## **PARKING and TRAFFIC SAFETY COMMITTEE**

PORTSMOUTH, NEW HAMPSHIRE

### **CONFERENCE ROOM A**

CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

Members of the public also have the option to join the meeting over Zoom (See below for more details)\*

3:00 PM July 8, 2021

## <u>AGENDA</u>

- I. CALL TO ORDER
- II. ATTENDANCE
- III. FINANCIAL REPORT
- IV. PUBLIC COMMENT (15 MINUTES)

This is the time for all comments on any of the agenda items or non-agenda items.

- V. PRESENTATION
  - A. Brewery Lane Area Traffic Study, by TEC
- VI. NEW BUSINESS

(No public comment during Committee discussion without Committee approval.)

- A. Proposed all-way STOP control at intersection of Brewery Lane and Jewell Court. Sample Motion: Move to approve all-way STOP control at intersection of Brewery Lane and Jewell Court.
- **B.** Proposed all-way STOP control at intersection of Cass Street, Chevrolet Avenue and Lovell Street. Sample Motion: Move to approve all-way STOP control at intersection of Cass Street, Chevrolet Avenue and Lovell Street.
- C. Discussion of one-way traffic flow on Brewery Lane and Chevrolet Avenue. Sample Motion: Move to schedule public meeting on possible change to one-way flow on Brewery Lane and Chevrolet Avenue.
- **D.** Request for safety improvements at crosswalk on Middle Road at Kensington Road and Monroe Street, by Virginia von Muhlen. **Sample Motion: Move to refer to staff for report back at future meeting.**
- **E.** Holiday parking discussion, by Parking Director Ben Fletcher.

### VII. OLD BUSINESS

**A.** Report back on Islington Creek Neighborhood Parking Program.

- **B.** Request for two 1-hour limit spaces on Portwalk Place, by Seacoast Spine & Sports Injuries. **Sample Motion: Move to implement staff recommendations and continue to monitor usage.**
- **C.** Report back on time limit for handicap vehicles in downtown on-street parking spaces.

### VIII. INFORMATIONAL

- **A.** Monthly accident report from Police.
- **B.** Bike and vehicular traffic volume data.
- C. Maplewood Avenue pedestrian signal project update.
- **D.** Bartlett Street/Cate Street reconfiguration.
- E. PTS Action Items.

## IX. MISCELLANEOUS

## X. ADJOURNMENT

\*Members of the public also have the option to join the meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser: <a href="https://zoom.us/webinar/register/WN">https://zoom.us/webinar/register/WN</a> C8u1edo0RWuwdZ0rYrxiLw

Parking Related Revenues

## Unaudited

Percentage of Fiscal Year Complete 91.67%	Preliminary Totals Thru		
	May 31, 2021		
	Total	Budgeted	% of Budget
FY 21			
Parking Meter Fees	2,477,850.98	2,029,175.00	122%
Meter Space Rental	358,390.00	46,591.00	769%
Meter In Vehicle	46,498.25	46,072.00	101%
EV Charging Stations	5,243.71	4,000.00	131%
High Hanover Transient	1,523,737.65	1,458,701.00	104%
High HanoverPasses	1,159,947.02	1,337,700.00	87%
Foundry Place Transient	138,725.96	114,640.00	121%
Foundry Place Passes	252,941.94	301,780.00	84%
Parking Sign Permit	150.00	0.00	
HH Pass Reinstatement	795.00	900.00	88%
Foundry Pass Reinstatement	1,230.00	700.00	0%
Parking Violations	527,414.75	405,350.00	130%
Immobilization Administration Fee	4,800.00	6,144.00	78%
Summons Admin Fee	0.00	250.00	0%
	6,497,725.26	5,752,003.00	113%

BUDGETED 3,339,698

3,339,698 58% Transfer to Parking Fund 2,412,305 42% Funds Remaining in Gen Fund

# Traffic and Parking Evaluation

## Brewery Lane Area

## Portsmouth, New Hampshire

Prepared for: City of Portsmouth 1 Junkins Avenue

Portsmouth, New Hampshire 03801



Prepared by: **TEC, Inc.** 

146 Dascomb Road

Andover, Massachusetts 01810



May 28, 2021

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- 1. Project Location Map & Study Area Intersections
- 2. Existing Regulatory Signage and Roadway Jurisdiction
- 3. Existing Pedestrian Infrastructure
- 4. Existing Parking Inventory
- 5. 2021 Base Year Conditions Weekday Morning and Weekday Evening Peak Hour Traffic Volumes
- 6. 2021 Adjusted Conditions Weekday Morning and Weekday Evening Peak Hour Traffic Volumes
- 7. 2031 Future Year Conditions Weekday Morning and Weekday Evening Peak Hour Traffic Volumes
- 8. Traffic Control Change Alternative
- 9. One-Way Alternative A
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## **TABLES**

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- 1. Observed Parking Utilization
- 2. Existing Weekday Traffic Volume Summary
- 3. Level of Service Criteria for Unsignalized Intersections
- 4. Sight Distance Measurements

## **APPENDICES**

### No. Title

- A. Turning Movement Counts (TMCs)
- B. Automatic Traffic Recorder (ATR) Counts
- C. Intersection Capacity and Queue Analysis
- D. Multi-way Stop Warrant

## I. INTRODUCTION

## **STUDY PURPOSE**

This report has been prepared for the City of Portsmouth to provide traffic planning and engineering evaluation of the roadways in the area of Brewery Lane in the west end of the City. The purpose of the following study is to outline a comprehensive approach to offering adequate parking, vehicle circulation and safe pedestrian accommodations for the new businesses, visitors, and residents of this revitalized neighborhood.

This report includes are a review of existing and future traffic volume conditions, parking and circulation analyses, intersection capacity and queue analyses, vehicle and pedestrian safety and circulation evaluation, and identification of recommendations for future traffic control and mitigation opportunities. This study examines a year 2031 design horizon for traffic volume projections and includes an evaluation of the future year conditions. The findings and recommendations for the improvements are based on the detailed traffic and parking evaluation included in this report.

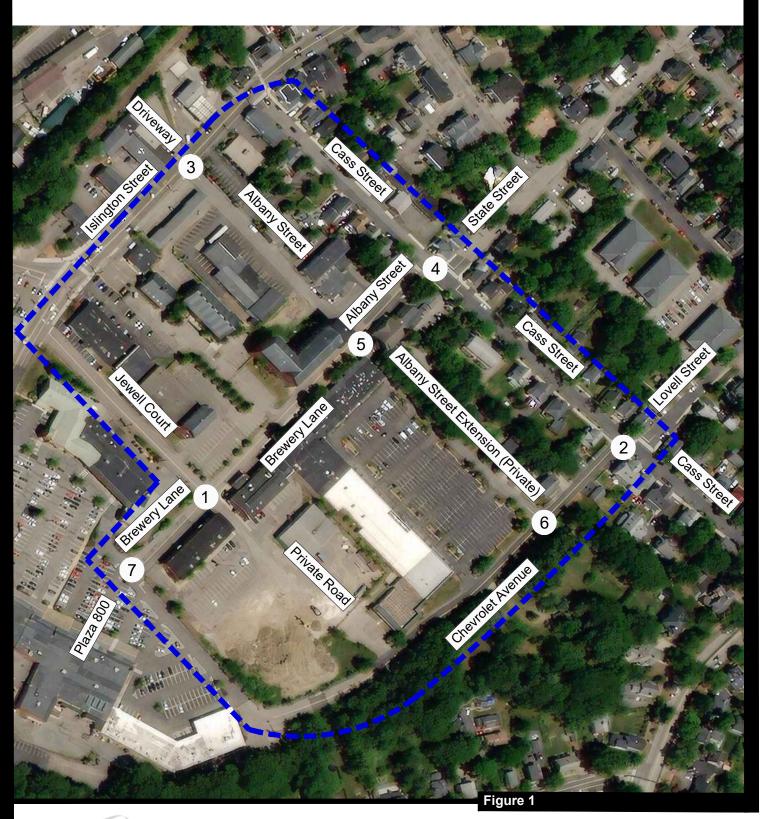
## **TRAFFIC STUDY AREA**

The Brewery Lane study area identified includes the mixed-use neighborhood surrounding Brewery Lane and bounded by Islington Street in the west, Chevrolet Avenue in the east, Plaza 800 in the south and Cass Street in the north. The study area includes:

- Jewell Court (from Islington Street to Brewery Lane)
- Brewery Lane (from Plaza 800 parking lot to Albany Street)
- Albany Street (from Islington Street to Cass Street) roadway turns at 90-degrees
- "Albany Street Extension" (Private from Brewery Lane to Chevrolet Avenue)
- Chevrolet Avenue (Private from Plaza 800 parking lot to Cass Street)
- Cass Street (from Islington Street to Chevrolet Avenue)

Within the project area, the land uses are primarily local and regional commercial uses, small businesses, restaurants and bars, multifamily residential units, some single-family dwellings, and an automobile service center, which impact parking and traffic operations in the study area. At the southern end of Brewery Lane is Plaza 800, a large commercial plaza. To the north, across Cass Street, are residential neighborhoods. Figure 1 illustrates the study area.







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Study Area Brewery Lane Traffic Analysis

## II. EXISTING CONDITIONS

#### **EXISTING ROADWAYS AND INTERSECTIONS**

A comprehensive field inventory of existing traffic conditions within the Brewery Lane study area was conducted during site visits by TEC staff in March and April 2021. The field investigations consisted of classifying existing roadway geometrics, study area safety concerns, parking utilization, pedestrian and vehicle circulation observations, and intersection operating characteristics.

## **Study Area Roadways**

## Brewery Lane/Albany Street

Brewery Lane is a local roadway under the jurisdiction of the City of Portsmouth, extending northward from the Plaza 800 shopping center to Albany Street, changing designations north of Albany Street to continue as Albany Street. For the purposes of this study, Brewery Lane / Albany Street is designated as a north-south roadway. Within the study area, Brewery Lane is 24 to 26 feet in width. No speed limit



Brewery Lane looking north at Jewell Court

is posted along Brewery Lane. Two on-street parking areas are defined along the east side of

Brewery Lane/ Albany Street with a total of seven parking spaces. Two additional spaces are used in front of the businesses at 100 Albany Street, where a depressed curb is present. Onstreet parking along the remaining length of the roadway is restricted by City Ordinance as a fire lane, and no on-street parking outside the defined areas was observed. Directional flow along Brewery Lane is separated by a marked centerline. Sidewalk is provided on east side of

the roadway and no formal bicycle accommodations are provided along the corridor.

## Jewell Court

Jewell Court is a local roadway under the jurisdiction of the City of Portsmouth, extending between Islington Street and Brewery Lane. To the east of Brewery Lane, Jewell Court is under private ownership and provides access to a residential



Jewell Court looking west at Brewery Lane

building parking lot. For the purposes of this study, Jewell Court is designated as an east-west roadway. Jewell Court is 27 feet in width. No speed limit is posted. On-street parking along the length of the roadway is not formally restricted, however, no on-street parking was observed. Directional flow along Jewell Court is separated by a marked centerline. Sidewalk is provided on the south side of the roadway west of Brewery Lane and no formal bicycle accommodations are provided.

## Albany Street/Albany Street Extension

Albany Street is a local roadway under the jurisdiction of the City Portsmouth, extending east Islington Street to Brewery Lane. East of Brewery Lane, the roadway is unnamed but has been designated the Albany Street Extension for the purposes of this report. The Albany Street Extension is under private ownership between Brewery Lane and Chevrolet Avenue. For the purposes of this study, Albany Street is designated



as an east-west roadway. Albany Street is 27 feet in Albany width and the Albany Street extension is 21 feet in

Albany Street looking west at Brewery Lane

width. No speed limit is posted. On-street parking was observed along the north side of Albany Street with a total of 10 parking spaces. Two on-street parking spaces were observed on the south side of Albany Street at Islington Street. On-street parking along the Albany Street extension is not restricted, however, no on-street parking was observed. No sidewalk is provided, and no formal bicycle accommodations are provided along the roadway.

