

Unlocking Potential

**Unlocking Potential: Economic Development Options for Coney Island**

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by

Garryth Trelawney Hoal

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**Abstract**

The Coney Island neighborhood fares worse than average in a number of key indicators of resident outcomes, health, finances, and community support. The site of the Abe Stark ice rink provides an opportunity to address these issues and jumpstart the local economy. The story of the Coney Island neighborhood and its residents has been explored through historical sources and data on current conditions. Through zoning analysis, some development options have been proposed. These options are put through economic impact analysis and financial viability analysis to ensure positive economic benefit and large-scale financial viability. A formal recommendation to develop the current Abe Stark site into a medium density mixed used development which financially supports a large-scale recreation development has been detailed.

*Keywords:* economic development, land use, urban planning, economic impact analysis, neighborhood revitalization, coney island.

## **Unlocking Potential: Economic Development Options for Coney Island**

The goals of this research are to identify and propose development options for the Abe Stark ice rink that create a positive economic impact, address community needs, and are financially viable at a large scale. This has been completed through the use of socioeconomic assessment at the neighborhood level to determine potential development options. These options are then put through economic impact analysis and financial viability analysis (where applicable). A formal development recommendation has been made and its benefits highlighted. This research functions as a potential methodology for future case studies and presents opportunities for further work on community development models, funding, and ownership.

### **Purpose and Research Aims**

The purpose of this study is to develop a recommendation or series of recommendations for the use of the Abe Stark site in Coney Island. The process of developing these recommendations serves as an environment for testing methodology for future case study work. This also seeks to create benefit for the community by highlighting strengths and weaknesses while emphasizing community voices. This research is guided by the following question:

1. Is the site of the Abe Stark ice rink being used for the highest benefit of the community?  
If not, what should take its place?

### **Methodology**

This analysis begins by looking at the history of the neighborhood of Coney Island and present conditions in/surrounding the Abe Stark site specifically. Combining analytical research into historical documents, previous exploratory research, and demographic information, a story of neighborhood evolution has been crafted. This assessment seeks to explain how the neighborhood and site have arrived at their current conditions. Investigation into current

conditions through on site documentation and discussions with residents and business owners reinforce the conclusions of this historical investigation. Looking towards future potential for the neighborhood and site, analysis of current developments throughout the study area help to visualize areas of interest to developers. The presence of a number of large real estate developers demonstrates the future growth potential of the neighborhood. Perspective gained from previous community needs assessments have been used to understand the vulnerabilities of the neighborhood and begin to determine how a variety of use options on the Abe Stark site can address these.

Zooming in to the Abe Stark site begins with an investigation into the current zoning that governs the use of the site. As with most developments, what is possible relies upon what the zoning states is allowable, this is the underpinning determinant for the redevelopment of the site. In addition to neighborhood needs, the consideration of comparable projects has driven the development of a number of operational possibilities. Data from the construction pricing program RS Means was used to determine the appropriate cost of construction based on what is allowable/realistic in terms of square footage based on the zoning. Economic impact analysis has been used to determine the economic benefits or losses incurred as a result of the construction/redevelopment of the site and uses. This analysis has been done at the zip code level to show neighborhood level impacts as well as the county level to show the economic impact on Brooklyn (Kings County). Financial feasibility analysis through the development of a pro-forma for each operational use has been completed to give insight into the financial viability of each operational recommendation.

## **Review of Relevant Literature**

Economic development can be considered both an academic field of research and a professional field of practice. Academic research in the field focuses on understanding the relationships between various economic factors and their impact on urban space as well as at the community level. Economic development is closely related to urban economics which applies economic theory to the urban environment and has been a significant field of economics for many decades. Professional work in the field is largely project based with some professional services companies developing software in the form of resources and best practices to support this project field work. Some of these firms include ESRI (resources), IMPLAN (resources), Boston Consulting Group (practices), and many other consulting firms along with large investment firms. Similarly, another applied field is the field of mathematical modelling which is an academic field of research that seeks to describe relationships in and around real world events or variables using the language of mathematics. This research aims to formulate a quantitative understanding of how various factors influence behaviors or outcomes. Much of the value that this kind of analysis provides is the ability to predict future reactions to changes in variables. The application of this field to urban planning and more specifically urban economics has been brought along in recent years by the focus on big data and examining the city as a system of quantifiable relationships. Finally, economic development works hand in hand with real estate development especially in the urban context as often on a project level, changing values in real estate throughout a community have meaningful and long-lasting impacts on community outcomes.

The progression of economic development as an academic research area has been closely linked to the progress of economics. Both macroeconomics and microeconomics have influenced

the study of economic development. The research area that is most closely linked to economic development is the field of urban economics. The study of economic factors in the urban environment began to evolve out of raw economic theory during the early 19<sup>th</sup> century with the work of Johann Heinrich von Thünen (1783-1850). Von Thünen is considered the “Adam Smith of locational economics” and introduced an economic model of land use and its relationship to market forces. This model showed how market processes could influence how the use of land would evolve.<sup>1</sup> Applied mainly in an agricultural environment, the theory posits that the cost of land and its use can be influenced by the cost of transportation to the “central place.”<sup>2</sup> The use of a central place around which economic activity concentrates could be considered an early form of cluster theory economics which holds significant sway over modern urban economics. In the Von Thünen model, the economically productive activities compete for land surrounding the central areas. This theory is often considered the historic origin for the current “bid-rent” theory used by economists and economic developers today. Another vital researcher in the early development of urban economics was William Alonso who expanded on the work of Von Thünen in his 1964 publication *Location and Land Use*.<sup>3</sup> This work also heavily influenced the development of the “bid-rent” model. Other contributions by Walter Christaller, who developed the central place theory and August Lösch who focused on the process of spatial analysis and economic factors contributed significantly to the advancement of the field.<sup>4</sup> This research heavily influences the process of hedonic modeling which is a mathematical regression analysis that seeks to determine to what extent is the market price of a property lot influenced by geographic factors. Over time and largely as a result of these contributions, six definitive areas of study for urban economics have evolved: market forces and the development of cities, land use, economic policy, transportation and economics, housing and public policy, and



government/taxes.<sup>5</sup> These areas of study still guide research in urban economics and hold significant sway over research into economic development as a result.

Contemporary economic development research focuses on what has been deemed “development economics” by the World Bank. This involves all major aspects that can be considered influential in determining economic outcomes for countries and communities such as human capital, targeted investment, resource allocation, etc.<sup>6</sup> Relevant to this thesis is the focus on developing positive economic outcomes and independence at the local community level. As there is a concerted effort to determine the best way to assist communities in achieving positive economic outcomes, academic explorations of the impact of economic development programs and evaluating their effectiveness are common. Much of this work can be termed “economic growth theory”, a form of research that focuses on taking advantage of the potential for geographic areas to increase their economic activity. As economic growth takes its most rapid form in developing economies, an acute focus on low income countries is present in academic literature. Considering academic research focusing on the United States, a significant concern throughout applied economic development is the process of gentrification which can occur when a previously vulnerable area is the focus of redevelopment efforts. Innovation districts, for example, are one way that many cities attempt to increase the economic situation of a neighborhood.

In Kayanan, et al. (2022) the authors explore post-industrial economic development through the lens of the innovation district strategy.<sup>7</sup> This paper argues that efforts to increase neighborhood investment through innovation districts is linked to gentrification and the removal of previous residents. This conclusion is arrived at through an analysis of a number of innovation district efforts located in various urban centers around the United States. The paper compares the

socio-economic demographics of the areas surrounding the innovation hubs and looks for changes suggesting gentrification. The authors state that innovation districts are located in a neighborhood but seek to bring in talent from the national or international stage, declaring that this negatively impacts the local community. Although a community should certainly have a say in how developments evolve in their neighborhoods, attempting to turn the focus of an innovation district into community resources is at odds with the purpose behind an innovation district. Inherent in this form of development is the goal of attracting and concentrating a specific kind of talent or interest. There is no neighborhood, regardless of its socio-economic demographics, which would be able to support an innovation district without a focus on bringing in talent from other geographies. Additionally, looking at the authors own published data, Boston's innovation development did not result in a change in neighborhood demographics. In fact, the area surrounding this district saw an increase in more diverse populations rather than the removal of these populations that traditionally defines gentrification. Finally, the authors did not explore any fiscal or economic benefits that these cities gained from the development of these districts. It is pertinent to consider that some of these cities need to attract investment in order to increase their fiscal revenues to fund existing operations. This paper highlights concerns of gentrification and community neglect in the development of innovation districts; however, their own data shows that this type of economic development can occur without displacement of residents. Seeking economic growth through the use of innovation districts cannot be used as an anti-gentrification measure due to the goals inherent in creating this kind of development. Cities may pair this development strategy with community development efforts already in place to combat gentrification.

Economic outcomes understood through an economic justice lens can be considered a combination of starting points and decision making. Each individual begins their lives with specific resources on hand and certain opportunities afforded to them, affecting their economic outcomes later in life. However, another significant factor that should be considered is the choices that individuals make that impact their ability to achieve certain economic outcomes. Anecdotally, if one has every opportunity afforded to them but decides not to take advantage of these opportunities or resources, naturally that affects their economic outcomes. This is the area of economic study known as behavioral economics. This area of study contrasts the traditional economic view of the “rational” decision maker with what individuals actually end up doing and how this affects their economic outcomes.<sup>8</sup> One measure used by economists to understand individual decision making is the labor-leisure model, which has been used to understand economic growth rates across countries. Hobara and Kuwahara use this measure to contrast economic outcomes and decision making in their 2023 paper on education and industriousness.<sup>9</sup> This paper uses historic economic growth rates, measures of labor and leisure time, and education levels of a number of countries to evaluate the relationship between starting points, decision making, and economic outcomes. As a result of their analysis, using the Uzawa-Lucas model of human capital, the authors find that increasing the labor supply through education is necessary to trigger economic growth. As economic growth increases, individual decision making becomes more important to sustain this growth, increased time spent working improves economic outcomes. This study provides data to argue that economic modernization increases individual labor share which contradicts some previous economic theory, particularly that associated with John Maynard Keynes. These findings provide insights into how individuals have the power to affect their economic outcomes, however, the paper does not address

individuals who are unemployed, something that the authors admit. Using labor-leisure data for only currently employed individuals does not account for those that find themselves without a job although they may be high in industriousness and desire to work. Application of this paper to research into economic development strategies is a focus on understanding why individuals may be making certain decisions. Although an area may be receiving significant community investment, if there is a factor preventing the targeted community from accessing that resource then economic improvement may not take place.

Urban economics is a major area of research for economists and economic developers alike. The breadth of research in this area is extensive, however, there are common threads that apply to neighborhood level economic development research. Modern economic theory supporting this research often involves analyzing the interaction between policy, government programs, free market activities, and economic outcomes. One area in which the bulk of academic literature is lacking is an analysis of fiscal policies on the economic outcomes of geographic areas, specifically at the local level. This may be partly due to a lack of data or transparency at the local level. In this research area, Kim, et al. deals with impacts of national level fiscal policy on labor market conditions.<sup>10</sup> As established by Hobara and Kuwahara, labor market conditions are affected by education as a starting point and industriousness as a continuous growth factor. Unemployment was not dealt with by Hobara and Kuwahara, however, this paper by Kim et al. seeks to understand the relationship between fiscal policy and labor market conditions understood through unemployment. This research applied in the scope of Hobara and Kuwahara offers an alternative factor that affects economic growth potential. Kim et al. finds that as fiscal policy trends to heavier taxation private sector jobs decrease while the public sector sees significant growth in the number of jobs available. This effect can be particularly acute at the

local level depending upon how risk sensitive the local economy is. This research has significant relevance to the development of a mathematical model of neighborhood outcomes which this paper is attempting to develop. Kim, et al. shows that the fiscal environment must be taken into account due to its high potential to affect the private sector labor market in a negative way. The modeling from Kim, et al. is similar to the modeling that will take place as part of this research, applied first at the national level, and then extrapolated and tested at the state and county level.

Economic impact analysis is an economic data analysis tool that is not in and of itself an area of research but a way of assessing inputs and outputs, something which is commonly done in urban economic research. This input/output analysis is common in the professional field and is often applied at the project level, or to assess the impacts or feasibility of a proposed project. Modeling economic impacts in the academic sphere has become a frequent topic in relation to the Covid-19 pandemic and understanding its consequences for economies of every scale.<sup>11</sup> Work applying this model to local economies has been sparse with very few studies tackling local level issues. This could be partly due to the global nature of the pandemic and its effects, as much focus has been placed on international supply chains.

The relationship between land use and economic outcomes is one aspect of urban economics that has seen an acute focus in the United States. This may be due to the fact that much of the responsibility for zoning lies with the municipalities and their departments. This has allowed for vastly different approaches to zoning to develop across the United States leading to experimentation with what strategy can best drives economic growth. Research in many urban centers around the country have focused on housing affordability and the ability of zoning changes to provide relief.<sup>12</sup> While sparse, research into municipal economic development and

land use has pointed to the need for a proactive growth strategy as a result of land use planning and coordination with private sector development.<sup>13</sup>

Physical exercise and participation in athletics have many physical and mental benefits for individuals and offer the ability to build bonds throughout a community. Utilizing this strategy to improve community health through the development of public recreation space has shown increasing potential in promoting positive outcomes in community capacity.<sup>14</sup> Economic studies often overlook the social benefits of sports facilities in favor of financial assessments. The promotion of sports facilities, even professional sports facilities can offer communities immense non-economic benefits that may justify continued investment.<sup>15</sup> Aside from positive health outcomes, the presence of sports and recreation facilities can increase community pride and solidarity, while attracting increased investment from the private sector. A study on a tennis facility constructed in New Haven, Connecticut found that the project assisted in bettering the public image of the local community.<sup>16</sup> This facility assisted in combatting perceptions of crime and disinvestment which presented the opportunity to attract outside investment. Neighborhoods that struggle with decreasing public image can benefit from the construction of public recreation and sports facilities.

Finally, research into neighborhoods in and surrounding centers of tourism has attempted to assess the impact of tourism on the daily lives of residents in these geographies. Increased tourist activities, although financially beneficial have the potential to lead to a decrease in residents remaining in these areas and their quality of life.<sup>17</sup> Additionally, strategies that are used to attract tourist populations coincide with strategies that attract wealthy residents which increase the probability of gentrification within these geographies. These areas of tourist activity are prone to having their neighborhood characteristics and history commercialized in an effort to increase or

maintain traffic and spending.<sup>18</sup> While tourism is a valuable part of many local economies, this is certainly the case in Coney Island, ensuring appropriate boundaries for residents are created is vital to combatting the touristification of everyday life.

### **History of Economic Development as A Profession**

Cities and their governments have created plans for and been involved in the development of new strategies for creating economic benefits since the establishment of municipal rule formal or informal. Land has been managed by ruling entities for a significant portion of history with land grants and public work projects often taking center stage. In the United States, perhaps the best example of this is the infrastructure boom seen in the late 1800s where government entities strongly encouraged and incentivized the creation of public works projects.<sup>19</sup> The use of land grants, subsidies, and other means the federal government was able to assist in driving a period of rapid development. This desire for the construction and installation of infrastructure was brought on by experiences in the War of 1812 in which it became clear due to reasons related to national security that the country needed better transportation and trade mechanisms.<sup>20</sup> In the early 1820's a number of legal events created the environment necessary to stimulate these improvements. The 1824 supreme court ruling in the case of *Gibbons v. Ogden* established that the federal government's authority over interstate commerce included the use of waterways.<sup>21</sup> While this case was being argued Congress was debating the General Survey Act, a law that would grant the federal government authority to survey areas for the establishment of roads necessary for commerce, defense, or purposes of communication.<sup>22</sup> The passage of this act led to the involvement of the US Army Corps of Engineers and Congress's allocation of funds for surveying and improvements.

