

**BY EMAIL ([mkrepelka@town.arlington.ma.us](mailto:mkrepelka@town.arlington.ma.us))**

Mr. John Hurd, Select Board Chair  
Select Board  
Town of Arlington  
c/o Marie Krepelka, Select Board Administrator  
730 Mass Ave.  
Arlington, MA 024756

RE: 251 Summer St  
Calyx Peak of MA Inc. – Host Community Agreement – Request for Reconsideration

Dear Chair Hurd,

Calyx Peak of MA Inc. (Calyx Peak) is submitting this letter and the attached Traffic Assessment in support of our request for the Select Board to reconsider its vote relative to issuing Calyx Peak a Host Community Agreement (HCA) for its retail location at 251 Summer St.

As you may know, Calyx Peak has a long history of working with the Town of Arlington to open a retail marijuana location. As part of the town's most recent HCA process, Calyx Peak participated in two (2) Select Board meetings. During these meetings Calyx Peak listened carefully to the comments of the Board, taking into consideration anything Calyx Peak could do to reasonably address the feedback from the Board. To that end, Calyx Peak took two immediate steps; first Calyx Peak engaged with a traffic engineering firm to study the site and provide recommendations that would minimize any traffic concerns or issues related to the surrounding neighbors specifically and the community generally. Second Calyx Peak began to reach out to the community for their feedback. Calyx Peak believes these steps were critical to address feedback from the Select Board and to properly address any impacts to the community.

Calyx Peak engaged McMahon Associates (McMahon) to conduct a Traffic Assessment for 251 Summer St. As part of the Traffic Assessment Calyx Peak directed McMahon to assess the following conditions: Adjacent Roadway Network, the nearby Signalized Intersection, Traffic Volumes, Safety Analysis (Crash Data), Site Generated Traffic, Sight Distances, as well as to conduct a real time onsite Queuing Observation. Based on all the available data as well as the onsite observations McMahon provided the following conclusion:

***“Conclusions***

*Based on a review of the proposed project, a conservative estimate of vehicle trips to the site would result in an increase of less than 4% on Summer Street (Route 2A) during the weekday afternoon peak hours. A review of the site access based on MassDOT records indicates no crashes occurred at the West Site Driveway and East Site Driveway between 2013 and 2017. Based on AASHTO guidelines, adequate sight distance is available looking both directions along Summer Street (Route 2A). As a result, the proposed RMD is not anticipated to have a significant impact on the safety and operations of Summer Street (Route 2A) or the surrounding roadway network.”*

It should be noted that during the onsite observations it was observed that the east side driveway entrance can become blocked by traffic backing up at the light. To that end McMahon recommended and Calyx Peak has agreed that it will make the east side driveway an entrance only and the west side driveway exit only. McMahon believes structuring the entry and exit in this way will eliminate any issues with people leaving the business on the east side. Further, Calyx Peak will also work with the Planning Department and civil engineers to evaluate moving both the entrance and exit further to the west as part of the site during site plan development, should the project be approved by the Select Board to move forward. For the Board's consideration, Calyx Peak has attached the full Traffic Assessment and supporting documentation.

Additionally, as Calyx Peak has stated publicly many times, Calyx Peak wants to be an outstanding partner and good corporate citizen to the Town of Arlington, our abutters, and the community as a whole. Calyx Peak knows that seeking direct feedback from the residents is the best way to do so. In support of Calyx Peak's goal to gather feedback Calyx Peak began to reach out to residents who are very active in the community and who would be able to provide feedback of any concerns related to the proposed location and business. Calyx Peak conducted primarily phone and email outreach given the ongoing health concerns related to COVID-19.

On November 23<sup>rd</sup>, Calyx Peak set up a community outreach meeting via Zoom for residents to provide feedback about our project. The meeting information was provided to the Town, as well as directly to residents through email. Calyx Peak sent invites, reminders and Zoom meeting details via email. The Zoom meeting was open to the public and did not require registration, in order to facilitate an open meeting and lower the barriers to joining the meeting. On November 23<sup>rd</sup>, no residents attended the meeting. However, the Town did have a representative attend to observe the meeting on behalf of the Town.

Calyx Peak remains deeply committed to Arlington. Calyx Peak wants to bring a great team and a great business to the Arlington community. Calyx Peak believes it can turn the current site into a compelling and attractive retail space and play a discrete but vital role in the community.

I greatly appreciate and thank the Select Board for its time and consideration of Calyx Peak's request. Please feel free to contact me should you require any additional information.

Sincerely,



Ed Schmults  
Chief Executive Officer

cc: Adam Chapdelaine, Town Manager (*by email only*) ([achapdelaine@town.arlington.ma.us](mailto:achapdelaine@town.arlington.ma.us))

## MEMORANDUM

**TO:** Ms. Gwen Takagawa, Calyx Peak Companies

**FROM:** Jeffrey T. Bandini, P.E., PTOE

**DATE:** December 14, 2020

**RE:** 251 Summer Street (Route 2A), Arlington, MA  
Retail Marijuana Dispensary

McMahon Associates has completed a traffic assessment for the proposed Retail Marijuana Dispensary (RMD) development to be located at 251 Summer Street (Route 2A) in Arlington, Massachusetts. This memorandum reviews the trip generating characteristics of the proposed project, the surrounding roadway network, and the layout of the project access.

### Project Description

The existing site, located at 251 Summer Street (Route 2A), houses a commercial building occupied by an auto repair center and dealership. Based on information provided by the client, the proposed project would remove the existing structure and construct a 2,500 square foot (s.f.) RMD. Access to the site would be provided via two site driveways on the north side of Summer Street (Route 2A) generally in the same location as the existing curb cuts.

The site is bounded by Summer Street (Route 2A) to the south, and residential properties to the west, north, and east. The signalized intersection of Summer Street (Route 2A) and Brattle Street/Symmes Road is located approximately 250 feet east of the project site.

The project site location is shown in Figure 1.

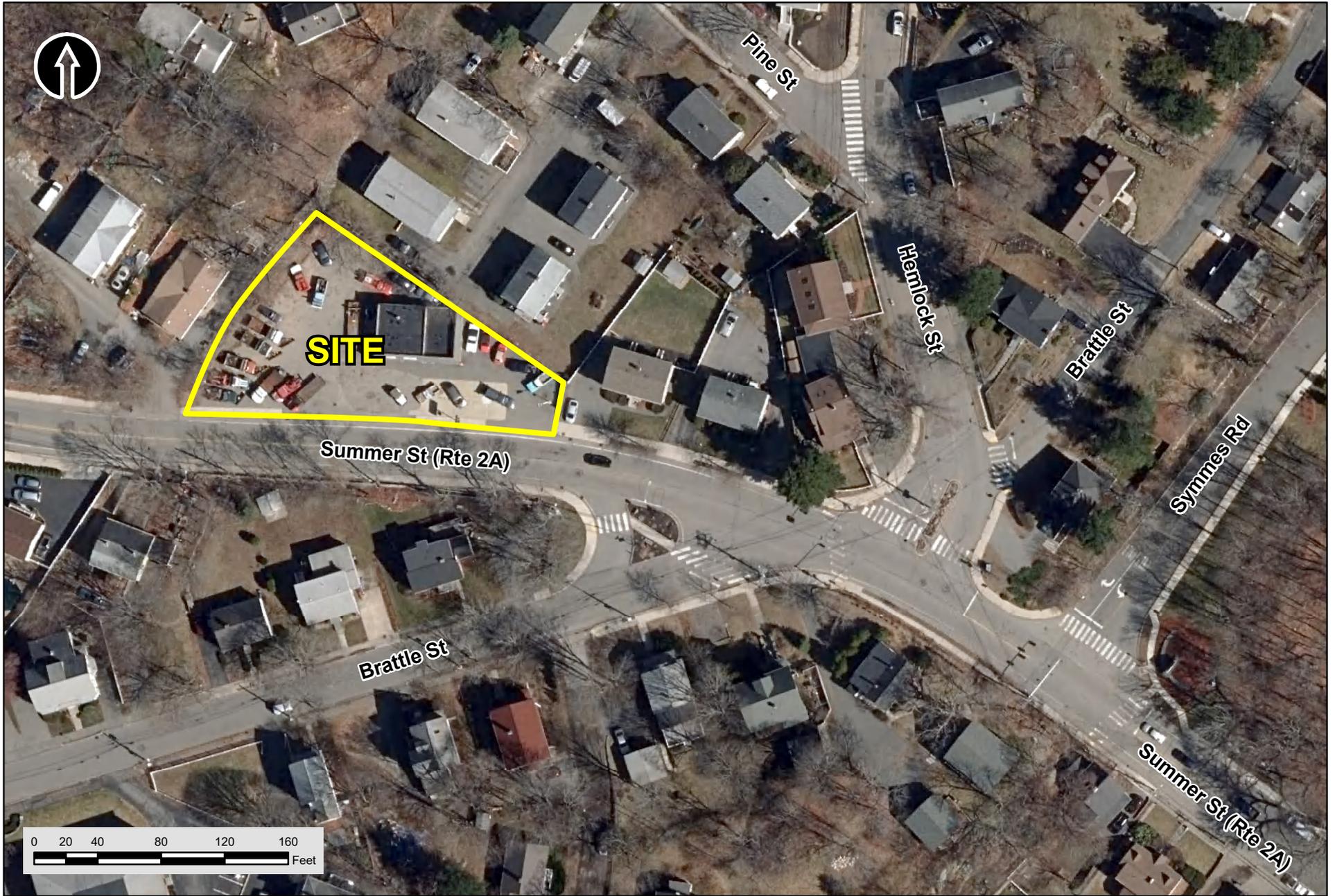


Figure 1  
Site Location Map  
Retail Marijuana Dispensary  
Arlington, Massachusetts

### **Adjacent Roadway Network**

Summer Street (Route 2A) is classified by the Massachusetts Department of Transportation (MassDOT) as an urban minor arterial under Town of Arlington jurisdiction, primarily providing access to commercial and residential land uses. Summer Street (Route 2A) generally runs in the east-west direction through the Town of Arlington, and includes two vehicle travel lanes, one in each direction. Sidewalks are provided along both sides of the roadway. No bicycle facilities are provided along Summer Street (Route 2A). The posted speed limit along Summer Street (Route 2A) is 30 miles per hour in both directions in the vicinity of the project site.