#### Chevrolet Avenue

Chevrolet Avenue is a local roadway under private ownership extending south from Cass Street to Plaza 800. For the purposes of this study, Chevrolet Avenue is designated as a north-south roadwav. Chevrolet Avenue is 25 feet in width. On-street parking along Chevrolet Avenue is not restricted along most of the roadway, however, no on-street parking was observed. On-street parking restricted by signage along both sides of the roadway as it approaches Plaza



Chevrolet Avenue looking south

800. Sidewalk is provided along the Brewery 145 frontage, with plans in place to extend the sidewalk to the north

along the west side of the roadway to Cass Street. No formal bicycle accommodations are provided along the roadway.

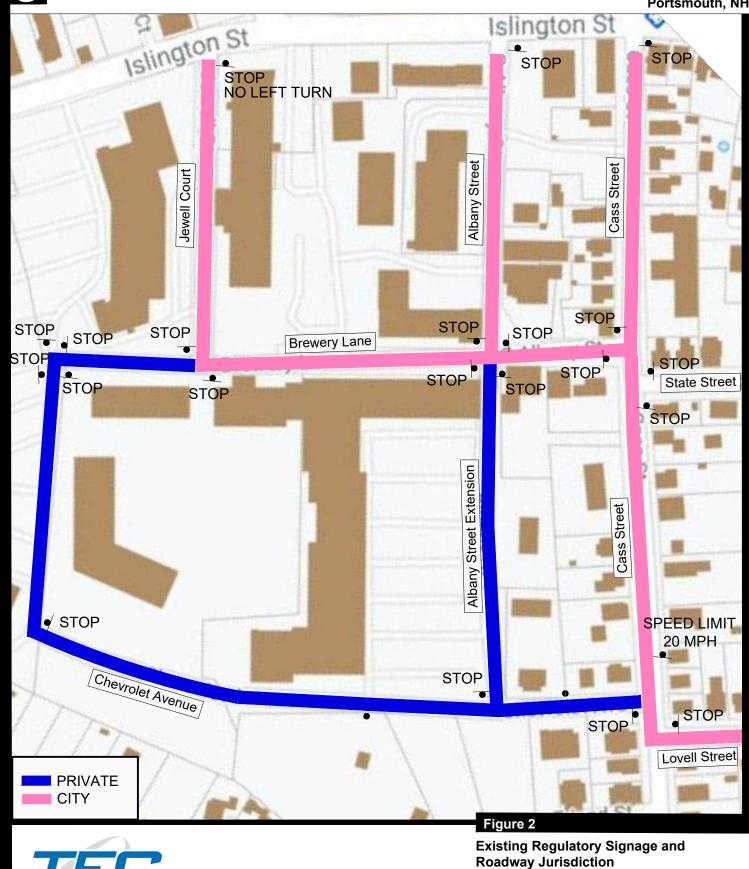
### Cass Street

Cass Street is a local roadway under the jurisdiction of the City of Portsmouth, extending east from Islington Street and providing a local connection to Middle Street. For the purposes of this study, Cass Street is designated as an eastwest roadway. Within the study area, Cass Street is 30 feet in width. A 20 MPH speed limit is posted. On-street parking is not restricted except at intersections for sight distance and

frequent on-street parking was observed. Directional flow along Cass Street is not delineated. Sidewalk is provided on both sides of the roadway and no formal bicycle accommodations are provided.



Cass Street looking west at Albany Street



The Engineering Corp

Not to scale

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## **Study Area Intersections**

The study area intersections included as part of the study are listed below as shown in Figure 1.

- 1. Jewell Court / Brewery Lane
- 2. Cass Street / Lovell Street / Chevrolet Avenue
- 3. Islington Street / Albany Street / Driveway
- 4. Cass Street / State Street / Albany Street
- 5. Albany Street / Brewery Lane / Albany Street Extension
- 6. Albany Street / Chevrolet Avenue
- 7. Brewery Lane / Plaza 800

## Jewell Court / Brewery Lane

Jewell Court intersects Brewery Lane to form a four-legged unsignalized intersection. The Jewell eastbound and westbound approaches are under STOP-control while the northbound Brewery Lane southbound approaches are freeflowing. All approaches consist of a single general-purpose lane. Sidewalks are provided along both sides of the Jewell Court westbound approach, south side of the Jewell Court



eastbound approach, and on the east side of Brewery Lane. Crosswalks are stripped on the east side of the intersection.

Jewell Court looking west at the intersection

## Cass Street / Lovell Street / Chevrolet Avenue

Lovell Street and Chevrolet Avenue intersect Cass Street to form a four-legged offset unsignalized intersection. The Chevrolet Avenue and Lovell Street approaches operate under STOP-control while the Cass Street approaches are free-flowing. All approaches consist of a single general-purpose lane. Sidewalks are provided along both sides of Cass Street and on the east side of the Lovell Street.



There are stripped crosswalks across Chevrolet Avenue, Lovell Street, and across Cass Street on the west side of Lovell Street.

Cass Street looking west at the intersection

## Islington Street / Albany Street / Driveway

Albany Street intersects Islington Street from the east opposite a retail driveway to form a four-legged, unsignalized intersection. The Albany Street and the driveway approaches operate under STOP-control while the Islington Street northbound and southbound approaches are free-flowing. All approaches consist of a single general-purpose lane. Sidewalks are provided along both sides of Islington Street. Crosswalks are



Albany Street looking west at the intersection

provided on the east side of the intersection across Albany Street and across the northbound approach

of Islington Street. No sidewalks are provided on Albany Street.

## Cass Street / State Street / Albany Street

Albany Street and State Street intersect Cass Street to form a four-legged offset unsignalized intersection. All the approaches operate under STOP-control. The approaches consist of a single general-purpose lane. Sidewalks are provided on both sides of Cass Street and State Street and on the east side of Albany Street. There

are stripped crosswalks across Albany Street, State Street, and across Cass Street on the west side of State Street.



Albany Street looking north at the intersection

# Albany Street / Brewery Lane / Albany Street Extension

Albany Street intersects Brewery Lane to form a four-legged unsignalized intersection. The northbound approach is designated as Brewery Lane, the eastbound and southbound approaches are designated as Albany Street and the westbound approach is unnamed but has been designated as the Albany Street extension. All approaches consist of a single general-



Brewery Lane looking south at the intersection

purpose lane. Sidewalk is provided along the east side of Brewery Lane. No crosswalks are provided at this intersection.

# Albany Street Extension / Chevrolet Avenue

Albany Street Extension intersects Chevrolet Avenue from the east to form a three-legged, unsignalized intersection. The Albany Street approach operates under STOP-control while the Chevrolet Avenue Street northbound and southbound approaches are free-flowing. All approaches consist of a single general-purpose lane.



Sidewalks and crosswalks are not provided at the Chevrolet Avenue looking south at the intersection intersection.

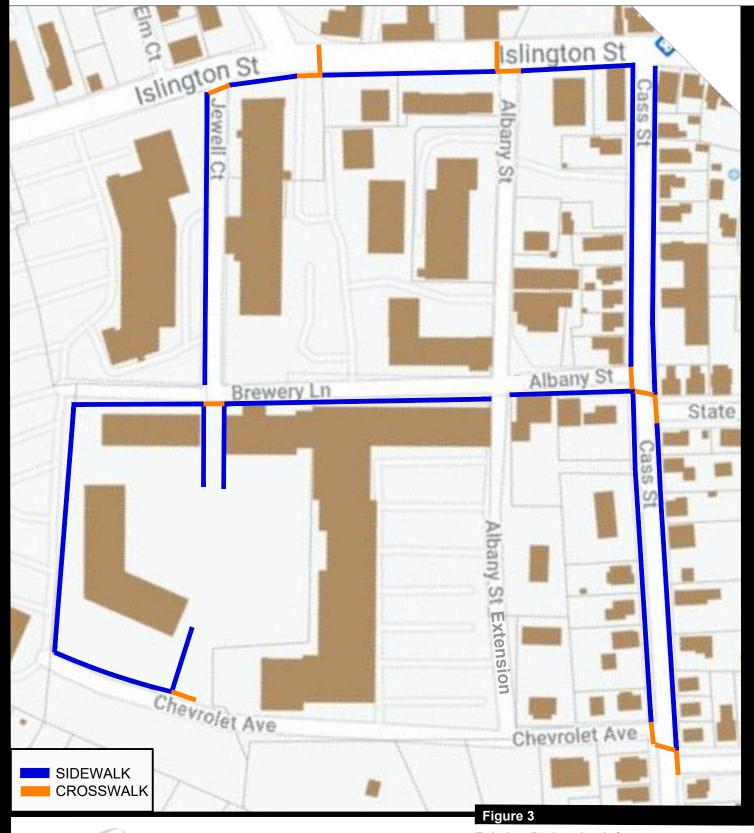
## Brewery Lane / Plaza 800

Brewery Lane intersects the main circulation aisle within Plaza 800 to form a four-legged unsignalized intersection. All the approaches operate under STOP-control. All approaches consist of a single general-purpose lane. Sidewalks are provided on the east side of the Brewery Lane approach and north side of the Plaza 800 approach. A crosswalk is provided across the Brewery Lane approach to the intersection.

### **PUBLIC TRANSPORTATION**

One COAST Bus line provides service within the study area, along Islington Street. COAST Bus Route 40 is a local City of Portsmouth route between Hanover Station and Portsmouth Transportation Center. This bus route includes two stops on Islington Street within the study area, at Plaza 800 and at Cass Street.







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## III. PARKING OBSERVATIONS

Both public on-street parking and privately owned off-street parking lots are available within the study area. A parking inventory was conducted in March 2021 of both existing on-street and off-street parking spaces within the study area.

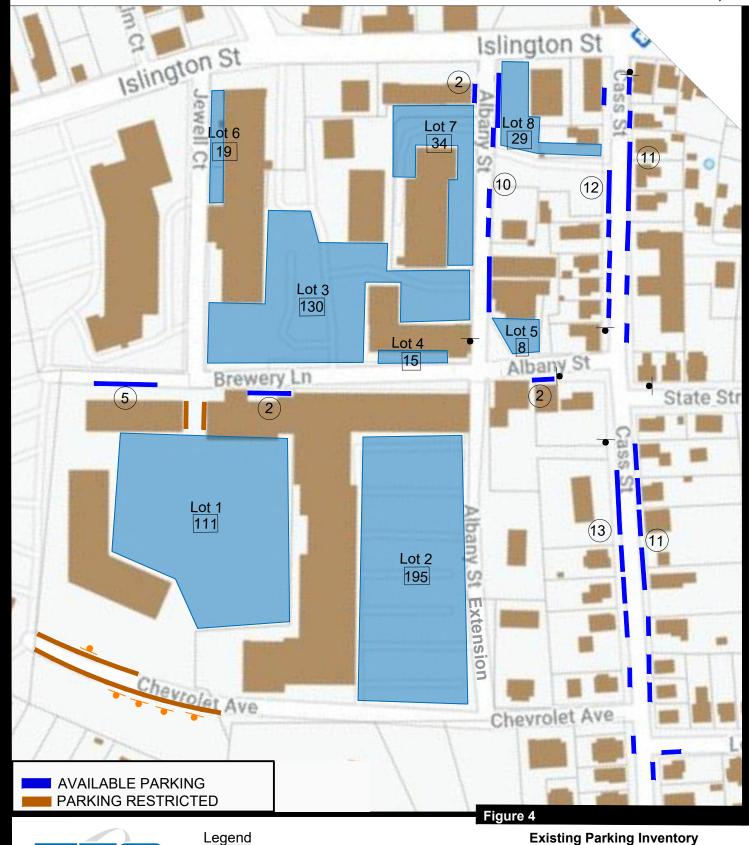
## **Off-Street Parking**

There are eight privately owned parking lots within the study area on Jewell Court, Albany Street and Chevrolet Avenue. There are no public off-street parking lots. The eight off-street private parking lots contain 541 spaces in total. Several of the privately owned lots are signed for customer, resident, and employee parking of the adjacent buildings. The large lot along the Albany Street extension for the Malt House Exchange and the lot for the Brewery 145 residences (155 Brewery Lane) are not specifically restricted.

