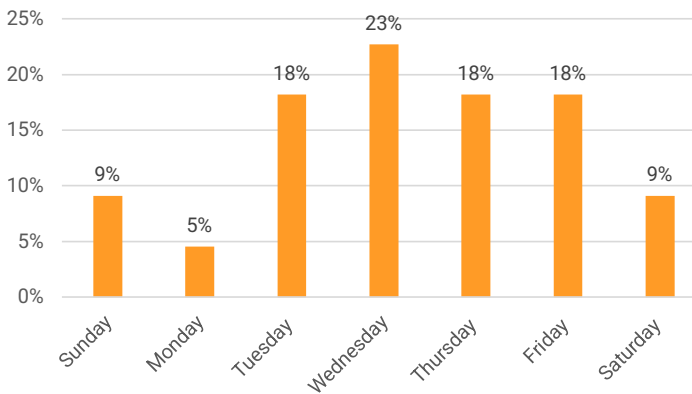
### CRASH ROAD SURFACE



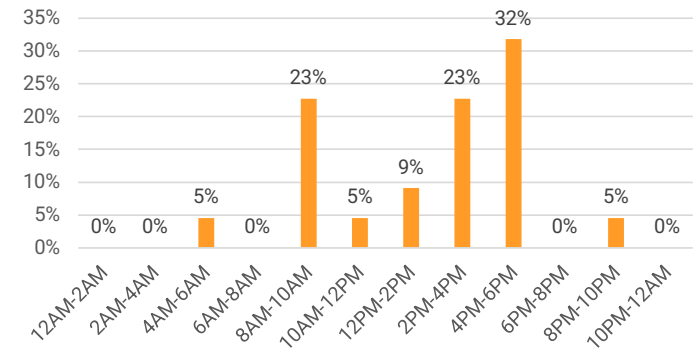
### CRASH MONTH



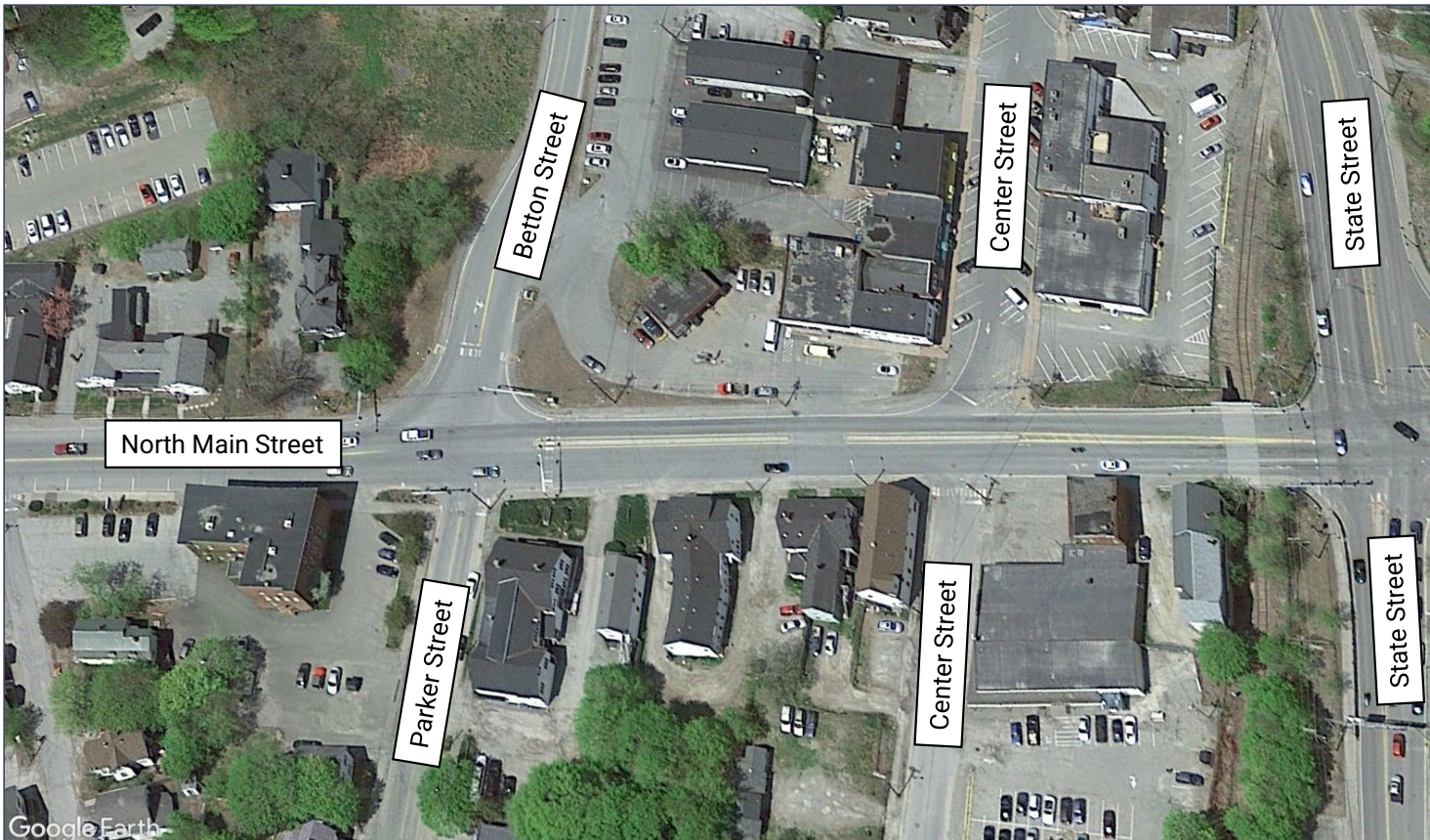
### DAY OF WEEK



### CRASH TIME



# Study Area – North Main Street from State Street to Betton / Parker Street



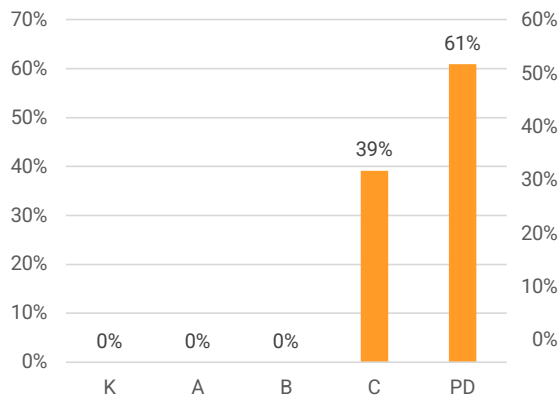
## Crash Summary (2019 – 2023):

- 44 total crashes
  - 11 crashes per year
- 8 injury crashes
  - 18 percent
  - All eight noted at the intersection of North Main Street and Betton Street / Parker Street

