A. INTRODUCTION

This chapter assesses the Proposed Action and resultant proposed development's effects on the socioeconomic character of the area within and surrounding the project site in the Astoria, Queens. As described in the *City Environmental Quality Review* (CEQR) *Technical Manual*, the socioeconomic character of an area includes its population, housing, and economic activities. Socioeconomic changes may occur when a project directly or indirectly affects any of these elements. Although some socioeconomic changes may not result in environmental impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area.

The Proposed Action would result in the development of 1,689 housing units of which a minimum of 295 dwelling units would be affordable, approximately 109,470 gross square feet (gsf) of local retail space, including an approximately 25,000 gsf supermarket, a site for an elementary school with approximately 456 seats (serving grades K-5), and accessory parking and publicly accessible open space uses (the "proposed project"). In accordance with *CEQR Technical Manual* guidelines, this analysis considers whether development of these uses could result in significant adverse socioeconomic impacts as a result of: (1) direct displacement of residential population from the project site; (2) indirect displacement of residential population in a ½-mile study area; (3) direct displacement of existing businesses from the project site; (4) indirect displacement of businesses in a ½-mile study area; and (5) adverse effects on specific industries.

B. PRINCIPAL CONCLUSIONS

This analysis finds that the Proposed Action and resultant proposed project would not result in significant adverse socioeconomic impacts. The following summarizes the conclusions for each of the five CEQR areas of socioeconomic concern.

Direct Residential Displacement

The Proposed Action would not directly displace any residents, as the project site does not contain any existing residential units. Therefore, the Proposed Action would not result in significant adverse impacts due to direct residential displacement.

Indirect Residential Displacement

A detailed analysis finds that the Proposed Action would not result in significant adverse impacts due to indirect residential displacement. According to the *CEQR Technical Manual*, indirect displacement of a residential population most often occurs when an action increases property values, and thus rents, making it difficult for some of the existing residents to continue to afford to live in the area. The Proposed Action and resultant proposed development would introduce approximately 1,689 residential units (net of 1,523 units) to the study area, of which 295 would be developed as affordable housing. While the Proposed Action would add a substantial amount of residential development to the project site, this would be in

keeping with existing trends toward higher-density residential development in northwestern Queens. Compared with the existing study area population, the population that would be introduced by the Proposed Action could include a larger proportion of households with higher incomes.

A detailed analysis of indirect residential displacement has determined that the study area may contain as many as 2,487 residents (in eight census tracts 69, 71, 73, 79, 81, 83, 87, and 91) in privately-held units unprotected by rent control, rent stabilization, or other government regulations restricting rent that are considered to be "at risk" of indirect residential displacement if their rents were to increase. While the Proposed Action could result in some upward pressure on rents within the study area, it is not expected to result in significant indirect residential displacement of the study area's potentially vulnerable population.

The following describes a number of reasons why indirect residential displacement of the population identified as at risk would be unlikely to take place in the future as a result of the Proposed Action. First, the project site, located along the waterfront on the Halletts Point peninsula, is geographically separated from the identified at risk population, limiting its potential to influence residential market trends in those areas. Many of the study area's potentially vulnerable residents live in housing stock that differs from newer residential uses. Inland portions of the study areas contain older, smaller residential buildings with few amenities that do not cater to the incoming, more affluent residential population who is primarily seeking newly-constructed condominiums, many with waterfront views. In addition, there is little opportunity for large-scale development opportunity in these inland areas; unlike many other portions of the study area, much of the inland portion of the study area was not rezoned to allow higher floor area ratio (FAR) in the 2010 Astoria Rezoning and remains in lower-density, contextual residential districts. Furthermore, by adding new housing units, the proposed project could serve to relieve rather than increase market pressure in the study area. Also, there is already a very strong existing trend in the study area toward residential development and an influx of a more affluent population that is anticipated to accelerate in the future without the Proposed Action. The construction of new residential buildings in Astoria has accelerated noticeably in recent years, and there is a substantial amount of new market-rate housing planned for the study area by 2023, including the approved Halletts Point development, which will add 2,644 dwelling units. Moreover, the proposed project would add affordable housing to the study area, which would help ensure housing opportunities for lower-income residents and would maintain a more diverse demographic composition within the study area.

Direct Business and Institutional Displacement

A screening-level assessment concluded that the Proposed Action would not result in significant adverse impacts due to direct business displacement. There are 14 existing businesses located on the project site that would be directly displaced by the Proposed Action, including: three manufacturing uses; seven construction-related firms; two transportation-related firms; one wholesale establishment; and one retail establishment. While these potentially displaced businesses are valuable to the City's economy, supporting an estimated 80 jobs, the products and services they provide are not uniquely dependent on their location on the project site, nor are the businesses the subject of regulations or publicly adopted plans aimed at preserving, enhancing, or otherwise protecting them in their current location. The employment associated with the potentially displaced businesses does not constitute a substantial portion of the ½-mile study area's employment base, and is below the *CEQR Technical Manual's* 100-employee threshold warranting a preliminary assessment of direct business displacement. Further, these businesses are occupying Applicant-controlled sites and they have short-term leases with termination clauses in anticipation of site redevelopment should the requested discretionary land use actions be approved.

Indirect Business and Institutional Displacement

A preliminary assessment finds that the Proposed Action would not result in significant adverse impacts due to indirect business displacement. While the proposed project's uses would be a substantial addition to the ½-mile study area, they would not be new types of uses within the study area, and therefore would not introduce a new trend that could alter economic patterns. The study area is already experiencing a trend toward increased residential development, adding to the demand for neighborhood retail and services. The housing inventory in Astoria and Long Island City increased by approximately 4.8 percent with the addition of more than 3,600 units between 2002 and 2008, and a substantial amount of new housing (approximately 3,750 new housing units) is anticipated to be added to the ½-mile study area absent the Proposed Action by 2023. Despite these increases in residential development, there has not been a corresponding increase in retail goods and services. According to the U.S. Census Bureau's County Business Patterns, the number of retail establishments has only increased by approximately three percent since 2000. In the future without the Proposed Action, approximately 103,727 gsf of retail would be added to the ½-mile study area. The proposed project's retail would serve existing residents, and would accommodate future consumer demand introduced by residents of planned developments and the proposed development. Existing industrial uses are expected to continue to experience increased rents and indirect displacement pressures due to this trend irrespective of the Proposed Action. The uses, residents, and workers introduced by the Proposed Action are not expected to place upward pressure on commercial office rents in the study area.

Adverse Effects on Specific Industries

A screening-level assessment concluded that the Proposed Action would not result in any significant adverse impacts due to effects on specific industries. As noted above, the 14 businesses that could be directly displaced by the Proposed Action are on short-term leases with termination clauses that provide a six month notice provision in anticipation of future site redevelopment and would be expected to relocate as a result of the Proposed Action. These businesses represent a small portion of the businesses within their industries, and the goods and services provided by these businesses can be found elsewhere in the City. Similarly, any potential indirect business displacement that could occur as a result of the proposed project would be limited, and would not affect conditions within any City industries.

C. METHODOLOGY

Under CEQR, the socioeconomic character of an area is defined by its population, housing, and economic activities. The assessment of socioeconomic conditions usually distinguishes between the socioeconomic conditions of an area's residents and businesses. However, proposed action(s) affect either or both of these segments in the same ways: they may directly displace residents or businesses, or they may alter one or more of the underlying forces that shape socioeconomic conditions in an area and thus may cause indirect displacement of residents or businesses. The objective of the CEQR analysis is to disclose whether any changes created by the Proposed Action would have a significant impact compared with what would happen in the future without the Proposed Action (i.e., the No-Action condition).

Direct displacement is defined as the involuntary displacement of residents, businesses, or institutions from the actual site of (or sites directly affected by) a proposed project. Examples include proposed redevelopment of a currently occupied site for new uses or structures, or a proposed easement or right-of-way that would take a portion of a parcel and thus render it unfit for its current use. Since the occupants of a particular site are usually known, the disclosure of direct displacement focuses on specific businesses and employment and an identifiable number of residents and workers.

Indirect or secondary displacement is defined as the involuntary displacement of residents, businesses, or employees in an area adjacent to, or close to, a project site that results from changes in socioeconomic conditions created by a proposed project. Examples include rising rents in an area that result from a new concentration of higher-income housing introduced by a project, which ultimately could make existing housing unaffordable to lower income residents; a similar turnover of industrial to higher-rent commercial tenancies induced by the introduction of a successful office project in an area; or the flight from a neighborhood that can occur if a proposed project creates conditions that break down the community (such as a highway dividing the area). Unlike direct displacement, the exact occupants to be indirectly displaced are not known. Therefore, an assessment of indirect displacement usually identifies the size and type of groups of residents, businesses, or employees potentially affected.

Even if projects do not directly or indirectly displace businesses, they may affect the operation and viability of a major industry or commercial operation in the City. An example would be new regulations that prohibit or restrict the use of certain processes that are critical to certain industries. In these cases, the CEQR review process may involve the assessment of the economic impacts of the project on the specific industry in question.

Determining Whether a Socioeconomic Assessment is Appropriate

According to the *CEQR Technical Manual*, a socioeconomic assessment should be conducted if a project may be reasonably expected to create socioeconomic changes in the area affected by the project that would not be expected to occur in the absence of the project. The following screening assessment considers threshold circumstances identified in the *CEQR Technical Manual* and enumerated below that can lead to socioeconomic changes warranting further assessment.

1. ***Direct Residential Displacement: Would the project directly displace residential population to the extent that the socioeconomic character of the neighborhood would be substantially altered? Displacement of fewer than 500 residents would not typically be expected to alter the socioeconomic character of a neighborhood.***

   The Proposed Action and resultant proposed project would not directly displace any residents, as the project site does not contain any existing residential units. Therefore an assessment of direct residential displacement is unwarranted.

2. ***Direct Business Displacement: Would the project directly displace more than 100 employees? If so, assessments of direct business displacement and indirect business displacement are appropriate.***

   The *CEQR Technical Manual* defines direct business displacement as the involuntary displacement of businesses from the site of (or a site directly affected by) a proposed action. As described in detail in Chapter 2, "Land Use, Zoning, and Public Policy," the upland portion of the project site, located to the south of 26th Avenue, would be redeveloped on an as-of-right basis in the future without the Proposed Action. Therefore, businesses potentially displaced by redevelopment in the No-Action condition are not included in the count.

   There would be some direct displacement attributable to the Proposed Action; however, the amount of employment associated with that displacement would not exceed the 100-employee *CEQR Technical Manual* threshold warranting a preliminary assessment. The Proposed Action and resultant proposed project would directly displace 14 business establishments that employ approximately 80 people, and represent approximately 1.5 percent of the total study area employment (refer to Table 3-5). Moreover, these businesses are occupying Applicant-controlled sites and they have short-term

leases with termination clauses in anticipation of site redevelopment should the requested discretionary land use actions be approved.

3. Direct Business Displacement: Would the project directly displace a business whose products or services are uniquely dependent on its location, are the subject of policies or plans aimed at its preservation, or serve a population uniquely dependent on its services in its present location? If so, an assessment of direct business displacement is warranted.

The Proposed Action and resultant proposed project would directly displace 14 businesses occupying the project site including three manufacturing firms, seven construction-related firms (all construction contractors), two transportation-related firms, one wholesale establishment, and one retail establishment—all of which, as noted above, are on short-term leases with termination clauses in anticipation of the site's redevelopment (refer to Table 3-1). While these potentially displaced businesses are valuable to the City's economy, the products and services they provide are not uniquely dependent on their location on the project site, nor are the businesses the subject of regulations or publicly adopted plans aimed at preserving, enhancing, or otherwise protecting them in their current location. Therefore, further assessment of direct business displacement is unwarranted.

Table 3-1: Directly Displaced Business Establishments and Associated Employment by Industry Sector, in the Future with the Proposed Action

Business Name	Address	NAICS Type of Business	Estimated Employees
BSMC Corp	4-05 26th Avenue	23- Construction	2
BYA Contracting	4-05 26th Avenue	23- Construction	1
Midtown Corp.	4-05 26th Avenue	23- Construction	2
QED Mech Construction Corp.	4-05 26th Avenue	23- Construction	2
Northeast Builders of NY	4-05 26th Avenue	23- Construction	1
ABI Electronics	4-05 26th Avenue	45- Retail Trade	3
Uzi Duz It Inc.	4-05 26th Avenue	48- Transportation	4
UL Wholesale Lighting Fixtures	4-05 26th Avenue	33- Manufacturing	20
Exterior Wall Supply	4-11 26th Avenue	42- Wholesale Trade	5
Sound Maintenance	4-11 26th Avenue	23- Construction	4
Ivy Square Woodworking	4-11 26th Avenue	33- Manufacturing	10
Rainbow Transit Inc.	4-11 26th Avenue	48- Transportation	8
U2 Rigging & Hoisting Inc.	801 26th Avenue	23- Construction	9
Pleko East NC	851 6th Avenue	33- Manufacturing	9
		Total	***80***

Source: 2030 Astoria Developers, LLC. and PHA site surveys

4. Indirect Displacement due to Increased Rents: Would the project result in substantial new development that is markedly different from existing uses, development, and activities within the neighborhood? Residential development of 200 units or less or commercial development of 200,000 square feet (sf) or less would typically not result in significant socioeconomic impacts. For projects exceeding these thresholds, assessments of indirect residential displacement and indirect business displacement are appropriate.

The Proposed Action and resultant proposed project would introduce residential uses in excess of 200 units; therefore, an assessment of potential indirect displacement is warranted.

5. Indirect Business Displacement due to Retail Market Saturation: Would the project result in a total of 200,000 sf or more of retail on a single development site or 200,000 sf or more of region-serving retail across multiple sites? This type of development may have the potential to draw a substantial amount of sales from existing businesses within the study area, resulting in indirect business displacement due to market saturation.

The Proposed Action and resultant proposed development would introduce approximately 109,470 gsf of neighborhood retail uses, which is below the 200,000-square-foot CEQR threshold warranting assessment of indirect business displacement due to market saturation.

6. Adverse Effects on Specific Industries: Is the project expected to affect conditions within a specific industry? This could affect socioeconomic conditions if a substantial number of workers or residents depend on the goods or services provided by the affected businesses, or if the project would result in the loss or substantial diminishment of a particularly important product or service within the city.

