

To: Land Use Committee of the Newton City Council

From: Lou Mercuri, Planning Horizons

Re: 255-257 Newtonville Avenue

Date: May 16, 2016

On behalf of the petitioner for this land use petition, Planning Horizons is submitting this supplemental report regarding the supporting vehicle trip surveys for the proposed self storage facility location at 255-257 Newtonville Avenue in Newtonville.

At the May 3 public hearing, requests were made by the Council to undertake additional traffic counts and Planning Horizons conducted both onsite and comparable facility counts between May 6 and May 11, 2016. Our original detailed report dated September 21, 2015 to the Council will be referenced in this report; in particular, the data from earlier counts in August and September 2015 will be noted. Other sections of that report, including project overview, existing conditions, and survey methodology remain the same and will generally not be reproduced here.

A total of 6 additional hours of vehicle trips to Public Storage at 945 Moody Street in Waltham and EZ Storage at 300 Needham Street in Newton were recently generated. In addition, for comparison purposes, 5 hours of survey observations were conducted on May 6 and May 9 at the proposed site at 255-257 Newtonville Avenue, which currently houses a landscape business and a separate nonprofit organization known as Waypoint Adventures that serves people with disabilities.

The following summarizes all of the traffic/customer count surveys conducted to date:

1. Public Storage, 945 Moody Street, Waltham – 1015 storage units; a total of 6 hours of surveys, 3 separate 1-hour counts in August and September 2015 and one consecutive 3-hour count on Tuesday, May 10, 2016.
2. EZ Storage, 300 Needham Street, Newton – 1400 storage units; a total of 6 hours of surveys, 3 separate 1-hour counts in August and September 2015 and one consecutive 3-hour count on Wednesday, May 11, 2016.
3. 255-257 Newtonville Avenue – existing site with a landscape business and Waypoint Adventures; a total of 5 hours of surveys on May 6 and May 9, 2016.

Results of Counts/Surveys

The following data compiled in chart form identifies the results of the counts/surveys from the most recent to the previous surveys conducted in 2015. In the May 2016 counts, it was decided to capture a

morning peak time of 3 hours at one facility and an afternoon peak time of 3 hours at the other storage facility. Both morning and afternoon peak hour surveys were conducted at 255-257 Newtonville Avenue.

1. Public Storage, 945 Moody Street, Waltham

| Date: Tuesday, May 10, 2016 Time: 7:30 AM – 10:30 AM 50° , Sunny | | | |
|---|--------------------------|-------------------------|-----------------------------|
| | # vehicles entering site | # vehicles exiting site | # trucks/vans entering site |
| 7:30-7:45 | 0 | 1 | 0 |
| 7:45-8:00 | 2 | 1 | 0 |
| 8:00-8:15 | 0 | 1 | 0 |
| 8:15-8:30 | 1 | 0 | 0 |
| 8:30-8:45 | 1 | 1 | 1 |
| 8:45-9:00 | 0 | 1 | 0 |
| 9:00-9:15 | 1 | 0 | 0 |
| 9:15-9:30 | 1 | 1 | 0 |
| 9:30-9:45 | 0 | 1 | 0 |
| 9:45-10:00 | 0 | 0 | 0 |
| 10:00-10:15 | 0 | 0 | 0 |
| 10:13-10:30 | 1 | 1 | 0 |
| TOTAL (2.3 per hour) | 7 | 8 | 1 |

| Date: Friday, August 28, 2015 Time: 9:00 AM – 10:00 AM 70° , Sunny | |
|---|--------------------------|
| | # vehicles entering site |
| 9:00-9:15 | 2 |
| 9:15-9:30 | 0 |
| 9:30-9:45 | 2 |
| 9:45-10:00 | 3 |
| TOTAL | 7 |

| Date: Tuesday, September 1, 2015 Time: 4:00 PM – 5:00 PM 85° , Sunny | |
|---|--------------------------|
| | # vehicles entering site |
| 4:00-4:15 | 4 |
| 4:15-4:30 | 3 |
| 4:30-4:45 | 3 |
| 4:45-5:00 | 1 |
| TOTAL | 11 |

| Date: Saturday, September 5, 2015 Time: 9:00 AM – 10:00 AM 65° , Sunny | |
|---|--------------------------|
| | # vehicles entering site |
| 9:00-9:15 | 1 |
| 9:15-9:30 | 2 |
| 9:30-9:45 | 2 |
| 9:45-10:00 | 2 |
| TOTAL | 7 |