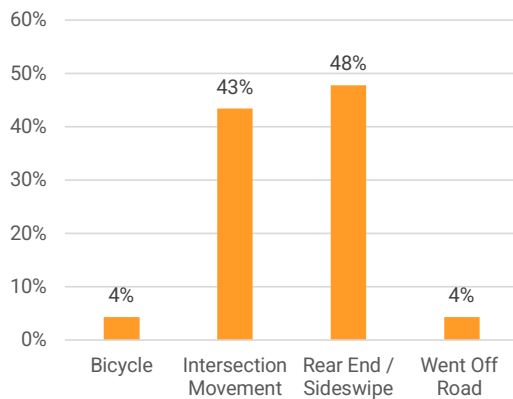


# Study Area – North Main Street from State Street to Betton / Parker Street

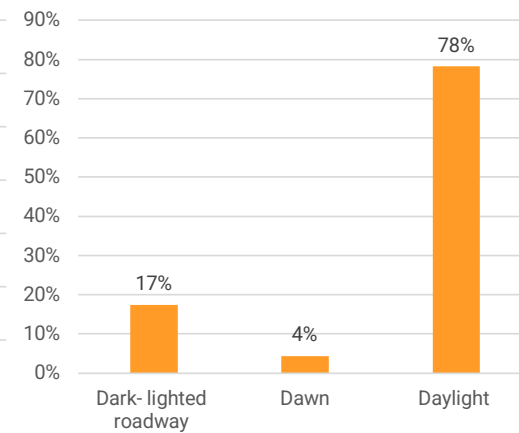
### CRASH SEVERITY



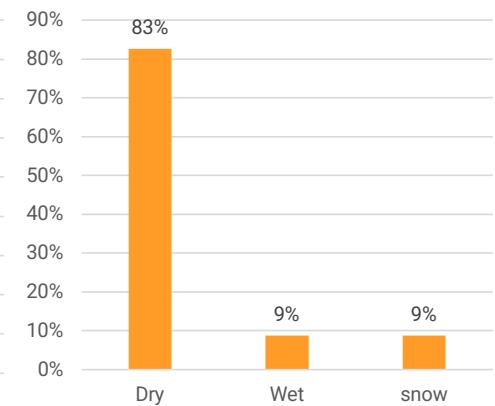
### TYPE OF CRASH



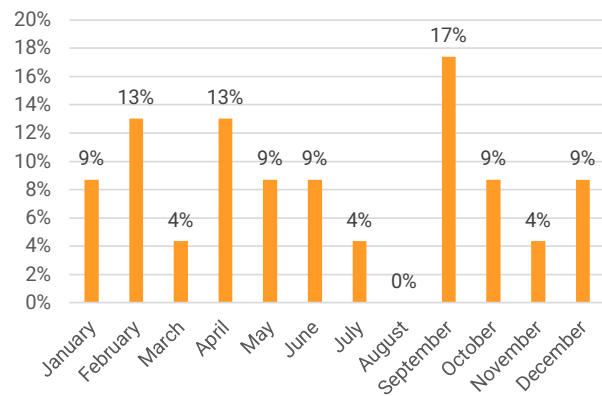
### CRASH LIGHT CONDITION



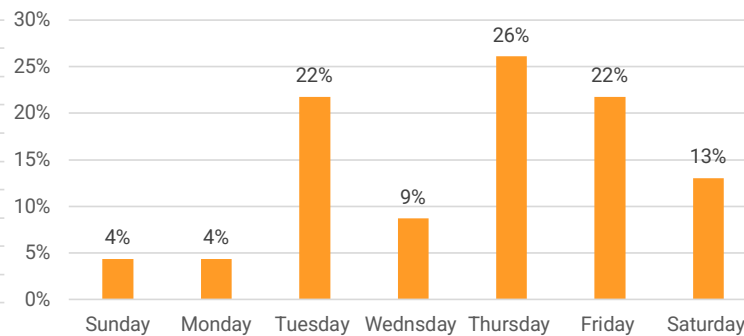
### CRASH ROAD SURFACE



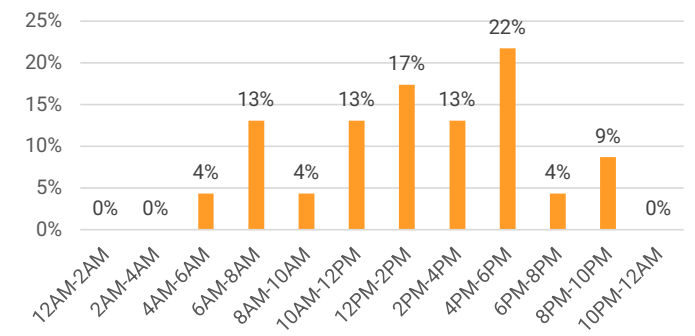
### CRASH MONTH



### DAY OF WEEK



### CRASH TIME



# Field Visit for Audit

## Prompt Sheets Available

### Things to consider - GORE

- Geometric attributes and condition of roadway
- Operations - Traffic movements, signs, pavement markings, lighting
- Road Users - All possible users and their needs
- Environment - effect of weather, vegetation and flooding



# Field Visit for Audit



## Stay Together as a Group

- Promote Group Discussion

## Safety First

- Wear a safety vest
- Be careful of traffic, roadside ditches, culverts, manholes and vegetation
- Do not block vehicle sight lines
- Be aware of your surroundings
- Try not to distract





# Countermeasure Tools and Guidance

## INTERSECTIONS



Backplates with Retroreflective Borders



Corridor Access Management



Dedicated Left- and Right-Turn Lanes at Intersections



Reduced Left-Turn Conflict Intersections



Roundabouts



Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections



Yellow Change Intervals

## PEDESTRIANS/BICYCLES



Crosswalk Visibility Enhancements



Bicycle Lanes



Rectangular Rapid Flashing Beacons (RRFB)



Leading Pedestrian Interval



Medians and Pedestrian Refuge Islands in Urban and Suburban Areas



Pedestrian Hybrid Beacons



Road Diets (Roadway Reconfiguration)



Walkways

<https://highways.dot.gov/safety/proven-safety-countermeasures/search>

The screenshot shows the homepage of the Crash Modification Factors Clearinghouse. At the top, there is a navigation bar with the C M F logo and the text "CRASH MODIFICATION FACTORS CLEARINGHOUSE". Below this, there are links for "ABOUT THE CLEARINGHOUSE", "USING CMFs", "DEVELOPING CMFs", and "ADDITIONAL RESOURCES". The main heading reads "The Crash Modification Factors Clearinghouse provides a searchable database of CMFs along with guidance and resources on using CMFs in road safety practice." Below the heading is a search bar with the placeholder "ENTER SEARCH TERMS...". To the right of the search bar is a dropdown menu for "Countermeasure Name" and a "SEARCH" button. Below the search bar, there are "FREQUENT SEARCHES" for "ROUNDBOUT", "SIGNAL", "PEDESTRIAN", "COMPLETE STREETS", "TSMO", and "BROWSE ALL". The main content area features three columns of cards: "WHAT ARE CMFs?", "GETTING STARTED", and "UPDATED RATINGS". Each card has a brief description and a "LEARN MORE" link. At the bottom, there is a dark blue banner for "RECEIVE THE QUARTERLY EMAIL NEWSLETTER" with input fields for "EMAIL ADDRESS", "FIRST NAME", "LAST NAME", "ORGANIZATION", and a "SIGN UP" button.

<https://www.cmfclearinghouse.org/index.php>



# Field Visit Recap – North Main Street at State Street

## *Pros*

- *Dot/Brewer have implemented ped improvements using signs and signal equipment. No Right Turn on Red*
- *Adaptive Signals – This Month*
- *City – Wayfinding Signs*
- *Pedestrian Crossings across available legs*
- *Restricted Left-Turns – Based sightlines*

## *Cons*

- *Drainage – Crossing Locations*
- *ADA – Sidewalk grades / condition of sidewalk*
- *Geometry – Grades for all approaching legs*
- *Lighting*
- *Uneven queuing for State Street EB Left Turns*
- *Uneven use of North Main Street NB Through and Through-Right*



## Study Area – North Main Street from State Street to Chamberlain Street

### *Pros*

- *Pedestrian Crossings – heavily preferred/used*
- *Ped Signs*
- *Pavement to work with*
- *Freight Plan in 2 Years*

### *Cons*

- *Ped Signs need to be per MUTCD dimensions*
- *Pedestrian Scale Lighting / Character Lighting*
- *Needs Gateway*
- *Freight Plan from early 2000s*
- *Proximity of crosswalk and gas station entrance*