The 14 businesses that would be directly displaced by the Proposed Action and resultant proposed development do not represent a critical mass of businesses within any industry or category of business, and the number of employees directly displaced would not be considered significant under CEQR. In addition, all of the businesses that would be directly displaced by the Proposed Action are on short-term leases with termination clauses that provide a six month notice provision in anticipation of future site redevelopment, and would be expected to relocate as a result of the Proposed Action. Although these businesses are valuable individually and collectively to the City's economy, the goods and services they provide can be found elsewhere in the City. Therefore, a substantial number of workers or residents do not depend on the goods and services provided by the affected businesses.

Based on the screening assessment presented above, the Proposed Action warrants an analysis of indirect residential displacement and indirect business displacement due to increased rents.

Analysis Format

Based on *CEQR Technical Manual* guidelines, the analyses of indirect residential displacement and indirect businesses displacement due to increased rents begin with a preliminary assessment. The objective of the preliminary assessment is to learn enough about the potential effects of the Proposed Action and resultant proposed project to either rule out the possibility of significant adverse impacts or determine that a more detailed analysis is required to fully determine the extent of the impacts. A detailed analysis, when required, is framed in the context of existing conditions and evaluates the changes to those conditions in the With-Action condition as compared with the changes that would be expected in the No-Action condition. In conjunction with the land use task, specific development projects expected to occur by the Build Year of the proposed project are identified. These projects are described in terms of the possible changes to socioeconomic conditions that they would cause, including potential population increases, changes in income characteristics of the affected area, changes to the rents or sale prices of residential units, new commercial or industrial uses, or changes to employment or retail sales. Those conditions are then compared with the future with the Proposed Action to determine the potential for significant adverse impacts.

A preliminary assessment was sufficient to conclude that the Proposed Action and resultant proposed development would not result in any significant adverse socioeconomic impacts due to indirect business displacement. For indirect residential displacement, a detailed analysis was required in order to rule out the potential for significant adverse impacts.

Study Area Definition

According to the *CEQR Technical Manual*, the socioeconomic study area typically reflects the land use study area, and should reflect the scale of the project relative to the area's population. The *CEQR Technical Manual* explains that for projects that would increase the population by more than 5 percent

compared with the population expected to reside in the ¼-mile study area in the future without the Proposed Action, a ½-mile study area is appropriate. As detailed in Chapter 1, "Project Description," the proposed project would result in a net increase of 1,523 new residential units, which would increase the population of the ¼-mile study area by more than 5 percent. Therefore, the study area for the socioeconomic assessment of indirect residential and business displacement approximates a ½-mile perimeter around the project site. Because the analysis examines population and income data, the ½-mile area was modified to reflect census tract boundaries. The ½-mile socioeconomic study area for indirect displacement includes census tracts 69, 71, 73, 79, 81, 83, 87 and 91 (see Figure 3-1).[1]

Data Sources

Data related to residential conditions, including population, housing, and income data, were obtained from the U.S. Census Bureau's 2000 and 2010 Census and the 2007-2011 American Community Survey (ACS). Land use and parcel data were collected from the New York City Department of Finance's (NYCDOF's) Real Property Assessment Data (RPAD) 2012 database. Due to data collections problems incurred by the U.S. Census Bureau, 2010 Census data may present information that is not fully representative of the ½-mile study area. In July 2010, the U.S. Census Bureau, in cooperation with the Department of City Planning (DCP), had estimated New York City's population to be around 8.4 million. The 2010 Census enumerated the City's population at 8,175,133, well short of the July 2010 estimate. The City believes this discrepancy is indicative of an undercount of the City's population. This was partly due to the 2010 Census reporting an increase of 82,000 vacant units in New York City, or a 46 percent rise since 2000. A disproportionate share of this increase was found in two local census offices (LCOs) covering southern Brooklyn and northwest Queens, which encompasses the ½-mile study area. Both southern Brooklyn and northwest Queens are vibrant sections of the City. The huge concentration of vacant units in these areas cannot be explained by new construction or foreclosures; nor is it consistent with other survey and administrative data. As a result, information about existing conditions in the study area have been supplemented by conversations with real estate brokers and community leaders. Additional real estate data were obtained from Prudential Douglas Elliman Real Estate, Modern Spaces, Streeteasy.com, and zumper.com.

Employment data on specific businesses was estimated based on field surveys, information provided by the Applicant, 2030 Astoria Developers, LLC, and secondary sources (such as Manta.com). For the indirect business displacement analysis, employment data for the study area was obtained from ESRI, a commercial data provider. Employment data for Queens and New York City were obtained from the New York State Department of Labor (NYSDOL). Historic data on the number of firms in the study area was obtained from U.S. Census Bureau's County Business Patterns, an annual series that provides economic data by industries for zip codes.[2]

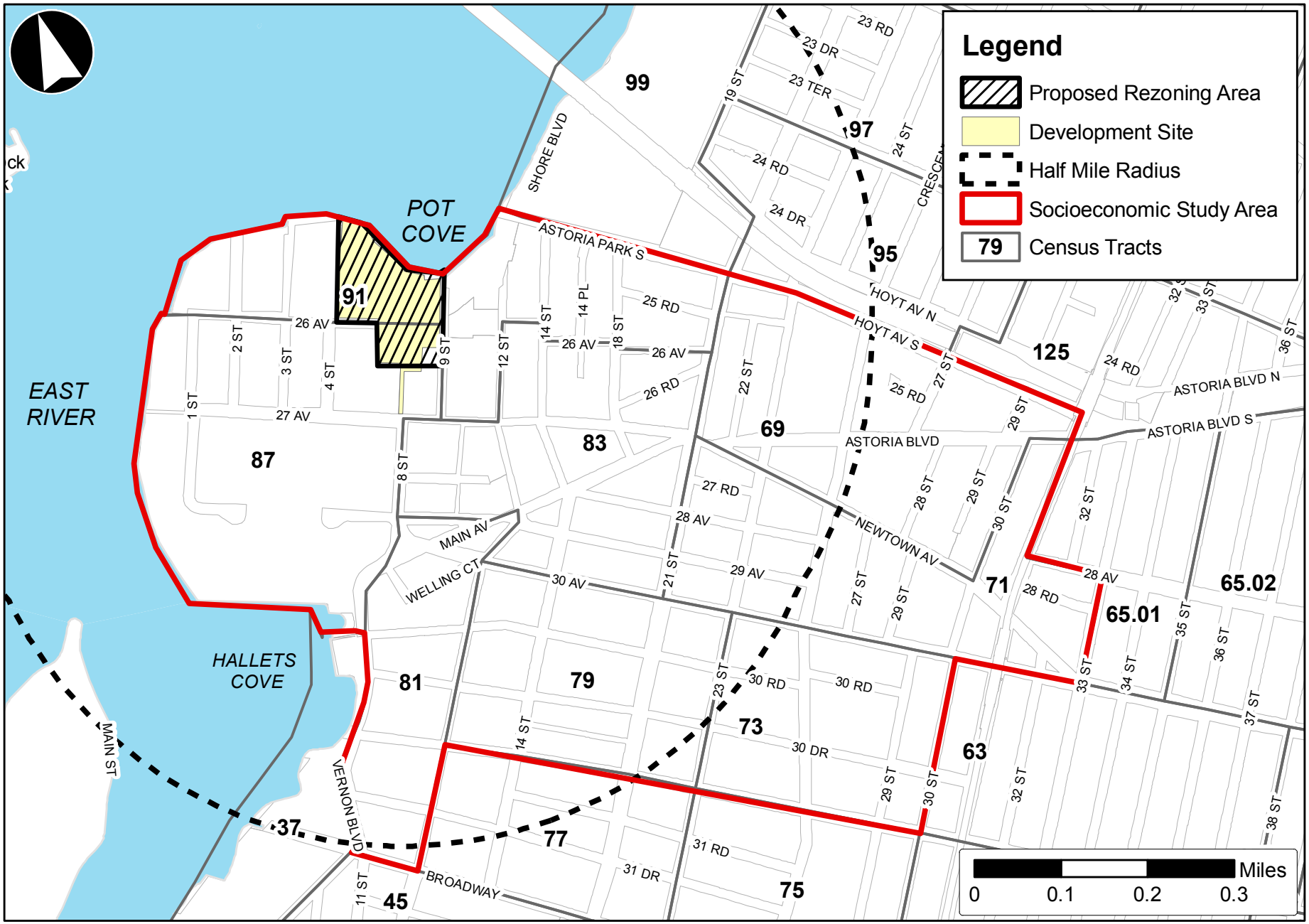
D. PRELIMINARY ASSESSMENT

Indirect Residential Displacement

Indirect residential displacement usually results from substantial new development that is markedly different from existing uses and activity in an area, which causes increased property values in the area.

[1] The ½-mile study area comprises the Queens Old Astoria (QN71) Neighborhood Tabulation Area (NTA). NTAs are aggregations of census tracts that are subsets of New York City's 55 Public Use Microdata Areas (PUMAs), and may not definitively represent neighborhoods. NTAs were created to project populations at a small area level, from 2000 to 2030 for PlaNYC, the long-term sustainability plan for New York City.

[2] Zip code 11102 includes much of Astoria and Long Island City and encompasses the ½-mile study area.



Astoria Cove

Figure 3-1

Socioeconomic Conditions Study Area (Census Tracts Within the 1/2-Mile Radius)

Increased property values can lead to increased rents, which can make it difficult for some existing residents to afford their homes. The indirect residential displacement assessment aims to determine whether the Proposed Action and subsequent development would either introduce a trend or accelerate an existing trend of changing real estate market conditions that may have the potential to displace a vulnerable residential population and substantially change the socioeconomic character of the neighborhood. This preliminary assessment follows the step-by-step preliminary assessment guidelines described in Section 322.1 of the *CEQR Technical Manual.*

Step 1: Determine if the proposed project would add new population with higher average incomes compared with the average incomes of the existing populations and any new population expected to reside in the study area without the project.

The socioeconomic study area comprises the northwestern portion of Astoria, Queens, including the neighborhood's transitioning industrial waterfront near Pot and Halletts Coves, as well as inland residential areas roughly bounded by Astoria Park South/Hoyt Avenue South to the north and 31st Street to the south. The study area includes the 32-acre Astoria Houses Campus, a 1,103-unit New York City Housing Authority (NYCHA) public housing development, which is bordered by 27th Avenue, 8th Street, Hallett's Cove, and the East River. The concentration of low-income households in the Astoria Houses Campus contributes to the relatively low mean household income for the ½-mile study area as compared with all of Queens and New York City as a whole. As shown in Table 3-2, between 2007 and 2011 the average household income for the ½-mile study area was $62,854, lower than the median in both Queens ($74,879) and New York City ($83,374).

Table 3-2: Comparison of Average Household Income[1] in the Study Area, Borough of Queens, and New York City

	1999	2007-2011[3]	Numeric Change	Percent Change
½-Mile Study Area[2]	$64,468	$62,854	- $1,614	-2.6%
Queens	$78,431	$74,879	- $3,552	- 4.5%
New York City	$84,773	$83,374	- $1,399	- 1.6%

Notes:
[1] Household income is presented in inflation-adjusted 2013 dollars using an average of the U.S. Department of Labor's September 2013 Consumer Price Index for the "New York-Northern New Jersey-Long Island Area."
[2] Mean household income for the study area was estimated based on a weighted average of the average household income for the 8 census tracts included in the ½-mile study area (comprises NTA QN71).
[3] The ACS collects throughout the period on an on-going, monthly basis and requests the respondent's income over the "past 12 months." The 2007-2011 ACS data reflect incomes over 2007 and 2011, while the 2000 Census data reflects income over the prior calendar year (i.e., 1999).
Sources: U.S. Department of Commerce, Bureau of the Census, 2000 Census, Summary File 3; 2007-2011 American Community Survey; U.S. Department of Labor Bureau of Labor Statistics.

Similar to Queens and New York City as whole, the average household income in the study area declined between 1999 and 2007-2011. As shown in Table 3-2, the average household income level in the study area decreased by approximately 2.6 percent from 1999 to 2007-2011; a slower rate than that of the overall borough, which declined by 4.5 percent. The average household income level in New York City as a whole declined by approximately 1.6 percent.

The Proposed Action and resultant proposed project would result in the development of 1,689 residential units. Of the 1,689 residential units, a minimum of 295 units (approximately 20 percent) would be developed as affordable housing using the incentives of the Inclusionary Housing Program, and would be occupied by a range of low-to middle-income households. It is expected that the proposed project would give preference for the sale or rental of 50 percent of the affordable units to current residents of Queens Community District (CD) 1. Thus the proposed project would provide opportunities for long-term

residents to remain in the area and, in this respect, would help to maintain a more diverse demographic composition within the study area.

The remaining 1,394 units would be market rate and are expected to be priced on the high end of the market for the study area. The proposed development's market-rate residents would therefore have incomes on the high end of the ranges presented above, which are well above the study area's 2007-2011 average household income of $62,854.

Step 2: Determine if the project's increase in population is large enough relative to the size of the population expected to reside in the study area without the project to affect real estate market conditions in the study area.

According to the *CEQR Technical Manual*, a population increase of less than 5 percent of the total study area population would generally not be expected to change real estate market conditions; however, a population increase of greater than 10 percent of the study area would warrant a detailed analysis.

According to census data, the ½-mile study area population was 27,814 residents in 2010 (see Table 3-3). The study area experienced a 3.6 percent decline in population between 2000 and 2010, as compared to Queens and New York City, which experienced increases of 0.1 percent and 2.1 percent, respectively. As described previously, the study area comprises much of northwest Queens, which along with southern Brooklyn, had been the subject of the City's formal challenge to the 2010 Census Count Question Resolution Program (CQR) disputing the 2010 population count for the City. The City identified a disproportionate share of vacant units in two LCOs covering southern Brooklyn and northwest Queens, both vibrant sections of the city. The vast concentration of vacant units in these areas cannot be explained by new construction or foreclosures; nor is it consistent with other survey and administrative data. The City contends that these erroneous vacancies have resulted in an undercount of the population in these areas, their respective boroughs and in New York City as a whole. Furthermore, community leaders, such as Queens Community Board 1, contend that the residential population of Astoria is growing and that the 2010 Census does not accurately reflect the residential population of the area.