## **On-Street Parking**

There are currently 21 on-street spaces within the study area that are frequently used by area visitors, employees, and patrons. These spaces are located in pull-off areas along Brewery Lane / Albany Street and adjacent to the roadway along Albany Street. Parking is not restricted by signage along Jewell Court, the remainder of Brewery Lane, Albany Street or Chevrolet Avenue. Brewery Lane is designated as a fire lane within the City Ordinance. On-street parking was not observed in these locations. The current roadway widths and two-way vehicular traffic flow may make on-street parking uncomfortable for many drivers. A total of 47 on-street parking spaces are present along both sides of Cass Street between Islington Street and Chevrolet Avenue. This roadway is only a few feet wider than the others within the study area; however, residents and visitors are comfortable parking along both sides of the roadway.







Legend

No Parking Here To Corner

= No Parking

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#### **PARKING OCCUPANCY**

Parking occupancy counts provide an overview of the public parking demand within the study area. TEC counted parked vehicles in each on-street segment at pre-determined time intervals during a weekday afternoon peak period (1:00 PM to 4:00 PM) when a majority of the commercial businesses were open. TEC acknowledges that parking activity is likely impacted by the ongoing Covid-19 pandemic, which has affected many small businesses, especially restaurants. The area restaurants were all open for take-out lunch business when the occupancy counts were performed. While the parking counts represent a limited data set during a challenging time for businesses, they are sufficient to draw conclusions about current parking patterns in the study area.

The utilization rate was calculated by dividing the total number of cars observed over the study period by the total capacity in the same area. During the parking observations and occupancy counts, TEC noted that the parking demand is consistent throughout the study area. The overall parking utilization was generally highest within the commercial private lots, where shops, restaurants, and other community destinations are located. Peak on-street parking occupancy was observed along Albany Street.

A summary of the parking utilization rates is shown in Table 1. National standards indicate that a parking facility that is over 90% occupied is considered functionally full, meaning that it will be difficult for a driver to find a parking space and gives the impression of an overall lack of parking. The closest observation to this was along Albany Street and within Lot 1 for 125 Brewery Lane. The remaining parking areas consistently had available capacity. Observations noted that all private lots had available parking spaces during the study period, with the majority of available spaces located within the private lots along Albany Street.

**Table 1 – Observed Parking Utilization** 

Street / Surface Lot	From / To	Permitted Parking	Weekday Demand observed spot Counts Between 2:00pm to 4:00pm		
		Capacity	Count	<b>Utilization</b> %	
Brewery Ln	Plaza 800 / Cass St	9	5	56%	
Albany St & Albany St Ext.	Islington St / Chevrolet Av	12	9	75%	
Cass St	Islington St / Chevrolet Av	47	10	22%	
125 Brewery Ln Parking Lot	Lot 1	111	78	70%	
95 Brewery Ln Parking Lot	Lot 2	195	32	16%	
Brewery Ln	Commercial Parking / Lot 3	130	83	62%	
Brewery Ln	Commercial Parking / Lot 4	15	4	27%	
Brewery Ln	Weekend House Parking / Lot 5	8	5	63%	
Jewell Ct	CVS Parking / Lot 6	19	8	42%	
Albany Street	Sullivan Parking / Lot 7	34	14	41%	
Albany Street	Dental Implant Center / Lot 8	29	12	41%	

## **III. AREA CIRCULATION**

Traffic volume data for this report was obtained from manual Turning Movement Counts (TMCs) conducted at the study area intersections and supplemented with Automatic Traffic Recorder (ATR) counts conducted on the primary roadways. The details of the data collection effort for this project are described below.

## **TRAFFIC CIRCULATION**

## **Turning Movement Counts**

To establish existing traffic volume conditions, manual TMCs were conducted for twelve hours on a typical weekday (7:00 AM - 7:00 PM) at the intersections of Brewery Lane / Jewell Court and Chevrolet Avenue / Cass Street and on a typical weekday morning (7:00 AM - 9:00 AM) and weekday evening (4:00 PM - 6:00 PM) peak hours at the remaining study area intersections on Tuesday, March 9, 2021. Area schools were in hybrid session during the time of the traffic counts due to the ongoing COVID-19 pandemic restrictions. A detailed summary of the TMCs, partitioned into 15-minute intervals, is provided within Appendix A.

To assist with the formulation of traffic patterns within the study area, historical traffic volumes were provided by the City of Portsmouth for various intersections within the area conducted in 2017, 2018 and 2019.

## **Automatic Traffic Recorder Counts**

In addition, Automatic Traffic Recorder (ATR) counts were conducted for a 48-hour period from Tuesday, March 3, 2021 through Wednesday, March 4, 2021. The counts were utilized to determine typical traffic volumes, vehicle speeds, and vehicle classifications along the specified roadways. The ATRs were conducted at the following locations within the study area:

- Brewery Lane south of Albany Street
- Chevrolet Avenue south of Albany Street Extension
- Albany Street west of Brewery Lane

A summary of the weekday ATR traffic data is presented in Table 2. A detailed summary of the ATR data, partitioned into 15-minutes intervals, is provided within Appendix B.

**Table 2 – Existing Weekday Traffic Volume Summary** 

	Weekday	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	Traffic	Traffic	K	Directional	Traffic		Directional
Location	Volume <sup>(a)</sup>	Volume <sup>(b)</sup>	Factor <sup>(c)</sup>	Distribution(d)	Volume	K Factor	Distribution
Brewery Lane south of Albany Street	1,798	59	3.3%	57.6% NB	210	11.7%	60.5% NB
Chevrolet Avenue south of Albany Street Ext.	1,468	77	5.2%	57.1% SB	191	13.0%	57.6% NB
Albany Street west of Brewery Lane	1,089	69	6.3%	56.5% WB	104	9.6%	54.8% EB
		l					

<sup>&</sup>lt;sup>a</sup> Daily traffic expressed in vehicles per day;

On an average weekday, Brewery Lane between Jewell Court and Albany Street carries approximately 1,800 vehicles per day (vpd) on an average weekday. The majority of the vehicles along Brewery Lane are travelling northbound during both peak periods. The 85<sup>th</sup> percentile speed was recorded as 22 miles per hour (mph).

Chevrolet Avenue south of Albany Street carries approximately 1,500 vpd on an average weekday. The majority the vehicles along Chevrolet Avenue are traveling southbound in the weekday morning peak period and northbound in the weekday evening peak hour. The 85<sup>th</sup> percentile speed was recorded as 26 miles per hour (mph).

Albany Street west of Brewery Lane carries approximately 1,100 vpd on an average weekday. The majority the vehicles along Albany Street are traveling westbound in the weekday morning peak period and eastbound in the weekday evening peak hour. The 85<sup>th</sup> percentile speed was recorded as 21 miles per hour (mph).

## **COVID-19 Pandemic Adjustment to Existing Year**

Traffic volumes and area businesses have been significantly affected by and since the onset of the COVID-19 pandemic. TEC understands that current vehicular traffic volumes in the area may be artificially lower than a standard non-pandemic time period. To determine the existing year's non-COVID level of traffic, TEC utilized 15% growth obtained from the City of Portsmouth. The permanent count station data from the intersection of South Street and Lafayette Road indicates that the March 2021 traffic volumes are 85% of previous volumes from 2019. Therefore, the 2021 traffic volumes were upwardly increased 15% to reflect a 2021 Adjusted Year Condition. The 2021 Base Year and 2021 Adjusted Year Conditions weekday morning and weekday evening peak hour traffic volumes are illustrated in Figures 5 and 6, respectively.

## **Future Year Conditions**

To determine traffic volumes under future year conditions, the 2021 Adjusted traffic volumes were projected to the year 2031 to provide a 10-year design horizon. Traffic volumes on the

<sup>&</sup>lt;sup>b</sup> Hourly traffic expressed in vehicles per hour

<sup>&</sup>lt;sup>c</sup> Percent of daily traffic volumes which occurs during the peak hour

<sup>&</sup>lt;sup>d</sup> Percent of peak-hour volume in the predominant direction of travel

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

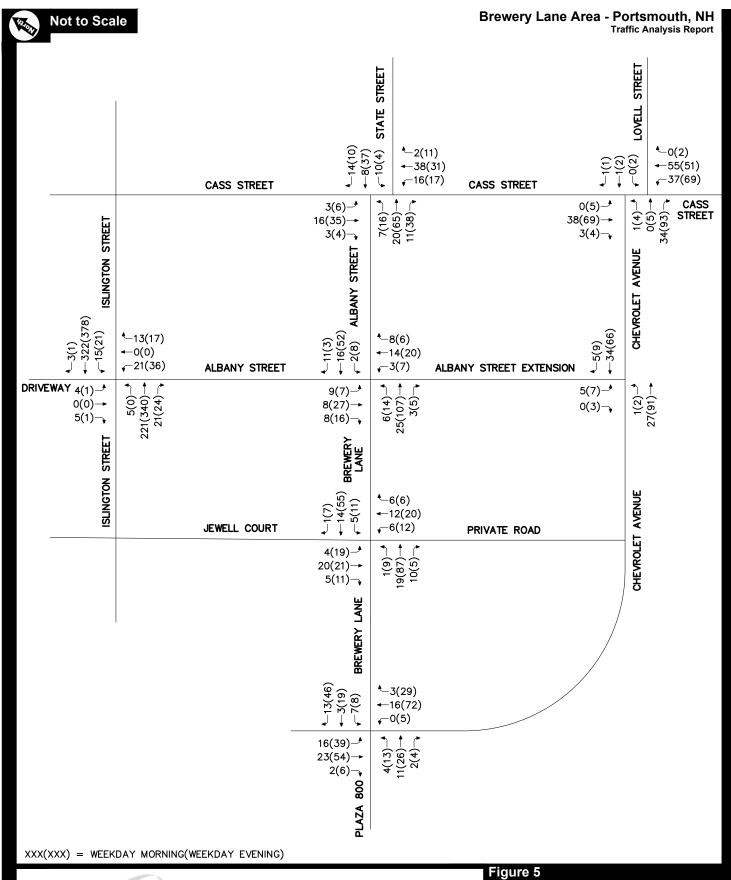
roadway network at that time would include existing traffic and new traffic due to general background traffic growth. Consideration of these factors resulted in the development of the 2031 Future Year Condition traffic volumes. A small residential development is under consideration along Chevrolet Avenue. The new traffic volumes projected to be generated by this development would be accounted for within the background growth rate applied.

The 2031 Future Year Condition traffic volumes were obtained by multiplying the 2021 Adjusted Conditions by the average yearly growth rate factor of 0.5 percent over the 10-year design horizon period. The resulting 2031 Future Year Conditions weekday morning and weekday evening traffic volumes are shown graphically in Figure 7.

## **PEDESTRIAN CIRCULATION**

TEC recorded the circulation of pedestrians throughout the area within the turning movement counts and observed pedestrian behavior during the parking utilization study time period. Significant pedestrian activity was recorded throughout the area with the highest pedestrian volumes traveling north/south along Brewery Lane/Albany Street and across Cass Street to and from the neighborhoods to the north of the study area. TEC noted that pedestrians mainly crossed in the crosswalks, where available. Crosswalks across Brewery Lane at Jewell Court and Albany Street are not currently provided. Pedestrians were observed to cross Brewery Lane from the sidewalk along Jewell Street and from both sides of Albany Street diagonally across the intersections at an angle to reduce walking distance rather than at a marked crossing for reduced crossing distance. The relatively low vehicular traffic volumes may encourage this behavior, as gaps in traffic flow are frequent and pedestrian crossing sight distances are sufficient along Brewery Lane. A minor number of pedestrians were recorded walking along the west side of Brewery Lane where no sidewalk is present.