Massachusetts Bay Transportation Authority (MBTA) Bus Route 67 provides transit service along Summer Street (Route 2A), with a stop located at the intersection of Summer Street (Route 2A) at Brattle Street/Symmes Road.

Brattle Street is classified as an urban minor arterial under Town of Arlington jurisdiction, primarily providing access to residential properties. Brattle Street generally runs in a north-south direction and provides two vehicle travel lanes, one in each direction. Sidewalks are provided along both sides of Brattle Road and there is no posted speed limit along Brattle Street.

Symmes Road is classified as a local roadway under private jurisdiction, providing access to the Arlington 360 apartment complex and the Brightview Arlington assisted living center. Symmes Road generally runs in a north-south direction and provides two vehicle travel lanes, one in each direction. Sidewalks are provided on the east side of the roadway and no bicycle facilities are provided along Symmes Road. There is no posted speed limit along the Symmes Road.

### **Signalized Intersection**

Summer Street (Route 2A) at Brattle/Symmes Road consists of two clustered signalized intersections operating under the same controller. The intersection includes five approaches including Summer Street (Route 2A) eastbound and westbound, Brattle Street northbound and southbound, and Symmes Road southbound. The intersections and lane configurations are outlined below:

#### West Signal - Summer Street (Route 2A) at Brattle Street

- Summer Street (Route 2A) eastbound - one multi-purpose lane and one channelized right-turn lane.
- Brattle Street northbound – one multi-purpose lane.
- Brattle Street southbound – one exclusive left-turn lane and one shared through/right-turn lane.

#### East Signal - Summer Street (Route 2A) at Symmes Road

- Summer Street (Route 2A) westbound - one multi-purpose lane.
- Symmes Road southbound – one exclusive right-turn lane and one exclusive left-turn lane.

The intersection is controlled by an actuated traffic signal with three phases for vehicular traffic, including a phase for Summer Street (Route 2A) eastbound and westbound traffic, followed by a phase for northbound and southbound traffic on Brattle Street, and then a phase for southbound Symmes Road traffic. Pedestrian movements are accommodated by a push-button activated exclusive pedestrian phase for the crosswalks which span all of the roadway approaches.

**Traffic Volumes**

Turning Movement Counts (TMC) were obtained from the Town of Arlington within the study area during the weekday afternoon peak period. TMCs were available for the intersection of Summer Street (Route 2A) at Brattle Street/Symmes Road (that were conducted on Thursday, April 26, 2012) and these TMCs were used in intersection crash rate calculations (see Safety Analysis section below). Additional TMCs were available for the intersection of Summer Street (Route 2A) at Grove Street (conducted on Wednesday, May 16, 2019), located approximately 1000 feet east of the project site. To convert the peak hour volumes from the TMCs to an average daily traffic (ADT) value, the peak hour volumes were divided by a K factor (proportion of daily traffic occurring during the peak hour) of 8.1%. The K factor was derived from the traffic counts received from the Town of Arlington as part of the Arlington High School study. A summary of the ADT and weekday afternoon peak hour traffic volumes on Summer Street (Route 2A) are shown in Table 1 and provided as an attachment.

**Table 1: Summer Street (Route 2A) Traffic Volumes**

Location	Direction	Afternoon	2018 ADT <sup>(2)</sup>
		Peak 2018 <sup>(1)</sup>	(vpd)
Summer Street (Route 2A)	Eastbound	800	9,300
	Westbound	<u>700</u>	<u>8,400</u>
	<b>TOTAL</b>	1,500	17,700

(1) Peak Hour volumes based on TMCs conducted on Wednesday May 16 2018 at intersection of Summer Street at Grove Street. Peak hour 4:30 PM - 5:30 PM as part of the Arlington High School Study provided by the Town of Arlington.

(2) Average Daily Traffic based on K factor of 8.10% calculated from the Arlington High School Study provided by the Town of Arlington.

As shown in Table 1, the ADT along Summer Street (Route 2A) was approximately 17,700 vehicles per day in 2018 (9,300 eastbound and 8,400 westbound). The weekday afternoon peak hour volume was estimated at approximately 1,500 vehicles in 2018.

**Safety Analysis**

Crash data was obtained from MassDOT for the most recent five-year period available to analyze reported crashes within the vicinity of the proposed site driveways and the signalized intersection of Summer Street (Route 2A) and Brattle Street/Symmes Road. This data includes complete yearly crash summaries for 2013 through 2017. Over the five-year period analyzed, there were no reported crashes on Summer Street (Route 2A) in the vicinity of the project site driveways.

There were twelve reported crashes at the signalized intersection of Summer Street (Route 2A) and Brattle Street/Symmes Road over the five-year period analyzed. Two of these reported crashes were angle collisions, six were rear-end collisions, three were sideswipe collisions, and one was a single vehicle crash. Of the twelve reported crashes, four resulted in personal injury, four resulted in property damage only, and four were of unknown severity. No reported crashes involved pedestrians or bicycles. Based on the entering traffic volumes for the signalized intersection, the crash rate was 0.34 crashes per million entering vehicles, which is lower than both the statewide and MassDOT District 4 crash rates. The crash summary is provided as an attachment.

### Site-Generated Traffic

The Institute of Transportation Engineers (ITE) is a national research organization of transportation professionals. Their publication, *Trip Generation Manual, 10th Edition*, provides traffic generation information for various land uses compiled from studies conducted by members nationwide. Vehicle trip estimates for the proposed RMD were developed based on data presented in this publication for Land Use Code (LUC) 882 (Marijuana Dispensary). Table 2 presents the number of vehicle trips projected to be generated by the proposed 2,500 s.f. RMD.

**Table 2: Trip Generation for Proposed RMD**

Description	Size	Weekday PM			Saturday Midday		
		In	Out	Total	In	Out	Total
Marijuana Dispensary <sup>(1)</sup>	2,500 s.f.	27	27	54	46	46	92

(1) ITE Land Use Code 882 (Marijuana Dispensary), based on 2,500 s.f.

As shown in Table 2, the proposed RMD is estimated to result in approximately 54 vehicle trips (27 entering and 27 exiting) during the weekday afternoon peak hour, and approximately 92 new vehicle trips (46 entering and 46 exiting) during the Saturday midday peak hour. Based on the existing pedestrian accommodations, nearby bike facilities, and close proximity to MBTA bus stops, it is anticipated that a portion of patrons accessing the site would travel via alternative modes rather than by vehicle. However, to present a conservative analysis, no multi-modal credit was applied to the trip generation calculations in Table 2.

The proposed RMD would replace the existing auto repair center and dealership, which currently generates vehicle trips to the site. To present a conservative analysis, the existing vehicle trips were not subtracted from the estimated trips that would be generated by the proposed RMD.

Using the conservative estimate of vehicle trips, an additional 54 vehicle trips during the weekday afternoon peak hour would result in an increase of approximately 3.6% vehicles along Summer Street (Route 2A).

### Sight Distance

A field visit was completed on Wednesday, December 2, 2020 during clear conditions to review the available sight distance at the existing site driveways, referred to as the West Site Driveway and East Site Driveway. The posted speed limit along Summer Street (Route 2A) within the vicinity of the project site is 30 mph in both directions. The American Association of State Highway and Transportation Officials' (AASHTO) publication *A Policy on Geometric Design, 2018 Edition* defines the minimum sight distance at intersections based on the required stopping sight distance (SSD) of vehicles traveling along the main roadway for a given speed. The AASHTO publication also provides a recommended intersection sight distance (ISD) for vehicles exiting the site onto the main roadway based on the speed of the roadway. Due to the existing width of the West Site Driveway, sight distance was measured from the furthest possible driver eye location to the west to present a conservative analysis with respect to the horizontal curve along Summer Street to the west of the site.

Table 3 reviews the required and measured sight distances along Summer Street (Route 2A) at the project site driveways.

**Table 3: Sight Distance**

Location	Direction	Posted Speed Limit (mph)	SSD Required <sup>1</sup>	ISD Recommended <sup>2</sup>	Sight Distance Measured	Meets SSD Requirements?	Meets ISD Recommendation?
Summer Street (Route 2A) at West Site Driveway <sup>3</sup>	Looking Left (East)	30	200'	330'	470'	Yes	Yes
Summer Street (Route 2A) at East Site Driveway	Looking Right (West)	30	200'	290'	290'	Yes	Yes
Summer Street (Route 2A) at West Site Driveway <sup>3</sup>	Looking Left (East)	30	200'	330'	500'+	Yes	Yes
Summer Street (Route 2A) at East Site Driveway	Looking Right (West)	30	200'	290'	400'	Yes	Yes

1 AASHTO required stopping sight distance (see AASHTO Table 3-1) for posted speed limit on Summer Street (Route 2A).

2 AASHTO recommended intersection sight distance (see AASHTO Equations 9-1 and 9-2 ) for posted speed limit on Summer Street (Route 2A).

3 Sight distance measured from western edge of existing driveway curb cut on Summer Street (Route 2A) to present a conservative analysis with respect to the horizontal curve along Summer Street (Route 2A).

As shown in Table 3, the available sight distance along Summer Street (Route 2A) at the West Site Driveway and the East Site Driveway exceeds the AASHTO required SSD and recommended ISD for the posted speed limit of 30 mph. Based on the available sight distance at the project site driveways, vehicles should be able to make safe decisions entering and exiting the project site.

**Queue Observations**

Queue length observations were conducted at the eastbound Summer Street (Route 2A) approach to the signalized intersection at Brattle Street/Symmes Road. The queue length observations were performed for a one-hour period on Wednesday, December 2, 2020 during the weekday afternoon peak period between 4:30 PM and 5:30 PM, which is consistent with the peak hour from the Summer Street (Route 2A) at Grove Street traffic counts, and the anticipated weekday afternoon peak hour of the RMD. The observation consisted of measuring the vehicle queue length every one to two minutes during the peak hour, depending on vehicle arrival and movement of vehicles through the Summer Street (Route 2A) at Brattle/Symmes Road intersection. The results of the queue observations are shown in Table 4 and are provided as an attachment.