Table 3-3: 2000 and 2010 Population

	2000	2010[1]	Percent Change (%)
½-Mile Study Area	28,847	27,814	- 3.67
Queens	2,229,379	2,230,722	0.1
New York City	8,008,278	8,175,133	2.1

Notes:
[1]The study area comprises much of northwest Queens, which had been the subject of the City's formal challenge to the 2010 Census CQR Program disputing the 2010 population count for the City. The City contends that erroneous vacancies in areas, such as northwest Queens and southern Brooklyn, have resulted in an undercount of the population in New York City as a whole.
Sources: U.S. Department of Commerce, Bureau of the Census, 2000 Census, Summary File 1; and 2010 Census, Summary File 1.

Assuming an average household size of 2.34 persons (the average household size in Queens CD 1 in the 2010 Census) and 100 percent occupancy, the proposed project's 1,689 residential units would introduce 3,952 new residents to the study area. As shown in Table 3-4, when compared with the population expected to reside in the study area in the No-Action condition, the proposed project would result in a 9.7 percent population increase in the ½-mile study area. According to *CEQR Technical Manual* methodology, a population increase greater than 10 percent warrants a detailed analysis to determine a proposed action's potential for significant adverse impacts due to indirect residential displacement. As this percentage increase approaches the 10 percent CEQR threshold, a detailed analysis has been

conducted to determine the Proposed Action's potential for significant adverse impacts due to indirect displacement and is presented in Section D, below.

Table 3-4: Estimated Residential Population in the ½-Mile Study Area: No-Action and With Action Conditions

	2010	2023 No-Action Condition	2023 With-Action Condition[1]	Percent Change (No-Action to With Action)
½-Mile Study Area	27,814	36,669	40,233	9.7%

Notes:

[1] Population estimates for known proposed and planned developments in the future No-Action condition assume an average household size of 2.34 persons and 100 percent occupancy, the average household size for Queens Community District 1 is based on 2010 Census data. Refer to Chapter 2, "Land Use, Zoning, and Public Policy" and Chapter 5, "Open Space" for a description of projects that are anticipated to be developed within the ½- mile study area in the future without the Proposed Action.

Sources: U.S. Department of Commerce, Bureau of the Census, 2010 Census; and New York City Department of City Planning

Indirect Business and Institutional Displacement

The preliminary assessment of indirect business displacement focuses on whether the Proposed Action and subsequent development could increase commercial property values and rents within the ½-mile study area so that it would become difficult for some categories of businesses to remain in the area. The following three questions (shown in italics below) address the potential for significant adverse indirect business displacement impacts.

Would the Proposed Action and subsequent development introduce a trend that increases commercial property values, making it difficult for businesses essential to the local economy—or a business that is the subject of regulations or publicly adopted plans to preserve, enhance, or otherwise protect it—to remain in the study area?

The Proposed Action would facilitate the construction of 1,689 residential units and approximately 109,470 gsf of local retail space, a site for an elementary school with approximately 456 seats, accessory parking, and publicly accessible open space. The residential uses would include a combination of affordable (a minimum of 295 affordable units) and market-rate units, while the retail uses are expected to include neighborhood-oriented goods and services, including an approximately 25,000 gsf supermarket.

The project's residential population would be a substantial addition to the study area's consumer base, but it would not introduce a trend that would alter existing economic patterns. The ½-mile study area already has a well-established residential market, and therefore, the Proposed Action would not be introducing any new activities to the study area. As detailed in Chapter 2, "Land Use, Zoning, and Public Policy," and in Section D of this chapter, "Detailed Analysis of Indirect Residential Displacement," there is already a trend of increasing residential development and consumer demand in the study area. This trend will continue in the future without the Proposed Action (the No-Action condition), with 3,750 new housing units added to the ½-mile study area by 2023, for an estimated total of 8,855 new residents.[3] While the proposed project would contribute to the trend of increased residential development, the local retail introduced by the proposed project would satisfy a portion of the study area's increasing demand for neighborhood goods and services, and in this respect could serve to alleviate upward rent pressures on commercial and industrial properties in the surrounding area. Further, despite the significant increase in residential development within the study area, there has not been a corresponding increase in retail goods and services. According to U.S. Census Bureau's County Business Patterns, the number of retail

[3] The anticipated No-Action developments also include 80 community facility beds resulting in the addition of 80 residents.

establishments within zip code 11102, which comprises much of Astoria and Long Island City and encompasses the ½-mile study area, has only increased by approximately three percent since 2000. In the future without the Proposed Action, approximately 103,727 gsf of retail would be added to the ½-mile study area.

Commercial uses are common throughout the study area. Astoria's main commercial corridors are 30th Avenue, 31st and Steinway Streets, Ditmars and Astoria Boulevards, and Broadway, which offer regional shopping, nightlife and dining destinations. As shown in Table 3-5, the study area contains an estimated 364 jobs in the retail trade sector.

Table 3-5: 2012 Estimated Employees in the ½-Mile Study Area, Queens, and New York City

Type of Job by NAICS Category	Study Area		Queens		New York City	
	Employees	Percent (%)	Employees	Percent (%)	Employees	Percent (%)
Agriculture, forestry, fishing & hunting	8	0.2	33	0.0	237	0.0
Mining	0	0.0	0	0.0	21	0.0
Utilities	0	0.0	0	0.0	5,060	0.1
Construction	549	10.5	41,522	8.0	111,839	3.0
Manufacturing	309	5.9	21,925	4.2	75,978	2.0
Wholesale trade	289	5.5	22,222	4.3	131,328	3.5
Retail trade	364	7.0	58,818	11.4	324,077	8.7
Transportation & warehousing	380	7.3	59,372	11.5	103,909	2.8
Information	62	1.2	8,514	1.6	151,559	4.3
Finance & insurance	42	0.8	16,815	3.2	313,396	8.4
Real estate & rental & leasing	169	3.2	13,942	2.7	117,134	3.1
Professional, scientific, & technical services	254	4.9	13,133	2.5	339,708	9.1
Management of companies & enterprises	6	0.1	2,007	0.4	63,073	1.7
Administrative & support & waste management & remediation services	238	4.6	29,820	5.8	191,292	5.1
Educational service	637	12.2	15,308	3.0	153,644	4.1
Health care & social assistance	1,230	23.5	108,035	20.9	592,512	15.8
Arts, entertainment, & recreation	75	1.4	6,070	1.2	71,741	1.9
Accommodation & food services	157	3.0	39,639	7.7	288,741	7.7
Other services (except public administration)	342	6.5	23,481	4.5	152,814	4.1
Public Administration	114	2.2	34,014	6.6	531,268	14.2
Unclassified establishments	0	0.0	2,732	0.5	11,633	0.3
Totals	***5,225***	***100.0***	***517,402***	***100.0***	***3,740,964***	***100.0***

Sources: Study area employment data obtained from ESRI Business Analyst and borough and New York City data obtained from the New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 3-5 presents employment data for the ½-mile study area, Queens, and New York City, and serves as an indicator of economic activities. As of 2012, there were an estimated 5,225 employees in the ½-mile study area. These employees represented approximately 1.0 percent of Queen's employment, and less than 0.14 percent of the employment in all of New York City. As shown in Table 3-5, the health care and social assistance sector accounted for the largest percentage of employment in the study area (23.5 percent), reflecting the presence of the Goodwill Industries headquarters along 27th Avenue, Mount Sinai Queens, a community hospital with 235 beds at 25-10 30th Avenue, and the 280-bed New York Center for Rehabilitation and Nursing at 26-13 21st Street. Educational services and construction accounted for the next highest proportions of employment (12.2 and 10.5 percent, respectively). There were a larger percentage of study area employees within these three industry sectors than in Queens or New York City as a whole.

The study area's industrial sectors—including construction, manufacturing, wholesale trade, and transportation and warehousing—collectively include an estimated 285 businesses employing approximately 1,527 workers. This employment represents approximately 29 percent of the study area

total employment, a slightly higher percent as compared with Queens (28 percent) and New York City (11 percent), and reflects the study area's historic roots of low-density industrial uses along the waterfront. The northeastern section of the Halletts Point peninsula, which includes the project site, primarily contains low-rise industrial buildings with light-manufacturing uses and open storage yards that extend to the waterfront at Pot Cove. The largest tract of vacant land in the study area is also located along the waterfront in the rear of Hellgate Studios and comprises approximately 1.8 acres. However, as described in Chapter 2, "Land Use, Zoning, and Public Policy," this area has been transitioning to more mixed-use and there are some residential uses interspersed, including a cluster of recent residential development on the block bounded by 26th and 27th Avenues and 2nd and 3rd Streets under existing conditions.

As described in Section B, the project site includes seven underutilized low-rise warehousing and industrial buildings and open storage yards that are partially vacant and accommodate 15 businesses.[4] Light-manufacturing uses are predominantly construction and building suppliers, including specialized contractors, in this area. Additional warehousing and industrial buildings as well as bus/vehicle storage lots are also located in this area.

Other warehouses, light industrial uses, and storage yards are located on the upland blocks between 1st and 4th Streets, and include a custom cabinet-maker; a tile and marble contractor; plumbing heating and air-conditioning contractors; and an ambulette service provider. Concentrations of industrial and light-manufacturing uses are also found along Main Avenue/Astoria Boulevard and 27th Avenue east of 14th Street (including a garment manufacturer, carpet cleaner, auto service stations, and farm/garden equipment and tile wholesalers on 14th Street near Astoria Boulevard), and along Vernon Boulevard, 12th Street, and 14th Street between 30th Road and Broadway (including electrical contractors, a signage manufacturer, metal stamping, and a wholesale grocer). Most of the industrial businesses in the area have 12 or fewer employees and serve a local trade area that includes surrounding neighborhoods in Queens. However, there are several larger industrial businesses, such as garment and hardware manufacturers, that employee over 50 workers and that distribute product well beyond the local trade area.

As with manufacturing sectors throughout the country, since the 1970s there has been a decline of industrial uses in Queens and within the study area. Table 3-6 shows the relatively steady decline in the industrial sectors within zip code 11102, which comprises much of Astoria and Long Island City and encompasses the ½-mile study area, from 1998 to 2011. As shown in Table 3-6, with the exception of the transportation and warehousing sector, the number of industrial uses has decreased, most significantly for the manufacturing sector, which has declined by more than 46 percent. In 2011, there were 14 manufacturing firms located in zip code 11102, which included two retail bakeries, a perishable food manufacturer, a curtain drapery manufacturer, a women's clothing manufacturer, a sheet metal manufacturer, a candle manufacturer, four wood cabinetry manufacturers, a furniture manufacturer, and two miscellaneous manufacturers. With the exception of the women's clothing manufacturer, which employed an estimated 100 workers, most of the manufacturing firms employed less than 20 workers. In addition, a number of these remaining manufacturing firms are non-conforming uses that are inconsistent with applicable zoning district regulations.

Today, areas historically occupied by industrial uses that have become vacant or underutilized—particularly along the waterfront—are being redeveloped with residential and commercial uses that cater to the residential population. For example, the largely vacant, former industrial sites located along the 1st

[4] The project site is occupied by 15 businesses, 14 of which would be directly displaced as a result of the Proposed Action. The remaining business establishment (construction-related firm) occupies a portion of the project site located to the south of 26th Avenue, which would be redeveloped on an as-of-right basis in the future without the Proposed Action, and therefore displaced irrespective of the Proposed Action.

Avenue between roughly 26th Avenue and Astoria Boulevard, will be redeveloped as part of the approved Halletts Point mixed-use development. Halletts Point will add approximately 2.2 million gsf of residential space (2,644 dwelling units including 2,161 market-rate and 483 affordable housing units), approximately 69,000 gsf of retail (including an approximately 30,100 gsf supermarket), and approximately 1,400 parking spaces.

Table 3-6: Details for Industrial Sectors in Zip Code 11102

Industry Code and Description	Total Establishments			Percent Change (1998 to 2011)
	1998	2004	2011	
23- Construction	105	120	103	- 1.9%
31-Manufacturing	26	22	14	- 46.1%
42- Wholesale	35	36	32	- 8.6%
48- Transportation & Warehousing	19	21	28	47.4%
Total for all Sectors	***605***	***663***	***676***	***11.7%***

Source: U.S. Department of Commerce, Bureau of the Census, County Business Patterns.

In areas with increasing residential development, industrial businesses can be potentially vulnerable to indirect displacement due to increased rent, as they tend not to benefit directly from the increased consumer dollars in the area and therefore are less able to afford rent increases due to rising property values. Industrial businesses could be considered potentially vulnerable to indirect displacement, as a property owner could decide to convert an existing industrial property to retail or other commercial use. While some industrial businesses could be displaced due to upward rent pressure irrespective of the Proposed Action, there is no specific industrial business within the study area that is critical to the local economy or that is the subject of regulations or publicly adopted plans to preserve, enhance, or otherwise protect its use. In addition, upward rent pressure is already present in the study area. Recent mixed-use conversions and new residential developments, including the Sohmer Piano Factory, 11-15 Broadway (Astoria at Halletts Cove), 30-85 Vernon Boulevard, and 11-24 31st Avenue (East River Tower), as well as planned mixed-use development such as Halletts Point indicate that the western portion of the study area is already transitioning from underutilized industrial uses to higher-density residential and commercial uses along the waterfront. Further inland there is also a trend toward increased residential development, as evidenced by the many No-Action residential projects planned for the area within a ½-mile of the project site. While the proposed project would contribute to an existing trend of increasing residential development in the study area, any upward rent pressure experienced by industrial businesses in the area would be present in the future without the Proposed Action. Therefore, the Proposed Action would not introduce a new trend that would alter economic patterns in the study area.

Would the Proposed Action directly displace uses of any type that directly support businesses in the area or bring people to the area that form a customer base for local businesses?

