



TOWN OF BROOKLINE

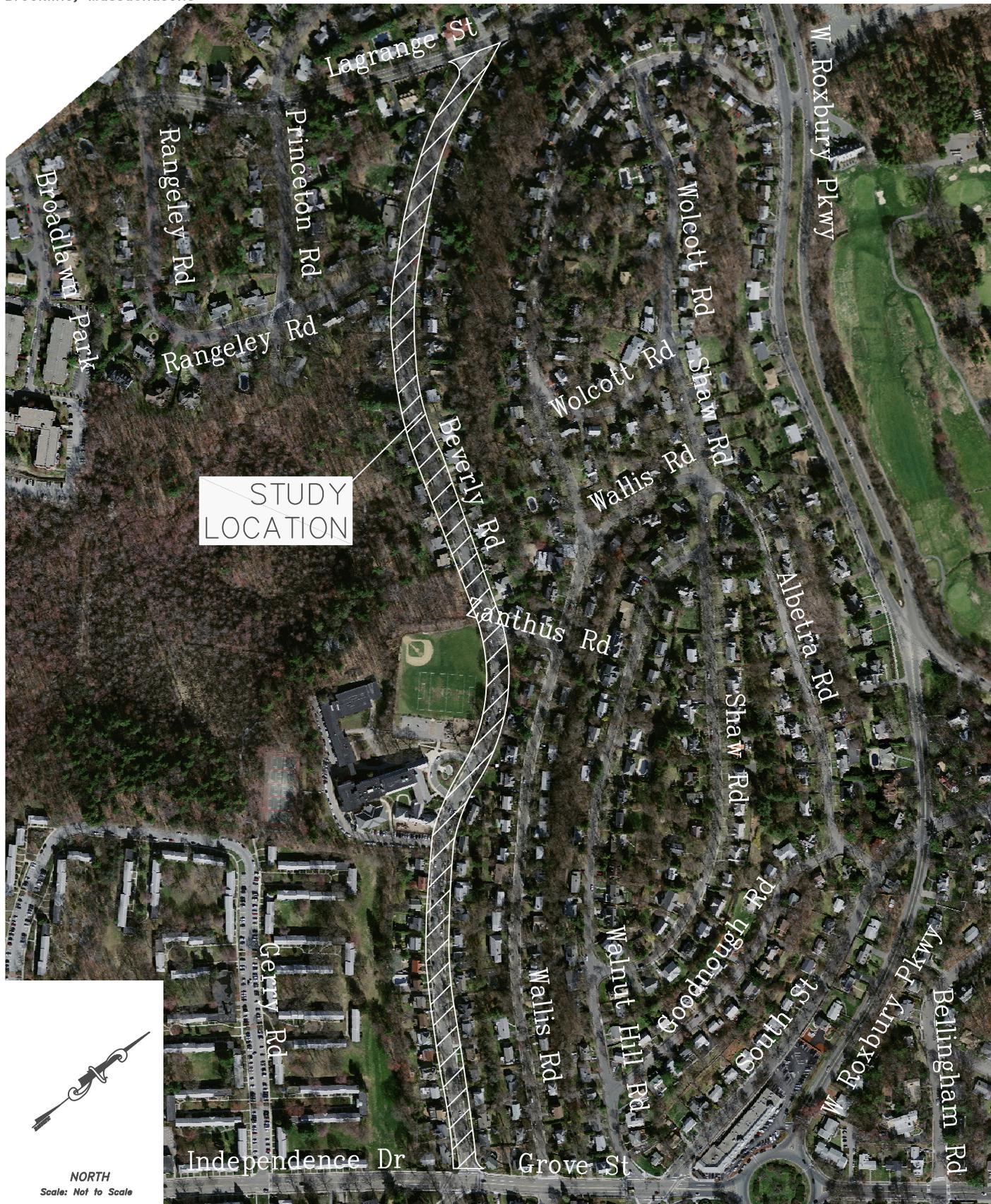
Department of Public Works
333 Washington Street
Brookline, MA 02445-6863

Initial Needs Assessment
For
Beverly Road
From Lagrange Street to Grove Street

Date: February 2020

The purpose of this Initial Needs Assessment is to establish and review baseline conditions for Beverly Road from Grove Street to Lagrange Street to determine if traffic calming elements are needed. The study location can be seen in **Figure 1**. Recommendations will be based on the Town of Brookline Department of Public Works Traffic Calming Policy, guidelines issued by state and federal agencies and industry best practices.

Carolyn Thall a Town Meeting Member of Precinct 16 submitted a traffic calming request for Beverly Road between Lagrange Street and Independence Drive. The problems identified by the neighborhood traffic calming request are speeding vehicles, excessive traffic volumes and safety concerns for school aged children.



BROOKLINE ENGINEERING/TRANSPORTATION DIVISION
333 WASHINGTON ST 4TH FLOOR, BROOKLINE, MA
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Figure 1

Study Location

EXISTING CONDITIONS

Roadway

Beverly Road is classified by the Massachusetts Department of Transportation (MassDOT) as an urban Collector under town jurisdiction. Urban collectors collect traffic from the local roadway networks and distribute them to the arterial system. In addition, these roadways can provide an important link to small scale land uses to the community. Lane uses along Beverly Road includes residential housing and the Baker Elementary School.

Beverly Road generally runs in a Northeast-Southwest direction between Grove Street and Beverly Road. The roadway width of Beverly Road is approximately 32'-34' parking is allowed on both sides of the street. Sidewalks are provided on both sides of Beverly Road. The unposted statutory speed limit on Beverly Road is 25 mph. Where Beverly Road abuts the Baker School a regulatory school zone speed of 20 mph is posted with flashers.



Beverly Road at 236 Beverly Road Looking Westbound



Beverly Road at 95 Beverly Road Looking Eastbound

Intersections

Beverly Road, Independence Drive, Grove Street and Russet Road meet to form a four way offset skewed signalized intersection. The Independence Drive and Grove Streets approaches both provide two general purpose travel lanes. The Russets Road approach enters the intersection at a skew and provides one general purpose travel lane. The Beverly Road approach provides one general purpose lane with a pedestrian refuge island. Crosswalks are provided on all four legs of the intersection. Wheel chair ramps are provided but need to be upgrade with detectable warning panels to be ADA compliant. Land use at the intersection consists of residential houses.

The Beverly Road at Zanthus Road intersection was re-constructed in 2011 and particular attention was given to intersection geometry and pedestrian accommodations. The reconstruction tightened the corner radii and provided ADA wheel chair ramps at the marked crosswalks. The Beverly Road approaches to the intersection operate free with no control and each provide one general purpose travel lane. The Zanthus Road approach to the intersection operates under stop control and provides one general purpose lane. Land use at the intersection consists of residential houses and the Baker School Playground.

The Beverly Road at Rangeley Road intersection was re-constructed in 2011 and particular attention was given to intersection geometry and pedestrian accommodations. The reconstruction tightened the corner radii, provided ADA wheel chair ramps and a marked crosswalks across the Rangeley Road leg of the intersection. The Beverly Road approaches to the intersection operate free with no control and each provide one general purpose travel lane. The Rangeley Road approach to the intersection operates under stop control and provides one general purpose lane. Land use at the intersection consists of residential houses.

The Beverly Road at Lagrange Street intersection was re-constructed in 2011 and the reconstruction tightened the Northeast corner radii, and provided ADA wheel chair ramps. The Lagrange Street approaches to the intersection operate free with no control and each provides one general purpose travel lane. The Beverly Road approach to the intersection enters at a 135 degree skew, operates under stop control and provides one general purpose lane. There is a marked crosswalk crossing the Beverly Road approach. There is a request for a crosswalk across Lagrange Street at Beverly Road. Land use at the intersection consists of residential houses.

SPEED STUDY

Automatic Traffic Recorders (ATR) were used on Beverly Road in September 2019 at strategic locations to get a picture of vehicle speeds in the area. The results are presented in **Figure 2** and below in **Table 2**. Speed data are provided in the **Appendix**.

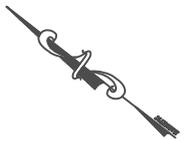
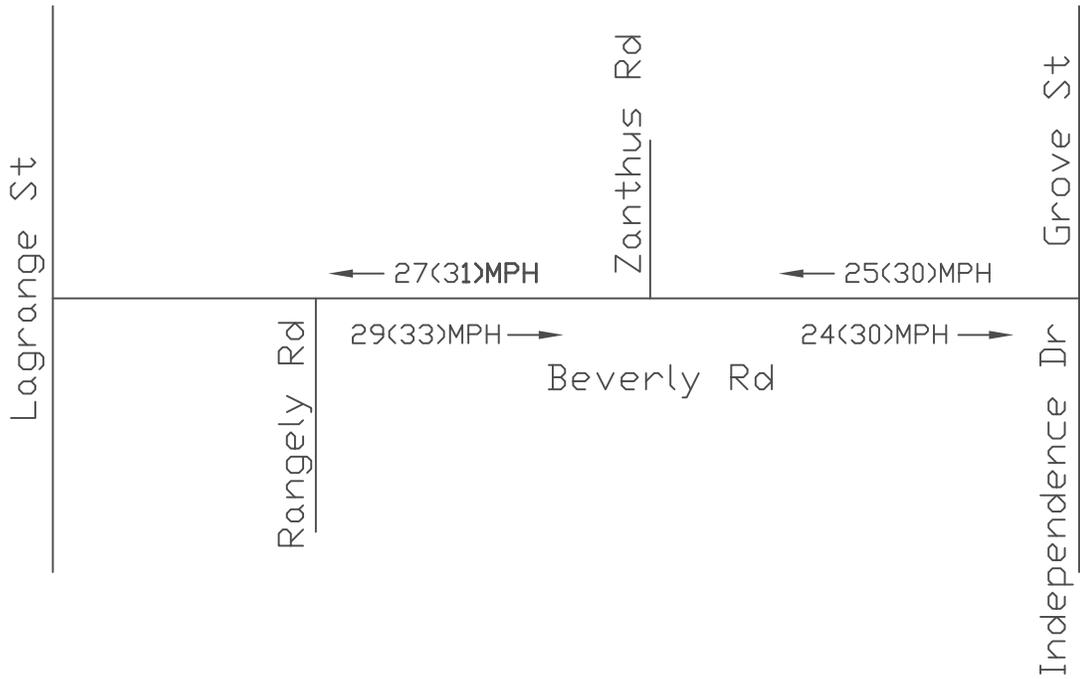
Table 2
Study Area Travel Speeds

<u>Travel Direction</u>	<u>Speed Limit</u>	<u>Travel Speed</u>	
		<u>Average</u>	<u>85th Percentile</u>
<i>Beverly Rd –@ 260 Beverly Rd</i>			
Westbound	25 mph	25 mph	30 mph
Eastbound	25 mph	24 mph	30 mph
<i>Beverly Rd –@ 105 Beverly Rd</i>			
Westbound	25 mph	27 mph	31 mph
Eastbound	25 mph	29 mph	33 mph

As summarized in **Table 2**, the posted regulatory speed limit for Beverly Road within the study area is 25 mph (miles per hour) and there is a school zone starting at 152 Beverly Road and going to 236 Beverly Road.

Vehicles traveling on Beverly Road near 260 Beverly Road have an average speed of 25 mph westbound and 24 mph eastbound. The 85th percentile speed of vehicles is 30 mph westbound and 30 mph eastbound.

Vehicles traveling on Beverly Road near 105 Beverly Road have an average speed of 27 mph westbound and 29 mph eastbound. The 85th percentile speed of vehicles is 31 mph westbound and 33 mph eastbound.



##(##)MPH = AVERAGE(85%)MPH

NORTH
Scale: Not to Scale



Figure 2

Average Speed and 85th Percentile Speed

TRAFFIC VOLUMES

Daily Traffic

Automatic Traffic Recorders (ATR) were used on Beverly Road in September 2019 at strategic locations to get a picture of vehicle volumes in the area. The results of the counts are summarized below in **Table 3**, depicted in **Figure 3**, and traffic volume data are provided in the **Appendix**.

Table 3
Existing Roadway Traffic-volume Summary

	<u>Weekday</u> Daily Volume (vpd) ¹	<u>Weekday Morning Peak Hour</u> Volume (vph) ²	<u>Percent</u> Daily Traffic	<u>Peak</u> Flow Direction	<u>Weekday Evening Peak Hour</u> Volume (vph) ²	<u>Percent</u> Daily Traffic	<u>Peak</u> Flow Direction
Beverly Road at 105 Beverly Road	1,973	257	13%	75%EB ³	182	9%	62%EB ³
Beverly Road at 260 Beverly Road	1,933	267	14%	51%EB ³	265	14%	73%EB ³

¹Two-way daily traffic expressed in vehicles per day

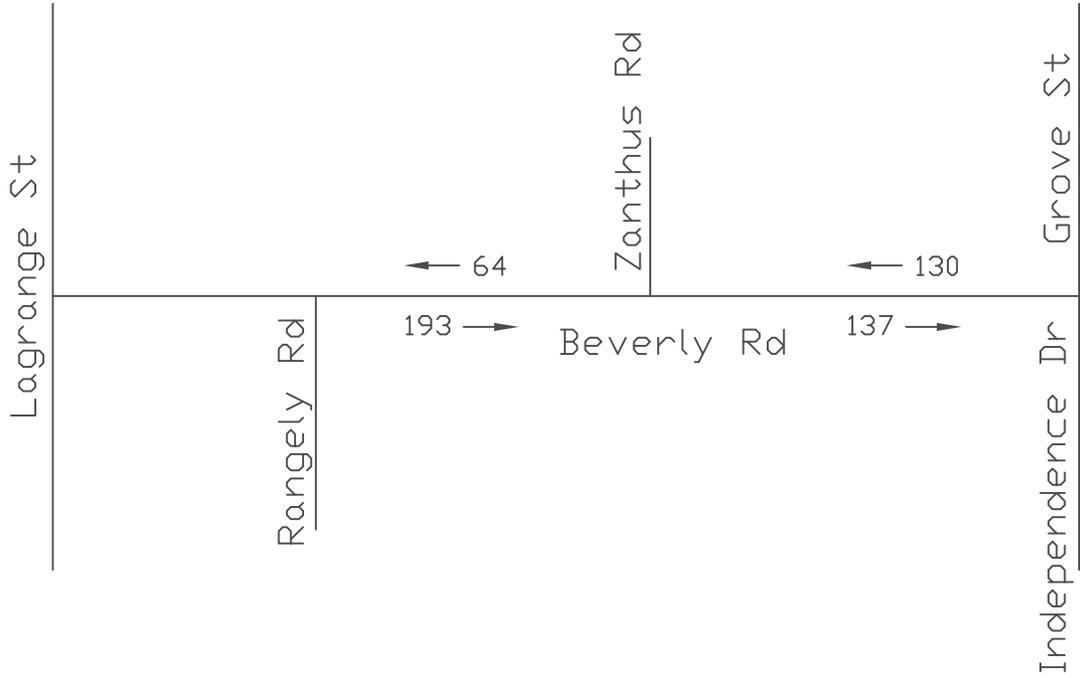
²Two-way peak hour volume expressed in vehicles per hour

³ NB = Northbound EB=Eastbound SB=Southbound WB=Westbound

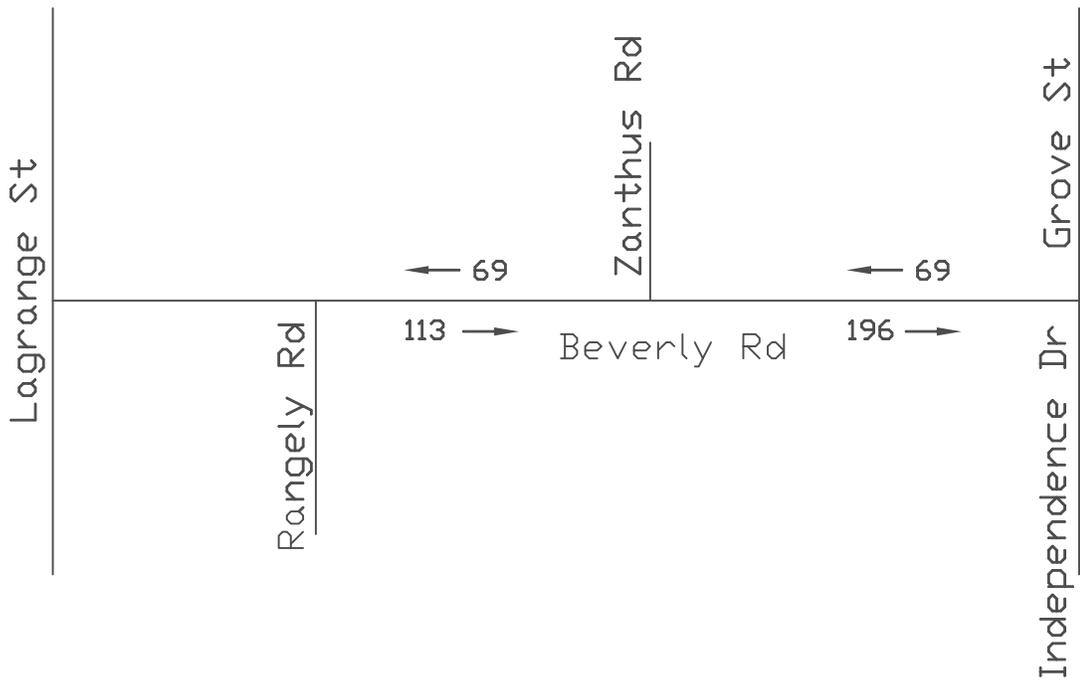
As summarized in **Table 3**, daily traffic volumes on Beverly Road near 105 Beverly Road is approximately 1,973 vehicles per day during the weekday. Peak hour traffic flow is approximately 9 TO 13 percent of daily traffic with directional flow split heavier eastbound in the morning and the evening.