Economic development in a more modern sense and as understood by urban planners originated after World War II when Europe needed significant economic aid to rebuild its destroyed physical and social infrastructure. The United States government, understanding the vulnerable position and physical destruction of Europe devised a plan to fund the rebuilding of many Western European countries. The European Recovery Program, also called “The Marshall Plan” transferred over \$13 Billion to European governments and public entities for the reconstruction of towns, roads, cities, and other major infrastructure needs.<sup>23</sup> With this incredible funding came the need for a strategy of allocating these resources to provide the highest benefits to communities that had been devastated. This strategic thinking centered around the need to rebuild an active economy with trade between many of the Western European states but also extended to the allocation of funds for what could be deemed “local necessities.” The money was first transferred to national governments but then allocated and managed by partnerships of local governments overseen by the Economic Cooperation Administration (ECA).<sup>24</sup> This money also flowed to private entities that were able to take loans from their local or national governments. There was a significant need for education programs in Europe at this time, in order to create the self-reliance needed to sustain this economic injection. This led to the funding of a number of technical education programs throughout Europe as well as the involvement of various US government agencies such as the Bureau of Labor Statistics (BLS). While the United States oversaw much of the investment, local governments across Europe were becoming closely involved in determining what investment was needed in their cities and towns. This was the birth and growth of what can be considered a predecessor to modern economic development efforts in Europe.



At this same point in time throughout the United States, various programs for the returning soldiers boosted the economic environment on the home front. Loan programs and heavy housing development in suburban areas caused a “hollowing-out” of urban cores which resulted in the economic decline of many cities. Population flow out of the city resulted in negative fiscal impacts and decreased the ability of many city governments to meet financial obligations while keeping up with infrastructure maintenance and investment.<sup>25</sup> In areas with vulnerable populations, this caused significant decline and, in some cases, like in New York City, led to policies that would ultimately cause disinvestment in these areas. As a result of the impacts of suburbanization and population loss many city governments sought solutions in the form of economic development efforts. Targeted investment projects and large scale infrastructure projects became common throughout the post-war era, extending into the fiscal troubles experienced throughout the United States in the 1970’s. These efforts of development largely failed and often times left the city government and affected communities in a worse state than before, this was the failure of urban renewal.<sup>26</sup>

Once it had been understood that urban renewal was not a viable way to create economic benefits for urban communities, the field of economic development shifted to be dominated by macroeconomic policies. Local context development shifted to project based implementation and association with private development efforts. Academic interest in the field has increased its association with urban planning and community development leading to the modern variety of strategies and studies.

### **History and Background of Coney Island**

Prior to European contact, the Coney Island area was under the influence of a number of indigenous tribes such as the Lenape and Montaukett with the Iroquois also having a presence.

The Lenape peoples lived throughout the Lenapehoking lands which extended across modern day Delaware, New Jersey, New York, and Long Island.<sup>27</sup> These original inhabitants called the area “Narrioch” meaning “land without shadows” or “always in the light.”<sup>28</sup> This name possibly refers to the southern facing beaches which gave the natural environment extended exposure to sunlight for much of the year. The area was historically a collection of islands and the western most received the name “Conyne Eylandt” from the Dutch who mapped the area after their arrival in the early 17<sup>th</sup> century.<sup>29</sup> While there are a number of theories as to how the area came to be called Coney Island, it is generally thought that it has to do with the large rabbit population that was found among the islands, with the Dutch word for rabbit being “conijn” which may have been translated to “coney.”<sup>30</sup> There is also a theory that the area was named after Coney Island in Sligo county, Ireland, an area that also has a significant rabbit population.<sup>31</sup>

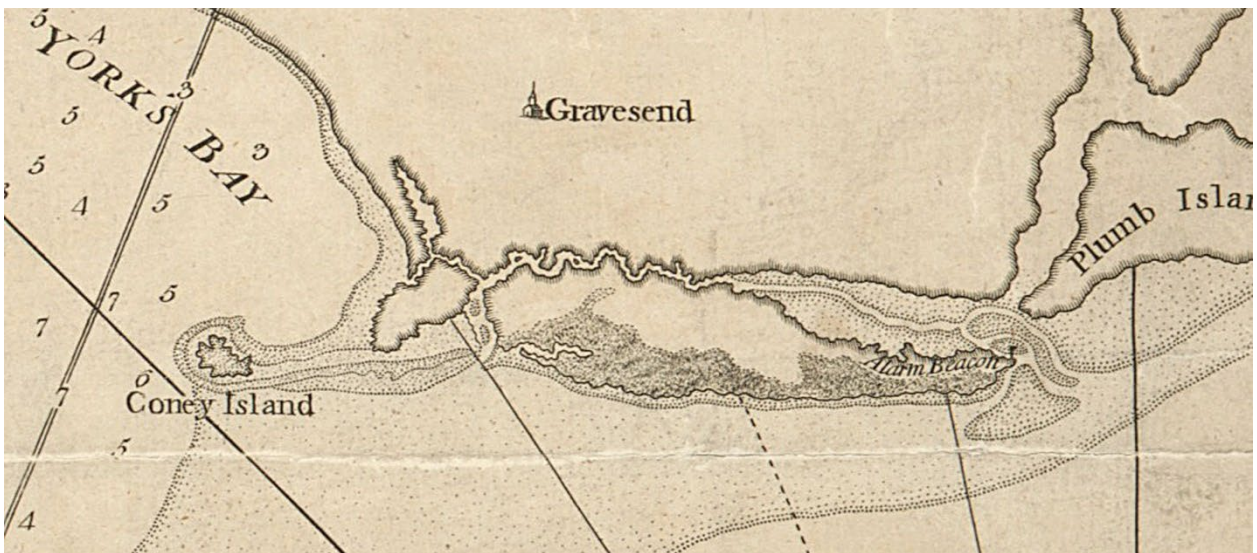
**Figure 1**<sup>32</sup>*Map of Lenapehoking native languages*

As part of the bay of New York and the outer barrier of Long Island, the area was explored by Giovanni de Verrazano and Henry Hudson on their expeditions of the New York area.<sup>33</sup> It is thought that Henry Hudson landed on or near the island during his explorations of the area. A Dutch settler named Anthony Janszoon acquired land near the Coney Island area from the Dutch government through a patent in 1639, he was the first to formally acquire land in the area.<sup>34</sup> The area was claimed as part of the New Netherlands colony and remained under Dutch control until this colony was ceded to Great Britain in 1664, becoming part of the New York

Colony. Land in and near the Coney Island area was included in a number of land patents throughout its colonial history including as part of the town of Gravesend, one of the earliest settlements of the Brooklyn area.<sup>35</sup> By the end of the 1600s the area was still disconnected from the mainland by small inlets but was used by colonial residents to graze cattle and livestock during the winter months.<sup>36</sup> Little development occurred in the area through the 18<sup>th</sup> century, however, in 1750 Jamaica Ditch was dug through the Coney Hook area to allow for easier nautical trade, this ditch would come to be known as Coney Island Creek.<sup>37</sup>

**Figure 2**<sup>38</sup>

*Map of Coney Island from around 1776*

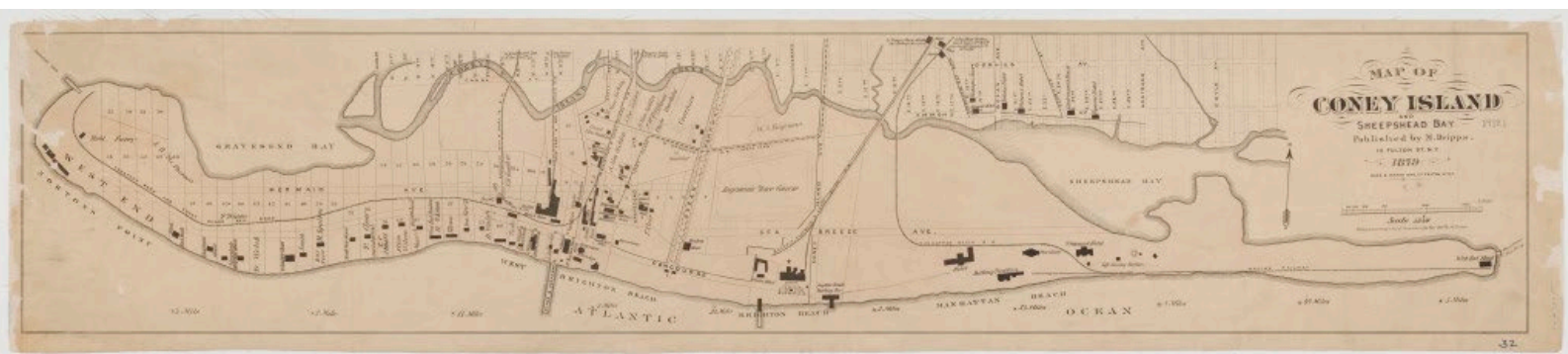


Natural shifting sands eventually allowed residents to travel to and from the island with a bridge being built across the Coney Island Creek by a local road and bridge company in 1824.<sup>39</sup> A few years later in 1829 the same company built the first hotel on the island and began to attract vacationers. With this development came a flow of residents and hotel competition, this was the beginning of the resort era in Coney Island. Throughout the 1830's and 1840's the area was a vacation spot for wealthier residents of the neighboring urban areas, mainly New York City.

Carriage roads and a steamship service provided transportation options until the Brooklyn, Bath and Coney Island Railroad opened in 1864, providing an influx of visitors.<sup>40</sup> In the late 1860's the Brighton Beach hotel was constructed by William A Engemen and a group of businessmen who coined the name in an attempt to draw comparisons with the Brighton vacation destination in the UK. At the same time the Manhattan Beach area was being developed by wealthy business interests prompting a number of railway lines to begin further developing transportation options to the area. The Brooklyn Flatbush and Coney Island Railway opened in 1878, the predecessor to the modern day Brighton line and provided access to the hotels in the area.<sup>41</sup> By the end of the 19<sup>th</sup> century, the Brighton Beach, Manhattan Beach, and West Brighton areas had developed into vacation destinations with hotels, luxury services, and theaters populating the beachfront. The Coney Island area had developed into the most popular of these destinations with early amusement areas being built and the private neighborhood of Sea Gate being developed.<sup>42</sup> Sea Lion Park, the predecessor to the famous Luna Park operated until 1902 while Steeplechase Park would continue to operate until the mid-1900's.

**Figure 3**<sup>43</sup>

*Map of Coney Island 1879*



Throughout the 19<sup>th</sup> century the area defined itself as a center for amusement with hotels, amusement parks, and other activities drawing in significant tourist interest. Luna Park opened in 1903 and became an instant attraction with a variety of rides and nighttime entertainment options.<sup>44</sup> The area's popularity as an amusement area would continue through World War II with the city government of New York implementing controls such as defining the beachfront and limiting some development. In 1937, then the New York City Parks commissioner, Robert Moses proposed a redevelopment plan for Coney Island which included renovations to the boardwalk and the purchasing of land by the city.<sup>45</sup> Throughout the 1950's Robert Moses attempted to rezone much of the area for residential development with plans to remove up to a third of the entertainment district. However, pushback from the community led to the reinstatement of the previous uses and some of Moses's proposals were rejected.<sup>46</sup> The New York Aquarium opened in the neighborhood in 1954 as part of a plan to revitalize the area and many other attractions continue to operate.

The 1960's saw the fortunes of Coney Island change, the World's Fair events in the early 1960's caused a decline in tourist traffic to the area.<sup>47</sup> Issues with rising crime and the effects of the post-war suburban growth continued to decrease foot-traffic to the amusement parks causing many to close their doors. This economic downturn in the neighborhood created increased development interest with large real estate companies moving in to rapidly expand residential housing. Fred Trump took advantage of the situation and purchased much of the former amusement parks attempting to turn them either into residential developments.<sup>48</sup> Tensions between developers such as Norman Kaufman, the city government, and residents heightened with the city taking land and leasing it to developers. All the while, the local community struggled with social issues such as drugs and crime, giving the area a general perception of poor

safety. During the 1970's a number of strategies to increase positive development were pursued but conflict between developers and public agencies stalled these efforts.<sup>49</sup> The idea of building entertainment around gambling was considered but nothing was built upon this and by the 1980's the area was largely abandoned with the city demolishing structures, creating many vacant lots. Acquiring significant land from developer Norman Kaufman the city attempted to attract development but was unable to do so due to crime issues in the neighborhood.<sup>50</sup> By 1990 Mermaid Ave. had only 39 active storefronts.<sup>51</sup>

Through the 1990's two proposals to help revitalize the area began serious development, Horace Bullard's proposal to rebuild the area near Steeplechase Park, and the proposal to build a baseball stadium just north of the Abe Stark Ice Rink. Simultaneously, a number of amusement rides in the neighborhood were designated as New York City landmarks, protecting them from future development. Plans to build the proposed sportsplex were delayed by regulation, political conflict, and cost increases, however a large amount of residential development was completed. By 1998 the sportsplex proposal had been scaled down and Horace Bullard was no longer seeking to complete his rebuilding plan, he concurrently sold the land to other developers. The plan for the sports park went ahead and the minor league baseball stadium opened in Maimonides Park in 2005 along with improvements to sewers and transportation.<sup>52</sup> Competing development interests continued in the area and the city rezoned the Coney Island neighborhood in 2009 creating an amusement district along with establishing guidelines for further development. Thor Equities took a large hand in the redevelopment efforts with extended negotiations to open resorts, timeshares, and entertainment related developments. Improvements to existing amusement parks have been made with Luna Park opening in 2010 along with a number of public plazas.<sup>53</sup>

Recent developments have included expansions of amusement space and major increases in residential units. New York State officials have announced their intentions to issue casino licenses for the development of casinos in the New York City area, possibly in Coney Island.<sup>54</sup> It remains to be seen if a casino will be fully developed in the neighborhood and there has been significant pushback from some of the community.<sup>55</sup> Although there is recent development activity, the area is not taking full advantage of its amusement assets. The story of the Coney Island neighborhood is one of economic fluctuations with a recent downturn that if left unchecked can lead to a distressed future for its residents.

### **Background of Abe Stark Site**

Named after the businessman and local New York City politician, the Abe Stark Ice rink is located adjacent to the historical site of Steeplechase Park on the boardwalk of Coney Island Beach. The site is surrounded by a parking lot on three sides with its southern wall touching the boardwalk. The rink is part of the same lot as Maimonides Park, the minor league baseball stadium and also features some historical amusement space. The current building is roughly 53,000 square feet with a height of 46 ft and a building perimeter of roughly 1,000 linear feet. There is only one floor of the building which holds the rink, locker rooms, and other necessary features for its use.