The Proposed Action would not result in the direct displacement of any residential uses and would directly displace 14 businesses. While these businesses contribute to the overall economy of the area and the City, none of the potentially displaced businesses provide substantial direct support to other businesses in the study area, nor do they bring substantial numbers of people to the area that form a customer base for local businesses. As discussed in the preliminary assessment of direct business displacement, local businesses do not rely on the potentially displaced businesses' products and services for day-to-day needs.

Would the Proposed Action directly or indirectly displace residents, workers, or visitors, who form a customer base for local businesses?

The Proposed Action would not result in significant adverse impacts due to direct business displacement, and the Proposed Action is not expected to indirectly displace a substantial number of residents or workers. The Proposed Action is not expected to result in significant indirect business displacement that would negatively affect the customer base of any existing businesses in the study area. Although the workers who would be directly displaced form a portion of the customer base of some existing businesses in the area, the proposed project would introduce new residents and workers that would add to the customer base of the existing businesses. The proposed project would enliven the project site and bring an influx of residents and workers to the waterfront and the upland areas.

Conclusion

Based on the preliminary assessment above, the Proposed Action would not result in significant adverse impacts due to indirect business displacement, and a detailed analysis of this issue is not warranted. The Proposed Action and resultant development would enliven the waterfront with new mixed-use development. While the proposed project would add a substantial amount of residential development to the project site, this would be in keeping with existing trends toward higher-density residential development along the study area's waterfront. The 109,470 gsf of retail added by the proposed development would support the existing, anticipated, and project-generated population living in an area where retail is lacking and residential development is leading to increased retail demand. While the Proposed Action would contribute to an existing trend of residential development, it would not introduce this trend; any upward rent pressure experienced by industrial businesses in the area would be present in the future without the Proposed Action.

E. DETAILED ANALYSIS—INDIRECT RESIDENTIAL DISPLACEMENT

The preliminary assessment for indirect residential displacement indicated the need for further analysis in order to determine whether the Proposed Action and subsequent development could result in significant adverse impacts due to indirect residential displacement. Therefore, a detailed analysis has been conducted. The approach to a detailed analysis of indirect residential displacement builds upon the information provided in the preliminary assessment, but requires more in-depth analysis of census information and may include field surveys. The objective of the detailed analysis is to determine whether the Proposed Action may introduce or accelerate a socioeconomic trend that may potentially displace a vulnerable population ("population at risk"). Populations at risk are defined as renters living in units not protected by rent stabilization, rent control, or other government regulations restricting rents, whose incomes are too low to afford increases in rents. In order to determine impacts, the detailed analysis characterizes existing conditions of residents and housing to identify potential populations at risk, assesses current and future socioeconomic trends in the area that may affect these populations, and examines the potential effects of the proposed project on those trends.

The detailed analysis of indirect residential displacement uses the same ½-mile study area, adjusted to census tract boundaries, that was used in the preliminary assessment (See Figure 3-1). The ½-mile study area represents a portion of the Astoria neighborhood.

Existing Conditions

This section describes the population and housing characteristics of the ½-mile study area. It outlines trend data since the 2000 Census and compares the characteristics of the ½-mile study area to Queens and New York City as a whole.

Population

According to the U.S. Census, in 2010 the ½-mile study area had a population of 27,814 (see Table 3-3).[5] Unlike the overall borough and the City, which experienced increases in residential populations between 2000 and 2010, the study area's population decreased by 3.6 percent. This is largely attributed to residential population losses in Census Tracts 71 and 73, which are located in the upland portion of the study area generally to the east of 21st and 23rd Streets and south of Astoria Boulevard and Newton Avenue (see Figure 3-1). The residential population declined by approximately 13.3 percent in both of these census tracts between 2000 and 2010. The residential population of census tract 83 located to the southeast of the project site and bounded by 21st Street on the east also decreased between 2000 and 2010 by approximately 5.3 percent. As noted above, the City and community leaders, such as Queens Community Board 1, contend that the residential population of Astoria is growing and has not been experiencing a decline.

Between 2000 and 2010, population growth was highest in Census Tract 81, which is located along the waterfront in the southern portion of the study area (see Figure 3-1). As shown in Table 3-7, census tract 81 accounted for almost all of the population growth in the study area from 2000 to 2010. The residential population increased in this census tract by 21.5 percent, which can likely be attributed to the construction of new, higher-density residential buildings near the waterfront and Socrates Sculpture Park, including the 20-story East River Tower at 11-24 31st Avenue (75 units), the seven-story Hallett's Cove at 30-85 Vernon Boulevard (73 units), and the eight-story Astoria at Hallett's Cove at 11-15 Broadway (82 units).

Table 3-7: Residential Population—2000 and 2010

Census Tracts	2000	2010*[1]	Percent Change
69	4,537	4,611	1.6%
71	4,572	3,963	-13.3%
73	4,881	4,231	-13.3%
79	3,489	3,493	0.1%
81	978	1,188	21.5%
83	3,114	2,950	-5.3%
87	4,545	4,582	0.8%
91	2,731	2,796	2.4%
Study Area	***28,847***	***27,814***	***-3.6%***
Queens	***2,229,379***	***2,230,722***	***0.1%***
New York City	***8,008,278***	***8,175,133***	***2.1%***

Notes:

[1] The study area comprises much of northwest Queens, which had been the subject of the City's formal challenge to the 2010 Census Count Question Resolution Program (CQR) disputing the 2010 population count for the City. The City contends that erroneous vacancies in areas, such as northwest Queens and southern Brooklyn, have resulted in an undercount of the population in New York City as a whole.

Sources: U.S. Department of Commerce, Bureau of the Census, 2000 and 2010 Census Summary File 1

[5] As noted above, the study area comprises much of northwest Queens, which had been the subject of the City's formal challenge to the 2010 Census Count Question Resolution Program (CQR) disputing the 2010 population count for the City. The City contends that erroneous vacancies in areas, such as northwest Queens and southern Brooklyn, have resulted in an undercount of the population in New York City as a whole.

Households and Income

According to the 2010 Census, the ½-mile study area contained a total of 11,242 households, with an average household size of 2.45 persons per household; this is lower than the average household size for Queens and that of New York City as a whole (see Table 3-8). The average household size for the study area has decreased since 2000, when it was higher than the City as a whole. As shown in Table 3-8, the number of households increased in all census tracts with the exception of census tract 73, which experienced a 3.2 percent decline in households. Mirroring the increase in population, census tracts 79 and 81, which comprise the southern portion of the study area, also experienced the largest percent increases in the number of new households (13 percent and 21 percent, respectively). This increase in the number of households and decline in household size may be attributed to a decrease in the number of family households and increase in nonfamily households. Table 3-8 also shows an overall decline in the number of family households in the study area between 2000 and 2010, whereas the number of nonfamily households increased by approximately 24 percent during this time.

Table 3-8: Household Characteristics—2000 and 2010

Area Census Tracts	Total Households		Family Households		Non-family Households		Average Household Size	
	2000	2010	2000	2010	2000	2010	2000	2010
69	1,668	1,902	997	849	689	1,053	2.63	2.27
71	1,796	1,810	981	784	813	1,026	2.48	2.19
73	2,200	2,130	1,015	828	1,185	1,302	2.22	1.99
79	1,114	1,219	771	730	310	489	3.23	2.87
81	273	364	204	226	97	138	3.25	3.24
83	1,031	1,040	670	639	350	401	3.04	2.83
87	1,473	1,530	1,033	1,091	440	439	3.09	2.99
91	1,242	1,247	641	598	536	649	2.32	2.24
Study Area	***10,732***	***11,242***	***6,312***	***5,745***	***4,420***	***5,497***	***2.67***	***2.45***
Queens	***782,664***	***780,117***	***537,991***	***526,875***	***244,673***	***253,242***	***2.81***	***2.82***
New York City	***3,021,588***	***3,109,784***	***1,853,223***	***1,850,221***	***1,168,365***	***1,259,563***	***2.59***	***2.57***

Sources: U.S. Department of Commerce, Bureau of the Census, 2000 and 2010 Census Summary File 1

Between 2007 and 2011, the median household income in the ½-mile study area was $45,957, a decrease of approximately 7.7 percent since 1999 (See Table 3-9). Both Queens and New York City as whole also experienced declines in median household income over this time (5.0 percent and 4.3 percent, respectively). An explanation for the lowering of household income in the ½-mile study area may be attributed to the growth of non-family households in the study area. Non-family households frequently have lower incomes then family households. The growth of non-family households in this study area would be consistent with trends that are apparent in Northwest Queens, Long Island City, and Western Brooklyn. These areas in New York City have emerged as centers for young singles and unattached residents. This trend should be seen as part of a change in population demographics and not as indicative of a study area population with declining income.

Despite the ½-mile study area's overall decline in median household income between 1999 and 2007-2011, 50 percent of the census tracts within the study area experienced increases in median household income between 1999 and 2007-2011. Census tracts 81, 83, 87, and 91, which include the waterfront and the western portion of the study area, experienced increases in the median household income during this period. Census tract 81, located along the waterfront in the southern portion of the study area, experienced the highest increase in median household income between 1999 and 2007-2011 (roughly 36 percent). This is primarily due to the development of new, market-rate residential units within multi-unit residential buildings in proximity to the waterfront. Since 1999, three buildings were built in census tract 81 that contained more than 70 residential units, including the 20-story East River Tower at 11-24 31st Avenue

(75 units), the 7-story Hallett's Cove at 30-85 Vernon Boulevard (73 units), and the 8-story Astoria at Hallett's Cove at 11-15 Broadway (82 units).

Census tracts 71 and 79, which comprise the eastern and southeastern portions of the study area, experienced decreases of roughly 14 percent in median household income between 1999 and 2007-2011 (see Figure 3-1 and Table 3-9). Census tract 69, which includes the northwestern portion of the study area, experienced a 12.6 percent decline, and census tract 73, which comprises the southwestern portion of the study area, experienced a 4.0 percent decline in median household income during the same timeframe.

Table 3-9: Income Characteristics—1999 and 2007-2011

Area	Median Household Income[1]			Percent of Persons Below Poverty Level[2] (%)	
Census Tracts	1999	2007-2011	Percent Change (%)	2000	2007-2011
69	$51,613	$45,127	-12.6	19.1%	17.5
71	$52,032	$44,929	-13.6	21.3%	12.7
73	$60,885	$58,413	-4.1	12.5%	7.6
79	$48,986	$42,060	-14.1	17.6%	20.8
81	$42,962	$58,503	36.2	28.7%	2.8
83	$51,846	$52,034	0.4	24.8%	15.2
87	$21,380	$23,174	8.4	46.5%	34.9
91	$59,408	$68,826	15.8	23.5%	15.1
Study Area	**$49,804**	**$45,957**	**-7.7**	**23.9%**	**17.1**
Queens	**$61,493**	**$58,399**	**-5.0**	**14.6%**	**13.7**
New York City	**$55,486**	**$53,081**	**-4.3**	**21.2%**	**19.4**

Notes:

[1] Median household income is presented in constant 2013 dollars based on the U.S. Department of Labor Bureau of Labor Statistics' 2013 half-year Consumer Price Index for all Urban Consumers for New York-Northern New Jersey-Long Island. Median household income for the study area represents a weighted average of the median incomes of the 8 census tracts in the study area.

[2] Percent of population with incomes below established poverty level. The Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is in poverty. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level," The official poverty thresholds do not vary geographically, but they are updated annually for inflation using the Consumer Price Index.

Sources: U.S. Department of Commerce, Bureau of the Census, 2000 Census, Summary File 3; American Community Survey 2007-2011 5-Year Estimates; U.S. Department of Labor Bureau of Labor Statistics' Consumer Price Index for all Urban Consumers for New York-Northern New Jersey-Long Island.

Similar to Queens and New York City, the proportion of the population in the study area living below the poverty level has decreased since 2000, from 23.9 percent of the study area population for whom poverty status is determined, to 17.1 percent between 2007 and 2011 (see Table 3-9). The percentage of population living below the poverty level decreased in all census tracts in the study area except for one; census tract 79 (bounded by 30th Avenue, 23rd Street, 31st Avenue, and 12th Street) was the only study area census tract to experience an increase in persons living below the level between 1999 and 2007 and 2011.

Housing

The study area contains a wide variety of housing types, including detached and semi-detached single- and two-family homes, attached two- and three-story row houses, multi-family walkup apartments, and mixed-use buildings with ground floor retail. The study area also contains a number of newer, large tower apartment and condominium buildings, as well as converted industrial buildings. The residential buildings in the eastern portion of the study area are generally low-rise (two to five stories) with a fewer taller

multi-unit building along the main corridors, specifically 21st Street. Closer to the waterfront, taller buildings have recently been constructed among older, lower-rise buildings.

The number of housing units in the ½-mile study area increased at a higher rate between 2000 and 2010 than in Queens and New York City as a whole (see Table 3-10). Approximately 1,461 housing units were added to the study area during this time for an increase of 13.2 percent. With the exception of census tract 87, which is dominated by NYCHA housing and under existing zoning has had little opportunity for new development, each respective study area census tract gained more housing units proportionately during this time than Queens and New York City as a whole. The number of housing units increased most dramatically in tracts 81 and 69, where new residential units were built near the waterfront and in the northeastern portions of the study area.

Table 3-10: Housing Characteristics—2000 and 2010

Area Census Tracts	Total Housing Units			Occupancy Status (%)				Tenure (%)			
	2000	2010	% Change	Occupied		Vacant		Renter		Owner	
				2000	2010	2000	2010	2000	2010	2000	2010
69	1,738	2,209	27.1%	97.0	86.1	3.0	13.9	82.7	86.4	17.3	13.6
71	1,835	1,954	6.5%	97.8	92.6	2.2	7.4	87.1	90.0	12.9	10.0
73	2,226	2,296	3.1%	98.8	92.8	1.2	7.2	89.0	87.6	11.0	12.4
79	1,109	1,325	19.5%	97.5	92.0	2.5	8.0	80.8	79.2	19.2	20.8
81	331	473	42.9%	90.9	77.0	9.1	23.0	67.9	70.1	32.1	29.9
83	1,056	1,296	22.7%	96.6	80.2	3.4	19.8	79.8	85.2	20.2	14.8
87	1,552	1,582	1.9%	94.9	96.7	5.1	3.3	98.6	98.8	1.4	1.2
91	1,221	1,394	14.2%	96.4	89.5	3.6	10.5	59.9	66.6	40.1	33.4
Study Area	11,068	12,529	13.2%	97.0	89.7	3.0	10.3	83.4	85.3	16.6	14.7
Queens	817,250	835,127	2.2%	95.8	93.4	4.2	6.6	57.2	57.0	42.8	43.0
New York City	3,200,912	3,371,062	5.3%	94.4	92.2	5.6	7.8	69.8	69.0	30.2	31.0

Sources: U.S. Department of Commerce, Bureau of the Census, 2000 Census, Summary File 3, 2010 Census, Summary File 1.