# Study Area – North Main Street from State Street to Betton / Parker Street

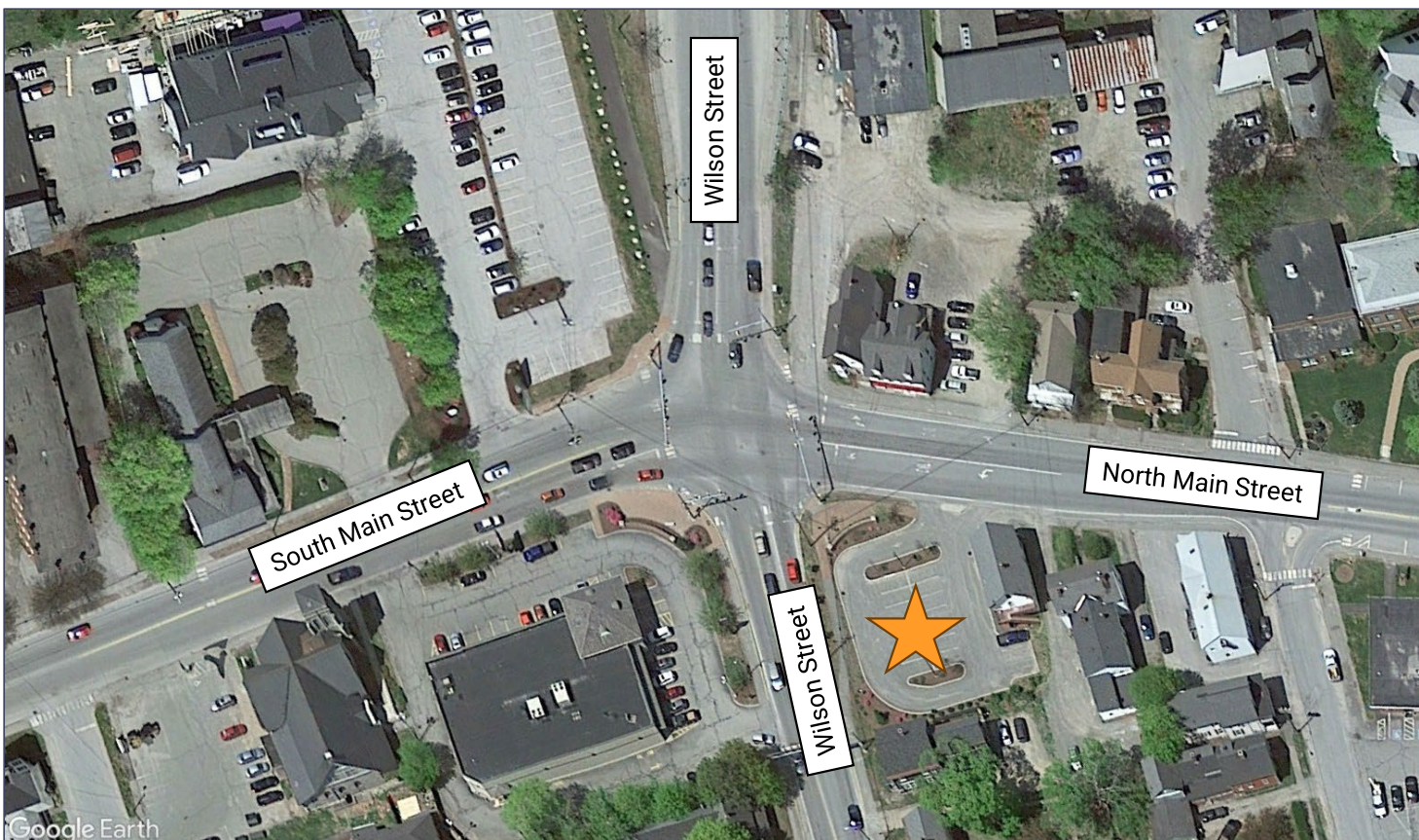
## *Pros*

- *Center Median*
- *Right-Turn Only from Side Streets*
- *Realigned Betton Street*
- *Cross-Section allows for some modifications*
- *Parker Street – Ped Improvements underway/planned*
- *Historic District*
- *Wayfinding*

## *Cons*

- *U-Turns through median break*
- *Width of mouth of Center Street*
- *Lighting*
- *No Ped/Bike Crossing, however people cross anyway/jaywalk*
- *Median signs and other ways to delineate median*
- *Grades!!!*
- *Evaluate Center Street and Parker Street improving ped/bike circulation and connection to Riverwalk*
- *Wayfinding*
- *Ped Signs need to be per MUTCD dimensions*

# Study Area – North Main Street / South Main Street at Wilson Street



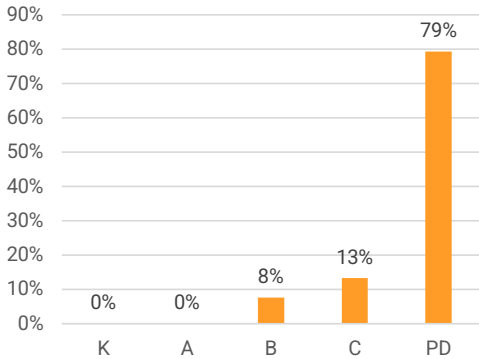
## Crash Summary (2019 – 2023):