Daily traffic volumes on Beverly Road near 260 Beverly Road is approximately 1,933 vehicles per day during the weekday. Peak hour traffic flow is approximately 14 percent of daily traffic with directional flow split heavier eastbound in the morning and the evening.

The peak hour traffic on Beverly Road is approximately 9 to 14 percent of daily traffic. Typically peak hour traffic is 10 percent of daily traffic. The US Department of Transportation Highway Functional Classification concepts criteria and procedures gives a typical range of 1,100-6,300 vehicles per day for urban collectors.



Weekday Morning Peak Hour



Weekday Evening Peak Hour



NORTH
Scale: Not to Scale



Figure 3

Weekday Morning and Weekday Evening
Peak Hour Volumes

Baker School Pedestrian Traffic

The Baker School with collaboration with the MassDOT Safe Routes to School program conducted a survey of Baker students on how they arrive to school. The survey data was collected from December 9 2019 to December 20 2019. The Baker school had a 63 percent participation rate. The survey asked students to the nearest intersection where they lived and how they typically arrived to school in the morning or how they got home in the afternoon. The transportation mode choices included Automobile, School Bus, or Walk and Bike. The **Appendix** contains the survey report from Safe Routes to School.

The chart and **Table 4** below outlines the results of the survey for how the typical students arrive and depart the Baker School separated by their walkshed distance from the school.

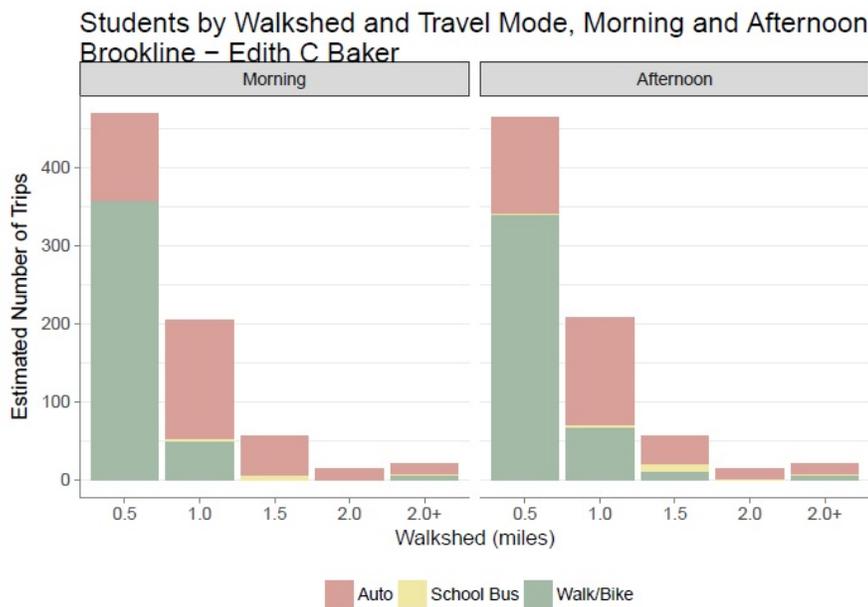


Table 4
Safe Routes to School Estimated Travel Mode, Morning and Afternoon- Baker School

		Walkshed Distance					
Morning		0.5	1.0	1.5	2.0	2.0+	Total
	Auto	111	152	50	14	13	340
	School Bus	0	4	6	0	2	12
	Walk	357	49	0	0	5	411
Afternoon		0.5	1.0	1.5	2.0	2.0+	Total
	Auto	123	137	36	12	13	321
	School Bus	1	4	9	1	2	17
	Walk	339	67	11	0	5	422

As summarized in the chart and **Table 4**, in the morning 411 students walk/bike to school, 340 are driven, and 12 come by school bus. In the afternoon 422 students walk/bike home, 321 are driven and 17 take the school bus. The results also show that students within half a mile to school are much more likely to walk and as the walkshed expands students are more often driven or take a school bus.

CRASH SUMMARY

In order to identify accident trends and safety characteristics for the study corridor accident reports were obtained from MassDOT Crash Database and the Brookline Police Department for the latest five-year period available. The MassDOT reported accidents are outlined below in **Table 5**. The **Appendix** contains crash data from MassDOT.

Table 5 MassDOT Accident Summary

<u>Data Category</u>	<u>Beverly Rd at Lagrange St</u>	<u>Beverly Rd at Grove St</u>	<u>Beverly Rd at Other Locatoin</u>
Year:			
2013	0	1	1
2014	1	0	0
2015	1	0	1
2016	0	1	1
<u>2017</u>	<u>1</u>	<u>0</u>	<u>0</u>
Total	3	2	3
Type:			
Angle	1	0	0
Rear-End	1	2	1
Head-On	0	0	0
Sideswipe	1	0	1
Unknown/Other	0	0	1
Event:			
Collision with Pedestrian	0	0	0
Collision with Bicycle	0	0	0
Collision with Moped	0	0	0
Collision with Vehicle	3	1	2
Collision with Parked Car	0	1	0
Collision with Object	0	0	1
Unknown/Other	0	0	0
Severity:			
P. Damage Only	2	1	2
Personal Injury	1	1	1
Fatality	0	0	0
Unknown/Other	0	0	0
Conditions:			
Dry	3	2	2
Wet	0	0	0
Snow/Ice	0	0	1
Other/Unreported	0	0	0
Time:			
7:00 AM to 9 AM	0	0	1
4:00 PM to 6 PM	1	0	1
Rest of Day	2	2	1

As outlined in **Table 5**, eight crashes were reported on the MassDOT crash database for Beverly Road for the latest five year period available from 2013 to 2017. Of those eight crashes three crashes happened at the Lagrange Street at Beverly Road intersection and two of the crashes occurred at the Beverly Rd at Independence Drive, Grove Street and Russet Road intersection the remaining three crashes occurred on Beverly Road at various locations. The crash rate for the Beverly Road corridor in the study area is 1.59, below the state average for an Urban Collector of 3.63. The MassDOT rate work sheet can be found in the **Appendix**.

The Brookline Police Department provided Crash Reports for the latest five year period available from 2019 to 2015. There were a total of 9 crash reports on Beverly Road within the study area. Most of the reports coincided with the MassDOT crash database with the exception of one crash that occurred in 2016 involving a rear end collision at Lagrange Street and Beverly Road. Then in 2019 which falls outside the MassDOT available crash years a vehicle making a u turn at 249 Beverly Road struck a school aged skate boarder. The Brookline Police Crash Reports can be found in the **Appendix**.

CONCLUSION

The vehicle speeds, volumes, and crash history would not normally warrant traffic calming on urban collector roadways under our Traffic Calming Policy and industry best practices, however due to the location of the Baker School and the high number of school age pedestrian and cyclists on the roadway staff recommends traffic calming for Beverly Road between Lagrange Street and Grove Street.

The unposted statutory speed limit is 25 mph on Beverly Road and near the Baker School a school zone speed of 20mph is posted for schooldays when children are present. The observed average speed on the east side of Beverly Road is 25 mph and the 85th percentile speed is 30 mph. Traffic speeds are moderately faster on the west side of Beverly Road where the average speed is 28 mph and the 85th percentile speed is 32 mph.

The traffic volumes collected on Beverly Road show appropriate vehicle volumes for an urban collector road. The average daily vehicle volume on Beverly Road is 1,953 vehicles per day with an average of 262 vehicles in the morning and 224 vehicles in the evening. The US Department of Transportation Highway Functional Classification concepts criteria and procedures provide a typical range of 1,100-6,300 vehicles per day for urban collector. It should be noted that the safe routes to school survey estimated that over 400 students are walking to and from the Baker School on a daily basis.

Appendix

- Speed Data
- Volume Data
- Safe Routes To School Survey
- Crash data

- Speed Data

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

WB to Rangeley Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/27/19	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	29	29
01:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	24	24
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	5	3	1	0	0	0	0	0	0	0	0	0	9	29	32
06:00	2	0	4	7	2	0	0	0	0	0	0	0	0	0	15	29	33
07:00	1	4	16	11	2	0	0	0	0	0	0	0	0	0	34	28	30
08:00	2	8	29	14	4	0	0	0	0	0	0	0	0	0	57	28	31
09:00	0	0	13	13	9	1	0	0	0	0	0	0	0	0	36	32	34
10:00	0	1	17	14	12	0	0	0	0	0	0	0	0	0	44	32	34
11:00	2	3	6	19	11	0	0	0	0	0	0	0	0	0	41	32	34
12 PM	0	3	19	24	8	0	0	0	0	0	0	0	0	0	54	29	33
13:00	0	3	22	20	4	2	0	0	0	0	0	0	0	0	51	29	34
14:00	5	17	34	15	6	1	0	0	0	0	0	0	0	0	78	28	32
15:00	1	8	32	7	4	0	0	0	0	0	0	0	0	0	52	27	31
16:00	0	5	11	21	14	0	0	0	0	0	0	0	0	0	51	32	34
17:00	1	3	18	29	10	1	0	0	0	0	0	0	0	0	62	30	33
18:00	1	3	22	42	13	0	0	0	0	0	0	0	0	0	81	30	33
19:00	0	1	10	17	8	1	0	0	0	0	0	0	0	0	37	32	34
20:00	0	0	7	14	9	0	0	0	0	0	0	0	0	0	30	32	34
21:00	0	1	6	5	1	0	0	0	0	0	0	0	0	0	13	29	31
22:00	0	0	2	4	1	0	0	0	0	0	0	0	0	0	7	29	33
23:00	0	0	1	5	3	0	0	0	0	0	0	0	0	0	9	32	34
Total	15	60	276	286	122	6	0	0	0	0	0	0	0	0	765		
Percent	2.0%	7.8%	36.1%	37.4%	15.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	08:00	08:00	11:00	10:00	09:00									08:00		
Vol.	2	8	29	19	12	1									57		
PM Peak	14:00	14:00	14:00	18:00	16:00	13:00									18:00		
Vol.	5	17	34	42	14	2									81		

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

WB to Rangeley Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/30/19	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4	32	33
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	3	1	0	0	0	0	0	0	0	0	0	5	31	33
06:00	0	0	5	2	1	0	0	0	0	0	0	0	0	0	8	29	32
07:00	0	0	2	10	5	3	0	0	0	0	0	0	0	0	20	35	38
08:00	0	0	8	17	4	1	0	0	0	0	0	0	0	0	30	30	34
09:00	0	1	10	24	13	1	0	0	0	0	0	0	0	0	49	32	34
10:00	1	1	11	25	7	1	0	0	0	0	0	0	0	0	46	30	34
11:00	0	5	12	16	8	0	0	0	0	0	0	0	0	0	41	31	33
12 PM	0	4	23	25	10	0	0	0	0	0	0	0	0	0	62	30	33
13:00	4	8	25	39	7	2	0	0	0	0	0	0	0	0	85	29	33
14:00	1	4	11	21	13	0	1	0	0	0	0	0	0	0	51	32	34
15:00	1	2	15	20	9	3	0	0	0	0	0	0	0	0	50	32	35
16:00	0	0	6	18	6	2	0	0	0	0	0	0	0	0	32	32	35
17:00	0	4	15	30	9	3	0	0	0	0	0	0	0	0	61	31	34
18:00	0	3	15	18	8	0	0	0	0	0	0	0	0	0	44	30	33
19:00	0	1	14	21	10	1	1	0	0	0	0	0	0	0	48	32	34
20:00	1	0	2	7	7	0	1	0	0	0	0	0	0	0	18	33	40
21:00	0	0	4	7	2	1	0	0	0	0	0	0	0	0	14	32	36
22:00	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4	28	29
23:00	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4	32	33
Total	8	33	183	309	122	18	3	0	0	0	0	0	0	0	676		
Percent	1.2%	4.9%	27.1%	45.7%	18.0%	2.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	10:00	09:00	07:00									09:00		
Vol.	1	5	12	25	13	3									49		
PM Peak	13:00	13:00	13:00	13:00	14:00	15:00	14:00								13:00		
Vol.	4	8	25	39	13	3	1								85		
Total	32	190	1197	1776	797	105	7	0	0	0	0	0	0	0	4104		
Percent	0.8%	4.6%	29.2%	43.3%	19.4%	2.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 21 MPH
 50th Percentile : 26 MPH
 85th Percentile : 31 MPH
 95th Percentile : 34 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 2973
 Percent in Pace : 72.4%
 Number of Vehicles > 25 MPH : 2685
 Percent of Vehicles > 25 MPH : 65.4%
 Mean Speed(Average) : 27 MPH

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Beverly Rd
at 105 Beverly Rd
Brookline, MA

