

15. TRANSPORTATION

15.1. INTRODUCTION

The objective of the transportation analysis is to determine whether a proposed project or a proposed set of actions would have the potential to cause significant impacts on traffic and parking operations, public transportation facilities, pedestrian elements, and the safety of all roadway users (pedestrians, bicyclists and motorists).

As discussed in Chapter 1, “Project Description,” the Proposed Action would require that a Special Permit be granted by the City Planning Commission to allow self-storage facilities to be developed in certain “Designated Areas”. The Proposed Action is not expected to induce development. Compared to the No-Action condition, the Proposed Project is anticipated to result in five fewer self-storage facilities over the next 10 years. A total of nine fewer self-storage facilities are projected to be developed inside the Designated Areas, and a total of four additional self-storage facilities are projected to be developed in M1, M2, M3, and C8 districts outside of Designated Areas throughout New York City.

This chapter addresses the potential for self-storage facilities that may be developed in M1, M2, M3, and C8 districts outside of Designated Areas throughout New York City to create significant impacts on the transportation network.

The analysis framework described in Chapter 2 (“Analytical Framework”) defines the four prototypical developments that have been developed as a basis to project the potential for the Proposed Action to result in significant adverse impacts. The potential development levels associated with these four prototypes were evaluated according to the methodologies presented in the *CEQR Technical Manual*. As in the other sections of this document, a 2027, “Build Year” has been defined as a reasonable window in which to frame the analysis scenarios, and to identify the potential for project impacts.

15.2. PRINCIPAL CONCLUSIONS

The analyses presented below conclude that the Proposed Action would not result in significant adverse impacts on the transportation network. Of the four prototypes that have been developed to represent the likely effects of the Proposed Action outside of Designated Areas, Prototype 2 is the largest and contains a total of 167,000 gross square feet of floor area. Based on the analyses presented below, Prototype 2 is projected to generate vehicle, pedestrian, and transit trip levels that are below the screening thresholds that could cause significant transportation impacts, as defined by the *CEQR Technical Manual*. It is noted that this analysis does not “take credit” for a potential No-Action development, such as an as-of-right industrial use that may have occupied the project site absent the Proposed Action, resulting in conservative analysis. Therefore, none of the other prototypes would exceed the screening thresholds, and there is no potential for the Proposed Action to create significant adverse transportation impacts.

15.3. SCREENING ANALYSIS

According to the *2014 CEQR Technical Manual* procedures for transportation analysis, a two tiered screening process can be undertaken to determine whether a quantified analysis is necessary. The first step, the Level 1 (Trip Generation) screening, determines whether the volume of peak hour person and vehicle trips generated by the proposed project would remain below the minimum thresholds for further study. These thresholds are:

- 50 peak hour vehicle trip ends;
- 200 peak hour subway/rail or bus transit riders; and
- 200 peak hour pedestrian trips.

If the Proposed Action results in increments that would exceed any of these thresholds, a Level 2 (Trip Assignment) screening assessment is generally performed. Under this assessment, project-generated trips that exceed Level 1 thresholds are assigned to and from the site through their respective networks (streets, buses, subway lines, sidewalks, etc.) based on expected origin-destination patterns and travel routes. This determines the volume of peak hour vehicular traffic that would be added per intersection, the volume of riders that would be added per subway line or bus route, and the walk trips that would be added per individual pedestrian network element (sidewalk, crosswalk, corner reservoir area, etc.). If the Level 2 screening assessment determines that no traffic locations, transit lines/station elements, or pedestrian network elements would experience an increase in trips beyond the above thresholds for any peak hour, then there is generally no potential for significant impacts and no further analysis is typically warranted.

As noted above, Prototype 2 could result in an increment of 167,000 gross square feet of self-storage space. In order to forecast the maximum hourly arrivals and departures for each of the self-storage prototypes, data were collected from an existing 113,886-gsf self-storage facility operated by Manhattan Mini Storage at 108 W. 107th Street¹. The hours of operation of the existing site are generally from 7AM to 10PM, with occasional early arrivals and late departures. Monday-Friday daily person trips were averaged for weekday daily person trips, and Saturday-Sunday daily person trips-were averaged for the generated weekend daily person trips. The busiest weekday was Friday with 202 daily person trip ends (inbound and outbound trips), and Tuesday was the least busy weekday with 128 daily person trip ends. Saturday and Sunday were very similar, with 272 daily person trip ends generated on Saturday and 260 on Sunday. On a typical weekday, there are 162 daily person trip ends generated to and from the facility, while there are 266 person trip ends per day during the weekend. Refer to Table 1.

15.3.1. Person Trips

At the surveyed facility, the busiest hour is between 1PM and 2PM on weekdays, with 11 people coming in and 9 people leaving. The busiest weekend hour is between 3PM and 4PM, reaching a high of 17 arrival trips and 16 departure trips.

¹ Environmental Assessment Statement 290 Dyckman Street, May 2014

As discussed above, the largest prototypical self-storage facility is P2 which contains 167,000 gross square feet. Applying the factor 167,000/114,000 (1.46) to the 33 peak hour trips in the surveyed facility yields a total of 48 peak hour two-way person trips.

15.3.2. Vehicle Trips

It was conservatively assumed that everybody would drive to and from self-storage facility at vehicle occupancy rate of 1.2. It is estimated that a total of 40 vehicle trip ends would be generated during the peak hour.

Even during the busiest hour the number of vehicle trip ends generated would be well below 50 vehicle trip ends, which is the CEQR Level One Screening Threshold.

15.3.3. Transit and Pedestrians

Based on the information presented in Table X, it is clear that none of the prototypes could generate more than 200 person trips during any peak hour. Because the screening thresholds for transit (subway and bus service) and pedestrian elements (sidewalks, street corners, and crosswalks) are each 200 trips per hour (or 50 bus trips in one direction), the Proposed Action does not have the potential to create significant impacts on transit systems or the pedestrian environment and no further analysis is warranted.

15.3.4. Parking

Based on the guidelines published in the *2014 CEQR Technical Manual*, if a detailed traffic analysis is not warranted, then a parking analysis is not required and there is no potential for a parking impact.

Table 1- Daily trips

113,886 gross square foot self-storage facility

Hour Ending	WEEKDAY			WEEKEND		
	IN	OUT	TOTAL	IN	OUT	TOTAL
7:00	0	0	0	0	0	0
8:00	3	2	5	1	1	2
9:00	4	3	7	6	3	9
10:00	4	4	8	9	8	17
11:00	8	6	14	8	8	16
12:00	7	8	15	17	13	30
1:00	7	7	14	11	14	25
2:00	11	9	20	16	13	29
3:00	6	8	14	14	15	29
4:00	7	7	14	17	16	33
5:00	6	6	12	10	13	23
6:00	5	6	11	9	10	19
7:00	5	5	10	5	7	12
8:00	5	5	10	4	4	8
9:00	2	3	5	4	4	8
10:00	1	2	3	2	4	6
11:00	0	0	0		0	0
12:00	0	0	0	0	0	0
TOTAL	81	81	162	133	133	266

Source: CEQR No. 14-BSA-148M