- 53 total crashes
  - 13.25 crashes per year
- 11 injury Crashes
  - 21 percent

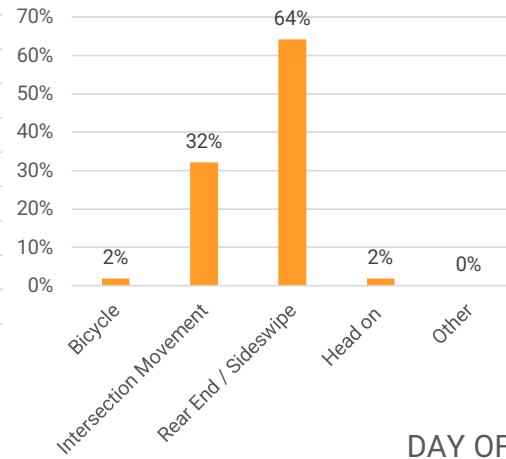


# Study Area – North Main Street / South Main Street at Wilson Street

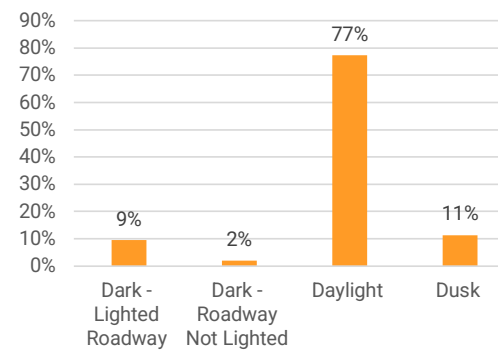
### CRASH SEVERITY



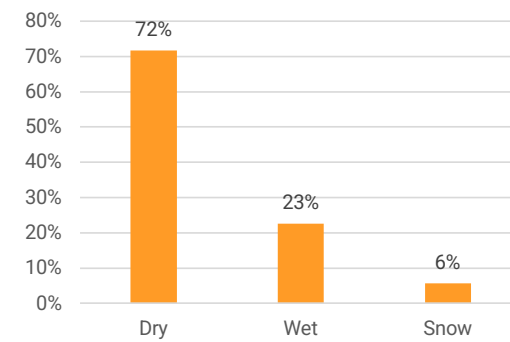
### TYPE OF CRASH



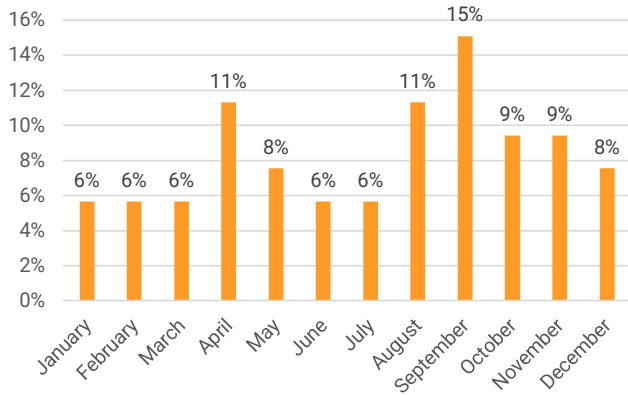
### CRASH LIGHT CONDITION



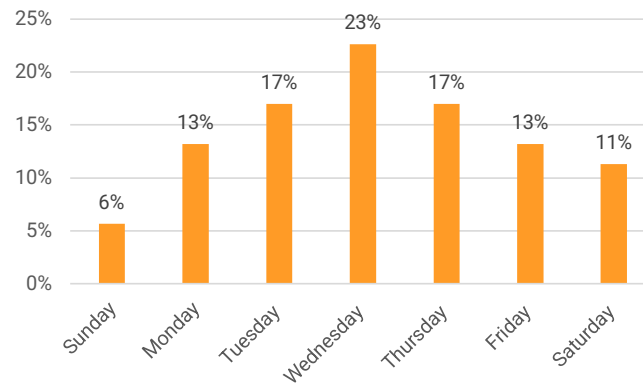
### CRASH ROAD SURFACE



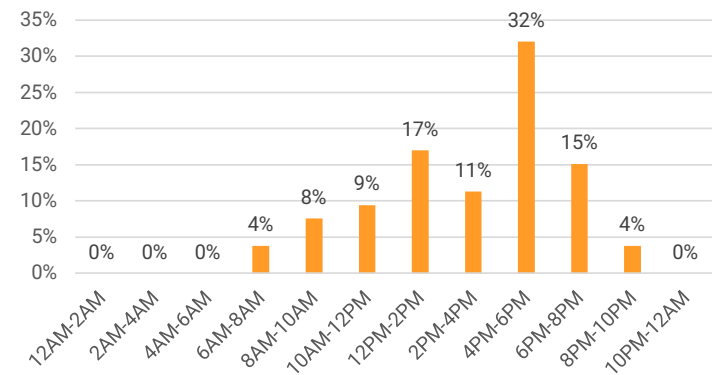
### CRASH MONTH



### DAY OF WEEK

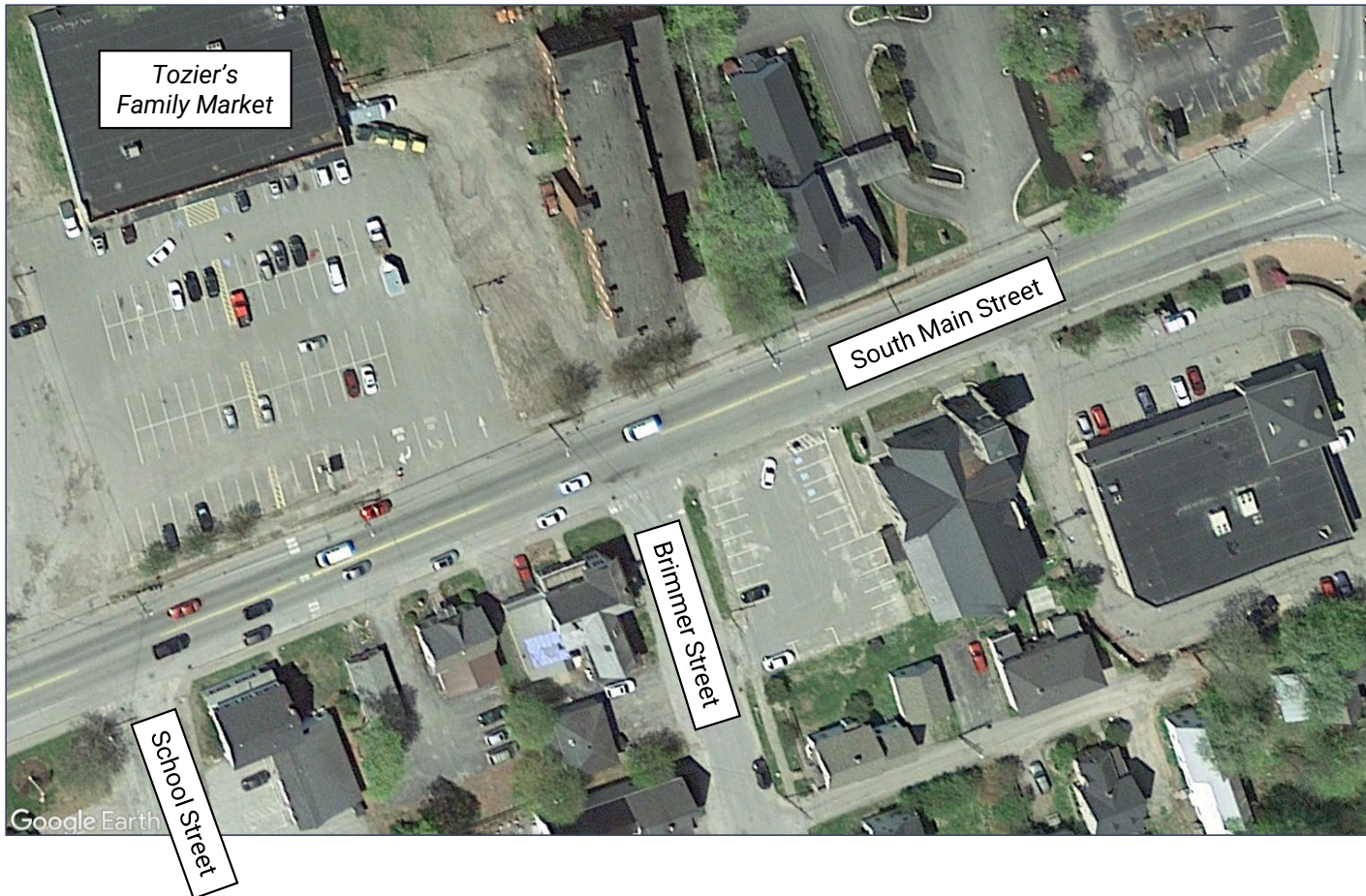


### CRASH TIME





# Study Area – South Main Street from Wilson Street to Brimmer Street and School Street



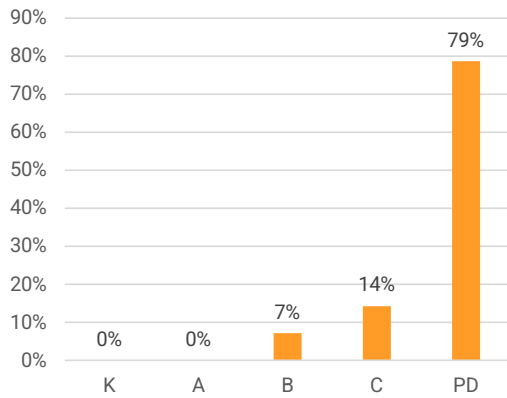
## Crash Summary (2019 – 2023):

