

Public Safety & Transportation Committee Report

City of Newton In City Council

Wednesday, October 19, 2022

Present: Councilors Downs (Chair), Malakie, Oliver, Lucas, Grossman, Markiewicz and Bowman

Absent: Councilor Lipof

Also Present: Councilor Kelley

Others Present: NewTV

City Staff: David Koses, Transportation Coordinator and Jason Sobel, Director of Transportation

#467-22 Appeal of Traffic Council Decision TC46-22 Exeter Street at Berkeley Street

THOMAS RILEY, 66 Berkeley Street, West Newton AND COUNCILOR KELLEY appealing the approval of Traffic Council petition TC46-22 on September 15, 2022, requesting to

add a stop sign at the end of Exeter Street at Berkeley Street. (Ward 3)

Action: Public Safety & Transportation Denied 6-1, Councilor Malakie opposed

Note: Councilor Kelley, Mr. Koses and Mr. Sobel joined the Committee for discussion on this

item.

Mr. Koses provided Committee members with a PowerPoint presentation, attached.

Mr. Koses stated that the Traffic Council petition was docketed after receiving a 311 request for a stop sign at the "T" intersection at the end of Exeter Street at Berkeley Street, which is on the way to the Peirce Elementary School. Traffic Council frequently receives requests for stop signs at "T" intersections, and typically approves them. Traffic Council believes these stop signs clarify the right of way and increase safety, especially when near school or other walking or biking routes.

Mr. Koses then stated that there are no warrants that apply in the Manual Uniform Traffic Control Devices (MUTCD), the guidance traffic engineers use. A 'T" intersection is an implied stop. Vehicles that are traveling on Exeter Street are supposed to be stopping when approaching Berkeley Street. It is not necessary to install a stop sign. But a stop sign is allowed and there is no reason not to install one here.

Chair Downs stated that the Committee received eight emails supporting Traffic Council's decision to install a stop sign.

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Councilor Kelley stated that she was approached by Mr. Reilly and eight households about codocketing this appeal because the direct abutters never saw a need for a stop sign. She then said that she wanted to support the abutters who a stop sign is unnecessary.

Public Comment:

Thomas Riley, 66 Berkeley Street, stated the intersection is perfectly safe in such a quiet residential area. Thousands of children have crossed this intersection. I don't see the logic or value to adding a stop sign and I prefer one is not installed. I would prefer residential neighborhoods have less signage.

Jenn Martin, Chair, Safe Routes to School Task Force, stated that the Task Force works to make safety improvements on all school routes. The Peirce Elementary School representative was not the person who requested the stop sign. Traffic Council acknowledged that there haven't been any recent crashes, but we shouldn't wait for a crash, especially if it could involve a child. The stop sign could prevent a crash. We want drivers to stop before the crossing in order to see if oncoming vehicles are coming. Many students walk to the school and this intersection is within 1,000 feet.

Scott Oran, 147 Prince Street, stated he has had some close calls while biking and walking through this intersection. Drivers can't see you. A stop sign would make the intersection safer for all.

Meryl Kessler, 147 Prince Street, stated that vehicles travel quickly from Commonwealth Avenue to this neighborhood as a cut through. Vehicles frequently do not stop at this corner, they sometimes slow down. Drivers traveling north on Exeter Street have impeded sightlines due to the large trees on the corner.

Jane Hanser, 40 Cedar Street, stated that one of the reasons it is difficult to drive in Newton is the number of "T" intersections that do not have stop signs and stop bars. When it is dark, you do not know that Exeter Street ends because there are no markings. A stop sign is a low cost intervention to potentially provide a great benefit with children's safety at risk.

Questions, answers and comments:

One email is from a Peirce Elementary School PTO representative supporting the stop sign.

This intersection has two ADA compliant curb ramps. When curb ramps are installed, crosswalks should be installed and painted. We want students to be able to walk to school and have the expectation that vehicles are going to stop. There are stop signs in the neighborhood. When stop signs are installed, drivers are more likely to stop.

Every intersection where we expect drivers to stop, there should be a stop sign, stop bar and a crosswalk.

Who requested the stop sign and what is their email address? Mr. Koses answered that the request came in through a 311 service request. When we get a service request, we review the site and determine whether DPW should docket it, or we may suggest that a resident docket the request

themselves. In this case, we discussed the request and docketed it. He then said that he could find out who made the initial request.