Results for Public Storage, 945 Moody Street, Waltham: 6-hour site average: 5.3 vehicle trips entering per hour

2. EZ Storage, 300 Needham Street, Newton

| Date: Wednesday, May 11, 2016 Time: 2:45 PM – 5:45 PM 75° , Sunny | | |
|--|---------------------------|-----------------------------|
| | # vehicles entering site* | # trucks/vans entering site |
| 2:45-3:00 | 1 | 0 |
| 3:00-3:15 | 0 | 0 |
| 3:15-3:30 | 1 | 0 |
| 3:30-3:45 | 1 | 0 |
| 3:45-4:00 | 1 | 1 |
| 4:00-4:15 | 2 | 0 |
| 4:15-4:30 | 1 | 1 |
| 4:30-4:45 | 0 | 0 |
| 4:45-5:00 | 3 | 1 |
| 5:00-5:15 | 3 | 1 |
| 5:15-5:30 | 1 | 0 |
| 5:30-5:45 | 1 | 0 |
| TOTAL (5.0 per hour) | 15 | 4 |

* It was not possible to survey vehicles exiting the site at this location since both the site entrance and site exit could not be viewed simultaneously.

| Date: Tuesday, September 1, 2015 Time: 9:00 AM – 10:00 AM 75° , Sunny | |
|--|--------------------------|
| | # vehicles entering site |
| 9:00-9:15 | 2 |
| 9:15-9:30 | 3 |
| 9:30-9:45 | 0 |
| 9:45-10:00 | 2 |
| TOTAL | 7 |

| Date: Friday, September 4, 2015 Time: 4:15 PM – 5:15 PM 75° , Sunny | |
|--|--------------------------|
| | # vehicles entering site |
| 4:15-4:30 | 3 |
| 4:30-4:45 | 4 |
| 4:45-5:00 | 1 |
| 5:00-5:15 | 2 |
| TOTAL | 10 |

| Date: Saturday, September 5, 2015 Time: 11:45 AM – 12:45 AM 75° , Sunny | |
|--|--------------------------|
| | # vehicles entering site |
| 11:45-12:00 | 0 |
| 12:00-12:15 | 2 |
| 12:15-12:30 | 3 |
| 12:30-12:45 | 3 |
| TOTAL | 8 |

Results for EZ Storage, 300 Needham Street, Newton: 6-hour site average: 6.7 vehicle trips entering per hour

3. Current site, 255-257 Newtonville Avenue, landscaping business and non-profit organization (Waypoint Adventures)

| Date: Friday, May 6, 2016 Time: 1:30 PM – 3:30 PM 55° , Cloudy | | | |
|---|--------------------------|-------------------------|-----------------------------|
| | # vehicles entering site | # vehicles exiting site | # trucks/vans entering site |
| 1:30-1:45 | 2 | 0 | 1 |
| 1:45-2:00 | 4 | 2 | 0 |
| 2:00-2:15 | 1 | 1 | 0 |
| 2:15-2:30 | 2 | 1 | 1 |
| 2:30-2:45 | 2 | 1 | 1 |
| 2:45-3:00 | 0 | 2 | 0 |
| 3:00-3:15 | 2 | 0 | 0 |
| 3:15-3:30 | 1 | 0 | 0 |
| TOTAL | 14 | 7 | 3 |

| Date: Monday, May 9, 2016 Time: 3:30 PM – 4:30 PM 65° , Sunny | | | |
|--|--------------------------|-------------------------|-----------------------------|
| | # vehicles entering site | # vehicles exiting site | # trucks/vans entering site |
| 3:30-3:45 | 2 | 3 | 0 |
| 3:45-4:00 | 0 | 0 | 0 |
| 4:00-4:15 | 3 | 0 | 3 |
| 4:15-4:30 | 1 | 0 | 0 |
| TOTAL | 6 | 3 | 3 |

| Date: Monday, May 9, 2016 Time: 7:30 AM – 9:30 AM 55° , Partly Sunny | | | |
|---|--------------------------|-------------------------|-----------------------------|
| | # vehicles entering site | # vehicles exiting site | # trucks/vans entering site |
| 7:30-7:45 | 0 | 1 | 0 |
| 7:45-8:00 | 2 | 2 | 2 |
| 8:00-8:15 | 1 | 0 | 0 |
| 8:15-8:30 | 1 | 1 | 1 |
| 8:30-8:45 | 1 | 2 | 1 |
| 8:45-9:00 | 1 | 1 | 0 |
| 9:00-9:15 | 1 | 0 | 0 |
| 9:15-9:30 | 1 | 0 | 1 |
| TOTAL | 8 | 7 | 5 |