- 28 total crashes
  - 7 crashes per year
- 7 injury crashes
  - 25 percent

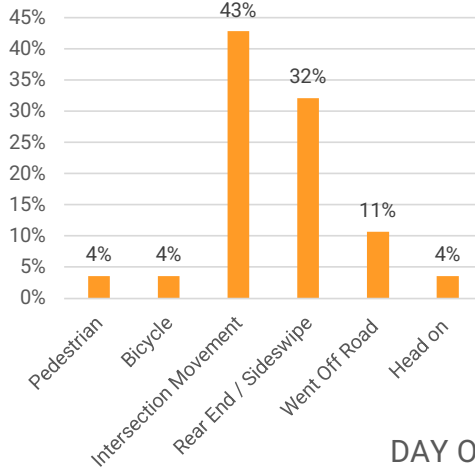


# Study Area – South Main Street from Wilson Street to Brimmer Street and School Street

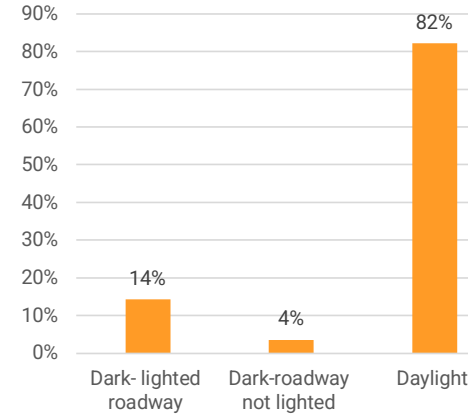
### CRASH SEVERITY



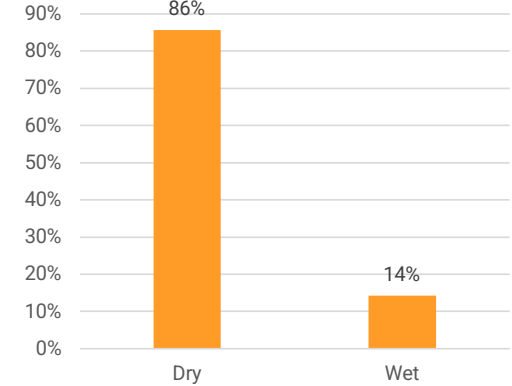
### TYPE OF CRASH



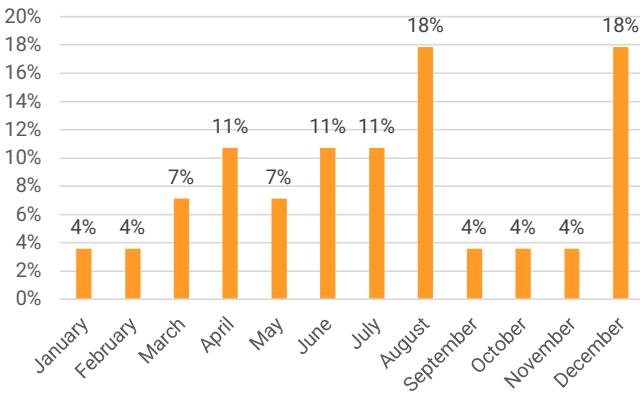
### CRASH LIGHT CONDITION



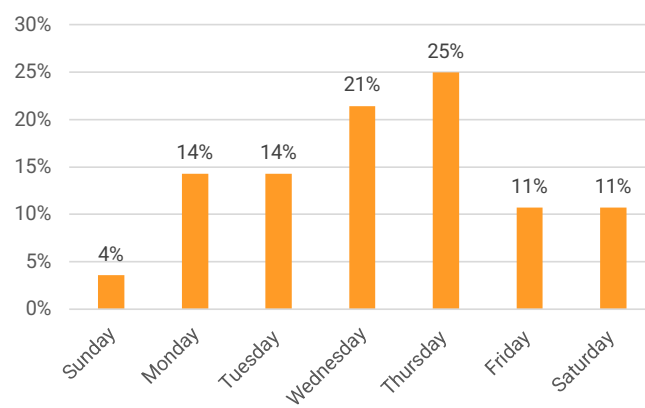
### CRASH ROAD SURFACE



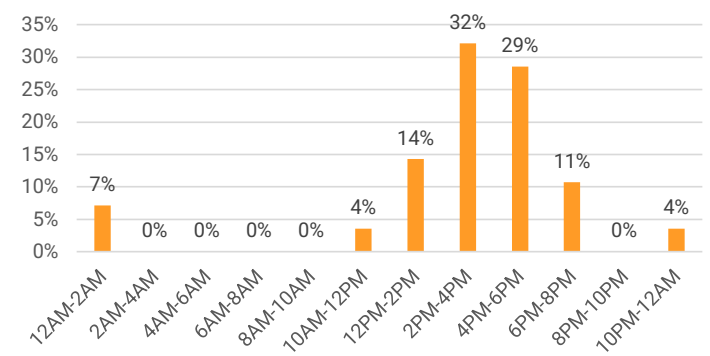
### CRASH MONTH



### DAY OF WEEK

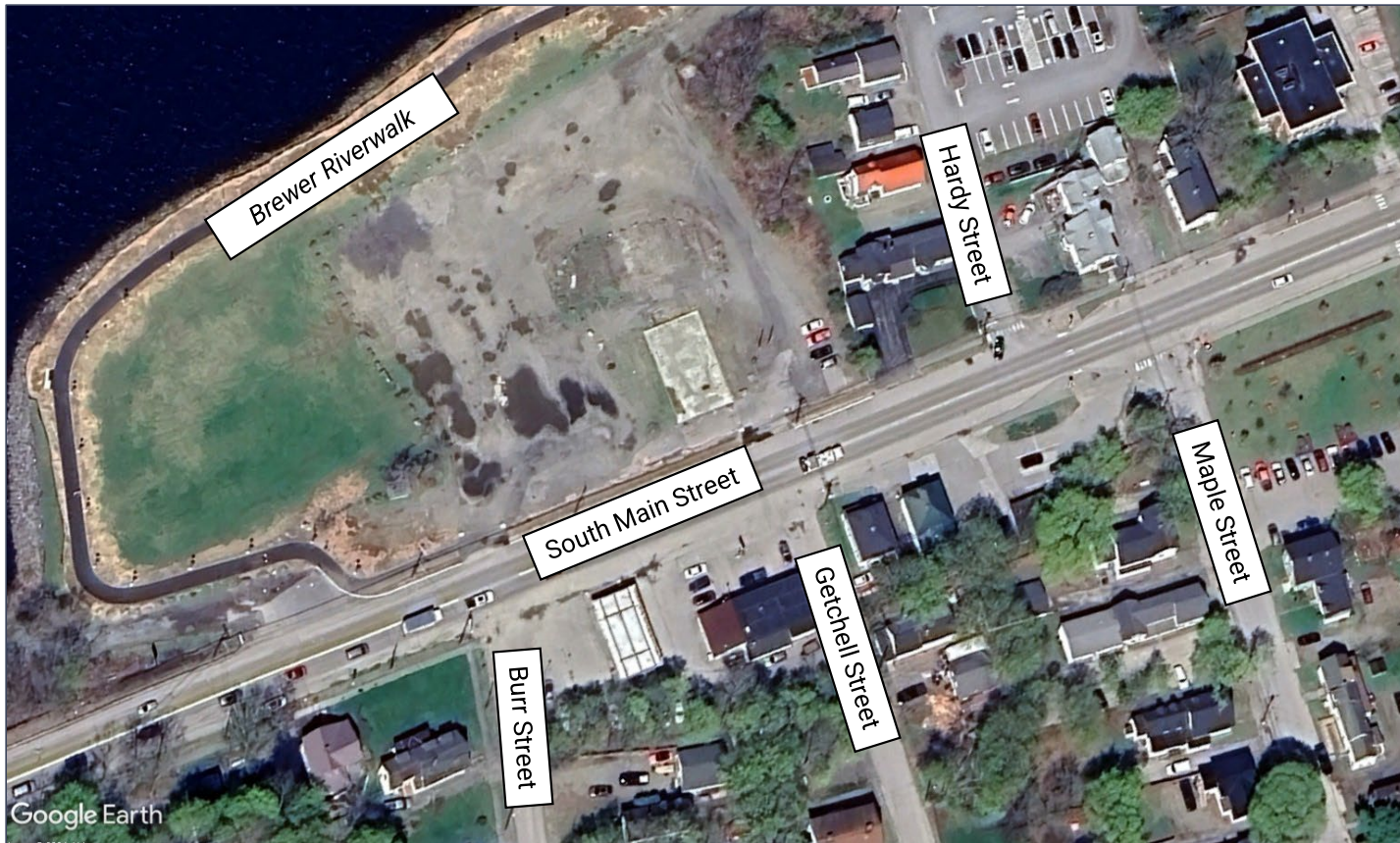


### CRASH TIME





# Study Area – South Main Street from Maple Street to Burr Street and Riverwalk Terminus



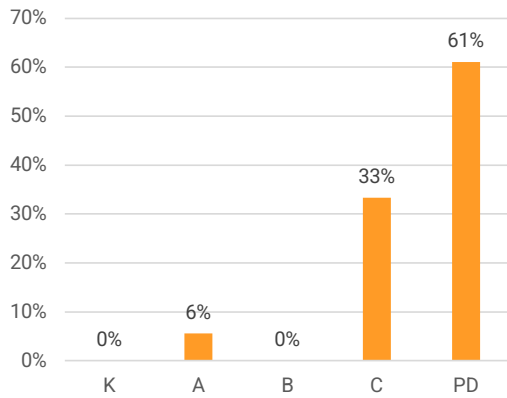
## Crash Summary (2019 – 2023):