EB to Zanthus Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/25/19	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	29	29
01:00	0	0	2	0	1	0	1	0	0	0	0	0	0	0	4	42	43
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
05:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	37	39
06:00	0	0	4	11	5	6	0	0	0	0	0	0	0	0	26	36	38
07:00	1	13	55	60	33	3	3	0	0	0	0	0	0	0	168	32	34
08:00	0	6	27	57	31	11	1	0	0	0	0	0	0	0	133	33	37
09:00	0	2	7	23	12	4	0	0	0	0	0	0	0	0	48	33	36
10:00	1	4	9	16	14	4	0	0	0	0	0	0	0	0	48	33	36
11:00	0	4	7	18	14	0	0	0	0	0	0	0	0	0	43	32	34
12 PM	0	3	8	19	12	7	0	0	0	0	0	0	0	0	49	34	38
13:00	0	1	12	23	14	2	1	0	0	0	0	0	0	0	53	33	35
14:00	0	6	18	28	21	5	1	0	0	0	0	0	0	0	79	33	37
15:00	0	3	15	24	21	4	3	0	0	0	0	0	0	0	70	34	39
16:00	0	3	15	24	19	9	3	0	0	0	0	0	0	0	73	35	39
17:00	1	1	28	48	28	6	3	0	0	0	0	0	0	0	115	33	37
18:00	0	6	15	51	32	4	2	0	0	0	0	0	0	0	110	33	35
19:00	0	1	20	37	16	4	0	0	0	0	0	0	0	0	78	32	35
20:00	0	0	11	26	18	7	0	0	0	0	0	0	0	0	62	34	37
21:00	0	0	6	4	9	2	4	0	0	0	0	0	0	0	25	40	43
22:00	0	0	2	6	2	0	0	0	0	0	0	0	0	0	10	31	33
23:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	37	39
Total	3	53	262	480	305	80	22	0	1205								
Percent	0.2%	4.4%	21.7%	39.8%	25.3%	6.6%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	07:00	08:00	07:00									07:00	
Vol.	1	13	55	60	33	11	3								168		
PM Peak	17:00	14:00	17:00	18:00	18:00	16:00	21:00									17:00	
Vol.	1	6	28	51	32	9	4								115		

Town of Brookline

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Beverly Rd
at 105 Beverly Rd
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EB to Zanthus Rd

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	85th Percent	95th Percent
09/26/19	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	24	24
01:00	0	0	1	0	2	1	0	0	0	0	0	0	0	0	4	37	39
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	28	29
05:00	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4	33	34
06:00	0	1	4	7	6	1	0	0	0	0	0	0	0	0	19	33	35
07:00	0	10	46	54	36	13	3	1	0	0	0	0	0	0	163	33	38
08:00	0	4	40	54	33	5	5	0	0	0	0	0	0	0	141	33	37
09:00	0	4	14	16	10	4	0	0	0	0	0	0	0	0	48	33	36
10:00	0	2	7	23	13	3	0	2	0	0	0	0	0	0	50	34	39
11:00	1	3	18	18	7	7	1	0	0	0	0	0	0	0	55	34	38
12 PM	0	1	12	16	12	1	1	0	0	0	0	0	0	0	43	33	34
13:00	0	0	15	24	16	1	1	0	0	0	0	0	0	0	57	32	34
14:00	0	9	21	33	12	4	2	0	0	0	0	0	0	0	81	32	37
15:00	1	1	14	27	10	2	0	0	0	0	0	0	0	0	55	31	34
16:00	0	1	14	32	16	5	0	1	0	0	0	0	0	0	69	33	37
17:00	4	3	23	46	29	8	1	0	0	0	0	0	0	0	114	33	37
18:00	5	5	25	50	23	4	2	0	0	0	0	0	0	0	114	32	35
19:00	0	0	15	36	6	5	2	0	0	0	0	0	0	0	64	32	38
20:00	0	1	6	21	15	1	0	0	0	0	0	0	0	0	44	33	34
21:00	0	0	7	18	9	4	1	0	0	0	0	0	0	0	39	34	38
22:00	0	0	3	7	2	1	0	1	0	0	0	0	0	0	14	34	46
23:00	0	0	5	3	1	0	1	0	0	0	0	0	0	0	10	32	42
Total	11	45	292	490	260	70	20	5	0	0	0	0	0	0	1193		
Percent	0.9%	3.8%	24.5%	41.1%	21.8%	5.9%	1.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	07:00	07:00	07:00	07:00	07:00	08:00	10:00								07:00	
Vol.	1	10	46	54	36	13	5	2							163		
PM Peak	18:00	14:00	18:00	18:00	17:00	17:00	14:00	16:00								17:00	
Vol.	5	9	25	50	29	8	2	1							114		

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

EB to Zanthus Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/27/19	0	0	0	2	1	2	0	0	0	0	0	0	0	0	5	38	39
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	24	24
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	24	24
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	1	1	1	12	2	2	0	0	0	0	0	0	0	0	19	32	37
07:00	0	11	44	55	25	2	2	0	0	0	0	0	0	0	139	31	34
08:00	1	9	29	36	13	7	0	0	0	0	0	0	0	0	95	32	36
09:00	0	1	7	15	11	1	1	0	0	0	0	0	0	0	36	33	36
10:00	1	1	10	15	11	3	0	0	0	0	0	0	0	0	41	33	36
11:00	0	3	10	12	8	2	0	0	0	0	0	0	0	0	35	32	35
12 PM	2	3	20	23	20	4	1	0	0	0	0	0	0	0	73	33	36
13:00	4	4	22	25	13	4	1	0	0	0	0	0	0	0	73	32	36
14:00	0	4	18	23	7	3	1	0	0	0	0	0	0	0	56	31	37
15:00	0	5	22	43	11	0	1	0	0	0	0	0	0	0	82	29	33
16:00	1	5	24	50	42	8	1	0	0	0	0	0	0	0	131	33	36
17:00	0	2	17	56	28	11	2	3	0	0	0	0	0	0	119	34	39
18:00	1	3	16	45	35	11	2	0	0	0	0	0	0	0	113	34	38
19:00	0	1	9	31	9	2	0	0	0	0	0	0	0	0	52	31	34
20:00	0	0	7	25	8	4	0	0	0	0	0	0	0	0	44	33	37
21:00	0	0	11	23	12	4	1	0	0	0	0	0	0	0	51	33	38
22:00	0	0	3	12	6	2	1	0	0	0	0	0	0	0	24	34	39
23:00	0	0	0	4	5	1	0	0	0	0	0	0	0	0	10	34	37
Total	11	53	272	507	267	73	14	3	0	0	0	0	0	0	1200		
Percent	0.9%	4.4%	22.7%	42.3%	22.3%	6.1%	1.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	07:00	07:00	07:00	07:00	08:00	07:00								07:00		
Vol.	1	11	44	55	25	7	2								139		
PM Peak	13:00	15:00	16:00	17:00	16:00	17:00	17:00	17:00							16:00		
Vol.	4	5	24	56	42	11	2	3							131		

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

EB to Zanthus Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/28/19	0	0	2	1	3	0	0	0	0	0	0	0	0	0	6	33	34
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	34	34
02:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	4	33	34
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	34	34
07:00	0	0	1	4	4	0	1	0	0	0	0	0	0	0	10	34	42
08:00	0	1	3	11	5	1	0	0	0	0	0	0	0	0	21	32	34
09:00	0	2	7	23	14	4	1	0	0	0	0	0	0	0	51	34	38
10:00	0	2	11	19	7	4	1	0	0	0	0	0	0	0	44	33	38
11:00	1	1	11	30	19	7	3	0	0	0	0	0	0	0	72	34	39
12 PM	1	1	17	27	12	2	4	0	0	0	0	0	0	0	64	33	40
13:00	0	3	12	29	22	1	1	1	0	0	0	0	0	0	69	33	34
14:00	1	1	5	33	11	8	2	1	0	0	0	0	0	0	62	36	39
15:00	0	1	5	32	14	5	2	0	0	0	0	0	0	0	59	34	39
16:00	0	2	9	29	14	6	1	0	0	0	0	0	0	0	61	34	38
17:00	0	0	12	24	16	4	3	2	0	0	0	0	0	0	61	34	43
18:00	1	1	6	36	20	7	0	1	0	0	0	0	0	0	72	34	38
19:00	0	1	7	23	14	2	1	0	0	0	0	0	0	0	48	33	36
20:00	0	1	10	22	7	5	1	0	0	0	0	0	0	0	46	34	38
21:00	0	0	7	12	13	3	1	0	0	0	0	0	0	0	36	34	38
22:00	0	0	3	8	6	0	0	0	0	0	0	0	0	0	17	32	34
23:00	0	0	2	5	2	0	0	0	0	0	0	0	0	0	9	31	33
Total	4	18	131	368	210	59	22	5	0	0	0	0	0	0	817		
Percent	0.5%	2.2%	16.0%	45.0%	25.7%	7.2%	2.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	09:00	10:00	11:00	11:00	11:00	11:00								11:00		
Vol.	1	2	11	30	19	7	3								72		
PM Peak	12:00	13:00	12:00	18:00	13:00	14:00	12:00	17:00							18:00		
Vol.	1	3	17	36	22	8	4	2							72		

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

EB to Zanthus Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/29/19	0	0	3	0	1	0	1	0	0	0	0	0	0	0	5	41	43
01:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	33	34
02:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	24	24
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	24	24
06:00	0	1	0	1	2	2	1	0	0	0	0	0	0	0	7	39	43
07:00	0	1	1	2	0	1	1	0	1	0	0	0	0	0	7	44	53
08:00	0	0	3	4	5	1	0	0	0	0	0	0	0	0	13	34	36
09:00	0	0	8	9	5	2	0	0	0	0	0	0	0	0	24	33	36
10:00	0	0	6	16	7	6	0	1	0	0	0	0	0	0	36	36	39
11:00	0	0	6	16	12	4	0	0	0	0	0	0	0	0	38	34	37
12 PM	0	2	17	11	9	3	0	1	0	0	0	0	0	0	43	33	38
13:00	0	0	9	22	23	3	2	0	0	0	0	0	0	0	59	34	38
14:00	0	2	11	28	18	4	1	0	0	0	0	0	0	0	64	33	37
15:00	0	2	10	25	22	2	2	0	0	0	0	0	0	0	63	33	37
16:00	0	4	8	16	12	4	0	0	0	0	0	0	0	0	44	33	37
17:00	0	1	10	28	22	10	2	1	0	0	0	0	0	0	74	35	39
18:00	0	0	16	38	13	3	2	1	0	0	0	0	0	0	73	33	38
19:00	0	1	7	23	13	7	0	1	0	0	0	0	0	0	52	35	38
20:00	0	0	9	14	10	2	2	0	0	0	0	0	0	0	37	34	40
21:00	0	0	6	19	13	4	1	0	0	0	0	0	0	0	43	34	38
22:00	0	1	3	6	5	2	0	0	0	0	0	0	0	0	17	34	37
23:00	0	0	0	5	2	1	0	0	0	0	0	0	0	0	8	34	37
Total	0	15	136	284	195	61	15	5	1	0	0	0	0	0	712		
Percent	0.0%	2.1%	19.1%	39.9%	27.4%	8.6%	2.1%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		06:00	09:00	10:00	11:00	10:00	00:00	10:00	07:00						11:00		
Vol.		1	8	16	12	6	1	1	1						38		
PM Peak		16:00	12:00	18:00	13:00	17:00	13:00	12:00							17:00		
Vol.		4	17	38	23	10	2	1							74		

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

EB to Zanthus Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/30/19	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	32	34
01:00	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	43	44
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	33	34
06:00	0	1	1	5	3	1	0	0	0	0	0	0	0	0	11	33	37
07:00	1	1	3	16	12	5	2	2	0	0	0	0	0	0	42	37	44
08:00	0	1	9	24	16	7	1	0	0	0	0	0	0	0	58	34	38
09:00	0	1	16	15	11	6	1	0	0	0	0	0	0	0	50	34	38
10:00	1	1	15	38	11	4	1	1	0	0	0	0	0	0	72	32	37
11:00	0	7	14	21	19	4	0	0	0	0	0	0	0	0	65	33	35
12 PM	1	3	28	13	10	4	2	0	0	0	0	0	0	0	61	33	38
13:00	1	2	6	26	14	3	1	0	0	0	0	0	0	0	53	33	37
14:00	0	2	14	19	12	4	1	0	0	0	0	0	0	0	52	33	38
15:00	0	2	13	17	11	2	0	0	0	0	0	0	0	0	45	32	34
16:00	0	3	11	24	13	5	2	1	1	0	0	0	0	0	60	35	42
17:00	0	4	13	38	15	5	0	0	0	0	0	0	0	0	75	32	36
18:00	0	1	11	39	33	8	2	0	0	0	0	0	0	0	94	34	38
19:00	0	3	14	28	15	2	0	0	1	0	0	0	0	0	63	32	34
20:00	0	1	4	24	12	4	1	0	0	0	0	0	0	0	46	34	38
21:00	0	0	5	13	7	4	0	0	0	0	0	0	0	0	29	34	38
22:00	0	1	2	3	3	1	0	0	0	0	0	0	0	0	10	34	37
23:00	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5	36	38
Total	4	34	180	369	222	70	15	4	2	0	0	0	0	0	900		
Percent	0.4%	3.8%	20.0%	41.0%	24.7%	7.8%	1.7%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	11:00	09:00	10:00	11:00	08:00	07:00	07:00							10:00		
Vol.	1	7	16	38	19	7	2	2							72		
PM Peak	12:00	17:00	12:00	18:00	18:00	18:00	12:00	16:00	16:00						18:00		
Vol.	1	4	28	39	33	8	2	1	1						94		
Total	33	218	1273	2498	1459	413	108	22	3	0	0	0	0	0	6027		
Percent	0.5%	3.6%	21.1%	41.4%	24.2%	6.9%	1.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 22 MPH
 50th Percentile : 27 MPH
 85th Percentile : 33 MPH
 95th Percentile : 37 MPH

Stats
 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 3957
 Percent in Pace : 65.7%
 Number of Vehicles > 25 MPH : 4503
 Percent of Vehicles > 25 MPH : 74.7%
 Mean Speed(Average) : 29 MPH

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 260 Beverly Rd
Brookline, MA

WB to Zanthus Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/25/19	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	24	24
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	24	24
05:00	0	0	4	2	0	0	0	0	0	0	0	0	0	0	6	27	29
06:00	1	1	6	12	2	0	0	0	0	0	0	0	0	0	22	29	32
07:00	11	34	48	33	7	0	0	0	0	0	0	0	0	0	133	28	30
08:00	4	10	16	19	4	0	0	0	0	0	0	0	0	0	53	28	31
09:00	0	1	12	12	6	0	0	0	0	0	0	0	0	0	31	31	33
10:00	0	2	5	11	11	1	0	0	0	0	0	0	0	0	30	33	34
11:00	2	3	10	18	12	1	0	0	0	0	0	0	0	0	46	32	34
12 PM	1	3	7	13	12	0	0	0	0	0	0	0	0	0	36	32	34
13:00	0	2	10	16	9	1	0	0	0	0	0	0	0	0	38	32	34
14:00	10	15	15	12	3	1	0	0	0	0	0	0	0	0	56	28	32
15:00	0	4	14	15	6	1	0	0	0	0	0	0	0	0	40	30	34
16:00	1	1	15	21	12	4	0	0	0	0	0	0	0	0	54	33	36
17:00	1	3	24	36	13	0	0	0	0	0	0	0	0	0	77	30	33
18:00	2	4	16	25	8	0	0	0	0	0	0	0	0	0	55	29	33
19:00	0	3	15	21	8	0	0	0	0	0	0	0	0	0	47	30	33
20:00	0	6	6	11	1	0	0	0	0	0	0	0	0	0	24	28	29
21:00	0	0	1	5	3	1	0	0	0	0	0	0	0	0	10	34	37
22:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	33	34
23:00	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4	32	33
Total	33	92	228	285	119	10	0	767									
Percent	4.3%	12.0%	29.7%	37.2%	15.5%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	11:00	10:00										07:00	
Vol.	11	34	48	33	12	1									133		
PM Peak	14:00	14:00	17:00	17:00	17:00	16:00										17:00	
Vol.	10	15	24	36	13	4									77		

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 260 Beverly Rd
Brookline, MA