At Cass Street, pedestrians were generally observed to use the existing crosswalks between the offset intersection legs at both Albany Street and Chevrolet Avenue. Pedestrians were more inclined to take a diagonal path from Chevrolet Avenue to the east side of Lovell Street, due to the missing sidewalk gap on the west side of Lovell Street. Vehicles were observed to park opposite Lovell Street on the south side of Cass Street, potentially restricting pedestrian visibility at the crosswalk across Cass Street in this location.





2021 Base Year Conditions Weekday Morning and Weekday Evening Peak Hour Traffic Volumes

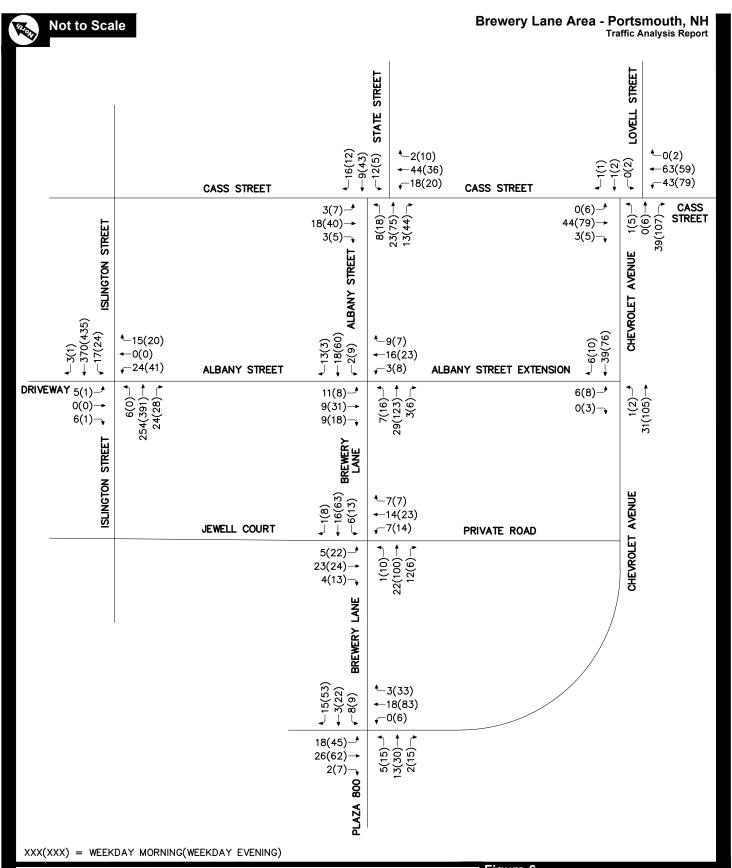
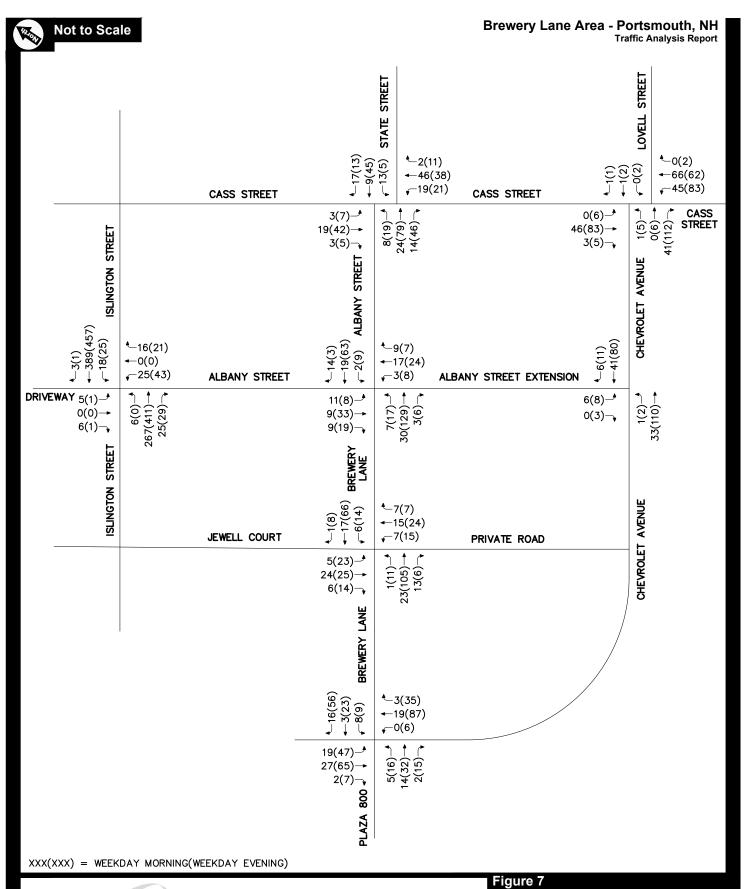




Figure 6

2021 Covid-19 Adjusted Volumes Weekday Morning and Weekday Evening Peak Hour Traffic Volumes





2031 Future Conditions Weekday Morning and Weekday Evening Peak Hour Traffic Volumes

## IV. ALTERNATIVES ANALYSIS

#### **EXISTING OPERATIONS**

Measuring existing and future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, roadway capacity and vehicle queue analyses were conducted for the 2021 Existing Adjusted Conditions. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study. Synchro 10 software was used to perform the analysis.

### **Levels of Service**

A primary result of capacity analyses is the assignment of level of service to traffic facilities under various traffic-flow conditions. The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level of service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels of service are defined for each type of facility. They are given letter designations from A to F, with level of service (LOS) A representing the best operating conditions and LOS F representing the worst. Since the level of service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels of service, depending on the time of day, day of week, or period of year.

## **Queue Length Analysis**

Vehicle queue analyses are a direct measurement of an intersection ability to process vehicles under various traffic control and volume scenarios and lane use arrangements.

The vehicle queue analysis was performed using the Synchro  $10^{\text{TM}}$  intersection capacity analysis software which is also based upon the methodology and procedures presented in the *HCM 2000*. Synchro reports the  $95^{\text{th}}$  percentile queues for unsignalized intersections, which are based on the number of vehicles that experience a delay of six seconds or more at an intersection and is a function of the vehicle arrival patterns during the analysis period and the saturation flow rate. The  $95^{\text{th}}$  percentile vehicle queue is the vehicle queue length that will be exceeded only five percent of the time; or approximately three minutes out of 60 minutes

<sup>&</sup>lt;sup>1</sup> The capacity analysis methodology is based on the concepts and procedures presented in the *Highway Capacity Manual 2010*; Transportation Research Board; Washington, DC; 2010.

during the peak one hour of the day. During the remaining 57 minutes, the vehicle queue length will be less than the 95<sup>th</sup> percentile queue length.

## <u>Unsignalized Intersections</u>

The levels of service of unsignalized intersections are determined by application of a procedure described in the *HCM 2010*. Level of service is measured in terms of average control delay. Mathematically, control delay is a function of the capacity and degree of saturation of the lane group and/or approach under study and is a quantification of motorist delay associated with traffic control devices such as traffic signals and STOP signs. Control delay includes the effects of initial deceleration delay approaching a STOP sign, stopped delay, queue move-up time, and final acceleration delay from a stopped condition. Table 4 summarizes the relationship between level of service and average control delay for unsignalized intersections.

Table 3 – Level of Service Criteria for Unsignalized Intersections<sup>(a)</sup>

Level of Service (V/C < 1.0)	Level of Service (V/C ≥ 1.0)	Average Control Delay (seconds per vehicle)	Description
Α	F	≤10.0	LOS A represents a condition with little or no control delay to minor street traffic.
В	F	10.1 to 15.0	LOS B represents a condition with short control delays to minor street traffic.
С	F	15.1 to 25.0	LOS C represents a condition with average control delays to minor street traffic.
D	F	25.1 to 35.0	LOS D represents a condition with long control delays to minor street traffic.
Е	F	35.1 to 50.0	LOS E represents operating conditions at or near capacity level, with very long control delays to minor street traffic.
F	F	>50.0	LOS F represents a condition where minor street demand volume exceeds capacity of an approach lane, with excessive control delays resulting.

<sup>&</sup>lt;sup>a</sup> Source: *Highway Capacity Manual 2010*, Transportation Research Board; Washington D.C.; 2010

## **Existing Intersection Operations**

Capacity and queue analyses were conducted for the 2021 Adjusted Conditions and 2031 Future Year with Existing Geometry Conditions. The results of the intersection capacity and queue analyses for all the intersections are provided in Appendix C.

The study area intersections each operate with level of service (LOS) A on all approaches and turning movements during the weekday morning and weekday evening peak hours studied during the 2021 Adjusted Conditions, with the exception of the westbound approach of Albany Street at Islington Street during the peak hours, which operates with a LOS C. Little delay is experienced and additional capacity is available at all intersections. These operating conditions are maintained in the 2031 Future Year condition.

#### TRAFFIC CONTROL CHANGE ALTERNATIVE

Multi-way (or all-way) stop control was evaluated for the intersections of Jewell Court / Brewery Lane and Cass Street / Chevrolet Avenue / Lovell Street. The *Manual of Uniform Traffic Control Devices* (*MUTCD*)<sup>2</sup> section 2B.07 contains multi-way stop warrants for evaluating the need for installation of STOP signs. The warrant analyses were conducted at the intersections using the 2021 Adjusted Condition turning movement counts. For purposes of the analysis, the Brewery Lane and Cass Street approaches were considered to be the "major street" volume, while the side streets were considered to be the "minor street". Based on the 2021 Adjusted Conditions, the intersections of Brewery Lane / Jewell Court and Cass Street / Chevrolet Avenue / Lovell Street do not meet the standard volume criteria for a multi-way stop warrant.

Although the volume related thresholds fall just short of satisfying the warranting condition for multi-way stop control, the MUTCD does provide the option to consider supplemental criteria for the installation of stop signs on all four approaches based on the following:

"Option C: Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop."

Both intersections have restricted sight distances for the side street approaches entering the intersections, due to parked vehicles, buildings, or vegetation on private properties as shown in Table 4. Restricted sight distances for vehicles exiting the side streets also places pedestrians currently crossing outside of marked crosswalks in conflict with turning vehicles.

**Table 4 – Sight Distance Measurements** 

		Minimu	m Required	Measured	
Approach / Direction	Design Speed	Stopping Sight Distance	Intersection Sight Distance	Stopping Sight Distance	Intersection Sight Distance
Jewell Court / Brewery Lane:					
Private Road WB looking right	25 MPH <sup>(a)</sup>	155 FT	280 FT	>200 FT	135 FT <sup>(d)</sup>
Private Road WB looking left	25 MPH	155 FT	280 FT	>200 FT	120 FT <sup>(e)</sup>
Jewell Court EB looking left	25 MPH	155 FT	280 FT	>200 FT	130 FT <sup>(c)</sup>
Jewell Court EB looking right	25 MPH	155 FT	280 FT	>200 FT	75 FT <sup>(c)</sup>
Cass Street / Lovell Street / Chevrolet Avenue:					
West of Chevrolet Avenue looking left	25 MPH <sup>(b)</sup>	155 FT	280 FT	>200 FT	100 FT <sup>(c)</sup>
East of Chevrolet Avenue looking right	25 MPH	155 FT	280 FT	>200 FT	100 FT <sup>(d)</sup>
West of Lovell Street looking right	25 MPH	155 FT	280 FT	>200 FT	200 FT <sup>(d)</sup>
East of Lovell Street looking left	25 MPH	155 FT	280 FT	>200 FT	150 FT <sup>(d)</sup>

<sup>&</sup>lt;sup>a</sup> 85<sup>th</sup> percentile speed from ATR counts rounded to 25 mph.

<sup>&</sup>lt;sup>b</sup> Design speed of 25 mph based upon 5 over the posted speed limit of 20 mph

<sup>&</sup>lt;sup>c</sup> Sightline restricted by trees and vegetation.

