## Transportation Impact Assessment

Proposed Child and Family Services Counseling and Treatment Center 947 \& 965 Church Street New Bedford, Massachusetts

Bourne, Massachusetts

January 2021

## Dear Reviewer:

This letter shall certify that this Transportation Impact Assessment has been prepared under my direct supervision and responsible charge. I am a Registered Professional Engineer (P.E.) in the Commonwealth of Massachusetts (Massachusetts P.E. No. 38871, Civil) and hold Certification as a Professional Traffic Operations Engineer (PTOE) from the Transportation Professional Certification Board, Inc. (TPCB), an independent affiliate of the Institute of Transportation Engineers (ITE) (PTOE Certificate No. 993). I am also a Fellow of the Institute of Transportation Engineers (FITE).

Sincerely,
VANASSE \& ASSOCIATES, INC.

frey S. Dirk, P.E., PTOE, FITE
Managing Partner
EXECUTIVE SUMMARY ..... 1
Recommendations ..... 2
INTRODUCTION ..... 5
Project Description ..... 5
Study Methodology ..... 6
EXISTING CONDITIONS ..... 7
Traffic Volumes ..... 9
Pedestrian and Bicycle Facilities ..... 10
Public Transportation. ..... 10
Spot Speed Measurements ..... 11
Motor Vehicle Crash Data ..... 11
FUTURE CONDITIONS ..... 14
Future Traffic Growth ..... 14
Project-Generated Traffic ..... 15
Trip Distribution and Assignment ..... 16
Future Traffic Volumes - Build Condition ..... 16
TRAFFIC OPERATIONS ANALYSIS ..... 18
Methodology ..... 18
Analysis Results ..... 20
SIGHT DISTANCE EVALUATION ..... 23
CONCLUSIONS AND RECOMMENDATIONS ..... 25
Conclusions ..... 25
Recommendations ..... 26

No. Title

1

2

3
4
5

6

72028 Build Peak Hour Traffic Volumes

No. Title

1

2

3

4

5

6

Study Area Intersection Description
2020 Existing Traffic Volumes
Vehicle Travel Speed Measurements
Motor Vehicle Crash Data Summary
Trip-Generation Summary
Peak-Hour Traffic-Volume Increases
Level-of-Service Criteria for Unsignalized Intersections
Unsignalized Intersection Level-of-Service and Vehicle Queue Summary
Sight Distance Measurements

## EXECUTIVE SUMMARY

Vanasse \& Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed renovation of the Regal House Classic Furniture store building located at 965 Church Street in New Bedford, Massachusetts, and the construction of supporting parking on a portion of the abutting property at 947 Church Street to accommodate a counseling and treatment center for Child and Family Services (hereafter referred to as the Project). This assessment was prepared in consultation with the City of New Bedford and the Massachusetts Department of Transportation (MassDOT), and was performed in accordance with MassDOT's Transportation Impact Assessment (TIA) Guidelines and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports.

Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the Institute of Transportation Engineers (ITE), ${ }^{1}$ the Project is expected to generate approximately 638 vehicle trips on an average weekday (two-way 24 -hour volume), with 50 vehicle trips expected during the weekday morning peak-hour and 84 vehicle trips expected during the weekday evening peak-hour;
2. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over Existing or anticipated future conditions without the Project (No-Build conditions), with the majority of the movements at the study intersections shown to operate at a level-of-service (LOS) of C or better under all analysis conditions, where an LOS of "D" or better is defined as "acceptable" traffic operations;
3. Independent of the Project, the Chaffee Street approaches to Church Street are currently or are predicted to operate at or over capacity (i.e., LOS "E" or LOS "F") during one or both peak hours, with Project-related impacts on these movements generally defined by an increase in vehicle queuing of up to four (4) vehicles;
4. All movements exiting the Project site are expected to operate at LOS C or better during the peak hours with minimal vehicle queuing predicted (up to one (1) vehicle);

[^0]5. No apparent safety deficiencies were noted with respect to the motor vehicle crash history at the study area intersections; and
6. Lines of sight to and from the Project site driveway intersections were found to meet or exceed the recommended minimum distances for safe operation based on the appropriate approach speed.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with implementation of the recommendations that follow.

## RECOMMENDATIONS

A detailed transportation improvement program has been developed that is designed to provide safe and efficient access to the Project site and address any deficiencies identified at off-site locations evaluated in conjunction with this study. The following improvements have been recommended as a part of this evaluation and, where applicable, will be completed in conjunction with the Project subject to receipt of all necessary rights, permits, and approvals.

## Project Access

Access to the Project site will be provided by way of three (3) driveways that will intersect the west side of Church Street approximately 180 feet south of Chaffee Street, the south side of Chaffee Street approximately 60 feet west of Church Street and the east side of Tarkiln Hill Place approximately 180 feet south of Chaffee Street, respectively. In addition, a curbside drop-off/pickup area will be provided along the Project site frontage on Chaffee Street outside of the traveled way and a paved access to an on-site dumpster will be provided that will intersect the south side of Chaffee Street approximately 30 feet east of Tarkiln Hill Place. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation, many of which are reflected on the Site Plans:
> The Project site driveways and circulating drives within the Project site should be a minimum of 24 -feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle.
> Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided
> All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the Manual on Uniform Traffic Control Devices (MUTCD). ${ }^{2}$
> A sidewalk has been provided within the Project site that extends between the building to Church Street, Chaffee Street and Tarkiln Hill Place.
> Americans with Disabilities Act (ADA) compliant wheelchair ramps should be provided at all pedestrian crossings that are constructed or modified as a part of the Project.

[^1]> Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveway intersections should be designed and maintained so as not to restrict lines of sight.
> Snow windrows within sight triangle areas of the Project site driveway intersections should be promptly removed where such accumulations would impede sight lines.
> Bicycle parking should be provided at an appropriate location within the Project site.

## Off-Site

In an effort to address constraints or safety concerns identified as a part of this assessment, the following off-site roadway, intersection and traffic control improvements will be advanced as a part of the Project subject to receipt of all necessary rights, permits and approvals where necessary:
> Chaffee Street - A double-yellow centerline should be installed along Chaffee Street between Church Street and Tarkiln Hill Place.
> Church Street at Chafee Street - A STOP-sign should be installed on the Chaffee Street eastbound approach and marked STOP-lines should be installed on both Chaffee Street approaches. In addition, a crosswalk with ADA compliant wheelchair ramps should be provided across the Chaffee Street west leg of the intersection.
> Tarkiln Hill Place at Chaffee Street - A STOP-sign and marked STOP-line should be installed on the Chaffee Street approach. In addition, a crosswalk with ADA compliant wheelchair ramps should be provided across the Tarkiln Hill Place north leg of the intersection.

## Transportation Demand Management

Public transportation services are provided within the study area by the Southeastern Regional Transit Authority (STRA) by way of the Route 4, Ashley Boulevard, and the North End Shuttle. The Route 4 bus provides service along Ashley Boulevard, Chaffee Street and Church Street, with a stop located at the Church Street/Chaffee Street intersection, opposite the Project site. The North End Shuttle provides service along Phillips Road, Church Street and Acushnet Avenue, with the closest regular stop located approximately 0.4 -miles north of the Project site at Amanda Avenue (Dottin Apartments). In addition to regular stops, SRTA buses operate in a passenger demand mode ("flag stop") and will stop anywhere along the regular service route where it is safe to pickup or discharge a passenger when requested.

In addition to fixed-route bus services, the SRTA provides Dial-a-Ride paratransit services to eligible persons that cannot use fixed-route transit all or some of the time due to a physical, cognitive or mental disability in compliance with the ADA, and provides services for seniors through the New Bedford Council on Aging (COA).

In an effort to encourage the use of alternative modes of transportation to single-occupant vehicles (SOVs), the following Transportation Demand Management (TDM) measures will be implemented as a part of the Project:
> A Transportation Coordinator will be designated for the Project to coordinate the elements of the TDM program;
> Information regarding public transportation services, maps, schedules and fare information will be posted in a central location and/or otherwise made available to employees and clients;
> A "welcome packet" will be provided to employees detailing available public transportation services, bicycle and walking alternatives, and commuter options available;
> The Transportation Coordinator will facilitate a ride matching program for employees, including posting a sign-up sheet in a central location or via a link on the corporate web site and proving information in the new employee "welcome packet". In addition, preferential parking will be reserved or provided for carpools and vanpools.
$>$ On-site amenities will be incorporated into the Project to discourage off-site trips, including providing a break-room equipped with a microwave and refrigerator; offering direct deposit of paychecks; allowing telecommuting or flexible work schedules; and other such measures to reduce overall traffic volumes and travel during peak traffic volume periods;
> Pedestrian accommodations have been incorporated into the Project; and
> Secure bicycle parking will be provided within the Project site.
With implementation of the aforementioned recommendations, safe and efficient access will be provided to the Project site and the Project can be accommodated within the confines of the existing and improved transportation system.

Vanasse \& Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed renovation of an existing building located at 965 Church Street in New Bedford, Massachusetts, and the construction of supporting parking on a portion of the abutting property at 947 Church Street to accommodate a counseling and treatment center for Child and Family Services (hereafter referred to as the Project). This study evaluates the following specific areas as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and identifies and analyzes existing traffic conditions and future traffic conditions, both with and without the Project, along Church Street, Chaffee Street and Tarkiln Hill Place, and at the intersections of Church Street at Chaffee Street and Tarkiln Hill Place at Chaffee Street.

## PROJECT DESCRIPTION

The Project will entail the renovation of the Regal House Classic Furniture store building located at 965 Church Street in New Bedford, Massachusetts, and the construction of supporting parking on a portion of the abutting property at 947 Church Street to accommodate a counseling and treatment center for Child and Family Services. The Project site (947 and 965 Church Street) encompasses a total of approximately $2.73 \pm$ acres of land that is bounded by Chaffee Street to the north, a commercial property (F.W. Webb Company) to the south, Church Street to the east and Tarkiln Hill Place to the west. A private right-of-way (Dutton Street) bisects the Project site between Tarkiln Hill Place and Church Street. Figure 1 depicts the Project site location in relation to the existing roadway network. The Project site is currently occupied by the Regal House Classic Furniture store building and a single-family home ( 947 Church Street) with supporting parking areas, driveways and appurtenances. Both structures will be retained as a part of the Project.

Access to the Project site will be provided by way of three (3) driveways that will intersect the west side of Church Street approximately 180 feet south of Chaffee Street, the south side of Chaffee Street approximately 60 feet west of Church Street and the east side of Tarkiln Hill Place approximately 180 feet south of Chaffee Street, respectively. In addition, a curbside drop-off/pickup area will be provided along the Project site frontage on Chaffee Street outside of the traveled way and a paved access to an on-site dumpster will be provided that will intersect the south side of Chaffee Street approximately 30 feet east of Tarkiln Hill Place.


Off-street parking will be provided for 131 vehicles, including five (5) handicapped accessible spaces, which exceeds the parking requirements of Section 3100, Parking and Loading, of Chapter 9, Comprehensive Zoning, of the City of New Bedford Code of Ordinances, for the appropriate use. ${ }^{3}$

## STUDY METHODOLOGY

This study was prepared in consultation with the City of New Bedford and the Massachusetts Department of Transportation (MassDOT); was performed in accordance with MassDOT's Transportation Impact Assessment (TIA) Guidelines and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports; and was conducted in three distinct stages.

The first stage involved an assessment of existing conditions in the study area and included an inventory of roadway geometrics; pedestrian and bicycle facilities; on-street parking; public transportation services; observations of traffic flow; and collection of pedestrian, bicycle and vehicle counts.

In the second stage of the study, future traffic conditions were projected and analyzed. Specific travel demand forecasts for the Project were assessed along with future traffic demands due to expected traffic growth independent of the Project. A seven-year time horizon from the date of publication of this assessment was selected for analyses consistent with MassDOT's Transportation Impact Assessment (TIA) Guidelines. The traffic analysis conducted in stage two identifies existing or projected future roadway capacity, traffic safety, and site access issues.

The third stage of the study presents and evaluates measures to address traffic and safety issues, if any, identified in stage two of the study.

[^2]
## EXISTING CONDITIONS

A comprehensive field inventory of existing conditions within the study area was conducted in December 2020. The field investigation consisted of an inventory of existing roadway geometrics; pedestrian and bicycle facilities; public transportation services; traffic volumes; and operating characteristics; as well as posted speed limits and land use information within the study area. The study area that was assessed for the Project consisted of Church Street, Chaffee Street and Tarkiln Hill Place, and the following specific intersections: Church Street at Chaffee Street and Tarkiln Hill Place at Chaffee Street.

The following describes the study area roadways and intersections.

## Roadways

## Church Street

> Two-lane urban collector roadway under City jurisdiction
> Traverses study area in a general north-south alignment between Route 140/Exit 5 and Coffin Avenue
> Provides two $15 \pm$ foot wide travel lanes that are separated by a double-yellow centerline with 7 -foot wide bicycle lanes provided along both sides of the roadway
$>$ The posted speed limit is 30 miles per hour (mph)
> In general, sidewalks are not provided along Church Street. A short segment of sidewalk has been constructed along the Church Street frontage (west side) of 1239 Chaffee Street
> Illumination is provided by way of street lights mounted on wood poles
> Land use within the study area consists of the Project site, residential and commercial properties, and areas of open wooded space

## Chaffee Street

> Two-lane local access roadway under City jurisdiction
> Traverses study area in a general east-west alignment between Tori Lyon Drive and Tarkiln Hill Place
> Provides an approximate 26 to 38 -foot wide traveled way (paved area) within the study area with no marked centerline or shoulders
> A posted speed limit is not provided and, therefore, the statutory or "prima facie" speed limit is $30 \mathrm{mph}^{4}$
$>$ Sidewalks are not provided within the study area
$>$ Illumination is provided by way of street lights mounted on wood poles
> Land use within the study area consists of the Project site, residential and commercial properties, and areas of open wooded space

## Tarkiln Hill Place

> Two-lane local access roadway under City jurisdiction
> Traverses study area in a general north-south between Mate Drive and the driveway to 9 Tarkiln Hill Place (approximately 275 feet south of Chaffee Street)
> Provides an approximate 24 to 36 -foot wide traveled way (paved area) within the study area with no marked centerline or shoulders
> A posted speed limit is not provided and, therefore, the statutory or "prima facie" speed limit is 30 mph
> Sidewalks are provided along both sides north of Chaffee Street
$>$ Illumination is provided by way of street lights mounted on wood poles
> Land use within the study area consists of the Project site, residential and commercial properties, and areas of open wooded space

## Intersections

Table 1 and Figure 2 summarize existing lane use, traffic control, and pedestrian and bicycle accommodations at the study area intersections as observed in December 2020.

Table 1
STUDY AREA INTERSECTION DESCRIPTION

| Intersection | Traffic Control Type ${ }^{\text {a }}$ | No. of Travel Lanes Provided | Shoulder Provided? (Yes/No/Width) | Pedestrian Accommodations? (Yes/No/Description) | Bicycle <br> Accommodations? <br> (Yes/No/Description) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Church St./ Chaffee St. | S | 1 general purpose travel lane on all approaches | Yes, 7-foot bike lanes on Church St. | Yes, sidewalk segment along west side of Church St. north of intersection; bus stop located on the northeast corner | Yes, 7-foot bike lanes on Church St. and shared traveled-way on Chaffee St. ${ }^{\text {b }}$ |
| Tarkiln Hill Pl./ Chaffee St. | S | 1 general purpose travel lane on all approaches | No | Yes, both sides of Tarkiln Hill Pl. north of intersection | Yes, shared traveled-way |

${ }^{\mathrm{a}}$ TS $=$ Traffic Signal Control; S = STOP-sign control.

[^3]Legend:
(1) Unsignalized Intersection
(B) Bus Stop
= - Sidewalk
$x x^{\prime}-\frac{5}{\checkmark} \quad$ Lane Use and Travel Lane Width do Bicycle Lane


## TRAFFIC VOLUMES

In order to determine existing traffic-volume demands and flow patterns within the study area, automatic traffic recorder (ATR) counts, manual turning movement counts (TMCs) and vehicle classification counts were completed in December 2020. The ATR counts were conducted on December $1^{\text {st }}$ and $2^{\text {nd }}, 2020$ (Tuesday through Wednesday, inclusive) on Church Street and Tarkiln Hill Place in the vicinity of the Project site in order to record weekday traffic conditions over an extended period, with weekday morning (7:00 to 9:00 AM) and evening (2:00 to 6:00 PM) peak period manual TMCs performed at the study intersections on December 1, 2020 (Tuesday). These time periods were selected for analysis purposes as they are representative of the peak-traffic-volume hours for both the Project and the adjacent roadway network.

## Traffic-Volume Adjustments

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, traffic volume data from MassDOT Continuous Count Station No. 38 located on Interstate 195 (I-195) in Fairhaven were reviewed. ${ }^{5}$ Based on a review of this data it was determined that traffic volumes for the month of December are approximately 10.2 percent below average-month conditions. As such, the December traffic volumes were adjusted upward by 10.2 percent in order to be representative of average-month conditions.

In order to account for the impact on traffic volumes and trip patterns resulting from the "safer-at-home" order and the phased "Reopening Massachusetts" plan that was issued by the Governor on May 18, 2020, in response to the COVID-19 pandemic, the December 2020 traffic volumes that were collected as a part of this assessment were adjusted upward by an additional 13.4 percent based on a comparison of traffic volume data obtained from MassDOT Continuous Count Station No. 38.

The 2020 Existing traffic volumes are summarized in Table 2, with the weekday morning and evening peak-hour traffic volumes graphically depicted on Figure 3. Note that the peak-hour traffic volumes presented in Table 2 were obtained from the TMCs and are reflected on the aforementioned figure.

Table 2
2020 EXISTING TRAFFIC VOLUMES

| Location/Peak Hour | $\mathrm{AWT}^{\text {a }}$ | VPH ${ }^{\text {b }}$ | K Factor ${ }^{\text {c }}$ | Directional Distribution ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Church Street, south of Chaffee Street: | 9,580 | -- | -- | -- |
| Weekday Morning (7:00-8:00 AM) | -- | 571 | 6.0 | 64.1\% SB |
| Weekday Evening (3:00-4:00 PM) | -- | 987 | 10.3 | 52.0\% NB |
| Tarkiln Hill Place, south of Chaffee Street: | 140 |  |  |  |
| Weekday Morning (7:00-8:00 AM) | -- | 18 | 12.9 | 94.4\% SB |
| Weekday Evening (3:00-4:00 PM) | -- | 19 | 13.6 | 94.7\% NB |

${ }^{\mathrm{a}}$ Average weekday traffic in vehicles per day.
${ }^{\text {b }}$ Vehicles per hour.
${ }^{\text {c }}$ Percent of daily traffic occurring during the peak hour.
${ }^{\mathrm{d}}$ Percent traveling in peak direction.
$\mathrm{NB}=$ northbound; $\mathrm{SB}=$ southbound.