**Figure 4***Map of current site*

The site is currently owned by the New York City Parks department and operates as an ice rink on Saturdays and Sundays throughout the winter months, typically October through March, and charges \$12 for admission and \$7 for ice skate rental. The land upon which the skating rink is built is the historical site of the Ravenhall Baths, a private recreation facility for day-trippers and visitors to Coney Island.<sup>56</sup> The city acquired the land through condemnation in 1964 and it has been held by the parks department since. The current ice skating facility,

providing locker rooms, concessions, and a rink, opened in 1970 and has operated since. The addition of the oversized parking facility was intended to serve not just the Abe Stark facility but the entirety of the Coney Island boardwalk. The skating rink has been a meaningful recreation center for the community for many decades and in recent years the community has expressed a wish to not see the site fall into the hands of a private developer.<sup>57</sup>

According to the 2022 annual concession report from the New York City Chief Procurement Officer, the rink is operated by City Ice Sports Inc. who brought in \$2,857 in revenue over the course of fiscal year 2021.<sup>58</sup> From the same annual report for 2023, the rink brought in \$8,160 in revenue over the fiscal year 2022.<sup>59</sup> This revenue significantly underperforms other ice rinks within the New York City Parks Department in recent fiscal years. However, the parking facilities at the site bring in significantly more revenue for the city with \$258,560 in revenue for the fiscal year 2022. However, for a parking structure, this revenue is not significant and from the city's perspective, these assets are likely not considered "income-generating." While the city may not be invested in parking as a continuing use on the site, the Brooklyn Cyclones organization, who play at Maimonides Park, have expressed the need to keep the parking facilities. Additionally, the local community has previously expressed significant interest in development surrounding the baseball stadium. When the stadium was opened in the early 2000's many community members expressed interest in recreational facilities accompanying the park. This interest also incorporated Abe Stark which is considered to be a valuable resource by the local community.

**Figure 5**

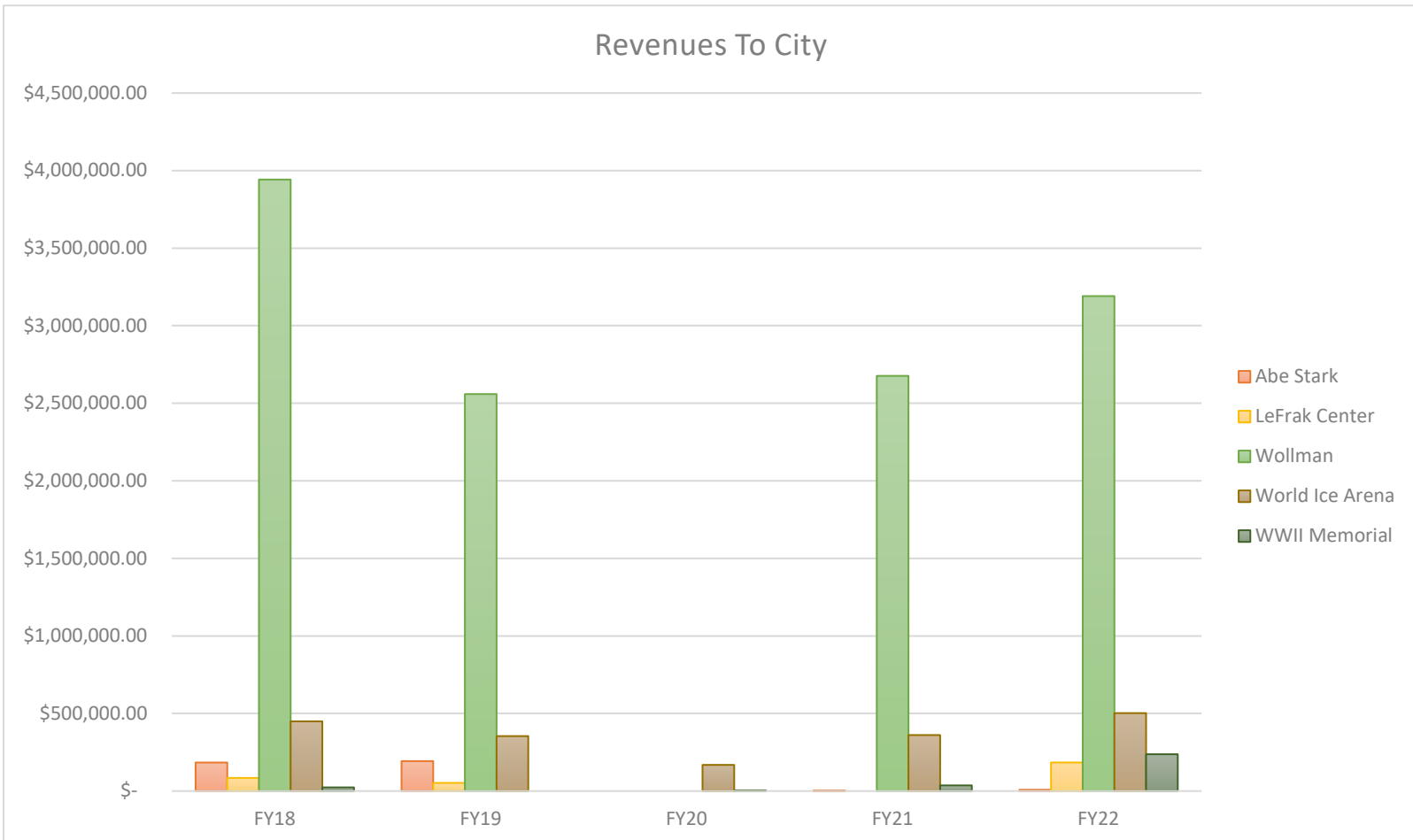
*Revenues to New York City Government from site operations*

*From NYC CCPO Annual Reports*

Rink	FY18	FY19	FY20	FY21	FY22	5 Year Total	Borough
<b>Abe Stark</b>	\$ 183,750.00	\$ 192,938.00	\$ -	\$ 2,857.00	\$ 8,160.00	\$ 387,705.00	Brooklyn
<b>LeFrak Center</b>	\$ 84,550.00	\$ 52,288.00	\$ -	\$ -	\$ 184,007.00	\$ 320,845.00	Brooklyn
<b>Wollman</b>	\$ 3,942,294.00	\$ 2,559,125.00	\$ -	\$ 2,676,519.00	\$ 3,190,909.00	\$ 12,368,847.00	Manhattan
<b>Bryant Park</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Manhattan
<b>World Ice Arena</b>	\$ 449,310.00	\$ 354,050.00	\$ 168,456.00	\$ 360,814.00	\$ 502,220.00	\$ 1,834,850.00	Queens
<b>WWII Memorial</b>	\$ 23,352.00	\$ -	\$ 4,324.00	\$ 36,326.00	\$ 237,171.00	\$ 301,173.00	Staten Island

**Figure 6**

*Revenues to city from site operations*



This community opinion of Abe Stark is one that has been enshrined in New York State law. In 2011 Senator Savino of the 23<sup>rd</sup> senate district led the passing of Senate Bill 1610 in session that protects the Abe Stark ice rink as a community resource.<sup>60</sup> This bill allowed the city government to transfer ownership of the tax lot underneath Abe Stark to another entity provided the city designates a portion of the transferred area as parkland. The bill also enables the city to enter into long-term lease agreements for the development and operations of the land as an “amusement park.” Dealing with the Abe Stark site specifically, the bill reads: “The transfer of discontinued parkland pursuant to this section shall be subject to the requirement that the improvement on such discontinued parkland known as the "Abe Stark Rink" shall not be demolished prior to the construction of a replacement rink (unless such replacement rink is constructed on the same site), with the goal of continuing normal ice skating activities until the replacement rink is complete and that such replacement rink shall be constructed within the Coney Island area.” The implication of this bill is that the Coney Island community shall always have some portion of land that is operated as an ice rink regardless of if this occurs at the current site of Abe Stark.

Following up on this New York Senate bill is the 2019 request for proposal sent out by the New York City Economic Development Corp. (NYCEDC).<sup>61</sup> This request specifies interest in “a developer to construct a new iconic attraction along the famed Riegelmann Boardwalk in Coney Island, Brooklyn. NYCEDC is looking for proposals to develop a new state-of-the-art ice-skating venue, open and accessible to the public, and potentially including other uses, such as complimentary sporting facilities, community space, entertainment, retail, and dining on a city-owned site. Proposals should also contemplate

the demolition of the existing Abe Stark Ice Rink on the site, which lies in the street bed of the future West 20th Street extension and must be removed in order to enable street buildout and development of the site.” The city clearly holds the perspective that the lot currently holding Maimonides Park and Abe Stark is underutilized and must be developed in the future as part of a cohesive redevelopment of Coney Island. This specific request for proposal has not led to any manifested development on the site as the lot is still owned by the parks department.

### **Neighborhood Level Analysis**

For the purposes of this study, the Coney Island neighborhood has been considered to be within the US zip code 11224. The decision to use the full zip code area has been made in order to ensure that relevant data is available. The population within this area is 48,943 people with a median household income of \$37,100 in 2023. The 2023 median household income of Brooklyn is \$70,220, while the median household income of New York City is \$77,077. Looking at 2023 per capita income the comparison is similar, Coney Island is \$29,127, Brooklyn is \$41,355, and New York City is \$45,830. The Coney Island neighborhood is less than the median in measures of income than the geographies it is surrounded by and less than the United States median. Looking towards future potential, over the next five years the median household income in the Coney Island neighborhood is expected to grow 10%. Over the same time period, the median household income of Brooklyn is expected to grow 14% while the median household income of New York City will grow 11%. This is a neighborhood that is lagging behind in terms of income and this appears to be the case looking forward.

**Figure 7**

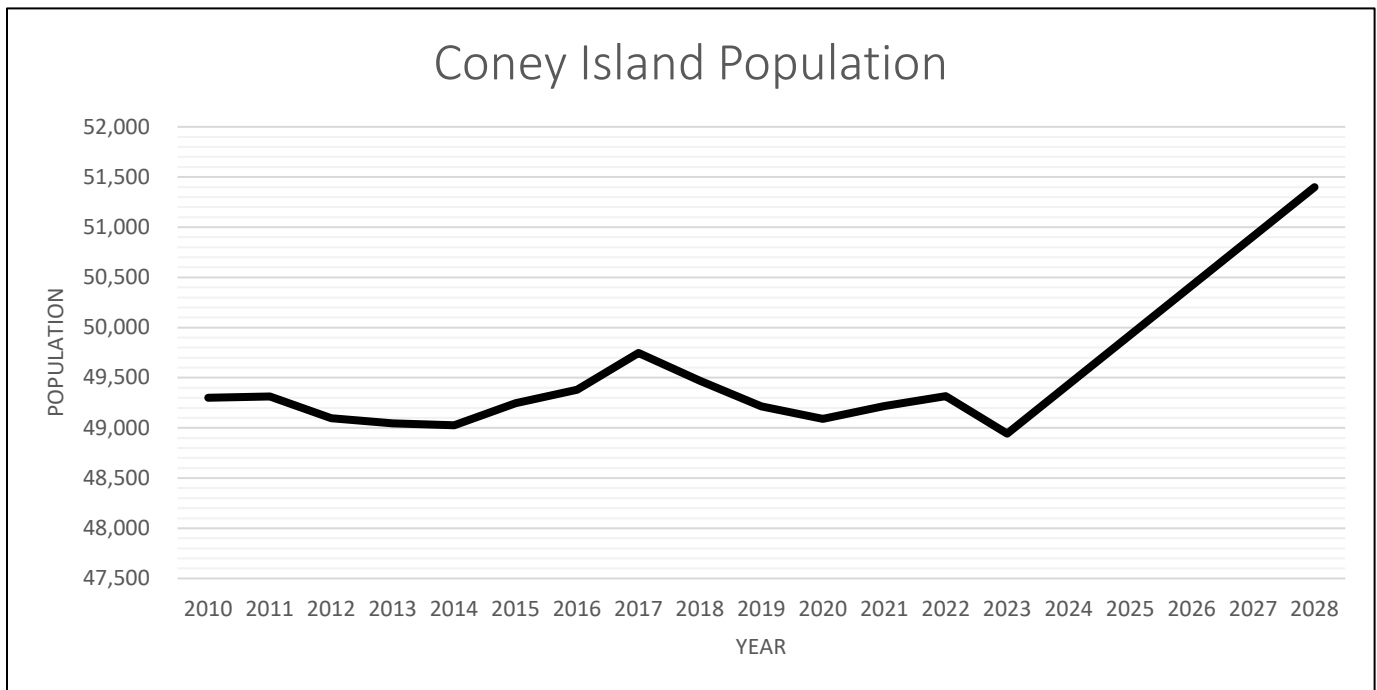
*Household income comparison*

SITE	2023 MEDIAN HOUSEHOLD INCOME	2028 MEDIAN HOUSEHOLD INCOME	EXPECTED GROWTH RATE 2023-2028
11224 (BROOKLYN)	\$37,100	\$40,893	10%
KINGS COUNTY, NY	\$70,220	\$79,967	14%
NEW YORK	\$77,077	\$85,392	11%
USA	\$72,603	\$82,410	14%

Source: ESRI 2023 – 2028

**Figure 8**

*Population of Coney Island Over Time*



Source: ESRI

Coney Islands population has fluctuated over time and is predicted to increase to 51,399 by the year 2028. This population change will increase the pressure on the development to maintain growth in the housing stock and pressure on the city to ensure that community resources/services keep up with this growth. This growth in housing is especially important as rents in the area are already straining the local community. In 2021 the percentage of Coney Island households that had gross rent of 50% or more of monthly income was 27.38%, higher than the national average of 22.91% and the New York City percentage of 26.08%. If rent costs continue to increase in the area due to increases in the population or increases in rent value, these portions of the population are at risk of being pushed out. The Coney Island population is older with a median age of 48.7 and majority white with 52.4% of the population reporting as “white alone” in 2023. The area is slowly diversifying with the shares of black and Asian residents increasing from 2020 – 2023 (22.9% to 23.1% and 8.5% to 8.7% respectively).