The study area has a higher proportion of vacant units than Queens and New York City as a whole. The vacancy rate in the study area was 10.3 percent in 2010, compared to 6.6 percent in Queens and 7.8 percent in New York City. In all three of these areas, the vacancy rate represents an increase since 2000. Census tract 81, located along the waterfront in the southern portion of the study area, which has had the largest influx of new housing units, also had the highest vacancy rate in the study area (23 percent) followed by tract 83 (19.8 percent).

The study area also had a higher proportion of renters than Queens and New York City, with 85.3 percent of residential units renter-occupied, compared with 57.0 percent and 69.0 percent in Queens and New York City, respectively. The study area experienced an increase in renter occupancy since 2000, whereas Queens and New York City saw home ownership increase slightly during the same time. Renters are most prevalent in census tract 87, which includes the 1,103-unit Astoria Houses Campus. Renters also account for 90 percent of occupied units in Tract 71, in the eastern portion of the study area, which is located east of 21st Street and bounded by Newtown Avenue and 28th Avenue to the north and 30th Avenue to the south. Homeowners are most concentrated in Tract 91, in the northern portion of the Halletts Point peninsula and bounded to the north by Astoria Park and the water, where they account for a greater proportion of occupied units than in New York City as a whole.

According to 2007-2011 ACS data, the median home value in the study area was $579,138, higher than in Queens ($490,747) and in New York City as a whole ($533,092) (see Table 3-11). Since 2000, median home values increased in all of the study area census tracts. However, in the study area overall, median home values increased at a lower rate than in Queens and New York City. Median home values ranged from $456,064 in Tract 73 (bounded by 30th and 31st Avenues and 23rd and 30th Streets) to $739,952 in

Tract 69, comprising the northeastern portion of the study area (bounded by Hoyt Avenue South, 30th/31st Street, Newtown Avenue, and 21st Street).

Table 3-11—Median Home Value and Contract Rent: 1999 and 2007-2011

	Median Home Value			Median Contract Rent		
Census Tract	1999	2007-2011	Percent Change (%)	1999	2007-2011	Percent Change (%)
69	$499,755	$739,952	48.1	$1,036	$1,427	37.4
71	$423,249	$692,430	63.6	$1,135	$1,348	18.8
73	$291,101	$456,064	56.7	$1,094	$1,222	20.5
79	$365,724	$494,371	35.2	$1,004	$1,221	27.8
81	$387,169	$517,666	33.7	$1,336	$1,432	7.3
83	$411,222	$705,579	71.6	$1,029	$1,172	16.5
87	$235,460	N.A.	N.A.	$451	$620	36.5
91	$297,911	$677,107	127.3	$1,053	$1,314	26.7
Study Area	$371,265	$579,138	56.0	$976	$1,193	20.1
Queens	$308,054	$490,747	64.2	$1,044	$1,156	12.5
New York City	$307,040	$533,092	66.3	$936	$1,022	11.7

Sources: U.S. Department of Commerce, Bureau of the Census, 2000 Census, Summary File 3, American Community Survey 2007-2011 5-year Estimates.

Median contract rent in the study area was $1,193 in 2007-2011, representing an increase of 20.1 percent since 1999. This was a higher increase than experienced in Queens and New York City as a whole. Within the study area, median contract rent increased by the highest percentage in tract 69. With the exception of Tract 87, median contract rents in the study area were higher than the overall borough. As shown in Table 3-11, median contract rent ranged from a low of $620 in tract 87 to a high of $1,432 in tract 81.

Recent Residential Trends

Median home value data reported in the census and ACS are based on respondents' estimates of how much their properties would sell for if they were for sale, and the median contract rent data include data for rent-regulated and rent-controlled apartments. Therefore, both of these data sets do not always accurately reflect true market rental rates and sale prices. In order to develop a more accurate picture of the current residential real estate market in the ½-mile study area, data from the census and ACS have been supplemented with information from local brokerage firms and real estate websites.

Reports from local brokerage firms and websites indicate that median sales prices in Northwest Queens, which includes Astoria and overlaps with the ½-mile study area, are higher than median sales prices for Queens a whole.[6] The median sales price in Northwest Queens for the third quarter of 2013 was $377,590, which is higher than the median sales price for Queens as a whole ($372,000).[7] These median sales prices are lower than the median home values reported by the ACS, as discussed above. As ACS median home value data reports what respondents estimate their properties would sell for, the discrepancy between the ACS data and reports from local brokerage firms suggests that homes may be selling for less than homeowners expect in the study area and in Queens.

Condominiums in particular are in high demand in Astoria. There is a shortage in inventory and as a result of young professionals moving from Manhattan and Long Island City into the neighborhood,

[6] The Northwest area of Queens includes Astoria, Long Island City, Sunnyside, and Woodside.
[7] The Elliman Report: 3Q-2013 Queens Quarterly Survey of Residential Sales. Obtained from Elliman.com. Accessed October 23, 2013.

condominium prices are increasing in Astoria.[8] As of October 2013, the average sales price for condominiums was $240,500 for a studio, $457,932 for a one-bedroom, and $737,155 for a two-bedroom.[9]

According to area brokers, housing prices generally peaked in 2007.[10] Although prices dropped during the recession, the market has improved over the past several years and local real estate brokers agree sales prices are stable and on the rise in Astoria.[11]

According to local real estate brokers, the rental market in Astoria is even stronger than the area's sales market, with a much more extensive inventory available. The current demand encompasses all types and sizes of rental apartments. According to Modern Spaces, apartments generally stay on the market for 28 days or less. Further, the rental market in Astoria is particularly strong for new construction.[12] Astoria is becoming a new destination for a new group of tenants moving from Brooklyn and Long Island City, as prices in these areas are reaching new highs. Within 2013, average rental prices for studios and one-bedroom apartments increased by approximately 8.8 percent and 7.0 percent, respectively, from the first half of the year to the second half, according to brokers from Modern Spaces.

A survey of current market-rate rentals in Astoria in October 2013 found that average rental rates for studios generally range from $1,200 to $1,900 per month; one-bedroom units generally range from $1,400 to $2,700 per month; and rental rates for two-bedroom units range from $1,800 to $3,500 per month.[13] Rental rates at the higher end of the ranges are generally more representative of larger multi-unit apartment buildings that offer amenities. However, buildings in close proximity to transportation/transit typically rent at a premium rate. The ACS median contract rent statistics discussed above, which include rent-regulated and rent-controlled apartments, are lower than the reports by local real estate brokers. This may be due in part to the concentration of rent-protected apartments in portions of the study area, discussed in detail below.

Table 3-12 provides a comparison of typical rental rates for two- and three-family homes and multi-unit residential buildings in 2013. It should be noted that generally two- to three-family homes in Astoria are closer to transit than the multi-unit apartment buildings. Additionally, based on discussions with the district manager of Queens Community Board 1 and a review of NYCDOF property assessment records, many of the two- and three-family homes within the study area include an owner-occupied residential unit at the respective property.

Table 3-12: A Comparison of Rental Rates for Two- and Three-Family Homes and Multi-unit Apartment Buildings in Astoria

Unit Size	Two- and Three-Family House	Multi-Unit Apartment Building
Studio	$1,300- $1,500	$1,700- $1,900
One-Bedroom	$1,500- $1,800	$2,000- $2,400
Two-Bedroom	$2,000- $2,400	$3,200- $3,400

Source: Modern Spaces, February 2013

[8] "Astoria Euphoria" *The Real Deal online*. September 2012; The Elliman Report: 3Q-2013 Queens Quarterly Survey of Residential Sales. Obtained from Elliman.com. Accessed October 23, 2013.

[9] "Crazy Prices in LIC: Condo Prices Fall but Luxe Rentals Skyrocket" *The Real Deal online*. October 8, 2013.
"Astoria Euphoria" *The Real Deal online*. September 2012.
"Modern Spaces Market Report." 2013, Quarter 3.

[10] "Living in – Astoria, Queens." *New York Times online*. November 22, 2009, accessed October 23, 2013.

[11] "Astoria Euphoria" *The Real Deal online*. September 2012.
The Elliman Report: 3Q-2013 Queens Quarterly Survey of Residential Sales. Obtained from Elliman.com. Accessed October 23, 2013.

[12] "Astoria Euphoria" *The Real Deal online*. September 2012.

[13] Average rental rates were obtained from searches for apartment listings on Elliman.com, Streeteasy.com, and zumper.com conducted on October 18, 2013.

The market-rate rents highlighted by the local brokerage reports reflect the changing residential market in the study area. Similar to many areas in the City, the neighborhoods of Astoria and Long Island City experienced an influx of new housing from 2002 to 2008. During this time, more than 3,600 apartment units were added to Astoria and Long Island City, which increased the housing inventory by approximately 4.8 percent, as compared to the citywide growth of 3.6 percent.[14] Although much of this growth occurred in Long Island City, a few underutilized industrial properties along the waterfront in Astoria were converted to residential and mixed-use buildings, such as the former Sohmer Piano Factory on Vernon Boulevard at 31st Avenue and the former Eagle Electric Company Factory (now the Pistilli Riverview East) on the northwest corner of 21st Street and 24th Avenue, just north of the study area. Other underutilized and recently rezoned industrial sites in the area have been demolished to build new residential towers. Many of these occurred as a result of the 2010 Astoria Rezoning, which allowed for moderate density increases for residential buildings on blocks fronting Vernon Boulevard, and 21st and 31st Streets.

As the market could not absorb the new condominiums built before the recession, some of the larger residential projects were converted to rentals after 2008.[15] For example, the former Sohmer Piano Factory was planned as a 69-unit condominium and retail conversion in 2008. The units were taken off the market in late 2008 and converted to rentals in 2010.[16] As the new inventory of residential units became occupied and development slowed, prices rose, reflected in the high rental rates listed above.

According to local residential brokers and market analysts, there are few development sites left in Astoria, especially with regard to the higher value property near the subway and waterfront sites. Two larger developments under construction near the waterfront are 12-07 Broadway at the corner of 12th Street, which will include 190 rental units, and the Halletts Point project at 1st Street and 27th Avenue, which will include 2,161 luxury apartments, 483 affordable units, retail, and community facility spaces on the peninsula.

Despite the lack of current development opportunities, high demand has resulted in small-scale, new construction where possible as well as renovations of existing properties where development potential is limited. Much of Astoria is an established neighborhood with one- to three-family, pre-war buildings and smaller rental apartment buildings. Most new developments in Astoria have been smaller residences with 8 to 20 units.[17] As a result, a majority of blocks in the study area contain new residential construction or renovation, highlighting the extent of this trend.

While development opportunities may be limited, reports from local brokerage firms and websites indicate that residential development trends in Astoria accelerated throughout 2013, as buyers and renters seeking luxury units have migrated from Long Island City and Brooklyn. Particularly, there is an increasing demand for new construction residential units from college-educated young professionals.[18] As a result, the demand for one-bedroom units is strongest in the area, followed by two-bedroom units, which often accommodate roommates. Sites in Astoria have the same advantages of proximity to the waterfront and to midtown Manhattan, but prices are still less expensive relative to Long Island City.[19] The neighborhood is also offers a range of retail, restaurants, personal services, and cultural resources.

[14] "L.I.C., Astoria in residential fast lane" *Crains New York.com.* November 19, 2009, accessed October 23, 2013.
[15] "Astoria Euphoria" *The Real Deal online*. September 2012.
[16] "Astoria's Piano Factory Condos Now Tuned to a New Key." *Curbed NY.* August 23, 2010, Accessed November 6, 2013.
[17] "Astoria Euphoria" *The Real Deal online*. September 2012.
[18] The Elliman Report: 3Q-2013 Queens Quarterly Survey of Residential Sales. Obtained from Elliman.com. Accessed October 23, 2013.
"Astoria Euphoria" *The Real Deal online*. September 2012.
[19] "Astoria Real Estate Market Sees Uptick in Luxury Properties, Report Says." *DNAinfo.com.*

This broader study area trend is driven in large part by excess demand from buyers and renters seeking luxury units in Long Island City, the study area's similar proximity to midtown Manhattan and the waterfront, and relatively cheaper prices. The area also offers a range of housing types including row houses and co-ops, new condominiums, detached and semi-detached homes that provide lots of choice and a mix of prices.

Estimate of Non-Regulated Housing

The objective of a detailed analysis of indirect residential displacement is to identify existing populations that may be at risk of displacement. According to the *CEQR Technical Manual*, at-risk populations are defined as people living in privately held units that are not protected by rent regulations, who, based on income or poverty status, may not be able to afford substantial rent increases. This section describes existing conditions in the ½-mile study area in terms of the status (rent-regulated or non-regulated) of housing stock. The following section identifies where in the study area there may be an at risk population, and if it is likely that an at-risk population lives in unprotected housing in the study area.

Rental rates in New York City are controlled through several mechanisms. These include rent regulation (either rent control or rent stabilization), direct public subsidies to landlords, and public ownership. In New York City, the rent control program applies to apartments in residential buildings that contain three or more units and were constructed before February 1947. Only apartments in which the tenant has lived continuously since before July 1, 1971 may fall under rent control. When a rent controlled apartment becomes vacant, it either becomes rent stabilized or, if it is in a building with fewer than six units, it is removed from regulation. Rent stabilization limits the annual rate at which owners may increase rents. In New York City, rent stabilization generally applies to apartments in buildings containing six or more units that were built between February 1, 1947 and January 1, 1974. An apartment is no longer protected by rent stabilization if it becomes vacant and could be offered at a legal regulated rent of $2,000 or more, or if the legal rent is $2,000 and the apartment is occupied by tenants whose total annual household income exceeded $175,000 for each of the past two years.[20]

Other types of rent regulated housing includes Section 8 housing, public housing, Mitchell-Lama developments, and other New York City Department of Housing Preservation and Development- (HPD-) owned housing. The ½-mile study area includes the NYCHA Astoria Houses Campus, which contains 1,103 public housing units in census tract 87 and two Mitchell-Lama developments (the 171-unit Bridgeview III development at 810 27th Avenue in census tract 83, and 28 units of the 128-unit Bridgeview I development at 421 27th Avenue in census tract 87). The Astoria Senior Residence, located at 2112 30th Road, contains 98 low-income senior units and is located in census tract 79. In addition, the Goodwill Terrace Apartments, at 421 27th Avenue in census tract 83, includes 208 residential units with supportive service for low-income people and people with disabilities and other needs.