What was Traffic Council's vote? Mr. Koses answered the vote was 4-0-1, Councilor Downs abstaining.

Do cars come to a stop when traveling on Exeter Street? Mr. Koses answered that it is an an implied stop. Drivers are supposed to be stopping, but not all do. We think that if we put a stop sign in, it would be a reminder that they're supposed to stop.

If we install a stop sign, will a crosswalk be installed? Mr. Koses answered that it is something that could be done. We could paint the crosswalk the same time the stop bar is painted. There are other side streets coming into Berkeley Street that don't have crosswalks.

What is an estimated cost to install a stop sign including labor and materials? Mr. Sobel answered that the estimate cost for the stop sign, hardware and post is approximately \$150 to \$200 plus \$100 to \$150 for labor costs.

How often does Traffic Council receive a stop sign request at a "T" intersection? Mr. Koses answered that at almost every meeting there is at least one request.

I don't see one stop sign as visual clutter. My concern is installing them where there is an implied stop.

My concern is that we may spend money on a safety improvement that may not be necessary. With an override coming, perhaps we should spend money on what is needed or required to make the most difference in situations, as opposed to improvements in already safe situations.

The cost is very small to install a stop sign.

Wouldn't you want a new driver to know exactly where they're supposed to stop.

We have an inconsistent approach on how we handle complaint driven requests. It can feel unfair to neighborhoods who suddenly have a change imposed on their street they weren't expecting. As we continue to focus on traffic, pedestrian, bike safety and accessibility, I would like to see a complete, holistic and consistent approach to deciding where we do and do not need these matters.

Chair Downs explained this Committee has five options for consideration. 1) Approve the appeal, meaning no stop sign would be installed. 2) Approve the appeal with an amendment. 3) Deny the appeal, which would uphold Traffic Council's decision to install a stop sign. 4) Approve as a trial and 5) Remand to Traffic Council for further review.

Without further discussion, Councilor Markiewicz made a motion to deny the appeal, upholding Traffic Council's decision. Committee members agreed 6-1, Councilor Malakie opposed.

Referred to Public Facilities and Public Safety & Transportation Committees

#70-22 Requesting a discussion regarding Traffic calming progress, plans, and adequacy of resources

COUNCILORS MALAKIE, NORTON, BOWMAN, DOWNS, GROSSMAN, AND WRIGHT requesting a discussion with the Department of Public Works and the Planning Department regarding Traffic Calming prioritization, selection of methods, effectiveness of completed projects, pending requests, adequacy of current funding and personnel, and timetable for addressing pending and new requests at current resource levels.

Public Facilities No Action Necessary 7-0 on 06/08/22 Public Safety & Transportation Held 7-0 on 06/08/22

Action: Public Safety & Transportation Held 6-0, Councilor Malakie not voting

Note: Mr. Sobel joined the Committee for discussion on this item.

Chair Downs explained that she scheduled this item in order to hear from the Transportation Division of DPW to look at post-construction evaluation of traffic calming interventions, where DPW had gathered the data and could discuss. She and the administration agree that when the city spends money to change a street for better safety, we should have data to show if that intervention is working, or if it needs a more aggressive measure to slow speeds.

Mr. Sobel provided a PowerPoint presentation on traffic calming progress update, attached.

Mr. Sobel stated that in June, he discussed the latest traffic calming priorities and process. Tonight, we will discuss the effectiveness and how DPW evaluates traffic calming once constructed.

Mr. Sobel provided the following examples on traffic calming measures installed.

Grant Avenue

Installed summer 2022, as a pilot project, DPW placed rubber speed cushions (which allow fire trucks to pass without pause, but slow other vehicles) at two locations north and south of Marshall Street, where there is a sharp curve in the road. Pre-installation data is from 2017 when we first evaluated Grant Avenue. This evaluation showed the 85th percentile speed was 35 miles per hour in both directions. (85th percentile speed is the speed at or below which 85% of the vehicles are traveling. 15% were traveling at higher speeds.) In September 2022, DPW placed speed monitors between the two speed cushions. This evaluation showed a substantial drop in in 85th percentile speed (down to 33 northbound, 31 southbound). DPW infers that drivers accelerate between the speed cushions and then slow down for the second one.