<sup>&</sup>lt;sup>d</sup> Sightline restricted by parked vehicle.

<sup>&</sup>lt;sup>e</sup> Sightline restricted by a building.

<sup>&</sup>lt;sup>2</sup> Manual of Uniform Traffic Control Devices, 2009 Edition; Federal Highway Administration; 2009

The Option C conditions are met at both intersections, allowing for the installation of multi-way stop conditions at these intersections to improve safety for vehicles and pedestrians at the intersections.

For intersections with multi-way stop control, the sight distance guidance provided by AASHTO<sup>3</sup> states:

"At intersections with multi-way stop control, the first stopped vehicle on one approach should be visible to the drivers of the first stopped vehicles on each of the other approaches. There are no other sight distance criteria applicable to intersections with multi-way stop control and, indeed multi-way stop control may be the best option at a limited number of intersections where sight distance for other control types cannot be attained."

The MUTCD supplemental criteria allows for the installation of multi-way stop control at the intersections without acquisition of significant sight line easements from adjacent neighbors.

The multi-way stop warrant analysis worksheets are provided in Appendix D.

## **Multi-way Intersection Operations**

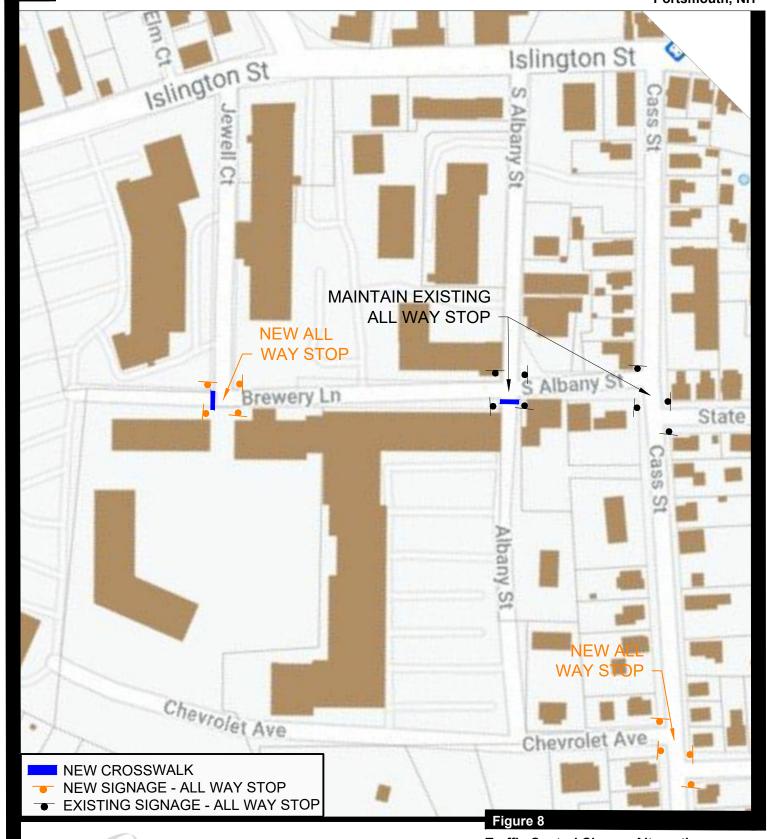
Capacity and queue analyses were conducted for the 2031 Future Year condition with multi-way stops at the intersections of Jewell Court / Brewery Lane and Cass Street / Chevrolet Avenue / Lovell Street. The intersections continue to operate with level of service (LOS) A on all approaches and turning movements during the weekday morning and weekday evening peak hours studied. Little delay is experienced, and additional capacity is available at all intersections.

New crosswalks should be striped across the Brewery Lane northbound approach at Jewell Court and across the Albany Street Extension westbound approach at Brewery Lane where curb ramps and sidewalk are present. With the implementation of a new all-way stop at the intersection of Chevrolet Avenue / Cass Street / Lovell Street, parking restrictions should be implemented on Cass Street between Chevrolet Avenue and Lovell Street to ensure sufficient sight lines between each stop bar.

This alternative is represented in Figure 8.

<sup>&</sup>lt;sup>3</sup> A Policy on Geometric Design of Highways and Street; American Association of State Highway Transportation Officials (AASHTO); 6<sup>th</sup> Edition; 2011; Section 9.5.3 Case E







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## **ONE-WAY ALTERNATIVE A**

The conversion of Brewery Lane / Albany Street and Chevrolet Avenue into a one-way pair was considered to facilitate pedestrian safety and provide additional on-street parking. Currently, vehicle travel patterns indicate that motorists traveling to/from the east on Cass Street use Chevrolet Avenue to enter and exit Plaza 800, with the majority of vehicles exiting Chevrolet Avenue northbound turning right onto Cass Street eastbound and approximately half of the vehicles traveling westbound on Cass Street turning left into Chevrolet Avenue. The vehicular traffic distribution along Brewery Lane/Albany Street is consistently 60% or more in the northbound direction throughout the day. Therefore, in the One-Way Alternative A scenario, Brewery Lane / Albany Street was considered to provide for one-way vehicular traffic flow in the northbound direction and Chevrolet Avenue to provide for one-way vehicular traffic flow in the southbound direction.

## **Parking and Circulation Evaluation**

With the implementation of one-way vehicular traffic flow, Brewery Lane has sufficient width to provide a new 8-foot wide on-street parking lane. On-street parking along Brewery Lane outside the delineated spaces is currently unmarked, but restricted by City Ordinance as a fire lane, and on-street parking was not observed along these roadways during the field visits. A total of 15 new on-street parking spaces (17 spaces total including the existing spaces) could be provided along Brewery Lane between Jewell Court and Albany Street and two new spaces (4 spaces total) could be provided along Albany Street between the Albany Street Extension and Cass Street. The existing two parking spaces along Albany Street at 100 Albany Street should be replaced with sidewalk and curbing to better protect pedestrians accessing the two small businesses fronting this section of roadway. The Portsmouth Fire Department would need to approve the provision of parking along Brewery Lane between Jewell Court and Albany Street; however, the roadway is 24 feet wide from curb to curb in the existing condition on this block. The provision of an 8-foot parking lane would leave 16 feet remaining for one-way traffic flow and emergency access. Provision of shoulder pavement markings along the opposite side of the roadway may aid in visually narrowing the travel way to maintain the currently low vehicle speeds.

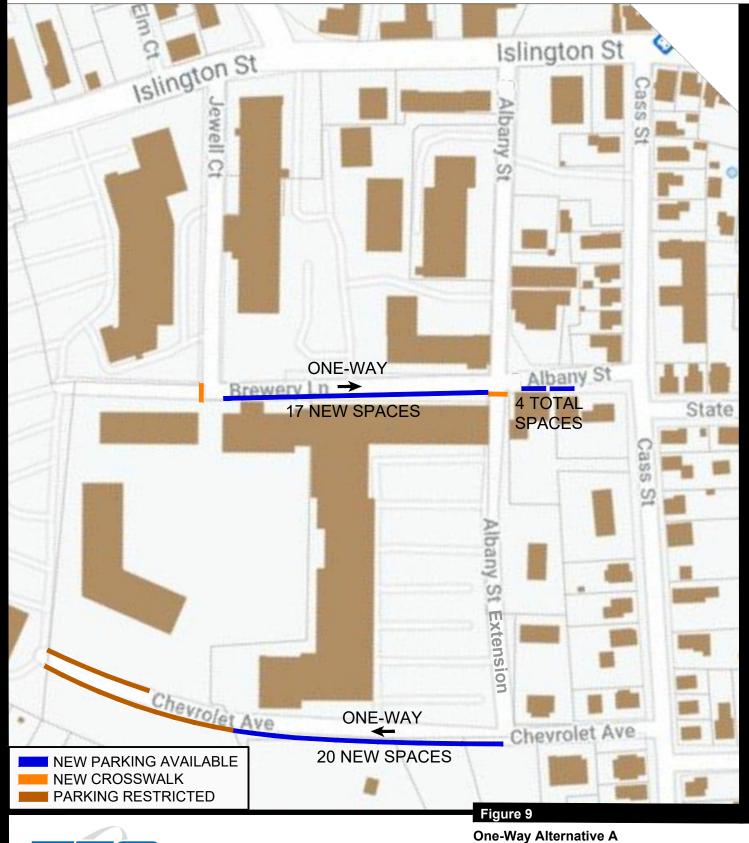
A total of 20 new on-street parking spaces could be provided along Chevrolet Avenue between Albany Street and the entrance to the Brewery 145 residential building parking. It is understood that Chevrolet Avenue is a privately owned roadway, however, additional on-street parking may benefit residents and visitors to the neighborhood, while passively slowing traffic speeds in the one-way condition. The provision of sidewalk and curbing along the west side Chevrolet Avenue would aid in providing a separate, defined area for pedestrians. Sufficient width is available along Chevrolet Avenue within the existing pavement width to provide an 8-foot parking lane with approximately 17 feet remaining for one-way traffic flow and emergency access. Provision of shoulder pavement markings along the opposite side of the roadway may aid in visually narrowing the travel way to maintain the currently low vehicle speeds.

The provision of one-way traffic flow along Brewery Lane and Chevrolet Avenue would add a level of comfort for drivers circulating the area and would not cause significant diversion of traffic flow outside of the Brewery Lane area, as these roadways are the primary access and

circulation to the destinations within to this area. The roadways are less than 900 feet in length and maintaining two-way traffic flow along Cass Street, Albany Street/Albany Street Extension and within Plaza 800 will allow for sufficient circulation to the residences and businesses adjacent to the roadways. Operationally, the intersections within the study area would not experience a significant increase in delay or queue lengths. The provision of on-street parking would aid in maintaining the slow vehicle speeds experienced today. One-way vehicular traffic flow would also aid pedestrian safety, as the number of conflict points between vehicles and pedestrians would be reduced. Concurrent with the provision of one-way traffic flow, it is recommended that new crosswalks be striped across the Brewery Lane northbound approach at Jewell Court and across the Albany Street Extension westbound approach at Brewery Lane where curb ramps and sidewalk are present. If sidewalk is provided along Chevrolet Avenue, a crosswalk should be provided across the Albany Street Extension approach.

This alternative is represented in Figure 9.







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#### **ONE-WAY ALTERNATIVE B**

The conversion of Jewell Court and Albany Street into a one-way pair was considered to facilitate pedestrian safety and provide additional on-street parking between Islington Street and Brewery Lane. Jewell Court, at its intersection with Islington Street is restricted to right turns only. Therefore, all vehicular traffic within the Brewery Lane area that desires to travel south along Islington Street must make a left turn from Albany Street. Vehicles traveling from the south on Islington Street generally enter the area along Jewell Court, rather than travel through the signalized Islington Street / Bartlett Street intersection to Albany Street. Therefore, in the One-Way Alternative B scenario, Jewell Court was considered to provide for one-way vehicular traffic flow in the eastbound direction and Albany Street to provide for one-way vehicular traffic flow in the westbound direction. In this scenario, Brewery Lane / Albany Street and Chevrolet Avenue were considered to maintain two-way operations.

## **Parking and Circulation Evaluation**

With the implementation of one-way vehicular traffic flow, Jewell Court has sufficient width to provide additional on-street parking. On-street parking is currently not prohibited along Jewell Court, but the current roadway width and two-way vehicular traffic flow may cause motorists to not feel comfortable parking along the curbline. Sidewalk and curbing with a six-inch minimum curb reveal are provided along the south side of Jewell Court, providing a clearly separated area for pedestrian travel. A total of 12 new on-street parking spaces could be provided along the south side of Jewell Court with the provision of one-way traffic flow. The roadway is 27 feet wide from curb to curb in the existing condition between Islington Street and Brewery Lane. The provision of an 8-foot parking lane would leave 19 feet remaining for one-way traffic flow and emergency access. A total of 8 parking spaces could also be considered along the north side of Jewell Court between the head-in parking along the CVS Pharmacy and the parking lot adjacent to 110 Brewery Lane to reduce the vehicular travel lane to 11 feet to maintain low vehicle travel speeds by reducing the travel way width. Alternatively, shoulder pavement markings could be provided to visually narrow the roadway.

