

# Zoning for Coastal Flood Resiliency

## Chapter 14: Transportation

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### A. INTRODUCTION

The objective of a CEQR transportation analysis is to determine whether a proposed action may have a significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety, on- and off-street parking, or goods movement.

As detailed in **Chapter 1, “Project Description,”** the New York City Department of City Planning (DCP) is proposing a zoning text amendment to update the Special Regulations Applying in Flood Hazard Areas (Article VI, Chapter 4) of the New York City Zoning Resolution (ZR), which includes the [“Flood Resilience Zoning Text”](#) (the “2013 Flood Text”) and [“Special Regulations for Neighborhood Recovery”](#) (the “2015 Recovery Text”). These temporary zoning rules were adopted on an emergency basis to remove zoning barriers that were hindering the reconstruction and retrofitting of buildings affected by Hurricane Sandy and to help ensure that new construction there would be more resilient. The 2013 Flood Text provisions are set to expire with the adoption of new and final Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), which is anticipated to occur within the next few years. Applicability of the 2015 Recovery Text expired in July 2020. Therefore, DCP is proposing a citywide zoning text amendment, [“Zoning for Coastal Flood Resiliency”](#) (the “Proposed Action”), to improve upon and make permanent the relevant provisions of the existing temporary zoning rules of the 2013 Flood Text and 2015 Recovery Text. In addition, the Proposed Action includes special provisions to help facilitate the city’s long-term recovery from the COVID-19 pandemic and its associated economic effects by providing more time for existing non-conforming uses to reopen and builders to undertake certain construction projects. The Proposed Action also includes updates to other sections of the ZR, including the Special Regulations Applying in the Waterfront Area (Article VI, Chapter 2) and provisions within various Special Purpose Districts. The Proposed Action would mostly affect New York City’s current 1% annual and 0.2% annual chance floodplains. However, select provisions of the Proposed Action would be applicable citywide. To help the City prepare for or respond to other disasters, select provisions in the Proposed Action regarding power systems and other mechanical equipment, ramps and lifts, vulnerable populations, and disaster recovery rules, would be applicable citywide.

Due to the broad applicability of the Proposed Action, it is difficult to predict the sites where development would be facilitated. In addition, the Proposed Action is not in-and-of-itself expected to induce development where it would not otherwise have occurred absent the Proposed Action. Although the Proposed Action may allow developments and existing buildings to retrofit to resilient standards, the overall amount, type, and location of construction within the affected area is not anticipated to change. Owing to the generic nature of this action, there are no known or projected as-of-right development sites identified as part of the Proposed Action’s Reasonable Worst-Case Development Scenario (RWCDs). To produce a reasonable analysis of the likely effects of the Proposed Action, 14 representative Prototypical Analysis Sites containing either new developments, infill, reconstructions, or retrofits of existing buildings in the city’s 1% and 0.2% annual chance floodplains were identified to demonstrate the wide range of proposed regulations for sites that would be able to develop as-of-right in the future with the Proposed Action, as detailed further in **Chapter 1**.

## B. PRINCIPAL CONCLUSIONS

The Proposed Action would not result in significant adverse impacts on the transportation network. The Prototypical Analysis Sites would be distributed throughout the city's floodplains. Incremental development for both the 1% annual and 0.2% annual chance floodplains at each of the Prototypical Analysis Sites would not exceed the minimum development densities for dwelling units (DUs) or commercial uses detailed in Table 16-1 of the *CEQR Technical Manual*. Therefore, further transportation-related analysis is not warranted, and the Proposed Action would not result in significant adverse impacts related to traffic, pedestrians, transit, or parking.

## C. PRELIMINARY SCREENING

Given the broad applicability of the Proposed Action, the sites where development would be facilitated are difficult to predict. **Chapter 1, "Project Description,"** identifies 14 representative sites to demonstrate how the proposed regulation would apply to sites that would be able to develop as-of-right in the With-Action scenario. Similar to other chapters of this document, these 14 Prototypical Analysis Sites are used to assess the potential for the Proposed Action to result in significant transportation impacts. A RWCDS was developed for the future without the Proposed Action (No-Action condition) and the future with the Proposed Action (With-Action condition) in both the 1% annual and 0.2% annual chance floodplains. As such, the incremental difference between No-Action and With-Action conditions for both the 1% annual and 0.2% annual chance floodplains will serve as the basis for assessing the potential transportation impacts of the Proposed Action.

Per CEQR guidance, transportation analyses may not be needed for projects that would create low- or low-to-moderate-density development in particular sections of the city.<sup>1</sup> The development densities cited in Table 16-1 of the *CEQR Technical Manual* generally result in fewer than 50 peak hour vehicle trips, 200 peak hour subway/rail or bus transit rides, and 200 peak hour pedestrian trips and are considered unlikely to result in significant adverse transportation impacts.

While the specific location of each Prototypical Analysis Site is unknown, for conservative analysis purposes, all sites are assumed to be located within the CEQR Traffic Zone with the lowest thresholds that could trigger the potential for significant impacts (CEQR Traffic Zone 5).

The density-dependent incremental development thresholds that would require further analysis in Zone 5 are 100 DUs; 40,000 square feet (sf) of office space; 10,000 sf of regional retail, local retail or restaurant space; or 15,000 sf of community facility space.<sup>2</sup> If a project were to result in development densities less than the levels shown in Table 16-1 of the *CEQR Technical Manual*, further transportation analyses would not be needed because transportation impacts would be unlikely. If a proposed project were to surpass these levels, individually or cumulatively, a preliminary trip generation analysis may be needed.