WB to Zanthus Rd

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/26/19	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	33	34
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12	14
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	33	34
05:00	0	1	1	2	1	0	0	0	0	0	0	0	0	0	5	31	33
06:00	1	0	7	9	4	2	0	0	0	0	0	0	0	0	23	33	37
07:00	25	17	44	36	3	1	1	0	0	0	0	0	0	0	127	28	29
08:00	9	20	21	4	3	0	0	0	0	0	0	0	0	0	57	24	30
09:00	4	4	14	14	1	1	0	0	0	0	0	0	0	0	38	28	30
10:00	2	2	16	9	5	0	0	0	0	0	0	0	0	0	34	29	33
11:00	1	2	10	16	7	0	1	0	0	0	0	0	0	0	37	31	34
12 PM	2	2	8	13	6	0	1	0	0	0	0	0	0	0	32	31	34
13:00	0	5	12	20	7	1	0	0	0	0	0	0	0	0	45	30	34
14:00	12	19	23	10	2	1	0	0	0	0	0	0	0	0	67	26	29
15:00	3	8	19	18	3	0	0	0	0	0	0	0	0	0	51	28	30
16:00	0	3	23	33	8	0	0	0	0	0	0	0	0	0	67	29	32
17:00	1	5	34	25	17	2	0	0	0	0	0	0	0	0	84	31	34
18:00	0	5	12	13	9	1	0	0	0	0	0	0	0	0	40	32	34
19:00	1	0	11	11	3	0	0	0	0	0	0	0	0	0	26	29	32
20:00	0	1	7	12	7	1	0	0	0	0	0	0	0	0	28	32	34
21:00	0	1	2	7	4	1	0	0	0	0	0	0	0	0	15	33	36
22:00	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6	29	29
23:00	0	0	1	4	0	0	0	0	0	0	0	0	0	0	5	29	29
Total	63	95	265	263	92	11	3	0	792								
Percent	8.0%	12.0%	33.5%	33.2%	11.6%	1.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	08:00	07:00	07:00	11:00	06:00	07:00									07:00	
Vol.	25	20	44	36	7	2	1								127		
PM Peak	14:00	14:00	17:00	16:00	17:00	17:00	12:00									17:00	
Vol.	12	19	34	33	17	2	1								84		
Total	96	187	493	548	211	21	3	0	1559								
Percent	6.2%	12.0%	31.6%	35.2%	13.5%	1.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 18 MPH
 50th Percentile : 25 MPH
 85th Percentile : 30 MPH
 95th Percentile : 33 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 1041
 Percent in Pace : 66.8%
 Number of Vehicles > 25 MPH : 783
 Percent of Vehicles > 25 MPH : 50.2%
 Mean Speed(Average) : 25 MPH

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 260 Beverly Rd
Brookline, MA

EB to Grove St

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/25/19	0	0	2	1	0	1	0	0	0	0	0	0	0	0	4	37	38
01:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3	32	34
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	49	49
05:00	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	38	39
06:00	1	0	2	4	5	0	0	0	0	0	0	0	0	0	12	33	34
07:00	5	14	26	23	5	1	0	0	0	0	0	0	0	0	74	28	32
08:00	13	35	32	8	6	0	0	0	0	0	0	0	0	0	94	24	31
09:00	1	6	11	18	5	0	0	0	0	0	0	0	0	0	41	29	32
10:00	1	6	7	14	8	2	1	0	1	0	0	0	0	0	40	33	40
11:00	1	6	9	15	14	1	0	0	0	0	0	0	0	0	46	32	34
12 PM	0	3	11	11	11	2	0	0	0	0	0	0	0	0	38	33	35
13:00	1	0	18	20	3	2	0	0	0	0	0	0	0	0	44	29	34
14:00	25	32	25	13	4	0	1	1	0	0	0	0	0	0	101	26	31
15:00	3	14	32	30	7	1	0	0	0	0	0	0	0	0	87	29	32
16:00	1	3	20	24	12	3	0	0	0	0	0	0	0	0	63	32	34
17:00	0	13	50	43	14	5	0	1	0	0	0	0	0	0	126	30	34
18:00	1	7	31	36	18	3	0	0	0	0	0	0	0	0	96	31	34
19:00	0	5	28	23	11	1	0	0	0	0	0	0	0	0	68	30	33
20:00	4	13	37	21	9	1	0	0	0	0	0	0	0	0	85	29	33
21:00	0	1	4	9	2	1	1	0	0	0	0	0	0	0	18	33	40
22:00	0	1	4	4	1	0	0	0	0	0	0	0	0	0	10	29	32
23:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	33	34
Total	57	160	351	318	138	25	3	3	1	0	0	0	0	0	1056		
Percent	5.4%	15.2%	33.2%	30.1%	13.1%	2.4%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	07:00	11:00	10:00	10:00	04:00	10:00						08:00		
Vol.	13	35	32	23	14	2	1	1	1						94		
PM Peak	14:00	14:00	17:00	17:00	18:00	17:00	14:00	14:00							17:00		
Vol.	25	32	50	43	18	5	1	1							126		

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 260 Beverly Rd
Brookline, MA

EB to Grove St

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	85th Percent	95th Percent
09/26/19	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	33	34
01:00	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4	34	34
02:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	28	29
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	24	24
05:00	0	1	1	1	1	1	0	0	0	0	0	0	0	0	5	36	38
06:00	0	0	5	3	6	2	0	0	0	0	0	0	0	0	16	34	37
07:00	8	22	34	17	6	3	0	1	0	0	0	0	0	0	91	28	34
08:00	12	35	25	18	5	1	1	0	0	0	0	0	0	0	97	27	32
09:00	1	11	12	9	8	0	1	0	0	0	0	0	0	0	42	31	34
10:00	1	3	17	21	4	1	0	0	0	0	0	0	0	0	47	29	33
11:00	2	4	8	22	1	1	0	1	0	0	0	0	0	0	39	29	35
12 PM	1	3	12	12	5	1	1	0	0	0	0	0	0	0	35	31	36
13:00	0	2	10	17	15	3	0	0	0	0	0	0	0	0	47	33	36
14:00	15	29	34	15	5	0	0	0	0	0	0	0	0	0	98	26	30
15:00	3	9	19	31	8	1	0	0	0	0	0	0	0	0	71	29	33
16:00	2	5	30	36	13	2	0	0	0	0	0	0	0	0	88	30	34
17:00	32	20	49	40	14	4	1	0	0	0	0	0	0	0	160	29	33
18:00	24	35	32	39	19	2	0	0	0	0	0	0	0	0	151	29	33
19:00	1	7	15	20	9	3	0	0	0	0	0	0	0	0	55	32	35
20:00	0	1	11	17	13	1	0	0	0	0	0	0	0	0	43	32	34
21:00	0	0	8	9	2	5	0	0	0	0	0	0	0	0	24	36	38
22:00	0	0	2	8	2	1	1	0	0	0	0	0	0	0	14	34	41
23:00	0	0	2	4	2	0	0	0	0	0	0	0	0	0	8	32	34
Total	103	188	328	341	142	32	5	2	0	0	0	0	0	0	1141		
Percent	9.0%	16.5%	28.7%	29.9%	12.4%	2.8%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	07:00	11:00	09:00	07:00	08:00	07:00								08:00	
Vol.	12	35	34	22	8	3	1	1								97	
PM Peak	17:00	18:00	17:00	17:00	18:00	21:00	12:00									17:00	
Vol.	32	35	49	40	19	5	1									160	
Total	160	348	679	659	280	57	8	5	1	0	0	0	0	0	2197		
Percent	7.3%	15.8%	30.9%	30.0%	12.7%	2.6%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile : 17 MPH
 50th Percentile : 24 MPH
 85th Percentile : 30 MPH
 95th Percentile : 34 MPH

Stats
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 1338
 Percent in Pace : 60.9%
 Number of Vehicles > 25 MPH : 1010
 Percent of Vehicles > 25 MPH : 46.0%
 Mean Speed(Average) : 24 MPH

- Volume Data

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/25/2019 Wed	WB to Ran	EB to Zant	Total						
12:00 AM		0	1	1						
12:15		0	1	1						
12:30		1	2	3						
12:45		1	0	1						
01:00		0	2	2						
01:15		1	0	1						
01:30		0	2	2						
01:45		0	0	0						
02:00		0	0	0						
02:15		0	0	0						
02:30		0	0	0						
02:45		0	0	0						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		0	0	0						
04:00		0	0	0						
04:15		0	0	0						
04:30		0	0	0						
04:45		0	1	1						
05:00		2	1	3						
05:15		1	0	1						
05:30		4	1	5						
05:45		2	1	3						
06:00		4	2	6						
06:15		2	3	5						
06:30		5	7	12						
06:45		9	14	23						
07:00		2	15	17						
07:15		16	35	51						
07:30		11	52	63						
07:45		15	66	81						
08:00		24	42	66						
08:15		11	31	42						
08:30		14	37	51						
08:45		8	23	31						
09:00		11	13	24						
09:15		8	5	13						
09:30		7	15	22						
09:45		7	15	22						
10:00		15	14	29						
10:15		7	11	18						
10:30		7	12	19						
10:45		8	11	19						
11:00		13	12	25						
11:15		6	12	18						
11:30		14	13	27						
11:45		13	6	19						
Total		249	478	727						
Percent		34.3%	65.7%							
Peak	-	07:15	07:15	-	-	-	-	-	-	07:15
Vol.	-	66	195	-	-	-	-	-	-	261
P.H.F.		0.688	0.739							0.806

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/25/2019 Wed	WB to Ran	EB to Zant	Total						
12:00 PM		12	9	21						
12:15		6	16	22						
12:30		13	17	30						
12:45		11	7	18						
01:00		5	13	18						
01:15		10	13	23						
01:30		7	17	24						
01:45		15	10	25						
02:00		9	16	25						
02:15		8	23	31						
02:30		17	20	37						
02:45		27	20	47						
03:00		21	18	39						
03:15		21	16	37						
03:30		15	20	35						
03:45		11	16	27						
04:00		12	13	25						
04:15		21	16	37						
04:30		19	20	39						
04:45		11	24	35						
05:00		14	33	47						
05:15		14	27	41						
05:30		18	22	40						
05:45		16	33	49						
06:00		10	33	43						
06:15		13	34	47						
06:30		14	21	35						
06:45		16	22	38						
07:00		14	28	42						
07:15		8	25	33						
07:30		14	9	23						
07:45		7	16	23						
08:00		8	24	32						
08:15		8	17	25						
08:30		11	14	25						
08:45		4	7	11						
09:00		3	10	13						
09:15		5	7	12						
09:30		1	4	5						
09:45		1	4	5						
10:00		2	5	7						
10:15		0	1	1						
10:30		0	2	2						
10:45		1	2	3						
11:00		0	0	0						
11:15		3	0	3						
11:30		0	0	0						
11:45		1	3	4						
Total		477	727	1204						
Percent		39.6%	60.4%							
Peak	-	14:30	17:30	-	-	-	-	-	-	17:30
Vol.	-	86	122	-	-	-	-	-	-	179
P.H.F.		0.796	0.897							0.913

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/26/2019 Thu	WB to Ran	EB to Zant	Total						
12:00 AM		0	1	1						
12:15		1	0	1						
12:30		0	0	0						
12:45		0	0	0						
01:00		0	2	2						
01:15		0	1	1						
01:30		0	1	1						
01:45		0	0	0						
02:00		0	0	0						
02:15		0	0	0						
02:30		0	0	0						
02:45		0	1	1						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		0	0	0						
04:00		0	0	0						
04:15		1	2	3						
04:30		0	0	0						
04:45		0	1	1						
05:00		3	0	3						
05:15		0	0	0						
05:30		1	1	2						
05:45		2	3	5						
06:00		2	2	4						
06:15		5	3	8						
06:30		3	4	7						
06:45		5	10	15						
07:00		7	21	28						
07:15		12	27	39						
07:30		14	47	61						
07:45		8	68	76						
08:00		22	44	66						
08:15		21	33	54						
08:30		13	37	50						
08:45		15	27	42						
09:00		11	12	23						
09:15		16	13	29						
09:30		13	9	22						
09:45		7	14	21						
10:00		8	10	18						
10:15		6	10	16						
10:30		15	17	32						
10:45		15	13	28						
11:00		10	15	25						
11:15		13	13	26						
11:30		11	17	28						
11:45		10	10	20						
Total		270	489	759						
Percent		35.6%	64.4%							
Peak	-	08:00	07:30	-	-	-	-	-	-	07:30
Vol.	-	71	192	-	-	-	-	-	-	257
P.H.F.		0.807	0.706							0.845

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/26/2019 Thu	WB to Ran	EB to Zant	Total
12:00 PM		11	10	21
12:15		13	8	21
12:30		12	15	27
12:45		8	10	18
01:00		9	9	18
01:15		16	18	34
01:30		9	13	22
01:45		14	17	31
02:00		12	17	29
02:15		6	27	33
02:30		11	21	32
02:45		48	16	64
03:00		19	21	40
03:15		19	14	33
03:30		20	10	30
03:45		14	10	24
04:00		22	17	39
04:15		13	19	32
04:30		21	15	36
04:45		12	18	30
05:00		12	29	41
05:15		21	30	51
05:30		19	25	44
05:45		16	30	46
06:00		13	21	34
06:15		15	30	45
06:30		11	29	40
06:45		8	34	42
07:00		6	17	23
07:15		8	17	25
07:30		5	18	23
07:45		11	12	23
08:00		10	8	18
08:15		6	16	22
08:30		6	13	19
08:45		9	7	16
09:00		6	13	19
09:15		5	9	14
09:30		3	12	15
09:45		3	5	8
10:00		3	1	4
10:15		0	5	5
10:30		1	3	4
10:45		0	5	5
11:00		1	4	5
11:15		1	4	5
11:30		0	0	0
11:45		2	2	4
Total		510	704	1214
Percent		42.0%	58.0%	
Peak	-	14:45	17:00	17:00
Vol.	-	106	114	182
P.H.F.		0.552	0.950	0.711

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/27/2019 Fri	WB to Ran	EB to Zant	Total						
12:00 AM		0	2	2						
12:15		0	0	0						
12:30		0	1	1						
12:45		2	2	4						
01:00		1	1	2						
01:15		0	0	0						
01:30		1	0	1						
01:45		0	0	0						
02:00		0	0	0						
02:15		0	1	1						
02:30		0	0	0						
02:45		0	0	0						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		0	0	0						
04:00		0	0	0						
04:15		0	0	0						
04:30		0	0	0						
04:45		0	0	0						
05:00		0	0	0						
05:15		3	0	3						
05:30		3	0	3						
05:45		3	0	3						
06:00		5	1	6						
06:15		2	3	5						
06:30		4	4	8						
06:45		4	11	15						
07:00		2	18	20						
07:15		7	21	28						
07:30		16	41	57						
07:45		9	59	68						
08:00		17	46	63						
08:15		21	14	35						
08:30		17	16	33						
08:45		2	19	21						
09:00		14	12	26						
09:15		6	9	15						
09:30		8	10	18						
09:45		8	5	13						
10:00		8	14	22						
10:15		10	6	16						
10:30		9	9	18						
10:45		17	12	29						
11:00		6	11	17						
11:15		10	9	19						
11:30		17	7	24						
11:45		8	8	16						
Total		240	372	612						
Percent		39.2%	60.8%							
Peak	-	07:45	07:15	-	-	-	-	-	-	07:30
Vol.	-	64	167	-	-	-	-	-	-	223
P.H.F.		0.762	0.708							0.820