Study Area

In accordance with the *CEQR Technical Manual*, the number of unregulated units in the study area was estimated based on census data and data obtained from the NYCDOF's RPAD database. Table 3-13 shows the calculations and the estimated count of unregulated units in the study area. As shown in the table, the estimate was based on the number of units in the study area that met the following criteria and was therefore assumed to be unprotected from rent increases:

"Modern Spaces Market Report." 2013, Quarter 3.

[20] Rent regulations obtained from the New York State Division of Housing and Community Renewal, Office of Rent Administration and the New York City Rent Guidelines Board.

- The units are in buildings that are privately owned (i.e., not public housing units);
- The units are in buildings not old enough to be subject to rent control or rent stabilization (i.e., built in 1974 or later); and/or
- The units are in buildings too small to be subject to rent control or rent stabilization (i.e., have five units or fewer).

Based on these criteria, the ½-mile study area contains approximately 10,523 renter-occupied units, of which approximately 2,683 are currently unprotected from rent increases (see Table 3-13). This number of unprotected units represents approximately 25 percent of the total renter-occupied units and 21 percent of all residential units in the study area.

Table 3-13: Estimated Unprotected Rental Housing Units in the ½-Mile Study Area

Row	Unites Identified	Components	Total for Study Area	Notes
1	Base of Unprotected Units: Units in Small Buildings (1-5 Units)	Number of units in buildings with 1-5 units	3,736	Derived from RPAD
2		Estimated of rental units in 1-5 unit buildings	1,072	(Row 1) X (Renter occupancy rate by census tract)
3	Additional Unprotected Units: Buildings built after 1974	Total units (renter and owner-occupied) in buildings built after 1974 with more than 5 units	3,048	Derived from RPAD
4		Estimate of rental units in buildings with more than 5 units, built after 1974	1,611	(Row 3) X (Renter occupancy rate by census tract)
5	All Unprotected Rental Units	Estimate of renter-occupied units that are unprotected	2,683	(Row 2) + (Row 4)

Sources: New York City Department of Finance Real Property Assessment Data (RPAD) 2012 database; U.S. Department of Commerce, Bureau of the Census, 2007-2011 American Community Survey 5-year Estimates.

According to this methodology, census tract 81, located along the waterfront in the southern portion of the study area, and census tract 91, which includes the project site, contain the highest percentage of renter-occupied units that are unprotected. This is largely due to recent residential development close to the waterfront, including residential conversions, new buildings, and the 404-unit Shore Towers development located at 25-40 Shore Boulevard, which contains luxury condominium and rental units. Census tract 87 (comprising the southern portion of the Halletts Point peninsula) has the lowest percentage of renter-occupied units that are unprotected, primarily due to the large concentration of public housing units within Astoria Houses.

Population Potentially at Risk of Indirect Displacement

Populations potentially at risk of indirect residential displacement are defined as people living in privately held units that are not protected by rent regulations, whose incomes or poverty status indicates that they could not afford to pay substantial rent increases. This section estimates the population potentially at risk of indirect residential displacement in the ½-mile study area.

In order to identify population in the study area potentially at risk of indirect displacement, the population of low-income renters in the study area was estimated and then adjusted according to the estimated proportion of rental units that were unprotected. The following steps were used to identify population at risk, and the calculations are shown in Table 3-14.

Table 3-14: Estimated Population Potentially Vulnerable to Indirect Residential Displacement in the ½-Mile Study Area

Row	Population Identified	Components	Total for Study Area	Notes
1	Low-income population in renter-occupied housing units	Total population in renter-occupied housing units in study area	21,580	ACS 2007-2011 5-year estimates
2		Proportion of low-income renter population in PUMA	45.2%[1]	Halletts Point Rezining FEIS (CEQR No. 09DCP084Q)
3		Study Area low-income renters	9,754	(Row 1) x (Row 2)
4	Population potentially at-risk of indirect residential displacement	Total unprotected units in the study area	2,683	From Table 3-13 above
5		Total rental units in the study area	10,523	ACS 2007-2011 5-Year Estimates
6		Proportion of rental units in the study area that are unprotected	25.5%	(Row 4) / (Row 5)
7		Low-income population living in unprotected rental units in the study area	2,487	(Row 3) x (Row 6)
8	Percentage of study area population potentially vulnerable to indirect residential displacement	Total population	26,550	ACS 2007-2011 5-Year Estimate
9		Proportion of total population who are low-income renters living in unprotected rental units	9.4%	(Row 7) / (Row 8)

Notes:

[1] The PUMA data gives household income in the past 12 months (in 2011 inflation-adjusted dollars) for renter occupied housing units. PUMA 4101 includes the Astoria Houses Campus, the Ravenswood campus, the Woodside campus, and the Queensbridge North and South campuses—all NYCHA public housing developments. The PUMA also includes the Astoria Senior Residence, the Goodwill Terrace Apartments, the Catherine Sheridan House, Astoria Mac, HANAC Senior Housing, the Hour Apartments, the Monsignor Thomas Campbell Apartments, and the Saint George Senior Residence—all of which are protected housing. The total number of low-income renters in the PUMA was therefore adjusted to exclude low-income renters living in these protected units, based on data obtained from NYCHA and from HUD's Low-Income Housing Tax Credits (LIHTC) on-line database.

Sources: New York City Department of Finance Real Property Assessment Data (RPAD) 2012 database; U.S. Department of Commerce, Bureau of the Census, 2007-2011 American Community Survey 5-Year Estimates; NYCHA, February 2013; HUD's LIHTC on-line database, last accessed on February 14, 2013.

1. Estimate the low-income population in renter-occupied housing units in the study area.

The low-income population in renter-occupied housing units for the study area was estimated using PUMS data, which is available for specific geographies called Public Use Microdata Areas (PUMAs). PUMS data on household income for renter-occupied housing units by household size was collected for the PUMA that most closely approximated the study area.[21] The PUMS data was used to calculate the total number of low-income renters in the PUMA. This number was then adjusted to exclude low-income renters living in large buildings known to contain protected units, such as public housing, Section 202, and other HPD-owned housing. The share of low-income renter households in the PUMA was then calculated (45.2 percent).[22] This proportion was applied to the total renter population in the study area to estimate the low-income renter population in the study area (9,754).

2. Estimate the low-income population living in unprotected rental units in the study area.

The low-income population living in unprotected rental units (the population potentially vulnerable to indirect residential displacement) was estimated by multiplying the proportion of rental units in the study area that are unprotected (25.5 percent) by the low-income renter population calculated above (9,754).

[21] PUMS data for PUMA 4101 was used for this analysis. PUMA 4101 approximates Queens Community District 1, though the two are not coterminous. PUMA 4101 is roughly bounded by the East River to the north and east; 81st Street, Boody Street, and 51st Street to the east; Northern Boulevard and the Queensboro Bridge entrance to the south.

[22] *Halletts Point Rezoning FEIS*, August 2013 (CEQR No. 09DCP084Q) Low-income households are defined as those that that meet the HUD-defined low (80 percent) income limits, by household size, for Queens county for FY2012.

As shown in Table 3-14, based on this methodology there are an estimated 2,487 low-income residents living in unprotected units in the study area.[23]

As stated in the *CEQR Technical Manual*, if the analysis described above indicates a low-income population in unregulated rental housing, additional analysis may be necessary to determine whether conditions in the study area, and consequently, the size of the population at risk, have changed since the date of the data used in the analysis. Current rents in the study area indicate that residents living in unprotected market-rate housing, particularly in mid- and high-rise buildings, are already paying high rents, suggesting that the analysis above overestimates the study area's vulnerable population. Therefore, the quantified analysis provided above is supplemented with a discussion of recent trends to determine whether a higher-income population has been introduced in areas with a vulnerable population. If so, it is possible that unprotected units potentially containing a vulnerable population have been turned over to higher-income households. The following characterizes demographics and residential market conditions for each of the census tracts in the study area.

Census Tract 69

Census tract 69 comprises the northeastern portion of the study area and straddles Astoria Boulevard, generally bounded by Hoyt Avenue South to the north, 21st Street to the west, Newtown Avenue to the south, and 30th Street to the east. Similar to much of the upland portion of the study area, tract 69 consists mostly of residential use and is the most populous of the tracts within the study area. Astoria Boulevard, which bisects the tract, is lined with a number of mixed-use buildings that accommodate ground floor commercial uses with residential located above. There are very few vacant properties in tract 69.

Between 2000 and 2010, population slightly increased in this census tract, as did the number of households, whereas the average household size decreased reflecting an increase in non-family households. Although the percentage of persons residing below the poverty level decreased, the median household income declined by 12.6 percent in this tract.

Housing inventory within tract 69 increased considerably, by approximately 27 percent, between 2000 and 2010. This new development is scattered throughout the tract and consisted primarily of mixed-use buildings and multi-unit apartment buildings, as well as some one- and two-family homes. However, this tract had the second highest vacancy rate at 13.9 percent in the study area in 2010. In terms of tenure, this census tract saw a 3.7 percent increase in renter-occupied housing. The majority of residential buildings (almost 78 percent) in tract 69 are small and contain one to four units, which account for about 36 percent of all residential units. About 41 percent of buildings were built in 1930 or earlier, which account for approximately 28 percent of residential units. Only 11 percent of buildings were built in 2000 or later, but these recently built buildings account for approximately a third of residential units in tract and include a mix of multiunit apartment buildings generally ranging in size from 8 to 30 units.

According to NYCDOF's recent 2014 NOPV, the exterior condition of most of the smaller residential apartment buildings (i.e., buildings containing five or fewer units) in this tract are qualitatively described as average, followed by good or high-average. The NYCDOF classified very few properties (less than one percent) with a low-average condition. Field surveying also indicated that no areas within census tract 69 included a collection of unmaintained housing stock in poor condition.

[23] This methodology assumes the same income distribution for populations living in protected and unprotected rental units. As it is probable that a higher proportion of low-income renters live in protected units relative to unprotected units, this methodology may overestimate the population of low-income renters living in unprotected units in the study area.

According to the methodology outlined above for estimating the number of unregulated housing units, approximately 1,404 units, or 64 percent of all residential units and 74 percent of renter-occupied units in census tract 69 are unprotected. Recently built rental developments, such as the 28-unit The Boulevard at 25-25 Astoria Boulevard, the 24-unit residential building at 28-21 Astoria Boulevard, the 22-unit residential building at 25-15 27th Street, the 18-unit residential building at 2544 Crescent Street, and the eight-unit Boutique 8 at 2642 28th Street, would not contain a population vulnerable to rent increases. In addition, residents living in the 184-unit George T. Douris Tower, an affordable housing development for seniors, would be protected from rent increases.

Census Tract 71

Census tract 71 is located directly south of census tract 69 and is roughly bounded by Newtown Avenue to the north, 33rd Street to the east, 30th Avenue to the south, and 21st Street to the west. With the exception of the eastern portion of the tract which supports a number of commercial uses along 31st Street and Newtown Avenue, tract 71 is also dominated by residential use. There is little remaining vacant land.

Between 2000 and 2010, tract 71 experienced the largest decline in residential population in the study area. However, the number of households increased slightly, as the household size declined reflecting a decline in family households and an increase in nonfamily households. Similar to Tract 69, the median household income in tract 71 declined by 13.6 percent, whereas the percentage of residents living below the poverty level declined by 8.6 percent to 12.7 percent.

The housing stock in tract 71 increased by approximately 6.5 percent between 2000 and 2010. This new housing inventory consists largely of mixed-use commercial and residential development and smaller multi-unit residential apartment buildings located generally to the east of Crescent Street. During this period, the vacancy rate also increased to 7.4 percent, which was higher than Queens but comparable to that of New York City. In terms of tenure, this census tract saw a 2.9 percent increase in renter-occupied housing. Although approximately 70 percent of residential buildings in tract 71 contain between one to four housing units, these buildings account for less than a third of the housing stock in the tract. The majority of housing units (approximately 65 percent) in tract 71 are contained in buildings that were built in 1930 or earlier. Only about 5 percent of residential buildings were built in 2000 or later, which account for approximately 9 percent of the housing inventory.

According to NYCDOF's recent 2014 NOPV, the exterior condition of most of the smaller residential apartment buildings (i.e., buildings containing five or fewer units) in this tract are qualitatively described as average, followed by high-average. The NYCDOF classified very few properties (less than two percent) with a low-average condition. Field surveying also indicated that no areas within census tract 71 included a collection of unmaintained housing stock in poor condition.

Using the methodology above, an estimated 732 units, or 38 percent of all residential units and 43 percent of the renter-occupied units in census tract 71 are unprotected.

Census Tract 73

Census tract 73 comprises the southeastern portion of the study area and is bounded by 30th Avenue to the north, 30th Street to the east, 31st Avenue to the south, and 23rd Street to the west. It is also predominantly residential with little vacant land.

Similar to census tract 71, the residential population of tract 73 declined by 13.3 percent from 2000 to 2010. The number of households also declined, as did the average household size. In 2010, tract 73 had the smallest average household size in the study area, with 1.99 persons per household. Between 2000 and

2007-2011, median household income decreased by 4.1 percent, whereas the percentage of population with incomes below the poverty level decreased over this time, to 7.6 percent, the second lowest in the study area. The average household income in tract 73 was comparable to New York City as a whole.