[^4]

## WEEKDAY EVENING PEAK HOUR (3:00-4:00 PM)



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.
Not To Scale
Vanasse \& Associates inc

As can be seen in Table 2, Church Street in the vicinity of the Project site was found to accommodate approximately 9,580 vehicles on an average weekday (two-way, 24 -hour volume), with approximately 571 vehicles per hour (vph) during the weekday morning peak-hour and 987 vph during the weekday evening peak-hour.

Tarkiln Hill Place in the vicinity of the Project site was found to accommodate approximately 140 vehicles on an average weekday, with approximately 18 vph during the weekday morning peak-hour and 19 vph during the weekday evening peak-hour.

## PEDESTRIAN AND BICYCLE FACILITIES

A comprehensive field inventory of pedestrian and bicycle facilities within the study area was undertaken in December 2020. The field inventory consisted of a review of the location of sidewalks and pedestrian crossing locations along the study roadways and at the study area intersections. As detailed on Figure 2, sidewalks are provided along both sides Tarkiln Hill Place north of Chaffee Street and the Church Street frontage (west side ) of 1239 Chaffee Street.

Marked bicycle lanes are provided along both sides of Church Street within the study area, with both Chaffee Street and Tarkiln Hill Place providing sufficient width to accommodate bicycle travel in a shared traveled-way configuration (i.e., bicyclists and motor vehicles sharing the traveledway). ${ }^{6}$

## PUBLIC TRANSPORTATION

Public transportation services are provided within the study area by the Southeastern Regional Transit Authority (STRA) by way of the Route 4, Ashley Boulevard, and the North End Shuttle. The Route 4 bus provides service along Ashley Boulevard, Chaffee Street and Church Street, with a stop located at the Church Street/Chaffee Street intersection, opposite the Project site. The North End Shuttle provides service along Phillips Road, Church Street and Acushnet Avenue, with the closest regular stop located approximately 0.4 -miles north of the Project site at Amanda Avenue (Dottin Apartments). In addition to regular stops, SRTA buses operate in a passenger demand mode ("flag stop") and will stop anywhere along the regular service route where it is safe to pickup or discharge a passenger when requested.

In addition to fixed-route bus services, the SRTA provides Dial-a-Ride paratransit services to eligible persons that cannot use fixed-route transit all or some of the time due to a physical, cognitive or mental disability in compliance with the ADA, and provides services for seniors through the New Bedford Council on Aging (COA).

The public transportation schedules and fare information are provided in the Appendix.

[^5]
## SPOT SPEED MEASUREMENTS

Vehicle travel speed measurements were performed on Church Street and Tarkiln Hill Place in the vicinity of the Project site in conjunction with the ATR counts. Table 3 summarizes the vehicle travel speed measurements.

Table 3 VEHICLE TRAVEL SPEED MEASUREMENTS

|  | Church Street |  | Tarkiln Hill Place |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Northbound | Southbound | Northbound | Southbound |
| Mean Travel Speed (mph) | 32 | 29 | 17 | 18 |
| 85 ${ }^{\text {th }}$ Percentile Speed (mph) | 38 | 34 | 22 | 23 |
| Posted or Statutory Speed Limit (mph) | 30 | 30 | $30^{\text {a }}$ | $30^{\text {a }}$ |

${ }^{\text {a }}$ Statutory speed limit.
$\mathrm{mph}=$ miles per hour.

As can be seen in Table 3, the mean vehicle travel speed along Church Street in the vicinity of the Project site was found to be 32 mph northbound and 29 mph southbound. The measured $85^{\text {th }}$ percentile vehicle travel speed, or the speed at which 85 percent of the observed vehicles traveled at or below, was found to be 38 mph northbound and 34 mph southbound, which is 4 to 8 mph above the posted speed limit ( 35 mph ). The $85^{\text {th }}$ percentile speed is used as the basis of engineering design and in the evaluation of sight distances, and is often used in establishing posted speed limits.

The mean vehicle travel speed along Tarkiln Hill Place in the vicinity of the Project site was found to be 17 mph northbound and 18 mph southbound, with the measured $85^{\text {th }}$ percentile vehicle travel speed found to be 22 mph northbound and 23 mph southbound, which is 7 to 8 mph below the statutory speed limit ( 30 mph ) and is indicative of the relatively short segment of roadway along which the measurements were performed.

## MOTOR VEHICLE CRASH DATA

Motor vehicle crash information for the study area intersections was provided by the MassDOT Highway Division Safety Management/Traffic Operations Unit for the most recent fiveyear period available (2013 through 2017, inclusive) in order to examine motor vehicle crash trends occurring within the study area. The data is summarized by intersection, type, severity, roadway and weather conditions, and day of occurrence, and presented in Table 4.

Table 4
MOTOR VEHICLE CRASH DATA SUMMARY ${ }^{\text {a }}$

|  |  |  |
| :--- | :---: | :---: |
|  |  |  |
|  | Church Street/ <br> Chaffee Street | Chaffee Street/ <br>  <br> Traffic Control Type: |
|  |  |  |
| Year: | U | U |
| 2013 Place |  |  |

${ }^{\text {a}}$ Source: MassDOT Safety Management/Traffic Operations Unit records, 2013 through 2017.
${ }^{\mathrm{b}}$ Traffic Control Type: $\mathrm{U}=$ unsignalized; TS = traffic signal.
${ }^{\text {c }}$ Crash rate per million vehicles entering the intersection.
${ }^{\mathrm{d}}$ Statewide/District crash rate.

As can be seen in Table 4, the Church Street/Chaffee Street intersection was found to have experienced a total of seven (7) reported motor vehicle crashes over the five-year review period, or an average of 1.4 crashes per year, the majority of which occurred on a weekday; under clear weather conditions; during daylight; and were reported as angle type collisions that resulted in personal injury. The intersection was found to have a motor vehicle crash rate that was below the MassDOT Statewide and District 5 average crash rates for an unsignalized intersection. No (0) motor vehicle crashes were reported to have occurred at the Tarkiln Hill Place/Chaffee Street intersection over the five-year review period.

A review of the MassDOT statewide High Crash Location List indicated that there are no locations within the study area that are included on MassDOT’s Highway Safety Improvement Program (HSIP) listing as a high crash location. In addition, no fatal motor vehicle crashes were reported to have occurred at the study area intersections over the five-year review period.

The detailed MassDOT Crash Rate Worksheets are provided in the Appendix.

Traffic volumes in the study area were projected to the year 2028, which reflects a seven-year planning horizon from the date of publication of this assessment, consistent with MassDOT's Transportation Impact Assessment (TIA) Guidelines. Independent of the Project, traffic volumes on the roadway network in the year 2028 under No-Build conditions include all existing traffic and new traffic resulting from background traffic growth. Anticipated Project-generated traffic volumes superimposed upon the 2028 No-Build traffic volumes reflect 2028 Build traffic volume conditions with the Project.

## FUTURE TRAFFIC GROWTH

Future traffic growth is a function of the expected land development in the immediate area and the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning volumes may actually grow at either a higher or a lower rate at particular intersections.

An alternative procedure identifies the location and type of planned development, estimates the traffic to be generated, and assigns it to the area roadway network. This procedure produces a more realistic estimate of growth for local traffic; however, potential population growth and development external to the study area would not be accounted for in the resulting traffic projections.

To provide a conservative analysis framework, both procedures were used, the salient components of which are described below.

## Specific Development by Others

The City of New Bedford Planning Department was consulted in order to determine if there were any projects planned within the study area that would have an impact on future traffic volumes at the study intersections. Based on this consultation, the following projects were identified for inclusion in this assessment:
> U-Haul Moving \& Storage, 429 Church Street, New Bedford, Massachusetts. This project entails the construction of a 84,785 sf U-Haul Moving \& Storage facility to be located at 429 Church Street.
> Alma Del Mar II Charter School, 739 Church Street, New Bedford, Massachusetts. This project entails the construction of a charter school to be located at 739 Church Street that will consist of two (2) buildings totaling 57,127 sf of space that will accommodate 600 students.

Traffic volumes associated with the aforementioned specific development projects by others were obtained from the respective traffic study or using trip-generation information available from the Institute of Transportation Engineers (ITE) ${ }^{7}$ for the appropriate land uses, and were assigned onto the study area roadway network based on existing traffic patterns where no other information was available. No other developments were identified at this time that are expected to result in an increase in traffic within the study area beyond the general background traffic growth rate.

## General Background Traffic Growth

Traffic-volume data obtained for MassDOT Continuous Count Station No. 38 (I-195 in Fairhaven) was reviewed in order to determine general traffic growth trends in the area. Based on a review of this data, a 1.0 percent per year compounded annual background traffic growth rate was used in order to account for future traffic growth and presently unforeseen development within the study area.

## Roadway Improvement Projects

The City of New Bedford and MassDOT were contacted in order to determine if there were any planned future roadway improvement projects expected to be complete by 2028 within the study area. Based on these discussions, no roadway improvement projects aside from routine maintenance activities were identified to be planned within the study area at this time.

## No-Build Traffic Volumes

The 2028 No-Build condition peak-hour traffic-volumes were developed by applying the 1.0 percent per year compounded annual background traffic growth rate to the 2020 Existing peak-hour traffic volumes and then adding the traffic volumes associated with the identified specific development projects by others. The resulting 2028 No-Build weekday morning and evening peak-hour traffic volumes are shown on Figure 4.

## PROJECT-GENERATED TRAFFIC

Design year (2028 Build) traffic volumes for the study area roadways were determined by estimating Project-generated traffic volumes and assigning those volumes on the study roadways. The following sections describe the methodology used to develop the anticipated traffic characteristics of the Project.

The Project will entail the renovation of the Regal House Classic Furniture store building, which encompasses $69,283 \pm$ sf, to accommodate a counseling and treatment center for Child and Family Services. A maximum of 85 employees are expected at the center. In order to develop the traffic characteristics of the Project, trip-generation statistics published by the $\mathrm{ITE}^{8}$ for a similar land use as that proposed were used. ITE Land Use Code (LUC) 720, Medical-Dental Office Building, was

[^6]

## WEEKDAY EVENING PEAK HOUR (3:00-4:00 PM)



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.
Not To Scale
Vanasse \& Associates inc
used to develop the traffic characteristics of the Project, the results of which are summarized in Table 5, with detailed trip calculations provided in the Appendix.

Table 5
TRIP GENERATION SUMMARY

| Time Period | Vehicle Trips ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Entering | Exiting | Total |
| Average Weekday: | 319 | 319 | 638 |
| Weekday Morning Peak-Hour: | 39 | 11 | 50 |
| Weekday Evening Peak-Hour: | 29 | 55 | 84 |

${ }^{\text {a }}$ Based on ITE LUC 720, Medical-Dental Office; 85 employees.

## Project-Generated Traffic Volume Summary

As can be seen in Table 5, the Project is expected to generate approximately 638 vehicle trips on an average weekday (two-way, 24 -hour volume, or 319 vehicles entering and 319 exiting), with 50 vehicle trips ( 39 vehicles entering and 11 exiting) expected during the weekday morning peak-hour and 84 vehicle trips ( 29 vehicles entering and 55 exiting) expected during the weekday evening peak-hour.

## TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of generated trips to and from the Project site was determined based on a review of existing traffic patterns within the study area. The general trip distribution for the Project is graphically depicted on Figure 5. The additional traffic expected to be generated by the Project was assigned on the study area roadway network as shown on Figure 6 for the weekday morning and evening peak hours.

## FUTURE TRAFFIC VOLUMES - BUILD CONDITION

The 2028 Build condition traffic volumes consist of the 2028 No-Build traffic volumes with the additional traffic expected to be generated by the Project added to them. The 2028 Build weekday morning and evening peak-hour traffic-volumes are graphically depicted on Figure 7.

A summary of peak-hour projected traffic-volume changes outside of the study area that is the subject of this assessment is shown in Table 6. These changes are a result of the construction of the Project.


WEEKDAY MORNING PEAK HOUR (7:00-8:00 AM) Legend:


WEEKDAY EVENING PEAK HOUR (3:00-4:00 PM)


Not To Scale
Vanasse \& Associates inc

Figure 6
Project-Generated
Peak Hour Traffic Volumes


## WEEKDAY EVENING PEAK HOUR (3:00-4:00 PM)



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.
R\&W ROPE

Figure 7

Table 6
PEAK-HOUR TRAFFIC-VOLUME INCREASES

| Location/Peak Hour | $\begin{gathered} 2020 \\ \text { Existing } \\ \hline \end{gathered}$ | $\begin{gathered} 2028 \\ \text { No-Build } \\ \hline \end{gathered}$ | $\begin{aligned} & 2028 \\ & \text { Build } \end{aligned}$ | Traffic <br> Volume <br> Increase <br> Over <br> No-Build | Percent <br> Increase <br> Over <br> No-Build |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Church Street, north of Chaffee Street: |  |  |  |  |  |
| Weekday Morning | 709 | 870 | 895 | 25 | 2.9 |
| Weekday Evening | 1,060 | 1,218 | 1,260 | 42 | 3.4 |
| Church Street, south of Chaffee Street: |  |  |  |  |  |
| Weekday Morning | 571 | 720 | 737 | 17 | 2.4 |
| Weekday Evening | 978 | 1,139 | 1,168 | 29 | 2.5 |
| Chaffee Street, east of Church Street: |  |  |  |  |  |
| Weekday Morning | 523 | 274 | 282 | 8 | 2.9 |
| Weekday Evening | 255 | 275 | 288 | 13 | 4.7 |

As shown in Table 6, Project-related traffic-volume increases outside of the study area relative to 2028 No-Build conditions are anticipated to range from 2.4 to 4.7 percent during the peak periods, with vehicle increases shown to range from 8 to 42 vehicles. When distributed over the peak-hour, the predicted traffic volume increases would not result in a significant impact (increase) on motorist delays or vehicle queuing outside of the immediate study area that is the subject of this assessment.

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 under Existing, No-Build and Build traffic volume 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.

## METHODOLOGY

## Levels of Service

A primary result of capacity analyses is the assignment of level of service to traffic facilities under various traffic-flow conditions. ${ }^{9}$ 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 congested or constrained operating conditions.

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.

[^7]
## Unsignalized Intersections

The six levels of service for unsignalized intersections may be described as follows:

- LOS A represents a condition with little or no control delay to minor street traffic.
- LOS B represents a condition with short control delays to minor street traffic.
- LOS C represents a condition with average control delays to minor street traffic.
- LOS D represents a condition with long control delays to minor street traffic.
- LOS E represents operating conditions at or near capacity level, with very long control delays to minor street traffic.
- LOS F represents a condition where minor street demand volume exceeds capacity of an approach lane, with extreme control delays resulting.

The levels of service of unsignalized intersections are determined by application of a procedure described in the 2010 Highway Capacity Manual. ${ }^{10}$ 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. Definitions for level of service at unsignalized intersections are also given in the 2010 Highway Capacity Manual. Table 7 summarizes the relationship between level of service and average control delay for two-way stop controlled and all-way stop controlled intersections.

## Table 7 <br> LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS ${ }^{\text {a }}$

| Level-Of-Service by Volume-to-Capacity Ratio |  | Average Control Delay (Seconds Per Vehicle) |
| :---: | :---: | :---: |
| $\mathrm{v} / \mathrm{c} \leq 1.0$ | v/c > 1.0 |  |
| A | F | $\leq 10.0$ |
| B | F | 10.1 to 15.0 |
| C | F | 15.1 to 25.0 |
| D | F | 25.1 to 35.0 |
| E | F | 35.1 to 50.0 |
| F | F | >50.0 |

${ }^{\text {a }}$ Source: Highway Capacity Manual; Transportation Research Board; Washington, DC; 2010; page 19-2.

[^8]
## Vehicle Queue Analysis

Vehicle queue analyses are a direct measurement of an intersection's ability to process vehicles under various traffic control and volume scenarios and lane use arrangements. The vehicle queue analysis was performed using the Synchro® intersection capacity analysis software which is based upon the methodology and procedures presented in the 2010 Highway Capacity Manual. The Synchro ${ }^{\circledR}$ vehicle queue analysis methodology is a simulation based model which reports the number of vehicles that experience a delay of six seconds or more at an intersection. For signalized intersections, Synchro® reports both the average ( $50^{\text {th }}$ percentile) the $95^{\text {th }}$ percentile vehicle queue. For unsignalized intersections, Synchro ${ }^{\circledR}$ reports the $95^{\text {th }}$ percentile vehicle queue. Vehicle queue lengths are a function of the capacity of the movement under study and the volume of traffic being processed by the intersection during the analysis period. The $95^{\text {th }}$ percentile vehicle queue is the vehicle queue length that will be exceeded only 5 percent of the time, or approximately three minutes out of sixty minutes during the peak one hour of the day (during the remaining fifty-seven minutes, the vehicle queue length will be less than the $95^{\text {th }}$ percentile queue length).

## ANALYSIS RESULTS

Level-of-service and vehicle queue analyses were conducted for 2020 Existing, 2028 No-Build and 2028 Build conditions for the intersections within the study area. The results of the intersection capacity and vehicle queue analyses are summarized in Table 8, with the detailed analysis results presented in the Appendix.

The following is a summary of the level-of-service and vehicle queue analyses for the intersections within the study area. For context, we note that an LOS of " $D$ " or better is generally defined as "acceptable" operating conditions. Project-related impacts at the study area intersections were identified as follows:

Church Street at Chaffee Street - During the weekday morning peak-hour, operating conditions for the Chaffee Street east and westbound approaches to Church Street were shown to degrade as a result of the addition of Project-related traffic, with the eastbound approach degrading from LOS D to LOS E as a result of an increase in average motorist delay of approximately 11.5 seconds and the westbound approach degrading from LOS E to LOS F as a result of an increase in average motorist delay of approximately 15.2 seconds. Operating conditions for both Chaffee Street approaches remained at LOS F during the weekday evening peak-hour (no change over Existing or No-Build conditions). Vehicle queues at the intersection are predicted to increase by up to four (4) vehicles as a result of the Project.