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/27/2019 Fri	WB to Ran	EB to Zant	Total
12:00 PM		13	16	29
12:15		16	19	35
12:30		12	18	30
12:45		13	20	33
01:00		10	15	25
01:15		13	17	30
01:30		9	26	35
01:45		19	15	34
02:00		25	15	40
02:15		16	22	38
02:30		19	10	29
02:45		18	9	27
03:00		18	19	37
03:15		12	17	29
03:30		12	26	38
03:45		10	20	30
04:00		15	27	42
04:15		13	38	51
04:30		8	39	47
04:45		15	27	42
05:00		10	21	31
05:15		21	24	45
05:30		17	34	51
05:45		14	40	54
06:00		16	35	51
06:15		26	34	60
06:30		24	25	49
06:45		15	19	34
07:00		6	19	25
07:15		14	15	29
07:30		9	12	21
07:45		8	6	14
08:00		7	14	21
08:15		7	10	17
08:30		6	13	19
08:45		10	7	17
09:00		2	12	14
09:15		4	11	15
09:30		1	20	21
09:45		6	8	14
10:00		4	11	15
10:15		1	4	5
10:30		2	4	6
10:45		0	5	5
11:00		3	3	6
11:15		2	5	7
11:30		2	2	4
11:45		2	0	2
Total		525	828	1353
Percent		38.8%	61.2%	
Peak	-	18:00	17:30	17:30
Vol.	-	81	143	216
P.H.F.		0.779	0.894	0.900

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/28/2019 Sat	WB to Ran	EB to Zant	Total						
12:00 AM		0	2	2						
12:15		1	3	4						
12:30		0	1	1						
12:45		1	0	1						
01:00		1	0	1						
01:15		0	0	0						
01:30		0	1	1						
01:45		1	0	1						
02:00		0	2	2						
02:15		0	1	1						
02:30		0	0	0						
02:45		1	1	2						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		0	0	0						
04:00		0	0	0						
04:15		0	0	0						
04:30		1	0	1						
04:45		0	0	0						
05:00		0	0	0						
05:15		1	0	1						
05:30		1	0	1						
05:45		0	0	0						
06:00		2	1	3						
06:15		2	1	3						
06:30		1	2	3						
06:45		0	0	0						
07:00		1	1	2						
07:15		4	1	5						
07:30		2	2	4						
07:45		6	6	12						
08:00		5	6	11						
08:15		5	4	9						
08:30		5	4	9						
08:45		6	7	13						
09:00		7	12	19						
09:15		20	9	29						
09:30		18	15	33						
09:45		13	15	28						
10:00		14	11	25						
10:15		14	10	24						
10:30		12	12	24						
10:45		17	11	28						
11:00		13	20	33						
11:15		10	15	25						
11:30		11	22	33						
11:45		11	15	26						
Total		207	213	420						
Percent		49.3%	50.7%							
Peak	-	09:15	11:00	-	-	-	-	-	-	10:45
Vol.	-	65	72	-	-	-	-	-	-	119
P.H.F.		0.813	0.818							0.902

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/28/2019 Sat	WB to Ran	EB to Zant	Total						
12:00 PM		11	15	26						
12:15		15	11	26						
12:30		13	24	37						
12:45		11	14	25						
01:00		12	24	36						
01:15		13	15	28						
01:30		14	21	35						
01:45		13	9	22						
02:00		9	15	24						
02:15		5	18	23						
02:30		10	11	21						
02:45		11	18	29						
03:00		5	12	17						
03:15		10	19	29						
03:30		12	12	24						
03:45		8	16	24						
04:00		12	17	29						
04:15		8	17	25						
04:30		14	17	31						
04:45		10	10	20						
05:00		7	15	22						
05:15		11	7	18						
05:30		12	15	27						
05:45		11	24	35						
06:00		13	10	23						
06:15		10	23	33						
06:30		10	21	31						
06:45		8	18	26						
07:00		8	16	24						
07:15		5	9	14						
07:30		7	12	19						
07:45		5	11	16						
08:00		5	12	17						
08:15		5	13	18						
08:30		5	11	16						
08:45		3	10	13						
09:00		6	4	10						
09:15		2	11	13						
09:30		1	10	11						
09:45		4	11	15						
10:00		5	6	11						
10:15		3	4	7						
10:30		3	6	9						
10:45		1	1	2						
11:00		0	1	1						
11:15		3	4	7						
11:30		1	4	5						
11:45		1	0	1						
Total		371	604	975						
Percent		38.1%	61.9%							
Peak	-	13:00	17:45	-	-	-	-	-	-	12:30
Vol.	-	52	78	-	-	-	-	-	-	126
P.H.F.		0.929	0.813							0.851

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 105 Beverly Rd
 Brookline, MA

Start Time	9/29/2019 Sun	WB to Ran	EB to Zant	Total						
12:00 AM		1	0	1						
12:15		0	1	1						
12:30		3	2	5						
12:45		1	2	3						
01:00		2	1	3						
01:15		0	0	0						
01:30		0	0	0						
01:45		0	1	1						
02:00		0	1	1						
02:15		1	1	2						
02:30		0	0	0						
02:45		2	0	2						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		1	0	1						
04:00		0	0	0						
04:15		0	0	0						
04:30		0	0	0						
04:45		0	0	0						
05:00		0	0	0						
05:15		0	1	1						
05:30		0	0	0						
05:45		0	0	0						
06:00		4	2	6						
06:15		1	1	2						
06:30		2	1	3						
06:45		0	3	3						
07:00		1	0	1						
07:15		3	1	4						
07:30		0	5	5						
07:45		3	1	4						
08:00		5	3	8						
08:15		7	4	11						
08:30		6	4	10						
08:45		3	2	5						
09:00		10	7	17						
09:15		13	7	20						
09:30		7	5	12						
09:45		17	5	22						
10:00		11	13	24						
10:15		19	12	31						
10:30		15	5	20						
10:45		11	6	17						
11:00		16	8	24						
11:15		17	7	24						
11:30		13	8	21						
11:45		12	15	27						
Total		207	135	342						
Percent		60.5%	39.5%							
Peak	-	09:45	11:00	-	-	-	-	-	-	09:45
Vol.	-	62	38	-	-	-	-	-	-	97
P.H.F.		0.816	0.633							0.782

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

Start Time	9/29/2019 Sun	WB to Ran	EB to Zant	Total						
12:00 PM		13	11	24						
12:15		12	15	27						
12:30		9	11	20						
12:45		11	6	17						
01:00		14	11	25						
01:15		13	26	39						
01:30		11	9	20						
01:45		10	13	23						
02:00		15	16	31						
02:15		9	20	29						
02:30		15	15	30						
02:45		8	13	21						
03:00		8	18	26						
03:15		4	15	19						
03:30		8	17	25						
03:45		10	13	23						
04:00		9	10	19						
04:15		6	13	19						
04:30		10	11	21						
04:45		12	10	22						
05:00		14	18	32						
05:15		11	15	26						
05:30		15	18	33						
05:45		10	23	33						
06:00		8	21	29						
06:15		9	17	26						
06:30		9	20	29						
06:45		8	15	23						
07:00		7	15	22						
07:15		9	13	22						
07:30		11	13	24						
07:45		4	11	15						
08:00		7	6	13						
08:15		4	8	12						
08:30		8	12	20						
08:45		4	11	15						
09:00		6	10	16						
09:15		3	10	13						
09:30		5	14	19						
09:45		1	9	10						
10:00		4	3	7						
10:15		1	2	3						
10:30		2	5	7						
10:45		2	7	9						
11:00		2	2	4						
11:15		0	0	0						
11:30		0	3	3						
11:45		1	3	4						
Total		372	577	949						
Percent		39.2%	60.8%							
Peak	-	16:45	17:45	-	-	-	-	-	-	17:00
Vol.	-	52	81	-	-	-	-	-	-	124
P.H.F.		0.867	0.880							0.939

Town of Brookline

Beverly Rd
at 105 Beverly Rd
Brookline, MA

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Start Time	9/30/2019 Mon	WB to Ran	EB to Zant	Total						
12:00 AM		1	1	2						
12:15		2	1	3						
12:30		1	0	1						
12:45		0	1	1						
01:00		0	1	1						
01:15		0	1	1						
01:30		0	0	0						
01:45		0	0	0						
02:00		0	1	1						
02:15		0	0	0						
02:30		0	0	0						
02:45		0	0	0						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		0	0	0						
04:00		0	0	0						
04:15		0	0	0						
04:30		0	0	0						
04:45		0	0	0						
05:00		0	0	0						
05:15		4	0	4						
05:30		1	0	1						
05:45		0	3	3						
06:00		1	0	1						
06:15		0	4	4						
06:30		4	3	7						
06:45		3	4	7						
07:00		2	10	12						
07:15		4	8	12						
07:30		6	14	20						
07:45		8	10	18						
08:00		3	15	18						
08:15		9	10	19						
08:30		7	17	24						
08:45		11	16	27						
09:00		10	17	27						
09:15		15	9	24						
09:30		18	13	31						
09:45		6	11	17						
10:00		11	18	29						
10:15		11	14	25						
10:30		7	17	24						
10:45		17	23	40						
11:00		12	17	29						
11:15		6	17	23						
11:30		12	18	30						
11:45		11	13	24						
Total		203	307	510						
Percent		39.8%	60.2%							
Peak	-	08:45	10:45	-	-	-	-	-	-	10:45
Vol.	-	54	75	-	-	-	-	-	-	122
P.H.F.		0.750	0.815							0.763

Town of Brookline

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Beverly Rd
at 105 Beverly Rd
Brookline, MA

Start Time	9/30/2019 Mon	WB to Ran	EB to Zant	Total						
12:00 PM		10	17	27						
12:15		20	14	34						
12:30		14	11	25						
12:45		18	19	37						
01:00		17	12	29						
01:15		16	12	28						
01:30		19	16	35						
01:45		33	13	46						
02:00		12	19	31						
02:15		14	12	26						
02:30		13	9	22						
02:45		12	12	24						
03:00		12	10	22						
03:15		11	12	23						
03:30		14	18	32						
03:45		13	5	18						
04:00		10	11	21						
04:15		9	21	30						
04:30		5	11	16						
04:45		8	17	25						
05:00		8	20	28						
05:15		12	24	36						
05:30		23	20	43						
05:45		18	11	29						
06:00		12	33	45						
06:15		17	22	39						
06:30		8	22	30						
06:45		7	17	24						
07:00		15	20	35						
07:15		11	13	24						
07:30		18	13	31						
07:45		4	17	21						
08:00		6	13	19						
08:15		2	15	17						
08:30		7	10	17						
08:45		3	8	11						
09:00		4	6	10						
09:15		4	9	13						
09:30		3	9	12						
09:45		3	5	8						
10:00		1	2	3						
10:15		1	6	7						
10:30		0	2	2						
10:45		2	0	2						
11:00		0	0	0						
11:15		2	1	3						
11:30		1	2	3						
11:45		1	2	3						
Total		473	593	1066						
Percent		44.4%	55.6%							
Peak	-	13:00	18:00	-	-	-	-	-	-	17:30
Vol.	-	85	94	-	-	-	-	-	-	156
P.H.F.		0.644	0.712							0.867
Grand Total		4104	6027							10131
Percent		40.5%	59.5%							

ADT

ADT 1,973

AADT 1,973

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 260 Beverly Rd
 Brookline, MA

Start Time	9/25/2019 Wed	WB to Zant	EB to Grov	Total						
12:00 AM		0	1	1						
12:15		0	1	1						
12:30		1	2	3						
12:45		1	0	1						
01:00		0	1	1						
01:15		0	0	0						
01:30		0	2	2						
01:45		0	0	0						
02:00		0	0	0						
02:15		0	0	0						
02:30		0	0	0						
02:45		0	0	0						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		0	0	0						
04:00		0	0	0						
04:15		0	0	0						
04:30		0	0	0						
04:45		1	1	2						
05:00		1	0	1						
05:15		0	1	1						
05:30		2	1	3						
05:45		3	0	3						
06:00		4	2	6						
06:15		4	1	5						
06:30		3	4	7						
06:45		11	5	16						
07:00		6	5	11						
07:15		30	16	46						
07:30		34	22	56						
07:45		63	31	94						
08:00		22	57	79						
08:15		7	10	17						
08:30		12	13	25						
08:45		12	14	26						
09:00		4	6	10						
09:15		7	4	11						
09:30		9	17	26						
09:45		11	14	25						
10:00		7	11	18						
10:15		8	7	15						
10:30		8	11	19						
10:45		7	11	18						
11:00		10	9	19						
11:15		6	16	22						
11:30		17	15	32						
11:45		13	6	19						
Total		324	317	641						
Percent		50.5%	49.5%							
Peak	-	07:15	07:15	-	-	-	-	-	-	07:15
Vol.	-	149	126	-	-	-	-	-	-	275
P.H.F.		0.591	0.553							0.731

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 260 Beverly Rd
 Brookline, MA

Start Time	9/25/2019 Wed	WB to Zant	EB to Grov	Total						
12:00 PM		8	11	19						
12:15		7	9	16						
12:30		14	15	29						
12:45		7	3	10						
01:00		6	12	18						
01:15		12	10	22						
01:30		8	11	19						
01:45		12	11	23						
02:00		13	10	23						
02:15		21	16	37						
02:30		12	37	49						
02:45		10	38	48						
03:00		7	25	32						
03:15		12	21	33						
03:30		8	20	28						
03:45		13	21	34						
04:00		10	16	26						
04:15		15	17	32						
04:30		17	15	32						
04:45		12	15	27						
05:00		22	34	56						
05:15		11	24	35						
05:30		23	29	52						
05:45		21	39	60						
06:00		13	29	42						
06:15		11	30	41						
06:30		13	19	32						
06:45		18	18	36						
07:00		21	17	38						
07:15		10	22	32						
07:30		9	10	19						
07:45		7	19	26						
08:00		7	17	24						
08:15		4	45	49						
08:30		10	16	26						
08:45		3	7	10						
09:00		2	6	8						
09:15		5	5	10						
09:30		2	4	6						
09:45		1	3	4						
10:00		1	5	6						
10:15		0	2	2						
10:30		1	2	3						
10:45		0	1	1						
11:00		1	0	1						
11:15		2	0	2						
11:30		0	0	0						
11:45		1	3	4						
Total		443	739	1182						
Percent		37.5%	62.5%							
Peak	-	17:00	17:30	-	-	-	-	-	-	17:00
Vol.	-	77	127	-	-	-	-	-	-	203
P.H.F.		0.837	0.814							0.846

Town of Brookline

Engineering/Transportation Department
 333 Washington St, Brookline MA, 02445

Beverly Rd
 at 260 Beverly Rd
 Brookline, MA

Start Time	9/26/2019 Thu	WB to Zant	EB to Grov	Total						
12:00 AM		0	1	1						
12:15		1	0	1						
12:30		1	0	1						
12:45		0	1	1						
01:00		0	1	1						
01:15		0	1	1						
01:30		0	1	1						
01:45		0	1	1						
02:00		0	0	0						
02:15		1	1	2						
02:30		0	1	1						
02:45		0	0	0						
03:00		0	0	0						
03:15		0	0	0						
03:30		0	0	0						
03:45		0	0	0						
04:00		0	0	0						
04:15		0	1	1						
04:30		0	0	0						
04:45		2	1	3						
05:00		1	0	1						
05:15		0	0	0						
05:30		1	2	3						
05:45		3	3	6						
06:00		3	2	5						
06:15		7	3	10						
06:30		3	3	6						
06:45		10	8	18						
07:00		12	10	22						
07:15		23	13	36						
07:30		36	28	64						
07:45		56	40	96						
08:00		18	51	69						
08:15		20	18	38						
08:30		7	18	25						
08:45		12	10	22						
09:00		9	14	23						
09:15		13	7	20						
09:30		9	9	18						
09:45		7	12	19						
10:00		7	10	17						
10:15		6	10	16						
10:30		9	14	23						
10:45		12	13	25						
11:00		8	12	20						
11:15		9	9	18						
11:30		11	10	21						
11:45		9	8	17						
Total		326	347	673						
Percent		48.4%	51.6%							
Peak	-	07:15	07:30	-	-	-	-	-	-	07:30
Vol.	-	133	137	-	-	-	-	-	-	267
P.H.F.		0.594	0.672							0.695