**Table 4: Eastbound Summer Street (Route 2A) Approach Queue Lengths**

	# of Vehicles	Queue Length (ft) <sup>(1)</sup>
<b>50<sup>th</sup> Percentile</b>	5	125
<b>95<sup>th</sup> Percentile</b>	8	200
<b>Max</b>	13	325

(1) Assumes a 25 ft vehicle length

As shown in Table 4, during 95% of the data collection, the eastbound vehicle queue along Summer Street (Route 2A) eastbound was shorter than 200 feet during the weekday afternoon peak period. Therefore, it is anticipated that the driveway would not be blocked for the majority of the time during business operations.

### **Conclusions**

Based on a review of the proposed project, a conservative estimate of vehicle trips to the site would result in an increase of less than 4% on Summer Street (Route 2A) during the weekday afternoon peak hours. A review of the site access based on MassDOT records indicates no crashes occurred at the West Site Driveway and East Site Driveway between 2013 and 2017. Based on AASHTO guidelines, adequate sight distance is available looking both directions along Summer Street (Route 2A). As a result, the proposed RMD is not anticipated to have a significant impact on the safety and operations of Summer Street (Route 2A) or the surrounding roadway network.

### **Attachments:**

Turning Movement Count Data  
Crash Summary  
Queue Length Observations



**ATTACHMENT 1**

**Turning Movement Count Data**



**Table 7**  
**Crash Data Comparison: FDR (1995–97) to MassDOT (2005–09)**

Intersection	FDR 1995 to 1997				MassDOT 2005 to 2009					Crash Rate
	1995	1996	1997	Crash Rate	2005	2006	2007	2008	2009	
Brattle/Hemlock Streets at Summer Street	6	2	4	0.65	1	2	1	3	1	0.25

### Traffic Volumes

MPO staff collected turning-movement counts at the intersection on April 26, 2012. The data were recorded in 15-minute intervals for the peak traffic periods in the morning, from 7:00 to 9:00 AM, and in the evening, from 4:00 to 6:00 PM. Traffic count summaries are provided in Appendix A. Traffic volumes for three different years are listed in Table 8 for three different analysis scenarios:

- 1998 FDR “Before” Existing Conditions
- 2020 FDR “Projected” Build Conditions
- 2012 “After” Conditions

As indicated in Table 8, the overall traffic volumes remained the same from the 1998 FDR to the 2012 volumes. Traffic volumes never increased to anywhere near the demand projected for 2020.

**Table 8**  
**Traffic Volume Comparison**

Scenario	Brattle St.			Hemlock Street			Summer Street						Total
	Northbound			Southbound			Eastbound			Westbound			
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
<b>AM</b> 1998 FDR “Before”	50	28	68	170	57	27	4	550	0	72	558	0	1,584
2020 FDR Projected”	55	31	75	188	63	30	4	607	0	79	616	0	1,748
2012 “After”	38	22	40	113	58	33	11	575	37	45	567	50	1,589
<b>PM</b> 1998 FDR “Before”	36	29	74	70	26	23	17	670	0	50	530	0	1,525
2020 FDR Projected”	39	32	82	77	29	25	19	740	0	55	585	0	1,683
2012 “After”	33	16	48	61	19	21	17	594	38	39	582	88	1,556

Note: LT = left turn; TH = through traffic; and RT = right turn.

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

**Cars and Heavy Vehicles (Combined)**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	22	10	0	32	8	1	0	9	4	37	0	41	82
6:15 AM	44	26	0	70	12	2	0	14	13	69	0	82	166
6:30 AM	56	27	0	83	18	2	0	20	10	70	0	80	183
6:45 AM	96	34	0	130	22	5	0	27	10	127	0	137	294
Total	218	97	0	315	60	10	0	70	37	303	0	340	725
7:00 AM	85	33	0	118	30	9	0	39	13	147	0	160	317
7:15 AM	96	58	0	154	35	7	0	42	23	156	0	179	375
7:30 AM	119	54	0	173	38	9	0	47	13	162	0	175	395
7:45 AM	134	77	0	211	46	5	0	51	31	167	0	198	460
Total	434	222	0	656	149	30	0	179	80	632	0	712	1547
8:00 AM	137	61	0	198	43	13	0	56	26	167	0	193	447
8:15 AM	116	60	0	176	39	7	0	46	22	154	0	176	398
8:30 AM	116	43	0	159	28	11	0	39	12	132	0	144	342
8:45 AM	97	52	0	149	28	4	0	32	12	119	0	131	312
Total	466	216	0	682	138	35	0	173	72	572	0	644	1499
9:00 AM	97	31	0	128	21	14	0	35	10	119	0	129	292
9:15 AM	108	29	0	137	22	7	0	29	10	91	0	101	267
9:30 AM	85	41	0	126	38	8	0	46	4	100	1	105	277
9:45 AM	80	30	0	110	27	11	0	38	11	99	0	110	258
Total	370	131	0	501	108	40	0	148	35	409	1	445	1094
Grand Total	1488	666	0	2154	455	115	0	570	224	1916	1	2141	4865
Approach %	69.1	30.9	0.0		79.8	20.2	0.0		10.5	89.5	0.0		
Total %	30.6	13.7	0.0	44.3	9.4	2.4	0.0	11.7	4.6	39.4	0.0	44.0	
Exiting Leg Total				2371				890				1604	4865
Cars	1442	652	0	2094	443	110	0	553	218	1859	1	2078	4725
% Cars	96.9	97.9	0.0	97.2	97.4	95.7	0.0	97.0	97.3	97.0	100.0	97.1	97.1
Exiting Leg Total				2302				870				1553	4725
Heavy Vehicles	46	14	0	60	12	5	0	17	6	57	0	63	140
% Heavy Vehicles	3.1	2.1	0.0	2.8	2.6	4.3	0.0	3.0	2.7	3.0	0.0	2.9	2.9
Exiting Leg Total				69				20				51	140

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:30 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	119	54	0	173	38	9	0	47	13	162	0	175	395
7:45 AM	134	77	0	211	46	5	0	51	31	167	0	198	460
8:00 AM	137	61	0	198	43	13	0	56	26	167	0	193	447
8:15 AM	116	60	0	176	39	7	0	46	22	154	0	176	398
Total Volume	506	252	0	758	166	34	0	200	92	650	0	742	1700
% Approach Total	66.8	33.2	0.0		83.0	17.0	0.0		12.4	87.6	0.0		
PHF	0.923	0.818	0.000	0.898	0.902	0.654	0.000	0.893	0.742	0.973	0.000	0.937	0.924
Cars	492	248	0	740	162	34	0	196	88	633	0	721	1657
Cars %	97.2	98.4	0.0	97.6	97.6	100.0	0.0	98.0	95.7	97.4	0.0	97.2	97.5
Heavy Vehicles	14	4	0	18	4	0	0	4	4	17	0	21	43
Heavy Vehicles %	2.8	1.6	0.0	2.4	2.4	0.0	0.0	2.0	4.3	2.6	0.0	2.8	2.5
Cars Enter Leg	492	248	0	740	162	34	0	196	88	633	0	721	1657
Heavy Enter Leg	14	4	0	18	4	0	0	4	4	17	0	21	43
Total Entering Leg	506	252	0	758	166	34	0	200	92	650	0	742	1700
Cars Exiting Leg				795				336				526	1657
Heavy Exiting Leg				21				8				14	43
Total Exiting Leg				816				344				540	1700

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46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilc.com

Class: **Cars-Combined (Motorcycles, Cars, Light Goods)**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	22	10	0	32	8	1	0	9	4	37	0	41	82
6:15 AM	43	26	0	69	12	2	0	14	13	69	0	82	165
6:30 AM	55	27	0	82	18	2	0	20	10	68	0	78	180
6:45 AM	95	33	0	128	20	4	0	24	10	123	0	133	285
Total	215	96	0	311	58	9	0	67	37	297	0	334	712
7:00 AM	83	33	0	116	29	7	0	36	13	142	0	155	307
7:15 AM	91	56	0	147	33	6	0	39	22	150	0	172	358
7:30 AM	113	54	0	167	36	9	0	45	13	161	0	174	386
7:45 AM	132	77	0	209	46	5	0	51	31	161	0	192	452
Total	419	220	0	639	144	27	0	171	79	614	0	693	1503
8:00 AM	133	59	0	192	43	13	0	56	23	162	0	185	433
8:15 AM	114	58	0	172	37	7	0	44	21	149	0	170	386
8:30 AM	112	42	0	154	27	11	0	38	12	131	0	143	335
8:45 AM	90	51	0	141	27	4	0	31	12	115	0	127	299
Total	449	210	0	659	134	35	0	169	68	557	0	625	1453
9:00 AM	93	31	0	124	21	14	0	35	10	115	0	125	284
9:15 AM	107	29	0	136	22	7	0	29	10	85	0	95	260
9:30 AM	85	36	0	121	37	7	0	44	4	99	1	104	269
9:45 AM	74	30	0	104	27	11	0	38	10	92	0	102	244
Total	359	126	0	485	107	39	0	146	34	391	1	426	1057
Grand Total	1442	652	0	2094	443	110	0	553	218	1859	1	2078	4725
Approach %	68.9	31.1	0.0		80.1	19.9	0.0		10.5	89.5	0.0		
Total %	30.5	13.8	0.0	44.3	9.4	2.3	0.0	11.7	4.6	39.3	0.0	44.0	
Exiting Leg Total				2302				870				1553	4725

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:30 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	113	54	0	167	36	9	0	45	13	161	0	174	386
7:45 AM	132	77	0	209	46	5	0	51	31	161	0	192	452
8:00 AM	133	59	0	192	43	13	0	56	23	162	0	185	433
8:15 AM	114	58	0	172	37	7	0	44	21	149	0	170	386
Total Volume	492	248	0	740	162	34	0	196	88	633	0	721	1657
% Approach Total	66.5	33.5	0.0		82.7	17.3	0.0		12.2	87.8	0.0		
PHF	0.925	0.805	0.000	0.885	0.880	0.654	0.000	0.875	0.710	0.977	0.000	0.939	0.916
Entering Leg	492	248	0	740	162	34	0	196	88	633	0	721	1657
Exiting Leg				795				336				526	1657
Total				1535				532				1247	3314