Tarklin Hill Place at Chaffee Street - All movements at this intersection were shown to operate at LOS A under all analysis conditions with negligible vehicle queuing.

Church Street at the Project Site Driveway - All movements exiting the Project site are predicted to operate at LOS B during the weekday morning peak-hour and at LOS C during the weekday evening peak-hour with residual vehicle queues of up to one (1) vehicle which can be contained within the Project site without impeding the movement of vehicles, pedestrians or bicyclists along Church Street. All movements along Church Street approaching the Project site driveway are expected to operate at LOS A with negligible vehicle queuing.

Chaffee Street and Tarklin Hill Place at the Project Site Driveways - All movements are predicted to operate at LOS A during the peak-hours with negligible vehicle queuing.

Table 8
UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

| Unsignalized Intersection/Peak-hour/Movement | 2020 Existing |  |  |  | 2028 No-Build |  |  |  | 2028 Build |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Demand ${ }^{\text {a }}$ | Delay ${ }^{\text {b }}$ | LOS ${ }^{\text {c }}$ | $\begin{gathered} \text { Queue }^{\mathrm{d}} \\ 95^{\mathrm{th}} \end{gathered}$ | Demand | Delay | LOS | $\begin{gathered} \text { Queue } \\ 95^{\text {th }} \end{gathered}$ | Demand | Delay | LOS | $\begin{gathered} \text { Queue } \\ 95^{\text {th }} \end{gathered}$ |
| Church Street at Chaffee Street |  |  |  |  |  |  |  |  |  |  |  |  |
| Weekday Morning: |  |  |  |  |  |  |  |  |  |  |  |  |
| Chaffee Street EB LT/TH/RT | 7 | 19.2 | C | 0 | 7 | 28.0 | D | 0 | 11 | 39.5 | E | 1 |
| Chaffee Street WB LT/TH/RT | 109 | 23.2 | C | 3 | 118 | 43.3 | E | 4 | 124 | >50.0 | F | 6 |
| Church Street NB LT/TH/RT | 205 | 0.3 | A | 0 | 271 | 0.3 | A | 0 | 274 | 0.3 | A | 0 |
| Church Street SB LT/TH/RT | 466 | 2.0 | A | 1 | 558 | 2.0 | A | 1 | 578 | 2.0 | A | 1 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |
| Chaffee Street EB LT/TH/RT | 21 | >50.0 | F | 2 | 23 | $>50.0$ | F | 3 | 42 | $>50.0$ | F | 7 |
| Chaffee Street WB LT/TH/RT | 119 | $>50.0$ | F | 7 | 128 | >50.0 | F | 12 | 133 | >50.0 | F | 14 |
| Church Street NB LT/TH/RT | 513 | 0.2 | A | 0 | 593 | 0.2 | A | 0 | 607 | 0.2 | A | 0 |
| Church Street SB LT/TH/RT | 521 | 1.6 | A | 1 | 597 | 1.6 | A | 1 | 611 | 1.6 | A | 1 |
| Tarkiln Hill Place at Chaffee Street |  |  |  |  |  |  |  |  |  |  |  |  |
| Weekday Morning: |  |  |  |  |  |  |  |  |  |  |  |  |
| Private Driveway EB LT/TH/RT | 2 | 0.0 | A | 0 | 2 | 0.0 | A | 0 | 2 | 0.0 | A | 0 |
| Chaffee Street WB LT/TH/RT | 36 | 0.0 | A | 0 | 38 | 0.0 | A | 0 | 38 | 0.0 | A | 0 |
| Tarkiln Hill Place NB LT/TH/RT | 1 | 0.0 | A | 0 | 1 | 0.0 | A | 0 | 2 | 0.0 | A | 0 |
| Tarkiln Hill Place SB LT/TH/RT | 2 | 7.2 | A | 0 | 2 | 7.2 | A | 0 | 2 | 7.2 | A | 0 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |
| Private Driveway EB LT/TH/RT | 26 | 9.7 | A | 0 | 26 | 9.8 | A | 0 | 26 | 9.8 | A | 0 |
| Chaffee Street EB LT/TH/RT | 15 | 9.1 | A | 0 | 16 | 9.1 | A | 0 | 16 | 9.1 | A | 0 |
| Tarkiln Hill Place NB LT/TH/RT | 18 | 0.4 | A | 0 | 19 | 0.4 | A | 0 | 22 | 0.4 | A | 0 |
| Tarkiln Hill Place SB LT/TH/RT | 12 | 6.7 | A | 0 | 13 | 6.7 | A | 0 | 13 | 6.7 | A | 0 |

See notes at end of table.

Table 8 (Continued)
UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

| Unsignalized Intersection/Peak-hour/Movement | 2020 Existing |  |  |  | 2028 No-Build |  |  |  | 2028 Build |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Demand ${ }^{\text {a }}$ | Delay ${ }^{\text {b }}$ | LOS ${ }^{\text {c }}$ | $\begin{gathered} \text { Queue }^{\mathrm{d}} \\ 95^{\text {th }} \\ \hline \end{gathered}$ | Demand | Delay | LOS | $\begin{gathered} \text { Queue } \\ 95^{\mathrm{th}} \end{gathered}$ | Demand | Delay | LOS | $\begin{gathered} \hline \text { Queue } \\ 95^{\text {th }} \end{gathered}$ |
| Church Street at the Project Site Driveway |  |  |  |  |  |  |  |  |  |  |  |  |
| Weekday Morning: |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Site Driveway EB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 7 | 13.2 | B | 0 |
| Church Street NB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 284 | 0.4 | A | 0 |
| Church Street SB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 461 | 0.0 | A | 0 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Site Driveway EB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 36 | 20.2 | C | 1 |
| Church Street NB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 603 | 0.1 | A | 0 |
| Church Street SB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 555 | 0.0 | A | 0 |
| Chaffee Street at the Project Site Driveway |  |  |  |  |  |  |  |  |  |  |  |  |
| Weekday Morning: |  |  |  |  |  |  |  |  |  |  |  |  |
| Chaffee Street EB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 8 | 0.0 | A | 0 |
| Chaffee Street WB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 51 | 0.2 | A | 0 |
| Project Site Driveway NB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 8.4 | A | 0 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |
| Chaffee Street EB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 26 | 0.0 | A | 0 |
| Chaffee Street WB LT/TH | -- | -- | -- | -- |  | -- | -- | -- | 37 | 2.0 | A | 0 |
| Project Site Driveway NB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 16 | 8.5 | A | 0 |
| Tarkiln Hill Place at the Project Site Driveway |  |  |  |  |  |  |  |  |  |  |  |  |
| Weekday Morning: |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Site Driveway WB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 8.3 | A |  |
| Tarkiln Hill Place NB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 0.0 | A | 0 |
| Tarkiln Hill Place SB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 18 | 0.0 | A | 0 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Site Driveway WB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 3 | 8.4 | A | 0 |
| Tarkiln Hill Place NB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 19 | 0.0 | A | 0 |
| Tarkiln Hill Place SB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 0.0 | A | 0 |

${ }^{2}$ Demand in vehicles per hour.
${ }^{\mathrm{b}}$ Average control delay per vehicle (in seconds).
${ }^{\text {c }}$ Level-of-Service.
${ }^{\text {d}}$ Queue length in vehicle.
$\mathrm{NB}=$ northbound; $\mathrm{SB}=$ southbound; $\mathrm{EB}=$ eastbound; $\mathrm{WB}=$ westbound; $\mathrm{LT}=$ left-turning movements; $\mathrm{TH}=$ through movements; $\mathrm{RT}=$ right-turning movements

## SIGHT DISTANCE EVALUATION

Sight distance measurements were performed at the Project site driveway intersections with Church Street, Chaffee Street and Tarklin Hill Place in accordance with American Association of State Highway and Transportation Officials (AASHTO) ${ }^{11}$ requirements. Both stopping sight distance (SSD) and intersection sight distance (ISD) measurements were performed. In brief, SSD is the distance required by a vehicle traveling at the design speed of a roadway, on wet pavement, to stop prior to striking an object in its travel path. ISD or corner sight distance (CSD) is the sight distance required by a driver entering or crossing an intersecting roadway to perceive an on-coming vehicle and safely complete a turning or crossing maneuver with on-coming traffic. In accordance with AASHTO standards, if the measured ISD is at least equal to the required SSD value for the appropriate design speed, the intersection can operate in a safe manner. Table 9 presents the measured SSD and ISD at the subject intersections.

[^9]Table 9
SIGHT DISTANCE MEASUREMENTS ${ }^{\text {a }}$

| Intersection/Sight Distance Measurement | Feet |  |  |
| :---: | :---: | :---: | :---: |
|  | Required Minimum (SSD) | $\begin{gathered} \text { Desirable } \\ (\text { ISD })^{\mathrm{b}} \end{gathered}$ | Measured |
| Church Street at the Project Site Driveway |  |  |  |
| Stopping Sight Distance: |  |  |  |
| Church Street approaching from the north | 305 | -- | 500+ |
| Church Street approaching from the south | 305 | -- | 500+ |
| Intersection Sight Distance: |  |  |  |
| Looking to the north from the Site Driveway | 305 | 385 | 500+ |
| Looking to the south from the Site Driveway | 305 | 445 | 500+ |
| Chaffee Street at the Project Site Driveway |  |  |  |
| Stopping Sight Distance: |  |  |  |
| Chaffee Street approaching from the east | 80 | -- | $80^{\text {c }}$ |
| Chaffee Street approaching from the west | 200 | -- | $371{ }^{\text {d }}$ |
| Intersection Sight Distance: |  |  |  |
| Looking to the east from Site Driveway | 80 | 170 | $80^{\text {c }}$ |
| Looking to the west from Site Driveway | 200 | 290 | $371{ }^{\text {d }}$ |
| Tarkiln Hill Place at the Site Driveway |  |  |  |
| Stopping Sight Distance: |  |  |  |
| Tarkiln Hill Place approaching from the north | 155 | -- | 500+ |
| Tarkiln Hill Place approaching from the south | 155 | -- | $212^{\text {e }}$ |
| Intersection Sight Distance: |  |  |  |
| Looking to the north from the Site Driveway | 155 | 280 | 500+ |
| Looking to the south from the Site Driveway | 155 | 240 | $212^{\text {e }}$ |

${ }^{\text {a Recommended minimum values obtained from A Policy on Geometric Design of Highways and Streets, } 7^{7 \mathrm{~h}} \text { Edition; American Association }}$ of State Highway and Transportation Officials (AASHTO); 2018; and based on a 40 mph approach speed along Church Street, a 25 mph approach speed along Tarkiln Hill Place and a 30 mph approach speed along Chaffee Street with the exception of approaching the Chaffee Street driveway from the east where a 15 mph approach speed was used to reflect the reduced speed of vehicles turning from Church Street onto Chaffee Street given the proximity of the driveway to Church Street.
${ }^{\mathrm{b}}$ Values shown are the intersection sight distance for a vehicle turning right or left exiting a roadway under STOP control such that motorists approaching the intersection on the major street should not need to adjust their travel speed to less than 70 percent of their initial approach speed.
${ }^{\text {c }}$ Clear line of sight is provide to/from Church Street.
${ }^{\mathrm{d}}$ Clear line of sight is provide to/from Tarkiln Hill Place.
${ }^{\mathrm{e}}$ Clear line of sight is provided to/from the end of Tarkiln Hill Place.

As can be seen in Table 9, the available lines of sight at the Project site driveway intersections meet or exceed the recommended minimum sight distances to function in a safe manner (SSD) based on the appropriate approach speed along the intersecting roadway.

## CONCLUSIONS AND RECOMMENDATIONS

## CONCLUSIONS

VAI has conducted a TIA in order to determine the potential impacts on the transportation infrastructure associated with the proposed renovation of an existing building located at 965 Church Street in New Bedford, Massachusetts, and the construction of supporting parking on a portion of the abutting property at 947 Church Street to accommodate a counseling and treatment center for Child and Family Services. The following specific areas have been evaluated as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; under existing and future conditions, both with and without the Project. Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the ITE, ${ }^{12}$ the Project is expected to generate approximately 638 vehicle trips on an average weekday (two-way 24 -hour volume), with 50 vehicle trips expected during the weekday morning peak-hour and 84 vehicle trips expected during the weekday evening peak-hour;
2. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over Existing or anticipated future conditions without the Project (No-Build conditions), with the majority of the movements at the study intersections shown to operate at LOS of C or better under all analysis conditions, where an LOS of " D " or better is defined as "acceptable" traffic operations;
3. Independent of the Project, the Chaffee Street approaches to Church Street are currently or are predicted to operate at or over capacity (i.e., LOS "E" or LOS "F") during one or both peak hours, with Project-related impacts on these movements generally defined by an increase in vehicle queuing of up to four (4) vehicles;
4. All movements exiting the Project site are expected to operate at LOS C or better during the peak hours with minimal vehicle queuing predicted (up to one (1) vehicle);
5. No apparent safety deficiencies were noted with respect to the motor vehicle crash history at the study area intersections; and

[^10]6. Lines of sight to and from the Project site driveway intersections were found to meet or exceed the recommended minimum distances for safe operation based on the appropriate approach speed.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with implementation of the recommendations that follow.

## RECOMMENDATIONS

A detailed transportation improvement program has been developed that is designed to provide safe and efficient access to the Project site and address any deficiencies identified at off-site locations evaluated in conjunction with this study. The following improvements have been recommended as a part of this evaluation and, where applicable, will be completed in conjunction with the Project subject to receipt of all necessary rights, permits, and approvals.

## Project Access

Access to the Project site will be provided by way of three (3) driveways that will intersect the west side of Church Street approximately 180 feet south of Chaffee Street, the south side of Chaffee Street approximately 60 feet west of Church Street and the east side of Tarkiln Hill Place approximately 180 feet south of Chaffee Street, respectively. In addition, a curbside drop-off/pickup area will be provided along the Project site frontage on Chaffee Street outside of the traveled way and a paved access to an on-site dumpster will be provided that will intersect the south side of Chaffee Street approximately 30 feet east of Tarkiln Hill Place. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation, many of which are reflected on the Site Plans:
> The Project site driveways and circulating drives within the Project site should be a minimum of 24 -feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle.
> Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided
> All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the Manual on Uniform Traffic Control Devices (MUTCD). ${ }^{13}$
> A sidewalk has been provided within the Project site that extends between the building to Church Street, Chaffee Street and Tarkiln Hill Place.
> Americans with Disabilities Act (ADA) compliant wheelchair ramps should be provided at all pedestrian crossings that are constructed or modified as a part of the Project.
> Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveway intersections should be designed and maintained so as not to restrict lines of sight.

[^11]> Snow windrows within sight triangle areas of the Project site driveway intersections should be promptly removed where such accumulations would impede sight lines.
> Bicycle parking should be provided at an appropriate location within the Project site.

## Off-Site

In an effort to address constraints or safety concerns identified as a part of this assessment, the following off-site roadway, intersection and traffic control improvements will be advanced as a part of the Project subject to receipt of all necessary rights, permits and approvals where necessary:
> Chaffee Street - A double-yellow centerline should be installed along Chaffee Street between Church Street and Tarklin Hill Place.
> Church Street at Chafee Street - A STOP-sign should be installed on the Chaffee Street eastbound approach and marked STOP-lines should be installed on both Chaffee Street approaches. In addition, a crosswalk with ADA compliant wheelchair ramps should be provided across the Chaffee Street west leg of the intersection.
> Tarkiln Hill Place at Chaffee Street - A STOP-sign and marked STOP-line should be installed on the Chaffee Street approach. In addition, a crosswalk with ADA compliant wheelchair ramps should be provided across the Tarkiln Hill Place north leg of the intersection.

## Transportation Demand Management

Public transportation services are provided within the study area by the STRA by way of the Route 4, Ashley Boulevard, and the North End Shuttle. The Route 4 bus provides service along Ashley Boulevard, Chaffee Street and Church Street, with a stop located at the Church Street/Chaffee Street intersection, opposite the Project site. The North End Shuttle provides service along Phillips Road, Church Street and Acushnet Avenue, with the closest regular stop located approximately 0.4 -miles north of the Project site at Amanda Avenue (Dottin Apartments). In addition to regular stops, SRTA buses operate in a passenger demand mode ("flag stop") and will stop anywhere along the regular service route where it is safe to pickup or discharge a passenger when requested.

In addition to fixed-route bus services, the SRTA provides Dial-a-Ride paratransit services to eligible persons that cannot use fixed-route transit all or some of the time due to a physical, cognitive or mental disability in compliance with the ADA, and provides services for seniors through the New Bedford Council on Aging (COA).

In an effort to encourage the use of alternative modes of transportation to single-occupant vehicles (SOVs), the following Transportation Demand Management (TDM) measures will be implemented as a part of the Project:
> A Transportation Coordinator will be designated for the Project to coordinate the elements of the TDM program;
> Information regarding public transportation services, maps, schedules and fare information will be posted in a central location and/or otherwise made available to employees and clients;
> A "welcome packet" will be provided to employees detailing available public transportation services, bicycle and walking alternatives, and commuter options available;
> The Transportation Coordinator will facilitate a ride matching program for employees, including posting a sign-up sheet in a central location or via a link on the corporate web site and proving information in the new employee "welcome packet". In addition, preferential parking will be reserved or provided for carpools and vanpools.
> On-site amenities will be incorporated into the Project to discourage off-site trips, including providing a break-room equipped with a microwave and refrigerator; offering direct deposit of paychecks; allowing telecommuting or flexible work schedules; and other such measures to reduce overall traffic volumes and travel during peak traffic volume periods;
> Pedestrian accommodations have been incorporated into the Project; and
> Secure bicycle parking will be provided within the Project site.
With implementation of the aforementioned recommendations, safe and efficient access will be provided to the Project site and the Project can be accommodated within the confines of the existing and improved transportation system.

