

2. FRAMEWORK FOR ENVIRONMENTAL ANALYSIS

2.1. OVERVIEW

This EIS has been prepared in accordance with 6 NYCRR 617.9(b) and Sections 6-08 and 6-12 of Executive Order No. 91 of 1977 as amended (City Environmental Quality Review [CEQR]). This chapter outlines the procedural framework utilized to comply with environmental review regulations and provides an overview of the analytical framework to guide the EIS technical analyses presented in subsequent chapters of this document.

2.2. CITY ENVIRONMENTAL QUALITY REVIEW PROCESS

Responding to the State Environmental Quality Review Act (SEQRA) and its implementing regulations, New York City has established rules for its environmental review process known as CEQR. The CEQR process provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to evaluate reasonable alternatives, and to identify and, when practicable, mitigate significant adverse environmental impacts. CEQR rules guide environmental review through the following steps:

- **Establishing a Lead Agency.** Under CEQR, the “lead agency” is the public entity responsible for conducting the environmental review. Usually, the lead agency is also the entity primarily responsible for carrying out, funding, or approving the proposed project. The Department of City Planning (the “Department” or “DCP”) acting as lead agency on behalf of the New York City Planning Commission (CPC) assumed lead agency status for the Proposed Action.
- **Determination of Significance.** The lead agency’s first charge is to determine whether the proposed project might have a significant impact on the environment. To do so, DCP prepared an Environmental Assessment Statement (EAS). Based on the information contained in the EAS, DCP determined that the project might result in significant adverse environment impacts and issued a Positive Declaration on March 1, 2017.
- **Scoping.** Along with its issuance of a Positive Declaration, DCP issued a draft Scope of Work for the EIS on March 1, 2017. This draft scope was widely distributed to concerned citizens, public agencies, and other interested groups. “Scoping,” or creating the scope of work, is the process of focusing the environmental impact analyses on the key issues that are to be studied. A public scoping meeting was held for the proposed project on March 30, 2017, and additional comments were accepted until 5 p.m. on April 10, 2017. Based on these comments received during the scoping process, modifications to the draft Scope of Work for the project’s draft Environmental Impact Statement (EIS) were made as. A Final Public Scoping Document for the project, which

reflects comments, the agency's responses to these comments, and any refinements/ updates to the program were issued on May 22, 2017.

- **Draft Environmental Impact Statement.** In accordance with the Final Public Scoping Document, a Draft Environmental Impact Statement (DEIS) was prepared. Upon review of the DEIS and determination that the document has fully disclosed the proposed Action, its potential environmental impacts, and recommended mitigation, the Department will issue a Notice of Completion for the Draft Environmental Impact Statement. The DEIS was certified as complete and the Notice of Completion of the DEIS was issued on May 19, 2017.

- **Public Review.** Publication of the DEIS and issuance of the Notice of Completion signal the start of the public review period. During this time, which extends for a minimum of 30 days, the public has the opportunity to review and comment on the DEIS either in writing or at a public hearing convened for the purpose of receiving such comments. Where the CEQR process is coordinated with another City process that requires a public hearing, such as ULURP, the hearings may be held jointly. In any event, the lead agency must publish a notice of the hearing at least 14 days before it takes place and must accept written comments for at least 10 days following the close of the hearing. All substantive comments received at the hearing or during the comment period become part of the CEQR record and are summarized and responded to in the Final Environmental Impact Statement (FEIS). The DEIS public hearing was held on August 23, 2017, in the Manhattan Municipal Building, Mezzanine level, 1 Centre Street, New York, New York 10007. The period for submitting written comments remained open until September 5, 2017.

- **Final Environmental Impact Statement (FEIS).** After the close of the public comment period for the DEIS, the department acting on behalf of the CPC will prepare a Final Environmental Impact Statement (FEIS). The FEIS document will include a summary restatement of each substantive comment made about the DEIS and a response to each comment. Once the Department has determined lead agency determines that the FEIS is complete, it will issue a Notice of Completion and circulate the FEIS.

- **Findings.** To demonstrate that the responsible public decision-maker has taken a hard look at the environmental consequences of a proposed project, any agency taking a discretionary action regarding a project must adopt a formal set of written findings, reflecting its conclusions about the significant adverse environmental impacts of the proposed project, potential alternatives, and potential mitigation measures. The findings may not be adopted until 10 days after the Notice of Completion has been issued for the FEIS. Once findings are adopted, the lead and involved agencies may take their actions (or take "no action").

2.3. BUILD YEAR

CEQR requires analysis of the project's effects on its environmental setting. For those projects that would be implemented quickly following approval, the current environment would be the appropriate environmental setting. However, proposed projects typically are completed and become operational at a future date, and therefore, the environmental setting is the environment as it would exist at project

completion and operation. Therefore, future conditions must be projected. This prediction is made for a particular year, generally known as the “analysis year” or the “build year,” which is the year when the proposed project would be substantially operational.

As discussed in the *CEQR Technical Manual*, for some generic actions, where the build-out depends on market conditions and other variables, the build year cannot be determined with precision. In these cases, per CEQR guidelines, a build year ten (10) years in the future is considered reasonable, as it captures a typical cycle of market conditions and represents a timeframe within which predictions of future development may be made without a high degree of speculation. This is a typical time frame for area-wide rezonings not associated with a specific development, since it is assumed to be the length of time over which developers would act on the change in zoning and the effects of the Proposed Action would be experienced. Therefore, an analysis year of 2027 is used for this environmental review.

2.4. ANALYTICAL APPROACH TO THE EIS

A Reasonable Worst Case Development Scenario (RWCDS) is broadly defined as the potential development under both the future No-Action and With-Action Conditions that is used to determine the change in permitted development created by a discretionary action. The RWCDS analysis takes the existing condition and adds to it known or expected changes in order to arrive at a reasonable estimate of future conditions. The first step in constructing the RWCDS for this project was to estimate the projected development sites in the future without the proposed text amendment for both the directly affected areas and indirectly affected areas. For this proposal, the directly affected areas are the proposed Designated Areas in M districts. The indirectly affected areas are all M and C8 districts, which are not within the proposed Designated Areas in M districts and would not be subject to the Proposed Action. For the purpose of this analytic framework, these areas will be referred to as M and C8 districts outside of Designated Areas.

When considering future development sites, non-conforming uses as defined by the *NYC Zoning Resolution* were excluded. The NYC Zoning Resolution states that under certain circumstances, a non-conforming use may be changed to another non-conforming use. Non-conforming uses are typically not analyzed in analytic frameworks: it is usually assumed that when an area is rezoned, the new zoning district in place will define the type of development that will occur in the future. Accordingly, this development scenario did not consider the possibility of self-storage development in Residential (R) or Commercial (C) districts (except C8): R and C districts allow a wide array of uses, and in the last five years, only one out of thirty-four new self-storage facilities has been developed in these areas. Over the last decade, the ratio is somewhat higher, but still low: nine out of seventy-seven new self-storage facilities were built in R and C districts, outside of M and C8 districts. These facilities were furthermore almost all conversions of non-conforming industrial buildings. Accordingly, self-storage can be understood as an interim use of these buildings, which becomes less likely in the future, as these C and R districts become more established markets for residential and conforming commercial uses. The probability of a new legal, non-conforming self-storage facility being developed in areas, where residential development is permitted, is further reduced when one considers New York City’s lasting housing shortage (NYC Office of the Mayor, 2014).

After the future without the text amendment, the future conditions with the proposed text amendment are estimated. The RWCDs then compares the No-Action Condition to the With-Action Condition; the increment between the two provides the basis of the environmental assessment. The presented framework is intended for analytical purposes, and cannot capture the character or totality of future self-storage development, which is to a large extent unknown.

The Proposed Action establishes a new CPC Special Permit for self-storage development which would be applied city-wide in the proposed Designated Areas in M districts. Per CEQR guidelines, since the Proposed Action has broad applicability, it is difficult to predict the universe of sites where development would be affected by the Proposed Action. The Proposed Action is analyzed in this DEIS as a “generic action”. According to the *CEQR Technical Manual*, generic actions are programs and plans that have wide application or affect the range of future alternative policies. Usually these actions affect the entire city or an area so large that site-specific description or analysis is not appropriate.

2.4.1. Prototypical Analysis

The Department of City Planning cannot predict with certainty where self-storage facilities will locate in the future. Self-storage facilities and the zoning districts that permit them are relatively dispersed within New York City, and the siting of self-storage facilities is demand-driven, which may furthermore disperse them in the city. Given the numerous possibilities for future development of self-storage facilities in M and C8 districts outside of Designated Areas, which cover areas in all boroughs of New York City, a detailed, quantitative analysis of these potential developments and their environmental impacts in a site-specific manner would be very speculative. As such, this is a generic, city-wide action and the potential impacts of self-storage development in the future No-Action and Future With-Action Condition will be analyzed by means of a prototypical analysis, which will be based on existing trends and reasonable projections for the future. These reasonable projections regard the type of locations self-storage developers have typically sought out: larger sites near transit and highways, enjoying a high degree of visibility, in relatively densely populated areas. (See Section 2.10 Prototypical analysis of the potential for increased self-storage development in M and C8 districts outside of Designated Areas, for more details.)

By subjecting the development of self-storage to a CPC Special Permit, the Proposed Action aims to improve future siting opportunities for industrial businesses in NYC, in a context where industrial uses are growing and are already permitted as-of-right in M districts. However, it is understood that the Proposed Action alone will not directly induce industrial development in the Designated Areas in M Districts: numerous factors influence the kind of uses that are developed in any given area, which remain beyond the scope of the Proposed Action, and which the Department of City Planning has no control over. Although the Proposed Action is a restriction and would in itself not induce development in the Designated Areas in M Districts, the occurrence of development on sites can never be excluded. Sites that may have become self-storage facilities in the No-Action Condition, in the With-Action Condition may be developed for another use instead. Alternatively, an existing use may be more likely to remain in a location that would be redeveloped with self-storage in the No-Action.

2.4.2. Representative Examples

This DEIS considers the type and location of new development and the placement or retention of businesses, by means of representative examples. This approach was the most appropriate given the

myriad of potential scenarios, which exist in Designated Areas in M-Districts in the With-Action Condition. No technical analysis is planned for these representative examples as there is a high level of uncertainty surrounding any potential development in the With-Action condition, which would render any analysis of projected uses and their impacts meaningless. It is reasonable for the Department of City Planning to point to representative examples; however, conducting detailed technical analyses would be highly speculative. See Section 2.11, Representative examples, for more details.)

2.4.3. Conceptual Analysis

Finally, this DEIS also analyzes the potential impact of self-storage development in Designated Areas in M Districts, which would be subject to a CPC Special Permit in the With-Action Condition, by means of a Conceptual Analysis. (See [Chapter 24, “Conceptual Analysis”](#) for more details.)

2.5. AREAS AFFECTED BY THE PROPOSED ACTION

A zoning text amendment is proposed, which would require a CPC Special Permit for new self-storage facilities within Designated Areas in Manufacturing districts, which largely coincide with Industrial Business Zones (see Figure 4). The Proposed Action would not apply to C8 and M districts that are not proposed as Designated Areas (see Figure 6).

In order to determine the Proposed Action’s impact on self-storage siting opportunities beyond the overall acreage of zoning districts, a detailed analysis was completed. This analysis took into account the actual reduction in land, where self-storage could potentially locate as-of-right and was based on Primary Land Use Tax Lot Output (PLUTO™ 16v2) data, which consists of extensive land use, geographic and zoning data at the tax lot level derived from data files maintained by several New York City agencies. The analysis was performed in an ArcGIS environment.

All tax lots zoned for Manufacturing (M1, M2, and M3) or heavy commercial (C8) were selected, including paired M/R districts, which also permit self-storage development as-of-right. Subsequently, an overlay was performed with a layer representing the proposed Designated Areas in M Districts, and the tax lots located within the proposed Designated Areas were identified. In order to provide a more realistic assessment of land where self-storage could potentially locate, certain tax lots were excluded from this analysis for both the Future No-Action and the With-Action Condition:

- Unbuildable land, such as streets, parks and transportation infrastructure and other utilities; since those tax lots do not reasonably present development opportunities.
- All publicly-owned tax lots and other fully tax-exempt property, based on ownership code or owner name, since those tax lots do not usually present development opportunities.
- Certain areas of Manhattan where new self-storage facilities are deemed highly unlikely due to market conditions. These areas are the M1-5A and M1-5B districts in SoHo and the M districts in the Central Business District, in Midtown East of 8th Ave. Areas in Manhattan that were included are mainly along Manhattan’s West side, but also North of 59th street, where currently several

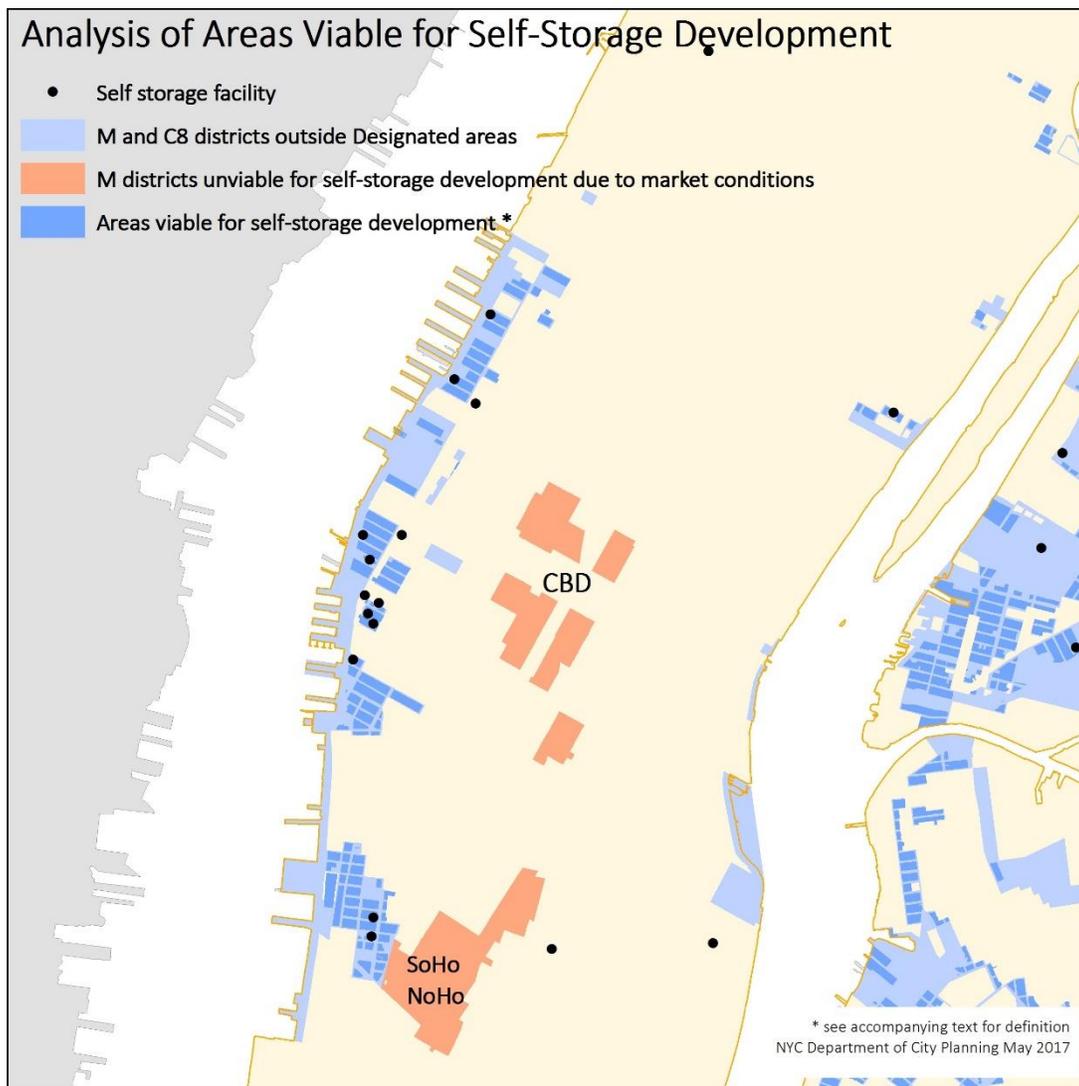


Figure 1

self-storage facilities can be found and new self-storage development cannot be excluded (see Figure 1).

- M and C8-zoned areas in the process of being rezoned to zoning districts, which do not permit self-storage. Considered projects were both public and private applications that are advanced in the pre-certification process (as of May 2017) and seem plausible for certification within the next 6-8 months. Projects that are less advanced are typically highly uncertain and often still undergo significant changes. For the purpose of this reasonable worst case analysis, it was assumed that all of the rezoning applications in the pre-certification pipeline would be approved. The total number of tax lot acres currently considered for rezoning, where self-storage development could otherwise reasonably occur in the future without the action, amount to 194 acres.