Allen Avenue

In Sept. 2021, DPW completed curb extensions and new crosswalks at Richardson Field near the Zervas Elementary School. Speed data in 2017 (pre construction) showed 85% speed at 35 miles per hour in both directions. Post construction, 85% speed has dropped to 30 (NB) and 32 (SB) mph. Between

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October 2021 through September 2022 there have been no crashes. As a comparison, we looked at 2020 which certainly wasn't a typical year for traffic patterns, and we also looked at 2019, with one crash.

Beethoven Avenue

September 2021, DPW completed a raised table intersection at the intersection of Beethoven Avenue and Puritan Road. This achieved the most significant of the speed drops in all of DPW's traffic calming evaluations to date. Seed tables are a very effective means of traffic calming. Evaluation in October 2017 showed 85% speeds at 36 miles per hour in both directions. Post construction evaluation in September 2022 showed 85% speeds of 25 (NB) and 28 (SB) mph. There have been no crashes.

Pearl Street

Construction complete in summer 2022. To calm traffic, DPW striped new white edge lines to narrow and better define the travel lanes, which changes drivers' perception of the road. DPW also installed a new school zone sign by Lincoln-Eliot Elementary School along with new speed feedback displays. As an additional safety measure, we installed an LED flashing stop sign at the stop at Pearl and Jewett streets. DPW collected speed data east of Thornton Street, not in the school zone. Edge lines made the most difference. In May 2022 vehicles were driving 31 (EB) and 32 (WB) mph. After the edge lines were striped, 85% speeds dropped to 29 mph both directions.

Chestnut Street

Chestnut Street between Beacon & Rt. 9 was repaved in the summer of 2021. The effect that we're seeing is the result of the perceived narrower travel lanes, after striping a centerline and an edge line. We saw a drop in 85th percentile speeds, of 1 mile per hour in each direction (36-35 NB and 35-34 SB).

Public Comment:

Scott Oran, 147 Prince Street, stated that the statutory speed limit throughout the City is 25 mph. I think we could do more to telegraph the Citywide speed limits, because clearly, we have scofflaws amongst us. I see this when biking, walking and driving. Traffic calming measures are working, and we need to do more.

Jenn Martin, Chair, Safe Routes to School Task Force, stated it is helpful to see how traffic calming measures are working. Allen and Beethoven Avenues have a 20 mile per hour safety zone. How will these safety zones impact traffic calming goals? Data shows that Allen Avenue is still 10 to 12 miles per hour over the speed limit. Will additional traffic calming measures be completed on Allen and Chestnut Street where speed remains significantly higher than desired? Will Chestnut Street go to the bottom of the traffic calming list, or will it be evaluated again? Mr. Sobel answered that there are many areas throughout the City that DPW would like to address. We will continue to lower speed limits, which could be the topic of another discussion. DPW may pursue several avenues to lower speed limits or eliminate regulatory speed limits and return roads back to the statutory speed limit of 25 mph.

Mayor Fuller recently announced \$2 million in ARPA funds dedicated to traffic calming projects. Five or six projects were top priorities already, and this funding accelerates measures we take on items

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lower down the priority list. The funded changes include two more raised tables. Also funded is an additional RRFB at the Chestnut Street, Tamworth Road and Amherst Road intersection.

Meryl Kessler, 147 Prince Street, asked why it appears that some municipalities use speed bumps differently than others? Boston is using them liberally; Newton is more cautious. Mr. Sobel answered that some of the reluctance is related to emergency response, emergency services and difficulty in snow clearing and maintenance. When new calming measures are planned, DPW works collaboratively with the fire and police departments.

Questions, answers, comments and suggestions:

The City has several areas with posted speed limits exceeding 25 miles per hour.

Was data collected on what the posted speed limit is and what was observed? Mr. Sobel answered that this information was not available. The state regulatory speed limit on some of these roads do differ from the city's statutory 25mph speed limit Citywide. The state's regulatory speed limit takes precedence. For this presentation tonight, we were focusing on the change in actual speeds. The examples I presented did not change the speed limits. Analyzing traffic calming pre- and post-construction is critical to understand what tools are effective, and help us advocate for more traffic calming.

It would be great to see the 85th percentile down to 20 miles per hour on Beethoven Avenue, which has a school and a park.

How does Brookline install speed cushions and speed tables that are much more dramatic than what **Newton has done?** They use speed tables that really slow you down and keep you from traveling fast.

It is important to work on reducing speeds on Grant Avenue, Pearl and Marshall Streets.