### Figure 9

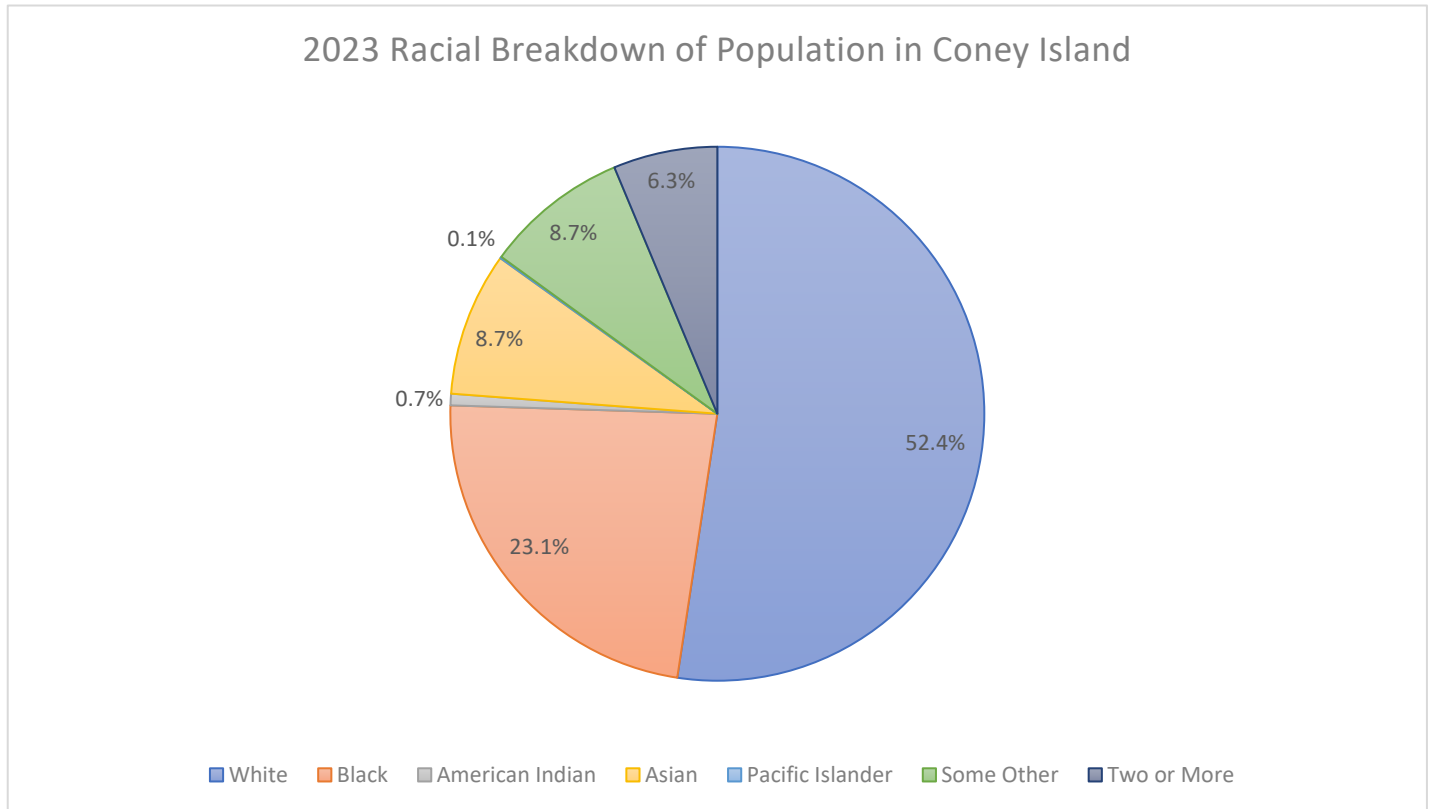
#### *2021 Percentage of Households Rent Burden*

SITE	2021 HHS W/GROSS RENT 50% + OF HOUSEHOLD INCOME (%)
11224 (BROOKLYN)	27.38%
KINGS COUNTY, NY	27.08%
NEW YORK	26.08%
USA	22.91%

Source: ESRI

**Figure 10**

*Chart of racial demographics in Coney Island*



Source: ESRI

The community has a number of active community resources and is not considered particularly “at-risk.” Asset mapping through the Citizens Committee for Children in New York City (CCC NYC), the neighborhood ranks 29<sup>th</sup> for risk out of 59 neighborhoods.<sup>62</sup> This data considers the geographic boundaries of Coney Island to be larger than the boundaries used in this study, however, the assets that are mapped are within a short travel time of the chosen zip code boundaries. According to this data from CCC NYC the neighborhood has 11 banking institutions, 2 workforce development centers, 9 medical facilities, 3 public library resources,



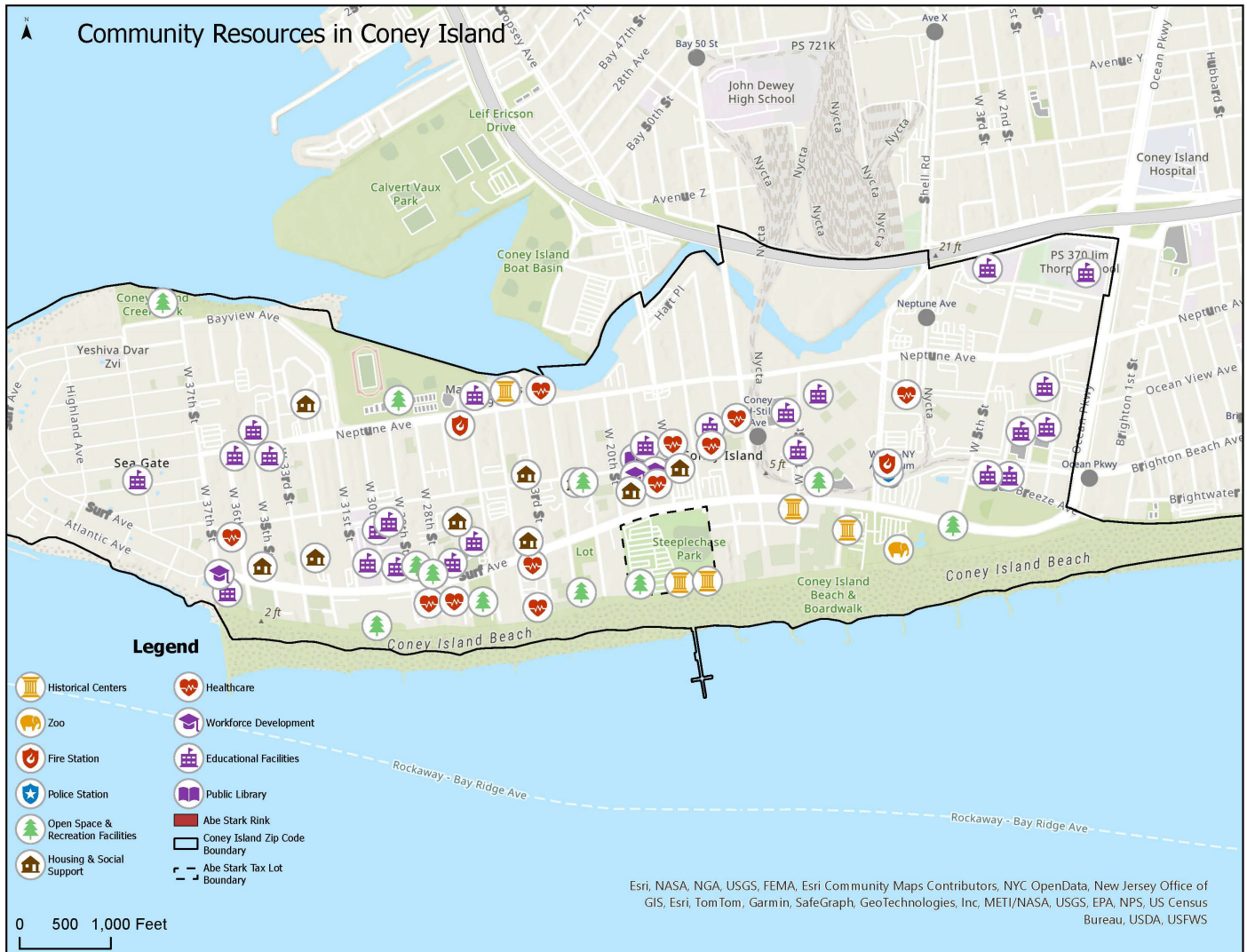
and more. While this data shows that there are community resources present, the demand for these resources is not addressed.

Data from the city planning facilities database sorts facilities that are owned or operated by city agencies. This data can enable the mapping of certain types of community resources, providing another perspective on community resources. This can be helpful to determine whether public resources in the neighborhood are adequate to meet current and future needs. The current community capacity is not serving certain community needs such as the availability of grocery based retail. In a 2017 study, grocery stores were the largest source of retail leakage in the area.<sup>63</sup> Additionally, recent health reports of the area have shown that Coney Island residents die prematurely at a higher rate than the average for New York City Residents.<sup>64</sup> This occurs although there are substantial healthcare resources available in the area. Further community services that are not meeting current needs are the transportation resources in the community as well as housing/workforce development.

Since the 2009 rezoning, adapted existing commercial zoning to residential, the area has seen improved residential development with some larger developments featuring several hundred units taking place. However, this new development has not maximized the potential of the rezoning which sought to encourage the creation of a medium density waterfront neighborhood in the area surrounding Abe Stark. The highest density development in the area has occurred away from the waterfront and has roughly 500 units.