- 18 total crashes
  - 4.5 crashes per year
- 7 injury crashes
  - 39 percent

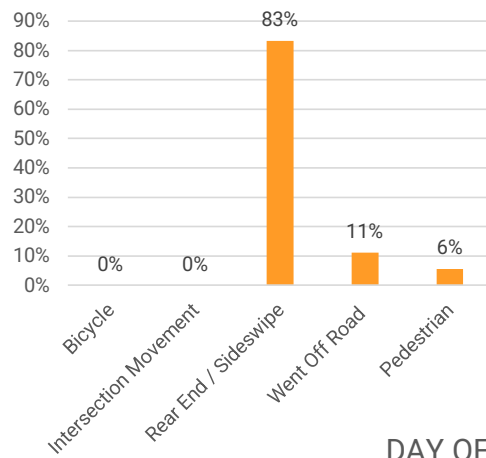


# Study Area – South Main Street from Maple Street to Burr Street and Riverwalk Terminus

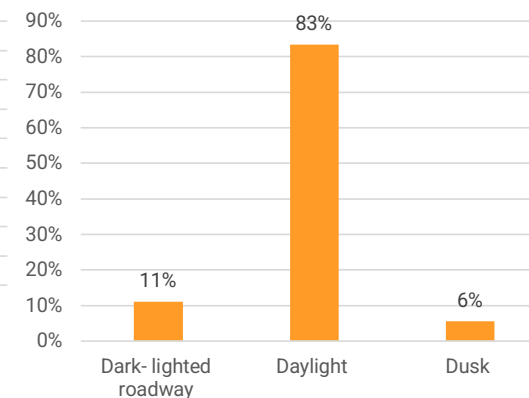
### CRASH SEVERITY



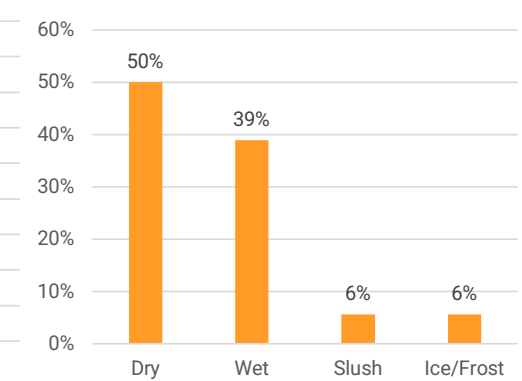
### TYPE OF CRASH



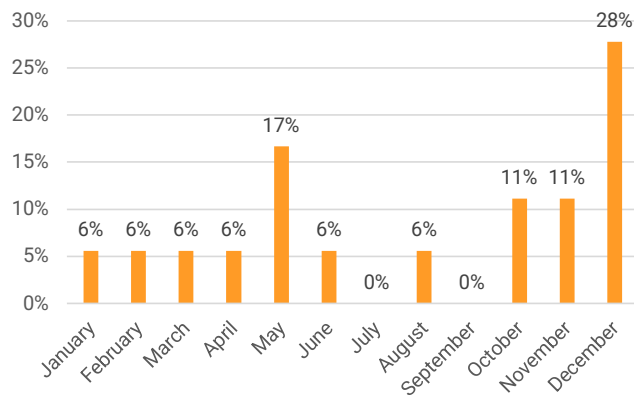
### CRASH LIGHT CONDITION



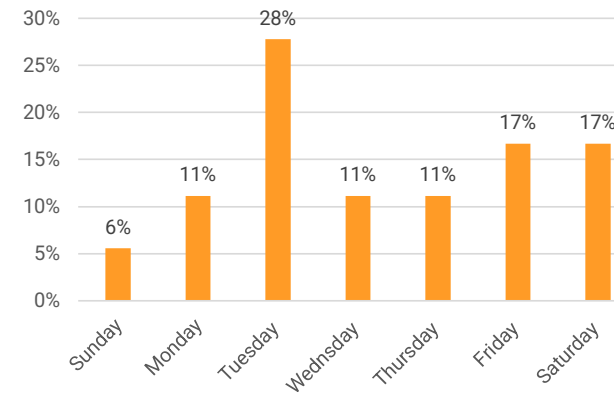
### CRASH ROAD SURFACE



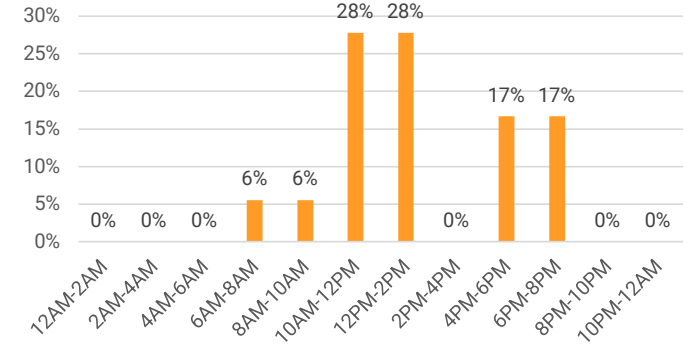
### CRASH MONTH



### DAY OF WEEK



### CRASH TIME



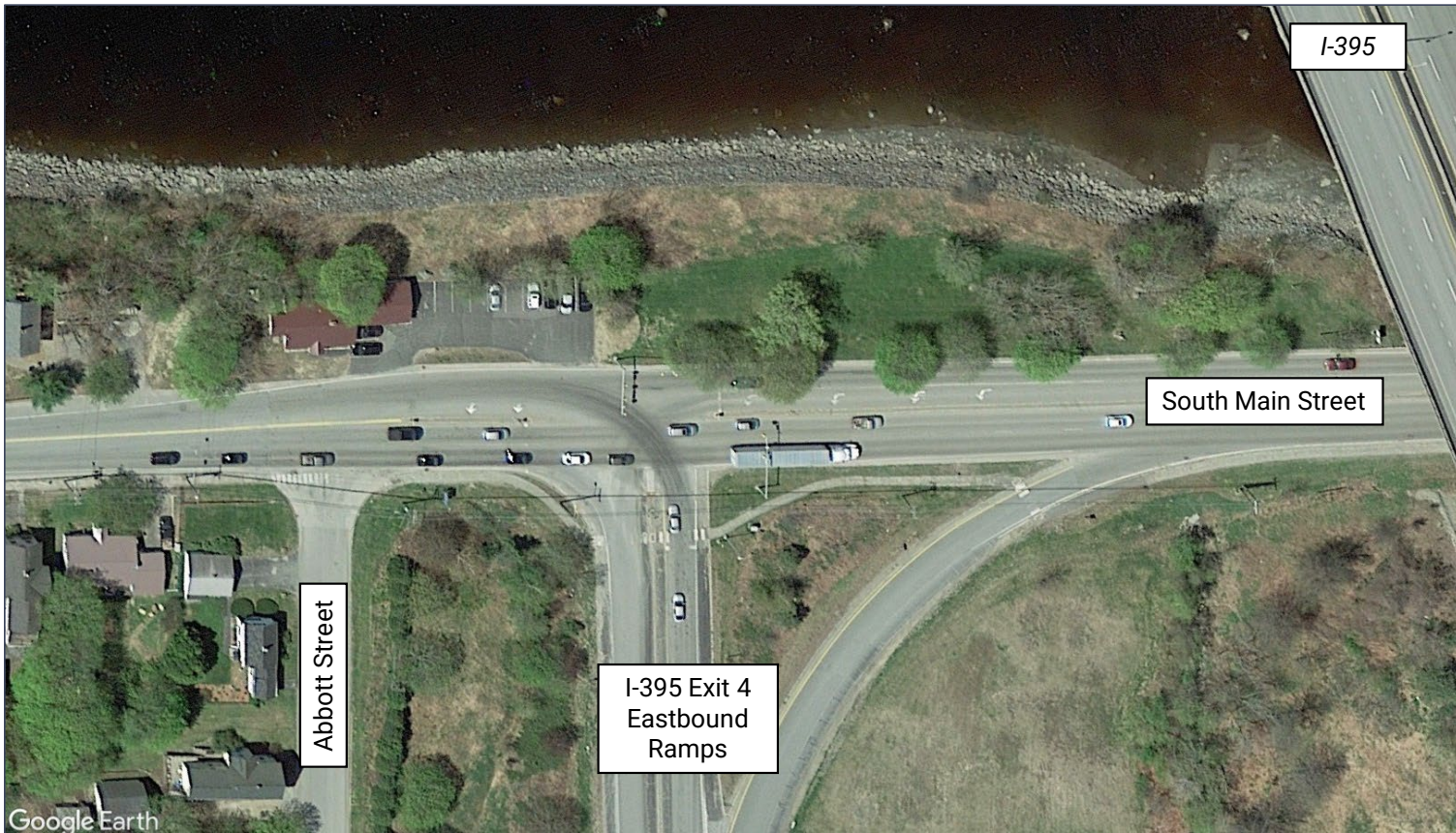
# Study Area – South Main Street from Industrial Park to Abbott Street (incl. I-395 Interchange)



## Crash Summary (2019 – 2023):

- 25 total crashes
  - 6.25 crashes per year
- 4 injury crashes
  - 16 percent

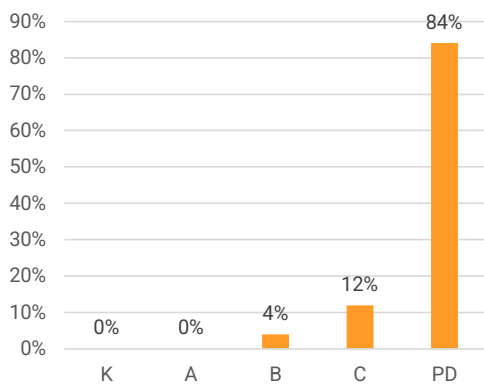
# Study Area – South Main Street from Industrial Park to Abbott Street (incl. I-395 Interchange)