## APPENDIX

PROJECT SITE PLAN
AUTOMATIC TRAFFIC RECORDER COUNT DATA
MANUAL TURNING MOVEMENT COUNT DATA
SEASONAL ADJUSTMENT DATA
VEHICLE TRAVEL SPEED DATA
PUBLIC TRANSPORTATION INFORMATION
MASSDOT CRASH RATE WORKSHEETS AND HIGH CRASH LOCATION MAPPING
BACKGROUND DEVELOPMENT TRAFFIC-VOLUME NETWORKS
GENERAL BACKGROUND TRAFFIC GROWTH
TRIP-GENERATION CALCULATIONS
CAPACITY ANALYSIS WORKSHEETS


Location : Church Street
Location : South of Chaffee Street
City/State: New Bedford, MA
8807VL01

| Start | 12/1/2020 | SB |  | Hour Totals |  | NB |  | Hour Totals |  | Combined Totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | Tue | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 |  | 11 | 73 |  |  | 1 | 68 |  |  |  |  |
| 12:15 |  | 4 | 81 |  |  | 2 | 73 |  |  |  |  |
| 12:30 |  | 1 | 77 |  |  | 2 | 69 |  |  |  |  |
| 12:45 |  | 1 | 57 | 17 | 288 | 2 | 69 | 7 | 279 | 24 | 567 |
| 01:00 |  | 9 | 71 |  |  | 1 | 60 |  |  |  |  |
| 01:15 |  | 3 | 50 |  |  | 3 | 78 |  |  |  |  |
| 01:30 |  | 6 | 68 |  |  | 2 | 59 |  |  |  |  |
| 01:45 |  | 4 | 57 | 22 | 246 | 2 | 73 | 8 | 270 | 30 | 516 |
| 02:00 |  | 1 | 61 |  |  | 1 | 60 |  |  |  |  |
| 02:15 |  | 1 | 64 |  |  | 0 | 66 |  |  |  |  |
| 02:30 |  | 1 | 83 |  |  | 1 | 97 |  |  |  |  |
| 02:45 |  | 0 | 80 | 3 | 288 | 3 | 86 | 5 | 309 | 8 | 597 |
| 03:00 |  | 2 | 93 |  |  | 2 | 146 |  |  |  |  |
| 03:15 |  | 1 | 72 |  |  | 2 | 108 |  |  |  |  |
| 03:30 |  | 0 | 116 |  |  | 1 | 80 |  |  |  |  |
| 03:45 |  | 3 | 97 | 6 | 378 | 1 | 81 | 6 | 415 | 12 | 793 |
| 04:00 |  | 1 | 102 |  |  | 9 | 88 |  |  |  |  |
| 04:15 |  | 1 | 90 |  |  | 9 | 90 |  |  |  |  |
| 04:30 |  | 1 | 104 |  |  | 14 | 80 |  |  |  |  |
| 04:45 |  | 8 | 93 | 11 | 389 | 25 | 70 | 57 | 328 | 68 | 717 |
| 05:00 |  | 6 | 95 |  |  | 19 | 91 |  |  |  |  |
| 05:15 |  | 9 | 69 |  |  | 13 | 70 |  |  |  |  |
| 05:30 |  | 9 | 52 |  |  | 37 | 69 |  |  |  |  |
| 05:45 |  | 17 | 53 | 41 | 269 | 34 | 55 | 103 | 285 | 144 | 554 |
| 06:00 |  | 17 | 53 |  |  | 19 | 46 |  |  |  |  |
| 06:15 |  | 28 | 44 |  |  | 27 | 62 |  |  |  |  |
| 06:30 |  | 28 | 49 |  |  | 41 | 53 |  |  |  |  |
| 06:45 |  | 45 | 44 | 118 | 190 | 56 | 40 | 143 | 201 | 261 | 391 |
| 07:00 |  | 103 | 40 |  |  | 38 | 40 |  |  |  |  |
| 07:15 |  | 62 | 34 |  |  | 56 | 38 |  |  |  |  |
| 07:30 |  | 63 | 30 |  |  | 42 | 42 |  |  |  |  |
| 07:45 |  | 67 | 27 | 295 | 131 | 32 | 36 | 168 | 156 | 463 | 287 |
| 08:00 |  | 55 | 22 |  |  | 60 | 21 |  |  |  |  |
| 08:15 |  | 53 | 19 |  |  | 48 | 27 |  |  |  |  |
| 08:30 |  | 48 | 17 |  |  | 45 | 21 |  |  |  |  |
| 08:45 |  | 59 | 21 | 215 | 79 | 42 | 18 | 195 | 87 | 410 | 166 |
| 09:00 |  | 48 | 15 |  |  | 52 | 21 |  |  |  |  |
| 09:15 |  | 55 | 16 |  |  | 35 | 14 |  |  |  |  |
| 09:30 |  | 52 | 16 |  |  | 60 | 14 |  |  |  |  |
| 09:45 |  | 45 | 16 | 200 | 63 | 44 | 17 | 191 | 66 | 391 | 129 |
| 10:00 |  | 55 | 12 |  |  | 46 | 14 |  |  |  |  |
| 10:15 |  | 61 | 10 |  |  | 46 | 15 |  |  |  |  |
| 10:30 |  | 59 | 9 |  |  | 68 | 21 |  |  |  |  |
| 10:45 |  | 48 | 11 | 223 | 42 | 48 | 13 | 208 | 63 | 431 | 105 |
| 11:00 |  | 57 | 26 |  |  | 59 | 8 |  |  |  |  |
| 11:15 |  | 60 | 8 |  |  | 57 | 4 |  |  |  |  |
| 11:30 |  | 67 | 7 |  |  | 53 | 9 |  |  |  |  |
| 11:45 |  | 66 | 4 | 250 | 45 | 66 | 1 | 235 | 22 | 485 | 67 |
| Total |  | 1401 | 2408 |  |  | 1326 | 2481 |  |  | 2727 | 4889 |
| Percent |  | 36.8\% | 63.2\% |  |  | 34.8\% | 65.2\% |  |  | 35.8\% | 64.2\% |


| Start | 12/2/2020 | SB |  | Hour Totals |  | NB |  | Hour Totals |  | Combined Totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | Wed | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 |  | 14 | 72 |  |  | 5 | 67 |  |  |  |  |
| 12:15 |  | 3 | 79 |  |  | 0 | 76 |  |  |  |  |
| 12:30 |  | 5 | 66 |  |  | 2 | 60 |  |  |  |  |
| 12:45 |  | 1 | 64 | 23 | 281 | 3 | 67 | 10 | 270 | 33 | 551 |
| 01:00 |  | 4 | 64 |  |  | 0 | 68 |  |  |  |  |
| 01:15 |  | 1 | 78 |  |  | 0 | 65 |  |  |  |  |
| 01:30 |  | 4 | 68 |  |  | 3 | 58 |  |  |  |  |
| 01:45 |  | 2 | 68 | 11 | 278 | 2 | 75 | 5 | 266 | 16 | 544 |
| 02:00 |  | 7 | 46 |  |  | 2 | 78 |  |  |  |  |
| 02:15 |  | 1 | 60 |  |  | 3 | 69 |  |  |  |  |
| 02:30 |  | 3 | 69 |  |  | 0 | 105 |  |  |  |  |
| 02:45 |  | 2 | 92 | 13 | 267 | 2 | 88 | 7 | 340 | 20 | 607 |
| 03:00 |  | 3 | 115 |  |  | 1 | 135 |  |  |  |  |
| 03:15 |  | 1 | 91 |  |  | 2 | 94 |  |  |  |  |
| 03:30 |  | 2 | 111 |  |  | 4 | 84 |  |  |  |  |
| 03:45 |  | 1 | 83 | 7 | 400 | 4 | 83 | 11 | 396 | 18 | 796 |
| 04:00 |  | 0 | 107 |  |  | 4 | 105 |  |  |  |  |
| 04:15 |  | 3 | 85 |  |  | 11 | 81 |  |  |  |  |
| 04:30 |  | 3 | 96 |  |  | 14 | 98 |  |  |  |  |
| 04:45 |  | 4 | 90 | 10 | 378 | 24 | 75 | 53 | 359 | 63 | 737 |
| 05:00 |  | 8 | 76 |  |  | 19 | 88 |  |  |  |  |
| 05:15 |  | 5 | 73 |  |  | 11 | 69 |  |  |  |  |
| 05:30 |  | 7 | 66 |  |  | 32 | 69 |  |  |  |  |
| 05:45 |  | 20 | 50 | 40 | 265 | 25 | 40 | 87 | 266 | 127 | 531 |
| 06:00 |  | 23 | 41 |  |  | 25 | 47 |  |  |  |  |
| 06:15 |  | 25 | 50 |  |  | 23 | 51 |  |  |  |  |
| 06:30 |  | 36 | 46 |  |  | 51 | 34 |  |  |  |  |
| 06:45 |  | 51 | 38 | 135 | 175 | 43 | 36 | 142 | 168 | 277 | 343 |
| 07:00 |  | 97 | 44 |  |  | 41 | 41 |  |  |  |  |
| 07:15 |  | 82 | 33 |  |  | 48 | 49 |  |  |  |  |
| 07:30 |  | 53 | 31 |  |  | 36 | 35 |  |  |  |  |
| 07:45 |  | 70 | 34 | 302 | 142 | 55 | 52 | 180 | 177 | 482 | 319 |
| 08:00 |  | 58 | 23 |  |  | 53 | 31 |  |  |  |  |
| 08:15 |  | 56 | 26 |  |  | 54 | 26 |  |  |  |  |
| 08:30 |  | 51 | 24 |  |  | 51 | 20 |  |  |  |  |
| 08:45 |  | 41 | 15 | 206 | 88 | 43 | 19 | 201 | 96 | 407 | 184 |
| 09:00 |  | 44 | 21 |  |  | 49 | 8 |  |  |  |  |
| 09:15 |  | 54 | 11 |  |  | 35 | 17 |  |  |  |  |
| 09:30 |  | 60 | 12 |  |  | 60 | 16 |  |  |  |  |
| 09:45 |  | 65 | 14 | 223 | 58 | 35 | 17 | 179 | 58 | 402 | 116 |
| 10:00 |  | 62 | 13 |  |  | 43 | 19 |  |  |  |  |
| 10:15 |  | 70 | 8 |  |  | 56 | 16 |  |  |  |  |
| 10:30 |  | 47 | 5 |  |  | 50 | 22 |  |  |  |  |
| 10:45 |  | 66 | 3 | 245 | 29 | 60 | 15 | 209 | 72 | 454 | 101 |
| 11:00 |  | 59 | 35 |  |  | 66 | 9 |  |  |  |  |
| 11:15 |  | 64 | 5 |  |  | 54 | 6 |  |  |  |  |
| 11:30 |  | 70 | 3 |  |  | 60 | 10 |  |  |  |  |
| 11:45 |  | 81 | 2 | 274 | 45 | 61 | 7 | 241 | 32 | 515 | 77 |
| Total |  | 1489 | 2406 |  |  | 1325 | 2500 |  |  | 2814 | 4906 |
| Percent |  | 38.2\% | 61.8\% |  |  | 34.6\% | 65.4\% |  |  | 36.5\% | 63.5\% |
| Grand Total |  | 2890 | 4814 |  |  | 2651 | 4981 |  |  | 5541 | 9795 |
| Percent |  | 37.5\% | 62.5\% |  |  | 34.7\% | 65.3\% |  |  | 36.1\% | 63.9\% |
| ADT |  | T 7,668 | AA | T 7,668 |  |  |  |  |  |  |  |

 Location: : Sorch of Chaffee Street
L_cotation : Sutw
City/State: New Bedford, MA


Location : South of Chaffee Street
City/State: New Bedford, MA
8807VL02

| Start | 12/1/2020 | NB |  | Hour Totals |  | SB |  | Hour Totals |  | Combined Totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | Tue | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 |  | 0 | 1 |  |  | 0 | 1 |  |  |  |  |
| 12:15 |  | 0 | 1 |  |  | 0 | 3 |  |  |  |  |
| 12:30 |  | 0 | 2 |  |  | 0 | 2 |  |  |  |  |
| 12:45 |  | 0 | 3 | 0 | 7 | 0 | 0 | 0 | 6 | 0 | 13 |
| 01:00 |  | 0 | 1 |  |  | 0 | 1 |  |  |  |  |
| 01:15 |  | 0 | 0 |  |  | 0 | 2 |  |  |  |  |
| 01:30 |  | 0 | 1 |  |  | 0 | 1 |  |  |  |  |
| 01:45 |  | 0 | 1 | 0 | 3 | 0 | 2 | 0 | 6 | 0 | 9 |
| 02:00 |  | 0 | 2 |  |  | 0 | 3 |  |  |  |  |
| 02:15 |  | 0 | 1 |  |  | 0 | 0 |  |  |  |  |
| 02:30 |  | 0 | 1 |  |  | 0 | 1 |  |  |  |  |
| 02:45 |  | 0 | 3 | 0 | 7 | 0 | 2 | 0 | 6 | 0 | 13 |
| 03:00 |  | 0 | 0 |  |  | 0 | 1 |  |  |  |  |
| 03:15 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 03:30 |  | 0 | 1 |  |  | 0 | 2 |  |  |  |  |
| 03:45 |  | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 5 |
| 04:00 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 04:15 |  | 0 | 2 |  |  | 0 | 1 |  |  |  |  |
| 04:30 |  | 0 | 2 |  |  | 0 | 1 |  |  |  |  |
| 04:45 |  | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 2 | 0 | 7 |
| 05:00 |  | 0 | 7 |  |  | 0 | 0 |  |  |  |  |
| 05:15 |  | 0 | 6 |  |  | 0 | 0 |  |  |  |  |
| 05:30 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 05:45 |  | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 13 |
| 06:00 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 06:15 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 06:30 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 06:45 |  | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 07:00 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 07:15 |  | 0 | 0 |  |  | 1 | 0 |  |  |  |  |
| 07:30 |  | 0 | 0 |  |  | 8 | 0 |  |  |  |  |
| 07:45 |  | 1 | 1 | 1 | 1 | 3 | 1 | 12 | 1 | 13 | 2 |
| 08:00 |  | 0 | 0 |  |  | 4 | 0 |  |  |  |  |
| 08:15 |  | 1 | 0 |  |  | 1 | 0 |  |  |  |  |
| 08:30 |  | 1 | 0 |  |  | 1 | 1 |  |  |  |  |
| 08:45 |  | 0 | 1 | 2 | 1 | 0 | 0 | 6 | 1 | 8 | 2 |
| 09:00 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 09:15 |  | 0 | 0 |  |  | 1 | 0 |  |  |  |  |
| 09:30 |  | 1 | 0 |  |  | 2 | 0 |  |  |  |  |
| 09:45 |  | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 4 | 0 |
| 10:00 |  | 0 | 0 |  |  | 2 | 0 |  |  |  |  |
| 10:15 |  | 0 | 0 |  |  | 1 | 0 |  |  |  |  |
| 10:30 |  | 1 | 0 |  |  | 0 | 0 |  |  |  |  |
| 10:45 |  | 1 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 6 | 0 |
| 11:00 |  | 0 | 0 |  |  | 2 | 0 |  |  |  |  |
| 11:15 |  | 3 | 0 |  |  | 1 | 0 |  |  |  |  |
| 11:30 |  | 2 | 0 |  |  | 1 | 0 |  |  |  |  |
| 11:45 |  | 2 | 0 | 7 | 0 | 0 | 0 | 4 | 0 | 11 | 0 |
| Total |  | 13 | 39 |  |  | 30 | 25 |  |  | 43 | 64 |
| Percent |  | 25.0\% | 75.0\% |  |  | 54.5\% | 45.5\% |  |  | 40.2\% | 59.8\% |

Location : South of Chaffee Street
City/State: New Bedford, MA
8807VL02

| Start | 12/2/2020 | NB |  | Hour Totals |  | SB |  | Hour Totals |  | Combined Totals |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | Wed | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 |  | 0 | 0 |  |  | 0 | 2 |  |  |  |  |
| 12:15 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 12:30 |  | 0 | 2 |  |  | 0 | 1 |  |  |  |  |
| 12:45 |  | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 6 |
| 01:00 |  | 0 | 1 |  |  | 0 | 0 |  |  |  |  |
| 01:15 |  | 0 | 3 |  |  | 0 | 4 |  |  |  |  |
| 01:30 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 01:45 |  | 0 | 3 | 0 | 7 | 0 | 3 | 0 | 7 | 0 | 14 |
| 02:00 |  | 0 | 2 |  |  | 0 | 2 |  | 7 | 0 | 14 |
| 02:15 |  | 0 | 0 |  |  | 0 | 4 |  |  |  |  |
| 02:30 |  | 0 | 2 |  |  | 0 | 0 |  |  |  |  |
| 02:45 |  | 0 | 1 | 0 | 5 | 0 | 1 | 0 | 7 | 0 | 12 |
| 03:00 |  | 0 | 0 |  |  | 0 | 0 |  |  |  | 12 |
| 03:15 |  | 0 | 2 |  |  | 0 | 1 |  |  |  |  |
| 03:30 |  | 0 | 0 |  |  | 0 | 1 |  |  |  |  |
| 03:45 |  | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 5 |
| 04:00 |  | 0 | 1 |  |  | 0 | 1 |  |  |  |  |
| 04:15 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 04:30 |  | 0 | 4 |  |  | 0 | 1 |  |  |  |  |
| 04:45 |  | 0 | 3 | 0 | 8 | 0 | 0 | 0 | 2 | 0 | 10 |
| 05:00 |  | 0 | 3 |  |  | 0 | 1 |  |  |  |  |
| 05:15 |  | 0 | 3 |  |  | 0 | 0 |  |  |  |  |
| 05:30 |  | 0 | 1 |  |  | 0 | 0 |  |  |  |  |
| 05:45 |  | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 1 | 0 | 8 |
| 06:00 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 06:15 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 06:30 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 06:45 |  | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 07:00 |  | 1 | 0 |  |  | 2 | 0 |  |  |  |  |
| 07:15 |  | 2 | 0 |  |  | 0 | 0 |  |  |  |  |
| 07:30 |  | 0 | 0 |  |  | 3 | 0 |  |  |  |  |
| 07:45 |  | 1 | 0 | 4 | 0 | 4 | 0 | 9 | 0 | 13 | 0 |
| 08:00 |  | 1 | 0 |  |  | 3 | 0 |  |  |  |  |
| 08:15 |  | 1 | 0 |  |  | 2 | 0 |  |  |  |  |
| 08:30 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 08:45 |  | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 7 | 0 |
| 09:00 |  | 1 | 0 |  |  | 4 | 0 |  |  |  |  |
| 09:15 |  | 1 | 0 |  |  | 1 | 0 |  |  |  |  |
| 09:30 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 09:45 |  | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 7 | 0 |
| 10:00 |  | 2 | 0 |  |  | 0 | 0 |  |  |  |  |
| 10:15 |  | 0 | 0 |  |  | 2 | 0 |  |  |  |  |
| 10:30 |  | 1 | 0 |  |  | 1 | 0 |  |  |  |  |
| 10:45 |  | 1 | 0 | 4 | 0 | 1 | 0 | 4 | 0 | 8 | 0 |
| 11:00 |  | 2 | 0 |  |  | 0 | 0 |  |  |  |  |
| 11:15 |  | 1 | 0 |  |  | 4 | 0 |  |  |  |  |
| 11:30 |  | 0 | 0 |  |  | 0 | 0 |  |  |  |  |
| 11:45 |  | 3 | 0 | 6 | 0 | 3 | 0 | 7 | 0 | 13 | 0 |
| Total |  | 18 | 33 |  |  | 31 | 22 |  |  | 49 | 55 |
| Percent |  | 35.3\% | 64.7\% |  |  | 58.5\% | 41.5\% |  |  | 47.1\% | 52.9\% |
| Grand |  | 31 | 72 |  |  | 61 | 47 |  |  | 92 | 119 |
| Percent |  | 30.1\% | 69.9\% |  |  | 56.5\% | 43.5\% |  |  | 43.6\% | 56.4\% |
| ADT |  | DT 106 |  | DT 106 |  |  |  |  |  |  |  |