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**  
 Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:30 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
6:45 AM	1	1	0	2	2	1	0	3	0	4	0	4	9
Total	3	1	0	4	2	1	0	3	0	6	0	6	13
7:00 AM	2	0	0	2	1	2	0	3	0	5	0	5	10
7:15 AM	5	2	0	7	2	1	0	3	1	6	0	7	17
7:30 AM	6	0	0	6	2	0	0	2	0	1	0	1	9
7:45 AM	2	0	0	2	0	0	0	0	0	6	0	6	8
Total	15	2	0	17	5	3	0	8	1	18	0	19	44
8:00 AM	4	2	0	6	0	0	0	0	3	5	0	8	14
8:15 AM	2	2	0	4	2	0	0	2	1	5	0	6	12
8:30 AM	4	1	0	5	1	0	0	1	0	1	0	1	7
8:45 AM	7	1	0	8	1	0	0	1	0	4	0	4	13
Total	17	6	0	23	4	0	0	4	4	15	0	19	46
9:00 AM	4	0	0	4	0	0	0	0	0	4	0	4	8
9:15 AM	1	0	0	1	0	0	0	0	0	6	0	6	7
9:30 AM	0	5	0	5	1	1	0	2	0	1	0	1	8
9:45 AM	6	0	0	6	0	0	0	0	1	7	0	8	14
Total	11	5	0	16	1	1	0	2	1	18	0	19	37
Grand Total	46	14	0	60	12	5	0	17	6	57	0	63	140
Approach %	76.7	23.3	0.0		70.6	29.4	0.0		9.5	90.5	0.0		
Total %	32.9	10.0	0.0	42.9	8.6	3.6	0.0	12.1	4.3	40.7	0.0	45.0	
Exiting Leg Total				69				20				51	140
Buses	11	4	0	15	3	1	0	4	2	17	0	19	38
% Buses	23.9	28.6	0.0	25.0	25.0	20.0	0.0	23.5	33.3	29.8	0.0	30.2	27.1
Exiting Leg Total				20				6				12	38
Single-Unit Trucks	28	9	0	37	8	4	0	12	4	35	0	39	88
% Single-Unit	60.9	64.3	0.0	61.7	66.7	80.0	0.0	70.6	66.7	61.4	0.0	61.9	62.9
Exiting Leg Total				43				13				32	88
Articulated Trucks	7	1	0	8	1	0	0	1	0	5	0	5	14
% Articulated	15.2	7.1	0.0	13.3	8.3	0.0	0.0	5.9	0.0	8.8	0.0	7.9	10.0
Exiting Leg Total				6				1				7	14

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:15 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	5	2	0	7	2	1	0	3	1	6	0	7	17
7:30 AM	6	0	0	6	2	0	0	2	0	1	0	1	9
7:45 AM	2	0	0	2	0	0	0	0	0	6	0	6	8
8:00 AM	4	2	0	6	0	0	0	0	3	5	0	8	14
Total Volume	17	4	0	21	4	1	0	5	4	18	0	22	48
% Approach Total	81.0	19.0	0.0		80.0	20.0	0.0		18.2	81.8	0.0		
PHF	0.708	0.500	0.000	0.750	0.500	0.250	0.000	0.417	0.333	0.750	0.000	0.688	0.706
Buses	2	2	0	4	0	0	0	0	1	6	0	7	11
Buses %	11.8	50.0	0.0	19.0	0.0	0.0	0.0	0.0	25.0	33.3	0.0	31.8	22.9
Single-Unit Trucks	11	2	0	13	3	1	0	4	3	10	0	13	30
Single-Unit %	64.7	50.0	0.0	61.9	75.0	100.0	0.0	80.0	75.0	55.6	0.0	59.1	62.5
Articulated Trucks	4	0	0	4	1	0	0	1	0	2	0	2	7
Articulated %	23.5	0.0	0.0	19.0	25.0	0.0	0.0	20.0	0.0	11.1	0.0	9.1	14.6
Buses	2	2	0	4	0	0	0	0	1	6	0	7	11
Single-Unit Trucks	11	2	0	13	3	1	0	4	3	10	0	13	30
Articulated Trucks	4	0	0	4	1	0	0	1	0	2	0	2	7
Total Entering Leg	17	4	0	21	4	1	0	5	4	18	0	22	48

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**



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Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Buses				6				3				2	11
Single-Unit Trucks				13				5				12	30
Articulated Trucks				3				0				4	7
<b>Total Exiting Leg</b>				<b>22</b>				<b>8</b>				<b>18</b>	<b>48</b>

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
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 Class:



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**Cars**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	21	10	0	31	7	1	0	8	3	31	0	34	73
6:15 AM	33	18	0	51	12	2	0	14	9	63	0	72	137
6:30 AM	39	19	0	58	17	1	0	18	7	60	0	67	143
6:45 AM	82	20	0	102	18	3	0	21	8	112	0	120	243
Total	175	67	0	242	54	7	0	61	27	266	0	293	596
7:00 AM	69	22	0	91	23	3	0	26	10	127	0	137	254
7:15 AM	84	50	0	134	28	6	0	34	21	128	0	149	317
7:30 AM	100	45	0	145	29	7	0	36	12	144	0	156	337
7:45 AM	125	68	0	193	45	4	0	49	28	143	0	171	413
Total	378	185	0	563	125	20	0	145	71	542	0	613	1321
8:00 AM	120	53	0	173	40	13	0	53	20	153	0	173	399
8:15 AM	108	51	0	159	34	2	0	36	20	144	0	164	359
8:30 AM	101	32	0	133	21	9	0	30	9	114	0	123	286
8:45 AM	81	40	0	121	24	1	0	25	10	108	0	118	264
Total	410	176	0	586	119	25	0	144	59	519	0	578	1308
9:00 AM	85	28	0	113	20	12	0	32	6	103	0	109	254
9:15 AM	90	25	0	115	15	3	0	18	9	77	0	86	219
9:30 AM	80	30	0	110	28	6	0	34	4	87	0	91	235
9:45 AM	61	26	0	87	19	8	0	27	6	84	0	90	204
Total	316	109	0	425	82	29	0	111	25	351	0	376	912
Grand Total	1279	537	0	1816	380	81	0	461	182	1678	0	1860	4137
Approach %	70.4	29.6	0.0		82.4	17.6	0.0		9.8	90.2	0.0		
Total %	30.9	13.0	0.0	43.9	9.2	2.0	0.0	11.1	4.4	40.6	0.0	45.0	
Exiting Leg Total	2058				719				1360				4137

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:30 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:30 AM	100	45	0	145	29	7	0	36	12	144	0	156	337
7:45 AM	125	68	0	193	45	4	0	49	28	143	0	171	413
8:00 AM	120	53	0	173	40	13	0	53	20	153	0	173	399
8:15 AM	108	51	0	159	34	2	0	36	20	144	0	164	359
Total Volume	453	217	0	670	148	26	0	174	80	584	0	664	1508
% Approach Total	67.6	32.4	0.0		85.1	14.9	0.0		12.0	88.0	0.0		
PHF	0.906	0.798	0.000	0.868	0.822	0.500	0.000	0.821	0.714	0.954	0.000	0.960	0.913
Entering Leg	453	217	0	670	148	26	0	174	80	584	0	664	1508
Exiting Leg	732				297				479				1508
Total	1402				471				1143				3016

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**  
 Class:



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**Light Goods Vehicle**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	1	0	0	1	1	0	0	1	1	6	0	7	9
6:15 AM	9	8	0	17	0	0	0	0	4	6	0	10	27
6:30 AM	16	8	0	24	1	1	0	2	3	8	0	11	37
6:45 AM	13	13	0	26	2	1	0	3	2	10	0	12	41
<b>Total</b>	<b>39</b>	<b>29</b>	<b>0</b>	<b>68</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>10</b>	<b>30</b>	<b>0</b>	<b>40</b>	<b>114</b>
7:00 AM	13	11	0	24	6	4	0	10	3	15	0	18	52
7:15 AM	7	6	0	13	5	0	0	5	1	22	0	23	41
7:30 AM	13	9	0	22	7	2	0	9	1	17	0	18	49
7:45 AM	7	9	0	16	1	1	0	2	3	18	0	21	39
<b>Total</b>	<b>40</b>	<b>35</b>	<b>0</b>	<b>75</b>	<b>19</b>	<b>7</b>	<b>0</b>	<b>26</b>	<b>8</b>	<b>72</b>	<b>0</b>	<b>80</b>	<b>181</b>
8:00 AM	13	6	0	19	3	0	0	3	3	9	0	12	34
8:15 AM	6	6	0	12	3	5	0	8	1	5	0	6	26
8:30 AM	11	8	0	19	6	2	0	8	3	17	0	20	47
8:45 AM	9	11	0	20	3	3	0	6	2	7	0	9	35
<b>Total</b>	<b>39</b>	<b>31</b>	<b>0</b>	<b>70</b>	<b>15</b>	<b>10</b>	<b>0</b>	<b>25</b>	<b>9</b>	<b>38</b>	<b>0</b>	<b>47</b>	<b>142</b>
9:00 AM	8	3	0	11	1	2	0	3	4	12	0	16	30
9:15 AM	17	4	0	21	7	4	0	11	1	8	0	9	41
9:30 AM	5	6	0	11	9	1	0	10	0	12	1	13	34
9:45 AM	11	4	0	15	8	3	0	11	4	8	0	12	38
<b>Total</b>	<b>41</b>	<b>17</b>	<b>0</b>	<b>58</b>	<b>25</b>	<b>10</b>	<b>0</b>	<b>35</b>	<b>9</b>	<b>40</b>	<b>1</b>	<b>50</b>	<b>143</b>
<b>Grand Total</b>	<b>159</b>	<b>112</b>	<b>0</b>	<b>271</b>	<b>63</b>	<b>29</b>	<b>0</b>	<b>92</b>	<b>36</b>	<b>180</b>	<b>1</b>	<b>217</b>	<b>580</b>
Approach %	58.7	41.3	0.0		68.5	31.5	0.0		16.6	82.9	0.5		
Total %	27.4	19.3	0.0	46.7	10.9	5.0	0.0	15.9	6.2	31.0	0.2	37.4	
Exiting Leg Total				243				148				189	580