**Figure 11**

*Community resources throughout the study area.*



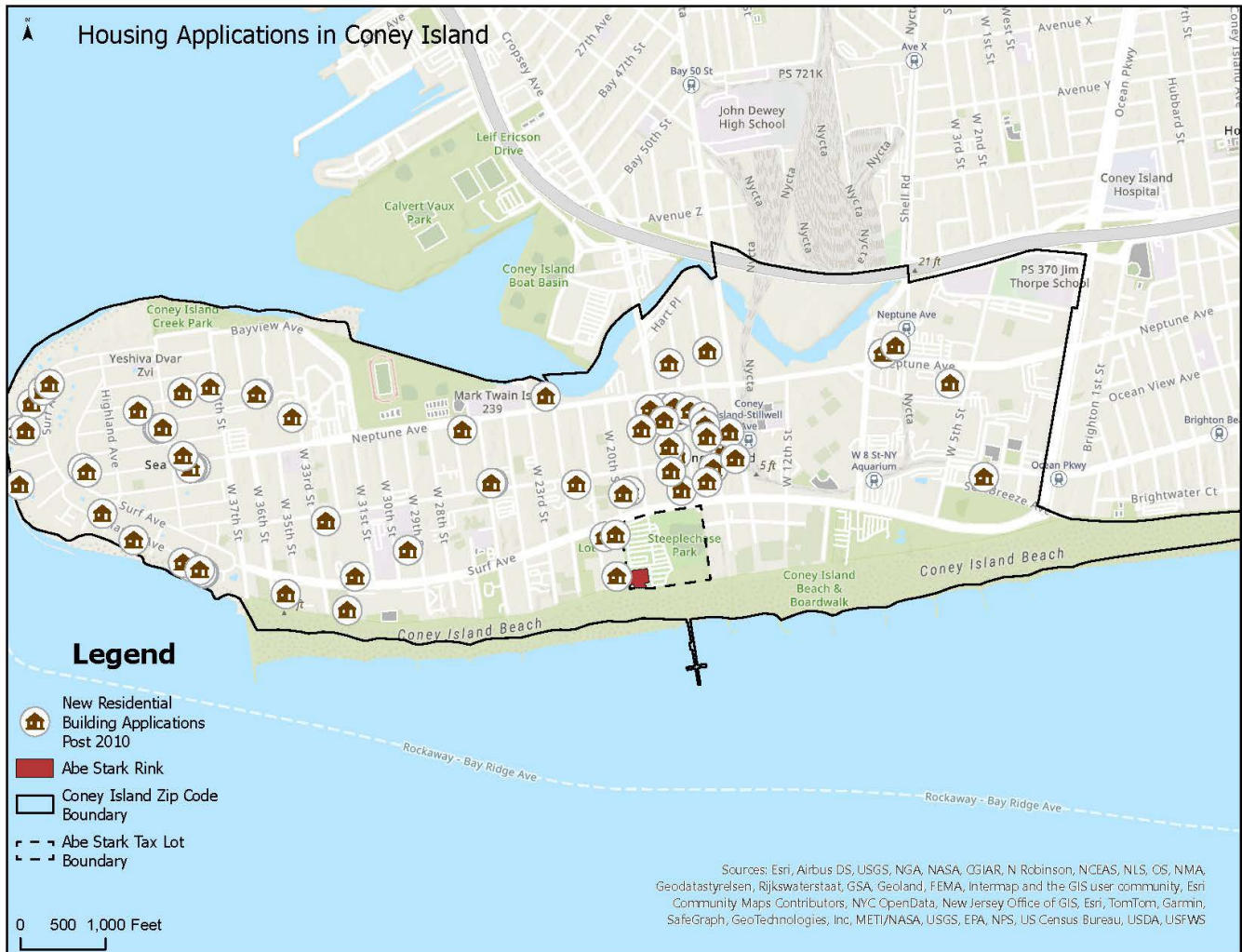
**Figure 12**

*Transportation resources throughout the study area.*



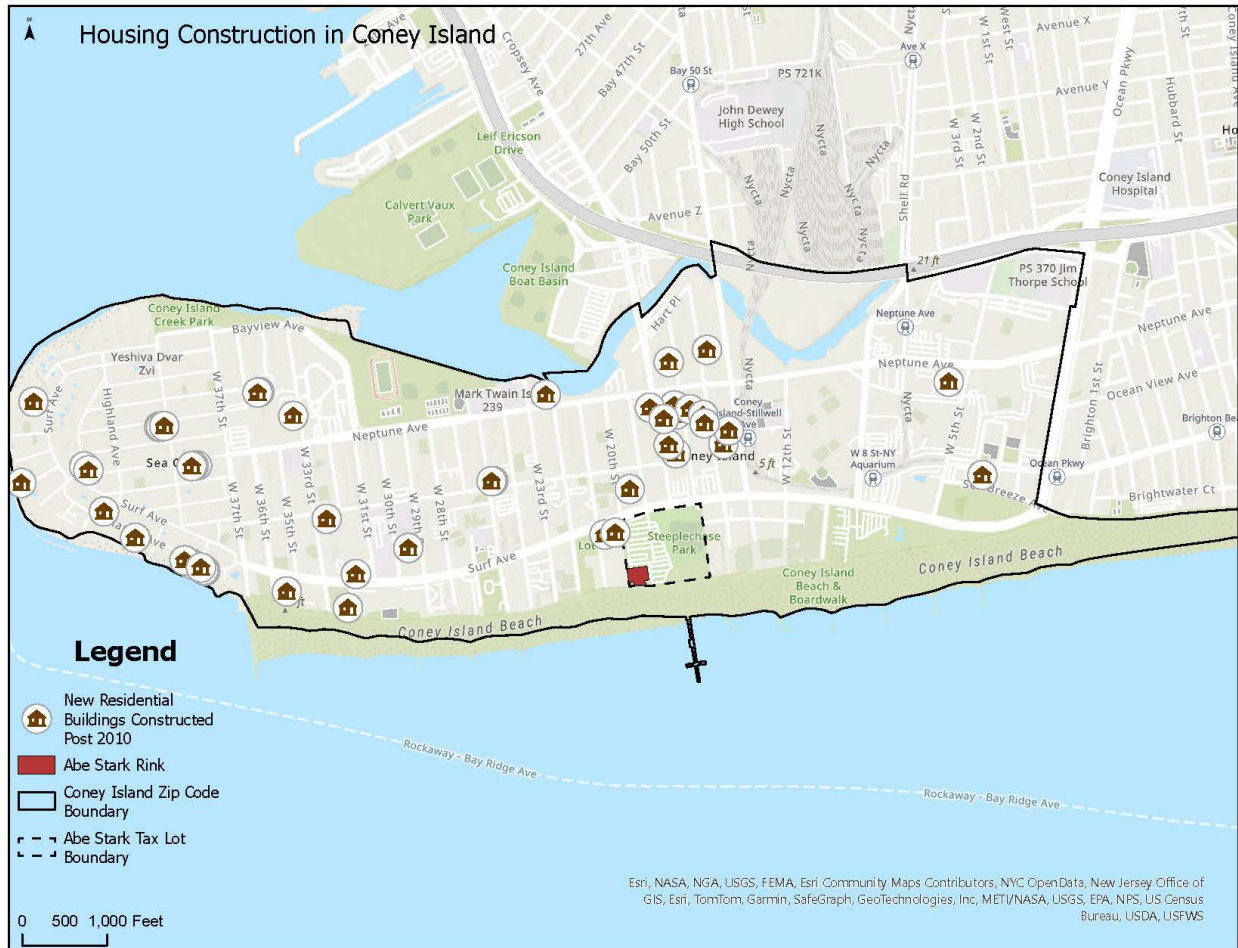
**Figure 13**

*Post 2010 applications for housing construction throughout the study area.*



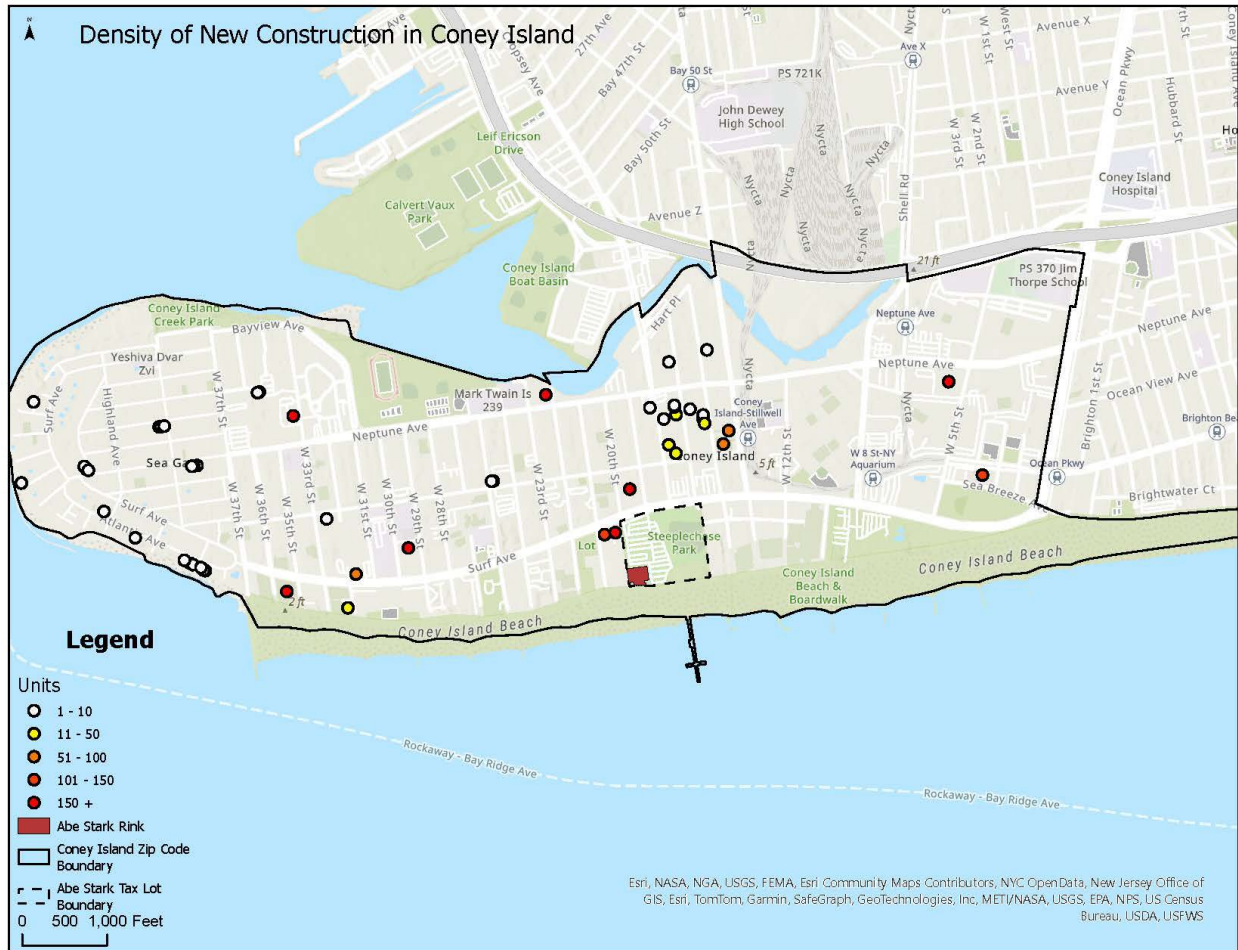
**Figure 14**

*Post 2010 constructed housing throughout the study area.*



**Figure 15**

*New construction by housing units throughout the study area*



**Stakeholder & Community Perspectives**

Engagement with the community involved speaking with residents and business owners in a variety of different formats. Most residents were spoken with in person while other stakeholders like property developers opted to speak over Zoom. All residents and business owners, aside from the development firms, were asked a standard series of questions in a semi-structured interview format. The interviewees were given flexibility to cover topics not accounted for in the questions and express their views in whatever way they wished. Previous

community analysis was not taken into account during the conversations and no resident or business owner was guided to specific thought processes during the conversations. Property developers were hesitant to speak about ongoing or past projects in any official capacity, all conversations occurred in a casual setting with a guarantee of anonymity. These conversations with developers did not occur with any structured questions and topics were flexible depending upon how much the individuals wished to reveal. Finally, previous community input in past projects was researched and considered.

The Coney Island neighborhood has a number of development companies operating in the area with Thor equities, BFC partners, L+M, and Taconic among the largest firms. Thor and L+M were not reachable for any conversations, however, individuals at BFC and Taconic were contacted through professional networking efforts. These employees agreed to casual conversations about the firms development strategies and views at the macro level as well as in Coney Island specifically. The major concern among developers at the moment is the movement of interest rates. Many development firms utilize interest only loans meaning that no principal amount is paid during the lifetime of the loan, and it is simply refinanced at conclusion. This is a reliable strategy when there is little volatility in interest rates, however, when the Fed begins to change rates there can be issues. Refinancing a sizeable loan at an interest rate of 5% or 6% when financial analysis has held the loan at 2% can mean significant changes to levered cash flows. Any change in the cost of debt service can in some cases cause financial viability issues for current projects or ones currently in development. These macro-economic concerns were highlighted by both firms; however, specific project impacts were not mentioned.

Another major concern that both firms expressed as an essential part of property development was the temporal scope of bringing a project to market. Once a project has been

started there is often a timespan of multiple years until the property begins to generate cash flows. This temporal aspect generates risk from a demand perspective as market forces occasionally have the volatility to move in such a way to reduce demand prior to the project coming online. This means that the vacancy rates or the assumed rental prices may no longer be realistic by the time the project nears completion. Both firms did express, however, that this level of market movement is rare and in most cases is not necessarily a concern due to the uniqueness of the New York City real estate market. In this market, demand typically remains significant for properties below luxury level unless there is a major economic shift.

During these conversations, the firms were not as forthcoming regarding development strategy in Coney Island specifically and had nothing of substance to say regarding the Abe Stark site. However, the Taconic partners website features sketches and renderings of their Surf Avenue property and in these images the site is featured. In one sketch specifically, the site is captured in its entirety and rather than displaying the current conditions, it is shown as a large park next to the baseball stadium.<sup>65</sup> This is no doubt a choice to advertise ocean views in their residential units, perhaps justifying a demand for premium rental rates. Any large level development on the Abe Stark site would likely impact this, especially a development that features a large residential element. The site immediately bordering Abe Stark to the west is also altered from its current conditions to reflect medium density development at the waterfront featuring what looks to be extensive commercial space. Although there was not any real discussion on development strategies in the area, it is clear that developers see this location as part of a medium to low density residential and commercial development. Judging from discussions and observing the marketing for current properties, the future of the neighborhood from the development perspective seems to rely on a reinvigorated amusement area along with



an increase in housing. This vision has likely been reinforced by the recent potential for casino development as well as the presence of other large development firms in the area.

**Figure 16**

*Taconic Partners development sketch*



Source: Taconic Partners

From the community perspective, the neighborhood is dealing with significant issues ranging from the physical deterioration of buildings to the lack of transit options. Interviews conducted with multiple community members from a variety of backgrounds all featured similar complaints. Firstly, the neighborhood is not in good condition, the commercial space has a large number of vacant storefronts and the buildings do not appear to be well taken care of. Residents expressed a view that the pandemic in prior years essentially killed off many of the small

businesses that existed in these now vacant storefronts. Crime is another issue that residents expressed to be impacting the ability of commercial space to decrease vacancy. Residents stated that drug use is common and many mention that it is common for drug paraphernalia to be found in and around the boardwalk spaces. Some also mentioned that they purposefully avoid the waterfront area at certain times due to negative encounters they experienced. Violence during peak times is also common with some interviewees pointing to news articles last summer referring to stabbings, robberies, and fights at the boardwalk areas. There seems to be an overall unsafe feeling when it comes to large areas of the neighborhood and one resident went so far as to express that the area was a “shell” of its former self. This perspective of danger was also expressed regarding the public transportation system which was also stated to be inadequate for service needs. This view of the area as physically degenerating while it becomes more dangerous may or may not be supported by crime statistics. However, statistics do not capture everything that affects residents perspectives on their safety, and this perspective can significantly alter the ability of the area to attract new residents and businesses.

Business owners in the area expressed a high level of seasonality for commercial and amusement activity. Many businesses must make the majority of their yearly income during the few peak months when tourism to the area picks up significantly. The low foot traffic during the winter months and the high concentration of tourist focused commerce means that residents may not have all the services that they need. As mentioned previously, “grocery and food” was the highest category of retail leakage for the neighborhood. This was confirmed in conversations with residents and business owners alike who expressed a need to diversify the local economy. Another factor that some business owners felt was affecting their ability to attract off season foot traffic is the distance from Manhattan to Coney Island. The need for faster and more frequent

public transit, especially at later hours, was mentioned as a way to increase the customer base available to local businesses. This wish was also mirrored by residents who expressed the fact that they felt certain job opportunities were off limits to them due to the long hours needed to commute to Manhattan. During community engagement these long hours of travel were experienced firsthand when the train to Coney Island took about 4 hours roundtrip due to delays on the metro lines. Finally, the baseball stadium located directly to the east of the Abe Stark site houses the Brooklyn Cyclones team, something that many interviewees mentioned as a positive aspect of the neighborhood. This minor league team generates reasonable foot traffic to games and utilizes the parking on the site extensively.<sup>66</sup> Average game attendance for 2023 was just under 3,000 people, a slight increase from the previous season. Residents and business owners mentioned that a sizeable portion of the games are attended by those outside of the geographic area of Coney Island. The owner of the Cyclones has expressed a direct need to maintain parking on the site, without which attendance would suffer.

## **Zoning**

The ability for a site to generate certain economic benefits is to a large extent influenced by what is possible to build on that site. The Abe Stark rink is located on the same tax lot as Maimonides Park and has an extensive parking structure (block 7073, lot 101). There are multiple zoning layers that overlap on the lot, R7D, CI, C2-4, and PARK. The CI zoning establishes the Coney Island special purpose district. The Abe Stark building specifically lies within an R7D district and C2-4 overlay. The R7D zoning establishes a contextual district to promote new medium-density development along transit corridors that range between 10 and 11 stories.<sup>67</sup> The C2-4 subdistrict is a commercial overlay within residential districts that is designed

to promote the development of local retail services throughout lower and medium density areas.<sup>68</sup> The lot that Abe Stark sits on is designated as a landmark, part of a historic district which means that the Abe Stark rink could be subject to protections under the landmarks law along with the necessary review procedure for any changes to the building. The lot is also within a designated transit zone and inclusionary housing zone meaning that lower parking requirements can apply for types of affordable units and some units may qualify the building for bonus FAR. The lot is eligible for the FRESH program which offers incentives for developments that include FRESH supermarkets. These incentives can be either a FAR boost or certain tax incentive programs that developers can apply for. The area of the baseball stadium on the west side of the lot and the surrounding area are designated under the PARK zoning category meaning that no square footage, either residential or commercial can be drawn from that area. More specific to the building design, the lot is designated as a waterfront zone which can mean certain bulk regulations apply. The lot is also designated as a coastal zone and therefore the New York City waterfront revitalization program may apply to any development on the site.

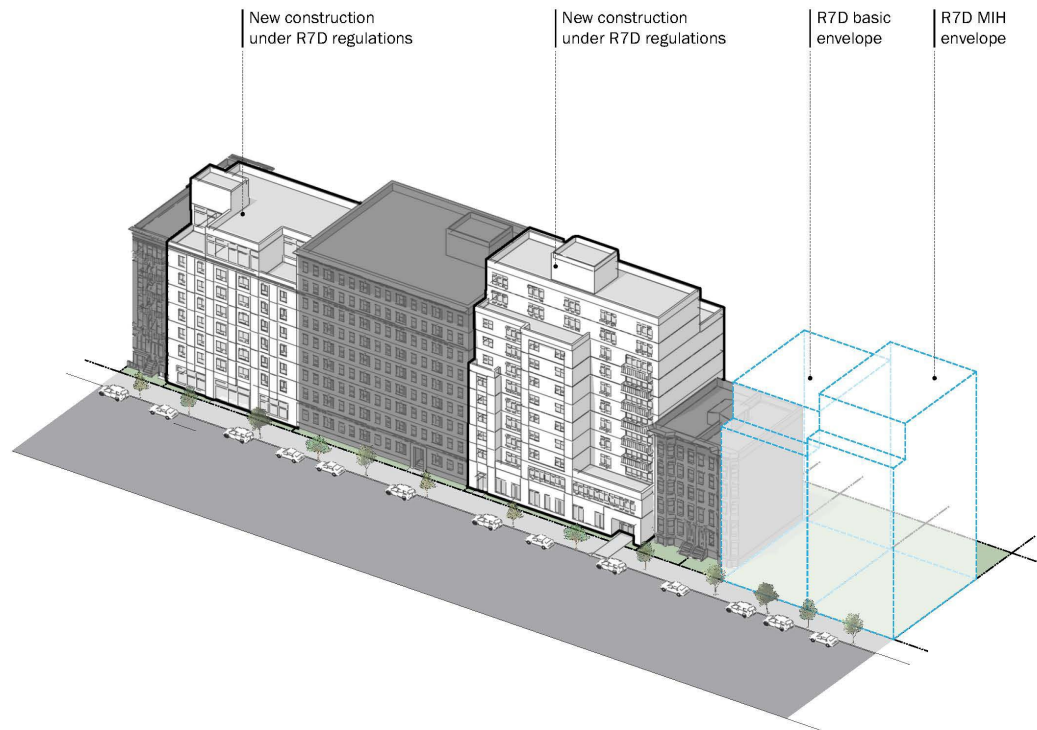
The R7 residential zoning district typically takes form in medium-density apartment buildings and are present in the Upper West Side and similar neighborhoods. Brighton Beach, just next to Coney Island has significant area featuring this zoning. The height factor regulations associated with R7 zoning encourages lower apartment buildings on smaller lots while encouraging taller buildings with less lot coverage on larger lots.<sup>69</sup> There are also quality housing regulations that allow for lower buildings with greater lot coverage and are optional for developers. The R7D zoning district is a R7 subdistrict and used mainly along transit corridors or in special purpose districts like that found in Coney Island. This zoning allows for a floor area ratio (FAR) of 4.2, giving R7D districts higher density than other R7 districts. When a

commercial overlay is mapped onto an R7D district, which is the case for Abe Stark, the ground floor of the site must have a retail use, either goods or services. The quality housing regulations typically results in ten-story buildings set near the street line. These regulations also specify that the base height of a new construction must be 60-85 feet before setback with a maximum height of 100-105 feet with a qualifying ground floor use (commercial). If the building pursues the inclusionary housing program, there is a bonus FAR available which brings the total FAR to 5.6. Finally, with R7D zoning, there is a parking requirement of 15% of the dwelling units within the building but this can be altered if participating in income-restricted housing units or for lots of 10,000 or less.