ADT 106
ㅇ
$\stackrel{』}{\stackrel{~}{㠯}}$

$11: 00$
7
$17: 00$
13


Location：Tarkiln Hill Place
Location：South of Chaffee Street
City／State：New Bedford，MA


0
0
8
0
$1: 00$
6
$: 00$
8
¢ 9
$00: 乙$
21
$00: 1$ m $\stackrel{m}{-}$


## Accurate Counts

978-664-2565

N/S Street : Church Street
File Name : 88070001
ENW Street : Chaffee Street
Site Code : 88070001
City/State : New Bedford, MA
Weather : Cloudy
Start Date : 12/1/2020
Page No : 1

| Groups Printed-Cars - Trucks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Church St From North |  |  | Chaffee St From East |  |  | Church St From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 23 | 95 | 3 | 7 | 0 | 11 | 1 | 29 | 5 | 0 | 0 | 2 | 176 |
| 07:15 AM | 26 | 54 | 2 | 5 | 1 | 14 | 2 | 45 | 9 | 1 | 1 | 2 | 162 |
| 07:30 AM | 24 | 59 | 6 | 6 | 3 | 25 | 2 | 36 | 2 | 0 | 0 | 0 | 163 |
| 07:45 AM ! | 20 | 59 | 3 | 6 | 3 | 7 | 1 | 26 | 6 | 1 | 0 | 0 | 132 |
| Total | 93 | 267 | 14 | 24 | 7 | 57 | 6 | 136 | 22 | 2 | 1 | 4 | 633 |
| 08:00 AM | 12 | 49 | 3 | 6 | 1 | 13 | 3 | 50 | 6 | 0 | 0 | 1 | 144 |
| 08:15 AM | 5 | 51 | 2 | 6 | 0 | 9 | 1 | 41 | 6 | 3 | 0 | 0 | 124 |
| 08:30 AM | 14 | 37 | 6 | 9 | 4 | 10 | 1 | 35 | 8 | 2 | 1 | 1 | 128 |
| 08:45 AM | 11 | 49 | 2 | 3 | 1 | 11 | 1 | 37 | 4 | 3 | 0 | 3 | 125 |
| Total | 42 | 186 | 13 | 24 | 6 | 43 | 6 | 163 | 24 | 8 | 1 | 5 | 521 |
| Grand Total | 135 | 453 | 27 | 48 | 13 | 100 | 12 | 299 | 46 | 10 | 2 | 9 | 1154 |
| Apprch \% | 22 | 73.7 | 4.4 | 29.8 | 8.1 | 62.1 | 3.4 | 83.8 | 12.9 | 47.6 | 9.5 | 42.9 |  |
| Total \% | 11.7 | 39.3 | 2.3 | 4.2 | 1.1 | 8.7 | 1 | 25.9 | 4 | 0.9 | 0.2 | 0.8 |  |
| Cars | 133 | 404 | 26 | 46 | 13 | 96 | 12 | 283 | 44 | 7 | 2 | 9 | 1075 |
| \% Cars | 98.5 | 89.2 | 96.3 | 95.8 | 100 | 96 | 100 | 94.6 | 95.7 | 70 | 100 | 100 | 93.2 |
| Trucks | 2 | 49 | 1 | 2 | 0 | 4 | 0 | 16 | 2 | 3 | 0 | 0 | 79 |
| \% Trucks | 1.5 | 10.8 | 3.7 | 4.2 | 0 | 4 | 0 | 5.4 | 4.3 | 30 | 0 | 0 | 6.8 |


|  | Church St From North |  |  |  | Chaffee St <br> From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | p. Tolal | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 <br> Peak Hour for Entire Intersection Begins at 07:00 AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:00 AM | 23 | 95 | 3 | 121 | 7 | 0 | 11 | 18 | 1 | 29 | 5 | 35 | 0 | 0 | 2 | 2 | 176 |
| 07:15 AM | 26 | 54 | 2 | 82 | 5 | 1 | 14 | 20 | 2 | 45 | 9 | 56 | 1 | 1 | 2 | 4 | 162 |
| 07:30 AM | 24 | 59 | 6 | 89 | 6 | 3 | 25 | 34 | 2 | 36 | 2 | 40 | 0 | 0 | 0 | 0 | 163 |
| 07:45 AM | 20 | 59 | 3 | 82 | 6 | 3 | 7 | 16 | 1 | 26 | 6 | 33 | 1 | 0 | 0 | 1 | 132 |
| Total Volume | 93 | 267 | 14 | 374 | 24 | 7 | 57 | 88 | 6 | 136 | 22 | 164 | 2 | 1 | 4 | 7 | 633 |
| \% App. Total | 24.9 | 71.4 | 3.7 |  | 27.3 | 8 | 64.8 |  | 3.7 | 82.9 | 13.4 |  | 28.6 | 14.3 | 57.1 |  |  |
| PHF | . 894 | . 703 | . 583 | . 773 | . 857 | . 583 | . 570 | . 647 | 750 | . 756 | . 611 | 732 | . 500 | 250 | . 500 | . 438 | 899 |
| Cars | 92 | 233 | 13 | 338 | 22 | 7 | 55 | 84 | 6 | 131 | 22 | 159 | 2 | 1 | 4 | 7 | 588 |
| \% Cars | 98.9 | 87.3 | 92.9 | 90.4 | 91.7 | 100 | 96.5 | 95.5 | 100 | 96.3 | 100 | 97.0 | 100 | 100 | 100 | 100 | 92.9 |
| Trucks | 1 | 34 | 1 | 36 | 2 | 0 | 2 | 4 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 45 |
| \% Trucks | 1.1 | 12.7 | 7.1 | 9.6 | 8.3 | 0 | 3.5 | 4.5 | 0 | 3.7 | 0 | 3.0 | 0 | 0 | 0 | 0 | 7.1 |

## Accurate Counts

978-664-2565

N/S Street: Church Street
E/W Street: Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy

File Name : 88070001
Site Code : 88070001
Start Date : 12/1/2020 Page No : 2


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| 07:00 AM |  |  |  |  | 07:15 AM |  |  |  | 08:00 AM |  |  |  | 08:00 AM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 23 | 95 | 3 | 121 | 5 | 1 | 14 | 20 | 3 | 50 | 6 | 59 | 0 | 0 | 1 | 1 |
| +15 mins. | 26 | 54 | 2 | 82 | 6 | 3 | 25 | 34 | 1 | 41 | 6 | 48 | 3 | 0 | 0 | 3 |
| +30 mins. | 24 | 59 | 6 | 89 | 6 | 3 | 7 | 16 | 1 | 35 | 8 | 44 | 2 | 1 | 1 | 4 |
| +45 mins. | 20 | 59 | 3 | 82 | 6 | 1 | 13 | 20 | 1 | 37 | 4 | 42 | 3 | 0 | 3 | 6 |
| Total Volume | 93 | 267 | 14 | 374 | 23 | 8 | 59 | 90 | 6 | 163 | 24 | 193 | 8 | 1 | 5 | 14 |
| \% App, Total | 24.9 | 71.4 | 3.7 |  | 25.6 | 8.9 | 65.6 |  | 3.1 | 84.5 | 12.4 |  | 57.1 | 7.1 | 35.7 |  |
| PHF | . 894 | . 703 | . 583 | . 773 | . 958 | . 667 | . 590 | . 662 | . 500 | . 815 | . 750 | . 818 | . 667 | . 250 | 417 | . 583 |
| Cars | 92 | 233 | 13 | 338 | 22 | 8 | 57 | 87 | 6 | 152 | 22 | 180 | 5 | 1 | 5 | 11 |
| \% Cars | 98.9 | 87.3 | 92.9 | 90.4 | 95.7 | 100 | 96.6 | 96.7 | 100 | 93.3 | 91.7 | 93.3 | 62.5 | 100 | 100 | 78.6 |
| Trucks | 1 | 34 | 1 | 36 | 1 | 0 | 2 | 3 | 0 | 11 | 2 | 13 | 3 | 0 | 0 | 3 |
| \% Trucks | 1.1 | 12.7 | 7.1 | 9.6 | 4.3 | 0 | 3.4 | 3.3 | 0 | 6.7 | 8.3 | 6.7 | 37.5 | 0 | 0 | 21.4 |

## Accurate Counts

978-664-2565
N/S Street : Church Street
E/W Street : Chaffee Street
City/State : New Bedford, M

File Name : 88070001
E/W Street : Chaffee Street
Bedford, MA
Site Code : 88070001
Start Date : 12/1/2020
Page No : 4


|  | Church St From North |  |  |  | Chaffee St From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | Tolal | Left | Thru | Right | App. Total | Left | Thru | Right | Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:00 AM | 23 | 73 | 3 | 99 | 6 | 0 | 10 | 16 | 1 | 27 | 5 | 33 | 0 | 0 | 2 | 2 | 150 |
| 07:15 AM | 26 | 52 | 2 | 80 | 5 | 1 | 14 | 20 | 2 | 43 | 9 | 54 | 1 | 1 | 2 | 4 | 158 |
| 07:30 AM | 24 | 52 | 5 | 81 | 6 | 3 | 24 | 33 | 2 | 35 | 2 | 39 | 0 | 0 | 0 | 0 | 153 |
| 07:45 AM | 19 | 56 | 3 | 78 | 5 | 3 | 7 | 15 | 1 | 26 | 6 | 33 | 1 | 0 | 0 | 1 | 127 |
| Total Volume | 92 | 233 | 13 | 338 | 22 | 7 | 55 | 84 | 6 | 131 | 22 | 159 | 2 | 1 | 4 | 7 | 588 |
| \% App. Total | 27.2 | 68.9 | 3.8 |  | 26.2 | 8.3 | 65.5 |  | 3.8 | 82.4 | 13.8 |  | 28.6 | 14.3 | 57.1 |  |  |
| PHF | . 885 | . 798 | . 650 | . 854 | . 917 | . 583 | . 573 | . 636 | . 750 | . 762 | . 611 | 736 | . 500 | . 250 | . 500 | 438 | 930 |

## Accurate Counts

978-664-2565

N/S Street : Church Street
EN Street : Chaffee Street
City/State : New Bedford, MA
File Name : 88070001
Site Code : 88070001
Start Date : 12/1/2020
Page No : 7
Weather : Cloudy
Groups Printed- Trucks

| Groups Printed- Trucks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Church St From North |  |  | Chaffee St From East |  |  | Church St From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thrul | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 0 | 22 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 26 |
| 07:15 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 4 |
| 07:30 AM | 0 | 7 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 10 |
| 07:45 AM | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 1 | 34 | 1 | 2 | 0 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 45 |
| 08:00 AM | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 8 |
| 08:15 AM | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 13 |
| 08:30 AM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 5 |
| 08:45 AM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 8 |
| Total | 1 | 15 | 0 | 0 | 0 | 2 | 0 | 11 | 2 | 3 | 0 | 0 | 34 |
| Grand Total | 2 | 49 | 1 | 2 | 0 | 4 | 0 | 16 | 2 | 3 | 0 | 0 | 79 |
| Apprch \% | 3.8 | 94.2 | 1.9 | 33.3 | 0 | 66.7 | 0 | 88.9 | 11.1 | 100 | 0 | 0 | , |
| Total \% | 2.5 | 62 | 1.3 | 2.5 | 0 | 5.1 | 0 | 20.3 | 2.5 | 3.8 | 0 | 0 |  |


|  | Church St <br> From North |  |  |  | Chaffee St From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:00 AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:00 AM | 0 | 22 | 0 | 22 | 1 | 0 | 1 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 26 |
| 07:15 AM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 4 |
| 07:30 AM | 0 | 7 | 1 | 8 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 10 |
| 07:45 AM | 1 | 3 | 0 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total Volume | 1 | 34 | 1 | 36 | 2 | 0 | 2 | 4 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 45 |
| \% App. Total | 2.8 | 94.4 | 2.8 |  | 50 | 0 | 50 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  |  |
| PHF | . 250 | . 386 | . 250 | . 409 | . 500 | . 000 | . 500 | . 500 | . 000 | . 625 | . 000 | . 625 | . 000 | . 000 | . 000 | . 000 | . 433 |

## Accurate Counts

978-664-2565

N/S Street: Church Street
File Name : 88070001
Site Code : 88070001
Start Date: 12/1/2020
Page No : 10
ENW Street : Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy
Groups Printed-Bikes Peds

|  | Church St From North |  |  |  | Chaffee St From East |  |  |  | Church St <br> From South |  |  |  | Chaffee St <br> From West |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | Peds | Left 1 | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu Tolal | Inclu Totar | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 2 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 3 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 2 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 1 | 6 |
| Grand Total | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 7 | 2 | 9 |
| Apprch \% | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  |  |  |  |
| Total \% | 0 | 0 | 0 |  | 0 | 50 | 0 |  | 0 | 0 | 0 |  | 0 | 50 | 0 |  | 77.8 | 22.2 |  |


|  | Church St From North |  |  |  | Chaffee St From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Tolal | Left | Thru | Right | App. Total | Left | Thru | Right | App Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 <br> Peak Hour for Entire Intersection Begins at 07:15 AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| \% App. Total | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  |  |
| PHF | . 000 | . 000 | . 000 | . 000 | . 000 | . 250 | . 000 | 250 | . 000 | . 000 | . 000 | . 000 | . 000 | 250 | . 000 | 250 | 500 |

## Accurate Counts

978-664-2565

N/S Street: Church Street
EN Street: Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy

File Name : 88070001
Site Code : 88070001
Start Date : 12/1/2020
Page No : 11


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 07:00 AM |  |  |  | 07:15 AM |  |  |  | 07:00 AM |  |  |  | 07:00 AM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins, | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| \% App. Total | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  |
| PHF | . 000 | 000 | . 000 | . 000 | . 000 | 250 | . 000 | . 250 | . 000 | . 000 | . 000 | . 000 | . 000 | . 250 | . 000 | . 250 |

## Accurate Counts

978-664-2565

N/S Street: Church Street
File Name : 88070001
E/N Street : Chaffee Street
City/State : New Bedford, MA
Site Code : 88070001
Weather : Cloudy
Start Date: 12/1/2020
Page No : 1

| Groups Printed- Cars - Trucks |  |  |  |  |  |  |  |  |  |  |  |  | nt. Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Church St From North |  |  | Chaffee St From East |  |  | Church St From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru ${ }^{1}$ | Right |  |
| 02:00 PM | 17 | 57 | 0 | 3 | 1 | 13 | 0 | 54 | 5 | 0 | 1 | 2 | 153 |
| 02:15 PM | 20 | 62 | 0 | 2 | 2 | 17 | 0 | 64 | 4 | 2 | 2 | 0 | 175 |
| 02:30 PM | 13 | 67 | 4 | 13 | 3 | 42 | 1 | 85 | 6 | 1 | 4 | 1 | 240 |
| 02:45 PM | 13 | 71 | 3 | 7 | 1 | 15 | 2 | 73 | 10 | 1 | 2 | 3 | 201 |
| Total | 63 | 257 | 7 | 25 | 7 | 87 | 3 | 276 | 25 | 4 | 9 | 6 | 769 |
| 03:00 PM | 18 | 84 | 2 | 6 | 0 | 25 | 1 | 134 | 12 | 4 | 0 | 3 | 289 |
| 03:15 PM | 11 | 69 | 1 | 5 | 1 | 11 | 3 | 92 | 10 | 0 | 0 | 2 | 205 |
| 03:30 PM | 17 | 109 | 5 | 9 | 3 | 13 | 0 | 72 | 7 | 1 | 1 | 1 | 238 |
| 03:45 PM | 23 | 77 | 1 | 13 | 0 | 10 | 4 | 66 | 9 | 3 | 1 | 1 | 208 |
| Total | 69 | 339 | 9 | 33 | 4 | 59 | 8 | 364 | 38 | 8 | 2 | 7 | 940 |
| 04:00 PM | 11 | 93 | 3 | 7 | 1 | 18 | 2 | 77 | 13 | 5 | 0 | 4 | 234 |
| 04:15 PM | 15 | 84 | 3 | 8 | 4 | 12 | 2 | 66 | 16 | 6 | 0 | 0 | 216 |
| 04:30 PM | 20 | 95 | 3 | 8 | 1 | 16 | 4 | 61 | 12 | 7 | 0 | 0 | 227 |
| 04:45 PM | 17 | 79 | 9 | 6 | 3 | 11 | 3 | 57 | 10 | 4 | 4 | 4 | 207 |
| Total | 63 | 351 | 18 | 29 | 9 | 57 | 11 | 261 | 51 | 22 | 4 | 8 | 884 |
| 05:00 PM | 17 | 80 | 3 | 12 | 1 | 11 | 1 | 84 | 6 | 9 | 5 | 5 | 234 |
| 05:15 PM | 8 | 58 | 0 | 5 | 1 | 9 | 1 | 65 | 6 | 3 | 2 | 5 | 163 |
| 05:30 PM | 14 | 43 | 2 | 6 | 3 | 10 | 1 | 57 | 6 | 0 | 2 | 2 | 146 |
| 05:45 PM | 13 | 46 | 8 | 3 | 3 | 6 | 3 | 44 | 8 | 8 | 3 | 4 | 149 |
| Total | 52 | 227 | 13 | 26 | 8 | 36 | 6 | 250 | 26 | 20 | 12 | 16 | 692 |
| Grand Total | 247 | 1174 | 47 | 113 | 28 | 239 | 28 | 1151 | 140 | 54 | 27 | 37 | 3285 |
| Apprch \% | 16.8 | 80 | 3.2 | 29.7 | 7.4 | 62.9 | 2.1 | 87.3 | 10.6 | 45.8 | 22.9 | 31.4 |  |
| Total \% | 7.5 | 35.7 | 1.4 | 3.4 | 0.9 | 7.3 | 0.9 | 35 | 4.3 | 1.6 | 0.8 | 1.1 |  |
| Cars | 244 | 1140 | 46 | 111 | 28 | 214 | 28 | 1129 | 139 | 52 | 27 | 36 | 3194 |
| \% Cars | 98.8 | 97.1 | 97.9 | 98.2 | 100 | 89.5 | 100 | 98.1 | 99.3 | 96.3 | 100 | 97.3 | 97.2 |
| Trucks | 3 | 34 | 1 | 2 | 0 | 25 | 0 | 22 | 1 | 2 | 0 | 1 | 91 |
| \% Trucks | 1.2 | 2.9 | 2.1 | 1.8 | 0 | 10.5 | 0 | 1.9 | 0.7 | 3.7 | 0 | 2.7 | 2.8 |