The analysis of tax lot area showed that, assuming all rezoning applications in the pre-certification pipeline are excluded, the Proposed Action would affect 49 percent of the area where self-storage may currently site as-of-right and could reasonably occur in the future without the action.

Zoning framework and land area: Future with and without the Action

	As-of-right <i>(If all future rezonings are approved)</i>	by Special Permit:
Future No-Action	C8 and all M districts = 9,647 acres	none
Future With-Action	C8 districts and M districts that are not Designated Areas = 4,932 acres	Designated Areas in M districts = 4,715 acres

Figure 2: Zoning framework - Future with and without the Action

2.5.1. Proposed Designated Areas in Manufacturing districts

The proposed Designated Areas in M districts are listed by Community District in Figure 3, and represented by the maps in Figure 10, and in more detail in the Appendix. These areas are the directly affected areas by the Proposed Action. They encompass portions of 27 Community Districts located in four boroughs of New York City.

Directly affected areas and number of existing self-storage facilities				
Borough	Community District	Acreage of area viable for self-storage development	Existing self-storage facilities	Pre-construction self-storage
Bronx	1	161	7	
	2	287	1	
	3	18		
	4	2		
	6	7	1	
	9	78	3	
	10	89	3	
	12	79	2	1
Brooklyn	1	530	4	
	2	0		
	4	13		
	5	196	5	
	6	232	3	
	7	200	3	
	16	39		
	17	90	1	
	18	117	4	
Queens	1	170	3	
	2	586	8	
	5	275	4	1
	9	34	1	
	10	8		
	12	109	9	
	13	78		
Staten Island	1	128	1	
	2	952	2	
	3	239		
Total		4,715	65	2

Figure 3: Directly Affected Areas

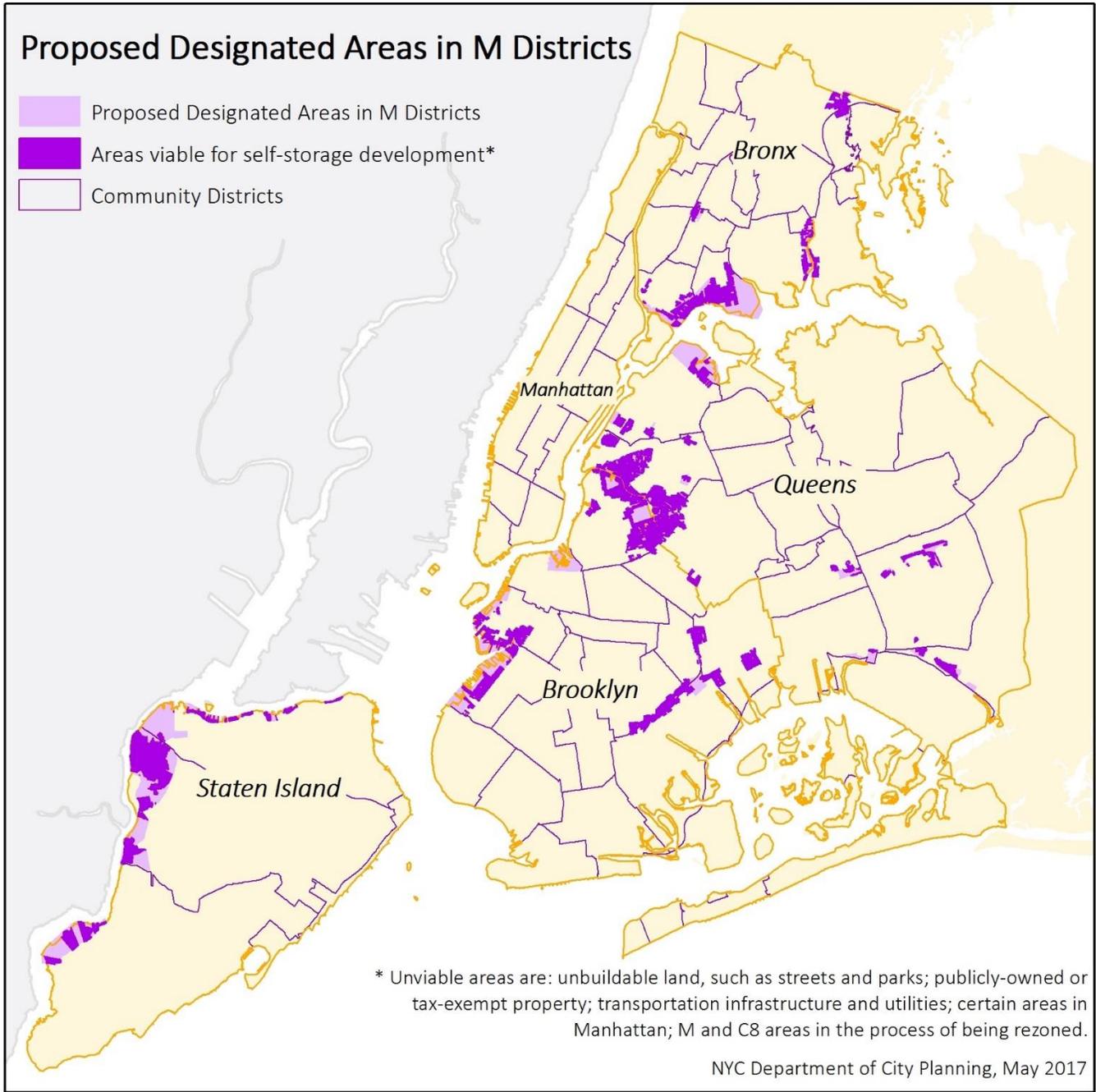


Figure 4

2.5.2. M and C8 districts outside of Designated Areas

Furthermore, the areas that are not directly affected by the Proposed Action, are all zoning districts that would continue to permit self-storage as-of-right, which are mapped in all five boroughs of New York City. They are referred to in this DEIS as M and C8 districts outside of Designated Areas. These areas are dispersed in all boroughs and Community Districts of New York City (see Figure 5 and Figure 6). The citywide perspective allows for an assessment of the effects on the self-storage industry in a comprehensive manner, including the wider implications of the proposed text amendment, which may potentially have environmental effects beyond the proposed Designated Areas in M districts.

M and C8 districts outside of Designated Areas and number of existing self-storage facilities				
Borough	Community District	Acreage of viable area for self-storage development	Existing self-storage facilities	Under or pre-construction self-storage
Manhattan	1	1		
	2	54	2	
	3	2	3	
	4	86	11	
	5	0		
	6	0		
	7	0	2	
	8	13	1	1
	9	7	5	
	10	9	4	
	11	9	4	
	12	11	2	
Bronx	1	93	8	
	2	30		
	3	66	5	1
	4	43	5	1
	5	23	1	
	6	54	2	
	7	26	2	
	8	37	2	1
	9	56	3	
	10	57		
	11	85	4	
	12	85	6	1
Brooklyn	1	252	1	

	2	77	13	
	3	90	1	
	4	73		
	5	53	6	
	6	162	3	
	7	111	4	
	8	51	7	
	9	21	3	
	10	37		
	11	98	2	
	12	127	1	
	13	81	4	
	14	20	1	
	15	43	1	
	16	24	2	
	17	39	4	
	18	86		
Queens	1	261	10	
	2	198	1	1
	3	50		
	4	34		1
	5	191	5	1
	6	30		
	7	482	4	
	8	0		
	9	30	4	
	10	33	2	
	11	6		
	12	89	6	
	13	88	3	
	14	65	3	
Staten Island	1	366	4	
	2	183	3	
	3	534	4	
Total		4,932	174	7
Figure 5: M And C8 districts outside of Designated Areas				

M and C8 Districts outside of Designated Areas

-  M and C8 districts outside Designated Areas in M districts
-  Areas viable for self-storage development *
-  Community Districts

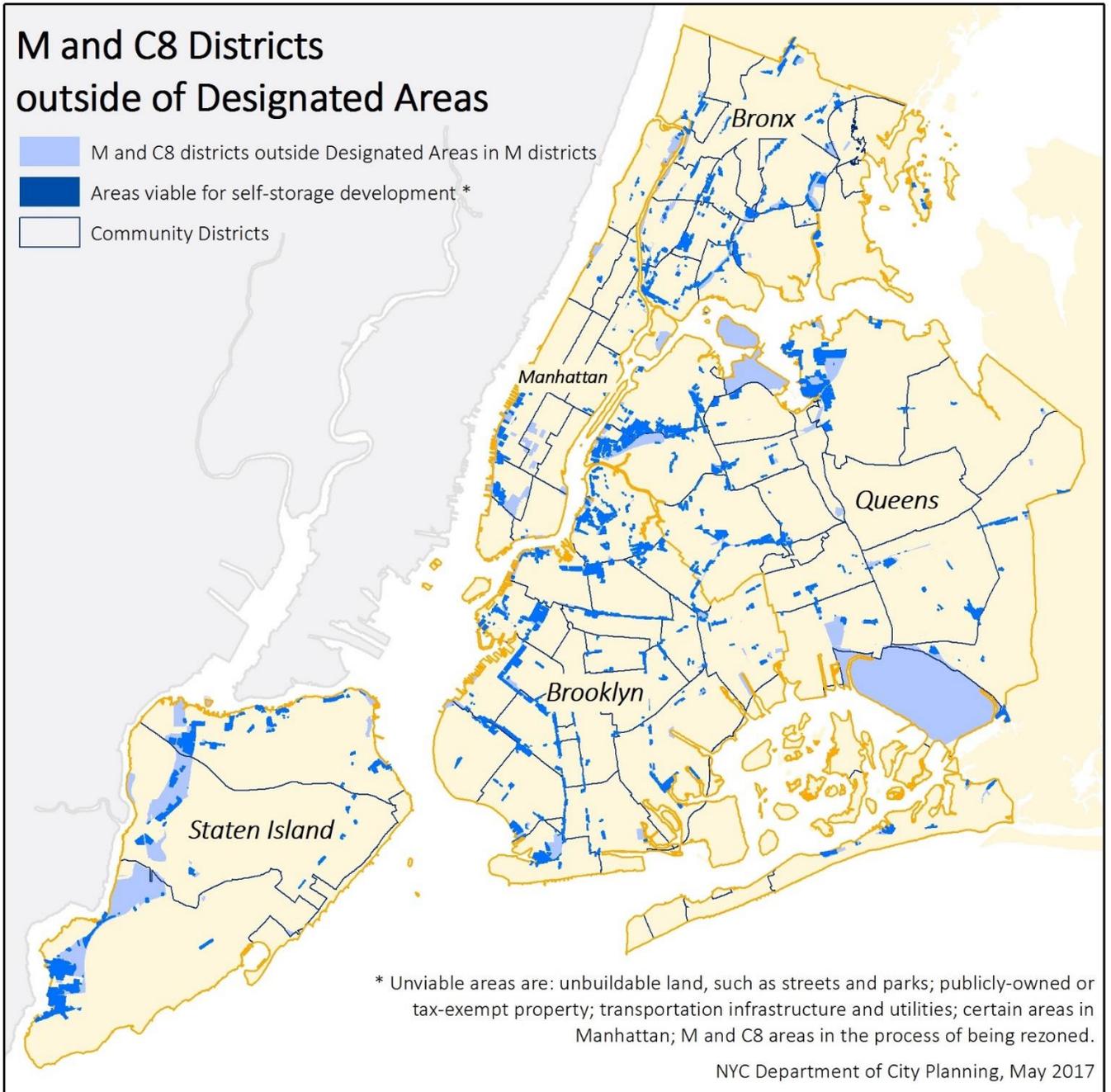


Figure 6

2.6. EXISTING CONDITIONS

2.6.1. Self-storage

In early 2017, there were approximately 240 self-storage facilities in New York City. The borough of Brooklyn had the most self-storage facilities, followed by Queens and the Bronx (see Figure 7). The majority of self-storage facilities are in M districts, since M districts are more widely mapped than C8 districts – the only other zoning districts where self-storage is currently allowed as-of-right. A number of self-storage facilities also exist outside of M or C8 districts (listed as Other, in Figure 7), but these facilities are non-conforming uses. As explained earlier, in New York City’s current market it is relatively unusual for a new self-storage facility to site in a residential district as a legal, non-conforming use, when a residential use could be developed as-of-right.

Overall, about one quarter of all self-storage facilities are located in the proposed Designated Areas in M districts, meaning that the majority of facilities have been developed outside NYC’s most active industrial areas.

Number of self-storage facilities, by borough and zoning					
	Total	Other	C8 district	M-district outside proposed Designated Area	M district in proposed Designated Area
Brooklyn	73	12	17	24	20
Bronx	54	8	7	22	17
Manhattan	35	18	3	14	
Queens	63	10	2	26	25
Staten Island	14		1	10	3
Citywide	239	48	30	96	65

Figure 7: Self-storage facilities by borough and zoning
Source: DCP January 2017, existing self-storage facilities (excludes pre-construction)

Estimated new self-storage facilities per year, by location*

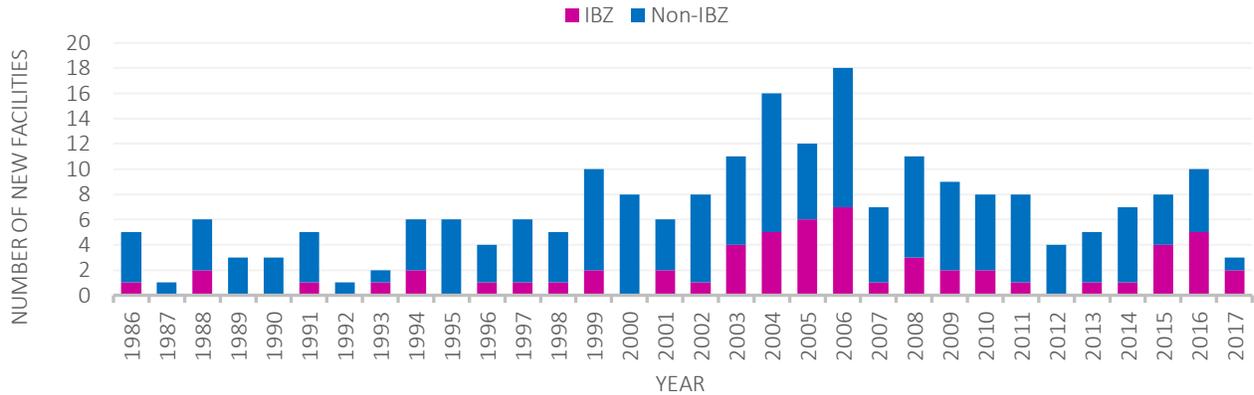


Figure 8: Estimated new self-storage facilities per year, by location
 *Approx. 7 percent of existing facilities lack data and are not included in this chart

NYC Dept. of City Planning, January 2017. Sources: PLUTO v16 Year Built/Year Altered or DOB Permit database Year Building Permit Issued

The above chart¹ (Figure 8) depicts the number of new self-storage facilities developed annually. The chart does not include approximately seven percent of existing self-storage facilities (N=17), because the Build Year of those facilities could not adequately be determined with the data sources at hand. Accordingly, the actual development numbers would be slightly higher than those represented in the chart.

In the 1980s and 1990s, there was only a modest amount of self-storage development in New York City. Around the year 2000, self-storage development became more prevalent, peaking in the mid-2000s and maintaining a relatively constant rate over the last decade. Between 2007 and 2016, the chart shows that an average of eight new facilities opened citywide on a yearly basis. Over the same time span, between 2007 and 2016, an average of about two self-storage facilities per year have opened in proposed Designated Areas in M districts, or one quarter of all self-storage development.

In written statements submitted to DCP, the New York Self-Storage Association (NYSSA) has stated that New York City is underserved in terms of self-storage. According to the NYSSA, the national average square footage of self-storage amounts to 7.5 square feet per person, but self-storage amounts only to two square feet per person in NYC. Developers of self-storage have seen an increasing demand, which they attribute to the city’s small apartments and growing population.

¹ Year estimates are based on two data sources: PLUTO v16, which is based on DOF data *Year Built/Year Altered*, or the DOB Permit database, *Year Building Permit Issued* (P or Q permits). These sources are not perfectly comparable and may contain certain errors. DCP uses these sources for a general indication of self-storage development trends, since there are no other, more reliable sources. The created charts are meant to depict general trends and should not be analyzed on a year-by-year basis. Due to potential data inaccuracies and the presence of certain market cycles, future self-storage development projections are based on general trends in the last decade, rather than recent short-term trends, which are typically less reliable.