**Figure 17**

*R7D Zoning Table*

<b>Medium-Density Contextual Residence District</b>												
<b>R7D</b>	<b>Lot Area</b>	<b>Lot Width</b>	<b>Rear Yard</b>	<b>Lot Coverage</b>		<b>FAR</b>	<b>Base Height</b>	<b>Building Height</b>	<b># of Stories</b>	<b>DU Factor</b>	<b>Required Parking</b>	
	min.	min.	min.	Corner	Other Lot						max.	min.-max.
						max.					min.	
<b>Basic</b>	1,700 sf	18 ft	30 ft	100%	65%	4.20	60-85 ft	100 (105) ft	n/a (10)	680	50% of	15% of
<b>Inclusionary</b>						5.60	60-95 ft	110 (115) ft	11		DU	IRHU

**Figure 18***R7D Zoning Diagram*

The C2-4 zoning maps a commercial overlay onto the R7D zoning district establishing ground floor uses that can range from retail stores to repair services.<sup>70</sup> In mixed use buildings, commercial uses are limited to within the first two floors and are always required to be located below residential. When overlaid on an R7 district, the maximum FAR for commercial uses 2.0 and are subject to commercial bulk guidance. C2-4 zoning requires parking at a rate of 1 per

1,000 sf and a depth of the overlay district of 100 feet. The residential area of the building is subject to residential bulk guidelines.

**Figure 19**

*C1 and C2 Zoning Overlay Table*

C1 and C2 Overlays	Local Retail and Local Service District									
	C1-1	C2-1	C1-2	C2-2	C1-3	C2-3	C1-4	C2-4	C1-5	C2-5
Commercial FAR within R1 - R5	All districts have a commercial FAR of 1.0									
Commercial FAR within R6 - R10	All districts have a commercial FAR of 2.0									
Depth of Overlay District (in feet)	200	150					100			
Required Accessory Parking PRC-B	1 per 150 SF		1 per 300 sf		1 per 400 sf		1 per 1,000 sf		None	

As a result of the relevant zoning and bulk guidelines, we can expect any new building placed on the Abe Stark site to feature ground floor commercial with about 10 stories of residential above. This building or series of buildings will have a continuous street wall aligning with the commercial zoning overlays. Using the zoning lot size, the zoning overlay, and the FAR requirements the maximum allowable square footage has been calculated below. The maximum allowable dwelling units were also calculated below using the zoning guidelines for a residential building with inclusionary and one with all market rate units.

**Figure 20**

*SQFT calculations for site.*

<b>Type</b>	<b>SQFT</b>	<b>FAR</b>	<b>Maximum Buildable Area</b>
Residential sqft on lot	340,000	5.6	1,904,000
Commercial overlay North	116,000	2.0	232,000
Commercial overlay South	119,000	2.0	238,000
Residential sqft on lot (no inclusionary)	340,000	4.2	1,428,000

**Figure 21**

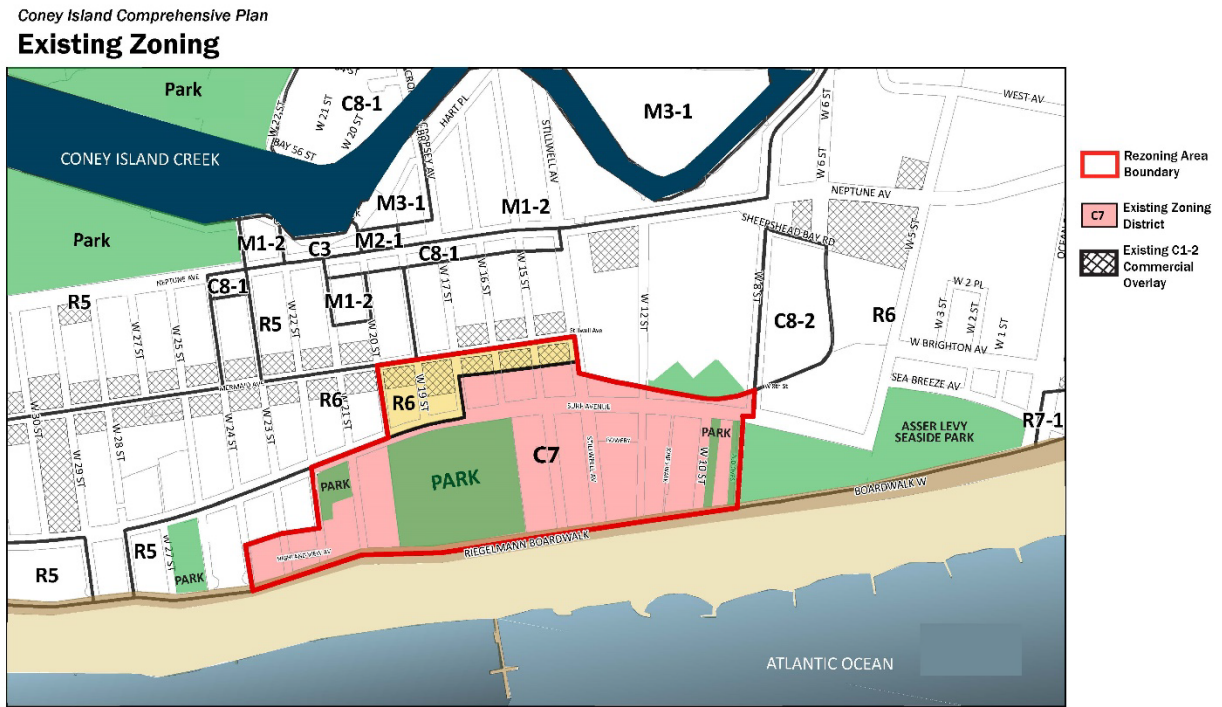
*Dwelling unit calculations for residential on site.*

<b>Maximum Dwellings</b>	<b>Count</b>
DU Factor	680
Dwelling Calculation (inclusionary)	2,800
Dwelling Calculation (market)	2,100



**Figure 22**

*Existing zoning prior to 2009 rezoning*



Source: NYCEDC

The 2009 rezoning of Coney Island established the Coney Island special interest district which set a number of specific areas of emphasis for the district:

- a) to preserve, protect and enhance the character of the existing amusement district as the location of the city’s foremost concentration of amusements and an area of diverse uses of a primarily entertainment and entertainment-related nature;
- b) to facilitate and guide the development of a year-round amusement, entertainment and hotel district;
- c) to facilitate and guide the development of a residential and retail district;

- d) to provide a transition to the neighboring areas to the north and west;
- e) to provide flexibility for architectural design that encourages building forms that enhance and enliven the streetscape;
- f) to control the impact of development on the access of light and air to streets, the Boardwalk and parks in the district and surrounding neighborhood;
- g) to promote development in accordance with the area’s District Plan and thus conserve the value of land and buildings, and thereby protect the City’s tax revenues.<sup>71</sup>

**Figure 23**

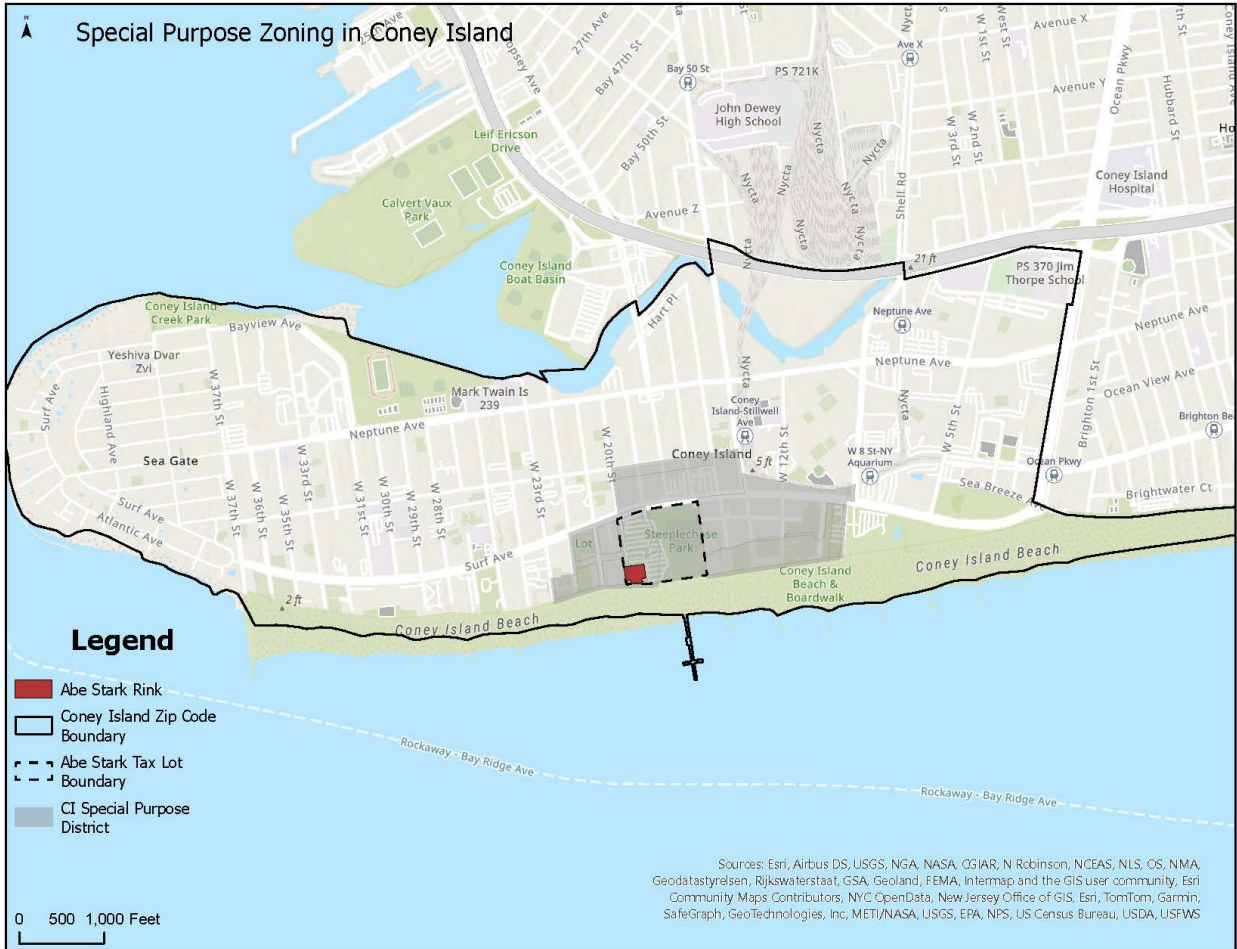
*Coney Island 2009 approved rezoning.*



Source: NYCEDC

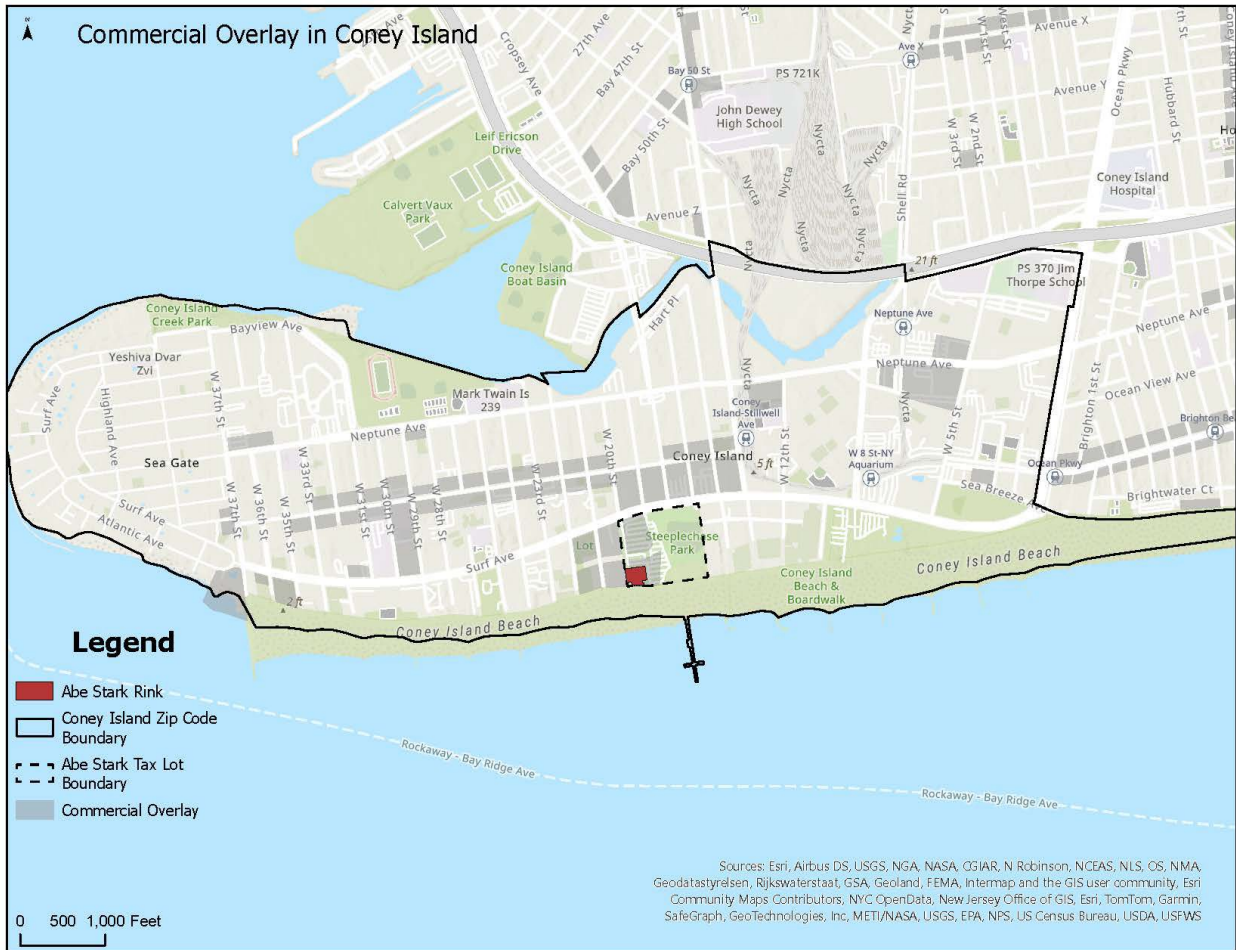
**Figure 24**

*Special Purpose District established in 2009 rezoning.*



**Figure 25**

*Commercial Overlay established in 2009 rezoning.*



### **Proposed Development Options for Abe Stark**

Stated simply, the land use options for the Abe Stark site should meet the requirements of being the highest and best use for the neighborhood. A use that provides the best possible combination of economic and non-economic benefits. As publicly owned land the site should be activated for the benefit of the community surrounding it, functioning as a public good. In the event that the city decides to sell the land to a private developer, this need for public good should be taken into consideration regardless of who is ultimately responsible for its development.

There are three main use options for the site, each with positives and negatives depending upon the ultimate goal for development in the area. The site can be thought of in two directional aspects, a northern and southern part of the site. The current Abe Stark building is located on the southern part of the site and any recreational or amusement development would happen in this area. The northern part of the site is currently an open surface parking lot and therefore its use would not be impacted by the expansion or renovation of the ice rink.