Results for current Site: 5-hour site average: 5.6 vehicle trips entering per hour

Combining the data from both 2015 and 2016 for the two comparable storage facilities reveals several points. First, the total number of vehicle trips to both sites during the 12 hours of observations was 72. This equates to 6.0 trips per hour or roughly one vehicle entering the site every 10 minutes. If both entering and exiting trips are factored in, the projected number of two trips is 12.0 per hour or one trip every 5.0 minutes. Second, the 15-minute intervals reveal a range of between 0 and 4 entering trips during the 48 surveyed intervals. This reveals that traffic to the storage facilities (even at peak times) is relatively small and steady regardless of the day and time.

The 2015 report highlighted that the perceived peak time of year for self storage facilities occurs in late August and early September, coinciding with the start of the college academic year. Our recent surveys revealed that this perception has validity, as the August/September 2015 counts showed 8.3 vehicles per hour entering both facilities whereas in May 2016 it was just 3.7 vehicles entering per hour, using an equal number of surveyed hours (6) at peak times. Based on the observed data points, it is likely that no more than 8 vehicles per peak hour would enter the site at the peak time of year.

The size of both storage facilities can be factored in to the proposed Newtonville Avenue site. Public Storage on Moody Street in Waltham is very comparable in both the total building square footage and in terms of the number of units. Public Storage is 117,500 gross square feet with 1015 storage units. The proposed facility on Newtonville Avenue would have 113,187 gross square feet with 1025 storage units. Public Storage generated an average of 5.3 one-way trips to the site per hour when combining both the 2015 and 2016 surveys. The figure was 8.3 trips per hour in August/September 2015 and 2.3 in May 2016 at Public Storage. An upper limit estimate of approximately 8 trips per hour at the peak time of year is therefore a reasonable expectation for 255-257 Newtonville Avenue.

Using the May 2016 data recorded for the current landscaping business and non-profit office use, there are on average 5.6 vehicle trips entering the site during the 5 peak hours surveyed. This is very close to the overall 6.0 trips for both storage facilities using all of the surveys (12 hours) from 2015 and May 2016. If all of the counts (both on site and at comparable storage facilities) from only the May 2016 counts are compared, it is important to note that the two comparable storage facilities generated an average of 3.7 trips per hour whereas the present uses produced an even higher average of 5.6 trips per hour. It must be noted that the current site is underutilized and other possible future land uses whether it be office or other types of commercial or even residential would almost certainly result in a large increase in vehicular trips to the site, well above 5.6 trips per hour.

The number and potentially high percentage of truck trips to a self storage facility was identified as a concern at the May 3 public hearing. The recent May 2016 surveys at the two comparable facilities made note of the number of truck and van trips to the sites. Of the 22 vehicle trips to both sites recorded in the 6 hours of observations, a total of 5 trucks and vans or just 22.7% of the trips to both sites originated by truck, the rest were smaller passenger vehicles accessing the site.

Summary and Conclusion

The proposed self-storage facility at 255-257 Newtonville Avenue is a relatively low traffic generator when compared with office or residential uses of a similar scale. Our study of two comparably sized storage facilities reveals an average trip rate of 6.0 trips per hour to each site. This figure works out to one trip to the site approximately every ten minutes, even during peak periods. During off-peak hours, the number of trips to the site will be far less, or almost non-existent. Our May 2016 survey showed the current land use generating 5.6 entering trips per hour, if this is compared with the two comparable storage facilities at the same time period (May 2016) where 3.7 entering trips per hour were observed, then the proposed storage use would generate fewer trips than what is currently being experienced at this time of year. It is important to note that the current site is certainly underutilized compared with potential office, commercial, or residential uses that might occupy it and the larger number of vehicle trips those uses would generate.

The current surveys conducted in May 2016 reinforce the earlier findings in 2015 that the late August-early September timeframe is likely the busiest time of year for facilities of this type. Even at the peak hours of the peak times of year, an overall upper limit of approximately 8 vehicles entering per hour can be expected at the Newtonville site. The data acquired from Public Storage in Waltham is most reliable as that facility and the proposed Newtonville facility are nearly identical in size and number of storage units.