In the most recent years, it appears that the share of facilities being developed in proposed Designated Areas in M districts is growing: approximately 50 percent of the new facilities were located in Designated Areas. However, this trend is not clearly discernible, since the pre-construction pipeline does not follow such a pattern. As of mid-January 2017, there were 9 self-storage facilities in the pre-construction process. Four of the facilities in the pre-construction process will be built in Queens, and four in the Bronx (see Figure 9 below). Two of the nine self-storage developments in the pre-construction process are to be developed in proposed Designated Areas in M districts, which reflects the last decade’s average rate (25 percent), but is a lower share than in the last few years. Due to the inconclusive data, it is not possible to predict whether in the future without the proposed action, self-storage development would increasingly occur in the proposed Designated Areas in M districts, or whether the geographic development patterns would remain similar to those in the past.

Number of self-storage facilities in the pre-construction phase

	Total	M and C8 districts outside Designated Areas	Designated Areas in M Districts
Bronx	4	3	1
Brooklyn			
Manhattan	1	1	
Queens	4	3	1
Staten Island			
Citywide	9	7	2

Figure 9: Pre-construction self-storage
Source: DCP January 2017, status based on DOB Permit Database

Although self-storage is thriving and many facilities are being developed, growth has not been uniform in all boroughs of NYC; there have been a handful of self-storage facilities that have closed. Two examples can be cited, where this has occurred: 847 11th Avenue in Manhattan was demolished and rebuilt as residential, and 517 W 29th Street is in the process of being demolished and was purchased by a developer of condos. Both were legal nonconforming uses in an area rezoned to permit residences. While today there are only few examples of self-storage facilities closing, in the long-term DCP expects the re-conversion or demolition of self-storage facilities to become more common in parts of Manhattan and in downtown Brooklyn, where residential development is permitted and market conditions have changed significantly. However, currently this trend is too marginal to be quantified and it is not anticipated to become prevalent before 2027 (build year). Consequentially, this trend is not discussed further in this DEIS.

2.6.2. Areas viable for as-of-right self-storage development

Figure 10 shows the total acreage of land where self-storage is currently allowed as-of-right and could reasonably occur, according to the methodology excluding certain M- and C8-zoned areas as specified above. The total area amounts to 9,841 acres, and covers portions of all Community Districts in NYC, except for Community Districts 5, 6 and 7 in Manhattan and Community District 8 in Queens.

Existing Conditions: Areas Viable For As-Of-Right Self-Storage Development (All M & C8 Zoning Districts)²

Borough	Community district	Acreage of viable area for self-storage development
Manhattan	1	1
	2	54
	3	2
	4	86
	5	0
	6	0
	7	0
	8	13
	9	7
	10	9
	11	12
	12	32
Bronx	1	255
	2	318
	3	85
	4	67
	5	28
	6	61
	7	26
	8	37
	9	134
	10	145
	11	139
	12	195
Brooklyn	1	786
	2	77
	3	91
	4	86
	5	250

² See Section V Chapter 2 for methodology.

	6	394
	7	311
	8	51
	9	21
	10	37
	11	98
	12	127
	13	81
	14	20
	15	43
	16	65
	17	129
	18	203
Queens	1	435
	2	785
	3	50
	4	34
	5	465
	6	30
	7	482
	8	0
	9	64
	10	41
	11	6
	12	198
	13	165
	14	72
Staten Island	1	528
	2	1135
	3	773
Total		9,841

Figure 10

This chart states Existing Conditions and does not consider M and C8 districts, which may be rezoned to other zoning districts. These rezoning efforts would be independent of the Proposed Action and do not have a related Purpose or Need.

2.7. FUTURE NO-ACTION CONDITION

2.7.1. Self-storage

Development patterns in the self-storage industry are anticipated to continue, with ongoing growth for the self-storage industry in NYC (REIS, 2015) and the city remaining undersupplied with this type of facility compared with the national average. The demand for self-storage is expected to continue to grow, based also on the fact that the population and the number of businesses in NYC is growing.

It is not possible to project with certainty the number and location of self-storage facilities that will be developed in the No-Action condition within the proposed Designated Areas in M districts or in M and C8 districts outside of Designated Areas. However, in order to complete a thorough environmental analysis that enables the Department of City Planning to understand the potential impacts of the Proposed Action, a reasonable and conservative framework has been developed. This framework is based on self-storage development trends of the last ten years, which have been relatively constant.

Number of self-storage facilities projected Citywide by the Build Year (No-Action)
based on the continuation of the rate of self-storage development in the last ten years (2007 – 2016), amounting to 8.5 new self-storage development per year
Citywide projection
9 self-storage facilities in pre-construction (next 1 year)
+
8.5 new facilities per year x 9 years
9 + (9 x 8.5) ≈86

Figure 11: Citywide, self-storage No-Action

As shown by Figure 8, over the last decade, an average of 7.7 new self-storage facilities were built annually. Figure 8 does not include approximately seven percent of existing self-storage facilities (N=17), because the build year of those facilities could not adequately be determined. Accordingly, the actual development numbers would be slightly higher than those represented in Figure 8. For analytic purposes, it is assumed that these seventeen facilities were completed within the last two decades. Accordingly, 0.85 (17 facilities/20 years = 0.85 facilities per year) self-storage facilities were added to the yearly average in order to account for these seventeen self-storage facilities. Adding 0.85 to the 7.7 yearly self-storage facilities of Figure 8, the total of new self-storage facilities per year over the last decade would amount to an average of 8.5.

For the purpose of environmental analysis, DCP estimates that within the next year, the nine self-storage developments that are currently in the pre-construction process will be completed (see Figure 9). For the remaining nine years until the Build Year, beyond the pre-construction pipeline, it is assumed that the last decade's rate of self-storage development will continue. As explained above, the rate of self-storage

development in NYC in the last decade averaged about 8.5 new self-storage facilities per year. Projecting this rate of self-storage development into the future is reasonable and conservative, since the self-storage industry expanded significantly in New York City in the last decade, and is expected to continue to grow, and thus maintain a similar development trend until the Build Year. Accordingly, an additional 8.5 self-storage facilities per year are expected to be built until the Build Year. As shown by Figure 11, this amounts to a total of approximately eighty-six projected new self-storage facilities citywide by the time of the Build Year.

Although approximately eighty-six new facilities are anticipated, the location of these facilities will most likely not be evenly distributed across the boroughs. Given that only one of the self-storage developments in the pre-construction phase is located in Manhattan, and none are in Staten Island, and that these boroughs' real estate market conditions tend to result in other types of development, it is expected that the large majority of the projected self-storage facilities would site in the Bronx, Brooklyn, and Queens.

Regarding the customer base of self-storage facilities, which are primarily households with a mix of business tenants, due to a lack of specific information, the future No-Action Condition regarding self-storage customers cannot be determined. It is plausible to assume a continuation of the existing condition, in which the majority of self-storage units will still be leased by households, and that approximately 20-30 percent of self-storage units would be leased by small businesses, according to information provided by the industry.

2.7.2. Geographic distribution of self-storage facilities in NYC in No-Action Condition

To the extent that recently observed trends in proposed Designated Areas in M districts will continue, DCP forecasts these areas to generally maintain a similar rate of industrial employment versus non-industrial employment and to globally remain more industrial than the M and C8 districts outside of Designated Areas.

As explained above, the rate of self-storage development in NYC in the last decade averaged about 8.5 new self-storage facilities per year, meaning that the number of projected new self-storage facilities to be developed citywide by the time of the Build Year amounts to approximately eighty-six (Figure 11). This estimate is based on the assumption that self-storage will continue to proliferate and grow, given that New York City will remain relatively undersupplied with this type of facility, compared with the national average, and is deemed to be conservative for the purpose of the analytic framework.

Although eighty-six facilities are anticipated to be built, the location of these facilities is not anticipated to be evenly distributed across the boroughs. Over the last decade (2007 – 2016), about one quarter of self-storage development has occurred in proposed Designated Areas in M districts and the other three quarters has for the most part taken place in M and C8 districts outside of Designated Areas.

2.7.2.1. *M and C8 districts outside of Designated Areas*

Over the last decade, the majority of self-storage development has occurred in M and C8 districts outside of Designated Areas. However, considering that population and employment are growing in New York City, these areas – typically less industrial in character, often closer to transit and residencies, tending to consist of smaller lots – may gain an increasing share of development in commercial, community facility and other uses. It is possible that self-storage would decrease in competitiveness compared to other uses in these areas, and may increasingly occur in the proposed Designated Areas in M districts. In that sense, the ratio of self-storage facilities built in proposed Designated Areas in M districts versus other areas could change, with proposed Designated Areas in M districts absorbing an increasingly larger share of self-storage development. Because data regarding whether such a trend already exists is inconclusive (see Existing Conditions), it is assumed that the future share of new facilities siting in Designated areas in M districts will resemble the patterns of the last decade. Understanding that the total number of projected self-storage facilities amounts to 8.5 per year in the No-Action Condition (see Figure 11), and past rates of self-storage development place about three quarter of these facilities in M and C8 districts outside of Designated Areas, approximately 6.5 self-storage facilities would be developed on a yearly basis in M and C8 districts outside of Designated Areas (see Figure 12).

2.7.2.2. *Proposed Designated Areas in Manufacturing districts*

The number of self-storage developments within proposed Designated Areas in Manufacturing districts amounts to an average of about two self-storage facilities per year between 2007 and 2016, representing approximately one quarter of all self-storage development (see Figure 8). In the most recent years, it appears that the share of facilities being developed in proposed Designated Areas in M districts is growing, but the pre-construction pipeline does not follow this pattern (see Figure 9), and so the data remains inconclusive. For analytic purposes, it is assumed that the last decade's trends will continue until the Build Year, meaning that the number of self-storage facilities that could be expected in proposed Designated Areas in M districts until the Build Year would amount to approximately 20 (see Figure 12). This includes also the two self-storage facilities, which are in the pre-construction phase (see Figure 9).

According to Figure 11 and Figure 12, the number of new self-storage facilities projected by the time of the Build Year amounts to eighty-six. This is a conservative estimate for the purpose of this analysis, and a generous assessment of the amount of self-storage development that may occur over the next decades, since it is based on the last decade's rate of self-storage development – a decade, which marked a significant expansion period for the self-storage industry.

Number of self-storage facilities projected by the Build Year (No-Action) by Location

Based on the continuation of the rate of self-storage development in the last ten years (2007 – 2016), amounting to 8.5 new self-storage development per year on a citywide basis: one quarter in Designated Areas, and three-quarters in M and C8 districts outside of Designated Areas.

Proposed Designated Areas in M districts	Citywide, excl. proposed Designated Areas
2 self-storage facilities in pre-construction (next 1 year); and	7 self-storage facilities in pre-construction (next 1 year); and
2 new facilities per year x 9 years 2 + (9 x 2)	6.5 new facilities per year x 9 years 7 + (9 x 6.5)
≈20	≈ 66

Figure 12: Detailed, self-storage No-Action

2.7.3. Areas viable for as-of-right self-storage development

Figure 13 shows the total acreage of land where self-storage would be permitted as-of-right and could reasonably occur in the Future-No-Action Condition. The total area amounts to 9,647 acres and covers portions of all Community Districts in NYC, except for Community Districts 5, 6 and 7 in Manhattan and Community District 8 in Queens. The numbers indicated on the table below assume that all public and private applications that are currently in the pre-certification pipeline at the Department of City Planning, concerning rezonings from M and C8 districts to different zoning districts, will be granted. The total number of tax lot acres, where self-storage development could reasonably occur, currently considered for rezoning amount to 194 acres.

**Future-No-Action Condition:
Areas Viable For As-Of-Right Self-Storage Development
(All M & C8 Zoning Districts, except potentially rezoned areas)³**

Borough	Community district	Acreage of viable area for self-storage development
Manhattan	1	1
	2	54
	3	2
	4	86
	5	0
	6	0

³ See Section V Chapter 2 for methodology.

	7	0
	8	13
	9	7
	10	9
	11	9
	12	11
Bronx	1	255
	2	317
	3	85
	4	44
	5	23
	6	60
	7	26
	8	37
	9	134
	10	145
	11	85
	12	164
Brooklyn	1	782
	2	77
	3	90
	4	86
	5	250
	6	394
	7	311
	8	51
	9	21
	10	37
	11	98
	12	127
	13	81
	14	20
	15	43
	16	62
	17	129
	18	203
Queens	1	431
	2	785
	3	50
	4	34
	5	465
	6	30
	7	482

	8	0
	9	64
	10	41
	11	6
	12	198
	13	165
	14	65
Staten Island	1	495
	2	1135
	3	773
Total		9,647

Figure 13

2.7.4. Projections

In Designated Areas in M districts, these projected self-storage developments may utilize land and buildings that could instead be made available to industrial businesses that provide a greater number of jobs and/or essential industrial services. As described in Chapter 1, self-storage tends to occupy large sites along designated truck routes, in a context where such large sites are becoming increasingly scarce. Since those sites are crucial locations for many industrial businesses and are in limited supply in NYC, their use for self-storage is regarded as a lost opportunity in proposed Designated Areas in Manufacturing districts, which are the City's target areas for the realization of economic development goals supporting a range of industrial and other employment-generating business activities.

In the No-Action Condition, self-storage would occupy approximately twenty large lots in proposed Designated Areas in M districts within ten years, which could be suitable for otherwise hard-to-site, large scale, employment-supporting or essential industrial uses such as logistics, wholesale and distribution, construction and film production. The number of foregone opportunities for industrial development could be considerable, given the City's active efforts to maintain and grow industrial employment opportunities in IBZs.

Without the Proposed Action, existing trends are expected to continue and scarcity for large, industrial sites may become more acute. It is expected that some of the more traffic-intensive uses, such as transportation and distribution, would locate on smaller sites without off-street loading, potentially closer to residential populations, and creating more land use conflicts. Given the policy goals formulated under Mayor de Blasio's 10-point Action Plan, maintaining the availability of optimal industrial sites for industrial businesses is crucial. Under the Future No-Action Condition, the City's vision for proposed Designated Areas in M districts, as active industrial areas for commercial and industrial innovation, employment growth and the provision of essential industrial services and utilities is potentially discouraged by the continued growth of self-storage facilities.

2.8. FUTURE WITH-ACTION CONDITION

2.8.1. Self-storage

The Proposed Action introduces a discretionary approval process by CPC Special Permit for self-storage development within proposed Designated Areas in M districts. CPC Special Permits present a disincentive to the development of self-storage development facilities, since obtaining the Special Permit can add significant time, costs and uncertainty to a project. Accordingly, it is reasonable to assume that a CPC Special Permit would have the effect of slowing the rate at which self-storage is developed in the proposed Designated M districts and increasing the rate at which it is developed in the areas that remain as-of-right.

Overall, by 2027, the Proposed Action may lead to a somewhat reduced number of additional self-storage facilities in New York City; some self-storage projects that may have occurred in the No-Action Condition may never get realized. Because the directly affected area covers a considerable amount of the area where self-storage is permitted as-of-right today (49 percent, see Figure 2), it can be expected that the Proposed Action would to a certain extent, reduce the number of sites available to developers of self-storage, who would seek opportunities in neighboring municipalities. In this case, the Proposed Action would likely increase self-storage development in counties such as Westchester and Nassau in New York State, or Bergen and Hudson in the state of New Jersey. Here, land is typically more widely available and also less expensive than in New York City. However, considering the importance of the New York City market for the self-storage industry, it is generally expected that the industry will continue to seek siting opportunities in New York City, despite the Proposed Action. For instance, self-storage development that would have located in the Designated Areas in Manufacturing districts may seek siting opportunities in M and C8 districts in New York City, where the Special Permit is not proposed.

As in the No-Action Condition, it is not possible to project with certainty the number and location of self-storage facilities that will be developed until the Build Year in the With-Action condition. Nevertheless, for the purposes of environmental review, a reasonable and conservative framework has been developed, which is based on past self-storage development trends and other plausible, well-explained assumptions. This framework allows for an analytical analysis, but is not intended to capture the character or totality of future self-storage development, which is to a large extent unknown.

The number of self-storage facilities that would not be built in New York City due to the Proposed Action cannot be determined with precision. Since demand for self-storage is very strong and the industry is highly lucrative, it is expected that the industry will continue to seek and find siting opportunities in New York City, despite the Proposed Action. DCP also expects that increased demand for self-storage may lead to redevelopment of what today would be considered suboptimal sites, as we see with many other highly profitable developments, such as residential.