“Option 1” (as it will be referred to in the rest of the document) the rink can be removed from its current location and constructed elsewhere in the Coney Island neighborhood per the state law requiring this action. In this scenario, the full site can be used to develop residential buildings with commercial ground floor uses essentially creating a medium density neighborhood in accordance with the 2009 rezoning commercial overlay. This option also would require the construction of an underground parking lot due to the influence of the baseball stadium just to the east of the site.

“Option 2” (as it will be referred to in the rest of the document) also includes moving the parking lot underground while renovating the ice rink and developing a full scale recreation center on the southern area of the site. In this option, the northern residential construction occurs

with commercial ground floor, creating essentially one half of the medium density neighborhood laid out in the 2009 rezoning overlay. This option allows for the ice rink to remain in place while constructing an attractive recreation area in the surrounding space. The operations in this scenario can include both summer and winter sports to a varying degree. There is also the potential to attract further investment in or from the minor league team for use of the recreation area as a training ground.

Finally, the third option, “option 3” (as it will be referred to in the rest of the document) moves the parking underground, again addressing the concerns to keep the baseball team in place. This option also includes a renovation of the ice rink, but the surrounding development is based on amusement operations rather than recreation. This model of operations fits in with the current economy of the neighborhood and provides an opportunity to expand on the historic Steeplechase Park. Along with the amusement area, there is a significant opportunity for the incorporation of green space or open space in this option.

The current parking on the site must be incorporated into these development options. The boardwalk that borders the southern area of the site is already raised above the ground level of the current open air parking. This means that the “underground” parking aspect of the development options can be simply covering the existing parking in a concrete structure and building above this. This would raise the height of the southern area to match the height of the boardwalk. The Abe Stark building could be raised to match this or the parking structure can allow for a height gradient towards the building.

Below is a table that summarizes each development option. It should also be said that the ground floor commercial use can explore a number of use options due to the large size of the commercial space in all options in which it is present. It is also important to consider that this

development can occur through a combination of ownership and financing strategies which will ultimately decide the operating model.

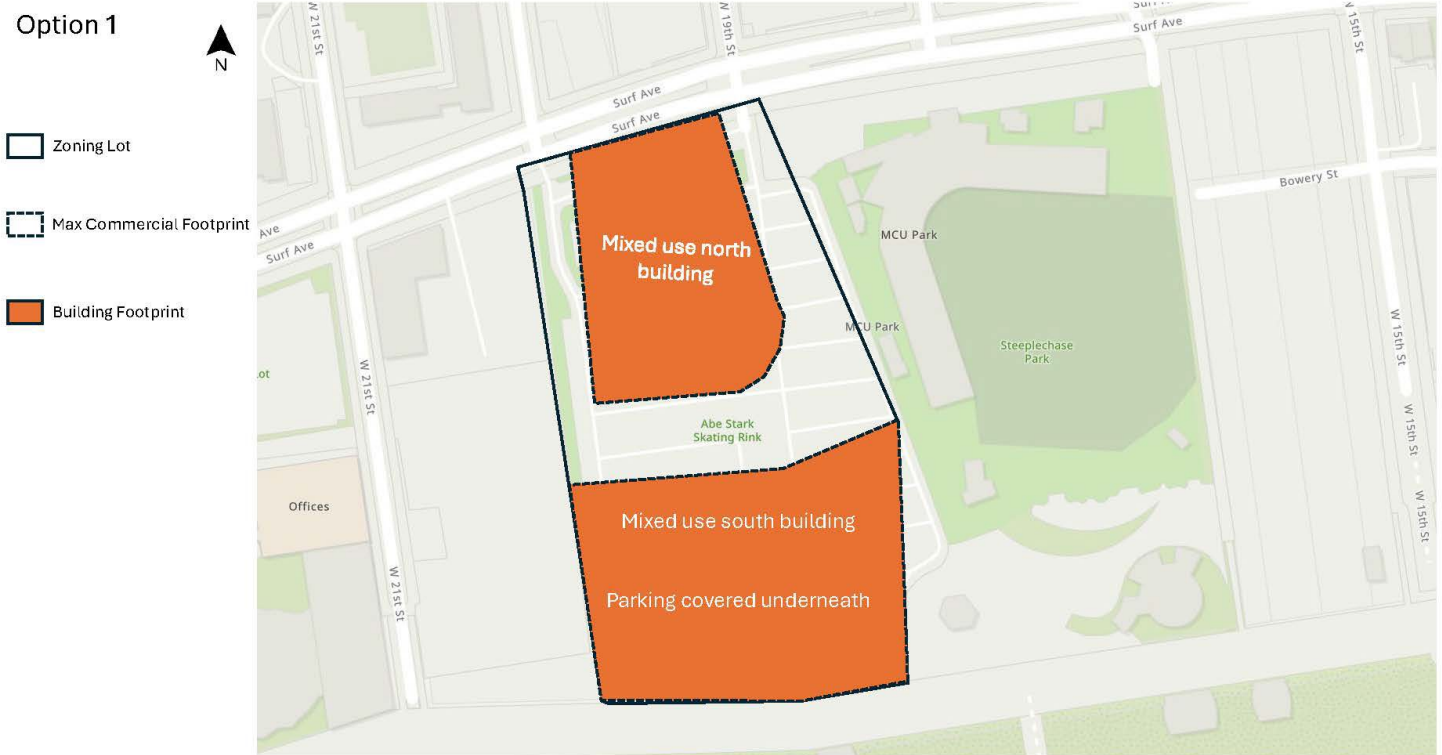
**Figure 26**

*Proposed development options for the site*

Option	Event 1	Event 2	Event 3	Event 4
1	Underground Parking	Commercial North and South	Residential North and South	Rebuild Abe Stark
2	Underground Parking	Renovate Abe Stark	Recreation Area South	Commercial and Residential North
3	Underground Parking	Renovate Abe Stark	Amusement Area South	

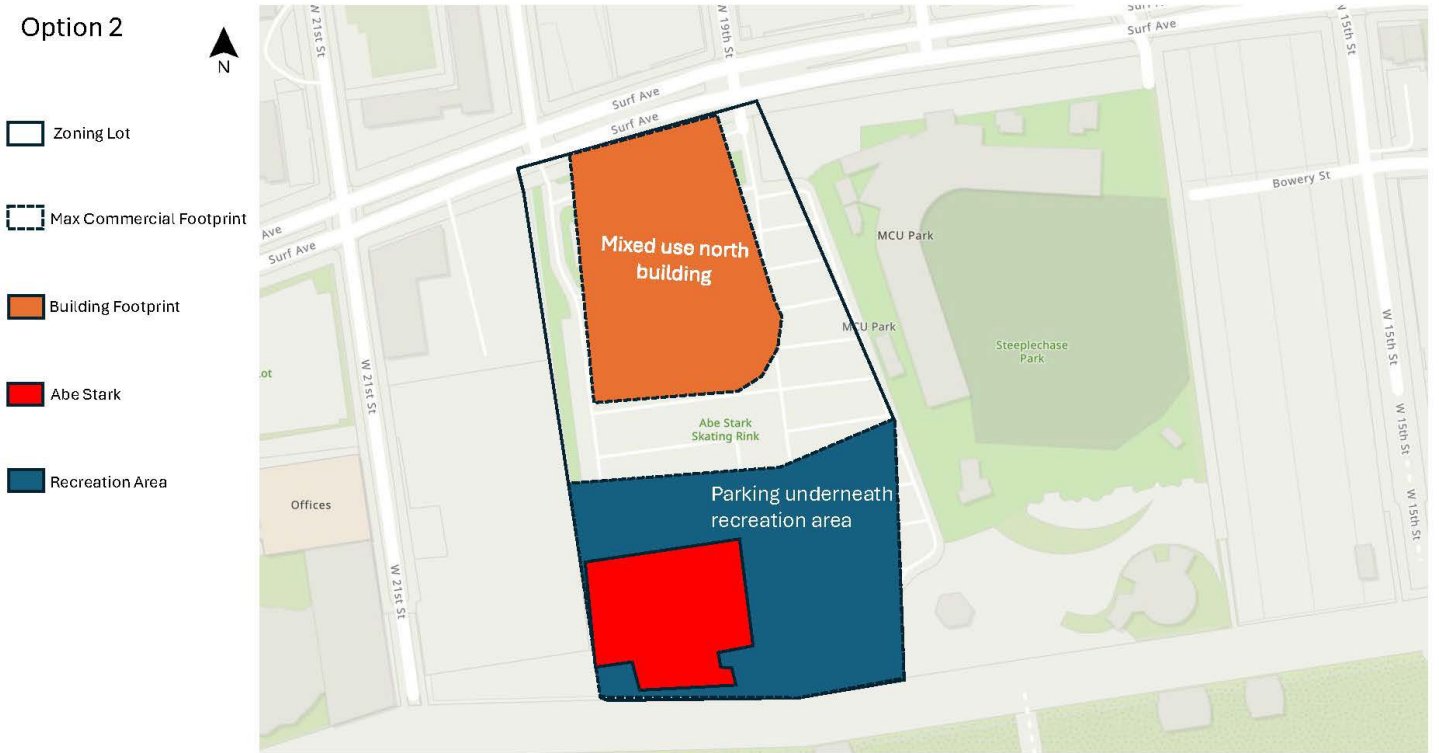
**Figure 27**

*Option 1 site plan*



**Figure 28**

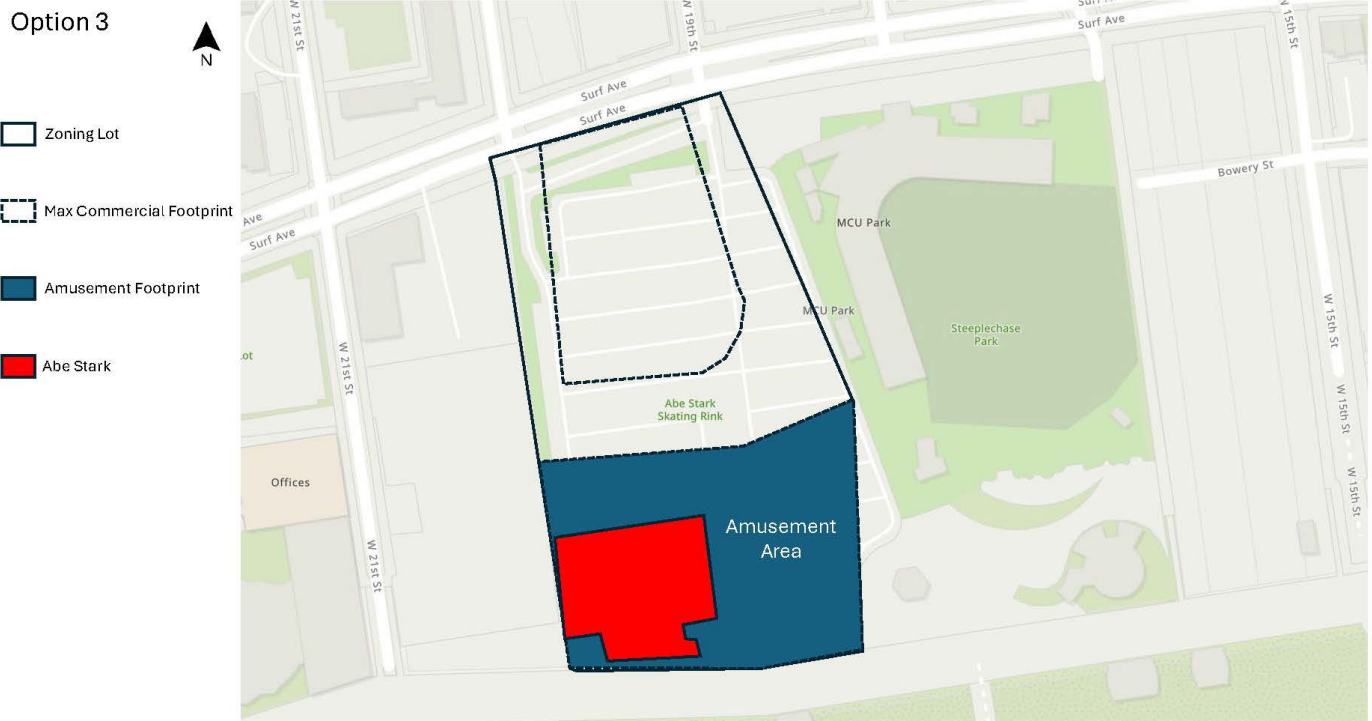
*Option 2 site plan*





**Figure 29**

*Option 3 site plan*



**Comparable Development Projects**

These development options have the potential to fulfill the goals of the special district established in the 2009 rezoning. Residential with commercial and recreational or amusement uses would contribute significantly to responding to community needs. There are a number of projects that have very similar elements to those that make up the proposed development options. There are also comparable examples of development efforts throughout New York City that feature many of the same elements. The Queens Aqua Center, Aviator Sports Park, and the

Staten Island Yankees stadium all can serve as comparable projects to envision how future development in Coney Island can evolve.

The Staten Island Yankees were a minor league baseball team associated with the New York Yankees organization. The team played in the Richmond County Bank Ballpark and ultimately ceased operations after 2020.<sup>72</sup> Although there was some development activity around the ballpark, the team was not successful enough to bring in major foot traffic to the area. Other than a waterfront walkway there was also no concerted effort to create any recreation or attractive waterfront area surrounding the stadium. This lack of development surrounding the stadium has occurred although the area could feature waterfront connections and good views of lower Manhattan. The current site conditions also feature major parking structures similar to Maimonides Park next to the Abe Stark rink. Although the stadium will not feature another minor league team from the Atlantic league, it has not functioned as an anchor for the community.

The Flushing Meadows Corona Aqua Center in Queens cost the city \$67 million to construct and was supposed to be a “state of the art” recreation center. At 110,000 square feet and an Olympic size swimming pool and a year round NHL size hockey rink, this recreation center is the largest of its kind ever built in New York City.<sup>73</sup> However, upon opening it became clear that the construction and design was substandard forcing the center to close for repairs.<sup>74</sup> This closure lasted three years, after which the center briefly opened with another closure scheduled to complete the repairs.<sup>75</sup> At the sizeable cost of this development, the city has gotten very little return from the project and some have criticized it as a waste of taxpayer money. A recreation center of this size and programming options would serve the Coney Island neighborhood well, meeting neighborhood needs and serving as an anchor development.

The Aviator sports and event venue at Floyd Bennet Field located in the eastern part of Brooklyn is a privately operated recreation center. The facilities are extensive including:

- a) 175,000 square feet of indoor space
- b) Two state-of-the-art full-sized outdoor turf fields for soccer, football, field hockey – bleacher seating
- c) Two NHL-sized ice rinks – seating for 2,000
- d) 20,000 square foot multipurpose Field House, which houses:
- e) 10,000 square foot hardwood floor for basketball, volleyball, indoor tennis and special activities
- f) 10,000 square foot indoor turf field for soccer, football, fitness training, classes and special activities
- g) 15,500 square foot Gymnastics Center
- h) 5,000 square foot Sports Performance Center
- i) 35-foot tall rock climbing wall
- j) FREE parking for over 2,000 cars

The facility hosts sports and recreational activities for members of all ages and includes summer camps as well as training opportunities. The size of the center is much more than would be possible at the Abe Stark site, however, the programming should be comparable. The recreation center proposed as part of development option 2 should have similar programming to the Aviator center.

