

ARLINGTON POLICE DEPARTMENT

CHIEF OF POLICE
Frederick Ryan



Town of Arlington
MASSACHUSETTS 02474

POLICE HEADQUARTERS
112 Mystic Street
Telephone 781-316-3900
Facsimile 781-316-3919

MEMORANDUM

TO: Marie Krepelka
Board Administrator

FROM: Officer Corey P. Rateau
Traffic and Parking Unit

DATE: July 16, 2013

RE: Speed Table on Bates Road

Pursuant to my memorandum dated October 11, 2012 regarding Bates Road, the Board of Selectmen at their October 15, 2012 meeting referred the request for speed tables and other traffic calming measures on Bates Road to T.A.C. for further review. At the request of the petitioners Sheri Baron and Maria Romano, Chief Ryan and myself met with them at the police station on November 8, 2012 (prior to the November T.A.C. meeting) to discuss their concerns of excessive speeding being the "norm" on Bates Road (with cars constantly travelling in excess of 40 - 50 mph), pedestrian safety at the crosswalk at the intersection with Raleigh Street, heavy truck traffic despite a sign posted that imposes a truck restriction, and a need for 2-hour parking.

Speeding

Ms. Baron and Ms. Romano were advised that based on traffic counts conducted on two separate occasions on Bates Road by myself in 2002 and 2009 (when similar issues were reported) that the data collected on both occasions did not support their complaints of vehicles constantly speeding well above the posted limit. They were told that it's not as easy as they think to look at a car and estimate how fast it is traveling. There is an extensive amount of training and practice that officers go through to acquire the skill and that they have a calibrated radar unit at their disposal to help them learn to estimate vehicle speeds and engage in the practice frequently.

Furthermore, data was presented to them from Accurate Counts that were done in 2010 in conjunction with the Mass Ave Corridor Project. This data showed the average speeds on the street to be slightly below the posted 30 mph limit and that the 85th percentile was traveling approximately 30 mph (almost exactly the same as the previous counts conducted by this department). They were then advised that when doing speed enforcement, some leeway must be given to operators and that's usually based on an officer's discretion. Most cars do not have a certified calibration on their speedometers and there can be slight variances on what their

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speedometer says and how fast they actually going. Snarled traffic and gridlock would ensue if every car going just a couple of miles an hour over the speed limit were stopped. I'm quite sure they would complain if the same discretion were not afforded to them on any roadway in this or any other city or town.

Pedestrian Safety

A complaint was made that the crosswalk at Bates and Raleigh was unsafe due to the speeds on the roadway and the number of young children crossing with their parents to get to the school located on Tufts Street. Also, there was allegedly the same vehicle parked too close to the crosswalk every day, thus making it difficult to see pedestrians entering the crosswalk.

As stated previously, the speed data collected did not support the claims that vehicles were constantly traveling at speeds in excess of the posted speed limit near this crosswalk. Prior to this, there were no recent complaints to this station from any other citizens utilizing this crosswalk nor have there been any recently reported pedestrian accidents.

During my observations of the area, I saw what appeared to be the complaint vehicle referred to during our meeting. It did not appear to be parked illegally, despite having seen it in the same location on several different days. There were no parking restrictions posted and the vehicle was parked approximately 30 feet from the intersection.

Truck Traffic

Also discussed was the amount of trucks using the roadway despite "No Trucks" signs posted on the street. They were advised that this sign is not enforceable and should not have been posted because there was never a truck exclusion granted for the roadway by MassDot. Many professional truck drivers are aware which roadways have restrictions along their routes and probably ignore the ones they know are not legal.

Parking Complaints

It was reported that either commuters or people working on Mass Ave were parking all day on the street and taking up most of the parking. They also reported that there appeared to be a car with out-of-state plates frequently parked on the street all day with what appeared to be an expired registration sticker. Prior to the meeting, I made checks over several days to examine the parking situation and on each occasion there appeared to be an abundance of parking available on both sides of the street. I also eventually came across the vehicle with the expired out of state registration and had it impounded.

To combat the alleged all day parking, a request was made to have the street become a two-hour parking zone where they got to pick and choose what parts of the street the restrictions were implemented. They were advised that this was not a private way where they can decide whether or not to have anyone park in front of their residence because as a public way, no one is guaranteed a space in front of the house. It would have to be the entire street if they want it. I informed them of my previous experiences with other areas in town where these types of requests often do not hold well with residents of the street when they realize that the time restriction applied to them as well because it's a public way and that they and their guests would now have to leave the block every two hours to be in compliance if their cars were parked on the street.