The Proposed Action would apply to 49 percent of the land area where self-storage is currently permitted as-of-right, and where on average one quarter of self-storage development has occurred. Accordingly, the Proposed Action does not include the areas, where the majority of self-storage development has occurred, and zoning districts permitting self-storage development as-of-right would remain in nearly all Community Districts in New York City (Figure 16 and Figure 18). Furthermore, in some instances, developers will likely apply and receive a Special Permit to develop facilities in proposed Designated Areas in M districts (see next section for more details). Considering all of these factors, it is expected that the Proposed Action will

not as much affect the total number of new self-storage developments in NYC, as it will affect the *location* of those new facilities within the city boundaries. While this assumption is well-founded and thoroughly explained in this chapter, the future cannot be projected with certainty. However, for the purpose of this analysis, it is projected that the Proposed Action would result in the change of location of one new self-storage facility per every two years beyond city boundaries. This implies that under the With-Action Condition, the number of projected new self-storage facilities would amount to 8 per year until the Build Year on a citywide basis, as compared to the 8.5 per year under the No-Action Condition.

The Proposed Action is not expected to alter any self-storage developments that are currently in the pre-construction phase (see Figure 9). Operating under the assumption that the building permits would be issued before the date of enactment of this proposed text amendment, the nine projects that are currently in the pre-construction phase are anticipated to be completed. This assumption is reasonable, since developers need to obtain only a building permit and complete foundations, if constructing a new building, in order to comply with the vesting terms and receive permission to finish the project. Vesting rules are outlined in Section 11-30 of the *NYC Zoning Resolution* and have been written in order to include an adequate amount of flexibility and not impose undue hardship on property owners. If the foundations are started, but not completed, the building permit would lapse, but the developer may still apply to the BSA to renew the building permit to complete the foundations. The BSA may grant an extension of six months. Furthermore, property owners, aware of proposed zoning text amendments, tend to comply with the vesting rules by obtaining building permits and completing foundations. Accordingly, any project that is currently already in the pre-construction process is likely to be completed, and is not expected to be affected by the Proposed Action.

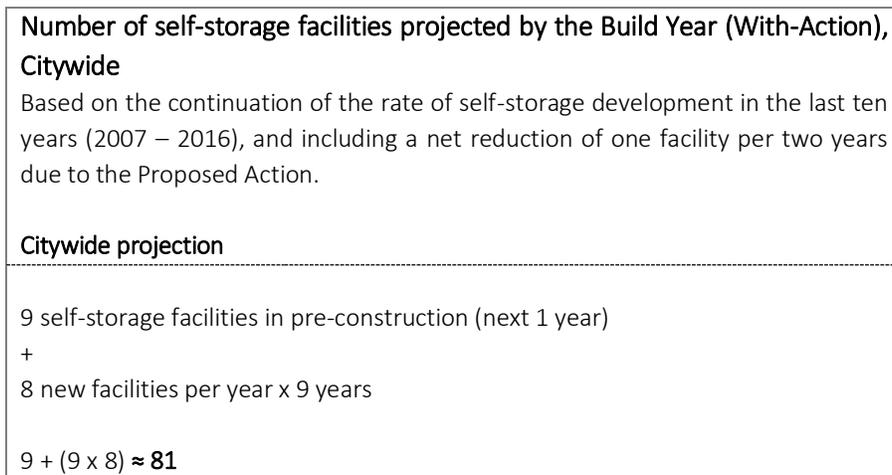


Figure 14: Citywide, self-storage With-Action

Overall, the Proposed Action would likely lead to slightly fewer self-storage facilities in NYC by the Build Year. This implies that the Proposed Action would slightly constrain supply and could potentially diminish the self-storage industry’s ability to satisfy market demand, which in return would lead to a modest increase in the price of self-storage units. The extent to which this would occur, and the prices at which self-storage units would be leased, are difficult to estimate. However, it is plausible to assume that the slight increase

in self-storage rates due to the Proposed Action would help the operating side of the self-storage industry, and also increase the value of pre-existing grandfathered self-storage facilities, while the development side would experience a small number of lost opportunities and slightly diminished revenues.

The potential modest rate increases for self-storage may affect certain households' and small businesses' ability to rent self-storage units or their ability to pay for such units, if demand stays strong. Households and businesses alike may have to travel further to access units in the desired price range or rent smaller units, resulting in some inconvenience. Furthermore, there may also be a certain shift in customer demand. Businesses may increasingly lease warehousing space, instead of self-storage units, and the on-demand storage model may become prominent. This alternative business model in the household storage market is gaining popularity. A shift in customer preferences, away from self-storage and toward on-demand storage, would reduce the demand for self-storage and consequently also the number of self-storage facilities developed in the future. Furthermore, if demand for personal storage continues to grow, more residential developments may include accessory private storage within buildings, providing more opportunities for storage closer to residences.

2.8.2. Geographic distribution of self-storage facilities in NYC in With-Action Condition

Regarding the distribution of self-storage facilities within New York City's five boroughs, DCP expects that the majority of the self-storage facilities would site in the Bronx, Brooklyn, and Queens. However, the Proposed Action is expected to have a certain effect on the siting locations city wide, since a Special Permit would be required in proposed Designated Areas in M districts.

Estimating the location of self-storage facilities that may get developed due to the Proposed Action is complex, particularly since self-storage facilities typically serve residents living within a few-mile radius (SSA, 2015a). This means that location and access are one of the most important factors in new self-storage development, and that the industry – to the extent that it is permitted by zoning – seeks to disperse facilities in the city, in order to serve customers. Because New York City is so densely inhabited, multiple self-storage facilities may serve the same neighborhood. Nevertheless, it can be expected that once a certain threshold of self-storage units in a given neighborhood is reached, the market is saturated and new self-storage development is no longer profitable within that area.

2.8.3. Proposed Designated Areas in Manufacturing districts, With-Action Condition

DCP projects less self-storage development in Designated Areas in Manufacturing districts under the With-Action Condition than the No-Action Condition. The introduction of a new discretionary approval process is likely to present a disincentive to the development of self-storage since some self-storage developers may be reluctant to undergo a discretionary review process. Yet, demand for self-storage is not close to being saturated, according to the New York Self Storage Association and is highly lucrative. Accordingly, it is plausible to assume that the Special Permit discretionary review process would not deter all self-storage developers, and that a certain number of Special Permits may be applied for. It is expected that those CPC Special Permit applications would be granted, since the objectives and findings of the proposed Special

Permit would permit self-storage development on sites that are suboptimal for more job-intensive industrial businesses. As detailed by the findings of the Special Permit, this includes sites that: are smaller, cannot be easily accessed by major streets, and are not located in areas where there is active investment in employment-intensive industrial uses. The Department of City Planning expects that there would be many sites within the proposed Designated Areas in M districts, where such findings could be met (see examples in Chapter 1).

Under the With-Action Condition, the number of self-storage facilities developed in Designated Areas in Manufacturing districts under the CPC Special Permit framework cannot be precisely determined. For the purpose of this analysis, past application trends of a Special Permit similar to the Proposed Action were used as a reference.

The existing CPC Special Permit for large retail establishments, outlined in Section 74-922 of the *NYC Zoning Resolution*, is considered to share several similarities with the proposed self-storage CPC Special Permit. Similar to the Proposed Action, the 74-922 CPC Special Permit targets a land-intensive, non-industrial use: large retail establishments, described as department stores, carpet, rug, linoleum or other floor covering stores, clothing or clothing accessory stores, dry goods or fabric stores, food stores, furniture stores, television, radio, phonograph or household appliance stores, or variety stores. Furthermore, the 74-922 CPC Special Permit applies to Manufacturing districts, and was introduced in 1974, at least partially with the intention of protecting Manufacturing districts and ensuring that large retail establishments wouldn't impair the essential character or the future use of or development of the area. The CPC report (CP 22683), dated July 10th 1974, states on pages 1 and 2:

Manufacturing district regulations currently allow a wide range of non-manufacturing activities to occupy land that otherwise could be available for industrial uses and which generate additional traffic. [...] If Manufacturing land is to be protected in the long term, the Zoning Resolution must clearly establish that certain areas should be set aside for manufacturing, even when the industrial land market is slow. Accordingly, the City Planning Commission proposes to eliminate certain non-manufacturing uses from manufacturing districts and to allow others by special permit only.

Accordingly, the 74-922 CPC Special Permit represents an adequate reference for the proposed CPC Special Permit for self-storage.

An analysis of the number of applications received for the 74-922 CPC Special Permit shows that, since the Special Permit's inception in 1974, 67 Special Permits have been processed. In the ten-year timeframe between 2007 and the end of 2016, ten Special Permit applications were completed, or an average of one CPC Special Permit per year. Using recent application patterns for the 74-922 CPC Special Permit, DCP projects that there would be one application per year for the CPC Special Permit for self-storage (see Figure 15).

The Proposed Action is not expected to alter any self-storage developments that are currently in the pre-construction phase (see Figure 9). Operating under the reasonable assumption that the building permits would be issued before the date of enactment of this proposed text amendment, the two developments that are currently in the pre-construction phase in proposed Designated Areas in M districts would presumably be completed. Accordingly, under the With-Action Condition, assuming all pre-construction

projects are realized and one CPC Special Permit is applied for and granted on a yearly basis (amounting to a total of nine Special Permits), a total of eleven new self-storage facilities would be built in the proposed Designated Areas in M districts until the Build Year (see Figure 15).

2.8.3.1. M and C8 districts outside Designated Areas, With-Action Condition

As discussed earlier, beyond projects in the pipeline, over the next ten years, the projected number of new self-storage facilities is eight facilities per year on a citywide basis. This is because demand for self-storage is expected to follow the patterns of the last decade and will remain high. As explained above, it is expected that one self-storage facility per year will be built in a Designated Area in M districts. All other self-storage facilities would be developed in M and C8 districts outside of Designated Areas, which are the only areas where self-storage development could still occur as-of-right (see Figure 15). It is expected that self-storage developers would increasingly seek development opportunities in M and C8 districts outside of Designated Areas. These other areas mapped and dispersed in all boroughs and Community Districts of New York City (see Figure 5 and Figure 6). Due to the Proposed Action and the still increasing demand for self-storage, sites that today would be considered suboptimal sites may be redeveloped, as can be seen with many other highly profitable developments, such as residential.

Since the Proposed Action is not expected to alter any self-storage developments that are currently in at least the pre-construction phase, the seven self-storage facilities, which are in the pre-construction phase in the M and C8 districts outside of Designated Areas, would assumedly not be affected by the Proposed Action and be completed.

As a result, under the With-Action Condition, seventy self-storage facilities would be added to M and C8 districts outside of Designated Areas on a citywide basis by the time of the Build Year (see Figure 15).

Number of self-storage facilities projected by the Build Year (With-Action) by Location	
based on the continuation of the rate of self-storage development in the last ten years (2007 – 2016), including a net reduction of one facility per two years due to the Proposed Action, and assuming 1 Special Permit per year for development in Designated Areas.	
Proposed Designated Areas in M districts	Citywide, excl. Designated Areas
2 self-storage facilities in pre-construction (next 1 year); and	7 self-storage facilities in pre-construction (next 1 year); and
1 Special Permit x 9 years	7 new facilities per year x 9 years
2 + (9 x 1)	7 + (9 x 7)
≈11	≈ 70

Figure 15: Detailed, self-storage With-Action

This represents an increase of four new self-storage facilities in the M and C8 districts outside Designated Areas in M-districts by the time of the Build Year, compared to the sixty-six additional facilities projected in the No-Action Condition.

The modest increase in self-storage development could occur anywhere in New York City where self-storage development would still be permitted as-of-right. It cannot be exactly determined where the additional four new self-storage facilities, projected on a citywide basis by the time of the Build Year, would be developed. However, it is clear that any such additional self-storage development would be relatively diffused; the potentially affected M and C8 districts are widely dispersed in the NYC and there are many sites where such development could potentially take place in these areas.

It is anticipated that a majority of the self-storage developments that would change location would site in M and C8 districts that adjoin Designated Areas in Manufacturing districts, which already have several self-storage facilities (see Figure 5). Here, existing market conditions already demonstrate demand for self-storage development. As such, DCP would expect the modest increase in self-storage development to take place in M and C8 districts within about a two-mile radius of proposed Designated Areas in M districts that have already experienced a greater amount of self-storage development (see Figure 5). Examples of such places include: Long Island City, Jamaica, Port Morris, Flatlands/Fairfield, Zerega and Southwest Brooklyn. The Designated Areas in the M districts in portions of those neighborhoods all have five or more self-storage facilities. As a result of the Proposed Action, the M and C8 districts within about a two-mile radius to these Designated Areas in Manufacturing districts would be expected to experience a minor increase in self-storage development. The boroughs of Brooklyn, Queens and Bronx each have two of these proposed Designated Areas in M districts, meaning that the areas, where such a modest increase could be projected, are relatively evenly distributed in the City.

These M and C8 districts near Designated Areas in Manufacturing districts are typically large and contain numerous potential sites where such additional self-storage facilities could be placed. Therefore it cannot be predicted with certainty where such a self-storage facility would be built. Self-storage does not only site on large existing lots, but it is also typical for assemblages to occur before the construction of such a facility.

2.8.4. Areas viable for as-of-right self-storage development

As shown by Figure 16, the total acreage of land where self-storage would be permitted as-of-right and could reasonably occur in the Future With-Action Condition amounts to 4,932 acres. The numbers indicated on the table below assume that all public and private applications that are currently in the pre-certification pipeline at the Department of City Planning, concerning rezonings from M and C8 districts to different zoning districts, will be granted. The total number of tax lot acres currently considered for rezoning, where self-storage development could reasonably occur, amount to 194 acres. While the amount of land available to as-of-right self-storage development is greatly reduced compared to the No-Action Condition, there are still portions of all Community Districts in NYC (except for Community Districts 5, 6 and 7 in Manhattan and Community District 8 in Queens, just like No-Action Condition), which will allow for as-of-right self-storage development.

**Future With-Action Condition:
Areas Viable For As-Of-Right Self-Storage Development
(M & C8 Zoning Districts outside of Designated Areas)⁴**

Borough	Community district	Acreage of viable area for self-storage development
Manhattan	1	1
	2	54
	3	2
	4	86
	5	0
	6	0
	7	0
	8	13
	9	7
	10	9
	11	9
	12	11
Bronx	1	93
	2	30
	3	66
	4	43
	5	23
	6	54
	7	26
	8	37
	9	56
	10	57
	11	85
	12	85
Brooklyn	1	252
	2	77
	3	90
	4	73
	5	53
	6	162
	7	111
	8	51
	9	21
	10	37
	11	98
	12	127

⁴ See Section V Chapter 2 for methodology.

	13	81
	14	20
	15	43
	16	24
	17	39
	18	86
Queens	1	261
	2	198
	3	50
	4	34
	5	191
	6	30
	7	482
	8	0
	9	30
	10	33
	11	6
	12	89
	13	88
	14	65
Staten Island	1	366
	2	183
	3	534
Total		4,932

Figure 16

2.8.5. Projections

On the whole, it is expected that the Proposed Action would lead to slightly fewer self-storage facilities in NYC by the Build Year. While the No-Action Condition projected an additional eighty-six new self-storage facilities in NYC within the next decade, the With-Action Condition projects a total of eighty-one new self-storage facilities. This represents five fewer facilities in the With-Action condition, compared to the No-Action condition, by the time of the Build Year. Within Designated Areas in M districts, only sites, which are suboptimal for industrial businesses, would meet the findings of the CPC Special Permit, and could still be developed for self-storage.

DCP projects under the With-Action Condition, that there would be one application per year for the CPC Special Permit for self-storage in proposed Designated Areas in M districts, resulting in a total of eleven self-storage facilities in Designated Areas in M Districts until the Build Year (see Figure 15). Accordingly, the Proposed Action would result in a decrease of nine self-storage facilities in proposed Designated Areas in M districts by the time of the Build Year, and would ensure that the eleven projected self-storage facilities would not occupy sites that would be optimal industrial business siting opportunities.

Without the Proposed Action, large sites suitable for more job-intensive industrial uses may become increasingly scarce. With the Proposed Action and as a result of less self-storage development on suitable sites for industry, more locations would be available for the appropriate siting of growing, often truck-dependent sectors, thereby allowing existing businesses to remain or expand in appropriate locations. In the future with the action, it is expected that the more traffic-intensive uses, such as transportation and distribution, would locate on larger sites, located closer to truck routes, which could better accommodate off-street loading and parking for industrial businesses. This is consistent with common principles of good planning and would likely result in net reductions in traffic since there would be fewer conflicts and congestion related to on-street loading and vehicle queuing and less traffic directed through local streets, away from truck routes and highways.

Comparing the With-Action to the No-Action Condition, it is expected that industrial businesses will experience decreased difficulties in finding opportunities to locate or expand in NYC's most active industrial areas, since approximately twenty large, industrial lots, located near truck routes and highways, should increasingly remain available for these businesses until the Build Year. As such, the With-Action Condition is expected to result in a greater availability of sites in Designated Areas in Manufacturing districts for existing businesses to remain and operate effectively or new potential development of more job-intensive industrial businesses, which provide essential industrial services, offer a greater number of jobs to New Yorkers and support the infrastructure of NYC.