What was the actual lane width painted on Pearl Street? Mr. Sobel answered a 10 foot travel lane.

When data was complete, were there any surprises? Mr. Sobel answered that he was pleased to see the data, particularly on Beethoven Avenue, as speed tables are very expensive. All the changes in speeds were in line with his expectations.

If the override is approved, we should advocate additional funding for traffic calming measures.

The speed tables on Auburndale Avenue and Woodward Street have been effective.

Speed cushions on Grant Avenue have slowed drivers. Should these be made permanent or is there another solution and how do you make that determination? Mr. Sobel answered that the southbound 4 mile per hour drop is significant. We would need many more speed humps, or a combination of speed humps and raised tables, to remove the room for driver acceleration. The most effective traffic calming options tend to be more expensive. Moving forward, when we have an

opportunity to redesign an entire roadway, we should evaluate the entire corridor and reduce design speeds to where we want them to be.

What was the cost to purchase and install the speed cushions on Grant Avenue? Mr. Sobel answered the material cost was approximately \$12,000 taking one DPW crew approximately one week to install. There was a learning curve since this was the first rubber speed cushions DPW installed. It was labor intensive because the speed cushions need to be tailored to the width of the road, and it was necessary to get the spacing correct.

Will the rubber speed cushions on Grant Avenue be removed in the winter? Mr. Sobel answered yes, late November/early December. We have received several complaints from some neighbors regarding truck noise as they go over the speed humps. We will also be monitoring the roadway condition with all the holes that we drilled into the road to ensure that we're not jeopardizing the pavement's structural integrity and having the asphalt fall apart underneath the cushions.

How will the speed cushions play out with the cold, snow and salt in the winter? Mr. Sobel answered this is the first time using rubber speed cushions. It is a concern with the freeze/thaw cycle.

An officer was stationed south of the S curve on Walnut Street by Newton North High School because everybody was driving in excess of 25 miles per hour. It would be interesting to know if speeding continues, particularly southbound.

When designing traffic calming, do you design with a target speed in mind? Mr. Sobel answered not yet. But they expect a raised table intersection to reduce speeds to 20 miles per hour. Other traffic calming measures vary. We know narrowing lanes will make a several difference but that they are not going to reduce speeds by more than 10 or 15 mph.

The perception of people living on Allen Avenue is that when you have oncoming traffic, driving is slow, but as soon as oncoming traffic stops, speeds increase beyond 25 miles per hour. It is interesting that data didn't reflect this.

After a traffic calming project, does DPW review the project and determine a next step? Is it complaint driven or is it your own observation? Please provide systemic post-construction evaluation and review. Is there enough capacity in the department to do that? Mr. Sobel answered that at this point, we don't have a formal post-construction evaluation process. The formal traffic calming process is relatively new. Traffic calming was first budgeted in FY19. Many traffic calming items take time to review with the City's Complete Streets Committee to develop conceptual options, taking it to a full engineering design, and bid out the work for construction. Now is a good time to think about how we evaluate projects and document our post construction data efforts.

There is no time like when we are rebuilding schools to install traffic calming measures near them.

Today, traffic calming is very complaint driven. At what point, do you envision getting to a point where you're able to have data on crashes, near misses, speeds allowing the City to proactively prioritize traffic calming measures? Mr. Sobel answered that the Zervas Elementary School opening happened ahead of when DPW could implement traffic calming nearby. We were fortunate that the school project budget had a significant line item for off-site improvements. The City was able to use those funds for Allen and Beethoven avenues. We have learned, and when Cabot Elementary School opened, we were able to move ahead with sidewalk improvements and traffic calming at the school and East Side Parkway. I expect this pattern will continue with future school projects.

<u>Councilors desired the following post-construction traffic calming evaluations in time for the next discussion:</u>

- The safety zone on Watertown Street.
- The intersection of Lexington Street, Auburndale Avenue and Wolcott Street.
- Speed on Walnut Street through Newtonville center.

Without further discussion, Councilor Markiewicz made a motion to hold. Committee members agreed 6-1, Councilor Malakie not voting

The Committee adjourned at 8:35 p.m.