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

6:45 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:45 AM	13	13	0	26	2	1	0	3	2	10	0	12	41
7:00 AM	13	11	0	24	6	4	0	10	3	15	0	18	52
7:15 AM	7	6	0	13	5	0	0	5	1	22	0	23	41
7:30 AM	13	9	0	22	7	2	0	9	1	17	0	18	49
<b>Total Volume</b>	<b>46</b>	<b>39</b>	<b>0</b>	<b>85</b>	<b>20</b>	<b>7</b>	<b>0</b>	<b>27</b>	<b>7</b>	<b>64</b>	<b>0</b>	<b>71</b>	<b>183</b>
<b>% Approach Total</b>	<b>54.1</b>	<b>45.9</b>	<b>0.0</b>		<b>74.1</b>	<b>25.9</b>	<b>0.0</b>		<b>9.9</b>	<b>90.1</b>	<b>0.0</b>		
<b>PHF</b>	<b>0.885</b>	<b>0.750</b>	<b>0.000</b>	<b>0.817</b>	<b>0.714</b>	<b>0.438</b>	<b>0.000</b>	<b>0.675</b>	<b>0.583</b>	<b>0.727</b>	<b>0.000</b>	<b>0.772</b>	<b>0.880</b>
Entering Leg	46	39	0	85	20	7	0	27	7	64	0	71	183
Exiting Leg				84				46				53	183
<b>Total</b>				<b>169</b>				<b>73</b>				<b>124</b>	<b>366</b>

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**  
 Class:



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**Buses**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
6:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
6:45 AM	0	0	0	0	2	0	0	2	0	2	0	2	4
Total	2	0	0	2	2	0	0	2	0	3	0	3	7
7:00 AM	2	0	0	2	0	1	0	1	0	0	0	0	3
7:15 AM	0	1	0	1	0	0	0	0	0	3	0	3	4
7:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	3	1	0	4	0	1	0	1	0	6	0	6	11
8:00 AM	1	1	0	2	0	0	0	0	1	0	0	1	3
8:15 AM	0	1	0	1	0	0	0	0	1	3	0	4	5
8:30 AM	1	1	0	2	1	0	0	1	0	1	0	1	4
8:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	3	3	0	6	1	0	0	1	2	5	0	7	14
9:00 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
9:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	3	0	0	3	0	0	0	0	0	3	0	3	6
Grand Total	11	4	0	15	3	1	0	4	2	17	0	19	38
Approach %	73.3	26.7	0.0		75.0	25.0	0.0		10.5	89.5	0.0		
Total %	28.9	10.5	0.0	39.5	7.9	2.6	0.0	10.5	5.3	44.7	0.0	50.0	
Exiting Leg Total	20				6				12				38

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:45 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
8:00 AM	1	1	0	2	0	0	0	0	1	0	0	1	3
8:15 AM	0	1	0	1	0	0	0	0	1	3	0	4	5
8:30 AM	1	1	0	2	1	0	0	1	0	1	0	1	4
Total Volume	2	3	0	5	1	0	0	1	2	6	0	8	14
% Approach Total	40.0	60.0	0.0		100.0	0.0	0.0		25.0	75.0	0.0		
PHF	0.500	0.750	0.000	0.625	0.250	0.000	0.000	0.250	0.500	0.500	0.000	0.500	0.700
Entering Leg	2	3	0	5	1	0	0	1	2	6	0	8	14
Exiting Leg	7				5				2				14
Total	12				6				10				28

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilc.com

**Single-Unit Trucks**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
6:45 AM	1	1	0	2	0	1	0	1	0	2	0	2	5
Total	1	1	0	2	0	1	0	1	0	3	0	3	6
7:00 AM	0	0	0	0	1	1	0	2	0	4	0	4	6
7:15 AM	4	1	0	5	1	1	0	2	1	3	0	4	11
7:30 AM	3	0	0	3	2	0	0	2	0	0	0	0	5
7:45 AM	1	0	0	1	0	0	0	0	0	3	0	3	4
Total	8	1	0	9	4	2	0	6	1	10	0	11	26
8:00 AM	3	1	0	4	0	0	0	0	2	4	0	6	10
8:15 AM	2	1	0	3	2	0	0	2	0	2	0	2	7
8:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
8:45 AM	4	1	0	5	1	0	0	1	0	3	0	3	9
Total	11	3	0	14	3	0	0	3	2	9	0	11	28
9:00 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
9:15 AM	1	0	0	1	0	0	0	0	0	3	0	3	4
9:30 AM	0	4	0	4	1	1	0	2	0	1	0	1	7
9:45 AM	5	0	0	5	0	0	0	0	1	7	0	8	13
Total	8	4	0	12	1	1	0	2	1	13	0	14	28
Grand Total	28	9	0	37	8	4	0	12	4	35	0	39	88
Approach %	75.7	24.3	0.0		66.7	33.3	0.0		10.3	89.7	0.0		
Total %	31.8	10.2	0.0	42.0	9.1	4.5	0.0	13.6	4.5	39.8	0.0	44.3	
Exiting Leg Total	43				13				32				88

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:15 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:15 AM	4	1	0	5	1	1	0	2	1	3	0	4	11
7:30 AM	3	0	0	3	2	0	0	2	0	0	0	0	5
7:45 AM	1	0	0	1	0	0	0	0	0	3	0	3	4
8:00 AM	3	1	0	4	0	0	0	0	2	4	0	6	10
Total Volume	11	2	0	13	3	1	0	4	3	10	0	13	30
% Approach Total	84.6	15.4	0.0		75.0	25.0	0.0		23.1	76.9	0.0		
PHF	0.688	0.500	0.000	0.650	0.375	0.250	0.000	0.500	0.375	0.625	0.000	0.542	0.682
Entering Leg	11	2	0	13	3	1	0	4	3	10	0	13	30
Exiting Leg	13				5				12				30
Total	26				9				25				60

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

**Articulated Trucks**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	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
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1
7:15 AM	1	0	0	1	1	0	0	1	0	0	0	0	2	2
7:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2	2
7:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2	2
Total	4	0	0	4	1	0	0	1	0	2	0	2	7	7
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1	1
8:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2	2
Total	3	0	0	3	0	0	0	0	0	1	0	1	4	4
9:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1
9:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1
9:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	2	0	2	3	3
Grand Total	7	1	0	8	1	0	0	1	0	5	0	5	14	14
Approach %	87.5	12.5	0.0		100.0	0.0	0.0		0.0	100.0	0.0			
Total %	50.0	7.1	0.0	57.1	7.1	0.0	0.0	7.1	0.0	35.7	0.0	35.7		
Exiting Leg Total	6				1				7				14	

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

7:00 AM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	1	0	0	1	1	0	0	1	0	0	0	0	2
7:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
7:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	4	0	0	4	1	0	0	1	0	2	0	2	7
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.250	0.000	0.000	0.250	0.000	0.500	0.000	0.500	0.875
Entering Leg	4	0	0	4	1	0	0	1	0	2	0	2	7
Exiting Leg	3				0				4				7
Total	7				1				6				14

PDI File #: 186252 A  
 Location: S: Grove Street  
 Location: E: Summer Street (Route 2A) W: Summer Street (Route 2A)  
 City, State: Arlington, MA  
 Client: Bryant Associates/ T. Brayton  
 Site Code: M17079MA  
 Count Date: Wednesday, May 16, 2018  
 Start Time: 6:00 AM  
 End Time: 10:00 AM  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

**Bicycles (on Roadway and Crosswalks)**

	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
Total	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	1	6	6
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Total	2	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	4	6
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
9:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	3
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	1	0	0	0	1	1	0	0	0	0	1	0	3	0	0	0	3	5
Grand Total	2	1	0	0	0	3	1	0	0	0	0	1	2	14	0	0	1	17	21
Approach %	66.7	33.3	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		11.8	82.4	0.0	0.0	5.9		
Total %	9.5	4.8	0.0	0.0	0.0	14.3	4.8	0.0	0.0	0.0	0.0	4.8	9.5	66.7	0.0	0.0	4.8	81.0	
Exiting Leg Total	15						3						3						21

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

8:30 AM	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
8:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
9:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	3
Total Volume	1	1	0	0	0	2	1	0	0	0	0	1	0	5	0	0	0	5	8
% Approach Total	50.0	50.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		
PHF	0.250	0.250	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.625	0.000	0.000	0.000	0.625	0.667
Entering Leg	1	1	0	0	0	2	1	0	0	0	0	1	0	5	0	0	0	5	8
Exiting Leg	6						1						1						8
Total	8						2						6						16

PDI File #: **186252 A**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **6:00 AM**  
 End Time: **10:00 AM**  
 Class:



**Pedestrians**

	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
6:45 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	0	0	0	2	2	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	13	1	14	0	0	0	5	7	12	26
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	9	10	11
Total	0	0	0	0	0	0	0	0	0	13	2	15	0	0	0	7	17	24	39
8:00 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	1	2	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3
8:45 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	0	0	2	5	7	0	0	0	1	1	2	9
9:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	3
Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	2	3	5
Grand Total	0	0	0	0	0	0	0	0	0	16	10	26	0	0	0	9	20	29	55
Approach %	0	0	0	0	0	0	0	0	0	61.538	38.462		0	0	0	31.034	68.966		
Total %	0	0	0	0	0	0	0	0	0	29.091	18.182	47.273	0	0	0	16.364	36.364	52.727	
Exiting Leg Total	0						26						29						55

Peak Hour Analysis from 06:00 AM to 10:00 AM begins at:

	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
7:30 AM	0	0	0	0	0	0	0	0	0	13	1	14	0	0	0	5	7	12	26
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	9	10	11
8:00 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	1	2	4
Total Volume	0	0	0	0	0	0	0	0	0	15	4	19	0	0	0	7	17	24	43
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.9	21.1		0.0	0.0	0.0	29.2	70.8		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.288	1.000	0.339	0.000	0.000	0.000	0.350	0.472	0.500	0.413
Entering Leg	0	0	0	0	0	0	0	0	0	15	4	19	0	0	0	7	17	24	43
Exiting Leg	0						19						24						43
Total	0						38						48						86