2.9. NO-ACTION AND WITH-ACTION CONDITION COMPARED

2.9.1. Self-storage

The No-Action Condition forecasted that eighty-six new self-storage facilities would be developed in New York City by the time of the Build Year: twenty in the proposed Designated Areas in M districts, and sixty-six in the M and C8 districts outside of Designated Areas. This number took into consideration the pre-construction pipeline, and projected an average of 8.5 new facilities per year beyond the pipeline. This estimate is deemed to be conservative for the purpose of this analysis and a generous assessment of the amount of self-storage development that may occur over the next decade.

The With-Action Condition projected a total of eighty-one new self-storage facilities on a citywide basis, leading to five fewer facilities by the time of the Build Year compared to the No-Action Condition (see Figure 17). Eleven new self-storage facilities would be built in proposed Designated Areas in M districts, and seventy self-storage facilities would be added to M and C8 districts outside of Designated Areas on a citywide basis by the time of the Build Year. When comparing the No-Action to the With-Action Condition, this represents a decrease in nine facilities in proposed Designated Areas in M districts, and an increase in four facilities in the M and C8 districts outside Designated Areas in M-districts by the time of the Build Year.

No-Action and With-Action Condition Comparison		
Number of self-storage facilities projected by the Build Year		
	Proposed Designated Areas in M districts	Citywide, excl. Designated Areas
No-Action Condition	≈20	≈ 66
With-Action Condition	≈11	≈ 70

Figure 17: Comparison of No-Action and With-Action Condition

Overall, the With-Action Condition is expected to achieve the Purpose and Need of the Proposed Action, as outlined in Attachment A. The detailed and site-specific review process for new self-storage developments in Designated Areas in Manufacturing districts would help to better ensure the availability of desirable sites for more job-intensive industrial uses by ensuring that self-storage would only get built on sites that are not optimal for such industrial businesses. Ensuring the availability of large industrial lots as future industrial business locations, in a context where such businesses are growing and are already experiencing difficulties to operate and expand their NYC base, is a crucial component of the Industrial Action Plan. Importantly, the 10-point Industrial Action Plan is accompanied by a series of economic development measures targeting IBZs, which are oriented towards enabling industrial businesses to remain and grow in Industrial Business Zones, which are largely coincident with proposed Designated M Areas.

Overall, the Proposed Action would likely lead to slightly fewer self-storage facilities in NYC by the Build Year. This implies that the Proposed Action would slightly constrain supply and could potentially diminish

the self-storage industry’s ability to satisfy market demand, which in return would lead to a modest increase in the price of self-storage units. The extent to which this would occur, and the prices at which self-storage units would be leased, are difficult to estimate. However, it is plausible to assume that the slight increase in self-storage rates due to the Proposed Action would help the operating side of the self-storage industry, and also increase the value of pre-existing grandfathered self-storage facilities, while the development side would experience a small number of lost opportunities and slightly diminished revenues.

The potential modest rate increases for self-storage may affect certain households’ and small businesses’ ability to rent self-storage units or their ability to pay for such units, if demand stays strong. Households and businesses alike may have to travel further to access units in the desired price range or rent smaller units, resulting in some inconvenience. Furthermore, there may also be a certain shift in customer demand. Businesses may increasingly lease warehousing space, instead of self-storage units, and the on-demand storage model may become prominent. This alternative business model in the household storage market is gaining popularity. A shift in customer preferences, away from self-storage and toward on-demand storage, would reduce the demand for self-storage and consequently also the number of self-storage facilities developed in the future. Moreover, if demand for personal storage continues to grow, more residential developments may include accessory private storage within buildings, providing more opportunities for storage closer to residences.

2.9.2. Areas viable for as-of-right self-storage development

A comparison of the area viable for as-of-right self-storage development in the No-Action and the With-Action Condition shows an overall reduction of 49% due to the Proposed Action. The numbers vary according to Community District, however. In 33 Community Districts, the area viable for self-storage development will remain unchanged. These are the M and C8 areas outside of Designated Areas that have been previously discussed and will be analyzed in more detail in Chapter 3.

**No-Action and With-Action Condition Comparison
Loss of Areas Viable For As-Of-Right Self-Storage Development ⁵**

Borough	Community district	Loss of acreage viable for self-storage development	Percentage loss of acreage viable for self-storage development	Remaining acreage viable for self-storage development
Manhattan	1	0	0%	1
	2	0	0%	54
	3	0	0%	2
	4	0	0%	86
	5	0	0%	0
	6	0	0%	0
	7	0	0%	0

⁵ See Section V Chapter 2 for methodology.

	8	0	0%	13
	9	0	0%	7
	10	0	0%	9
	11	0	0%	9
	12	0	0%	11
Bronx	1	-161	-63%	93
	2	-287	-90%	30
	3	-18	-22%	66
	4	-2	-4%	43
	5	0	0%	23
	6	-7	-11%	54
	7	0	0%	26
	8	0	0%	37
	9	-78	-58%	56
	10	-89	-61%	57
	11	0	0%	85
	12	-79	-48%	85
Brooklyn	1	-530	-68%	252
	2	0	0%	77
	3	0	0%	90
	4	-13	-15%	73
	5	-196	-79%	53
	6	-232	-59%	162
	7	-200	-64%	111
	8	0	0%	51
	9	0	0%	21
	10	0	0%	37
	11	0	0%	98
	12	0	0%	127
	13	0	0%	81
	14	0	0%	20
	15	0	0%	43
	16	-39	-62%	24
	17	-90	-70%	39
	18	-117	-57%	86
Queens	1	-170	-39%	261
	2	-586	-75%	198
	3	0	0%	50
	4	0	0%	34
	5	-275	-59%	191
	6	0	0%	30
	7	0	0%	482
	8	0	0%	0

	9	-34	-54%	30
	10	-8	-19%	33
	11	0	0%	6
	12	-109	-55%	89
	13	-78	-47%	88
	14	0	0%	65
Staten Island	1	-128	-26%	366
	2	-952	-84%	183
	3	-239	-31%	534
Total		-4,715	-49%	4,932

Figure 18

Overall, the Proposed Action reduces the amount of land viable for self-storage development in 27 Community Districts. In sixteen Community Districts, it reduces the amount of viable land by more than 50 percent. In two Community Districts, does the Proposed Action reduce the amount of land viable for self-storage development by more than 80 percent: this is in Community District 2 of the Bronx and Community District 2 of Staten Island. However, residual acreage in Community District 2 of the Bronx would still be 30 acres, and 183 acres in the case of Community District 2 of Staten Island.

2.10. PROTOTYPICAL ANALYSIS OF THE POTENTIAL FOR INCREASED SELF-STORAGE DEVELOPMENT IN M AND C8 DISTRICTS OUTSIDE OF DESIGNATED AREAS

The Department of City Planning cannot predict with certainty where self-storage facilities will locate in the future. Self-storage facilities and the zoning districts that permit them are relatively dispersed within New York City, and the siting of self-storage facilities is demand-driven, which may furthermore disperse them in the city. Given the numerous possibilities for future development of self-storage facilities in M and C8 districts outside of Designated Areas, which cover areas in all boroughs of New York City, per CEQR guidelines, a detailed, quantitative analysis of these potential developments and their environmental impacts in a site-specific manner would be inappropriate.

In cases such as this, CEQR guidelines suggest using “typical” or prototypical cases for analysis purpose. As such, for CEQR analysis purposes, the potential impacts of self-storage development in the future No-Action and Future With-Action Condition will be analyzed by means of a prototypical analysis, which will be based on existing trends and reasonable projections for the future. These reasonable projections regard the type of locations self-storage developers have typically sought out: larger sites near transit and highways, enjoying a high degree of visibility, in relatively densely populated areas.

2.10.1. Introduction

The prototypical analysis analyzes the potential environmental impacts that could occur in the With-Action condition if self-storage facilities move from Designated Areas to M and C8 districts located outside Designated Areas. Generic prototypes have been developed since DCP cannot predict with certainty where self-storage facilities will locate in the future; self-storage facilities and the zoning districts that permit them are relatively dispersed within New York City and the siting of self-storage facilities is demand-driven, further dispersing them. These generic prototypes will be used to analyze potential environmental impacts for increased self-storage development in M and C8 districts outside of Designated Areas. These prototypes were developed through analyzing self-storage development trends over the last decade and typical siting characteristics. The prototypes have been designed to reflect the full range of self-storage developments that could reasonably occur in the With-Action Condition.

All employee numbers are based on averages found in 2015 QCEW data for the specific industries located on sites of similar sizes to the described prototype.

2.10.2. Range of Possibilities

Self-storage facilities in New York City tend to resemble one another in terms of building, siting and land use characteristics:

- But for a few exceptions, self-storage facilities are multi-story buildings.
- New buildings are typically shaped like cuboids and are as large as possible, maximizing the permitted floor area;

- Self-storage facilities typically site on large lots, along or near arterial highways and designated truck routes.
- Due to zoning, self-storage facilities can typically be found in areas with a mix of active industrial, automotive and commercial uses. Residential uses are usually not in the immediate vicinity of a self-storage facility, but they tend to be relatively proximate.
- The inactive nature of storage entails few noise, energy, water and sewer, etc. impacts.
- The use generates relatively little traffic, since most leased self-storage units are not visited daily or weekly.
- Each facility has not more than a handful of employees; with an average of five employees per facility according to DCP research and QCEW data.

Given the relatively similar building characteristics of self-storage facilities, the prototypes were developed to reflect various siting possibilities rather than different self-storage typologies. For instance, while single-story drive-up self-storage facilities do exist in New York City, there are very few examples and none were opened in the last decade. A conversion of an existing building to self-storage was considered, however, since this practice has been common in the past.

Due to the high degree of resemblance between the different self-storage facilities, in terms of building, siting and land use characteristics, and the limited range of zoning districts where they are permitted, the four prototypes as further discussed below, are considered to be representative of the kind of self-storage development that can reasonably be expected to occur in M and C8 districts outside of Designated Areas in the Future-With-Action Condition. While the prototypes may not exhaust the entire universe of future possibilities for self-storage development, those variations would not alter the outcome of the analysis.

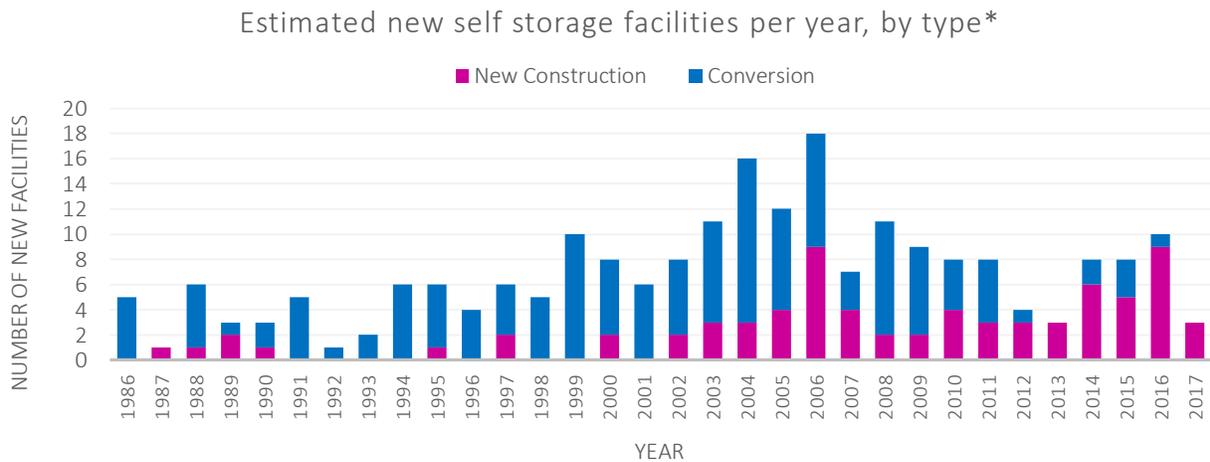


Figure 19: Estimated new self-storage facilities per year

*approx. 7 percent of facilities lack data and are not included in this chart
 NYC Dept. of City Planning, January 2017. Sources: PLUTO v16 Year Built/Year Altered or
 DOB Permit database Year Building Permit Issued

2.10.2.1. Development type: New Construction or Conversion

In January 2017, New York City had approximately 240 self-storage facilities, two-thirds of which were conversions of existing buildings and one-third were new construction. Over the last decade, however, new construction of self-storage has gained predominance. As reflected by Figure 19, conversions of existing buildings are now less common, and new construction accounts for an increasingly large share of new self-storage facilities.⁶ Regarding projects under development known to DCP, all of the projects in the pre-construction process are new, purpose-built facilities. This may reflect not only a changing business model, but also the fact that many loft buildings suitable for change of use to self-storage have already been converted. Based on these trends, three of the four selected prototypes are new buildings and one prototype reflects the conversions of an existing building to self-storage.

2.10.2.2. Lot Size and Configuration

Research conducted by the Department of City Planning, shows that new construction self-storage facilities built post-2000 in M and C8 districts outside of Designated Areas in M Districts, were sited on lots ranging from 13,000 SF to 185,000 SF. The median lot size was 32,500 SF and the top quartile lot size begins at 55,000 SF. Accordingly, DCP has selected prototypes that are representative of this range of typical lot sizes: a small (15,000-30,000 sq. ft.), medium (30,000-60,000 sq. ft.) and large (greater than 60,000 sq. ft.) site, as well as a conversion of an existing multi-story building on a 20,000 square foot lot.

Based on the various conditions across the city, for each prototype, a different typical lot size and configuration was assumed. Many self-storage facilities have sited on corner lots and interior lots; accordingly, the prototypes reflect both of these lot types. A number of self-storage facilities have been developed on irregular lots. None of the prototypical sites is on an irregularly shaped lot; however, should this variation occur, it is not expected to alter the outcome of the analysis.

2.10.2.3. Location and Zoning Districts

As shown in the Purpose and Need section of this DEIS, self-storage facilities tend to site on large sites, near highways and major arterials and also near transit access. The prototypical analysis takes this into account, by considering large sites of different sizes and projecting the prototypes along arterials and near subway stations.

Furthermore, various zoning districts have been chosen to reflect the Proposed Action. Although self-storage facilities exist in a wide range of zoning districts outside of Designated Areas (according to DCP's

⁶ Year estimates are based on two data sources: PLUTO v16, which is based on DOF data *Year Built/Year Altered*, or the DOB Permit database, *Year Building Permit Issued* (P or Q permits). These sources are not perfectly comparable and may contain certain errors. DCP uses these sources for a general indication of self-storage development trends, since there are no other, more reliable sources. The created charts are meant to depict general trends and should not be analyzed on a year-by-year basis. Due to potential data inaccuracies and the presence of certain market cycles, future self-storage development projections are based on general trends in the last decade, rather than recent short-term trends, which are typically less reliable. Furthermore, the chart does not include approximately seven percent of existing self-storage facilities, because the build year of those facilities could not adequately be determined. The actual development numbers would be slightly higher than those represented in the chart.

research, there are self-storage facilities in C8-1, C8-2, C8-3, M1-1, M1-2, M1-3/R7X, M1-3/R8, M1-4, M1-4D, M1-5, M2-1, M3-1, R3-2, R4, R6 and R7-2 districts), about half of the new construction self-storage facilities built post-2000 located either in M1-1, C8-2 or M1-2 zoning districts.

However, since most M1-2 districts are located within the Designated Areas and few located in Non-Designated M and C8 areas, this zoning typology was determined to be less likely. Furthermore, since both C8-2 and M1-2 districts have a permitted Zoning Floor Area of 2.0, the prototype based in a C8-2 district would produce a comparable building envelope.

Non-conforming uses as defined by the *NYC Zoning Resolution* are not considered in these prototypes. The self-storage facilities in R districts, listed in Figure 20, are either products of re-zoning subsequent to the existence of the self-storage facility or a variance approved by the Board of Standards and Appeals. Furthermore, the *NYC Zoning Resolution* states that under certain circumstances, a non-conforming use may be changed to another non-conforming use. Non-conforming uses are typically not included in analytical frameworks: it is usually assumed that when an area is rezoned, the new zoning district in place will define the type of development that will occur in the future. Accordingly, this analysis framework does not include a prototype of a self-storage development in a Residential (R) or Commercial (C) districts (except C8).