|  | Church St From North |  |  |  | Chaffee St From East |  |  |  | Church St From South |  |  |  | Chaffee St <br> From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Tolal | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 03:00 PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03:00 PM | 18 | 84 | 2 | 104 | 6 | 0 | 25 | 31 | 1 | 134 | 12 | 147 | 4 | 0 | 3 | 7 | 289 |
| 03:15 PM | 11 | 69 | 1 | 81 | 5 | 1 | 11 | 17 | 3 | 92 | 10 | 105 | 0 | 0 | 2 | 2 | 205 |
| 03:30 PM | 17 | 109 | 5 | 131 | 9 | 3 | 13 | 25 | 0 | 72 | 7 | 79 | 1 | 1 | 1 | 3 | 238 |
| 03:45 PM | 23 | 77 | 1 | 101 | 13 | 0 | 10 | 23 | 4 | 66 | 9 | 79 | 3 | 1 | 1 | 5 | 208 |
| Total Volume | 69 | 339 | 9 | 417 | 33 | 4 | 59 | 96 | 8 | 364 | 38 | 410 | 8 | 2 | 7 | 17 | 940 |
| \% App. Total | 16.5 | 81.3 | 2.2 |  | 34.4 | 4.2 | 61.5 |  | 2 | 88.8 | 9.3 |  | 47.1 | 11.8 | 41.2 |  |  |
| PHF | . 750 | . 778 | 450 | 796 | . 635 | . 333 | . 590 | . 774 | . 500 | . 679 | 792 | . 697 | . 500 | . 500 | . 583 | . 607 | . 813 |
| Cars | 68 | 331 | 9 | 408 | 32 | 4 | 56 | 92 | 8 | 356 | 37 | 401 | 8 | 2 | 7 | 17 | 918 |
| \% Cars | 98.6 | 97.6 | 100 | 97.8 | 97.0 | 100 | 94.9 | 95.8 | 100 | 97.8 | 97.4 | 97.8 | 100 | 100 | 100 | 100 | 97.7 |
| Trucks | 1 | 8 | 0 | 9 | 1 | 0 | 3 | 4 | 0 | 8 | 1 | 9 | 0 | 0 | 0 | 0 | 22 |
| \% Trucks | 1.4 | 2.4 | 0 | 2.2 | 3.0 | 0 | 5.1 | 4.2 | 0 | 2.2 | 2.6 | 2.2 | 0 | 0 | 0 | 0 | 2.3 |

## Accurate Counts

## 978-664-2565

N/S Street : Church Street
File Name : 88070001
ENW Street : Chaffee Street
City/State : New Bedford, MA
Site Code : 88070001
Start Date: 12/1/2020
Weather : Cloudy


Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| 03:30 PM |  |  |  |  | 02:15 PM |  |  | 1 02:30 PM |  |  |  |  | 04:30 PM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 17 | 109 | 5 | 131 | 2 | 2 | 17 | 21 | 1 | 85 | 6 | 92 | 7 | 0 | 0 | 7 |
| +15 mins. | 23 | 77 | 1 | 101 | 13 | 3 | 42 | 58 | 2 | 73 | 10 | 85 | 4 | 4 | 4 | 12 |
| +30 mins. | 11 | 93 | 3 | 107 | 7 | 1 | 15 | 23 | 1 | 134 | 12 | 147 | 9 | 5 | 5 | 19 |
| +45 mins. | 15 | 84 | 3 | 102 | 6 | 0 | 25 | 31 | 3 | 92 | 10 | 105 | 3 | 2 | 5 | 10 |
| Total Volume | 66 | 363 | 12 | 441 | 28 | 6 | 99 | 133 | 7 | 384 | 38 | 429 | 23 | 11 | 14 | 48 |
| \% App. Total | 15 | 82.3 | 2.7 |  | 21.1 | 4.5 | 74.4 |  | 1.6 | 89.5 | 8.9 |  | 47.9 | 22.9 | 29.2 |  |
| PHF | . 717 | . 833 | 600 | . 842 | . 538 | . 500 | . 589 | . 573 | 583 | . 716 | . 792 | 730 | . 639 | . 550 | . 700 | . 632 |
| Cars | 66 | 354 | 12 | 432 | 27 | 6 | 80 | 113 | 7 | 372 | 37 | 416 | 23 | 11 | 14 | 48 |
| \% Cars | 100 | 97.5 | 100 | 98 | 96.4 | 100 | 80.8 | 85 | 100 | 96.9 | 97.4 | 97 | 100 | 100 | 100 | 100 |
| Trucks | 0 | 9 | 0 | 9 | 1 | 0 | 19 | 20 | 0 | 12 | 1 | 13 | 0 | 0 | 0 | 0 |
| \% Trucks | 0 | 2.5 | 0 | 2 | 3.6 | 0 | 19.2 | 15 | 0 | 3.1 | 2.6 | 3 | 0 | 0 | 0 | 0 |

## Accurate Counts

978-664-2565

N/S Street: Church Street
File Name : 88070001
Site Code : 88070001
Start Date : 12/1/2020
Page No : 4
City/State : New Bedford, MA

| Groups Printed-Cars |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Church St From North |  |  | Chaffee St From East |  |  | Church St From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 02:00 PM | 17 | 55 | 0 | 3 | 1 | 12 | 0 | 54 | 5 | 0 | 1 | 2 | 150 |
| 02:15 PM | 19 | 58 | 0 | 2 | 2 | 17 | 0 | 60 | 4 | 1 | 2 | 0 | 165 |
| 02:30 PM | 13 | 63 | 3 | 12 | 3 | 26 | 1 | 80 | 6 | 1 | 4 | 1 | 213 |
| 02:45 PM | 12 | 61 | 3 | 7 | 1 | 14 | 2 | 71 | 10 | 1 | 2 | 2 | 186 |
| Total | 61 | 237 | 6 | 24 | 7 | 69 | 3 | 265 | 25 | 3 | 9 | 5 | 714 |
| 03:00 PM | 18 | 83 | 2 | 6 | 0 | 23 | 1 | 129 | 12 | 4 | 0 | 3 | 281 |
| 03:15 PM | 10 | 67 | 1 | 5 | 1 | 11 | 3 | 92 | 9 | 0 | 0 | 2 | 201 |
| 03:30 PM | 17 | 106 | 5 | 8 | 3 | 12 | 0 | 72 | 7 | 1 | 1 | 1 | 233 |
| 03:45 PM | 23 | 75 | 1 | 13 | 0 | 10 | 4 | 63 | 9 | 3 | 1 | 1 | 203 |
| Total | 68 | 331 | 9 | 32 | 4 | 56 | 8 | 356 | 37 | 8 | 2 | 7 | 918 |
| 04:00 PM | 11 | 89 | 3 | 7 | 1 | 17 | 2 | 77 | 13 | 5 | 0 | 4 | 229 |
| 04:15 PM | 15 | 84 | 3 | 8 | 4 | 12 | 2 | 64 | 16 | 5 | 0 | 0 | 213 |
| 04:30 PM | 20 | 94 | 3 | 8 | 1 | 15 | 4 | 61 | 12 | 7 | 0 | 0 | 225 |
| 04:45 PM | 17 | 78 | 9 | 6 | 3 | 11 | 3 | 56 | 10 | 4 | 4 | 4 | 205 |
| Total | 63 | 345 | 18 | 29 | 9 | 55 | 11 | 258 | 51 | 21 | 4 | 8 | 872 |
| 05:00 PM | 17 | 80 | 3 | 12 | 1 | 10 | 1 | 84 | 6 | 9 | 5 | 5 | 233 |
| 05:15 PM | 8 | 58 | 0 | 5 | 1 | 9 | 1 | 65 | 6 | 3 | 2 | 5 | 163 |
| 05:30 PM | 14 | 43 | 2 | 6 | 3 | 9 | 1 | 57 | 6 | 0 | 2 | 2 | 145 |
| 05:45 PM | 13 | 46 | 8 | 3 | 3 | 6 | 3 | 44 | 8 | 8 | 3 | 4 | 149 |
| Total | 52 | 227 | 13 | 26 | 8 | 34 | 6 | 250 | 26 | 20 | 12 | 16 | 690 |
| Grand Total : | 244 | 1140 | 46 | 111 | 28 | 214 | 28 | 1129 | 139 | 52 | 27 | 36 | 3194 |
| Apprch \% | 17.1 | 79.7 | 3.2 | 31.4 | 7.9 | 60.6 | 2.2 | 87.1 | 10.7 | 45.2 | 23.5 | 31.3 |  |
| Total \% | 7.6 | 35.7 | 1.4 | 3.5 | 0.9 | 6.7 | 0.9 | 35.3 | 4.4 | 1.6 | 0.8 | 1.1 |  |


|  | Church St From North |  |  |  | Chaffee St From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App Total | Left | Thru | Right | App Total | Left | Thru | Right | App. Total | Left | Thru | Right | App Total | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 03:00 PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03:00 PM | 18 | 83 | 2 | 103 | 6 | 0 | 23 | 29 | 1 | 129 | 12 | 142 | 4 | 0 | 3 | 7 | 281 |
| 03:15 PM | 10 | 67 | 1 | 78 | 5 | 1 | 11 | 17 | 3 | 92 | 9 | 104 | 0 | 0 | 2 | 2 | 201 |
| 03:30 PM | 17 | 106 | 5 | 128 | 8 | 3 | 12 | 23 | 0 | 72 | 7 | 79 | 1 | 1 | 1 | 3 | 233 |
| 03:45 PM | 23 | 75 | 1 | 99 | 13 | 0 | 10 | 23 | 4 | 63 | 9 | 76 | 3 | 1 | 1 | 5 | 203 |
| Total Volume | 68 | 331 | 9 | 408 | 32 | 4 | 56 | 92 | 8 | 356 | 37 | 401 | 8 | 2 | 7 | 17 | 918 |
| \% App. Total | 16.7 | 81.1 | 2.2 |  | 34.8 | 4.3 | 60.9 |  | 2 | 88.8 | 9.2 |  | 47.1 | 11.8 | 41.2 |  |  |
| PHF | . 739 | . 781 | 450 | . 797 | . 615 | . 333 | .609 | . 793 | . 500 | . 690 | . 771 | . 706 | . 500 | . 500 | . 583 | . 607 | 817 |

## Accurate Counts

978-664-2565

N/S Street: Church Street
File Name : 88070001
Site Code: 88070001
Start Date: 12/1/2020
Page No : 7
ENW Street: Chaffee Street
City/State : New Bedford, MA

| Groups Printed- Trucks |  |  |  |  |  |  |  |  |  |  |  |  | nt. Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Church St From North |  |  | Chaffee St From East |  |  | Church St From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 02:00 PM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 02:15 PM | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 10 |
| 02:30 PM | 0 | 4 | 1 | 1 | 0 | 16 | 0 | 5 | 0 | 0 | 0 | 0 | 27 |
| 02:45 PM | 1 | 10 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 15 |
| Total | 2 | 20 | 1 | 1 | 0 | 18 | 0 | 11 | 0 | 1 | 0 | 1 | 55 |
| 03:00 PM | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 8 |
| 03:15 PM | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 |
| 03:30 PM | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 03:45 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 5 |
| Total | 1 | 8 | 0 | 1 | 0 | 3 | 0 | 8 | 1 | 0 | 0 | 0 | 22 |
| 04:00 PM | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 3 |
| 04:30 PM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| Total | 0 | 6 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 1 | 0 | 0 | 12 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Grand Total | 3 | 34 | 1 | 2 | 0 | 25 | 0 | 22 | 1 | 2 | 0 | 1 \| | 91 |
| Apprch \% | 7.9 | 89.5 | 2.6 | 7.4 | 0 | 92.6 | 0 | 95.7 | 4.3 | 66.7 | 0 | 33.3 |  |
| Total \% | 3.3 | 37.4 | 1.1 | 2.2 | 0 | 27.5 | 0 | 24.2 | 1.1 | 2.2 | 0 | 1.1 |  |


|  | Church St From North |  |  |  | Chaffee St From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Tolal | Left | Thru | Right | App. Tolal | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 02:15 PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 02:15 PM | 1 | 4 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 1 | 0 | 0 | 1 | 10 |
| 02:30 PM | 0 | 4 | 1 | 5 | 1 | 0 | 16 | 17 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 27 |
| 02:45 PM | 1 | 10 | 0 | 11 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 1 | 1 | 15 |
| 03:00 PM | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 8 |
| Total Volume | 2 | 19 | 1 | 22 | 1 | 0 | 19 | 20 | 0 | 16 | 0 | 16 | 1 | 0 | 1 | 2 | 60 |
| \% App. Total | 9.1 | 86.4 | 4.5 |  | 5 | 0 | 95 |  | 0 | 100 | 0 |  | 50 | 0 | 50 |  |  |
| PHF | . 500 | 475 | 250 | . 500 | . 250 | . 000 | 297 | . 294 | . 000 | . 800 | . 000 | . 800 | . 250 | 000 | 250 | 500 | 556 |

## Accurate Counts

978-664-2565

N/S Street: Church Street
File Name : 88070001
Site Code : 88070001
Start Date : 12/1/2020
City/State : New Bedford, MA
Weather : Cloudy
Page No : 10

|  | Groups Printed-Bikes Peds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Church St From North |  |  |  | Chaffee St <br> From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |  |  |
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exelu Total | Inclu Toal | Int. Total |
| 02:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:45 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Total | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 03:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 3 |
| 03:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:45 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Total | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 2 | 5 |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grand Total | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 4 | 8 |
| Apprch \% | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  |  |  |  |
| Total \% | 0 | 50 | 0 |  | 0 | 0 | 0 |  | 0 | 50 | 0 |  | 0 | 0 | 0 |  | 50 | 50 |  |


|  | Church St From North |  |  |  | Chaffee St From East |  |  |  | Church St From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for | Int | sectio | Begin | $\text { at } 02: 15$ | M |  |  |  |  |  |  |  |  |  |  |  |  |
| 02:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:45 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total Volume | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| \% App. Total | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  |  |
| PHF | . 000 | . 250 | . 000 | . 250 | . 000 | . 000 | . 000 | . 000 | . 000 | 250 | . 000 | 250 | . 000 | . 000 | . 000 | 000 | 500 |

## Accurate Counts

978-664-2565

N/S Street : Church Street
E/W Street : Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy

File Name : 88070001
Site Code : 88070001
Start Date : 12/1/2020
Page No : 11


Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 02:00 PM |  |  |  | 02:00 PM |  |  |  | 02:15 PM |  |  |  | 02:00 PM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. ! | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| \% App. Total | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  |
| PHF | . 000 | . 250 | . 000 | 250 | . 000 | . 000 | 000 | . 000 | 000 | 250 | . 000 | . 250 | . 000 | 000 | 000 | 000 |

## Accurate Counts

978-664-2565

N/S Street: Tarklin Place
File Name : 88070002
Site Code : 88070002
Start Date : 12/1/2020
Page No : 1
City/State : New Bedford, MA

| Groups Printed- Cars - Trucks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tarklin PI From North |  |  | Chaffee St From East |  |  | Tarklin PI From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 07:15 AM | 2 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
| 07:30 AM | 0 | 0 | 0 | 6 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 07:45 AM | 0 | 0 | 0 | 3 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 8 |
| Total | 4 | 0 | 0 | 10 | 9 | 6 | 0 | 0 | 1 | 0 | 1 | 0 | 31 |
| 08:00 AM | 0 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
| 08:15 AM | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 6 |
| 08:30 AM | 1 | 0 | 0 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 12 |
| 08:45 AM | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 7 |
| Total | 3 | 0 | 0 | 7 | 15 | 2 | 0 | 0 | 2 | 0 | 4 | 0 | 33 |
| Grand Total | 7 | 0 | 0 | 17 | 24 | 8 | 0 | 0 | 3 | 0 | 5 | 0 | 64 |
| Apprch \% | 100 | 0 | 0 | 34.7 | 49 | 16.3 | 0 | 0 | 100 | 0 | 100 | 0 |  |
| Total \% | 10.9 | 0 | 0 | 26.6 | 37.5 | 12.5 | 0 | 0 | 4.7 | 0 | 7.8 | 0 |  |
| Cars | 7 | 0 | 0 | 16 | 24 | 8 | 0 | 0 | 2 | 0 | 4 | 0 | 61 |
| \% Cars | 100 | 0 | 0 | 94.1 | 100 | 100 | 0 | 0 | 66.7 | 0 | 80 | 0 | 95.3 |
| Trucks | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 |
| \% Trucks | 0 | 0 | 0 | 5.9 | 0 | 0 | 0 | 0 | 33.3 | 0 | 20 | 0 | 4.7 |