With the exception of census tract 87, tract 73 experienced the smallest increase in housing inventory within the study area between 2000 and 2010, increasing by only 3.1 percent. The vacancy rate of 7.2 percent in tract 73 was comparable to tract 71. In terms of tenure, census tract 73 saw an increase in the number of owner-occupied housing units.

Two-thirds of the residential buildings in tract 73 accommodate between one to four dwelling units and account for about 14 percent of the housing units in the tract. About 40 percent of housing units are located within buildings that were built in 1930 or earlier. Only about 10 percent of residential buildings were built in 2000 or later, which account for 12.4 percent of the housing inventory. Most of these newer building are concentrated near 31st Avenue and 23rd Street.

According to NYCDOF's recent 2014 NOPV, the exterior condition of most of the smaller residential apartment buildings (i.e., buildings containing five or fewer units) in this tract are qualitatively described as average, followed by high-average. The NYCDOF classified very few properties (less than one percent) with a low-average condition. Field surveying also indicated that no areas within census tract 73 included a collection of unmaintained housing stock in poor condition.

Using the methodology above, an estimated 593 units, or 25 percent of all residential units and 31 percent of the renter-occupied units in census tract 73 are unprotected.

Census Tract 79

Census tract 79, located in the southern portion of the study area, is roughly bounded by 30th Avenue to the north, 23rd Street to the east, 31st Avenue to the south, and 12th Street to the west. Land use within this tract is primarily residential with few remaining vacant properties. There are also a few scattered light industrial uses; a limited amount of commercial uses occupy ground floor spaces on 14th and 21st Streets.

Between 2000 and 2010, the residential population remained relatively stable in this census tract, as the number of total households increased and the average household size decreased. From 2000 to 2010, tract 79 had the largest decrease in median household income (approximately 14 percent). The tract also had the second highest poverty level in the study area in 2010 (approximately 21 percent).

Between 2000 and 2010, census tract 79 saw a 19.5 percent increase in total housing units. This new development was dispersed throughout the tract. In 2010, the tract had an eight percent vacancy rate and 79.2 percent of occupied housing units in the tract were renter-occupied. Similar to census tract 73, tract 79 saw a slight increase in the number of owner-occupied units from 2000 to 2010, increasing to 20.8 percent.

Almost 81 percent of buildings in census tract 79 contain one to four units. Tract 79 has the highest percentage of buildings built in 1930 or before in the study area (82 percent). Approximately 66 percent of the housing units in this tract were built prior to or in 1930. Though there is a concentration of older buildings in this tract, there are also examples of new residential development, including the Astor, a 37-unit rental development at 12-26 30th Avenue, the 65-unit Thirty-Fifty apartments, located at 30-50 21st Street, and the Astoria, a 27-unit condominium building at 21-24 30th Avenue. In total, four percent of residential buildings and 25 percent of residential dwelling units in census tract 79 were built in or after 2000.

According to NYCDOF's recent 2014 NOPV, the exterior condition of most of the smaller residential apartment buildings (i.e., buildings containing five or fewer units) in this tract are qualitatively described as average, followed by high-average. The NYCDOF classified very few properties (less than two percent) with a low-average condition. Field surveying also indicated that no areas within census tract 79 included a collection of unmaintained housing stock in poor condition.

According to the methodology outlined above for estimating the number of unregulated housing units, approximately 738 units, or 56 percent of all residential units and 72 percent of renter-occupied units in census tract 79 are unprotected. Recently-built rental developments, such as the Astor (described above), would not contain a population vulnerable to rent increases. In addition, residents living in the 88-unit Astoria Senior Residence, an affordable housing development for seniors, would be protected from rent increases.

Census Tract 81

Census tract 81, located southern portion of the study area along the waterfront, is roughly bounded by Astoria Boulevard to the north, 12th Street to the east, Broadway to the South, and Halletts Cove to the west. Land uses within this tract are more diverse, and includes a mix of residential, parking, light industrial/storage, and commercial uses. Much of the residential development consists of smaller multi-unit apartment buildings and two-and three-family homes to the north of 30th Drive and larger newer multi-unit apartment buildings to the south. Similar to the remainder of the study area there are few vacant properties.

Census tract 81 has experienced the highest rate of population growth in the study area, with a 21.5 percent increase in population since 2000, due largely to the industrial sites in the area that have been converted to or demolished and replaced with residential and commercial uses. Tract 81 also experienced the highest increase in median household income in the study area (approximately 36 percent), reflecting the more affluent households moving into the former industrial areas. However, in 2010 tract 81 had by far the smallest total number of households and the largest household size in the study area. Between 2007 and 2011, only 2.8 percent of residents in census tract 81 were below the poverty level—the lowest percentage in the study area.

Reflecting population growth, census tract 81 saw the highest percent increase in housing units between 2000 and 2010. Most of this new development is concentrated in the southern portion of the tract to the south of 30th Drive. In 2010, this census tract had the highest vacancy rate in the study area, with many of the vacant units for sale or for rent according to 2010 Census data, which may reflect the fact that recently-completed residential units remained on the market for an extended period of time. The housing stock in this tract is mixed in age, with approximately 49 percent of buildings built in or before 1930. Only eight residential buildings were built in 2000 or after, though these buildings account for approximately 52 percent of residential units in the tract. As described above, the 20-story East River Tower at 11-24 31st Avenue (completed in 2007) contains 75 condominium units, the eight-story development at 11-15 Broadway contains 79 rental units, and the seven-story 73-unit development at 30-85 Vernon Boulevard contains condominium and rental units. Other than the new, higher-density residential buildings, most of the housing stock in this tract is in smaller buildings, with 42 percent of buildings containing one to four units. This census tract also contains the former Sohmer Piano Factory, which was built as condominiums and then converted to rentals, as discussed above.

According to NYCDOF's recent 2014 NOPV, the exterior condition of most of the smaller residential apartment buildings (i.e., buildings containing five or fewer units) in this tract are qualitatively described as average, followed by high-average. The NYCDOF classified very few properties (less than three

percent) with a low-average condition. Field surveying also indicated that no areas within census tract 81 included a collection of unmaintained housing stock in poor condition.

According to the methodology outlined above for estimating the number of unregulated housing units, approximately 337 units, or 57 percent of all residential units and 81 percent of all renter-occupied housing units in census tract 81 are unprotected. As described above, there are several larger residential developments that have been recently built in the tract, including the 70-unit East River Tower, the 82-unit development at 11-15 Broadway, and the 72-unit development at 30-85 Vernon Boulevard—all relatively close to the waterfront or with views of the waterfront. Blocks with low-rise, older housing stock further inland have experienced recent development as well, such as the seven-unit RIA Condominium development at 11-42 31st Avenue. The recently-built rental buildings, including the Astoria at Hallett's Cove at 11-15 Broadway and 30-85 Vernon Boulevard, contain market-rate units that rent at the high end of the market, so it is reasonable to assume that they are occupied by more affluent households that could afford rent increases.

Census Tract 83

Census tract 83 is located to the southeast of the project site and is roughly bounded by 26th Avenue to the north, 21st Street to the east, 30th Avenue/Astoria Boulevard to the south, and 8th and 12th Streets to the west. Similar to census tract 81, land use is more diverse in census tract 83 as compared to much of the study area. Astoria Boulevard, which extends through the tract, is lined with a number of ground floor commercial and light industrial uses. There are a few small vacant lots, some of which are being redevelopment.

Census tract 83 experienced a 5.3 percent decline in population between 2000 and 2010. This was reflected in a decrease in household size during the same time, while total households remained relatively constant. Median household income in this tract increased slightly (approximately 0.4 percent) since 2000, while the percentage of persons below the poverty declined more rapidly by approximately 9.6 percent (to 15.2 percent).

Despite a decline in residents, census tract 83 experienced a 22.7 percent increase in total housing units, and a slight shift to more renters than owners. Several larger multi-unit residential building were constructed in this tract, with much of the new development concentrated near 27th Avenue. With the influx of new housing and a decline in population, tract 83 had the second highest vacancy rate in the study area in 2010. The housing stock in this tract is similar to tract 79 in that both tracts have a similar percentage of small buildings (with one to four units), which account for about 40 percent of the residential units in the respective tracts. Approximately 72 percent of the residential buildings in tract 83 were built in 1930 or before, which accounts for approximately 46 percent of the residential units. Slightly less than eight percent of the residential buildings were built in 2000 or after, which accounts for about 28 percent of residential units. The most recent residential construction has occurred north of Astoria Boulevard and along 21st Avenue. These include the 117-unit Exo Astoria at 26-36 27th Avenue, an 18-unit development at 27-16 12th Street, and four two-family units on the corner of 12th Street and 27th Avenue. Older, unprotected units are located south of Astoria Boulevard and are interspersed with industrial uses.

According to NYCDOF's recent 2014 NOPV, the exterior condition of most of the smaller residential apartment buildings (i.e., buildings containing five or fewer units) in this tract are qualitatively described as average, followed by high-average and good. The NYCDOF classified few properties (less than five percent) with a low-average condition in census tract 83. Field surveying also indicated that no areas within census tract 83 included a collection of unmaintained housing stock in poor condition.

In census tract 83, an estimated 638 units, or 52 percent of all residential units and 68 percent of renter-occupied units are unprotected. However, the 117 market-rate units in the Exo Astoria can be assumed to be occupied by more affluent households. In addition, residents living in the 60-unit Halletts Cove Apartments, an affordable housing development at the corner of 27th Avenue and 14th Street, would be protected from rent increases. In addition, residents living in the 171-unit Bridgeview III Apartments, a Mitchell Lama rental development at 8-10 27th Avenue at 8th Street, would be protected from rent increases.

Census Tract 87

Census tract 87 comprises the majority of the Halletts Point peninsula, and is roughly bounded by Halletts Cove to the south, 8th Street/9th Street to the east, 26th Avenue to the north, and the East River to the west. Tract 87 includes the southern portion of the project site, located south of 26th Avenue. Between 2000 and 2010, population in this census tract increased slightly, and the number of households increased by approximately 4 percent. The average household size in tract 87 in 2010 was 2.99.

Although the median household income within census tract 87 increased approximately eight percent between 1999 and 2007-2011, overall it remained the lowest in the study area. Compared to the other tracts in the study area, tract 87 had the largest percentage of residents with incomes below the poverty level between 2007 and 2011 (34.9 percent), although the percentage decreased from 46.5 percent in 2000.

As the Astoria Houses Campus comprises much of census tract 87, and the land along the waterfront is zoned for light industrial use that does not allow residential development as-of-right, this census tract has experienced minimal increases in its housing stock. Between 2000 and 2010, the total number of housing units in tract 87 increased by 1.9 percent. Only four percent of residential units in the tract have been built since 2000, which are concentrated on the block bounded by 26th and 27th Avenues and 2nd and 3rd Streets. These new residential buildings consist largely of low-rise multi-unit luxury apartments. The vacancy rate in tract 87, which had been the highest in the study area in 2000, declined to the lowest in the study area in 2010, with only 3.3 percent of housing units vacant. The tract also has the highest percentage of renter-occupied housing units, which is largely due to the 1,103-unit Astoria Houses Campus.

Reflecting the presence of the Astoria Houses Campus and a few other larger multi-unit developments, census tract 87 contains the lowest number of residential buildings (only 41 residential buildings), but a total of 1,600 residential units. Excluding the Astoria Houses (1,103 dwelling units), the tract contains 496 residential units, 208 of which are part of the Goodwill Terrace Apartments, which houses low-income people and people with disabilities and other needs, and 28 of which are part of the 128-unit Bridgeview I development at 421 27th Avenue, which is Section 8 housing. These buildings are rent-protected and residents living in these units would not be considered vulnerable populations. Tract 87 also contains RiverPoint Condominiums, a four-story development built in 2007 that fronts 27th Avenue between 2nd and 3rd Streets and contains 52 market-rate units. The RiverPoint Condominiums are owner-occupied and would therefore not contain any vulnerable populations.

Using the methodology above, an estimated 109 units, or seven percent of all residential units and seven percent of the renter-occupied units in census tract 87 are unprotected. While this census tract contains a significant low-income population, most of this population lives in rent-protected housing.

Census Tract 91

Census tract 91 includes the northern portion of the Halletts Point peninsula, roughly bounded by 26th Avenue/27th Avenue to the south, 21st Street to the east, Astoria Park South/Pot Cove to the north, and the

East River to the west. Tract 91 contains the portion of the project site north of 26th Avenue. Residential uses in tract 91 are located to the east of 9th Street, and, with the exception of a large vacant parcel on the waterfront to the west of the project site, there is little remaining vacant land. Between 2000 and 2010 the tract experienced a 2.4 percent growth in population, the second highest rate of increase in the study area and higher than Queens as a whole, but comparable with all of New York City. The number of households in this tract remained relatively stable during this time and the average household size declined slightly. Between 2000 and 2007-2011, median household income increased by almost 16 percent in census tract 91, the second highest increase in the study area. The percentage of tract's population with incomes below the poverty level decreased over this time as well, to 15.1 percent.

Reflecting population growth, census tract 91 experienced a 14.2 percent increase in housing units between 2000 and 2010, which consisted largely of smaller walk-up and elevator multi-unit apartment buildings located along midblock areas to the south of Astoria Park. In terms of tenure, tract 91 had the highest rate of home ownership in the study area, 33.4 percent of the tract's units are owner-occupied, which is comparable to New York City as a whole. Vacancy in the tract was 10.5 percent in 2010. Approximately 64 percent of buildings in census tract 91 were built in or before 1930, which is comparable to tract 73. However, these buildings only account for about 26 percent of residential units in this tract. Only 9 percent of residential buildings in census tract 91 were built in 2000 or later, accounting for 9 percent of total residential units in the tract. While 87 percent of residential buildings contain one to four units, these buildings only account for 36 percent of the residential units in the tract, due to the presence of Shore Towers, located at 25-40 Shore Boulevard adjacent to the project site. Constructed in 1989, Shore Towers contains 404 condominium and rental units. Many of the other buildings in census tract 91 are older, large detached, single-family homes that have been converted into multi-family dwellings, some of which have undergone substantial renovations.

According to NYCDOF's recent 2014 NOPV, the exterior condition of most of the smaller residential apartment buildings (i.e., buildings containing five or fewer units) in this tract are qualitatively described as average or high-average. The NYCDOF classified very few properties (less than two percent) with a low-average condition, which are scattered throughout the study area. Field surveying also indicated that no areas within census tract 91 included a collection of unmaintained housing stock in poor condition.