Town of Brookline

Beverly Rd
at 260 Beverly Rd
Brookline, MA

Engineering/Transportation Department
333 Washington St, Brookline MA, 02445

Start Time	9/26/2019 Thu	WB to Zant	EB to Grov							Total
12:00 PM		10	14							24
12:15		9	6							15
12:30		8	8							16
12:45		5	7							12
01:00		14	10							24
01:15		10	13							23
01:30		7	12							19
01:45		14	12							26
02:00		13	12							25
02:15		26	14							40
02:30		15	28							43
02:45		13	44							57
03:00		6	25							31
03:15		12	13							25
03:30		19	18							37
03:45		14	15							29
04:00		18	18							36
04:15		13	26							39
04:30		26	22							48
04:45		10	22							32
05:00		19	27							46
05:15		20	31							51
05:30		28	58							86
05:45		17	44							61
06:00		19	39							58
06:15		5	55							60
06:30		6	34							40
06:45		10	23							33
07:00		5	16							21
07:15		7	14							21
07:30		4	16							20
07:45		10	9							19
08:00		7	6							13
08:15		5	18							23
08:30		8	9							17
08:45		8	10							18
09:00		4	8							12
09:15		6	4							10
09:30		1	9							10
09:45		4	3							7
10:00		4	2							6
10:15		0	5							5
10:30		1	5							6
10:45		1	2							3
11:00		2	4							6
11:15		0	2							2
11:30		1	0							1
11:45		2	2							4
Total		466	794							1260
Percent		37.0%	63.0%							
Peak	-	17:00	17:30	-	-	-	-	-	-	17:30
Vol.	-	84	196	-	-	-	-	-	-	265
P.H.F.		0.750	0.845							0.770
Grand Total		1559	2197							3756
Percent		41.5%	58.5%							
ADT		ADT 1,933	AADT 1,933							

MASafeRoutesSurvey.org

Survey Report: Brookline - Edith C Baker

Survey Print Date: January 8, 2020

- Survey Dates: 2019-12-09 to 2019-12-20
- Responses Received: 482
- School-wide Participation Rate: 63% *

Introduction

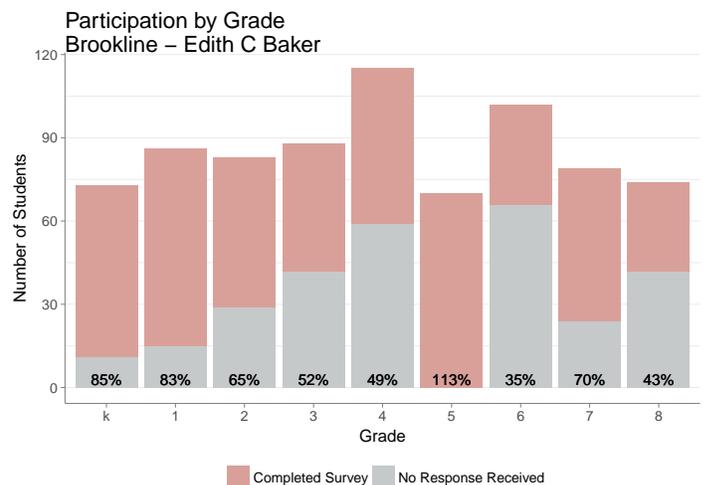
This report will help your school plan safe transportation options for all students. It contains the results of a survey conducted at Brookline - Edith C Baker in December 2019. Participating parents/guardians provided information about how students travel to school and their approximate home location. This information can help you identify the right strategies and best opportunities for new projects and investments related to reducing traffic congestion, encouraging walking and biking, and increasing safety around your school.

How to Read This Report

This report measures distance to school in terms of walksheds and bikesheds. A *walkshed* includes all the homes within a certain distance to school, based on mapped sidewalks, pedestrian paths, and low volume roadways. We define walksheds for 0.5, 1.0, and 1.5 mile walking distances to school. A *bikeshed* of 2.0 miles also includes multi-use paths and on-road cycle facilities, where mapped. For a map of the walksheds and bikesheds, see the last page of the report. Where "walkshed" is used alone, it always includes the bikeshed of the same distance.

Survey Statistics

The figure below shows the survey participation rate for each grade. Total enrollment is based on the 2018-2019 school year, per Department of Elementary and Secondary Education *. Survey responses from each grade were used to estimate the distance and travel choice for the entire grade. The higher the participation rate, the more reliable the survey results are.

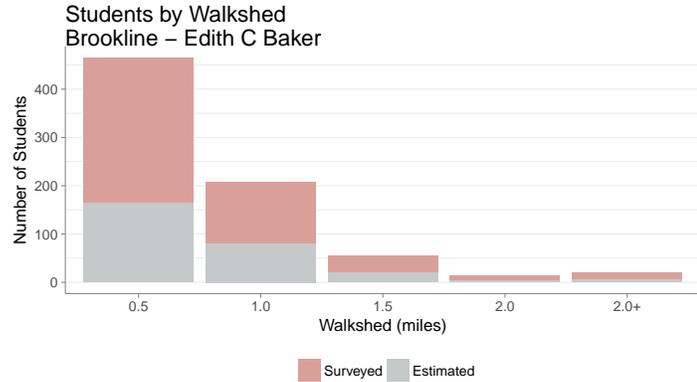


* Survey data discrepancies may exist in cases where more than one survey was submitted per student, current year enrollment is not currently available, or school enrollment has increase since reported to ESE on October 1st.

Student Proximity

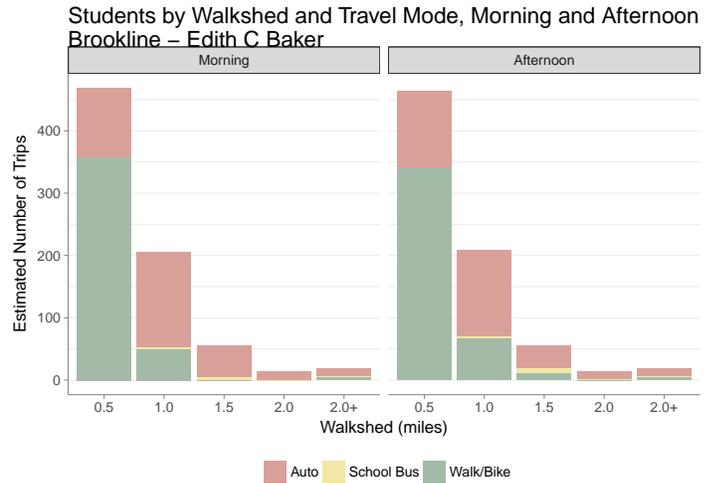
- Average Distance to School: 1 miles
- Within 1.0 Mile Walkshed: 88%
- Within 2.0 Mile Bikeshed: 97%

The chart and table below show the number of students surveyed and the total estimated students by walkshed. Student totals by walkshed are estimated assuming that the proportion of surveyed students within each walkshed and grade is proportional to the enrolled students within each walkshed and grade.



Students By Walkshed					
Students	0.5	1.0	1.5	2.0	2.0+
Estimated	466	208	55	14	20
Surveyed	299	127	33	9	14
Percent	61%	27%	7%	2%	3%

Walk share is 54.1% in the morning and 55.3% in the afternoon. The auto share is lower in the afternoon, indicating that as many as 4.9% of those who are driven to school in the morning get home by other means in the afternoon.



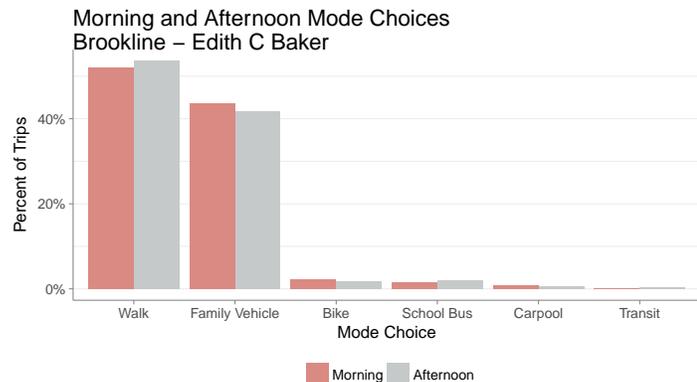
Estimated Travel Mode, Morning and Afternoon

	0.5	1.0	1.5	2.0	2.0+
Morning					
Auto	111	152	50	14	13
School Bus	0	4	6	0	2
Walk	357	49	0	0	5
Afternoon					
Auto	123	137	36	12	13
School Bus	1	4	9	1	2
Walk	339	67	11	0	5

Student Travel Choices

- Walk\Bike Trips Within One Mile: 60%
- Walk\Bike Trips Overall: 55%
- Family Vehicle\Carpool Trips Overall: 43%
- School Bus Trips Beyond One Mile: 11%

The chart below shows what percent of trips are made by each travel mode in the morning and afternoon.



Greenhouse Gas Emissions (GHG) Benefits of Walking and Biking

- Per-student GHGs within 1 mile: 4574 kg
- Per-student GHGs beyond 1 mile: 2530 kg

Transportation generates more than one-third of the total greenhouse gas (GHG) emissions produced in Massachusetts. Increasing the number of trips made by walking or biking is a critical step toward achieving state goals for GHG reduction. The following table shows the estimated annual GHG emissions (in kilograms of CO₂) for students being driven to school, by walkshed. (It does not include emissions from school buses.) For comparison, the average Massachusetts household drives about 19,000 miles per year, generating approximately 8,000 kg of GHG emissions.

Walkshed	Total (kg)	% of Auto Emissions
0.5	519762	20%
1.0	1090406	41%
1.5	405823	15%
2.0	247732	9%
2.0+	386315	15%

Shifting some school commutes from auto to walking or biking can create real benefits for your community. This section estimates the traffic, physical activity, and GHG benefits that might result from increasing walking and biking. It can help you make the case for investing in Safe Routes to School programs and to track your progress over time.

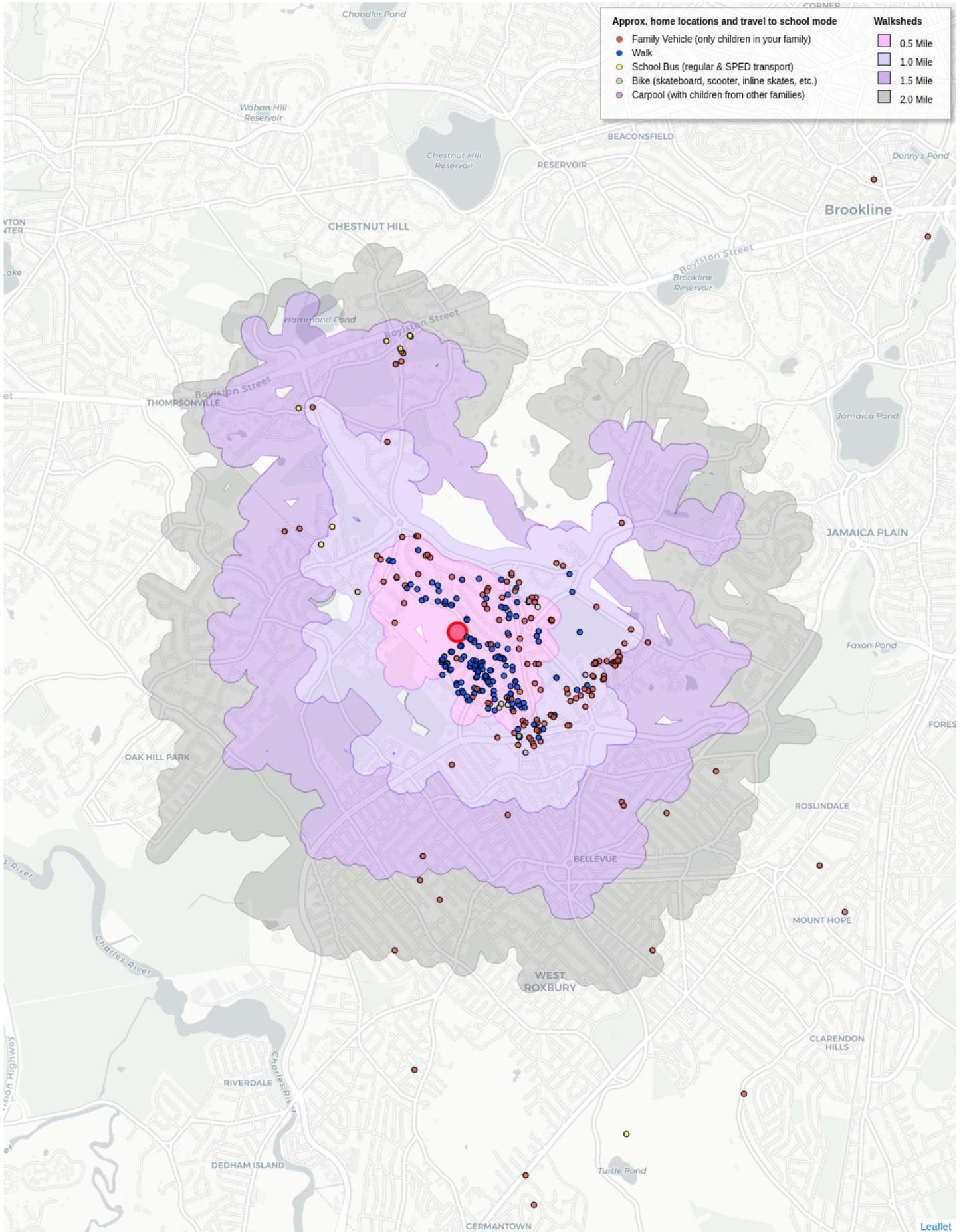
If your school achieved the "expected" values described above based on grade specific averages for each walkshed, it would:

- Reduce number of daily car trips to and from school by 11.
- Provide an additional 35 minutes of physical activity for each newly participating student.
- Reduce annual auto-generated GHG emissions from between 1,203 kg to 1,948 kg, or 0% to 0.1%.

How Your School Compares

The table below compares, for each walkshed, your school's actual walk \ bike share to an expected value reflecting average walking and biking rates across Massachusetts. Each percentage is the share of students in the walkshed that are walking or biking or expected to be walking or biking. The expected value accounts for student grade levels and proximity to school, and is based on more than 40,000 surveys collected statewide since 2011.