Zoning District	Number of self-storage facilities
C8-1	4
C8-2	7
C8-3	3
M1-1	10
M1-2	6
M1-3/R7X	1
M1-3/R8	1
M1-4	2
M1-4D	1
M1-5	1
M2-1	3
M3-1	3
R3-2	1
R4	1
R6	1
R7-2	1

Figure 20
NYC DCP

As such, M1-1 or C8-2 zoning districts represent the most adequate generic locations for the selected prototypes. However, this prototypical analysis will also consider an M1-5 zoning district. This prototype is less likely to occur, since only small parts of the City are zoned M1-5, but it is clear that such a prototype would be very attractive to developers: M1-5 districts permit a Floor Area Ratio of 5.0, which is a high Floor Area Ratio. For this same reason, considering a new self-storage facility in an M1-5 district is also more conservative: this prototype will result in a particularly large and tall facility, which could have an increased potential for environmental impacts compared to a smaller and shorter facility.

Two of the prototypical sites are projected to locate in M1-1 districts outside of Designated Areas in M Districts: this type of zoning district is widely mapped across the Bronx, Queens, Brooklyn and Staten Island, and represents the zoning district with the largest number of existing self-storage facilities, both in terms of newly constructed facilities and conversions. M1-1 districts have a Floor Area Ratio of 1.0, and have a small minimum parking requirement for self-storage which can

generally be waived. Several of the self-storage facilities on large sites have been developed in M1-1 districts and there are also several dozen overbuilt loft buildings in M1-1 districts, which are attractive for conversions to self-storage. Accordingly, the large self-storage facility prototype, and the conversion self-storage facility prototype, are both projected in M1-1 districts.

The small self-storage facility prototype is projected in a C8-2 district. According to DCP's research, the average lot size of new construction self-storage facilities built post-2000 in C8-2 districts outside of Designated Areas in M Districts amounts to 24,000 SF. It is also a relatively common zoning district for new construction self-storage facilities built post-2000. C8-2 districts are mapped in each borough, but the large majority of C8-2 zoning districts are in Brooklyn. They are typically along major traffic arterials, since the C8 zoning districts were often meant to provide for automotive and other heavy commercial services that often require large amounts of land.

The self-storage facility on a medium lot is projected in a M1-5 district. M1-5 districts are mapped in parts of Long Island City and Astoria, as well as along the West side of Manhattan. M1-5 districts paired with residential zoning districts are furthermore mapped in Long Island City and Hunter's Point, Mott Haven, DUMBO, Soho/Noho and some other parts in Manhattan.

2.10.2.4. Gross vs. Permitted Floor Area

All developments have a Floor Area Ratio (FAR) that determines the permitted development rights, or square footage that can be built. In addition to the permitted development rights per the FAR, there is some amount of additional square footage included in a development that is exempt from FAR calculations. This may include square footage allocated towards mechanical spaces, cellar space and required freight loading docks. As a result of these floor area exemptions, the gross floor area is higher than the permitted development rights. New construction self-storage facilities, in most cases, are built with one or even two floors in the cellar, considerably increasing the gross floor area versus the zoning floor area.

2.10.2.5. Parking and Loading Berth Requirements

Self-storage is a Use Group 16D use and has either no parking requirement or a low parking requirement of 1 parking space per 3 employees. Waivers for a small number of required spaces apply, so actual parking provided is based on the business needs of the facility. In general, most self-storage development include only a handful of parking spaces. An analysis of 25 recent new construction self-storage facilities shows a median of five accessory parking spaces. This is the number of accessory parking spaces that will be included in some of the prototypes. Only in relatively rare instances are self-storage facilities developed with more than 10 parking spaces in New York City. Each parking space was assumed to measure 300 sq. ft.

The number of required loading berths depends on the amount of built Floor Area. The prototypes will take into account the existing regulations, which are the following for M1-1 and C8-2 districts:

- First 8,000 sq. ft. of floor area – None
- Next 17,000 sq. ft. of floor area – 1 required berth
- Next 15,000 sq. ft. of floor area – 1 required berth
- Next 20,000 sq. ft. of floor area – 1 required berth
- Next 40,000 sq. ft. of floor area – 1 required berth
- Each additional 150,000 sq. ft. of floor area or fraction thereof: 1 required berth

And for M1-5 districts:

- First 25,000 square feet of floor area - None
- Next 15,000 square feet of floor area - 1 required berth
- Next 60,000 square feet of floor area - 1 required berth
- Each additional 150,000 square feet of floor area or fraction thereof : 1 required berth

Each loading berth was assumed to measure 400 sq. ft.

2.10.2.6. *Number of self-storage employees*

Chapter 1 included an analysis and estimate of the average number of employees per self-storage facility, concluding that each facility has an average of five employees. This is the number of employees used in the With-Action Condition for every prototype, since specific details regarding employees at different self-storage facilities are not known to the Department of City Planning. Furthermore, the average may present a particularly good estimate, since self-storage employees often assume managerial and maintenance tasks that are needed for the continuance of business independently of the size of the storage facility.

2.10.3. Discussion of Prototypes

2.10.3.1. *Prototype 1*

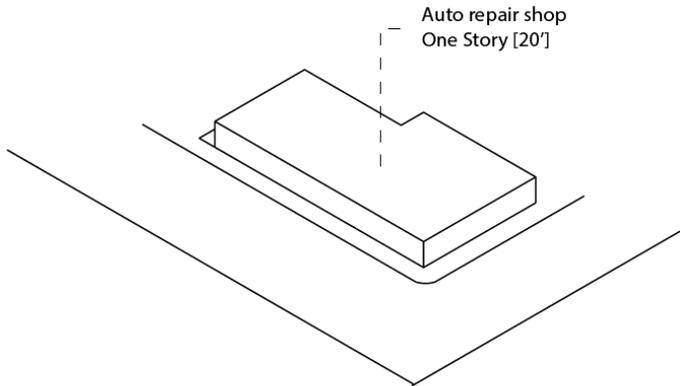
This prototype, as shown in the illustrative example, utilizes a generic 20,000 SF corner lot on a major traffic arterial in a C8-2 district. According to DCP's research, the average lot size of new construction self-storage facilities built post-2000 in C8-2 districts outside of Designated Areas in M Districts amounts to 24,000 SF, which is a small lot size for self-storage developments. The smaller site remains a feasible development site particularly because C8-2 districts permit a Floor Area Ratio of 2.0, which is higher than most other zoning districts that permit self-storage.

C8-2 districts are mapped in most boroughs, but the large majority of C8-2 zoning districts are in Brooklyn. They are typically along major traffic arterials, since the C8 zoning districts were often meant to provide for automotive and other heavy commercial services that often require large amounts of land. Accordingly, this prototype is sited on a wide street, which is also a local Designated Truck Route. In most instances, C8-2 districts are surrounded by low to medium-density residential areas. Except for the C8-2 corridor, the prototype is generally surrounded by a low-density residential district, which typically has three- and four-story attached houses and small apartment houses. The maximum building height permitted in the nearby residential district is 40 feet.

There are many sites where this prototype could be located, but for the purpose of this analysis, it will be assumed that the prototype is located in Midwood, a neighborhood in Brooklyn.

Prototype 1	No- Action	With- Action
Lot Area [square feet]	20,000	20,000
Permitted FAR	2.0	2.0
Permitted Developments Rights [square feet]	40,000	40,000
Gross Floor Area (square feet)	15,200	64,000 ⁷
Ground Floor/Upper Story Height	20	16'/12'
Building Height	20	40
Number of Stories	1	3
Number of loading berths		2
Number of parking included		1

Prototype 1: No- Action Condition



Prototype 1: With- Action Condition

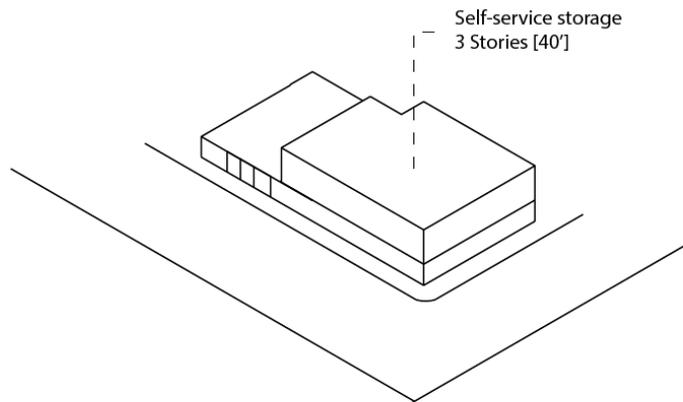


Figure 21: Chart and 3D diagram comparing No-Action and With-Action Condition

⁷ Includes one level in the cellar

As represented by the massing in Figure 21, in the With-Action Condition the prototype has a Zoning Floor Area of 40,000 SF and a Gross Floor Area of 64,000 SF, which includes two required loading berths and one cellar level. One parking space is provided. The facility is three stories high, with a building height of 40 feet.

This prototype is considered to be representative of new construction self-storage facilities in industrial/automotive districts with a Floor Area Ratio of 2.0, in proximity to a low-density residential district. It affords the opportunity to understand the effects of the following provisions of the Proposed Action on development:

In the No-Action scenario, the site's existing conditions would continue. Many types of uses or businesses could be on the site in the No-Action Condition, but since auto repair shops are particularly common in C8 districts, it is assumed that the existing business would be an auto repair shop located in a single-story garage. The projected repair shop has eleven employees.

In the With-Action scenario, a new self-storage facility would be built on the site. The facility would have five employees.

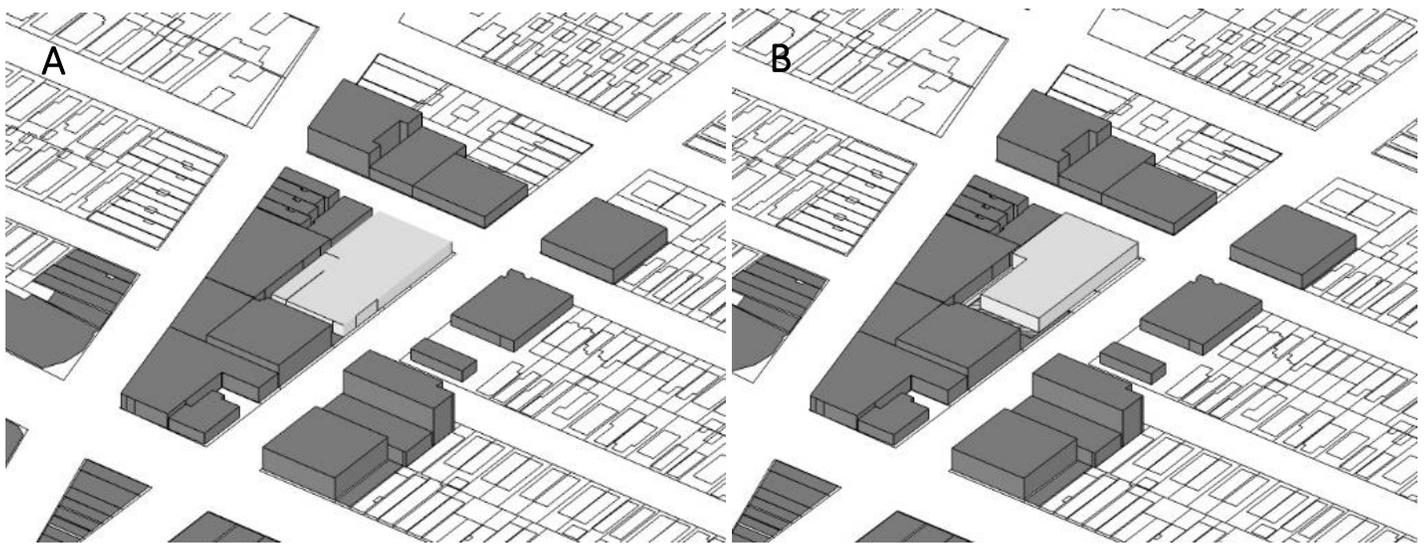


Figure 22: 3D diagrams of prototype and context area, comparing the Future No-Action (A) and With-Action Condition (B)

2.10.3.2. *Prototype 2*

This prototype, as shown in the illustrative example, utilizes an M1-5 district. Although this prototype is less likely to occur, since only few areas in NYC are zoned M1-5, it is considered here as a prototype, since this kind of self-storage facility likely to have the greatest potential for environmental impacts. As mentioned above, M1-5 district permit a Floor Area Ratio of 5.0, as such, this prototype will result in a particularly large and tall facility.

M1-5 districts are mapped in parts of Long Island City and Astoria, as well as along the West side of Manhattan. M1-5 districts paired with residential zoning districts are furthermore mapped in Long Island City and Hunter's Point, Mott Haven, DUMBO, Soho/Noho and some other parts in Manhattan. The real estate market in most areas in Manhattan is such that a new construction self-storage facility would be highly unlikely. Accordingly, this prototype is located in Western Queens in Long Island City.

This prototype is located within a quarter mile of a major traffic arterial and is built on a lot of 30,000 SF. The surrounding area is either Manufacturing-zoned with medium or higher density industrial, commercial and community facility uses, or zoned for Mixed Use with a blend of industrial, commercial, community facility and residential uses.

In the With-Action Condition, the prototype has a Zoning Floor Area of 150,000 SF and a Gross Floor Area of 153,000 SF. It includes four loading berths. It includes three parking spaces. It is seven stories high, with a building height of 88 feet. It is represented by the massing in Figure 23.

Prototype 2: No- Action and With-Action Condition

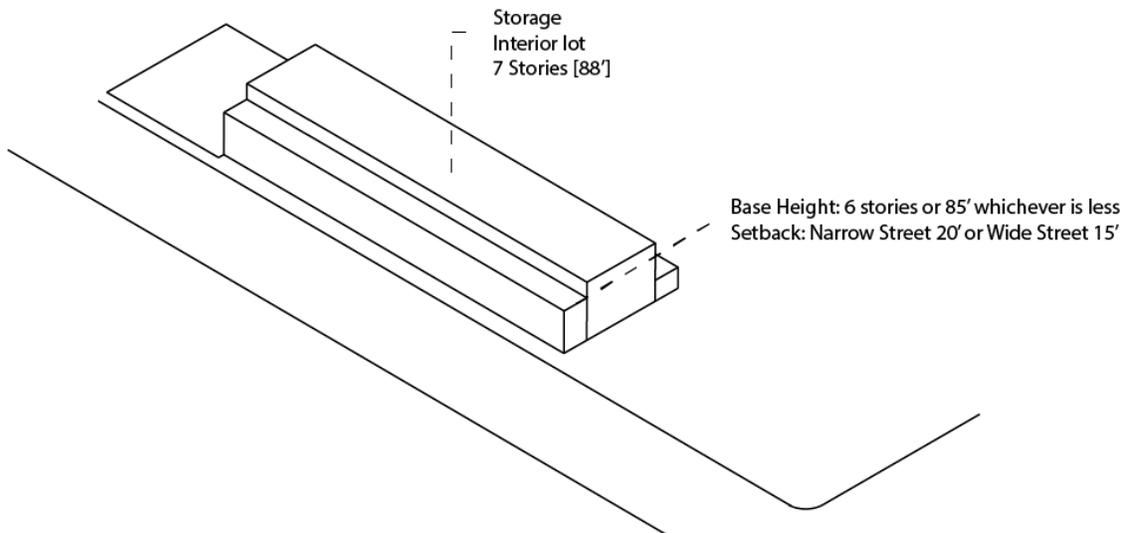


Figure 23

Prototype 2	No- Action	With- Action
Lot Area [square feet]	30,000	30,000
Permitted FAR	5.0	5.0
Permitted Developments Rights (square feet)	150,000	150,000
Gross Floor Area (square feet)	153,000	153,000
Ground Floor/Upper Story Height	16'/12'	16'/12'
Building Height	88'	88'
Number of Stories	7	7
Number of loading berths		4
Number of parking included	3	3

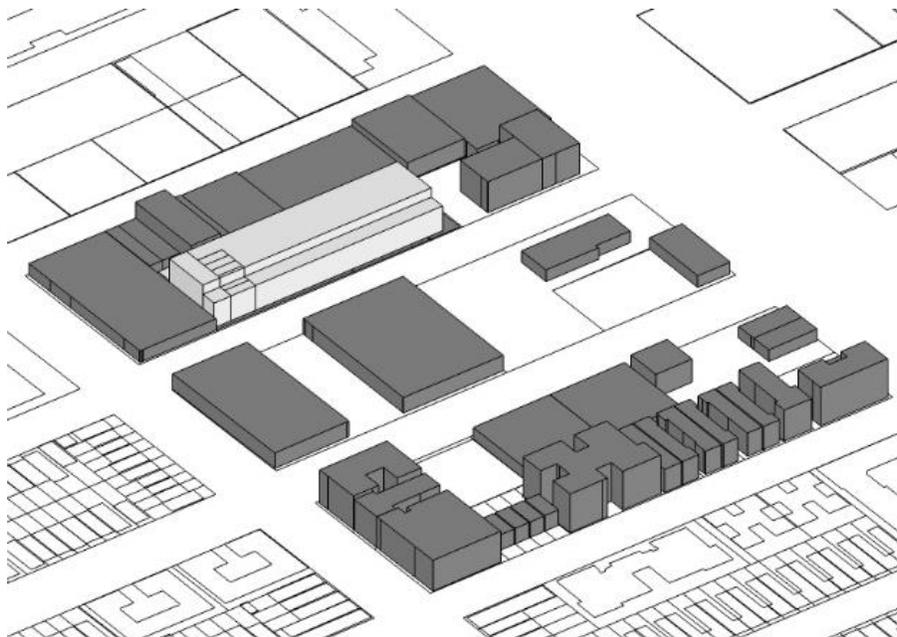


Figure 24: Chart and 3D diagrams of prototype and context area, showing both Future No-Action and With-Action Condition

This prototype is considered to be representative of tall, new construction self-storage facilities in districts with a large mix of uses and a Floor Area Ratio of 5.0. It affords the opportunity to understand the effects of the following provisions of the Proposed Action on development:

In the No-Action scenario, many types of uses or businesses could either continue to exist on the site or be developed on the site. Since this zoning district allows a high Floor Area Ratio, it is an attractive site for uses, which may operate in a taller building. The No-Action Condition, the site would be redeveloped as a specialized storage facility, such as an art storage facility. This is reasonable, since New York City has a large and active art industry and many private collectors, and there are examples of recent new construction for this kind of use in an M1-5 district. The art

storage facility would resemble the projected self-storage facility in its building envelope, and would have 18 employees.