Along Albany Street, no formal sidewalk is present and vehicles parking on-street pull out of the through travel way onto private properties. Sufficient width is available along Albany Street to provide a new 5-foot sidewalk with curbing along the north side of the roadway to define a pedestrian space, reduce pedestrian/vehicle conflicts, provide access management to the parking lots adjacent to the roadway and formalize on-street parking. The existing 10 parking spaces could be maintained along the north side of Albany Street between Islington Street and Brewery Lane. The existing roadway width varies, however, a vehicular travel lane of over 12 feet would be maintained.

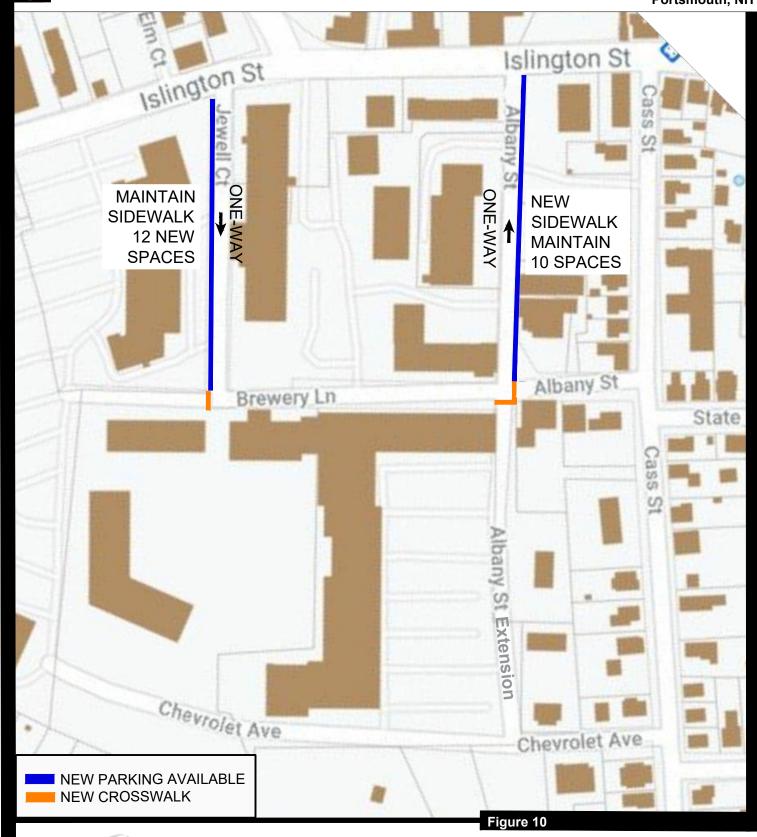
A noted operational concern with the provision of one-way traffic flow along Jewell Court and Albany Street is the diversion of Islington Street southbound left turns from Albany Street to Jewell Court. Currently, the signalized intersection of Islington Street with Bartlett Street experiences queue lengths along the northbound approach of Islington Street that regularly extend past the Jewell Court intersection in both the left turn and through lanes. Should the queuing vehicles in both lanes on this approach not leave an opening for southbound left turning vehicles, these vehicles could block southbound through vehicles at the signalized intersection. To prevent this condition, restricting the left turn movement southbound into

Jewell Court from Islington Street could be considered. The restriction of left turn movements into Jewell Court coincident with one-way traffic flow westbound on Albany Street would require southbound vehicles desiring to enter the Brewery Lane area to perform their left turn movement at Cass Street. Should a new visitor to the area miss this turn, the next option would be to circulate through the Plaza 800 site. Plaza 800 is a private development and should not be considered as a public thoroughfare for through traffic.

One-way vehicular traffic flow would aid pedestrian safety, as the number of conflict points between vehicles and pedestrians would be reduced. However, the provision of sidewalk along Albany Street between Islington Street and Brewery Lane would greatly improve pedestrian safety within this area without requiring vehicle diversion. The vehicular travel lanes for two-way traffic flow would be reduced to approximately 10 feet, which would aid in maintaining lower vehicle speeds. A new crosswalk across the Albany Street southbound approach would be striped with the installation of new sidewalk along the north side of Albany Street, more clearly defining pedestrian crossing areas.

This alternative is represented in Figure 10.







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## V. RECOMMENDATIONS

The evaluation of the parking and circulation within the Brewery Lane area considered maintaining local business and residential access, improving the pedestrian walking environment, and provision of efficient vehicle circulation and operational safety.

Encouraging walking can help create a "park once" environment, where patrons and residents park their car and visit multiple commercial destinations on foot. Traffic volumes and vehicle speeds are low through the area, and pedestrians were frequently observed to cross outside of defined crossing areas. Increasing the visibility and safety for pedestrians is necessary to promote the walkability of the Brewery Lane area and attract new business patrons and residents.

Changes to vehicle operations and circulation should consider safety of all roadway users and have the goal to maintain the current low vehicle speeds while maximizing access to area residences and businesses.

The following recommendations are intended to provide an outline for a comprehensive approach to offering adequate parking, vehicle circulation and safe pedestrian accommodations for the new businesses, visitors, and residents of this neighborhood. Full implementation of these recommendations will not be possible without continued City and private business/landowner coordination and conversations and a common interest and commitment to improving the Brewery Lane area environment for all roadway users.

## **Improve Pedestrian Accommodations**

Opportunities to provide for a complete and safer street for all users include

- Stripe new crosswalks across the Brewery Lane northbound approach at Jewell Court and across the Albany Street Extension westbound approach at Brewery Lane where curb ramps and sidewalk are present to maximize pedestrian visibility and define crossing areas to encourage pedestrians to use the most visible crossing location.
- Construct new sidewalk along the north side of Albany Street between Islington Street and Brewery Lane to close this network gap. Provide a new crosswalk across the north approach of Albany Street with new ADA-compliant curb ramps.
- Provide new sidewalk along the west side of Chevrolet Avenue between Cass Street and the current sidewalk terminus. Provide a new crosswalk across the east approach of the Albany Street Extension with ADA-compliant curb ramps.
- Provision of curb extensions at the end of any new on-street parking areas would reduce pedestrian crossing lengths and improve visibility of pedestrians waiting to cross the roadway.

## **Refine Vehicle Circulation**

Opportunities to improve vehicle circulation include:

- Implement all-way stop traffic control at the intersections of Jewell Court / Brewery Lane and Chevrolet Avenue / Cass Street / Lovell Street to improve the safety and sight distances for vehicles exiting the side streets. Provision of an all-way stop condition also increases the visibility of pedestrians at the intersection corners and encourages pedestrians to cross in front of stopped vehicles where they are the most visible. All-way stop traffic control used in series on a short section of roadway, while not specifically implemented as a traffic calming device, has the added benefit of keeping vehicle speeds low between intersections.
- Consider partnering with the private roadway owner to convert Brewery Lane and Chevrolet Avenue to a one-way vehicle traffic flow pair. Provision of one-way traffic flow will reduce conflict points at intersections with reduced sight distances. One-way vehicular traffic flow would aid pedestrian safety, as the number of conflict areas between vehicles and pedestrians would be reduced. Shoulder striping should be considered where appropriate within this scenario to visibly reduce the remaining travel lane widths to maintain low vehicle speeds.
- It is recommended to maintain the existing on-street parking along Cass Street as is currently permitted. The provision of on-street parking on both sides of the roadway provides passive traffic calming and slows vehicle speeds along this residential roadway, as the width of the roadway restricts two vehicles from passing each other when vehicles are parked on both sides of the roadway. Drivers must pause and yield to other drivers when the parking is fully utilized. There is sufficient area due to driveways and other breaks in the parking to accommodate waiting vehicles. On-street parking on both sides of Cass Street makes the roadway feel congested for vehicles but also serves as a passive traffic calming device, keeping speeds low and providing a pleasant walking experience for pedestrians. With the implementation of a new all-way stop at the intersection of Chevrolet Avenue / Cass Street / Lovell Street, parking restrictions will need to be implemented on Cass Street between Chevrolet Avenue and Lovell Street.
- General engineering practice in accordance with the guidance within the MUTCD provides that speed limits on local roadways be defined based upon the speed of free-flowing vehicles and that a posted speed limit should be within 5 mph of the 85<sup>th</sup> percentile speed of free-flowing vehicles. The 85<sup>th</sup> percentile speeds recorded along Albany Street, Brewery Lane and Chevrolet Avenue were at or below 26 mph. Therefore, posting a 25 mph speed limit is recommended along these roadways upon approval of the City's Parking and Traffic Safety Committee.
- Provision of a one-way vehicular traffic flow pair along Albany Street and Jewell Court between Islington Street and Brewery Lane is not recommended due to potential circulation constraints and conflicts along Islington Street.

## **Encourage More Efficient Use of Area Parking**

Opportunities for more efficient parking include:

- A total of 37 potential new on-street parking spaces would be created with the provision
  of a one-way vehicle traffic flow pair along Brewery Lane/Albany Street and Chevrolet
  Avenue. On-street parking along Brewery Lane between Jewell Court and Albany Street
  would require approval of the Portsmouth Fire Department and a change to the
  Emergency Fire Lane ordinance. On-street parking would reduce vehicle travel lane
  widths made wider by the removal of two-way traffic and aid in maintaining low vehicle
  speeds.
- There are several underutilized private parking lots within the Brewery Lane area. The City's acceptance and encouragement of shared parking agreements could create opportunities for additional redevelopment within the area as complimentary lots could be merged to reduce unnecessary surface parking.
- Consider dedicated parking spaces for area employees in an off-street lot through any shared parking agreement to alleviate concerns regarding loss of individual spaces for employees.



From: <u>Virginia von Muhlen</u>

To: <u>Eric B. Eby</u>

**Date:** Monday, June 28, 2021 12:08:07 PM

Attachments: 1.map.jpq

4.cars visibility of pedestrians.jpq
3.pedestrians visibility of incoming cars.jpq

2.pedestrians poor visibility .jpg

## Hi Eric,

Thank you so much for calling me back regarding crosswalk safety near the Lafayette Playground - crosswalk across Middle Rd between Kensington Rd and Monroe Street in Portsmouth. See map attached.

I'd like to bring to the attention of The Parking and Traffic Safety Committee that this crosswalk is dangerous, especially for our children trying to get to the Lafayette Playground. This crosswalk is dangerous not only due to traffic speed but also poor visibility for both cars and pedestrians. There's always cars parked on Middle Rd. (end of Kensington Rd) right next to the crosswalk blocking the visibility for both pedestrians trying to locate incoming cars from West of Middle Rd and those cars not being able to see pedestrians on the sidewalk trying to cross the crosswalk on Middle Rd to get to Monroe St.

Please see attached photos for poor visibility reference.

I'd like to request and propose the following solutions:

- 1) For car awareness of pedestrians a blinking crosswalk light for the crosswalk across Middle Rd between Huntington and Monroe Street
- 2) For pedestrian and car visibility block parking (at least 3 cars spaces) right next to that crosswalk
- 3) For speed awareness and reduction add a speed monitor showing that cars are habitually speeding in this section
- 4) For reduction of traffic speed near that crosswalk adding a seasonal speed bump for cars coming West of Middle Rd.