They were advised that if they wished to pursue the matter, they would do best to gather the signatures of all of the residents showing that they uniformly want this change (rather than submitting their own letter claiming that they "represent the majority of the residents") and then petition the Board of Selectmen.

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Your office was subsequently contacted and they withdrew their request for 2-hour parking.

Traffic Calming Measures Taken

At the conclusion of this November 8th meeting, both parties were advised that APD would initiate directed patrols of Bates Road for speeding violators. Also, they were told that the police department's speed awareness trailer would be put in place facing in both directions of Bates Road for several weeks. This would alert drivers of the speeds they are traveling as well as hopefully educate the petitioners that most vehicles are probably not traveling as fast as they believe; especially in light of the fact that data collected on three separate occasions appeared contrary to their beliefs. They were informed that crosswalk-warning signs will be added at the intersection of Raleigh St. to increase its visibility and that new traffic data would be collected again in the spring of 2013.

Both of them were present at the November 14th T.A.C. meeting and I advised my fellow committee members that Chief Ryan and I already met with them and were already implementing measures to address their concerns.

On January 30th, I was advised that you received an email signed by both Ms. Baron and Ms. Romano stating that the use of the speed awareness trailer and the installation of the crosswalk signs have resulted in a "measurable decrease in the speeding."

Data Collected

From April 30, 2013 to May 8, 2013, traffic counters were put in place at 37 and 57 Bates Road (same as my last count in 2009). These were set to collect speed, volume, and vehicle classification data. This timeframe was chosen as the roadway was dry and the adhesive used to install the tubes would stick and stay in place. Furthermore, there were several days of clear weather forecasted for the area.

Overall, data from the counter put in place at 37 Bates Road (approximately midpoint between Raleigh St. and Mass Ave) showed that the average speed of the road in both directions during this period was 27 mph. The 85th percentile of vehicle operators was traveling at 31 mph. The counter located at 57 Bates (just north of the crosswalk at Raleigh St) had similar counts with the average speed recorded at 28 mph and the 85th percentile at 32 mph. The data shows that only approximately 0.5% of the vehicles are traveling in excess of 35 mph and 0.05% traveling in excess of 40 mph. This shows that overall, traffic is moving at or below the posted speed limit. Combined, the counters showed that large trucks (3 axle singles or larger) only account for 0.35% of the traffic on the road. The majority of the trucks appear to be smaller box trucks of 2 axle/6 tire vehicles (approximately 1.5% of the overall traffic).

The data from the two counter boxes was entered into the "Speed Enforcement Evaluator" with an aggressively low threshold of tolerance (6 mph) and the evaluator computed that there is a low need for enforcement on Bates Road.

Crash data was also examined from January 1, 2010 to present and there appears to have been only three crashes on this section of Bates Road during this time period, with one being a hit and run that based on the report may or may not have happened in Arlington. None appeared to be speed related.

Data Analysis/Recommendations

As with previous complaints, the data suggests that reports of excessive speeding and the imminent danger it poses to pedestrians on this street is more of a perceived problem. Like with many local streets, there will occasionally be operators traveling at excessive speeds in regards to

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the posted speed limit. However, it would not be a responsible use of resources to implement engineering changes to attempt to target and/or control such a small percentage of operators and at the same time unnecessarily inconvenience the majority of operators driving responsibly on the roadway.

Despite multiple complaints to the contrary, the speeds have remained consistently within acceptable ranges of the already posted speed limit during four separate counts over the past eleven years; showing a pattern that nothing has really changed. It is therefore recommended to not implement any engineering changes on this roadway. Periodic directed patrols will continue in order to maintain a police presence but those resources will be used regularly on roadways with verified frequent traffic problems.

However, this recent investigation brings to light the previous practice of installing signs that are non-enforceable and/or illegal to post (No Trucks and 30 mph speed limit sign). It is recommended that the Town bring this street within regulations and only post signs in conformance with the Manual on Uniform Traffic Control Devices (MUTCD) and the MassDot addendum to the MUTCD. Improperly posted truck restriction signs, which falsely inform residents that a restriction exists and therefore cannot be enforced by police, should be removed immediately. It is also recommended that the absolute 30 mph speed limit sign be replaced with a "Thickly Settled" sign and if desired an accompanying advisory speed limit sign of 30 mph.

Submitted in consultation and with recommendations from the Transportation Advisory Committee.