In the With-Action scenario, a new self-storage facility would be built on the site, as described above. The facility would have five employees.

2.10.3.3. *Prototype 3*

This prototype, as shown in the illustrative example, utilizes a 60,000 SF lot in an M1-1 district near a major traffic arterial. This prototype is based on a corner lot, which is a frequent configuration for self-storage facilities, but it is also possible that such a facility could site on an irregularly shaped lot.

M1-1 zoning districts are widely mapped across the Bronx, Queens, Brooklyn and Staten Island. They have a Floor Area Ratio of 1.0, and a small minimum parking requirement for self-storage. Several of the self-storage facilities on large sites have been developed in M1-1 districts. M1 districts are often near residential districts, and so this prototype is located within a quarter mile of a medium-density residential district, that is widely mapped in Brooklyn, Queens and the Bronx. The neighborhood has a diverse mix of building types and heights, but none exceed 70 feet in height.

For this prototype, the neighborhood of Soundview in the Bronx is chosen, but it is deemed to be representative of many other neighborhoods with M1-1 districts, where this prototype may also occur.

As represented by the massing in Figure 25, in the With-Action Condition the prototype has a Zoning Floor Area of 60,000 SF, and a Gross Floor Area of 78,000 SF. It includes three loading berths and five parking spaces. It is four stories high, which is typical for new construction self-storage on large sites, with a building height of 52 feet and one cellar.

The prototype affords the opportunity to understand the effects of the following provisions of the Proposed Action on development:

In the No-Action scenario, the site's existing conditions would continue and the currently existing business would remain present. The projected existing use is a wholesale business, located in a two-story facility. The business has eleven employees. The wholesale business has daily truck deliveries and departures.

In the With-Action scenario, a new self-storage facility would be built on the site. The facility would have five employees.

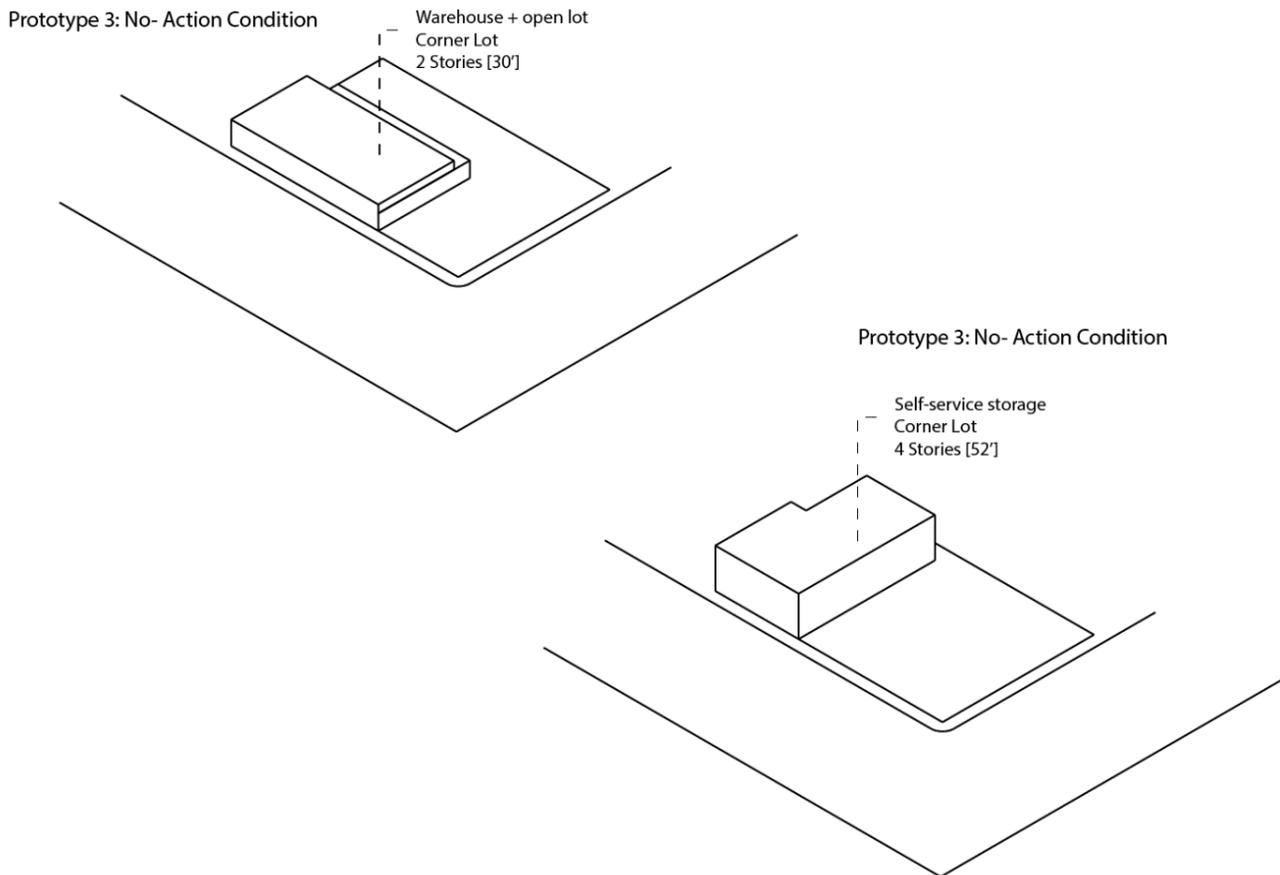


Figure 25

Prototype 3	No- Action	With- Action
Lot Area (square feet)	60,000	60,000
Permitted FAR	1.0	1.0
Permitted Developments Rights (square feet)	60,000	60,000
Gross Floor Area (square feet)	39,600	78,000 ⁸
Ground Floor/Upper Story Height	20'/10'	16'/12'
Building Height	30	52
Number of Stories	2	4
Number of loading berths		3
Number of parking included	4	5

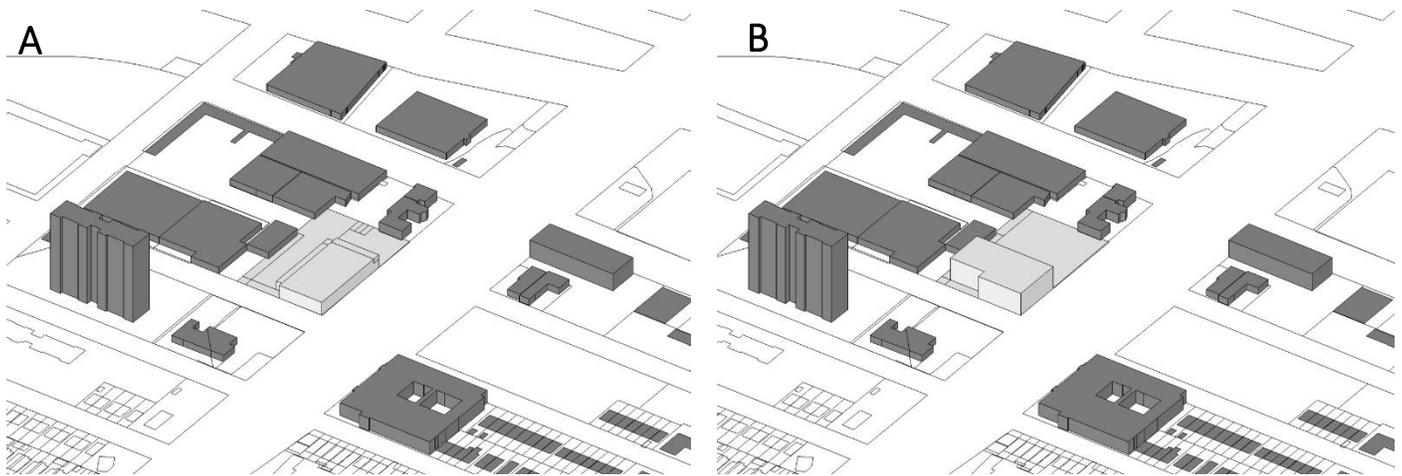


Figure 26: Chart and 3D diagrams of prototype and context area, comparing the Future No-Action (A) and With-Action Condition (B)

⁸ Includes one level in the cellar

2.10.3.4. Prototype 4

This prototype utilizes a generic existing five-story warehouse building in an M1-1 districts along a major traffic arterial. M1-1 zoning districts are widely mapped across the Bronx, Queens, Brooklyn and Staten Island. There are several dozen industrially-used buildings in M1-1 districts outside of Designated Areas in M districts, which are overbuilt and grandfathered, and are particularly attractive for conversions to self-storage. These existing buildings are dispersed across the New York City. This prototype is in an M1-1 district, surrounded by a medium-density residential district with a diverse mix of building types and heights not exceeding 70 feet in height. For analytical purposes, this prototype of a conversion to self-storage is sited along Atlantic Avenue in Bedford-Stuyvesant, but buildings like these can be found in many neighborhoods in all boroughs.

Prototype 4	No- Action	With- Action
Lot Area (square feet)		20,000
Permitted FAR		1.0
Permitted Developments Rights (square feet)		20,000
Gross Floor Area (square feet]		100,000
Ground Floor/Upper Story Height		10'/10'
Building Height		50
Number of Stories		5
Number of loading berths		2
Number of parking included	None - preexisting condition	

Prototype 4: No- Action and With-Action Condition

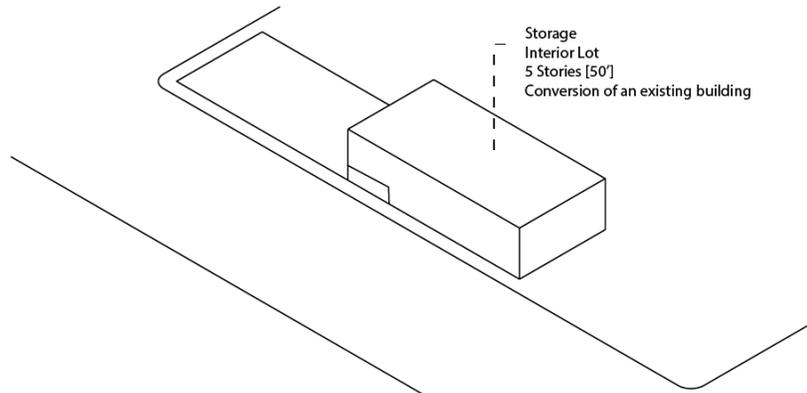


Figure 27: Chart and 3D diagram comparing No-Action and With-Action Condition

As represented by Figure 27, in both the No-Action and the With-Action Condition the warehouse is five stories tall, located on a 20,000 square foot lot, and has a Gross Floor Area of 100,000 SF. The building has two interior loading docks, but no parking.

The prototype affords the opportunity to understand the effects of the following provisions of the Proposed Action on development:

In the No-Action scenario, the building's existing conditions would continue and it would be used by a moving and storage company with 18 employees.

In the With-Action scenario, the building would be renovated and converted to a self-storage facility. The facility would have five employees.

These four generic prototypes will be used to analyze potential environmental impacts for increased self-storage development in M and C8 districts outside of Designated Areas in the technical chapters that follow.

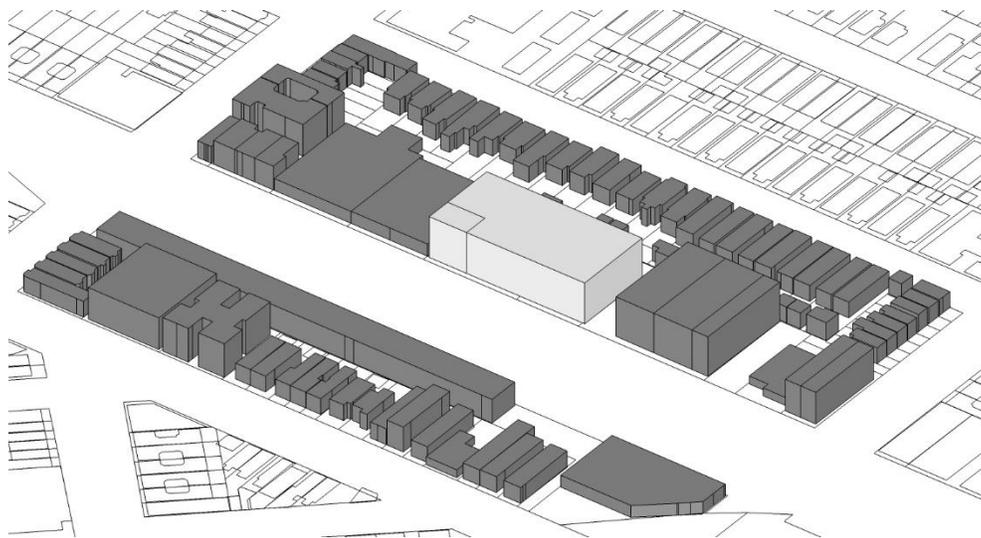


Figure 28: 3D diagrams of prototype and context area, showing both Future No-Action and With-Action Condition

2.11. REPRESENTATIVE EXAMPLES

The Proposed Action aims to improve future siting opportunities for more job-intensive industrial businesses in NYC. However, as discussed earlier, the Proposed Action in isolation will not directly induce industrial development in the Designated Areas in M Districts. Numerous factors influence the kind of uses that are developed in any given area, which remain beyond the scope of the Proposed Action, and which the Department of City Planning has no control over. These include real estate markets, business conditions within a particular industry, the obtaining of financing, the adequacy of transportation and other infrastructure, the circumstances of individual businesses and other factors. The Proposed Action solely aims to improve future siting opportunities for industrial businesses in NYC, in a context where industrial uses are growing and are already permitted as-of-right in M districts.

Although the Proposed Action itself would not induce development in the Designated Areas in M Districts, the occurrence of development on sites can never be excluded. Sites that may have become self-storage facilities in the No-Action Condition, in the With-Action Condition may be developed for another use instead, since self-storage will no longer be a permitted as-of-right use. Alternatively, an existing use may be more likely to remain in a location that would be redeveloped with self-storage in the No-Action. As such, it is appropriate to consider the realm of uses that could potentially be developed on parcels which might have otherwise be utilized by self storage. Due to the myriad of potential scenarios, which exist in Designated Areas in M-Districts in the With-Action Condition, this DEIS will show representative examples of what may occur in the With-Action Condition

To consider development, under the with action scenario, which might occur on these parcels, representative examples were developed by reviewing the existing land use and employment conditions on sites most typical of recent self-storage development within the Designated Area M Districts. As discussed in the Final Scope of Work, the DEIS utilizes representative examples of industrial and non-industrial development that may occupy the sites in the With Action should self-storage development not occur. Additionally, Department of Buildings' permits for new construction were researched, which is described in Chapter 3, *Land Use Zoning and Public Policy*. The analysis specifically considered new construction permits in Designated Areas in M Districts, for sites larger than 20,000 sq. ft., issued in recent years.

The representative examples focus primarily on industrial development, since it is considered most plausible, due to the kinds of sites that self-storage typically occupies, along with the existence of a variety of economic development policies in place in IBZs, including the 10-Point Industrial Action Plan. However, the possibility for other kinds of development to occur on sites, does exist, and to this extent DCP has included representative examples of non-industrial development that are permitted as-of-right based on the analysis of existing land use, employment and development trends on prime self-storage development sites, which is described in more detail in Chapter 3, *Land Use Zoning and Public Policy*.