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for E | ire Int | sectio | Begins | at 07:15 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:15 AM | 2 | 0 | 0 | 2 | 1 | 3 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 8 |
| 07:30 AM | 0 | 0 | 0 | 0 | 6 | 1 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 07:45 AM | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 7 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 8 |
| 08:00 AM | 0 | 0 | 0 | 0 | 4 | 2 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 8 |
| Total Volume | 2 | 0 | 0 | 2 | 14 | 8 | 7 | 29 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 34 |
| \% App. Total | 100 | 0 | 0 |  | 48.3 | 27.6 | 24.1 |  | 0 | 0 | 100 |  | 0 | 100 | 0 |  |  |
| PHF | . 250 | . 000 | . 000 | . 250 | . 583 | . 667 | . 583 | . 725 | . 000 | . 000 | . 250 | . 250 | . 000 | . 500 | . 000 | 500 | . 850 |
| Cars | 2 | 0 | 0 | 2 | 13 | 8 | 7 | 28 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 33 |
| \% Cars | 100 | 0 | 0 | 100 | 92.9 | 100 | 100 | 96.6 | 0 | 0 | 100 | 100 | 0 | 100 | 0 | 100 | 97.1 |
| Trucks | 0 | 0 | 0 | 0 | $\uparrow$ | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| \% Trucks | 0 | 0 | 0 | 0 | 7.1 | 0 | 0 | 3.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.9 |

## Accurate Counts

978-664-2565
N/S Street: Tarklin Place
E/W Street: Chaffee Street
City/State: New Bedford, MA
Weather: Cloudy

File Name : 88070002
Site Code : 88070002
Start Date : 12/1/2020
Page No : 2

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| 07:00 AM |  |  |  |  | 07:15 AM |  |  |  | 07:30 AM |  |  |  | 08:00 AM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 2 | 0 | 0 | 2 | 1 | 3 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| +15 mins. | 2 | 0 | 0 | 2 | 6 | 1 | 3 | 10 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| +30 mins. | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| +45 mins. | 0 | 0 | 0 | 0 | 4 | 2 | 1 | 7 | 0 | 0 | 2 | 2 | 0 | 1 | 0 | 1 |
| Total Volume | 4 | 0 | 0 | 4 | 14 | 8 | 7 | 29 | 0 | 0 | 3 | 3 | 0 | 4 | 0 | 4 |
| \% App. Total | 100 | 0 | 0 |  | 48.3 | 27.6 | 24.1 |  | 0 | 0 | 100 |  | 0 | 100 | 0 |  |
| PHF | . 500 | . 000 | . 000 | . 500 | . 583 | . 667 | . 583 | . 725 | . 000 | 000 | . 375 | . 375 | . 000 | 1.000 | . 000 | 1.000 |
| Cars | 4 | 0 | 0 | 4 | 13 | 8 | 7 | 28 | 0 | 0 | 2 | 2 | 0 | 3 | 0 | 3 |
| \% Cars | 100 | 0 | 0 | 100 | 92.9 | 100 | 100 | 96.6 | 0 | 0 | 66.7 | 66.7 | 0 | 75 | 0 | 75 |
| Trucks | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| \% Trucks | 0 | 0 | 0 | 0 | 7.1 | 0 | 0 | 3.4 | 0 | 0 | 33.3 | 33.3 | 0 | 25 | 0 | 25 |

## Accurate Counts

## 978-664-2565

N/S Street : Tarklin Place
EN Street : Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy

File Name : 88070002
Site Code : 88070002
Start Date ; 12/1/2020
Page No : 4

| Groups Printed-Cars |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tarklin PI From North |  |  | Chaffee St From East |  |  | Tarklin PI From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru ! | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 07:15 AM | 2 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
| 07:30 AM | 0 | 0 | 0 | 5 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 07:45 AM | 0 | 0 | 0 | 3 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 8 |
| Total | 4 | 0 | 0 | 9 | 9 | 6 | 0 | 0 | 1 | 0 | 1 | 0 | 30 |
| 08:00 AM | 0 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
| 08:15 AM | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 |
| 08:30 AM | 1 | 0 | 0 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 12 |
| 08:45 AM | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 7 |
| Total | 3 | 0 | 0 | 7 | 15 | 2 | 0 | 0 | 1 | 0 | 3 | 0 | 31 |
| Grand Total | 7 | 0 | 0 | 16 | 24 | 8 | 0 | 0 | 2 | 0 | 4 | 0 | 61 |
| Apprch \% | 100 | 0 | 0 | 33.3 | 50 | 16.7 | 0 | 0 | 100 | 0 | 100 | 0 |  |
| Total \% | 11.5 | 0 | 0 | 26.2 | 39.3 | 13.1 | 0 | 0 | 3.3 | 0 | 6.6 | 0 |  |


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St <br> From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App Total | Left | Thru | Right | App. Tolal | Left | Thru | Right | App Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:15 AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:15 AM | 2 | 0 | 0 | 2 | 1 | 3 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 8 |
| 07:30 AM | 0 | 0 | 0 | 0 | 5 | 1 | 3 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 07:45 AM | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 7 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 8 |
| 08:00 AM | 0 | 0 | 0 | 0 | 4 | 2 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 8 |
| Total Volume | 2 | 0 | 0 | 2 | 13 | 8 | 7 | 28 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 33 |
| \% App. Total | 100 | 0 | 0 |  | 46.4 | 28.6 | 25 |  | 0 | 0 | 100 |  | 0 | 100 | 0 |  |  |
| PHF | . 250 | . 000 | . 000 | . 250 | . 650 | . 667 | . 583 | . 778 | 000 | . 000 | 250 | . 250 | . 000 | 500 | . 000 | . 500 | 917 |

## Accurate Counts

## 978-664-2565

| N/S Street : Tarklin Place | File Name : 88070002 |
| :--- | ---: |
| EW Street : Chaffee Street | Site Code $: 88070002$ |
| City/State : New Bedford, MA | Start Date $: 12 / 1 / 2020$ |
| Weather : Cloudy | Page No $: 7$ |


| Groups Printed- Trucks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tarklin PI From North |  |  | Chaffee St <br> From East |  |  | Tarklin PI From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| Grand Total | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 |
| Apprch \% | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 |  |
| Total \% | 0 | 0 | 0 | 33.3 | 0 | 0 | 0 | 0 | 33.3 | 0 | 33.3 | 0 |  |


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stant Time | Left | Thru | Right | App. Total | Left | Thru | Right | App Total | Left | Thru | Right | App. Tolal | Left | Thru | Right | App. Tolal | \|nt. Total |

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 07:30 AM

| 07:30 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 2 |
| Total Volume | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 3 |
| \% App. Total | 0 | 0 | 0 |  | 100 | 0 | 0 |  | 0 | 0 | 100 |  | 0 | 100 | 0 |  |  |
| PHF | . 000 | 000 | . 000 | . 000 | 250 | . 000 | 000 | . 250 | 000 | 000 | 250 | 250 | 000 | 250 | 000 | 250 | 375 |

## Accurate Counts

978-664-2565
N/S Street: Tarklin Place
EM Street: Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy

File Name : 88070002
Site Code : 88070002
Start Date: 12/1/2020
Page No : 10

|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St From West |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exchu Tout | Inche Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Grand Total | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 5 |
| Apprch \% | 100 | 0 | 0 |  | 0 | 0 | 100 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  |
| Total \% | 50 | 0 | 0 |  | 0 | 0 | 50 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 60 | 40 |  |


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App, Total | Left | Thru | Right | App. Tolal | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:15 AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total Volume | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| \% App. Total | 100 | 0 | 0 |  | 0 | 0 | 100 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |
| PHF | 250 | . 000 | . 000 | . 250 | . 000 | . 000 | 250 | 250 | . 000 | . 000 | . 000 | . 000 | . 000 | 000 | 000 | . 000 | 500 |

## Accurate Counts

978-664-2565

| N/S Street : Tarklin Place | File Name :88070002 |
| :--- | :--- |
| EW Street : Chaffee Street | Site Code $: 88070002$ |
| City/State : New Bedford, MA | Start Date $: 12 / 1 / 2020$ |
| Weather : Cloudy | Page No $: 11$ |



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 07:00 AM | 07:15 AM |  |  |  |  |  |  | 07:00 AM |  |  |  | 07:00 AM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \% App. Total | 100 | 0 | 0 |  | 0 | 0 | 100 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |
| PHF | . 250 | . 000 | . 000 | 250 | . 000 | 000 | 250 | . 250 | . 000 | . 000 | . 000 | . 000 | . 000 | 00 | 00 | 000 |

## Accurate Counts

978-664-2565

N/S Street : Tarklin Place
File Name : 88070002
Site Code : 88070002
Start Date : 12/1/2020
City/State : New Bedford, MA
Page No : 1
Weather : Cloudy
Page No : 1

| Groups Printed-Cars - Trucks |  |  |  |  |  |  |  |  |  |  |  |  | Int Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tarklin PI From North |  |  | Chaffee St From East |  |  | Tarklin Pl From South |  |  | Chaffee St <br> From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 02:00 PM | 3 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 8 |
| 02:15 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 2 | 0 | 5 |
| 02:30 PM | 3 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 1 | 0 | 1 | 0 | 11 |
| 02:45 PM | 3 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 11 |
| Total | 9 | 0 | 0 | 3 | 2 | 9 | 2 | 0 | 5 | 0 | 3 | 2 | 35 |
| 03:00 PM | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 5 |
| 03:15 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:30 PM | 0 | 0 | 0 | 2 | 2 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 9 |
| 03:45 PM | 2 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 1 | 1 | 2 | 0 | 11 |
| Total | 3 | 0 | 0 | 3 | 6 | 7 | 0 | 0 | 2 | 1 | 5 | 0 | 27 |
| 04:00 PM | 2 | 0 | 1 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 6 | 0 | 15 |
| 04:15 PM | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 2 | 0 | 4 | 0 | 10 |
| 04:30 PM | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 0 | 10 |
| 04:45 PM | 5 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 16 |
| Total | 9 | 1 | 1 | 1 | 9 | 6 | 1 | 0 | 3 | 0 | 20 | 0 | 51 |
| 05:00 PM | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 7 | 1 | 8 | 0 | 20 |
| 05:15 PM | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 6 | 0 | 2 | 0 | 11 |
| 05:30 PM | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 05:45 PM | 2 | 0 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Total | 8 | 0 | 1 | 0 | 5 | 6 | 0 | 0 | 13 | 1 | 10 | 0 | 44 |
| Grand Total | 29 | 1 | 2 | 7 | 22 | 28 | 3 | 0 | 23 | 2 | 38 | 2 | 157 |
| Apprch \% ; | 90.6 | 3.1 | 6.2 | 12.3 | 38.6 | 49.1 | 11.5 | 0 | 88.5 | 4.8 | 90.5 | 4.8 |  |
| Total \% | 18.5 | 0.6 | 1.3 | 4.5 | 14 | 17.8 | 1.9 | 0 | 14.6 | 1.3 | 24.2 | 1.3 |  |
| Cars | 28 | 1 | 2 | 7 | 22 | 27 | 3 | 0 | 22 | 2 | 37 | 2 | 153 |
| \% Cars | 96.6 | 100 | 100 | 100 | 100 | 96.4 | 100 | 0 | 95.7 | 100 | 97.4 | 100 | 97.5 |
| Trucks | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 4 |
| \% Trucks | 3.4 | 0 | 0 | 0 | 0 | 3.6 | 0 | 0 | 4.3 | 0 | 2.6 | 0 | 2.5 |


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Tolal | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for E | Ire Int | sectio | Begin | s at 04:30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04:30 PM | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 6 | 0 | 6 | 10 |
| 04:45 PM | 5 | 0 | 0 | 5 | 0 | 5 | 1 | 6 | 0 | 0 | 1 | 1 | 0 | 4 | 0 | 4 | 16 |
| 05:00 PM | 1 | 0 | 0 | 1 | 0 | 1 | 2 | 3 | 0 | 0 | 7 | 7 | 1 | 8 | 0 | 9 | 20 |
| 05:15 PM | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 6 | 6 | 0 | 2 | 0 | 2 | 11 |
| Total Volume | 9 | 1 | 0 | 10 | 0 | 6 | 5 | 11 | 1 | 0 | 14 | 15 | 1 | 20 | 0 | 21 | 57 |
| \% App. Total | 90 | 10 | 0 |  | 0 | 54.5 | 45.5 |  | 6.7 | 0 | 93.3 |  | 4.8 | 95.2 | 0 |  |  |
| PHF | .450 | . 250 | . 000 | . 500 | . 000 | . 300 | . 625 | 458 | . 250 | . 000 | . 500 | . 536 | . 250 | . 625 | . 000 | . 583 | . 713 |
| Cars | 9 | 1 | 0 | 10 | 0 | 6 | 5 | 11 | 1 | 0 | 14 | 15 | 1 | 20 | 0 | 21 | 57 |
| \% Cars | 100 | 100 | 0 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \% Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Accurate Counts

978-664-2565
N/S Street : Tarklin Place
E/W Street : Chaffee Street
City/State: New Bedford, MA
Weather: Cloudy

File Name : 88070002
Site Code : 88070002
Start Date : 12/1/2020
Page No : 2

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 04:00 PM |  |  |  | 03:30 PM |  |  |  | 04:30 PM |  |  |  | 04:15 PM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 2 | 0 | 1 | 3 | 2 | 2 | 3 | 7 | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 4 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 5 | 0 | 0 | 1 | 1 | 0 | 6 | 0 | 6 |
| +30 mins. | 2 | 1 | 0 | 3 | 0 | 4 | 2 | 6 | 0 | 0 | 7 | 7 | 0 | 4 | 0 | 4 |
| +45 mins. | 5 | 0 | 0 | 5 | 1 | 0 | 3 | 4 | 0 | 0 | 6 | 6 | 1 | 8 | 0 | 9 |
| Total Volume | 9 | 1 | 1 | 11 | 3 | 10 | 9 | 22 | 1 | 0 | 14 | 15 | 1 | 22 | 0 | 23 |
| \% App. Total | 81.8 | 9.1 | 9.1 |  | 13.6 | 45.5 | 40.9 |  | 6.7 | 0 | 93.3 |  | 4.3 | 95.7 | 0 |  |
| PHF | , 450 | 250 | . 250 | . 550 | . 375 | . 625 | . 750 | . 786 | 250 | . 000 | . 500 | . 536 | . 250 | . 688 | . 000 | . 639 |
| Cars | 9 | 1 | 1 | 11 | 3 | 10 | 9 | 22 | 1 | 0 | 14 | 15 | 1 | 22 | 0 | 23 |
| \% Cars | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \% Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Accurate Counts

978-664-2565

N/S Street : Tarklin Place
File Name : 88070002
Site Code : 88070002
Start Date: 12/1/2020
Page No : 4
City/State : New Bedford, MA

Groups Printed- Cars


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Intersection Begins at 04:30 PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04:30 PM | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 6 | 0 | 6 | 10 |
| 04:45 PM | 5 | 0 | 0 | 5 | 0 | 5 | 1 | 6 | 0 | 0 | 1 | 1 | 0 | 4 | 0 | 4 | 16 |
| 05:00 PM | 1 | 0 | 0 | 1 | 0 | 1 | 2 |  | 0 | 0 | 7 | 7 | 1 | 8 | 0 | 9 | 20 |
| 05:15 PM | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 6 | 6 | 0 | 2 | 0 | 2 | 11 |
| Total Volume | 9 | 1 | 0 | 10 | 0 | 6 | 5 | 11 | 1 | 0 | 14 | 15 | 1 | 20 | 0 | 21 | 57 |
| \% App. Total | 90 | 10 | 0 |  | 0 | 54.5 | 45.5 |  | 6.7 | 0 | 93.3 |  | 4.8 | 95.2 | 0 |  |  |
| PHF | 450 | . 250 | . 000 | . 500 | . 000 | . 300 | . 625 | 458 | 250 | . 000 | . 500 | 536 | . 250 | . 625 | . 000 | 583 | 713 |

## Accurate Counts

978-664-2565

N/S Street : Tarklin Place
EN Street : Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy
File Name : 88070002
Site Code : 88070002
Start Date : 12/1/2020
Page No : 7

| Groups Printed- Trucks |  |  |  |  |  |  |  |  |  |  |  |  | It. Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tarklin PI From North |  |  | Chaffee St From East |  |  | Tarklin PI From South |  |  | Chaffee St From West |  |  |  |
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right |  |
| 02:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 02:30 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:45 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| 03:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grand Total | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 4 |
| Apprch \% | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 100 | 0 |  |
| Total \% | 25 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 25 | 0 | 25 | 0 |  |


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Tolal | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App Total | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for En | ire Int | sectio | Begins | s at 02:00 | M |  |  |  |  |  |  |  |  |  |  |  |  |
| 02:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 02:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:45 PM | 1 | 0 | 0 | 1 | 0 | 0 | O | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 | 1 |
| Total Volume | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 |
| \% App. Total | 100 | 0 | 0 |  | 0 | 0 | 100 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  |  |
| PHF | . 250 | . 000 | . 000 | . 250 | . 000 | . 000 | 250 | 250 | 000 | . 000 | . 000 | . 000 | . 000 | . 250 | 000 | 250 | . 750 |

## Accurate Counts

978-664-2565

N/S Street: Tarklin Place
File Name : 88070002
ENN Street : Chaffee Street
Site Code : 88070002
City/State : New Bedford, MA
Start Date : $12 / 1 / 2020$
Weather : Cloudy
Page No : 10


| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Grand Total | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 10 | 4 | 14 |
| Apprch \% | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  |  |  |  |
| Total \% | 0 | 50 | 0 |  | 0 | 0 | 0 |  | 0 | 50 | 0 |  | 0 | 0 | 0 |  | 71.4 | 28.6 |  |


|  | Tarklin PI From North |  |  |  | Chaffee St From East |  |  |  | Tarklin PI From South |  |  |  | Chaffee St <br> From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for E | ire Int | section | Begins | at 03:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:45 PM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 4 |
| Total Volume | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 4 |
| \% App. Total | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  |  |
| PHF | . 000 | . 250 | . 000 | . 250 | . 000 | . 000 | . 000 | . 000 | . 000 | 250 | . 000 | 250 | . 000 | . 000 | . 000 | . 000 | 250 |

## Accurate Counts

978-664-2565

N/S Street : Tarklin Place
E/W Street : Chaffee Street
City/State : New Bedford, MA
Weather : Cloudy

File Name : 88070002
Site Code : 88070002
Start Date : 12/1/2020
Page No : 11


Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 03.00 PM |  |  |  | 02:00 PM |  |  |  | 03:00 PM |  |  |  | 02:00 PM |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 |
| \% App Total | 0 | 100 | 0 |  | 0 | 0 | 0 |  | 0 | 100 | 0 |  | 0 | 0 | 0 |  |
| PHF | . 000 | 250 | . 000 | 250 | . 000 | . 000 | . 000 | . 000 | . 000 | . 250 | . 000 | . 250 | 000 | . 000 | . 000 | . 000 |

SEASONAL ADJUSTMENT DATA































38
Bristol
1
INTERSTATE 195






VEHICLE TRAVEL SPEED DATA






Location : Church Street
Location : South of Chaffee Street
City/State: New Bedford, MA





Location: Church Street
City/State: New Bedford, MA



厄్ల


호

\section*{| Accurate Counts |
| :--- | :--- |
| $978-664-2565$ |$\quad$ Page 5}


Location : Church Street Location: South of Chaffee Street City/State: New Bedford, MA








$\infty$
 Location: Tarkiln Hill Place City/State: New Bedford, MA
rmoooooooroooro00000000000N

Location ：Tarkiln Hill Place Location ：South of Chaffee Street City／State：New Bedford，MA


11 MPH
19 MPH
23 MPH
25 MPH

18 MPH
$16-25 \mathrm{MPH}$
38
$71.7 \%$
21
$39.6 \%$
$\odot$

$\checkmark$



Mean Speed（Average）
10 MPH Pace Speed
Number in Pace
Percent in Pace
Number of Vehicles＞ 20 MPH
Percent of Vehicles＞ 20 MPH


> -
$\sigma$
$\pm 10000000000000000000000000$
FM0000000N000－00－000000000才

の

Location: Tarkiln Hill Place
Location: South of Chaffee Street New Bedford, MA

15th Percentile :
50th Percentile :
85h Percentile :
95th Percentile :
Mean Speed(Average) :
10 MPH Pace Speed
Number in Pace :
Percent in Pace
Number of Vehicles $>20 \mathrm{MPH}$
Percent of Vehicles $>20 \mathrm{MPH}$











10 MPH
18 MPH
22 MPH
25 MPH


E
-


PUBLIC TRANSPORTATION INFORMATION


Please note that schedule times are approximate.