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Cars and Heavy Vehicles (Combined)**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:30 PM	81	24	0	105	33	15	0	48	7	81	1	89	242
1:45 PM	85	28	0	113	28	6	0	34	11	82	0	93	240
Total	166	52	0	218	61	21	0	82	18	163	1	182	482
2:00 PM	110	34	0	144	25	15	0	40	13	95	0	108	292
2:15 PM	107	33	0	140	36	13	0	49	12	84	0	96	285
2:30 PM	122	45	0	167	56	20	0	76	15	100	0	115	358
2:45 PM	128	30	0	158	54	14	0	68	10	134	0	144	370
Total	467	142	0	609	171	62	0	233	50	413	0	463	1305
3:00 PM	111	32	0	143	49	16	0	65	11	107	0	118	326
3:15 PM	106	30	0	136	43	14	0	57	9	119	0	128	321
3:30 PM	113	27	0	140	57	14	0	71	9	116	0	125	336
3:45 PM	114	19	0	133	40	12	0	52	11	109	0	120	305
Total	444	108	0	552	189	56	0	245	40	451	0	491	1288
4:00 PM	140	34	0	174	50	14	0	64	12	109	0	121	359
4:15 PM	104	34	0	138	61	20	0	81	8	132	0	140	359
4:30 PM	117	39	0	156	57	12	0	69	7	140	0	147	372
4:45 PM	109	34	0	143	57	14	0	71	8	118	0	126	340
Total	470	141	0	611	225	60	0	285	35	499	0	534	1430
5:00 PM	137	23	0	160	70	14	0	84	14	153	0	167	411
5:15 PM	139	32	0	171	76	18	0	94	15	169	0	184	449
Total	276	55	0	331	146	32	0	178	29	322	0	351	860
Grand Total	1823	498	0	2321	792	231	0	1023	172	1848	1	2021	5365
Approach %	78.5	21.5	0.0		77.4	22.6	0.0		8.5	91.4	0.0		
Total %	34.0	9.3	0.0	43.3	14.8	4.3	0.0	19.1	3.2	34.4	0.0	37.7	
Exiting Leg Total				2640				670				2055	5365
Cars	1782	485	0	2267	783	224	0	1007	167	1817	1	1985	5259
% Cars	97.8	97.4	0.0	97.7	98.9	97.0	0.0	98.4	97.1	98.3	100.0	98.2	98.0
Exiting Leg Total				2600				652				2007	5259
Heavy Vehicles	41	13	0	54	9	7	0	16	5	31	0	36	106
% Heavy Vehicles	2.2	2.6	0.0	2.3	1.1	3.0	0.0	1.6	2.9	1.7	0.0	1.8	2.0
Exiting Leg Total				40				18				48	106

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

4:30 PM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:30 PM	117	39	0	156	57	12	0	69	7	140	0	147	372
4:45 PM	109	34	0	143	57	14	0	71	8	118	0	126	340
5:00 PM	137	23	0	160	70	14	0	84	14	153	0	167	411
5:15 PM	139	32	0	171	76	18	0	94	15	169	0	184	449
Total Volume	502	128	0	630	260	58	0	318	44	580	0	624	1572
% Approach Total	79.7	20.3	0.0		81.8	18.2	0.0		7.1	92.9	0.0		
PHF	0.903	0.821	0.000	0.921	0.855	0.806	0.000	0.846	0.733	0.858	0.000	0.848	0.875
Cars	497	126	0	623	257	58	0	315	44	573	0	617	1555
Cars %	99.0	98.4	0.0	98.9	98.8	100.0	0.0	99.1	100.0	98.8	0.0	98.9	98.9
Heavy Vehicles	5	2	0	7	3	0	0	3	0	7	0	7	17
Heavy Vehicles %	1.0	1.6	0.0	1.1	1.2	0.0	0.0	0.9	0.0	1.2	0.0	1.1	1.1
Cars Enter Leg	497	126	0	623	257	58	0	315	44	573	0	617	1555
Heavy Enter Leg	5	2	0	7	3	0	0	3	0	7	0	7	17
Total Entering Leg	502	128	0	630	260	58	0	318	44	580	0	624	1572
Cars Exiting Leg				830				170				555	1555
Heavy Exiting Leg				10				2				5	17
Total Exiting Leg				840				172				560	1572

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

Class: **Cars-Combined (Motorcycles, Cars, Light Goods)**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:30 PM	79	24	0	103	33	15	0	48	7	77	1	85	236
1:45 PM	83	27	0	110	28	6	0	34	11	79	0	90	234
Total	162	51	0	213	61	21	0	82	18	156	1	175	470
2:00 PM	104	34	0	138	24	15	0	39	12	90	0	102	279
2:15 PM	103	33	0	136	34	11	0	45	12	83	0	95	276
2:30 PM	120	43	0	163	55	20	0	75	14	99	0	113	351
2:45 PM	123	29	0	152	54	13	0	67	10	132	0	142	361
Total	450	139	0	589	167	59	0	226	48	404	0	452	1267
3:00 PM	109	31	0	140	48	16	0	64	10	104	0	114	318
3:15 PM	103	27	0	130	43	12	0	55	8	118	0	126	311
3:30 PM	110	26	0	136	57	13	0	70	8	115	0	123	329
3:45 PM	112	18	0	130	40	12	0	52	11	108	0	119	301
Total	434	102	0	536	188	53	0	241	37	445	0	482	1259
4:00 PM	138	34	0	172	49	14	0	63	12	107	0	119	354
4:15 PM	101	33	0	134	61	19	0	80	8	132	0	140	354
4:30 PM	116	39	0	155	56	12	0	68	7	138	0	145	368
4:45 PM	108	33	0	141	57	14	0	71	8	116	0	124	336
Total	463	139	0	602	223	59	0	282	35	493	0	528	1412
5:00 PM	136	22	0	158	69	14	0	83	14	153	0	167	408
5:15 PM	137	32	0	169	75	18	0	93	15	166	0	181	443
Total	273	54	0	327	144	32	0	176	29	319	0	348	851
Grand Total	1782	485	0	2267	783	224	0	1007	167	1817	1	1985	5259
Approach %	78.6	21.4	0.0		77.8	22.2	0.0		8.4	91.5	0.1		
Total %	33.9	9.2	0.0	43.1	14.9	4.3	0.0	19.1	3.2	34.6	0.0	37.7	
Exiting Leg Total				2600				652				2007	5259

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:30 PM	116	39	0	155	56	12	0	68	7	138	0	145	368
4:45 PM	108	33	0	141	57	14	0	71	8	116	0	124	336
5:00 PM	136	22	0	158	69	14	0	83	14	153	0	167	408
5:15 PM	137	32	0	169	75	18	0	93	15	166	0	181	443
Total Volume	497	126	0	623	257	58	0	315	44	573	0	617	1555
% Approach Total	79.8	20.2	0.0		81.6	18.4	0.0		7.1	92.9	0.0		
PHF	0.907	0.808	0.000	0.922	0.857	0.806	0.000	0.847	0.733	0.863	0.000	0.852	0.878
Entering Leg	497	126	0	623	257	58	0	315	44	573	0	617	1555
Exiting Leg				830				170				555	1555
Total				1453				485				1172	3110

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total	
	from East				from South				from West					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total		
1:30 PM	2	0	0	2	0	0	0	0	0	4	0	4	6	
1:45 PM	2	1	0	3	0	0	0	0	0	3	0	3	6	
<b>Total</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>12</b>	
2:00 PM	6	0	0	6	1	0	0	1	1	5	0	6	13	
2:15 PM	4	0	0	4	2	2	0	4	0	1	0	1	9	
2:30 PM	2	2	0	4	1	0	0	1	1	1	0	2	7	
2:45 PM	5	1	0	6	0	1	0	1	0	2	0	2	9	
<b>Total</b>	<b>17</b>	<b>3</b>	<b>0</b>	<b>20</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>11</b>	<b>38</b>	
3:00 PM	2	1	0	3	1	0	0	1	1	3	0	4	8	
3:15 PM	3	3	0	6	0	2	0	2	1	1	0	2	10	
3:30 PM	3	1	0	4	0	1	0	1	1	1	0	2	7	
3:45 PM	2	1	0	3	0	0	0	0	0	1	0	1	4	
<b>Total</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>9</b>	<b>29</b>	
4:00 PM	2	0	0	2	1	0	0	1	0	2	0	2	5	
4:15 PM	3	1	0	4	0	1	0	1	0	0	0	0	5	
4:30 PM	1	0	0	1	1	0	0	1	0	2	0	2	4	
4:45 PM	1	1	0	2	0	0	0	0	0	2	0	2	4	
<b>Total</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>18</b>	
5:00 PM	1	1	0	2	1	0	0	1	0	0	0	0	3	
5:15 PM	2	0	0	2	1	0	0	1	0	3	0	3	6	
<b>Total</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>9</b>	
<b>Grand Total</b>	<b>41</b>	<b>13</b>	<b>0</b>	<b>54</b>	<b>9</b>	<b>7</b>	<b>0</b>	<b>16</b>	<b>5</b>	<b>31</b>	<b>0</b>	<b>36</b>	<b>106</b>	
Approach %	75.9	24.1	0.0		56.3	43.8	0.0		13.9	86.1	0.0			
Total %	38.7	12.3	0.0	50.9	8.5	6.6	0.0	15.1	4.7	29.2	0.0	34.0		
Exiting Leg Total					40				18				48	
Buses	12	5	0	17	2	4	0	6	3	8	0	11	34	
% Buses	29.3	38.5	0.0	31.5	22.2	57.1	0.0	37.5	60.0	25.8	0.0	30.6	32.1	
Exiting Leg Total	10				8				16				34	
Single-Unit Trucks	25	8	0	33	6	3	0	9	2	21	0	23	65	
% Single-Unit	61.0	61.5	0.0	61.1	66.7	42.9	0.0	56.3	40.0	67.7	0.0	63.9	61.3	
Exiting Leg Total	27				10				28				65	
Articulated Trucks	4	0	0	4	1	0	0	1	0	2	0	2	7	
% Articulated	9.8	0.0	0.0	7.4	11.1	0.0	0.0	6.3	0.0	6.5	0.0	5.6	6.6	
Exiting Leg Total	3				0				4				7	