Respectfully submitted,

Andreae Downs, Chair

Public Safety and Transportation

City of Newton

October 19, 2022

#467-22

Agenda

#467-22 Appeal of Traffic Council Decision TC46-22 Exeter St at Berkeley St. THOMAS RILEY, 66 Berkeley Street, West Newton AND COUNCILOR KELLEY appealing the approval of Traffic Council petition TC46-22 on September 15, 2022, requesting to add a stop sign at the end of Exeter Street at Berkeley Street. (Ward 3)

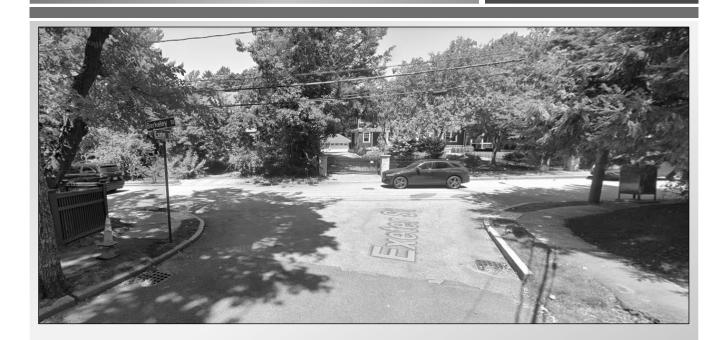
Location of Exeter Street at Berkeley Street

#467-22



View of Exeter Street at Berkeley Street

#467-22 #467-22



Walking Westbound on Berkeley St, at Exeter St, toward the Peirce School

#467-22



Traffic Council

Traffic Council

Considerations

#467-22

#467-22

- There are no official warrants in the MUTCD
- Any "T" intersection = an implied stop
- It is not necessary to install a stop sign, but stop signs are allowed
- Historically Traffic Council has viewed a stop sign at a T intersection as beneficial because:
 - It can clarify right-of-way

10.19.22

- · It may offer a small safety benefit, especially
 - Near schools, walking or biking routes
 - Abutting pedestrian crossings
 - · Anywhere with any type of unclear or blocked sightlines

Vote Taken by Traffic Council on 9.15.22 (4-0-1 to approve stop sign)

#467-22

Approve new stop sign By INSERTING into the provisions of Sec. TPR-147. Obedience to isolated stop signs, the following: Exeter Street at Berkeley Street, northbound.



Traffic Council

Public Safety & Transportation Committee October 19, 2022

#70-22 – Traffic Calming Progress update

#70-22

Grant Avenue

Pilot project
 with speed
 cushions across
 roadway at two
 locations,
 installed in the
 Summer 2022



Grant Avenue

- Pre & Post 85th percentile Speed Data Comparison
- Speed data collected between the two sets of speed cushions

	NB	SB
November 2017 (without speed humps)	35 mph	35 mph
September 2022 (with speed humps)	33 mph	31 mph

Allen Avenue

- Traffic Calming consisted of two new crosswalks and sidewalk bump-outs at Richardson Field.
- Construction completedSeptember 2021



#70 00

Allen Avenue

- Pre & Post 85th Percentile Speed Data Comparison
 - Speed data recorded between Pine Ridge
 Road and Plainfield Street
- Crash Data History
 - Zero recorded crashes in 12 months since project completion
 - One crash in calendar years 2019 & 2020

	NB	SB
September 2017	35 mph	35 mph
September 2022	30 mph	32 mph

Beethoven Avenue

- Raised table intersection at Beethoven Avenue / Puritan Road
- Construction completed
 September 2021



#70-22

Beethoven Avenue

- Pre & Post 85th Percentile Speed Data
 Comparison
 - Speed data collected south of Puritan Road
- Crash Data History
 - Zero recorded crashes in 12 months since project completion
 - One crash in calendar years 2019 & 2020

	NB	SB
October 2017	36 mph	36 mph
September 2022	25 mph	28 mph

#70-22

Pearl Street

- Traffic Calming and Safety improvements include:
 - Roadway edge lines to define and narrow travel lanes
 - New School Zone signs with Speed
 Feedback displays
 - LED Flashing STOP signs at Jewett
 Street intersection

 Speed data collected east of Thornton Street

	ЕВ	WB
May 2022 (before edge lines)	31 mph	32 mph
June 2022 (after edge lines)	29 mph	29 mph

Chestnut Street

- Roadway repaved in Summer 2021 (Beacon St to Route 9)
- Vehicle Speed Data collected after paving, before and after pavement markings installed.
 - Speed data collected just south of Amherst Road

	NB	SB
Early August 2021 (before edge lines)	36 mph	35 mph
Late August 2021 (after edge lines)	35 mph	34 mph