CPR

Cc: Fred Ryan
Police Chief

Capt. James Curran
Police Operations Commander

Lt. Paul Conroy
OIC, Traffic and Parking Unit

Adam Chapdelaine
Town Manager

Transportation Advisory Committee

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ARLINGTON POLICE DEPARTMENT

112 Mystic Street
Arlington, MA 02474
781-643-1212

Site Code: 57 BATES RD.
Station ID: BOX 21992

COMBINED

Latitude: 0' 0.000 Undefined

Report for Report From 4/30/2013 1:50:00 PM to 5/8/2013 10:51:48 AM

CLASS STATISTICS - Modified Scheme F

Class	Bikes	Cars & Trailers	2 Axle Long	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	No Class
Count	238	27174	4366	46	44	0	54	6	1	1	0	0	39
Percent	0.7	83.5	13.4	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1

SPEED STATISTICS - 15 to 70+ by 5 MPH

Speed in MPH	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
Count	588	2411	6014	14285	7853	1258	105	11	0	0	0	1	0	0
Percent	1.8	7.4	18.5	43.9	24.1	3.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Over Speed	15	20	25	30	35	40	45	50	55	60	65	70	75	999
Count	31938	29527	23513	9228	1375	117	12	1	1	1	1	0	0	0
Percent	98.2	90.8	72.3	28.4	4.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile	5%	10%	15%	45%	50%	55%	85%	90%	95%					
Speed	18	21	23	28	28	28	28	32	33	35				

Average 28
(Mean)

Pace Speed 24-33
Number in 23654
Pace
Percent in 72.7
Pace

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112 Mystic Street
Arlington, MA 02474
781-643-1212

Site Code: 37/BATES RD
Station ID: BOX 021993

COMBINED

Report for Report From 4/30/2013 1:24:00 PM to 5/8/2013 10:41:50 AM

Latitude: 0' 0.000 Undefined

CLASS STATISTICS - Modified Scheme F

Class	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	No Class
Count	272	27301	4400	40	747	51	0	61	7	1	1	1	0	58
Percent	0.8	82.9	13.4	0.1	2.3	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2

SPEED STATISTICS - 15 to 70+ by 5 MPH

Speed in MPH	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
Count	509	1728	9180	14903	5527	955	114	23	1	0	0	0	0	0
Percent	1.5	5.2	27.9	45.2	16.8	2.9	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Over Speed	15	20	25	30	35	40	45	50	55	60	65	70	75	999
Count	32431	30703	21523	6620	1093	138	24	1	0	0	0	0	0	0
Percent	98.5	93.2	65.3	20.1	3.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile	5%	10%	15%	45%	50%	55%	85%	90%	95%					
Speed	20	22	23	27	27	28	31	33	34					

Average 27
(Mean)

Face Speed 23-32
Number in 25043
Pace
Percent in 76.0
Pace

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Arlington, MA 02474
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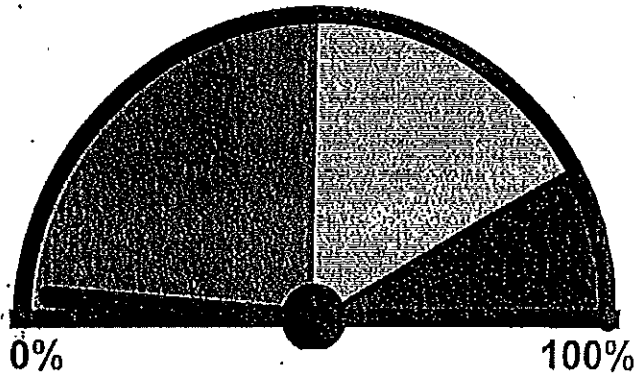
Speed Enforcement Evaluator

Location:
57 BATES ROAD

**Total Percentage of
Enforceable Violations**

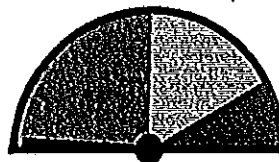
Closest Cross Street:
RALEIGH STREET

Analysis Dates:
Tuesday, April 30, 2013
Wednesday, May 08, 2013



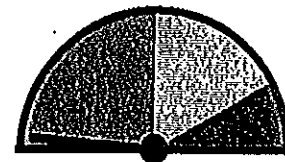
0% 100%
Posted Speed Limit: 30 MPH
Enforcement Tolerance: 6 MPH
Enforcement Limit: 37 MPH & Up
Percentage Above Limit: 2.6%
Enforcement Rating: LOW