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
2:00 PM	6	0	0	6	1	0	0	1	1	5	0	6	13
2:15 PM	4	0	0	4	2	2	0	4	0	1	0	1	9
2:30 PM	2	2	0	4	1	0	0	1	1	1	0	2	7
2:45 PM	5	1	0	6	0	1	0	1	0	2	0	2	9
<b>Total Volume</b>	<b>17</b>	<b>3</b>	<b>0</b>	<b>20</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>11</b>	<b>38</b>
% Approach Total	85.0	15.0	0.0		57.1	42.9	0.0		18.2	81.8	0.0		
PHF	0.708	0.375	0.000	0.833	0.500	0.375	0.000	0.438	0.500	0.450	0.000	0.458	0.731
Buses	7	0	0	7	2	1	0	3	0	3	0	3	13
Buses %	41.2	0.0	0.0	35.0	50.0	33.3	0.0	42.9	0.0	33.3	0.0	27.3	34.2
Single-Unit Trucks	9	3	0	12	2	2	0	4	2	6	0	8	24
Single-Unit %	52.9	100.0	0.0	60.0	50.0	66.7	0.0	57.1	100.0	66.7	0.0	72.7	63.2
Articulated Trucks	1	0	0	1	0	0	0	0	0	0	0	0	1
Articulated %	5.9	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Buses	7	0	0	7	2	1	0	3	0	3	0	3	13
Single-Unit Trucks	9	3	0	12	2	2	0	4	2	6	0	8	24
Articulated Trucks	1	0	0	1	0	0	0	0	0	0	0	0	1

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
Total Entering Leg	17	3	0	20	4	3	0	7	2	9	0	11	38
Buses				5				0				8	13
Single-Unit Trucks				8				5				11	24
Articulated Trucks				0				0				1	1
Total Exiting Leg				13				5				20	38

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**  
 Class:



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**Cars**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:30 PM	69	19	0	88	29	13	0	42	5	71	0	76	206
1:45 PM	71	23	0	94	23	4	0	27	9	72	0	81	202
Total	140	42	0	182	52	17	0	69	14	143	0	157	408
2:00 PM	95	30	0	125	22	13	0	35	7	78	0	85	245
2:15 PM	94	27	0	121	27	11	0	38	10	74	0	84	243
2:30 PM	114	40	0	154	51	19	0	70	13	92	0	105	329
2:45 PM	112	26	0	138	48	9	0	57	7	122	0	129	324
Total	415	123	0	538	148	52	0	200	37	366	0	403	1141
3:00 PM	97	30	0	127	42	16	0	58	10	99	0	109	294
3:15 PM	92	25	0	117	35	10	0	45	7	102	0	109	271
3:30 PM	103	20	0	123	50	12	0	62	7	101	0	108	293
3:45 PM	100	18	0	118	33	11	0	44	9	92	0	101	263
Total	392	93	0	485	160	49	0	209	33	394	0	427	1121
4:00 PM	126	28	0	154	44	14	0	58	10	95	0	105	317
4:15 PM	93	27	0	120	53	16	0	69	8	116	0	124	313
4:30 PM	108	36	0	144	50	12	0	62	6	124	0	130	336
4:45 PM	98	31	0	129	51	12	0	63	7	107	0	114	306
Total	425	122	0	547	198	54	0	252	31	442	0	473	1272
5:00 PM	124	20	0	144	62	13	0	75	13	144	0	157	376
5:15 PM	124	31	0	155	72	16	0	88	12	152	0	164	407
Total	248	51	0	299	134	29	0	163	25	296	0	321	783
Grand Total	1620	431	0	2051	692	201	0	893	140	1641	0	1781	4725
Approach %	79.0	21.0	0.0		77.5	22.5	0.0		7.9	92.1	0.0		
Total %	34.3	9.1	0.0	43.4	14.6	4.3	0.0	18.9	3.0	34.7	0.0	37.7	
Exiting Leg Total				2333				571				1821	4725

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
4:30 PM	108	36	0	144	50	12	0	62	6	124	0	130	336
4:45 PM	98	31	0	129	51	12	0	63	7	107	0	114	306
5:00 PM	124	20	0	144	62	13	0	75	13	144	0	157	376
5:15 PM	124	31	0	155	72	16	0	88	12	152	0	164	407
Total Volume	454	118	0	572	235	53	0	288	38	527	0	565	1425
% Approach Total	79.4	20.6	0.0		81.6	18.4	0.0		6.7	93.3	0.0		
PHF	0.915	0.819	0.000	0.923	0.816	0.828	0.000	0.818	0.731	0.867	0.000	0.861	0.875
Entering Leg	454	118	0	572	235	53	0	288	38	527	0	565	1425
Exiting Leg				762				156				507	1425
Total				1334				444				1072	2850

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
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**Light Goods Vehicle**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:30 PM	9	4	0	13	4	2	0	6	2	6	1	9	28
1:45 PM	12	4	0	16	5	2	0	7	2	7	0	9	32
Total	21	8	0	29	9	4	0	13	4	13	1	18	60
2:00 PM	9	4	0	13	2	2	0	4	5	12	0	17	34
2:15 PM	9	6	0	15	7	0	0	7	2	9	0	11	33
2:30 PM	6	3	0	9	4	1	0	5	1	6	0	7	21
2:45 PM	11	3	0	14	6	4	0	10	3	10	0	13	37
Total	35	16	0	51	19	7	0	26	11	37	0	48	125
3:00 PM	12	1	0	13	6	0	0	6	0	4	0	4	23
3:15 PM	11	1	0	12	8	2	0	10	1	15	0	16	38
3:30 PM	6	6	0	12	7	1	0	8	1	12	0	13	33
3:45 PM	12	0	0	12	7	1	0	8	2	16	0	18	38
Total	41	8	0	49	28	4	0	32	4	47	0	51	132
4:00 PM	12	6	0	18	5	0	0	5	2	12	0	14	37
4:15 PM	8	6	0	14	8	3	0	11	0	16	0	16	41
4:30 PM	8	3	0	11	5	0	0	5	1	14	0	15	31
4:45 PM	10	2	0	12	5	2	0	7	1	8	0	9	28
Total	38	17	0	55	23	5	0	28	4	50	0	54	137
5:00 PM	11	2	0	13	6	1	0	7	1	9	0	10	30
5:15 PM	12	1	0	13	3	2	0	5	3	14	0	17	35
Total	23	3	0	26	9	3	0	12	4	23	0	27	65
Grand Total	158	52	0	210	88	23	0	111	27	170	1	198	519
Approach %	75.2	24.8	0.0		79.3	20.7	0.0		13.6	85.9	0.5		
Total %	30.4	10.0	0.0	40.5	17.0	4.4	0.0	21.4	5.2	32.8	0.2	38.2	
Exiting Leg Total	258				79				182				519

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:30 PM	6	6	0	12	7	1	0	8	1	12	0	13	33
3:45 PM	12	0	0	12	7	1	0	8	2	16	0	18	38
4:00 PM	12	6	0	18	5	0	0	5	2	12	0	14	37
4:15 PM	8	6	0	14	8	3	0	11	0	16	0	16	41
Total Volume	38	18	0	56	27	5	0	32	5	56	0	61	149
% Approach Total	67.9	32.1	0.0		84.4	15.6	0.0		8.2	91.8	0.0		
PHF	0.792	0.750	0.000	0.778	0.844	0.417	0.000	0.727	0.625	0.875	0.000	0.847	0.909
Entering Leg	38	18	0	56	27	5	0	32	5	56	0	61	149
Exiting Leg	83				23				43				149
Total	139				55				104				298

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

**Buses**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>
2:00 PM	4	0	0	4	1	0	0	1	0	1	0	1	6
2:15 PM	0	0	0	0	1	1	0	2	0	1	0	1	3
2:30 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
2:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>13</b>
3:00 PM	0	1	0	1	0	0	0	0	1	1	0	2	3
3:15 PM	0	3	0	3	0	2	0	2	1	0	0	1	6
3:30 PM	1	0	0	1	0	1	0	1	1	0	0	1	3
3:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	2
<b>Total</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>14</b>
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>3</b>
<b>Grand Total</b>	<b>12</b>	<b>5</b>	<b>0</b>	<b>17</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>11</b>	<b>34</b>
Approach %	70.6	29.4	0.0		33.3	66.7	0.0		27.3	72.7	0.0		
Total %	35.3	14.7	0.0	50.0	5.9	11.8	0.0	17.6	8.8	23.5	0.0	32.4	
Exiting Leg Total				10				8				16	34

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

3:00 PM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:00 PM	0	1	0	1	0	0	0	0	1	1	0	2	3
3:15 PM	0	3	0	3	0	2	0	2	1	0	0	1	6
3:30 PM	1	0	0	1	0	1	0	1	1	0	0	1	3
3:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	1	5	0	6	0	3	0	3	3	2	0	5	14
% Approach Total	16.7	83.3	0.0		0.0	100.0	0.0		60.0	40.0	0.0		
PHF	0.250	0.417	0.000	0.500	0.000	0.375	0.000	0.375	0.750	0.500	0.000	0.625	0.583
Entering Leg	1	5	0	6	0	3	0	3	3	2	0	5	14
Exiting Leg				2				8				4	14
Total				8				11				9	28

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

**Single-Unit Trucks**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:30 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
1:45 PM	1	1	0	2	0	0	0	0	0	3	0	3	5
<b>Total</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>8</b>
2:00 PM	1	0	0	1	0	0	0	0	1	4	0	5	6
2:15 PM	4	0	0	4	1	1	0	2	0	0	0	0	6
2:30 PM	0	2	0	2	1	0	0	1	1	0	0	1	4
2:45 PM	4	1	0	5	0	1	0	1	0	2	0	2	8
<b>Total</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>12</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>8</b>	<b>24</b>
3:00 PM	2	0	0	2	1	0	0	1	0	2	0	2	5
3:15 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
3:30 PM	2	1	0	3	0	0	0	0	0	1	0	1	4
3:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
<b>Total</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>15</b>
4:00 PM	0	0	0	0	1	0	0	1	0	2	0	2	3
4:15 PM	2	1	0	3	0	1	0	1	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
4:45 PM	1	1	0	2	0	0	0	0	0	1	0	1	3
<b>Total</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>12</b>
5:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
5:15 PM	1	0	0	1	1	0	0	1	0	2	0	2	4
<b>Total</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>6</b>
<b>Grand Total</b>	<b>25</b>	<b>8</b>	<b>0</b>	<b>33</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>2</b>	<b>21</b>	<b>0</b>	<b>23</b>	<b>65</b>
Approach %	75.8	24.2	0.0		66.7	33.3	0.0		8.7	91.3	0.0		
Total %	38.5	12.3	0.0	50.8	9.2	4.6	0.0	13.8	3.1	32.3	0.0	35.4	
Exiting Leg Total				27				10				28	65