2.11.1. Existing Conditions

The types of sites that would be redeveloped with new self-storage facilities would reflect conditions typical of recent self-storage development. The representative examples described below are based on the existing land use and employment conditions on sites most typical of recent self-storage development

within the Designated Area M Districts described in detail in the Land Use, Zoning and Public Policy Chapter. The following representative examples are considered:

a. **Large Conversion Candidate Site:** 62 18th Street, Gowanus, Brooklyn (Block 632, lot 4)

Located in an M3-1 District on a 59,000 sq. ft. lot in the Southwest Brooklyn Industrial Business Zones and just off of the Gowanus Expressway. This 163,400 sq. ft., six-story industrial building was built in 1916. The current built FAR of 2.76 exceeds the maximum permitted FAR of 2.0. Based on employment records for 2015, the Department estimates that the building is occupied by 12 active business in apparel, beverage, furniture and machinery manufacturing; merchant wholesale; specialty trade contracting; arts and entertainment; retail; and unclassified. These businesses employed an estimated 31 workers in 2015.

b. **Small Conversion Candidate Site:** 146 41 Street, Sunset Park, Brooklyn (Block 625, Lot 90)

Located in an M3-1 District on a 10,000 sq. ft. lot in the Southwest Brooklyn Industrial Business Zone just off of the Gowanus Expressway and south of the South Brooklyn Marine Terminal. This 18,000 sq. ft., 3-story building was built in 1941. The current built FAR is 1.8, slightly less than the maximum permitted 2.0 FAR. The site appears to be currently occupied by a moving and storage business.

c. **Large New Construction Site:** 19-41 42nd Street, Long Island City, Queens (Block 789, Lot 15)

Located in an M1-1 district on a 68,900 sq. ft. lot near the Grand Central Parkway in the Long Island City Industrial Business Zone. This 17,424 sq. ft., single-story building was built in 1963. The current built FAR of 0.25 is less than half the permitted FAR of 1.0. The site is currently occupied by a bus transportation business. The average employment of Transportation and warehousing businesses on similar sites in the borough of Queens was 36 employees in 2015.

d. **Small New Construction Site:** 180 Morgan Avenue, East Williamsburg, Brooklyn (Block 2492, lot 201)

Located in an M3-1 district on a 37,400 sq. ft. lot about 0.4 miles from the Morgan Ave L-stop in the North Brooklyn Industrial Business Zone. This 23,000 sq. ft., 1-story building was built in 1970. The current built FAR of 0.61 is less than half the permitted FAR of 2.0. The site is currently occupied by a construction business. Companies within the construction industry and located on similar sites in the borough of Brooklyn had an average 40 employees in 2015.

e. **Undeveloped Site:** 220 Bloomfield Avenue, Staten Island (Block 502, Lot 1780)

Located in an M3-1 district on a 52,000 sq. ft. lot on the west shore of Staten Island. This site is currently undeveloped but is occupied by a construction debris and waste management business. Companies in the waste management industry on similar sites in the city had an average of 67 employees in 2015.

2.11.2. Future-No-Action Condition

According to the framework in Section 2.7, it is assumed that 20 additional self-storage facilities will be developed within Designated Areas. The types of sites that would be redeveloped with new self-storage facilities would reflect conditions typical of recent self-storage development. In the Future No-Action Condition, the representative examples above are projected to be redeveloped with or converted to self-storage.

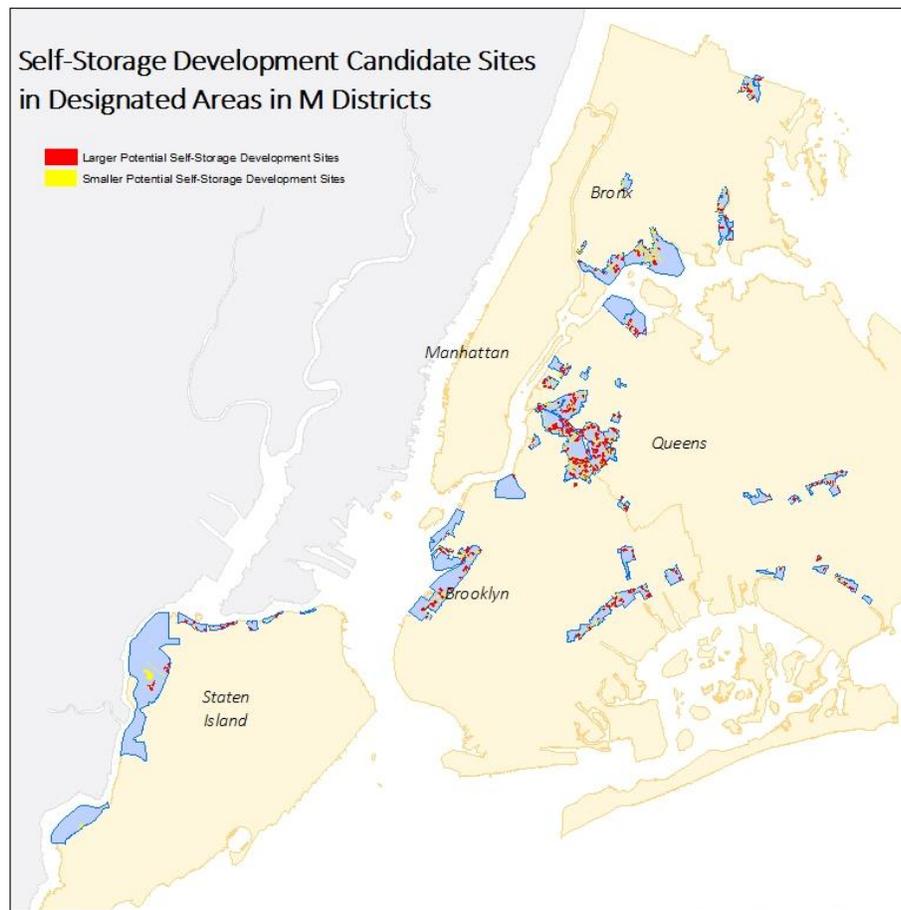
As described in the “Land Use, Zoning and Public Policy” Chapter, self-storage businesses tend to locate on sites on or near designated truck routes. About half of recent developments sited on lots smaller than 40,000 sq. ft. and half sited on lots larger than 40,000 sq. ft. In the Future No-Action condition, it is expected that self-storage will continue to favor these types of sites.

Self-storage developments in New York City include a mix of both new construction and conversions. However, new construction of self-storage has gained predominance over the last decade (see Figure 14 in Chapter 2) and new construction now accounts for an increasingly large share of new self-storage facilities. In order to reflect the predominance of new construction, but also consider the potential possibility and effects of conversions of existing buildings, this analysis assumes that 75 percent of the new self-storage facilities developed in Designated Areas will be new construction and 25 percent will be conversion. Therefore, by the 2027 build year, it is assumed that 15 of 20 new self-storage facilities will be in new construction and 5 will be conversions.

The analysis in the “Land Use, Zoning and Public Policy” Chapter identified a universe of almost 1,800 sites widely dispersed across the Designated Areas that are typical of sites recently developed with self-storage. Although existing sites suitable for future redevelopment for self-storage are concentrated among the smaller lots (10,000 to 40,000 sq. ft.), recent self-storage developments are evenly distributed across large and small sites (the median lot area of post-2000 construction is 40,000 sq. ft.), indicating that self-storage sites disproportionately on larger sites relative to the potential universe of sites available; 50 percent of new facilities sites on larger sites, which currently make up only about 19 percent of the current universe of likely development sites in Designated Areas. However, smaller sites may always be assembled for a larger development more typical of recent self-storage facilities, implying that the number of possibilities is larger than the current universe of likely development sites.

	Conversion (built FAR > half of permitted FAR)		New Construction (built FAR < half of permitted FAR)		Total	
	Number	% of all sites	Number	% of all sites	Number	% of all sites
Larger sites (40,000 to 90,000 SQ. FT.)	130	7.3%	209	11.8%	339	19%
Smaller sites (10,000 to 40,000 SQ. FT.)	679	38.4%	749	42.4%	1,428	81%
Total	809	45.8%	958	54.2%	1,767	100%

Figure 29
Self-storage candidate development sites in Designated Areas



NYC Dept. of City Planning April 2017

Figure 30: Potential Candidate Self-Storage Development Sites in Designated areas

2.11.3. Future-With-Action Condition

In order to understand the type of new construction that could occur within Designated Areas in M Zones both With and Without the Action, an analysis of New Building Permits issued by the Department of Buildings was completed (see Land Use, Zoning and Public Policy Chapter). The research looked at building permits in Industrial Business Zones for new construction between 2010 and the end of 2016. Development that has occurred in the recent past on sites larger than 20,000 sq. ft. is considered to be representative of the kinds of uses and businesses that could potentially have sited in the locations where self-storage facility was developed, which are then seen as lost opportunities. Similarly, past development on large sites illustrates the universe of potential development on such sites in the absence of self-storage in the Future With-Action Condition.

The analysis shows that a total of 121 new building permits were issued for developments in IBZs in the seven-year period from 2010 until 2016. 44 of these permits were for developments occurring on lots larger than 20,000 sq. ft., and ten, or 23 percent, of these 44 new developments were self-storage facilities. Figure 31 depicts the non-self-storage uses (no=34) that occurred in these newly developed buildings on lots larger than 40,000 sq. ft. (no= 19) and lots between 20,000 and 40,000 sq. ft. (no=15) in IBZs since 2010:

New Developments on large Lots (>40,000 sq. ft.)		
Industrial (13)	Non-Industrial (6)	Self-storage (6)
3 auto or fleet vehicle repair/maintenance facilities	2 retail	6 facilities
2 courier service facilities	1 hotel	
1 printing and distribution facility	1 elementary school	
1 food manufacturing and distribution facility	1 residential building	
1 miscellaneous warehouse	1 office	
1 concrete manufacturing batch plant		
1 trucking terminal		
1 construction contractor		
1 film recording studio		
1 utilities		
New Developments on small Lots (> 20,000 and <40,000 sq. ft.)		
Industrial (9)	Non-Industrial (6)	Self-storage (4)
3 food/wholesale and distribution facilities	2 hotels	4 facilities
2 miscellaneous warehouses	1 retail	
1 construction contractor	1 office	
1 trucking terminal	1 car rental/car wash	
1 plastic fabricator	1 medical care office	
1 steel fabricator		

Figure 31
DOB Building Permits and DCP research, April 2017

The recent developments on large lots in Designated Areas since 2010 (see Figure 31) show that while industrial uses represent the majority of permits for new construction, development has covered a wide spectrum and a variety of uses and businesses, even in NYC's most active industrial areas. The industrial uses include vehicle repair, wholesale and distribution, courier services, construction-related uses and the manufacturing of concrete, plastic and steel, but also new utility facilities and a film recording studio, which is an emerging industry in NYC. New non-industrial developments have been hotels, retail, offices, which are for the most part permitted by zoning regulations, but also a school and a residential development.

An assessment of the With-Action condition on the representative sites is provided below. Multiple possible scenarios are described based on the myriad reasonable possibilities supported by the assessment of existing land use, employment and development trends in the following Chapter.

- a. **Large Conversion Candidate Site:** 62 18th Street, Gowanus, Brooklyn (Block 632, lot 4)
Located in an M3-1 District on a 59,000 sq. ft. lot in the Southwest Brooklyn Industrial Business Zones and just off of the Gowanus Expressway. This 163,400 sq. ft., six-story industrial building was built in 1916. The current built FAR of 2.76 exceeds the maximum permitted FAR of 2.0. Based on employment records for 2015, the Department estimates that the building is occupied by 12 active business in apparel, beverage, furniture and machinery manufacturing; merchant wholesale; specialty trade contracting; arts and entertainment; retail; and unclassified. These businesses employed an estimated 31 workers in 2015.

In the Future With-Action Condition, it is expected that the existing uses and related employment would remain. Alternatively, the site could also be converted to office, co-working space and retail uses, which have been growing in the surrounding area.

- b. **Small Conversion Candidate Site:** 146 41 Street, Sunset Park, Brooklyn (Block 625, Lot 90)
Located in an M3-1 District on a 10,000 sq. ft. lot in the Southwest Brooklyn Industrial Business Zone just off of the Gowanus Expressway and south of the South Brooklyn Marine Terminal. This 18,000 sq. ft., 3-story building was built in 1941. The current built FAR is 1.8, slightly less than the maximum permitted 2.0 FAR. The site appears to be currently occupied by a moving and storage business.

In the Future With-Action Condition, it is expected that the existing uses would remain. Alternatively, the site could also be converted to specialized storage. Although conversion to office, co-working space or retail uses are possible, the uses are less likely given the distance from transit and less established market for these uses in the area.

- c. **Large New Construction Site:** 19-41 42nd Street, Long Island City, Queens (Block 789, Lot 15)
Located in an M1-1 district on a 68,900 sq. ft. lot near the Grand Central Parkway in the Long Island City Industrial Business Zone. This 17,424 sq. ft., single-story building was built in 1963. The current built FAR of 0.25 is less than half the permitted FAR of 1.0. The site is currently occupied by a bus transportation business. The average employment of Transportation and warehousing businesses on similar sites in the borough of Queens was 36 employees in 2015.

In the Future With-Action Condition, it is expected that the existing uses and related employment would remain. Alternatively, the site could be redeveloped with a new a building. Based on recent development trends on large sites described above, likely potential future redevelopments of the site could include an auto repair and maintenance facility; a courier service; a warehouse; retail; or office.

d. Small New Construction Site: 180 Morgan Avenue, East Williamsburg, Brooklyn (Block 2492, lot 201)

Located in an M3-1 district on a 37,400 sq. ft. lot about 0.4 miles from the Morgan Ave L-stop in the North Brooklyn Industrial Business Zone. This 23,000 sq. ft., 1-story building was built in 1970. The current built FAR of 0.61 is less than half the permitted FAR of 2.0. The site is currently occupied by a construction business. Companies within the construction industry and located on similar sites in the borough of Brooklyn had an average 40 employees in 2015.

In the Future With-Action Condition, it is expected that the existing uses and related employment would remain. Alternatively, the site could be redeveloped with a new a building. Based on recent development trends on smaller sites described above, likely potential future redevelopments of the site could include a food wholesaler, a construction contractor, a warehouse, a metal fabricator, a hotel, retail, or medical offices.

e. Undeveloped Site: 220 Bloomfield Avenue, Staten Island (Block 502, Lot 1780)

Located in an M3-1 district on a 52,000 sq. ft. lot on the west shore of Staten Island. This site is currently undeveloped but is occupied by a construction debris and waste management business. Companies in the waste management industry on similar sites in the city had an average of 67 employees in 2015.

In the Future With-Action Condition, it is expected that the existing uses and related employment would remain. Alternatively, the site could be redeveloped with a new a building. Based on recent development trends on large sites described above, likely potential future redevelopments of the site could include an auto repair and maintenance facility; a courier service; a warehouse; retail; or office.

2.11.4. Conclusions

Many uses are permitted as-of-right within Designated Areas in M Districts; however, horizontally configured, truck-dependent business represent the primary demand for the kinds of sites self-storage facilities have often been developed on, since such businesses also have a preference for larger sites near highways and designated truck routes. Along with the existence of a variety of economic development policies in IBZs, including the 10-Point Industrial Action Plan, it is considered that industrial representative examples are more likely to occur in the With-Action Condition than non-industrial uses. Furthermore, non-

industrial uses have gravitated to M districts outside of Designated Areas, which likely have more desirable locations for these uses. However, the possibility for other kinds of development to occur on sites, cannot be excluded.

This analysis indicated that there is a universe of almost 1,800 sites widely dispersed across the Designated Areas that are typical of sites recently developed with self-storage. Self-storage has proven to be a versatile use – locating as new construction on sites ranging from 10,000 to 90,000 sq. ft., as well as in conversion of both low-rise warehouses and multi-story loft buildings. These 1,800 sites are generally those where some existing businesses could be expected to remain, or where new construction of representative examples may expand in the With-Action Condition. While these 1,800 sites are all located in the Designated Areas in M districts, which are NYC’s most active industrial areas, they are nevertheless in dozens of different neighborhoods in New York City, with differing real estate market conditions and development trends. Not only do factors influencing the type of development vary widely across these areas, but these areas are all in Manufacturing districts, which permit a large array of uses as-of-right (see Chapter 3 for more details).

As shown by the analysis of representative examples above, there are myriad potential scenarios, which exist in Designated Areas in M-Districts in the With-Action Condition. Given the high level of uncertainty surrounding any potential development in the With-Action condition, and the high probability of projecting an inaccurate development scenario, which would render any analysis of projected uses and their impacts meaningless, no technical analysis will be conducted analyzing these uses. While it is reasonable for the Department of City Planning to point to representative examples, conducting detailed technical analyses would be highly speculative.