**Tables 14-1a and 14-1b** compare the No-Action and With-Action scenarios for both the 1% annual and 0.2% annual chance floodplains for the 14 Prototypical Analysis Sites. The Proposed Action would result in a total incremental change of no DUs and an incremental increase of approximately 2,200 sf of commercial retail space in the 1% annual chance floodplain. In the 0.2% annual chance floodplain, the Proposed Action would result in a total incremental change of no DUs and an incremental decrease of

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<sup>1</sup> Reference should be made to Table 16-1 of the ~~2020~~2014 *CEQR Technical Manual* in conjunction with Map 16-1 (CEQR Traffic Zones) to determine whether numerical analysis is needed.

<sup>2</sup> While Table 16-1 of the ~~2020~~2014 *CEQR Technical Manual* also includes parking thresholds, these thresholds generally do not apply to accessory parking; trips associated with accessory parking spaces are generally considered to be attributed to the associated land use.

approximately 365 sf of commercial retail space. The incremental changes between both No-Action and With-Action scenarios would not exceed the CEQR thresholds for either residential DUs or commercial uses. Therefore, no further analysis is warranted and there would be no potential for significant, adverse impacts on the transportation system.

**Table 14-1a: RWCDs of Prototypical Analysis Sites in the 1% Annual Chance Floodplain**

Prototypical Analysis Site	No-Action 1%			With-Action 1%			Increment 1%		
	DU	Commercial	Parking	DU	Commercial	Parking	DU	Commercial	Parking
1	1	0	1	1	0	1	0	0	0
2	1	0	1	1	0	1	0	0	0
3	2	0	1	2	0	2	0	0	+1
4	3	0	0	3	0	2	0	0	+2
5	54	0	27	54	0	27	0	0	0
6	320	0	78	320	0	78	0	0	0
7	10	4,400	9	10	5,510	9	0	+1,110	0
8	13	1,140	0	13	1,290	0	0	+150	0
9	0	5,040	9	0	6,000	15	0	+960	+6
10	0	0	0	0	0	0	0	0	0
11	1	0	1	1	0	1	0	0	0
12	1	0	0	1	0	1	0	0	1
13	2	0	2	2	0	3	0	0	+1
14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>TOTAL</b>	<b>408</b>	<b>10,580</b>	<b>129</b>	<b>408</b>	<b>12,800</b>	<b>140</b>	<b>0</b>	<b>+2,200</b>	<b>+11</b>

Note: Site 14 illustrates the proposed modifications to waterfront regulations for open space. See **Appendix A** for more details.

**Table 14-1b: RWCDs of Prototypical Analysis Sites in the 0.2% Annual Chance Floodplain**

Prototypical Analysis Site	No-Action 0.2%			With-Action 0.2%			Increment 0.2%		
	DU	Commercial	Parking	DU	Commercial	Parking	DU	Commercial	Parking
1	1	0	1	1	0	1	0	0	0
2	1	0	1	1	0	1	0	0	0
3	2	0	1	2	0	1	0	0	0
4	3	0	0	3	0	2	0	0	+2
5	54	0	27	54	0	27	0	0	0
6	320	0	78	320	0	78	0	0	0
7	10	7,560	9	10	6,085	9	0	-1,475	0
8	13	1,140	0	13	1,290	0	0	+150	0
9	0	5,040	9	0	6,000	15	0	+960	+6
10	0	0	0	0	0	0	0	0	0
11	1	0	1	1	0	1	0	0	0
12	1	0	0	1	0	1	0	0	+1
13	2	0	2	2	0	3	0	0	+1
14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>TOTAL</b>	<b>408</b>	<b>13,740</b>	<b>129</b>	<b>408</b>	<b>13,375</b>	<b>139</b>	<b>0</b>	<b>-365</b>	<b>+10</b>

Note: Site 14 illustrates the proposed modifications to waterfront regulations for open space. See **Appendix A** for more details.

## D. CLUSTERS/CUMULATIVE ANALYSIS

Any vehicular, transit, or pedestrian trips induced by the Proposed Action generally would be concentrated adjacent to individual Prototypical Analysis Sites, and these trips generally would disperse quickly into smaller increments as the distance from the site increases. For traffic or pedestrian volumes associated with more than one development site to superimpose completely on another, any potential development clustering would have to occur on the same block front. As the distance between potential developments increases, the cumulative effects of project-generated traffic and pedestrians volumes would decrease.

These sites would be distributed across areas throughout the city's 1% annual and 0.2% annual chance floodplains. Therefore, it is unlikely that multiple developments would occur on the same block front and it is unlikely that the potential for development sites to cluster together would alter the conclusions of the transportation screening analysis presented above.

## E. CONCLUSIONS

As shown in **Tables 14-1a** and **14-1b**, incremental development at the Prototypical Analysis Sites would not exceed the minimum development densities for DUs and commercial space provided in Table 16-1 of the ~~2020~~<sup>2014</sup> *CEQR Technical Manual*. The Proposed Action is expected to result in fewer than 50 peak hour vehicle trips, 200 peak hour subway/rail or bus transit riders, and 200 peak hour pedestrian trips. Therefore, further analysis is not warranted, and the Proposed Action would not result in significant, adverse transportation impacts.