Actual and Expected Walk \ Bike Share					
	0.5	1.0	1.5	2.0	2.0+
Actual	75%	28%	10%	0%	26%
Expected	62%	30%	11%	4%	4%



- Crash Data

**MassDOT Crash Report for BROOKLINE for the year 2013**

Crash Number	City/Town Name	Crash Date	Crash Time	Crash Severity	Number of Vehicles	Total Nonfatal Injuries	Total Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Road Surface Condition	Ambient Light	Weather Condition	At Roadway Intersection	Distance from Nearest Roadway Intersection	Distance from Nearest Milemarker	Distance from Nearest Exit	Distance from Nearest Landmark
3397359	BROOKLINE	16-Feb-2013	11:34 PM	Non-fatal injury Property damage only (none injured)	1	1	0	Single vehicle crash	V1: Travelling straight ahead	V1:Southbound	V1: Overtum/rollover V1: Collision with parked motor vehicle / V2: Collision with parked motor vehicle	V1: Passenger car	Dry	Dark - lighted roadway	Clear		136 BEVERLY ROAD 100 feet W from Intersection BEVERLY ROAD / GROVE STREET			
3618133	BROOKLINE	21-Jul-2013	1:50 PM	Non-fatal injury Property damage only (none injured)	2	0	0	Rear-end	V1: Parked / V2:Travelling straight ahead	V1:Northbound / V2:Northbound		V1: Passenger car / V2:Passenger car	Dry	Daylight	Clear					290 BEVERLY ROAD



MassDOT Crash Report for BROOKLINE for the year 2014

Crash Number	City/Town Name	Crash Date	Crash Time	Crash Severity	Number of Vehicles	Total Nonfatal Injuries	Total Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Road Surface Condition	Ambient Light	Weather Condition	At Roadway Intersection	Distance from Nearest Roadway Intersection	Distance from Nearest Milemarker	Distance from Nearest Exit	Distance from Nearest Landmark	Non Motorist Type
3817844	BROOKLINE	18-Apr-2014	9:10 AM	Property damage only (none injured)	2	0	0	Angle	V1: Travelling straight ahead / V2:Turning left	V1:Northbound / V2:Westbound	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Passenger car / V2:Passenger car	Dry	Daylight	Cloudy	LAGRANGE ST / BEVERLY RD					



MassDOT Crash Report for BROOKLINE for the year 2015

Crash Number	City/Town Name	Crash Date	Crash Time	Crash Severity	Number of Vehicles	Total Nonfatal Injuries	Total Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Road Surface Condition	Ambient Light	Weather Condition	At Roadway Intersection	Distance from Nearest Roadway Intersection	Distance from Nearest Milemarker	Distance from Nearest Exit	Distance from Nearest Landmark	Non Motorist Type
4132317	BROOKLINE	07-Jan-2015	8:20 AM	Property damage only (none injured)	2	0	0	Sideswipe, same direction	V1: Parked / V2:Turning right	V1:Not reported / V2:Not reported	V1: Collision with motor vehicle in traffic / V2: Collision with parked motor vehicle	V1: Passenger car / V2:Light truck(van, mini-van, panel, pickup, sport utility) with only four tires	Dry	Daylight	Clear		BEVERLY ROAD				
4075121	BROOKLINE	31-Mar-2015	4:45 PM	Non-fatal injury	2	1	0	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:Westbound / V2:Westbound	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Passenger car / V2:Passenger car	Dry	Daylight	Clear	LAGRANGE ST / BEVERLY RD					



MassDOT Crash Report for BROOKLINE for the year 2016

Crash Number	City/Town Name	Crash Date	Crash Time	Crash Severity	Number of Vehicles	Total Nonfatal Injuries	Total Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Road Surface Condition	Ambient Light	Weather Condition	At Roadway Intersection	Distance from Nearest Roadway Intersection	Distance from Nearest Milemarker	Distance from Nearest Exit	Distance from Nearest Landmark	Non Motorist Type
4172071	BROOKLINE	04-Apr-2016	5:59 PM	Non-fatal injury	2	1	0	Rear-to-rear	V1: Travelling straight ahead / V2:Backing	V1:Not reported / V2:Not reported	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Passenger car / V2:Passenger car	Snow	Daylight	Snow		230 BEVERLY RD				
4245342	BROOKLINE	10-Sep-2016	10:15 PM	Non-fatal injury	2	1	0	Rear-end	V1: Slowing or stopped in traffic / V2:Travelling straight ahead	V1:Eastbound / V2:Eastbound	V1: Reported but invalid / V2: Reported but invalid	V1: Passenger car / V2:Passenger car	Dry	Dark - lighted roadway	Clear	INDEPENDENCE DR / RUSSETT RD / BEVERLY RD					



MassDOT Crash Report for BROOKLINE for the year 2017

Crash Number	City/Town Name	Crash Date	Crash Time	Crash Severity	Number of Vehicles	Total Nonfatal Injuries	Total Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Road Surface Condition	Ambient Light	Weather Condition	At Roadway Intersection	Distance from Nearest Roadway Intersection	Distance from Nearest Milemarker	Distance from Nearest Exit	Distance from Nearest Landmark	Non Motorist Type
4410344	BROOKLINE	31-Jul-2017	6:10 PM	Property damage only (none injured)	2	0	0	Sideswipe, same direction	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1: Not reported / V2: Not reported	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	LAGRANGE ST / BEVERLY RD					

Commonwealth of Massachusetts

Motor Vehicle Crash Police Report

Date of Crash 11/22/2016 Time of Crash 0739 City/Town BRKL

Number Vehicles 003 Number Injured 000 Speed Limit 030 State Police Local Police MBTA Police Other:

AT INTERSECTION:

LOCATION

NOT AT INTERSECTION:

Form section for 'AT INTERSECTION' with fields for Route#, Direction, Name of Roadway/Street, and Name of Intersecting Roadway/Street.

Form section for 'NOT AT INTERSECTION' with fields for Route#, Direction, Address #, Name of Roadway/Street, and Mile Marker/Exit Number.

Form section for vehicle status with checkboxes for 'Vehicle 1 01 # Occupants', 'Hit/Ran', and 'Moped', and Case No. 2016-0005339(A).

Form section for insurance and citations with fields for Insurance Company (METROPOLITAN PROPERTY), Vehicle Travel Direction, and Citation #.

Form section for vehicle action and damaged area code with fields for Vehicle Action Prior to Crash, Event Sequence, Most Harmful Event, Driver Contributing Code, and a diagram of a vehicle with numbered impact points.

Table for operator and occupants with columns for Name, Address, Age/DOB, Sex, Seat Belt, Safety System, Airbag Status, Airbag Switch, Eject Code, Trap Code, Injury Status, Traump. Code, and Medical Facility.

Form section for vehicle 2 status with checkboxes for 'Vehicle 2 00 # Occupants' and 'Non-Motorist A Type', and fields for Action, Location, Condition, Hit/Ran, and Moped.

Form section for operator details with fields for License #, Sex, Lic. Class, Lic. Restrictions, CDL, Operator Name, Address, City, State, Zip, Insurance Company, Vehicle Travel Direction, and Violation details.

Form section for vehicle 2 details with fields for Reg #, Reg Type, Reg State, Veh Year, Veh Make, Veh Config, Vehicle Action Prior to Crash, Event Sequence, Most Harmful Event, Driver Contributing Code, and a diagram of a vehicle with numbered impact points.

Table for operator and occupants for vehicle 2 with columns for Name, Address, Age/DOB, Sex, Seat Belt, Safety System, Airbag Status, Airbag Switch, Eject Code, Trap Code, Injury Status, Traump. Code, and Medical Facility.

Commonwealth of Massachusetts

Motor Vehicle Crash
Police Report

Date of Crash: 07/31/2017
Time of Crash: 1810
City/Town: BRO

Number Vehicles: 002
Number Injured: 000
Speed Limit: 930
Latitude: _____
Longitude: _____
State Police: _____
Local Police: _____
MBTA Police: _____
Other: _____

AT INTERSECTION:

LOCATION

NOT AT INTERSECTION:

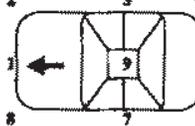
Route# Direction Name of Roadway/Street
S LAGRANGE ST
At
BEVERLY RD
Route# Direction Name of Intersecting Roadway/Street
Also at Intersection with
Route# Direction Name of Intersecting Roadway/Street

Route# Direction Address # Name of Roadway/Street
000000
Feet N S E W of _____ or _____
Mile Marker _____ Exit Number _____
Feet N S E W of _____
Route# Intersecting Roadway/Street _____
Feet N S E W of _____
Landmark _____

Vehicle 1 03 # Occupants Hit/Run Moped Case No. 2017-0003480(A)

Insurance Company: GOV'T EMPLOYEE INS
Vehicle Travel Direction: N S E W Responding to Emergency? 2
Citation # (If Issued): _____
Viol. 1: Ch/Sec/Sub _____ Viol. 2: Ch/Sec/Sub _____
Viol. 3: Ch/Sec/Sub _____ Viol. 4: Ch/Sec/Sub _____

Vehicle Action Prior to Crash: 02
Event Sequence: 01
Most Harmful Event: 01
Driver Contributing Code: 01
Underride/Override: 01 Towed N
Damaged Area Code: (Circle Up to Three)
0 None
10 Undercarriage
11 Totaled
97 Other
99 Unknown



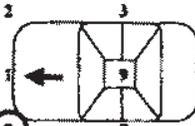
Please fill out for operator and all occupants involved

Name (Last, First, Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Trap Code	32 Injury Status	33 Transp. Code	Medical Facility
Operator	See Above					1	04	99	0	0	99	01
DEOK-KIM, JONG	10 GERRY RD		F			1	04		0	0	05	01
KIM, IAN	10 GERRY RD		M			4	04		0	0	05	01

Vehicle 2 01 # Occupants Non-Motorist A Type
14 Action 15 Location 16 Condition 17 Hit/Run Moped

Insurance Company: COMMERCE INS
Vehicle Travel Direction: N S E W Responding to Emergency? 2
Citation # (If Issued): _____
Violation 1: Ch _____ Sec _____ Violation 2: Ch _____ Sec _____
Violation 3: Ch _____ Sec _____ Violation 4: Ch _____ Sec _____

Vehicle Action Prior to Crash: 01
Event Sequence: 01
Most Harmful Event: 01
Driver Contributing Code: 04
Underride/Override: 01 Towed N
Damaged Area Code: (Circle Up to Three)
0 None
10 Undercarriage
11 Totaled
97 Other
99 Unknown



Please fill out for operator and all occupants involved

Name (Last, First, Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Trap Code	32 Injury Status	33 Transp. Code	Medical Facility
Operator/Non-Motorist	See Above					1	04	99	0	0	05	01

Commonwealth of Massachusetts

Motor Vehicle Crash
Police Report

Date of Crash 09/27/2018	Time of Crash 0825 24HR BRL	City/Town	Number Vehicles 002	Number Injured 001	Speed Limit 025 Latitude _____ Longitude _____	State Police NY Local Police NY MBTA Police NY Other: NY
-----------------------------	-----------------------------------	-----------	------------------------	-----------------------	--	---

AT INTERSECTION:

LOCATION

NOT AT INTERSECTION:

1 01	E Route# Direction	LAGRANGE ST Name of Roadway/Street	000000 Address #	
		At		
		BEVERLY RD Name of Intersecting Roadway/Street		
		Also at intersection with		
2 02	Route# Direction	Name of Intersecting Roadway/Street		

3 Please Select One of the Following: Vehicle 1 01# Occupants Hit/Run Moped Case No. 2018-0004231(A)

4 01

Insurance Company PLYMOUTH ROCK ASSURANCE

Vehicle Travel Direction: N S E W Responding to Emergency? 2

Citation # (If Issued) _____

Viol. 1: Ch/Sec/Sub _____ Viol. 2: Ch/Sec/Sub _____

Viol. 3: Ch/Sec/Sub _____ Viol. 4: Ch/Sec/Sub _____

Vehicle Action Prior to Crash 02 Damaged Area Code: (Circle Up to Three)

Event Sequence 01 21 22 23 24 25

Most Harmful Event 01

Driver Contributing Code 01 24 25

Underride/Override _____ Towed N

0 None
10 Undercarriage
11 Totaled
97 Other
99 Unknown

5

6 01

Please fill out for operator and all occupants involved

Name (Last First Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Trap Code	32 Injury Status	33 Transp. Code	Medical Facility	
Operator	See Above	-----	---	---	---	99	04	99	0	0	04	02	FAULKNER

7 03 Please Select One of the Following: Vehicle 2 01# Occupants Non-Motorist A Type

14 Action 15 Location 16 Condition 17 Hit/Run Moped

8 01

Insurance Company PROGRESSIVE INSURANCE

Vehicle Travel Direction: N S E W Responding to Emergency? 2

Citation # (If Issued) T1120799

Violation 1: Ch 90-1 Sec _____ Violation 2: Ch _____ Sec _____

Violation 3: Ch _____ Sec _____ Violation 4: Ch _____ Sec _____

Vehicle Action Prior to Crash 01 Damaged Area Code: (Circle Up to Three)

Event Sequence 01 21 22 23 24 25

Most Harmful Event 01

Driver Contributing Code 20 24 25

Underride/Override _____ Towed N

0 None
10 Undercarriage
11 Totaled
97 Other
99 Unknown

Please fill out for operator and all occupants involved

Name (Last First Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Trap Code	32 Injury Status	33 Transp. Code	Medical Facility
Operator/Non-Motorist	See Above	-----	---	---	---	99	04	99	0	0	05	01

Commonwealth of Massachusetts

Motor Vehicle Crash Police Report

Date of Crash: 09/10/2016
 Time of Crash: 2215
 City/Town: BRL

Number Vehicles: 002
 Number Injured: 001
 Speed Limit: 030
 Latitude: _____
 Longitude: _____
 State Police: _____
 Local Police: _____
 MBTA Police: _____
 Other: _____

AT INTERSECTION:

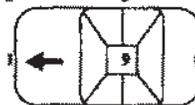
LOCATION

NOT AT INTERSECTION:

Route# E Direction INDEPENDENCE DR
 Name of Roadway/Street
 At
RUSSETT RD
 Name of Intersecting Roadway/Street
 Also at Intersection with
BEVERLY RD
 Name of Intersecting Roadway/Street

Route# 000000 Direction _____ Address # _____ Name of Roadway/Street _____
 Feet N S E W of _____ of _____ or _____ Mile Marker _____ Exit Number _____
 Feet N S E W of _____ of _____ Route# _____ Intersecting Roadway/Street _____
 Feet N S E W of _____ of _____ Landmark _____

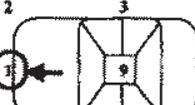
Vehicle 1 01 # Occupants Hit/Run Moped Case No. 2016-0004109(A)

Insurance Company SAFETY INS Vehicle Action Prior to Crash 02 Damaged Area Code: (Circle Up to Three)
 Vehicle Travel Direction: N S E W Responding to Emergency? _____ Event Sequence 01 49 23 22 22 22 2
 Citation # (If Issued) _____ Most Harmful Event 49 23  4 0 None
 Viol. 1: Ch/Sec/Sub _____ Viol. 2: Ch/Sec/Sub _____ Driver Contributing Code 34 34 10 Undercarriage
 Viol. 3: Ch/Sec/Sub _____ Viol. 4: Ch/Sec/Sub _____ Underride/Override 02 25 Towed N 11 Toted
 97 Other
 99 Unknown

Please fill out for operator and all occupants involved

Name (Last, First, Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Trap Code	32 Injury Status	33 Transp. Code	Medical Facility
Operator	See Above	-----	---	---	1	04	99	0	0	99	01	

Vehicle 2 01 # Occupants Non-Motorist A. Type Action Location Condition Hit/Run Moped

Insurance Company PLYMOUTH ROCK ASSU Vehicle Action Prior to Crash 01 Damaged Area Code: (Circle Up to Three)
 Vehicle Travel Direction: N S E W Responding to Emergency? _____ Event Sequence 01 49 23 22 22 22 2
 Citation # (If Issued) R731B178 Most Harmful Event 49 23  4 0 None
 Violation 1: Ch ART Sec _____ Violation 2: Ch _____ Sec _____ Driver Contributing Code 05 24 24 10 Undercarriage
 Violation 3: Ch _____ Sec _____ Violation 4: Ch _____ Sec _____ Underride/Override 03 23 Towed Y 11 Toted
 97 Other
 99 Unknown

Please fill out for operator and all occupants involved

Name (Last, First, Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Trap Code	32 Injury Status	33 Transp. Code	Medical Facility
Operator/Non-Motorist	See Above	-----	---	---	1	04	99	0	0	04	02	BRIGHAM