NORTH



Percent Above Limit: 2.0%
Enforcement Rating: LOW

SOUTH



Percent Above Limit: 3.1%
Enforcement Rating: LOW

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112 Mystic Street
Arlington, MA 02474
781-643-1212

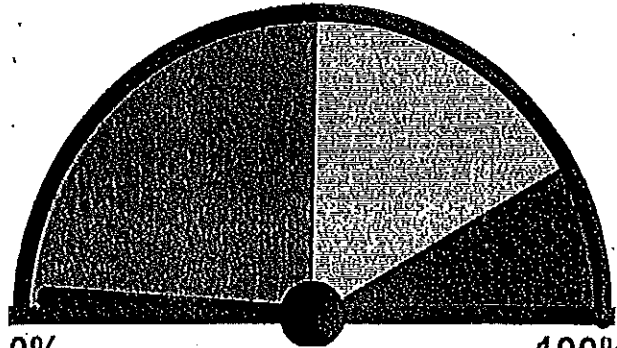
Speed Enforcement Evaluator

Location:
37 BATES ROAD

Closest Cross Street:
BETWEEN RALEIGH AND MASS

Analysis Dates:
Tuesday, April 30, 2013
Wednesday, May 08, 2013

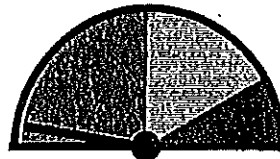
Total Percentage of
Enforceable Violations



0% 100%

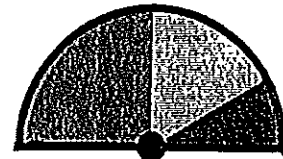
Posted Speed Limit: 30 MPH
Enforcement Tolerance: 6 MPH
Enforcement Limit: 37 MPH & Up
Percentage Above Limit: 2.2%
Enforcement Rating: LOW

NORTH



Percent Above Limit: 5.1%
Enforcement Rating: LOW

SOUTH



Percent Above Limit: 0.4%
Enforcement Rating: LOW

To: Arlington Board of Selectmen

From: Maria Romano and Sheri Baron, Town Meeting Members, Precinct 7

Date: October 9, 2012

RE: Request for:

1. Speed Table on Bates Road
2. "Two-Hour Only" Parking Signs on Bates Road

Dear Board of Selectmen:

We are writing to bring to your attention two issues which our neighborhood feels need addressing, one being a serious safety issue and the other an issue of illegal parking. We hope that with your input and guidance, we can reach an effective and amenable solution to both of these concerns

Speeding on Bates Road

We in the Bates Road and Raleigh Street neighborhood street are profoundly concerned about the safety of all residents and others who walk and/or drive on both streets. Speeding down Bates Road is the norm and not the exception and has become a serious safety issue. We have more than 20 children under the age of 12 who live on both streets. The Gibbs School programs, with their entrance on Tufts Street, serve a variety of children, some developmentally challenged, and Leslie Ellis School's population including nursery-school aged children. There is also a program that serves developmentally challenged adults, as well as an active Arts Center. In addition, there are two parks, one at the Gibbs School and one at the eastern end of Raleigh Street, adjacent to the Dearborn Academy. All of the above create a constant flow of children and adults of all ages walking on Raleigh Street and Bates Road, using the crosswalk at the intersection of both streets. It must be stated again that this intersection is a major crossing for all children in our neighborhood, either walking, riding bikes or in baby carriages

It is our desire, and we are certain that it is yours as well, to make this a safe area for all who use it. The amount of cars traveling this street makes crossing safely almost impossible. The vast majority of drivers on Bates Road exceed the posted speed limit of 30 mph. On a daily basis, we and our neighbors have observed vehicles traveling at speeds from 35 mph to 50 mph plus. In a totally residential neighborhood such as ours, driving over 30 mph poses a serious potential for injury to both drivers and pedestrians.

We are shocked, both by the drivers who speed up to make lights at Warren Street and Broadway from the Mystic Valley Parkway and continue to speed once on Bates Road, and the drivers coming off of Massachusetts Avenue onto Bates Road speeding to make the light at Broadway. Resident feel that it is only a matter of time before someone is seriously injured. This situation will not improve, but worsen, once the town installs the proposed traffic light at the intersection of Bates Road and Massachusetts Avenue. We fell that, without the implementation of a sound, well-thought out plan, a serious, possibly fatal accident is very likely.

We know that the town placed a "car counter" on Bates Road two years ago, which was used solely to determine the number of vehicles traveling on Bates Road over a specified period of time. We assume that this machine was not to gather information on speeding but only put there to count car trips. If it was to calculate speed of cars, etc., we are unaware of the results and any mitigation that was done as a result.