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

2:00 PM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
2:00 PM	1	0	0	1	0	0	0	0	1	4	0	5	6
2:15 PM	4	0	0	4	1	1	0	2	0	0	0	0	6
2:30 PM	0	2	0	2	1	0	0	1	1	0	0	1	4
2:45 PM	4	1	0	5	0	1	0	1	0	2	0	2	8
<b>Total Volume</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>12</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>8</b>	<b>24</b>
<b>% Approach Total</b>	<b>75.0</b>	<b>25.0</b>	<b>0.0</b>		<b>50.0</b>	<b>50.0</b>	<b>0.0</b>		<b>25.0</b>	<b>75.0</b>	<b>0.0</b>		
PHF	0.563	0.375	0.000	0.600	0.500	0.500	0.000	0.500	0.500	0.375	0.000	0.400	0.750
Entering Leg	9	3	0	12	2	2	0	4	2	6	0	8	24
Exiting Leg				8				5				11	24
<b>Total</b>				<b>20</b>				<b>9</b>				<b>19</b>	<b>48</b>

PDI File #: **186252 AA**  
 Location: **S: Grove Street**  
 Location: **E: Summer Street (Route 2A) W: Summer Street (Route 2A)**  
 City, State: **Arlington, MA**  
 Client: **Bryant Associates/ T. Brayton**  
 Site Code: **M17079MA**  
 Count Date: **Wednesday, May 16, 2018**  
 Start Time: **1:30 PM**  
 End Time: **5:30 PM**  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

**Articulated Trucks**

	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
1:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	2	0	2	2
2:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	3	1	0	0	1	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	4	0	0	4	1	0	0	1	0	2	0	2	7
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	57.1	0.0	0.0	57.1	14.3	0.0	0.0	14.3	0.0	28.6	0.0	28.6	
Exiting Leg Total				3				0				4	7

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

3:45 PM	Summer Street (Route 2A)				Grove Street				Summer Street (Route 2A)				Total
	from East				from South				from West				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	3	0	0	3	1	0	0	1	0	0	0	0	4
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.500
Entering Leg	3	0	0	3	1	0	0	1	0	0	0	0	4
Exiting Leg				1				0				3	4
Total				4				1				3	8

PDI File #: 186252 AA  
 Location: S: Grove Street  
 Location: E: Summer Street (Route 2A) W: Summer Street (Route 2A)  
 City, State: Arlington, MA  
 Client: Bryant Associates/ T. Brayton  
 Site Code: M17079MA  
 Count Date: Wednesday, May 16, 2018  
 Start Time: 1:30 PM  
 End Time: 5:30 PM  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

**Bicycles (on Roadway and Crosswalks)**

	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	2
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	2	3
3:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
3:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
Total	2	0	0	0	0	2	1	0	0	0	0	1	0	1	0	0	0	1	4
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:45 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	1	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Grand Total	2	0	0	0	0	2	2	1	0	0	0	3	1	3	0	0	0	4	9
Approach %	100.0	0.0	0.0	0.0	0.0		66.7	33.3	0.0	0.0	0.0		25.0	75.0	0.0	0.0	0.0		
Total %	22.2	0.0	0.0	0.0	0.0	22.2	22.2	11.1	0.0	0.0	0.0	33.3	11.1	33.3	0.0	0.0	0.0	44.4	
Exiting Leg Total	5						1						3						9

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
2:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	2
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
3:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	2	4
% Approach Total	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0		50.0	50.0	0.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.500	0.500
Entering Leg	1	0	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	2	4
Exiting Leg	2						1						1						4
Total	3						2						3						8

PDI File #: 186252 AA  
 Location: S: Grove Street  
 Location: E: Summer Street (Route 2A) W: Summer Street (Route 2A)  
 City, State: Arlington, MA  
 Client: Bryant Associates/ T. Brayton  
 Site Code: M17079MA  
 Count Date: Wednesday, May 16, 2018  
 Start Time: 1:30 PM  
 End Time: 5:30 PM  
 Class:



46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdilic.com

**Pedestrians**

	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0	2	3
1:45 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	1	0	1	0	0	0	2	0	2	3
2:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
2:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	13	0	13	14
2:45 PM	0	0	0	0	0	0	0	0	0	4	6	10	0	0	0	1	0	1	11
Total	0	0	0	0	0	0	0	0	0	6	8	14	0	0	0	14	0	14	28
3:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	5	0	5	7
3:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	9	0	9	12
4:00 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	2	3	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	1	1	2	6
Total	0	0	0	0	0	0	0	0	0	2	5	7	0	0	0	4	3	7	14
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	1	4	5	7
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4	0	4	6
Total	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	5	4	9	13
Grand Total	0	0	0	0	0	0	0	0	0	12	17	29	0	0	0	34	7	41	70
Approach %	0	0	0	0	0	0	0	0	0	41.379	58.621		0	0	0	82.927	17.073		
Total %	0	0	0	0	0	0	0	0	0	17.143	24.286	41.429	0	0	0	48.571	10	58.571	
Exiting Leg Total	0						29						41						70

Peak Hour Analysis from 01:30 PM to 05:30 PM begins at:

2:15 PM	Summer Street (Route 2A)						Grove Street						Summer Street (Route 2A)						Total
	from East						from South						from West						
	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	U-Turn	CW-NB	CW-SB	Total	
2:15 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
2:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	13	0	13	14
2:45 PM	0	0	0	0	0	0	0	0	0	4	6	10	0	0	0	1	0	1	11
3:00 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	5	0	5	7
Total Volume	0	0	0	0	0	0	0	0	0	5	10	15	0	0	0	19	0	19	34
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.313	0.417	0.375	0.000	0.000	0.000	0.365	0.000	0.365	0.607
Entering Leg	0	0	0	0	0	0	0	0	0	5	10	15	0	0	0	19	0	19	34
Exiting Leg	0						15						19						34
Total	0						30						38						68



## **ATTACHMENT 2**

### **Crash Summary**



## CRASH ANALYSIS

### Arlington RMD - 251 Summer Street

#### Arlington, MA

	Summer Street (Route 2A) at Site Driveways	Summer Street (Route 2A) at Brattle Street/Symmes Road
<b>Year</b>		
2013	0	7
2014	0	2
2015	0	1
2016	0	1
2017	0	1
<i>Total</i>	<i>0</i>	<i>12</i>
<b>Type</b>		
Angle	0	2
Rear-end	0	6
Sideswipe	0	3
Head-on	0	0
Pedestrian	0	0
Bicycle	0	0
Single Vehicle	0	1
Other	0	0
Unknown	0	0
<i>Total</i>	<i>0</i>	<i>12</i>
<b>Severity</b>		
Property Damage	0	4
Personal Injury	0	4
Fatality	0	0
Unknown	0	4
<i>Total</i>	<i>0</i>	<i>11</i>
<b>Weather</b>		
Clear	0	9
Cloudy	0	2
Rain	0	0
Snow	0	1
Sleet	0	0
Fog	0	0
Other	0	0
Unknown	0	0
<i>Total</i>	<i>0</i>	<i>12</i>
<b>Time</b>		
7:00 AM to 9:00 AM	0	2
9:00 AM to 4:00 PM	0	6
4:00 PM to 6:00 PM	0	1
6:00 PM to 7:00 AM	0	3
<b>Total</b>	<b>0</b>	<b>12</b>
Crash Rate	n/a	0.34
State Average	n/a	0.78
District 4 Average	n/a	0.73

Source: MassDOT



## **ATTACHMENT 3**

### **Queue Length Observations**



## QUEUE OBSERVATION SHEET



Project: Arlington RMD  
 Date: 12/3/2020  
 Time: 4:30 PM - 5:30 PM  
 Intersection: Summer Street at Brattle Street  
 Approach: EB  
 Observer: EKB

Time	Queue (# of vehicles)	Queue (ft) <sup>(1)</sup>	Notes
4:30 PM	5	125	E. driveway blocked
4:32 PM	3	75	
4:34 PM	8	200	W. driveway blocked
4:35 PM	6	150	E. driveway blocked
4:37 PM	5	125	E. driveway blocked
4:38 PM	13	325	W. driveway blocked
4:40 PM	6	150	E. driveway blocked
4:41 PM	7	175	E. driveway blocked
4:43 PM	3	75	
4:44 PM	1	25	
4:46 PM	7	175	one veh was an MBTA bus
4:48 PM	4	100	E. driveway blocked
4:50 PM	4	100	E. driveway blocked
4:51 PM	3	75	
4:52 PM	6	150	E. driveway blocked
4:53 PM	2	50	
4:54 PM	3	75	
4:56 PM	2	50	
4:57 PM	3	75	
4:58 PM	6	150	E. driveway blocked
4:59 PM	7	175	E. driveway blocked
5:00 PM	1	25	
5:01 PM	5	125	E. driveway blocked
5:02 PM	6	150	E. driveway blocked
5:03 PM	4	100	E. driveway blocked
5:04 PM	1	25	
5:05 PM	4	100	E. driveway blocked
5:07 PM	4	100	E. driveway blocked
5:09 PM	7	175	E. driveway blocked
5:11 PM	6	150	E. driveway blocked
5:12 PM	3	75	
5:13 PM	6	150	E. driveway blocked
5:14 PM	2	50	
5:16 PM	6	150	E. driveway blocked
5:18 PM	5	125	E. driveway blocked
5:19 PM	7	175	E. driveway blocked
5:20 PM	7	175	E. driveway blocked
5:21 PM	7	175	E. driveway blocked
5:22 PM	0	0	
5:23 PM	6	150	E. driveway blocked
5:24 PM	4	100	E. driveway blocked
5:25 PM	4	100	E. driveway blocked
5:26 PM	2	50	
5:27 PM	7	175	E. driveway blocked
5:28 PM	1	25	
5:30 PM	8	200	E. driveway blocked

(1) Assumes a 25 ft veh length