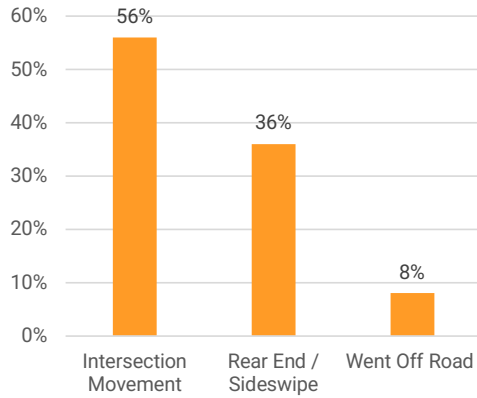


# Study Area – South Main Street from Industrial Park to Abbott Street (incl. I-395 Interchange)

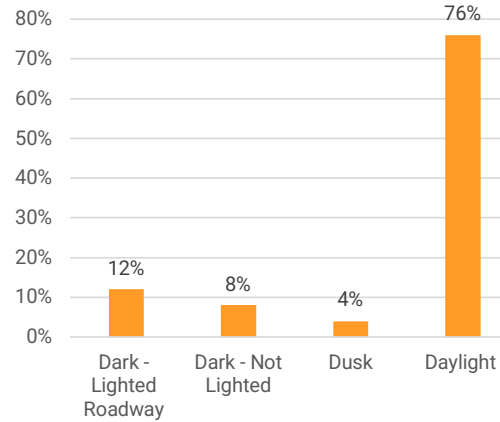
### CRASH SEVERITY



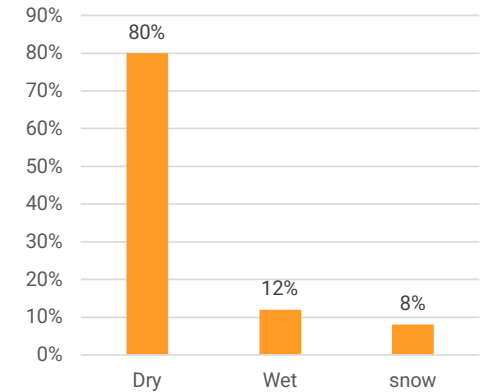
### TYPE OF CRASH



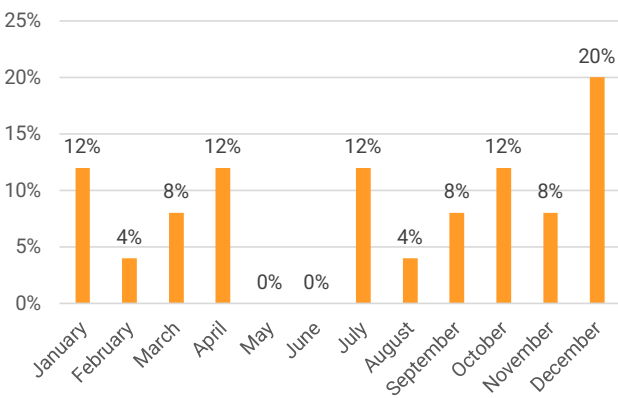
### CRASH LIGHT CONDITION



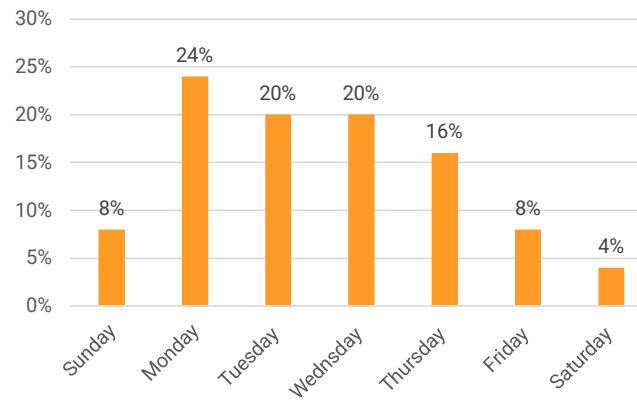
### CRASH ROAD SURFACE



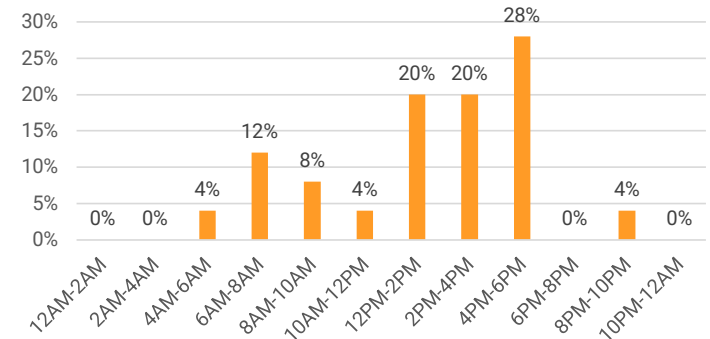
### CRASH MONTH



### DAY OF WEEK



### CRASH TIME





# Study Area – North Main Street / South Main Street at Wilson Street

## *Pros*

- *Pedestrian Crossings on All Side*
- *Access to Riverwalk*
- *Access to City-owned parking*
- *City provided wayfinding signs*
- *Roadway is wide enough to work with*
- *City landscaping present*
- *Efforts have been made regarding EV charging locations and policy making*

## *Cons*

- *Pedestrian curb ramps and drainage*
- *Access to/from High Tide, apartment uncontrolled driveway (NW corner)*
- *Roadway width is long for mid-block ped crossings*
- *Placemaking / Gateway is difficult*
- *“Big” intersection with difficult compromises to reduce*
- *Lighting – Consumer survey highlighted this as something to improve*
- *EV Charging – cost prohibitive*



# Study Area – South Main Street from Wilson Street to Brimmer Street and School Street

## *Pros*

- *Roadway is wide enough to work with*
- *RRFB at Hardy*
- *City is working on improvements to Hardy St intersection*
- *Access to Riverwalk*
- *Access to City parking*
- *Access to Library*
- *Relocating crosswalk existing Toziers Market to Library*
- *Mid-block crossings exist and expected by roadway users*
- *Side streets on east side connect along the back*
- *Wayfinding signs exist*
- *Redevelopment in Planning stages encourages re-look into access management along public roadways*
- *Existing City Park on DOT property*

## *Cons*

- *Pedestrian curb ramps and drainage*
- *Mid-block crossings visibility*
- *Mid-block crossings length (roadway width)*
  - *Bumpouts could help with adjacent street parking*
- *Segment is flat – difficult drainage*
- *Difficult utility locations/relocation*
- *Lighting*
- *Brimmer – Offset from Toziers and close to Wilson signal*
  - *Could certain movements be prohibited*
- *Wayfinding to be reviewed as changes occur on corridor*
- *Sidewalk conditions*
  - *Project not improving sidewalks*
- *Solutions for continuing Riverwalk connections*
- *Solutions for parallel South Main Street Riverwalk pathway*
- *Curb management*
- *Lighting – Improve both vehicular and ped-scale*



# Study Area – South Main Street from Industrial Park to Abbott Street (incl. I-395 Interchange)

## *Pros*

- *Crosswalks present along east side*
- *Ped signals at EB ramps*
- *Median present*
- *Trucks/commuters may be diverted due to I-395 Extension*
- *Vision to connect Riverwalk to points south*

## *Cons*

- *Difficult ROW for Riverwalk extension south*
- *Sidewalks only on interchange side (none along river)*
- *Expand, substantiate median on South Main Street*
- *EB Off-Ramp to South Main Street NB – Look into T-ing into S. Main Street for reducing speeds and improving sightlines*
- *No ped crossings of South Main Street*
- *Abbott is close to interchange*
- *Stop line at Industrial is not where they are stopping*
  - *Stopping over crosswalk, may need to relocate both*
- *Sightline issues from Industrial to Main Street southbound due to utility poles and low Stop sign*
- *Main St NB right-turn only lane operations*
- *Trucks/commuters diverting from Main Street to I-395 Extension will be ramp turns instead of Main Street through movements*