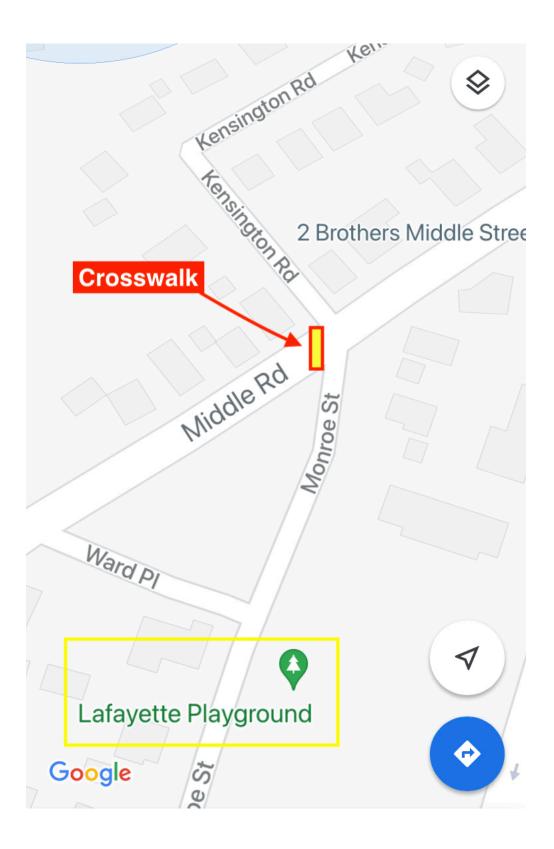
Thank you for reading my concern and request. Please let me know the next steps and if you have any questions.

Sincerely, a concerned mother and resident of Portsmouth.

Virginia von Muhlen

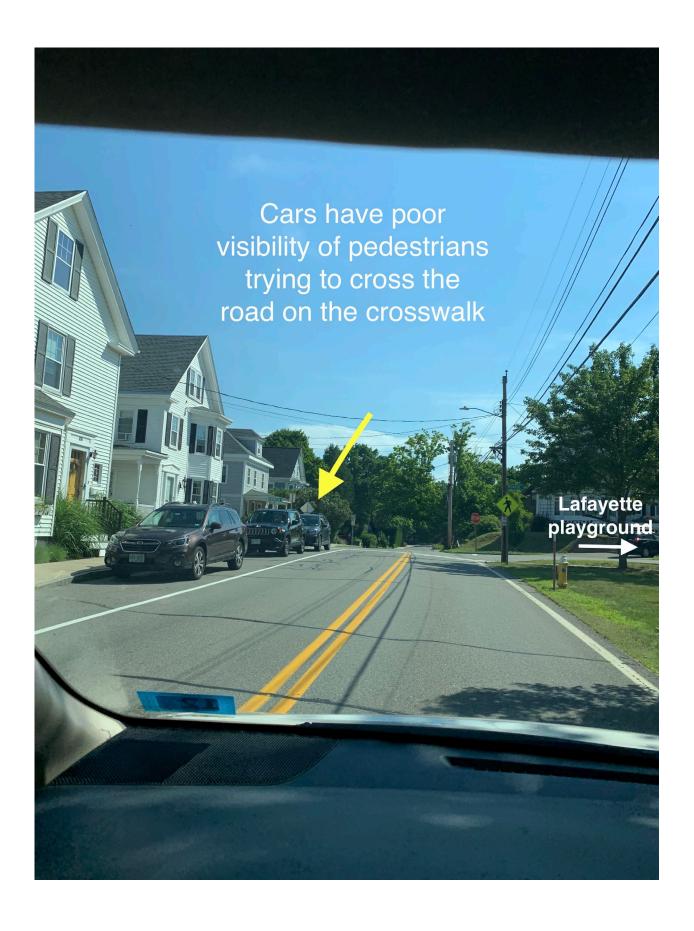
Resident at 303 Thaxter Rd. Portsmouth, NH.

Phone: (603) 978-8190











## **Governor's Commission on Disability**





# Guidelines for Free Parking for an Individual with a Disability

The Governor's Commission on Disability has adopted the following recommendations for state and municipal parking facilities where a fee is charged.

- When creating time periods for free parking for individuals with disabilities, the state and municipalities should consider the additional time that individuals with disabilities may require exiting their vehicles, traveling to their destinations, and returning to their vehicles.
- The state and municipalities should consider the need for additional time in situations involving street parking, heavy traffic, and where parking is limited due to snowfall and/or other obstacles.
- The time periods for free parking for individuals with disabilities should be extended; e.g., in a situation that ordinarily allows one hour of free parking, individuals with disabilities could receive two hours of free parking. If the situation allows two hours of free parking, four hours of free parking should be considered by the municipality.
- Unlimited or additional or free parking beyond two or four hours should always be considered by the municipality.

It is strongly suggested that the guidelines adopted by the municipality should be posted.

Pursuant to RSA 265:74, any motor vehicle carrying the special plates or hanging windshield placard issued to a person with a walking disability shall be allowed free parking in any city or town, including any state or municipal parking facility where a fee is charged (emphasis added). Each city or town shall have the discretion to set the time periods using guidelines which shall be provided by the Governor's Commission on Disability.

603.271.2773

www.nh.gov/disability





## New Hampshire's Accessible Parking Laws

For more information, contact the New Hampshire Division of Motor Vehicles at: (603) 227-4000

#### WALKING DISABILITY PERMITS



- Permits are only issued to a person who has an eligible walking disability. RSA 261:88-I(c)
- ◆ Permits **can only be used** when the permit holder is in the vehicle. RSA 265:69-I(j)
- <u>Download an application</u> for a Walking Disability Permit at: www.nh.gov/safety/divisions/dmv/registration/ disability.htm

## ACCESSIBLE PARKING SPACES

- ◆ A walking disability placard or license plate is required to park in an accessible parking space. RSA 265:69-I(j)
- ◆ Parking illegally in an accessible parking space carries a fine of \$250.00. RSA 265:69-I(j)
- Accessible parking spaces must be clearly marked by a sign displaying the international symbol of accessibility. RSA 265:73-a
- Vehicles displaying a plate or placard shall be allowed free parking in any city, town, or municipality that charges a fee. RSA 265:74



## **ACCESS AISLES**

- Access aisles are for vehicles and people who need additional room to enter and exit their transportation.
- ♦ It is illegal to park within the access aisle, even with a walking disability placardor license plate. RSA:265:69-I(m)
- Please remember to keep access aisles free and clear of snow or other obstructions.



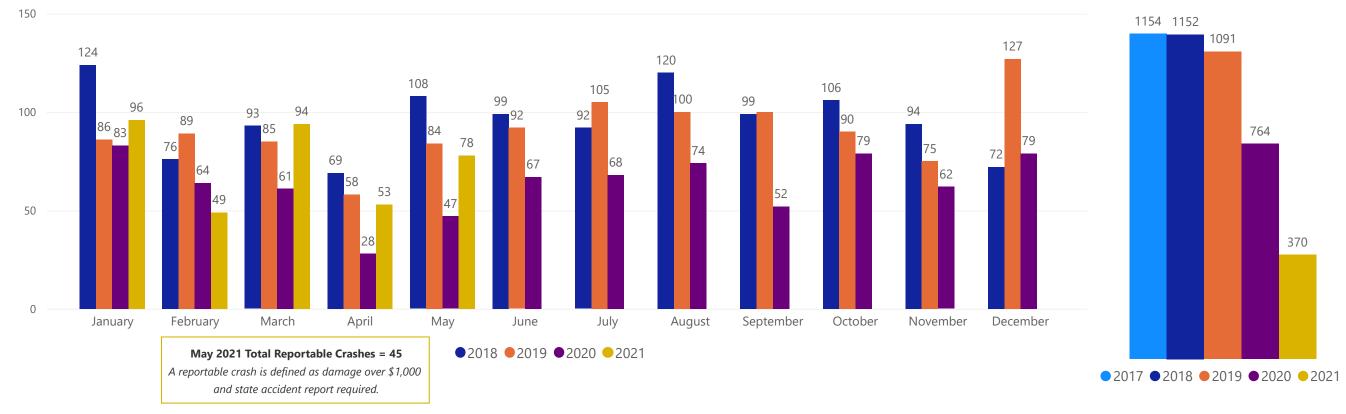
For your own safety, do not engage individuals suspected of being illegally parked. Contact your local police for assistance.