We appreciate the town's efforts to deal with the speeding problem by placing a machine on the street several years ago that indicated the street's speed limit (30mph) and indicated to approaching drivers their

actual speed at that moment. It is human nature when approaching this machine, to slow down to the posted speed limit on the sign. We do not believe that this behavior becomes habituated as a result. Once the machine is gone, drivers automatically revert to their pre-machine speeding habits.

We are fully aware of the town's budgetary constraints. We know that you, as a board, recognize and understand the concerns of the residents on these two streets. Safety is the only issue here. We feel that if the situation remains as it is, we are just waiting for an accident to happen. Bates Road is a collector street with a very high volume of traffic. Drivers rush down this street to get to and from work, appointments, pick up children, etc., with little or no regard for the posted speed limit.

For now, we request that a police officer be stationed on Raleigh Street for a consecutive seven-day period to ticket vehicles that exceed the posted 30 mph speed limit on Bates Road. The immediate result would likely be drivers slowing down to avoid getting a ticket. Typically, once someone gets a ticket for speeding, it serves as a reminder for drivers to obey the speed limit and drive safely for some time.

As for a more permanent solution, we have looked at four "Speed Tables" at 1) Blanchard Road, Belmont; 2) Cross Street, Belmont; 3) Rindge Avenue, Cambridge; and 4) Auburn Street, Newton. (We have photos to share with you.) While they are all a bit different, we feel that, in collaboration with the police department and Transportation Advisory Committee, we will be able to select the proper one to use on Bates Road. The one in Newton is particularly appealing, because before a driver comes to the actual speed table, there is a prominent yellow sign indicating "Speed Crossing Ahead" and another sign that is continuously lit around its perimeter which reads, "Speed Limit 20mpg".

As we explained earlier in this letter, the amount of foot traffic for schools and parks on these two streets, in our opinion, speaks volumes to the need for the town to install a speed table on Bates Road. Our street, and the four cited above with existing speed tables, is a collector street.

For our edification we did some research on collector streets and found: "A collector road or distributor road is a low/moderate capacity road which serves to move traffic from local streets to arterial roads. Unlike arterials, collectors are also designed to provide access to residential properties. Rarely, jurisdictions will differentiate major and minor collector roads, the former being wider, busier and more significant. Some urban collectors are wide boulevards entering communities or connecting sections. Others are residential streets which are typically wider than local roads, although few are wider than four lanes. Small-scale commercial areas can be found on collector roads in residential areas. Key community functions such as school, churches and recreational facilities can often be found on collector roads). The flow of a collector road usually consists of a mixture of signaled intersections or traffic circle with arterial roads, circles, or stop signs.)

Two-Hour Parking Signs

Our second concern is about the all-day parking that occurs on Bates Road and Raleigh Street. Residents are frequently unable to park in front of their own homes; snow plows and street cleaners, and trash collectors are thwarted because these cars do not move all day.

We want to eliminate the all-day parking that currently exists. Most of the all-day parking is done by


commuters from other towns and other parts of Arlington. These two streets are used as a free parking lot for 8-10 hours a day. Drivers leave their cars on our streets to walk to Massachusetts Avenue and use public transportation to go to work every day.


We recommend the installation of several "Two-Hour Parking" signs. We are asking for the guidance of officials and traffic specialists to recommend the optimal placement of these signs. While most of us have

driveways, we still should have the right to have our visitors park in front of our homes as well as parking our own vehicles for a period of time if we desire. Coupled with Bates Road and Raleigh Street covered with all-day parked cars, the speeding issue addressed earlier makes backing out of our driveways a challenge.

It is important for the board to note and understand that we wish to sustain our good neighbor policy with both the Gibbs School and Lexington Eye Associates. A two-hour time limit would not, we believe, have a negative effect on either concern, since patients/visitors normally do not need to park for more than two hours. Our request for posting Two-Hour parking signs on Bates Road is to stop commuters to Boston and Cambridge from using Bates Road as a free parking lot. These cars parked all day, sometimes up to 10 hours, are not clients of either Lexington Eye Associates or any of the programs at the Gibbs School. These are not cars visiting homes on Bates Road. These are not cars of homeowners on Bates Road. These are cars parking all day to use public transportation on Massachusetts Avenue.

We thank you for your consideration and feel confident that we will be able to resolve both issues quickly.


Maria Romano
25 Bates Road


Sheri Baron
10 Raleigh Street

Town Meeting Members
Precinct 7