Commonwealth of Massachusetts

Motor Vehicle Crash Police Report

Date of Crash 01/14/2018 Time of Crash 0930 City/Town BRL

Number Vehicles 001 Number Injured 000 Speed Limit Latitude Longitude State Police Local Police MBTA Police Other

AT INTERSECTION:

LOCATION

NOT AT INTERSECTION:

Route# Direction Name of Roadway/Street At Route# Direction Name of Intersecting Roadway/Street Also at Intersection with

000247 BEVERLY ROAD Route# Direction Address # Name of Roadway/Street Feet N S E W of Mile Marker Exit Number

Vehicle 1 01# Occupants Hit/Ran Moped

Case No. 2018-000213(A)

Insurance Company PROGRESSIVE DIRECT Vehicle Travel Direction: N S E W Responding to Emergency? 2 Citation # (If Issued) Viol. 1: Ch/Sec/Sub Viol. 2: Ch/Sec/Sub Viol. 3: Ch/Sec/Sub Viol. 4: Ch/Sec/Sub

Vehicle Action Prior to Crash 01 Damaged Area Code: (Circle Up to Three) Event Sequence 21 22 23 24 25 26 27 28 29 30 31 32 33 0 None 10 Undercarriage 11 Totalled 97 Other 99 Unknown

Table with columns: Name (Last First Middle), Address, Age/DOB, Sex, 26 Seat Pos, 27 Safety System, 28 Airbag Status, 29 Airbag Switch, 30 Eject Code, 31 Trap Code, 32 Injury Status, 33 Transp. Code, Medical Facility

Vehicle 2 00# Occupants Non-Motorist A Type Action Location Condition Hit/Ran Moped

License # St DOB/Age Sex Lic. Class Lic. Restrictions CDL Endorsement Operator Address City State Zip Insurance Company Vehicle Travel Direction: N S E W Responding to Emergency? Citation # (If Issued) Violation 1: Ch Sec Violation 2: Ch Sec Violation 3: Ch Sec Violation 4: Ch Sec

Reg # Reg Type Reg State Veh Year Veh Make Veh Config Owner Address City State Zip Vehicle Action Prior to Crash 01 Damaged Area Code: (Circle Up to Three) Event Sequence 21 22 23 24 25 26 27 28 29 30 31 32 33 0 None 10 Undercarriage 11 Totalled 97 Other 99 Unknown

Table with columns: Name (Last First Middle), Address, Age/DOB, Sex, 26 Seat Pos, 27 Safety System, 28 Airbag Status, 29 Airbag Switch, 30 Eject Code, 31 Trap Code, 32 Injury Status, 33 Transp. Code, Medical Facility

→ Direction 1 -Vehicle 1 2 -Vehicle 2 Pedestrian
 ie: → 1 → 2 →

Crash Diagram



If Crash Did Not Occur on a Public Way:

- Off-Street Parking Lot
- Garage
- Mall/Shopping Center
- Other Private Way

Indicate North by Arrow



Crash Narrative:

On 01/14/2018 at 0931 hrs, while assigned to the 545 unit, I responded to 245 Beverly Road for a vehicle into a tree. Upon arrival observed (MA reg 8TFL50), to have major front end damage. The operator, Annet Kabuusu stated while traveling on Beverly Road towards Independence Drive when she accidentally swerved the vehicle and struck a tree in front of 247 Beverly Road. Kabuusu refused medical attention. The vehicle was towed by Perfection.

Witnesses:

Name (Last, First, Middle)	Address	Phone #	Statement

Property Damage:

Owner (Last, First, Middle)	Address	Phone #	34-Type	Description of Damaged Property

Truck and Bus Information:

Registration # _____ (From Vehicle Section)

Carrier Name _____ Carrier Issuing Authority Code 35

Address _____ City _____ St _____ Zip _____

US DOT #: _____ State Number _____ Issuing State _____ ICC #: _____ Interstate 36

Cargo Body Type Code 37 Gross Vehicle Weight 38

Trailer Reg #: _____ Reg Type _____ Reg State _____ Reg Year _____ Trailer Length 39

Hazmat Information:

Placard 40 Material 1 digit # 41 Material Name _____ Material 4 digit # _____ Release code 42

CONNEELY, KAITLIN ELIZABET 989434 BROOKLINE POLICE DEPARTMENT 01/14/2018
 Police Officer Name (Please Print) Signature ID/Badge # Department Precinct/Barracks Date

Commonwealth of Massachusetts

Motor Vehicle Crash Police Report

Date of Crash 09/19/2019 Time of Crash 0753 City/Town BRL

Number Vehicles 001 Number Injured 001 Speed Limit 030 State Police Local Police MBTA Police Other

AT INTERSECTION:

LOCATION

NOT AT INTERSECTION:

Route# Direction Name of Roadway/Street At Route# Direction Name of Intersecting Roadway/Street Also at Intersection with

000249 BEVERLY RD (AREA) Route# Direction Address # Name of Roadway/Street Feet N S E W of Mile Marker Exit Number

Vehicle 1 01 Occupants Hit/Run Moped

Case No. 2019-0004510(A)

Insurance Company LM GENERAL Vehicle Travel Direction N S E W Responding to Emergency? 2 Citation # (If Issued) T2072406 Viol. 1: Ch/Sec/Sub ART.VII S6

Vehicle Action Prior to Crash 06 Event Sequence 04 Most Harmful Event 04 Driver Contributing Code 01 Underride/Override Towed N

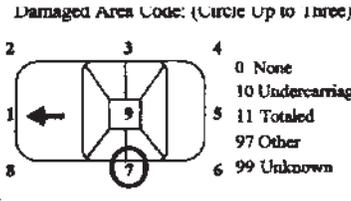


Table with columns: Name (Last, First, Middle), Address, Age/DOB, Sex, Seat Pos, Safety System, Airbag Status, Airbag Switch, Eject Code, Trap Code, Injury Status, Transp. Code, Medical Facility. Row 1: Operator, See Above, 99, 04, 04, 0, 0, 10, 01.

Vehicle 2 00 Occupants Non-Motorist A Type Action Location Condition Hit/Run Moped

Insurance Company Vehicle Travel Direction N S E W Responding to Emergency? Citation # (If Issued) Violation 1: Ch Sec Violation 2: Ch Sec Violation 3: Ch Sec Violation 4: Ch Sec

Vehicle Action Prior to Crash Event Sequence Most Harmful Event Driver Contributing Code Underride/Override Towed

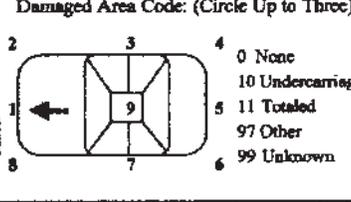


Table with columns: Name (Last, First, Middle), Address, Age/DOB, Sex, Seat Pos, Safety System, Airbag Status, Airbag Switch, Eject Code, Trap Code, Injury Status, Transp. Code, Medical Facility. Row 1: Operator/Non-Motorist, See Above, 08, 97.

Commonwealth of Massachusetts

Motor Vehicle Crash Police Report

Date of Crash 07/21/2013	Time of Crash 1350 24HR	City/Town BROOKLINE	Number Vehicles 002	Number Injured 000	Speed Limit 030 Latitude _____ Longitude _____	State Police Local Police MBTA Police Other:
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AT INTERSECTION:

LOCATION

NOT AT INTERSECTION:

1
01

Route# Direction _____ Name of Roadway/Street _____
At _____

Route# Direction _____ Name of Intersecting Roadway/Street _____
Also at Intersection with _____

2
01

Route# Direction _____ Name of Intersecting Roadway/Street _____

000290 BEVERLY RD

Route# Direction Address # Name of Roadway/Street

Feet N S E W of _____ or _____
Mile Marker _____ Exit Number _____

0100 Feet N S E W of _____

Route# Intersecting Roadway/Street
GROVE ST

Landmark _____

3

Please Select One of the Following: Vehicle 1 00# Occupants Hit/Ran Moped

Case No. 2013-0003780(A)

4
01

Insurance Company METROPOLITAN PROPERTY

Vehicle Travel Direction: S E W Responding to Emergency? 2

Citation # (if Issued) _____

Viol. 1: Ch/Sec/Sub _____ Viol. 2: Ch/Sec/Sub _____

Viol. 3: Ch/Sec/Sub _____ Viol. 4: Ch/Sec/Sub _____

Vehicle Action Prior to Crash 11

Event Sequence 23 22 21 20

Most Harmful Event 01

Driver Contributing Code 01 34 34

Underride/Override 01 Towed N

Damaged Area Code: (Circle Up to Three)

4 0 None
10 Undercarriage
5 11 Totaled
97 Other
6 99 Unknown

5

Please fill out for operator and all occupants involved

Name (Last, First, Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Imp Code	32 Injury Status	33 Transp. Code	Medical Facility
Operator	See Above	-----	---									

7
01

Please Select One of the Following: Vehicle 2 01# Occupants Non-Motorist A Type

14 Action 15 Location 16 Condition 17 Hit/Ran Moped

8
02

Insurance Company GEICO

Vehicle Travel Direction: S E W Responding to Emergency? 2

Citation # (if Issued) R3806160

Violation 1: Ch 90-9 Sec _____ Violation 2: Ch _____ Sec _____

Violation 3: Ch _____ Sec _____ Violation 4: Ch _____ Sec _____

Vehicle Action Prior to Crash 01

Event Sequence 23 22 21 20

Most Harmful Event 02

Driver Contributing Code 19 23

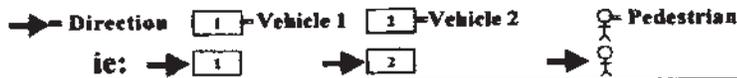
Underride/Override 01 Towed Y

Damaged Area Code: (Circle Up to Three)

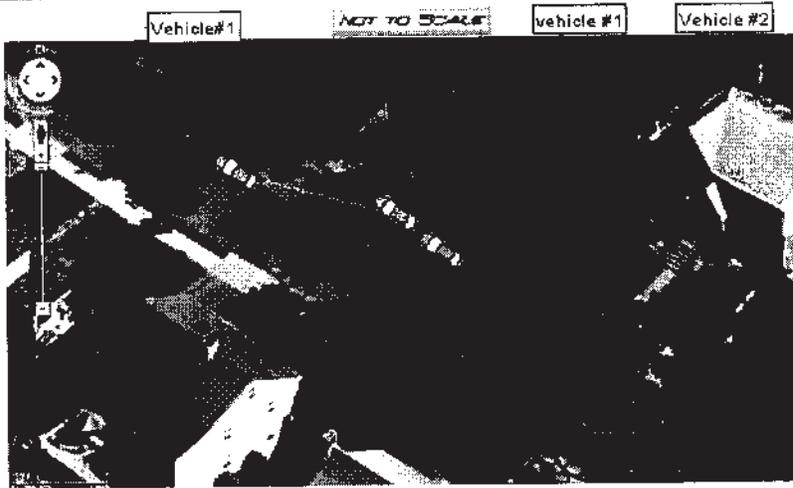
4 0 None
10 Undercarriage
5 11 Totaled
97 Other
6 99 Unknown

Please fill out for operator and all occupants involved

Name (Last, First, Middle)	Address	Age/DOB	Sex	26 Seat Pos.	27 Safety System	28 Airbag Status	29 Airbag Switch	30 Eject Code	31 Imp Code	32 Injury Status	33 Transp. Code	Medical Facility
Operator/Non-Motorist	See Above	-----	---			04	99			05	01	



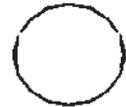
Crash Diagram



If Crash Did Not Occur on a Public Way:

- Off-Street Parking Lot
- Garage
- Mall/Shopping Center
- Other Private Way

Indicate North by Arrow



Crash Narrative

Vehicle #2 was traveling north on Beverly Rd when he took his eyes off the roadway to look at his navigation system on his phone and made contact with Vehicle #1 which was parked in front of 290 Beverly Rd, Vehicle was pushed approx 50 feet up Beverly Rd from this impact

Vehicle #2 had front end damage and Vehicle #1 had rear end damage, Vehicle #2 had to be towed from the scene by Perfection Towing.

Vehicle #2 was also Unregistered at this time and the Operator / Owner was cited for Unregistered M/V, citation number R3806160

Witnesses

Name (Last, First, Middle)	Address	Phone #	Statement

Property Damage

Owner (Last, First, Middle)	Address	Phone #	34-Type	Description of Damaged Property

Truck and Bus Information

Registration # _____ (From Vehicle Section)

Carrier Name _____ Carrier Issuing Authority Code 35

Address _____ City _____ St _____ Zip _____

US DOT #: _____ State Number _____ Issuing State _____ ICC #: _____ Interstate 36

Cargo Body Type Code 37 Gross Vehicle Weight 38

Trailer Reg #: _____ Reg Type _____ Reg State _____ Reg Year _____ Trailer Length 39

Hazmat Information:

Placard 40 Material 1 digit # 41 Material Name _____ Material 4 digit # _____ Release code 42

HARRINGTON, MARK JOSEPH

28000

BROOKLINE POLICE DEPARTMENT

07/21/2013

Police Officer Name (Please Print)

Signature

ID/Badge #

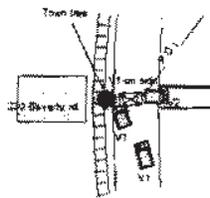
Department

Precinct/Barracks

Date

→ Direction 1 - Vehicle 1 2 - Vehicle 2 Pedestrian
 ic: → 1 → 2 →

Crash Diagram:



If Crash Did Not Occur on a Public Way:

- Off-Street Parking Lot
- Garage
- Mall/Shopping Center
- Other Private Way

Indicate North by Arrow



Crash Narrative:

Mass reg 132SN5 (V1) was travelling eastbound on Beverly Rd. The road conditions were snowy and slippery. Mass reg 888TX2 (V2) started backing out of her driveway when V1 turned slightly to the left and slid into a town tree in front of 230 Beverly Rd. V1 bounced off the tree and rolled onto it's right side. It then slid on the snowy road and the rear of V1 hit the rear of V2. Two passengers of V1 needed assistance from fire dept being helped out of the passenger side doors.

A passenger of V1 was complaining of neck pain. Hao Guo was evaluated by Fallon paramedics and refused assistance.

A witness, Howard Mirkin, who lives at 230 Beverly rd., said V1 was travelling down Beverly rd too fast for the conditions.

The operator of V1, Zhiqiang Wang was issued Mass citation R 7275340 for Speeding. V1 was towed by Perfection

Witnesses:

Name (Last, First, Middle)	Address	Phone #	Statement

Property Damage

Owner (Last, First, Middle)	Address	Phone #	34-Type	Description of Damaged Property
TOWN OF BROOKLINE,			MUNICIPAL	Town tree in front of 230 Beverly rd

Truck and Bus Information:

Registration # _____ (From Vehicle Section)

Carrier Name _____ Carrier Issuing Authority Code 35

Address _____ City _____ St _____ Zip _____

US DOT #: _____ State Number _____ Issuing State _____ ICC #: _____ Interstate 36

Cargo Body Type Code 37 Gross Vehicle Weight 38

Trailer Reg #: _____ Reg Type _____ Reg State _____ Reg Year _____ Trailer Length 39

Hazmat Information:

Placard 40 Material 1 digit # 41 Material Name _____ Material 4 digit # _____ Release code 42

FALLON, KEVIN JOHN 10308 BROOKLINE POLICE DEPARTMENT 04/04/2016
 Police Officer Name (Please Print) Signature ID/Badge # Department Precinct/Barracks Date