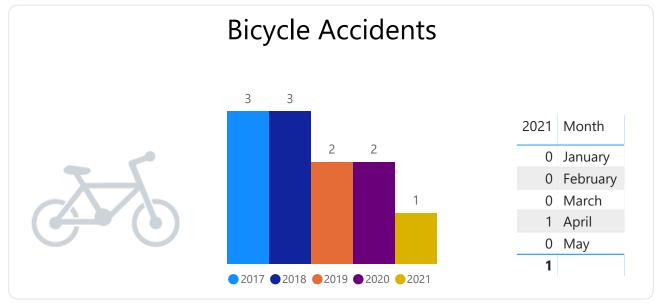
## Portsmouth Vehicle Accidents

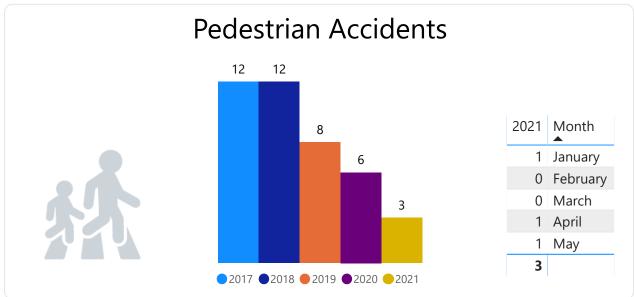


## Yearly Totals

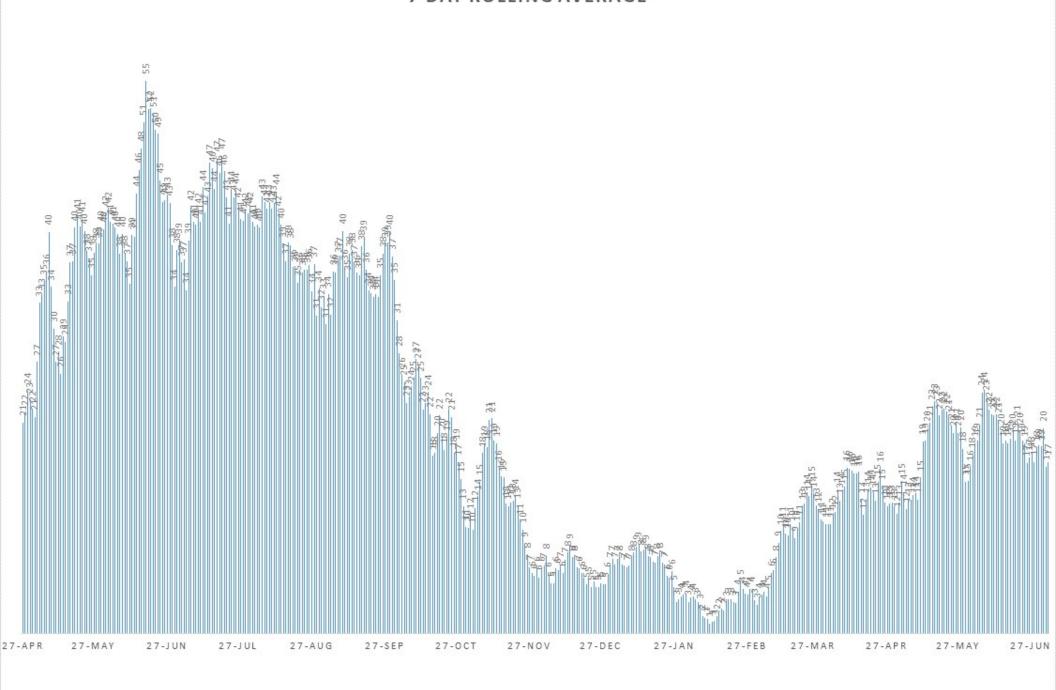
VIII.A. Monthly Accident Report

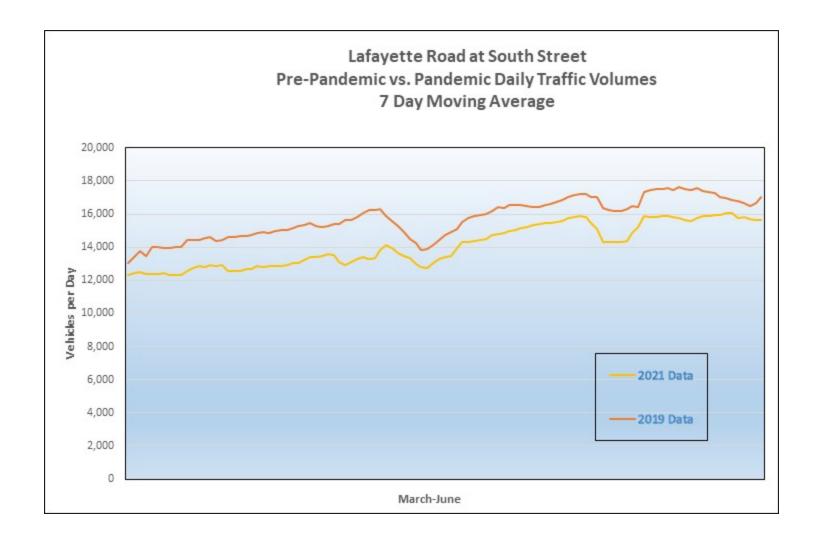


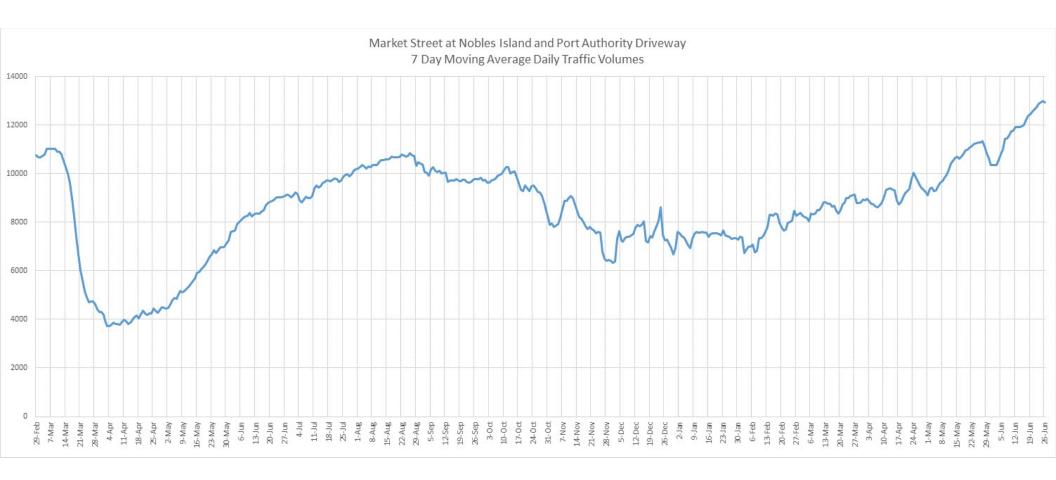




# AVERAGE DAILY BIKE COUNT ON LAFAYETTE AT SOUTH 7 DAY ROLLING AVERAGE







In regard to the safety concerns at the intersection of Maplewood Ave and Hanover Street surrounding oncoming traffic and pedestrian safety.

Traffic footage was analyzed from 12:00 PM 6/3/2021 - 12:00 AM 6/7/2021. in a 24 hour period an average of 1200 pedestrian crossings take place. Therefore in a total observation time of 86 hours, about 4300 pedestrian crossings took place.

Behavior that is considered unsafe is when a turning vehicle tries to make its turn in front of a pedestrian where they are going to walk. Not one of these instances was observed.

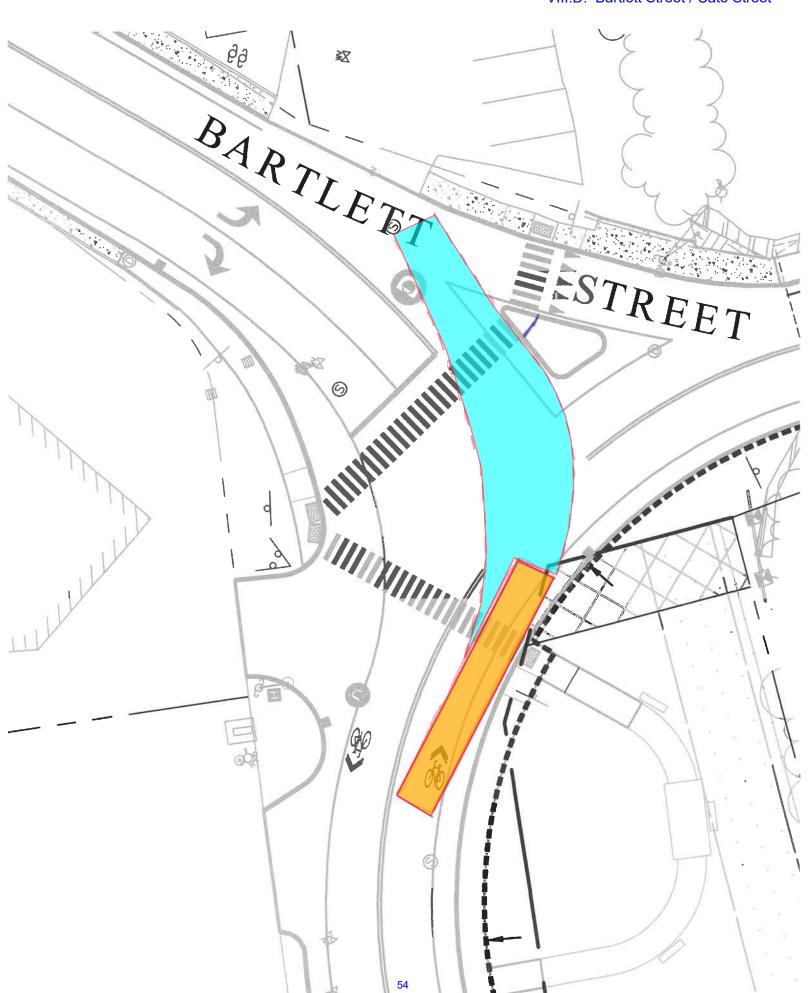
Any Questions or concerns regarding this issue can be directed to Parking Director Ben Fletcher or Transportation Associate Andy Rosenberg

In regard to the safety concerns at the intersection of Maplewood Ave, Middle Street, Congress Street, and Islington Street surrounding on coming traffic and pedestrian safety.

Traffic footage was analyzed from 12:00 PM 6/3/2021 - 12:00 AM 6/7/2021. in a 24 hour period an average of 1200 pedestrian crossings take place. Therefore in a total observation time of 86 hours about 4300 pedestrian crossing took place

Behavior that is considered unsafe is when a turning vehicle tries to make its turn in front of a pedestrian where they are going to walk. Not one of these instances was observed.

Any Questions or concerns regarding this issue can be directed to Parking Director Ben Fletcher or Transportation Associate Andy Rosenberg



PTS OPEN ACTION ITEMS				
PTS Meeting Date	Action Item	Vote / Action	Next Step / Report Back Date	
6/3/2021	Discussion of time limit for handicap vehicles in downtown on-street parking spaces.	VOTED to refer to staff for report back and proposed ordinance.	Future Meeting	
6/3/2021	Request for two 1-hour limit spaces on Portwalk Place, by Seacoast Spine & Sports Injuries.	VOTED to refer to staff for report back.	Future Meeting	
6/3/2021	Request for traffic calming measures on Sherburne Road, by residents of Sherburne Road.	VOTED to refer to staff for report back.	Future Meeting	
3/4/2021	Request for traffic signal at intersection of Lafayette Road and Hoover Drive.	4/8/2021 - VOTED to place on file awaiting study from NHDOT.  VOTED to conduct traffic assessment of intersection and report back on findings at future meeting.	Waiting on NHDOT Study	
3/4/2021	Request to examine speed of vehicles on Sagamore Avenue approaching the intersection with South Street, by Councilor Kennedy.	VOTED to refer to staff for report back at future meeting.	Future Meeting	
9/3/2020	Recent accidents at the intersection of Marcy Street and Mechanic Street.	10/8/20 - Report back after meeting with property owner.  VOTED to have staff report back after evaluating the intersection configuration and contacting the property owner to determine if further action is needed.	Future Meeting	
7/9/2020	Request for All-Way STOP at intersection of Jewell Court and Brewery Lane.	VOTED to request a report back in six (6) months from staff on All-Way STOP at intersection.  12/10/20 - Steve P. requested the Committee review Jewell Ct (should it be a right turn in and right turn out).	Future Meeting	
12/5/2019	Chase Drive, request to prohibit parking on north side of roadway.	VOTED to prohibit parking along north side of Chase Drive and to direct staff to report back on parking on Michael Succi Drive between Chase Drive and Market Street.	Future Meeting	
11/7/2019	Sagamore Avenue, south of Sagamore Grove, request for No Parking on west side of roadway.	2/6/20 - VOTED to table until development of adjacent lot is completed.  12/5/19 - VOTED to refer to staff to report back.  11/7/19 - VOTED to refer to staff to notify abutters and report back at future meeting.	Future Meeting	
10/3/2019	Discussion of speed limits, legal requirements and reducing speeds on City gateway roads.	Staff will report back at a later date on speed limits and speed segments on City gateway roads.	Future Meeting	
10/3/2019	Loading zone time / hours (3 Pleasant Street).	VOTED to refer to staff for report back.	Future Meeting	
6/6/2019	Request for 15-minute parking spaces on Hanover Street and the Vaughan Mall lot.	VOTED to table action on the three 15-minute spaces in Vaughan Mall parking lot behind 25 Maplewood Avenue and review the City's policy on designating 15-minute parking spaces.	Future Meeting	

PTS OPEN ACTION ITEMS				
PTS Meeting Date	Action Item	Vote / Action	Next Step / Report Back Date	
4/4/2019	Congress Street at Fleet Street lane use change.	08/01/19 - VOTED to implement the lane use changes on Congress Street and Fleet Street, and Pleasant Street at Market Square in the fall of 2019 on a trial basis and report back. VOTED to allow staff time to investigate the right turn only lane and making Pleasant Street one lane into Market Square.	Implement in the spring of 2021 on a trial basis & report back	
12/6/2018	Request for parking space in bike lane buffer at 60 Lafayette Road.	2/7/19 - VOTED to table request.	Future Meeting	
11/1/2018	Request to remove 10 metered parking spaces on Deer Street between Bridge Street and Maplewood Avenue, to accommodate anticipated traffic from new Foundry Place parking garage.	VOTED to table request to allow time for staff to observe traffic operations along Deer Street after the opening of the garage.	Tabled until new parking garage is generating more traffic	
2/1/2018	Request to eliminate 2-hour time limit on Islington Street between Cornwall Street and Rockingham Street.	VOTED to table the action item until the new parking garage is operational.	Future Meeting	
10/5/2017	Request to eliminate access to Echo Avenue from Spaulding Turnpike Frank Jones Neighborhood Turnpike connections (Echo Ave & Farm Lane).	8/6/20 - (Discussion at meeting) - City Staff determining appropriate barricade system and in communication with NHDOT. 12/5/19 - VOTED to show support for permanent ramp closure with stipulations from the Fire Department and Police Department being addressed and to refer to staff for report back on permanent closure configuration after meeting with the New Hampshire Department of Transportation (NHDOT). 2/7/19 VOTED to extend the trial closure of Turnpike exit ramp onto Echo Avenue until the completion of the Woodbury Avenue Bridge.	Future Meeting	
9/7/2017	Request for crosswalk on Grafton Drive at Sherburne Road.	10/5/17 - VOTED to have City staff work with PDA to implement pedestrian crossing at intersection of Grafton Drive and Sherburne Road. 9/7/17 VOTED to have staff collect data, evaluate, and report back with a recommendation at next month's meeting. (October Meeting)	Pending PDA funding for project	