Based on the methodology above, an estimated 702 units, or 56 percent of all residential units and 79 percent of renter-occupied units in census tract 91 are not rent-protected. However, this may be skewed by the rental units in Shore Towers, which would not be likely to contain a low-income population vulnerable to rent increases. In addition, residents living in the 108-unit Bridgeview II, an affordable housing development at 27th Avenue and 9th Street, would be protected from rent increases.

Future without the Proposed Action (No-Action Condition)

As potential impacts of the Proposed Action are assessed in relation to the future without the Proposed Action, this section considers trends affecting rents and potential displacement that may occur in the future without the Proposed Action. In the future No-Action condition, it is anticipated that the upland portions of project site, which are zoned R6 and located south of 26th Avenue, would be redeveloped as-of-right and would accommodate approximately 166 residential units. The waterfront area of the project site located north of 26th Avenue and zoned M1-1 would remain in its current condition and continue to be occupied by a mix of light industrial and warehousing uses, as well as vehicle storage.

The ongoing trend toward the development of new residential, community facilities, and publicly accessible open space in place of underutilized industrial uses and vacant land would continue. As described in Chapter 5, "Open Space," approximately 3,750 new housing units and 80 new community facility beds (8,855 new residents), 130,727 gsf of retail space, 43,000 sf of additional community facility

space and 1,760 accessory parking spaces are planned in the study area by 2023. Table 3-15 shows the amount of new housing and estimated population growth anticipated to occur within the ½-mile study area in the future without the Proposed Action. At least 599 of these units (approximately 16 percent) are expected to be affordable housing. The vast majority of residential units (3,151 units) are anticipated to be market-rate. Given that these planned development would introduce a substantial new population with high incomes relative to the existing population, it is possible that some portion of the vulnerable population identified in the study area are likely to experience rent increases that could result in their displacement in the future without the Proposed Action.

Table 3-15: Population and Housing Growth—Future without the Proposed Action

	Housing Units				Population			
	Existing Conditions	Additional by 2023	Total	Percent Change	Existing Conditions	Additional by 2023[1]	Total	Percent Change
½-Mile Study Area	12,529	3,750	16,279	29.9%	27,814	8,855	36,669	31.8%

Notes: [1] No-Action includes 80 community facility beds resulting in 80 additional residents

These planned developments will occur throughout the study area and will continue the trend of increased residential development that has already occurred throughout much of the study area. While the more dense residential development will be concentrated along the waterfront and inland along 21st and 23rd Streets due to existing zoning, new residential development has, and will continue to, affect all portions of the study area. This broader study area trend is driven in large part by excess demand from buyers and renters seeking luxury units in Long Island City, the study area's similar proximity to midtown Manhattan and the waterfront, and its relatively cheaper prices compared to Manhattan and Brooklyn. The area also offers a range of housing types including row houses and co-ops, new condominiums, and detached and semi-detached homes that provide lots of choice and a mix of prices. It is an established residential area with neighborhood amenities residents typically desire.

Future with the Proposed Action (With Action Condition)

This section considers the effects of the Proposed Action along with conditions expected in the future without the Proposed Action, in order to determine whether the identified vulnerable population would be at risk of displacement as a result of the proposed project. According to the *CEQR Technical Manual*, the assessment of the effects of the Proposed Action should consider how the real estate market conditions in the study area would change as a result of the Proposed Action, including whether land use or real estate market conditions would reduce the likelihood that a vulnerable population would be at risk of indirect displacement.

The Proposed Action would result in the development of an additional 1,523 net residential units in the study area, increasing the housing stock to 17,802 residential units by 2023 and representing a 9.4 percent unit increase over the No-Action condition. Assuming that all new units would be occupied and have an average household size of 2.34 persons per unit (the 2010 average household size for Queens CD 1), the proposed project would introduce up to 3,564 additional residents in the study area. As shown in Table 3-16, when compared with the population anticipated to reside in the study area in the future without the Proposed Action, the proposed project would result in an approximately 9.7 percent population increase in the ½-mile study area compared to the future without the Proposed Action.

Table 3-16: Population and Housing Growth—Future with the Proposed Action

	Housing Units				Population			
	2023 No-Action Condition Total	Project Additional	Total	Percent Change	2023 No-Action Condition Total	Project Additional	Total	Percent Change
½-Mile Study Area	16,279	1,523	17,802	9.4%	36,669	3,564	40,233	9.7%

Note: Population growth was calculated by applying the average household size in Queens Community District 1 (2.34 persons) to the number of housing units anticipated to be added by the proposed project.

Pursuant to CEQR guidelines, generally if the detailed assessment identified a vulnerable population potentially subject to indirect displacement that exceeds 5 percent of the study area—or relevant sub-areas, if the vulnerable population is located within the subarea identified—it may substantially affect the socioeconomic character of the study area and a significant adverse impact may occur. However, if it is determined that a project would not cause drastic changes in the real estate market (because of its mixed-income composition or due to land use or real estate market conditions in an area), the project may not affect rents for some or all of the existing vulnerable units.

As described above, there may be a population potentially at risk of indirect residential displacement in some portions of the study area, particularly areas that were not affected by the 2010 Astoria Rezoning and where new development is not expected to occur in the future. However, for the following reasons the Proposed Action would not be expected to initiate a trend toward increased rents that could generate significant adverse indirect residential displacement impacts.

The project site is geographically separated from a majority of the population potentially vulnerable to indirect displacement. Located on the Halletts Point peninsula, the project site is relatively isolated from the greater Astoria neighborhood.

While the immediate proximity of the proposed project could lead to increased rents in census tract 91, which includes an estimated 708 unprotected rental units, the majority of residential units in this tract are concentrated to the east of 9th Street. The area to the west of the project site in tract 91 is zoned for high-performance light industrial uses and does not permit residential development as-of-right. This area is occupied by the Hellgate Filming Studios and Build It Green! NYC, a non-profit retail outlet for salvaged and surplus building materials. Whitey Ford Field is also located further to the west of the project site in tract 91. Directly east of the project site along the waterfront is Shore Towers, a 404-unit, high-rise building at 25-40 Shore Boulevard, which offers several amenities and would be not be likely to contain a low-income population vulnerable to rent increases. Most of the remaining housing units in tract 91 are older, detached, single-family homes that have been converted to multi-family dwellings, as well as attached row houses.

As a portion of the project site is also located in census tract 87, the proposed project could lead to increased rents in tract 87. However, the scale of any potential displacement of a vulnerable population is expected to be relatively small, since only seven percent of all housing units are estimated to be unprotected in this tract (the majority of housing units in this census tract are located within the NYCHA Astoria Houses campus and are therefore, rent protected). Additionally, census tract 87 includes the 208-unit Goodwill Terrace Apartments and 128-unit Bridgeview Apartments, which are also rent protected. There has also been new residential development to the southwest of the project site on the block bounded by 26th and 27th Avenues and 2nd and 3rd Streets, which includes larger two- and three-bedroom luxury apartments.

The potential scale of the proposed project's influence on rents in the remaining census tracts would be in large part a function of the project site's visibility from, and connectivity to, surrounding neighborhoods. In this respect, the proposed project's influence would be limited by the project site's relatively isolated

location, bordered by the East River to the north, Shore Towers to the east, and low rise industrial and warehousing uses to the west. The topography of the peninsula separates the downhill slope west of 8th and 9th Streets and the upland portion to the east. Astoria Boulevard provides another topographical separation, as areas to the south (including census tracts 71, 73, 79, 81, and portions of 83 and 69) are downhill from the upland areas to the north.

Many of the study area's vulnerable populations live in housing stock that differs from newer residential uses. Census tracts 69, 71, 73, 79, 83, and 91 contain older, low-rise residential buildings that generally cater to a different demographic than the households attracted by the new residential towers, luxury apartments and condominiums, and residential conversions in the area. As redevelopment opportunities generally are limited to locations with commercial overlays in these neighborhoods, it is less likely that the proposed project would spur new residential development that could affect real estate trends outside of commercial overlays in these areas. In addition, the existing housing stock appeals to a different market than the households moving into the new residential units in the area, accounting for the fact that less turnover has occurred to more affluent households despite development in adjacent areas.

There is already an existing trend in the study area toward residential development and the introduction of a more affluent population that is anticipated to accelerate in the future without the Proposed Action. Since 2000, the construction of new residential buildings in Astoria has accelerated noticeably. According to records from the New York City Department of Buildings, more than 2,000 new housing units were added to Astoria between 2000 and 2008, and this trend has continued. As discussed above, there is a substantial amount of new market-rate housing planned for the study area by 2023 (refer to Table 3-15). This includes the approved Halletts Point Project, which is anticipated introduce approximately 2,644 housing units, of which 2,161 units would be market-rate, to the southern portion of the Halletts Point peninsula. These units would be constructed in several multi-unit high-rise buildings along the waterfront. Real estate brokers have indicated that Halletts Point would relieve, rather than increase, market pressure in the study area. Astoria, unlike, Long Island City, has very limited available land as it is already an established residential area.[24] The substantial number of market-rate housing recently constructed or currently planned in the study area indicates that there is a high demand for housing in the study area. It is likely that demand for housing will continue to increase in the future with or without the Proposed Action.

Furthermore, the southern portion of the study area along the waterfront (census tract 81) and east of 14th Street are experiencing varying degrees of new residential development that would be expected to continue in the future with or without the proposed project. Census tract 81 received moderate density increases for residential buildings on blocks fronting Vernon Boulevard as a result of the 2010 Astoria Rezoning, adding to an already existing trend of high-density residential development with waterfront views. As described above, reports from local brokerage firms and websites indicate that buyers and renters seeking luxury units with proximity to Manhattan have migrated from Long Island City to Astoria, where sites are less expensive.[25] This has prompted new development along the waterfront. For example, the East River Tower, a 20-story, 75-unit luxury tower at 11-24 31st Avenue (completed in 2007); the 79-unit development at 11-15 Broadway; and the 73-unit development at 30-85 Vernon Boulevard are all proximate to the waterfront or provide views of the waterfront. This residential development would be expected to have an influence on areas directly east of the waterfront more than the proposed project, as evidenced by planned and under construction buildings like the 190-unit building under construction at

[24] Melissa Dehncke-McGill "Astoria Euphoria" *TheRealDeal.com* September 2012

[25] Sources: "Astoria Real Estate Market Sees Uptick in Luxury Properties, Report Says." DNAinfo.com. January 24, 2013. Accessed November 6, 2013 at dnainfo.com. 2012 End of Year Orange Report. Obtained from modernspacesnyc.com. Accessed November 6, 2013.

the corner of Broadway and 12th Street.

East of 14th Street, census tract 79 and to a lesser degree census tracts 73 and 71 also experienced modest increases in allowable FAR in the 2010 Astoria Rezoning, adding to the existing trend of higher density residential and mixed use development in this area. For example, the Livelle development at 30-11 21st Street (built in 2007) contains 33 luxury condominium units. In addition, the 37-unit Astor rental development at 12-26 30th Avenue, the 27-unit Astoria condominium building at 21-24 30th Avenue, the 33-unit Crescent View Condominiums at 30-94 Crescent Street, the 45-unit condominium building at 23-23 31st Street, and the ten-unit condominium building at 27-17 Crescent Street were all built since 2000 in these three census tracts. While there are areas in the western portions of these tracts where older housing stock was not affected by the rezoning, these areas would be more likely to be affected by increased residential development along the waterfront in census tract 81 and the general trends in the Astoria residential market than by the proposed project.

Though there are factors driving more dense residential development along the waterfront and the corridors of 14th, 21st, and 23rd Streets, new residential development is expected to continue in all portions of the study area irrespective of the Proposed Action, due to an increase in residential development in Astoria driven in part by excess demand from buyers and renters seeking luxury units in nearby Long Island City. These buyers and renters are looking to Astoria due to its proximity to midtown Manhattan and the waterfront and its more affordable prices and range of prices, compared to Long Island City. This demand for new, market-rate housing is expected to continue in the future with or without the Proposed Action. There is potential for upward pressure on rents in the study area irrespective of the Proposed Action due to an existing trend towards market-rate development.

As a result of this clear pre-existing trend, it can be concluded that the Proposed Action would not be the catalyst triggering displacement pressures. The Proposed Action is not expected to result in a new development trend in the study area or adding a population group that will not already exist in the study area under No-Action conditions. Therefore, it is also reasonable to conclude that its influence on ongoing displacement pressures within the overall study area would not be significant. While the Proposed Action may be expected to contribute to displacement pressures in areas nearest the project site, as described above, those areas nearest the project site have fewer lower-income residents living in unprotected rental housing relative to the study area as a whole.

The households added by the project site's market-rate units would likely reflect the newer demographic that has moved into recently-constructed and planned residential buildings in Astoria. According to real estate professionals, these households are looking for residential units that compare to those in Manhattan, specifically new construction one-bedroom condominiums with amenities, many with waterfront views. These households would therefore be less interested in the housing stock concentrated farther inland in census tracts 83 and 91, which consists primarily of pre-war, one- to three-family buildings with few amenities and limited retail and services. It is therefore less likely that the residential population added by the proposed project would affect real estate trends in these areas. Moreover, the proposed project could absorb housing demand that might otherwise be expressed through increases in rents in the study area. This could reduce displacement pressures on the at risk population in the study area.

The proposed project would create a mix of market-rate and affordable housing. Although the population that would be introduced by the Proposed Action would include a larger proportion of households at higher incomes, the proposed project's affordable housing component would ensure that a substantial portion of the new population would have incomes that would more closely reflect existing incomes in the study area. The proposed project would add up to 295 affordable housing units to the project site. It is expected that the proposed project would give preference for the sale or rental of 50 percent of the affordable units to current residents of Queens CD 1, thus providing an opportunity for long-term

residents to remain in the area. Combined with the affordable units expected to be built in the study area in the No-Action condition, the affordable units added to the study area by the proposed project would help ensure housing opportunities for lower-income households in the study area, and would mirror the diversity of the existing population and help to maintain a more diverse demographic composition within the study area.