Please note that schedule times are approximate.
Regular fare- $\$ 1.50$ per trip
Children under 6-Free when
accompanied by adult (Limit 2
children per adult)
$6-11$ Yrs. Old- $\$ 0.75$ per trip
Senior Citizens $-\$ 0.75$ per trip
Registered Disabled- $\$ 0.75$ per trip
Medicare Recipients- $\$ 0.75$ per trip
Charlie Card Fares
Regular Fare- $\$ 1.40$ per trip
Reduced Fare- $\$ 0.70$ per trip
All buses are
Wheelchair accessible.
NO SUNDAY SERVICE
nOKING: Smoking is prohibited on all
buses.
JOD AND BEVERAGES:
The consuming of food or beverage
of any kind on the bus is prohibited.
Serious injury may occur when
trash is left aboard the vehicle.

BJECTIONABLE PERSONS:
JECTIONABLE PERSONS:
This Authority and its Operator
reserve the right to refuse to
transpart a person under the
transport a person under the
influence of alcohol or drugs, or who is incapable of taking care of
 әyem of se पכns aq oi Alay!! 10 पכn





## FARES

Regular Fare- $\$ 1.50$ per trip
Children under 6-Free when
accompanied by adult (Limit 2 children per adult)

6-11 Yrs. Old-\$0.75 per trip
Senior Citizens- $\$ 0.75$ per trip
Registered Disabled - $\$ 0.75$ per trip Medicare Recipients- $\$ 0.75$ per trip

Charlie Card Fares
Regular Fare $-\$ 1.40$ per trip
Reduced Fare- $\$ 0.70$ per trip
All buses are
wheelchair accessible.

## NO SUNDAY SERVICE

SMOKING: Smoking is prohibited on all
FOOD AND BEVERAGES:

# INTERSECTION CRASH RATE WORKSHEET 



PEAK HOUR VOLUMES

|  |  |  |  |  |  | Total Peak Hourly Approach Volume |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| APPROACH: | 1 | 2 | 3 | 4 | 5 |  |
| DIRECTION | EB | WB | NB | SB |  |  |
| PEAK HOURLY VOLUMES (PM) : | 21 | 119 | 513 | 521 |  | 1,174 |
| " K" FACTOR: | 0.090 | INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME |  |  |  | 13,044 |

TOTAL \# OF CRASHES :


CRASH RATE CALCULATION :


Comments : $\qquad$ Below MassDOT District 5 crash rate
Project Title \& Date: $\qquad$

$$
\operatorname{chatcs}
$$

churchst



WEEKDAY EVENING PEAK HOUR (3:00-4:00 PM)


Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.


U-Haul Moving and Storage
Facility
429 Church Street
Peak Hour Traffic Volumes


WEEKDAY EVENING PEAK HOUR (3:00-4:00 PM)


Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.
Not To Scale
Figure A-2
Proposed Medical Office - New Bedford, MA

| STA. | CITY/TOWN | ROUTE/STREET | LOCATION | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Average Annual Growth Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 38 | Fairhaven | 1.195 | East of Acushnet River | 55.200 |  | 48.956 | 46,908 | 48.639 | 47.430 | 50.371 | 52,000 | 57.728 | 52.820 | 1.00\% |
| \% $\quad 1.00 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# Medical-Dental Office Building <br> (720) 

Vehicle Trip Ends vs: Employees<br>On a: Weekday

## Setting/Location: General Urban/Suburban

Number of Studies: 20
Avg. Num. of Employees: 35
Directional Distribution: 50\% entering, 50\% exiting
Vehicle Trip Generation per Employee

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 8.70 | $5.32-33.00$ | 4.25 |

## Data Plot and Equation



# Medical-Dental Office Building <br> (720) 

Vehicle Trip Ends vs: Employees
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 25
Avg. Num. of Employees: 51
Directional Distribution: $78 \%$ entering, $22 \%$ exiting
Vehicle Trip Generation per Employee

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.68 | $0.25-5.67$ | 0.51 |

## Data Plot and Equation



# Medical-Dental Office Building <br> (720) 

Vehicle Trip Ends vs: Employees
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 29
Avg. Num. of Employees: 48
Directional Distribution: 34\% entering, $66 \%$ exiting
Vehicle Trip Generation per Employee

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.97 | $0.29-2.17$ | 0.35 |

## Data Plot and Equation



## CAPACITY ANALYSIS WORKSHEETS

Church Street at Chaffee Street
Tarkiln Hill Place at Chaffee Street
Church Street at the Project Site Driveway
Chaffee Street at the Project Site Driveway
Tarkiln Hill Place at the Project Site Driveway

Church Street at Chaffee Street






| Minor Lane/Major Mvint | NBL | NBT | NBR EBL_niWBLn1 | SBL | SBT | SBR |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1035 | - | - | 107 | 171 | 887 | - |
| HCM Lane V/C Ratio | 0.014 | - | -0.322 | 0.904 | 0.121 | - | - |
| HCM Control Delay (s) | 8.5 | 0 | -53.8 | 99.4 | 9.6 | 0 | - |
| HCM Lane LOS | A | A | - | F | F | A | A |
| HCM 95th \%otile Q(veh) | 0 | - | - | 1.3 | 6.7 | 0.4 | - |
| H |  |  |  |  |  |  |  |




|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { Intersection }}{\text { Int Delay, s/veh }} 29.2$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |  |
| Lane Configurations |  | $\dagger$ |  |  | $\uparrow$ |  |  | ${ }_{\text {¢ }}$ |  |  | ${ }_{4}$ |  |  |
| Traffic Vol, veh/h | 11 | 2 | 10 | 44 | 4 | 80 | 11 | 530 | 52 | 93 | 492 | 12 |  |
| Future Vol, veh/h | 11 | 2 | 10 | 44 | 4 | 80 | 11 | 530 | 52 | 93 | 492 | 12 |  |
| Conflicting Peds, \#hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Sign Control S | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |  |
| RT Channelized | - | . | None | . | . | None | . | . | None | . | . | None |  |
| Storage Length | - | $\cdot$ | - | - | - | - | - | $\cdot$ | - | - | - | . |  |
| Veh in Median Storage, \# | \# | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |  |
| Grade, \% | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |  |
| Peak Hour Factor | 61 | 61 | 61 | 77 | 77 | 77 | 70 | 70 | 70 | 80 | 80 | 80 |  |
| Heavy Vehicles, \% | 0 | 0 | 0 | 3 | 0 | 5 | 0 | 2 | 3 | 1 | 2 | 0 |  |
| Mumt Flow | 18 | 3 | 16 | 57 | 5 | 104 | 16 | 757 | 74 | 116 | 615 | 15 |  |




| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay, s/veh | 10.1 |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\dagger$ |  |  | ¢ |  |  | $\dagger$ |  |  | $\uparrow$ |  |
| Traffic Vol, veh/h | 5 | 2 | 4 | 33 | 14 | 77 | 9 | 235 | 30 | 126 | 424 | 28 |
| Future Vol, veh/h | 5 | 2 | 4 | 33 | 14 | 77 | 9 | 235 | 30 | 126 | 424 | 28 |
| 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 | $\cdot$ | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 44 | 44 | 44 | 65 | 65 | 65 | 73 | 73 | 73 | 77 | 77 | 77 |
| Heavy Vehicles, \% | 0 | 0 | 0 | 8 | 0 | 4 | 0 | 4 | 0 | 1 | 13 | 7 |
| Mvmt Flow | 11 | 5 | 9 | 51 | 22 | 118 | 12 | 322 | 41 | 164 | 551 | 36 |



| Minor Lane/Major Mvmt | NBL | NBT | NBR EBLn1WBLn1 | SBL | SBT | SBR |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Capacity (veh/h) | 998 | - | - | 129 | 243 | 1201 | - |
| HCM Lane V/C Ratio | 0.012 | - | -0.194 | 0.785 | 0.136 | - | - |
| HCM Control Delay (s) | 8.7 | 0 | - | 39.5 | 58.5 | 8.5 | 0 |




| Approach | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| HCM Control Delay, S\$ 403.7 | $\$ 422.7$ | 0.2 | 1.6 |  |
| HCM LOS | F | F |  |  |



Tarkiln Hill Place at Chaffee Street



HCMLOS

| Minor LanelMajor Mvmt | NBL | NBT | NBR EBLn1WBLn1 | SBL | SBT | SBR |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capacity (veh/h) | - | - | - | - | -1631 | - | - |
| HCM Lane V/C Ratio | - | - | - | - | -0.005 | - | - |
| HCM Control Delay (s) | 0 | - | - | - | - | 7.2 | 0 |




| Approach | EB | WB | NB | SB |
| :--- | ---: | ---: | ---: | ---: |
| HCM Control Delay, s | 9.7 | 9.1 | 0.4 | 6.7 |
| HCM LOS | A | A |  |  |


| Minor Lane/Major Mumt | NBL | NBT | NBR EBLn1WBLn1 | SBL | SBT | SBR |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Capacity (veh/h) | 1634 | - | -804 | 918 | 1595 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | -0.056 | 0.036 | 0.014 | - | - |
| HCM Control Delay (s) | 7.2 | 0 | - | 9.7 | 9.1 | 7.3 | 0 |



Minor Lane/Major Mvint NBL NBT NBREBLn1WBLn1 SBL SBT SBR

Capacity (veh/h)
NBL NBT NBREBLn1WBLn1 SBL SBT SBR
HCML Nat Rais.
HCM Control Delay (s) 0 . . . . 7.20
HCM Lane LOS A . . . . A A
HCM 95th \%tile Q(veh)



| Minor Lane/Major Mvmt | NBL | NBT | NBR EBLn1WBLn1 | SBL | SBT | SBR |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Capacity (veh/h) | 1634 | - | - | 796 | 921 | 1592 | - |
| HCM Lane V/C Ratio | 0.001 | - | -0.056 | 0.038 | 0.015 | - | - |
| HCM Control Delay (s) | 7.2 | 0 | - | 9.8 | 9.1 | 7.3 | 0 |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intersection |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |  |
| Lane Configurations |  | $\uparrow$ |  |  | * |  |  | $\uparrow$ |  |  | $\uparrow$ |  |  |
| Traffic Vol, veh/h | 0 | 2 | 0 | 18 | 10 | 10 | 0 | 0 | 2 | 2 | 0 | 0 |  |
| Future Vol, veh/h | 0 | 2 | 0 | 18 | 10 | 10 | 0 | 0 | 2 | 2 | 0 | 0 |  |
| Conflicting Peds, \#hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Sign Control St | 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 | 50 | 50 | 50 | 73 | 73 | 73 | 25 | 25 | 25 | 25 | 25 | 25 |  |
| Heavy Vehicles, \% | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Mvmt Flow | 0 | 4 | 0 | 25 | 14 | 14 | 0 | - | 8 | 8 | 0 | 0 |  |


Minor Lane/Major Mvmt NBL NBT NBREBLn1WBLn1 SBL SBT SBR

| Capacity (veh/h) | - | - | - | - | -1625 | - | - |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HCM Lane V/C Ratio | - | - | - | - | -0.005 | - | - |
| HCM Control Delay (s) | 0 | - | - | - | - | 7.2 | 0 |
| HCM Lane LOS | A | - | - | - | - | A | A |
| HCM 95th \%tile Q(veh) | - | - | - | - | - | 0 | - |
| H |  |  |  |  |  |  |  |




| Approach | EB | WB | NB | SB |
| :--- | :---: | :---: | :---: | :---: |
| HCM Control Delay,s | 9.8 | 9.1 | 0.3 | 6.7 |
| HCM LOS | A | A |  |  |


| Minor Lane/Major Mumt | NBL | NBT | NBR EBLn1WBLn1 | SBL | SBT | SBR |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Capacity (veh/h) | 1634 | - | -790 | 918 | 1584 | - | - |  |
| HCM Lane V/C Ratio | 0.001 | - | -0.057 | 0.038 | 0.015 | - | - |  |
| HCM Control Delay (s) | 7.2 | 0 | - | 9.8 | 9.1 | 7.3 | 0 | - |
| HCM Lane LOS | A | A | - | A | A | A | A | - |
| HCM 95th \%tile Q(veh) | 0 | - | - | 0.2 | 0.1 | 0 | - | - |




| Intersection |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |


| Major/Minor | Minor2 | Major1 |  | Major2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 1265 | 598 | 603 | 0 | . | 0 |
| Stage 1 | 598 | . | . | . |  |  |
| Stage 2 | 667 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |  |
| Critical Hdwy Stg 1 | 5.42 | . | . | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | $\cdot$ | - | - |  |  |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |  |
| Pot Cap-1 Maneuver | 187 | 502 | 975 | . | - |  |
| Stage 1 | 549 | - | - | - | - | - |
| Stage 2 | 510 | - | - | - | - |  |
| Platoon blocked, \% |  |  |  | - | - | - |
| Mov Cap-1 Maneuver | 184 | 502 | 975 | - | - |  |
| Mov Cap-2 Maneuver | 184 | - | - | - | - | - |
| Stage 1 | 539 | - | - | - | - |  |
| Stage 2 | 510 | - | - | - | - | - |


| Approach | EB | NB | SB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 20.2 | 0.1 | 0 |
| HCM LOS | C |  |  |


| Minor Lane/Major Mvmt | NBL | NBT EBLn1 | SBT | SBR |  |
| :--- | ---: | ---: | ---: | ---: | :--- |
| Capacity (veh/h) | 975 | -276 | - | - |  |
| HCM Lane V/C Ratio | 0.011 | -0.142 | - | - |  |
| HCM Control Delay (s) | 8.7 | 0 | 20.2 | - | - |
| HCM Lane LOS | A | A | C | - | - |
| HCM 95th \%tile Q(veh) | 0 | - | 0.5 | - | - |






| Minor Lane/Major Mvmt | NBL_n1 | EBT | EBR | WBL | WBT |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1047 | - | - | 1585 | - |
| HCM Lane V/C Ratio | 0.017 | - | -0.007 | - |  |
| HCM Control Delay (s) | 8.5 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th \%tile Q(veh) | 0.1 | - | - | 0 | - |


| Intersection |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |





HCMLOS A

| Minor Lane/Major Mumt | NBT | NBRWBLL1 | SBL | SBT |
| :--- | :---: | ---: | :---: | ---: |
| Capacity (veh/h) | - | -1056 | 1595 | - |
| HCM Lane V/C Ratio | - | -0.003 | - | - |
| HCM Control Delay (s) | - | - | 8.4 | 0 |
| - |  |  |  |  |
| HCM Lane LOS | - | - | A | A |
| HCM 95th \%tile Q(veh) | - | - | 0 | 0 |
| (s) |  |  |  |  |


[^0]:    ${ }^{1}$ Trip Generation, $10{ }^{\text {th }}$ Edition; Institute of Transportation Engineers; Washington, DC; 2017.

[^1]:    ${ }^{2}$ Manual on Uniform Traffic Control Devices (MUTCD); Federal Highway Administration; Washington, D.C.; 2009.

[^2]:    ${ }^{3}$ Offices: General, Professional, Business, Banks, Medical Clinics and Laboratories, Radio and Television Stations; Office of Non-Profit Educational, Cultural, or Charitable Organizations are required to provide one (1) space per each 200 sq ft of gross floor area, but not less than two (2) spaces for each business unit intended to occupy the premises; after $10,000 \mathrm{sq} \mathrm{ft}$ of gross floor area, one space for every $1,000 \mathrm{sq} \mathrm{ft}$ of gross floor area is required.

[^3]:    ${ }^{4}$ The statutory or "prima facie" speed is defined in M.G.L Chapter 90, Section 17, as the speed which would be deemed reasonable and proper to operate a motor vehicle.

[^4]:    ${ }^{5}$ MassDOT Traffic Volumes for the Commonwealth of Massachusetts; 2020.

[^5]:    ${ }^{6}$ A minimum combined travel lane and paved shoulder width of 14 -feet is required to support bicycle travel in a shared traveled-way condition.

[^6]:    ${ }^{7}$ Ibid 1.
    ${ }^{8}$ Ibid 1.

[^7]:    ${ }^{9}$ The capacity analysis methodology is based on the concepts and procedures presented in the Highway Capacity Manual; Transportation Research Board; Washington, DC; 2010.

[^8]:    ${ }^{10}$ Highway Capacity Manual; Transportation Research Board; Washington, DC; 2010.

[^9]:    ${ }^{11}$ A Policy on Geometric Design of Highway and Streets, $7^{\text {th }}$ Edition; American Association of State Highway and Transportation Officials (AASHTO); Washington D.C.; 2018.

[^10]:    ${ }^{12}$ Ibid 1.

[^11]:    ${ }^{13}$ Ibid 2.