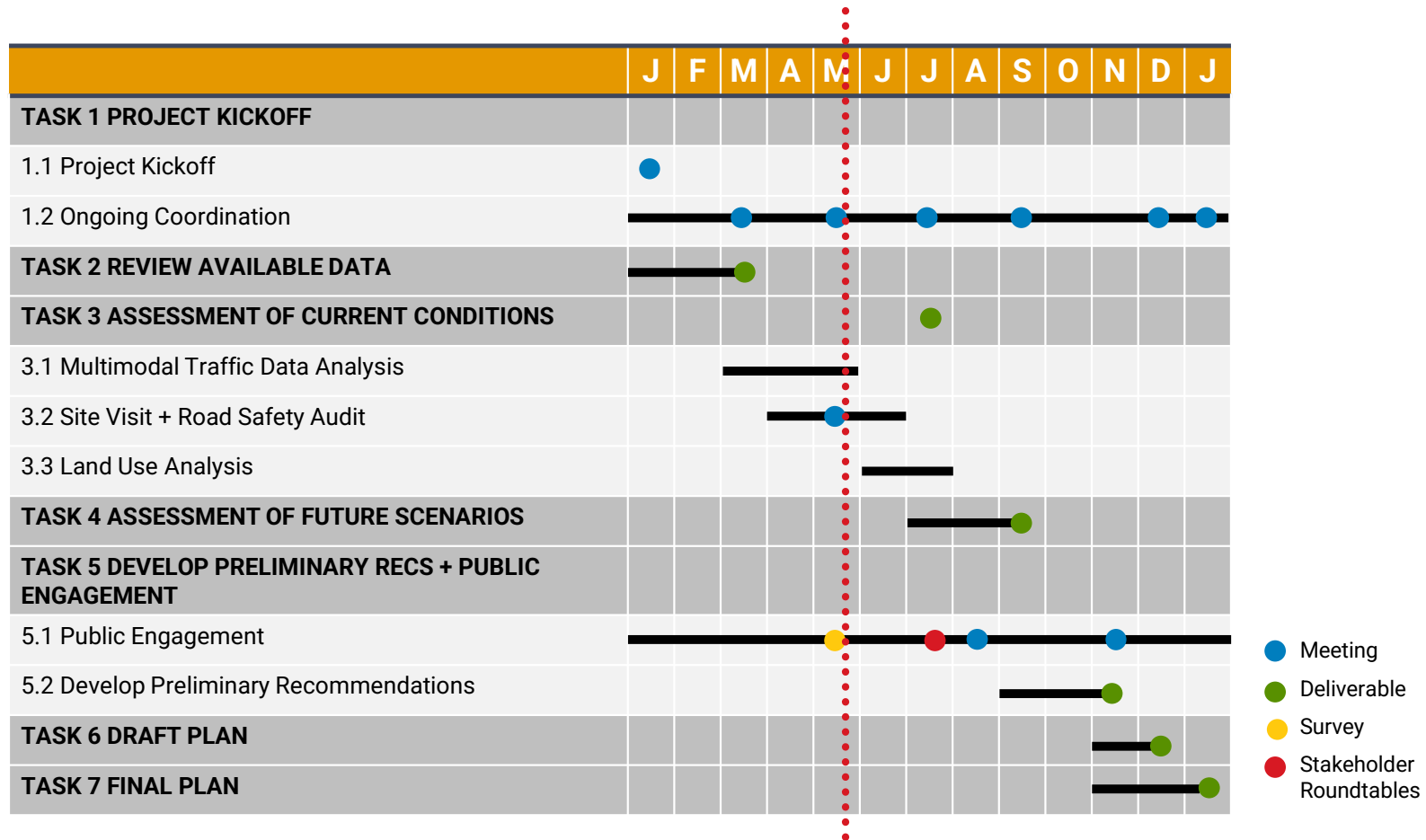


# Project Schedule

## BREWER VILLAGE PARTNERSHIP INITIATIVE

● Meeting

● Deliverable



- Meeting
- Deliverables
- Survey
- Stakeholder Roundtables

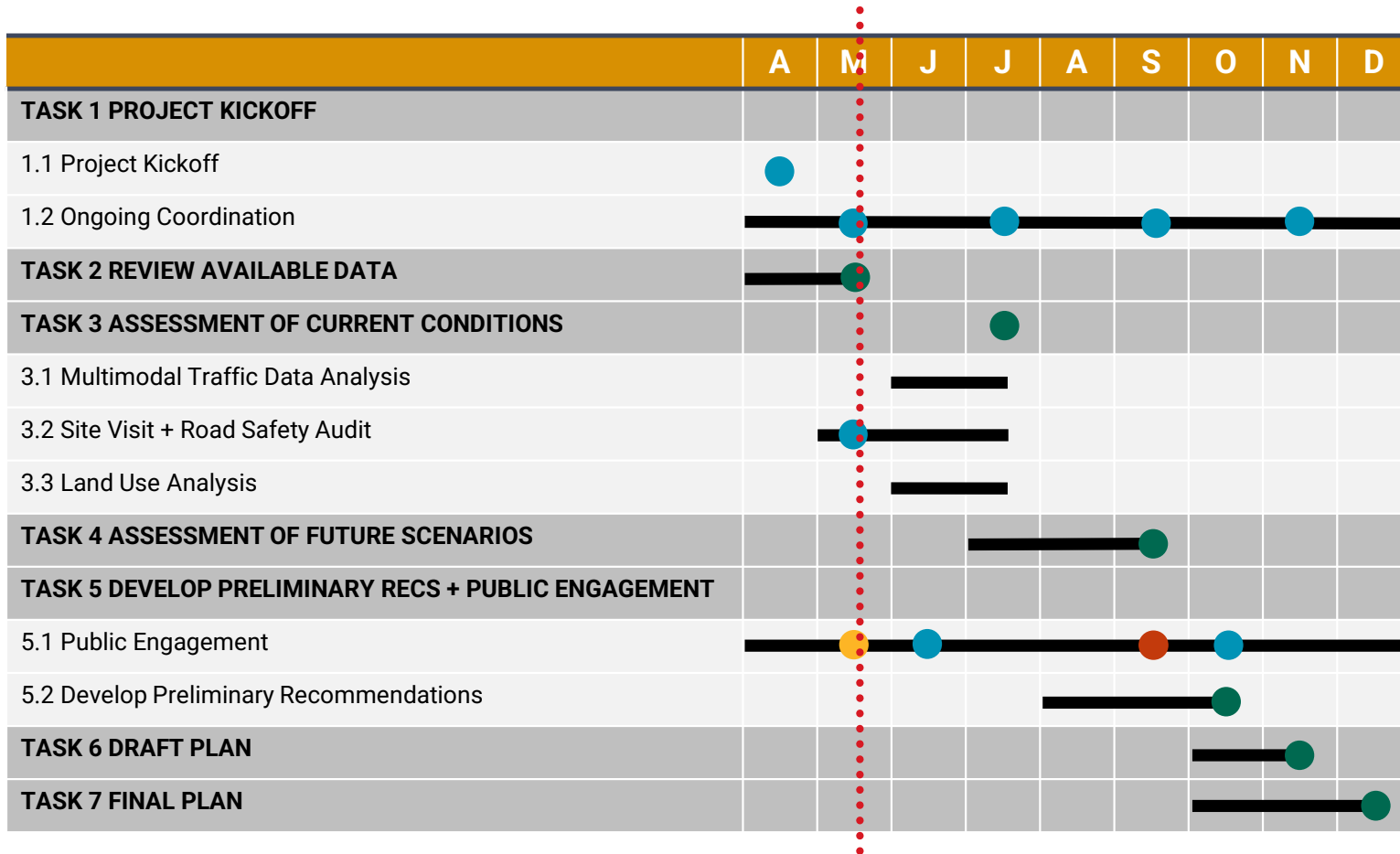


# Project Schedule

## SOUTH MAIN STREET CORRIDOR

Meeting

Deliverable



Meeting

Deliverable

Survey

Stakeholder Roundtables

**Thank you for  
participating!**