### **Development Pro Forma/Projections**

Although an operational decision may create positive economic benefit for the surrounding community and perhaps the county as a whole, it is only possible to sustain this benefit in an ongoing way if the operations can be financially supported. The financial return that determines what is sustainable can change depending on who is going to be operating the site. A public entity acting as an operator may be able to accept a lower return or perhaps a negative

return while a private company will be unlikely to continue operations when this is the case. The financial feasibility of different use options will ultimately determine who may or may not pursue the redevelopment of the site. Importantly, these proformas are not reflective of individual developers but rather takes into account the cost of the entire development option. This scale would likely not be pursued by one developer but rather a group of developers or entities would be involved. These proformas also only consider the potential commercial and residential revenues, leaving out any operational revenue from activities such as the recreation or amusement area. The goal in providing these proformas is to show that the proposed developments can be supported over a ten year period over revenues from just the housing element. This also means that a proforma has not been developed for option 3 which contains only an amusement development and a renovation to Abe Stark.

As with any attempt to develop operational proformas, this analysis is subject to assumptions made regarding the size and cost of development as well as assumptions in developing projected operating income. It is always possible of course that these assumptions can be wrong or that an unforeseen factor can heavily influence the financial situation of the project. In particular, the estimation of construction cost can be unreliable depending upon the timeline of the project. In this case where there is no ongoing development and any future development is many years from breaking ground, construction costs can be expected to range as much as 30% even when using industry standard calculations. A range such as this can impact the financial feasibility of the projected operations. However, as the timeline to construction becomes shorter, the ability to accurately predict construction costs increases. These models assume a purchase cost for the land and associated transaction costs to show that the city can gain some revenue from this development without removing the financial feasibility. Finally, it

should be noted that the proformas developed here are modeling the entire development and its operations in order to place in perspective the economic viability of the full development scale. In real world application of these development options many of these operations would likely be split into a number of entities which can affect the financial viability of each individual operation type.

Developing financial projects for development option 1 begins with developing a number of assumptions that will feed into the proforma. These assumptions are summarized in the table below along with the sources used to develop the application assumption. The total cost of construction was calculated using the industry standard software RS Means. This software allows for the user to input building specifications such as square footage, perimeter length, material, use type, and more in order to calculate the cost of construction. This data is geographically filtered and reflects the cost of construction in the specified area, in this case, construction in New York City. The exact cost of construction can change depending upon design decisions, site conditions, and a variety of other factors. The total cost of construction for each development event and summarized development options can be seen in the table below. It should be noted that the maximum buildable residential area has been cut down to reflect development within the commercial overlay boundary and the building height restrictions. However, the maximum number of allowable dwelling units has been accounted for. These assumptions are essentially design based as they reflect certain structural decisions in the construction of the buildings. These can and may change in any actual development that occurs on the site.

The proformas developed as part of this analysis use a first year revenue that is calculated separately and then projected forward using an average growth rate. This first year revenue

calculation underpins the entire financial analysis and its accuracy is vitally important. Again, as with other factors, this calculation is an assumption based on a number of sources and can change depending on changes in the market. A sensitivity analysis of this first year revenue has been conducted and can be found later in this section. The proformas below assume that any developer attempting to implement these proposed options is going to build the maximum units possible. The calculation of the first year revenue for options 1 and 2 are below, the sources used for these assumptions and the full excel file can be found in full in the appendix.

### Figure 30

#### *Option 1 First Year Revenue Calculation*

<b>FYR Option 1</b>			
<b>FYR Assumptions</b>			<b>First Year Revenue</b>
Total Units		2,800	
			Total Market Rate Revenue
Market Rate Rent	\$	3,950	\$ 106,176,000
Market Rate Units		80%	
Affordable Rent (30% AMI)	\$	855	Total Affordable Revenue
Affordable Units		20%	\$ 5,745,600
Commercial Space RPSF		20	Total Commercial Revenue
Commercial Space SF		470,000	\$ 9,400,000
			<b>\$ 121,321,600</b>

**Figure 31***Option 2 First Year Revenue Calculation*

<b>FYR Option 2</b>			
<b>FYR Assumptions</b>			<b>First Year Revenue</b>
Total Units		2,800	
			Total Market Rate Revenue
Market Rate Rent	\$	3,950	\$ 106,176,000
Market Rate Units		80%	
Affordable Rent (30% AMI)	\$	855	Total Affordable Revenue
Affordable Units		20%	\$ 5,745,600
Commercial Space RPSF		20	Total Commercial Revenue
Commercial Space SF		116,000	\$ 2,320,000
			<b>\$ 114,241,600</b>

As the financial analysis shows below, the cost of development for option 1 can be covered by the revenues from the commercial and residential space included in the development regardless of project exit after 10 years. This means that the removal and construction of an ice rink elsewhere in Coney Island, the creation of underground parking and the establishment of a medium density mixed use development can be supported fully on the current site. The development will carry a permanent loan debt past the temporal scope of the financial analysis that will have to be paid off by further operations at the site. Although the size of the debt may seem large it should be recalled that this is modelling the entire development that would likely not be created by just one entity, this debt would be split up among many entities. Finally, this

permanent loan is amortized for a 30 year period, meaning that the debt is fully paid off withing 30 years.

**Figure 32**

*Cost of construction for individual development events.*

*Assumes inclusionary housing in Res*

<b>Type</b>	<b>SQFT</b>	<b>LF</b>	<b>Total Cost</b>
Underground Parking	232,000	2,200	\$ 30,609,738.86
Commercial North	232,000	1,350	\$ 31,620,673.88
Commercial South	238,000	1,460	\$ 32,813,743.81
Residential North	952,000	1,350	\$ 255,871,111.41
Residential South	952,000	1,460	\$ 257,114,724.11
Residential North (1 tower option)	1,160,000	1,350	\$ 309,251,558.47
Commercial North (1 tower option)	116,000	1,350	\$ 19,338,118.84
Recreation Area South	160,500	1,605	\$ 27,128,324.64
Renovation of Abe Stark	53,000	1,000	\$ 2,795,407.57
Amusement Area South	160,500	1,605	\$ 17,333,786.35
Building Abe Stark on another lot	53,000	1,000	\$ 9,420,586.26

**Figure 33**

*Total cost of construction by development option*

<b>Option</b>	<b>Total Cost</b>
1	\$ 617,450,578.33
2	\$ 389,123,148.38
3	\$ 50,738,932.78



**Figure 34**

*General assumptions for option 1*

General Assumptions Category	Assumption	
Residential Gross Square Feet (GSF)	1,160,000 SF	height restrictions may reduce the sqft of the building
Commercial Gross Square Feet (GSF)	470,000 SF	both towers accounted for in these sqft
Total Gross Square Feet (GSF)	1,630,000	
Percent Rentable	90%	
Residential Rentable Square Feet (RSF)	1,044,000	
Commercial Rentable Square Feet (RSF)	423,000	
Land Acquisition - Transaction Costs	5.00%	
Hard Costs per GSF	\$378	Calculated from existing cost of construction/total gross sqft
Soft Costs (as percentage of Hard Costs)	0%	Soft costs already accounted for in cost of construction analysis
Construction Start (Year)	1.0	
Construction Period (Years)	2.0	
First Year of Operations	3.0	
Tenant Improvements (TIs) Upfront per RSF (Commercial)	\$0.00	
Leasing Commissions (LCs) Upfront per RSF (Commercial)	\$0.00	
Projected Revenue Growth	3.50%	
Lease Up Year (Year X)	3.0	
Average Occupancy During Lease-Up Period	50.00%	
1st Year of Stabilization	4.0	
Stabilized Vacancy/Turnover	5.00%	
General Inflation Rate	3.00%	
Property Taxes per RSF	0.0	Assumes tax break for development
Property Tax Abatement Value	\$0.00	
Other Operating Expenses (% of revenue)	20%	
Exit Year	10.0	
Exit Cap Rate	5.50%	
Sale Costs	5.00%	
Required Equity Return	9.50%	

**Figure 35**

*Financing assumptions for option 1*

<b>Financing Assumptions</b>	
<b>Category</b>	<b>Assumption</b>
<b>Construction Loan</b>	
Loan to Cost (Hard & Soft Only)	65.00%
Interest Rate (Apply to initial balance + added principal)	6.00%
Eligible Costs (Hard & Soft) - \$\$	\$616,140,000
Loan Size	\$400,491,000
Equity Used	\$215,649,000
Construction Loan Fees	1.50%
<b>Permanent Loan</b>	
Max. Loan to Value (LTV)	70.00%
Min. Debt Service Coverage Ratio (DSCR)	1.25
Amortization (Years)	30.0
Term (Year)	10.0
Interest Rate	5.00%
NOI at Stabilization	\$92,801,492
Permanent Loan Fees	1.50%
Loan Size LTV-based	\$1,181,109,893
Loan Size DSCR-based	\$1,141,269,108
Final Loan Size	\$1,141,269,108

Figure 36

Unlevered cash flows for development option 1

Unlevered Project Cash Flow Category	Total	Acquisition																				
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11									
<b>Development Costs</b>																						
Purchase Price	(\$5,000,000)	(\$5,000,000)																				
Termination Costs	(\$250,000)	(\$250,000)																				
Hard Costs	(\$61,614,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)
Soft Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Development Costs</b>	<b>(\$61,390,000)</b>	<b>(\$5,250,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>
<b>Net Operating Income (NOI) - show through Year 9)</b>																						
Gross Potential Revenues	\$1,553,862,246	\$1,211,200	\$124,961,248	\$128,710,085	\$132,571,388	\$136,432,691	\$140,294,000	\$144,155,310	\$148,016,620	\$151,877,930	\$155,739,240	\$159,600,550	\$163,461,860	\$167,323,170	\$171,184,480	\$175,045,790	\$178,907,100	\$182,768,410	\$186,629,720	\$190,491,030	\$194,352,340	\$198,213,650
Vacancy/Tenover (Percentage)		100%	100%	50%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Less Vacancy/Tenover	(\$408,524,824)	\$0	(\$17,132,169)	(\$124,961,248)	(\$64,353,043)	(\$13,297,139)	(\$1,354,853)	(\$1,404,499)	(\$1,454,145)	(\$1,503,791)	(\$1,553,437)	(\$1,603,083)	(\$1,652,729)	(\$1,702,375)	(\$1,752,021)	(\$1,801,667)	(\$1,851,313)	(\$1,900,959)	(\$1,950,605)	(\$1,999,251)	(\$2,048,897)	(\$2,097,543)
Less Operating Expenses - Property Taxes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less Operating Expenses - Other	(\$327,442,201)	\$0	\$0	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)	(\$32,309,264)
Less Other Operating Expenses - Other	\$236,505,542	(\$5,750,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)	(\$308,070,000)
Less Other Operating Expenses - Other	\$14,358,882	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total NOI through Disposition (Year 10)</b>	<b>\$91,185,252</b>	<b>(\$5,250,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>
NOI @ Stabilization	\$91,185,252																					
<b>Exit Sale</b>																						
Gross Proceeds	\$2,039,924,699	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Less Cost of Sale	(\$101,931,235)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Proceeds from Exit Sale</b>	<b>\$1,937,993,464</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Project Cash Flows (Unlevered)</b>	<b>\$2,153,578,705</b>	<b>(\$5,250,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>	<b>(\$308,070,000)</b>
<b>Total Project Cash Flows (Unlevered) - Assuming No Sale</b>	<b>\$17,252,281</b>																					

Figure 37

Levered cash flows for development option 1

Category	Total	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
<b>Levered Cash Flows</b>													
<b>Contribution Loan</b>													
Initial Balance	\$708,561,000		\$400,467,000	\$308,070,000									
Construction Loan Draw	(\$400,491,000)		(\$92,421,000)	(\$308,070,000)									
Principal Repayment	\$0		\$0	\$0									
Final Balance	\$308,070,000		\$308,070,000	\$0									
Interest Payment	\$24,029,480		\$5,545,260	\$18,484,200									
Financing Fees	\$6,007,365		\$6,007,365	\$0									
<b>Total Contribution Loan Cash Flow</b>	<b>\$0</b>	<b>\$0</b>	<b>\$103,973,923</b>	<b>\$206,554,200</b>	<b>(\$430,537,923)</b>								
<b>Permanent Loan</b>													
Permanent Loan Proceeds	\$1,121,392,658												
Initial Principal Balance	(\$656,533,815)		\$1,121,392,658										
Debt Service Payment	(\$470,421,191)		(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)	(\$72,948,202)
Interest Payment	(\$186,112,624)		(\$56,009,633)	(\$55,225,704)	(\$54,439,580)	(\$53,409,148)	(\$52,432,196)	(\$51,406,966)	(\$50,329,205)	(\$49,198,560)	(\$48,010,660)	(\$46,801,068)	(\$45,569,333)
Principal Repayment (Loan Payoff)	\$0		(\$16,808,569)	(\$17,722,497)	(\$18,608,622)	(\$19,539,053)	(\$20,516,006)	(\$21,541,806)	(\$22,618,966)	(\$23,749,841)	(\$24,937,233)	(\$26,181,966)	(\$27,484,157)
Final Principal Balance	\$9,222,211,190		\$1,104,514,089	\$1,086,791,592	\$1,068,182,970	\$1,048,643,916	\$1,028,127,911	\$1,006,586,104	\$983,967,208	\$960,217,367	\$935,280,033	\$909,067,208	\$881,300,000
Financing Fees	(\$16,820,890)		(\$16,820,890)										
<b>Total Permanent Loan Cash Flow</b>	<b>\$448,037,953</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,031,653,366</b>	<b>(\$72,948,202)</b>	<b>(\$72,948,202)</b>	<b>(\$72,948,202)</b>	<b>(\$72,948,202)</b>	<b>(\$72,948,202)</b>	<b>(\$72,948,202)</b>	<b>(\$72,948,202)</b>	<b>(\$72,948,202)</b>
<b>Total Project Levered Cash Flows</b>	<b>\$241,164,658</b>	<b>\$0</b>	<b>(\$5,250,000)</b>	<b>(\$204,096,573)</b>	<b>\$18,484,200</b>	<b>\$638,141,078</b>	<b>\$18,237,050</b>	<b>\$20,972,608</b>	<b>\$23,790,232</b>	<b>\$28,692,385</b>	<b>\$29,681,603</b>	<b>\$32,760,497</b>	<b>\$1,973,005,222</b>
<b>Total Project Levered Cash Flows - Assuming No Sale</b>	<b>\$830,611,496</b>												

Developing financial analysis for option 2 originated from a similar structure to option 1. The major difference between the two options is the decreased cost of development along with decreased commercial space. Option 2 assumes that the residential square footage that would have previously been located in the southern area of the site is absorbed into the northern development, therefore remaining the same. The number of units remains the same at the maximum allowable by zoning regulations. The same source information for rental price and yearly revenue was copied over to option 2 and the starting revenue decreased respectively with the decrease in commercial space. Most of the general and financing assumptions remain the same as shown in the figures below. The financial analysis for option 2 shows that the development can be financially supported by revenue from the residential and commercial space without considering any income from the recreational area on the southern side of the site. Again, the permanent loan remaining balance is large, but the loan is amortized at 30 years meaning that the loan will be fully paid off after a 30 year period. This debt will also likely be shared by multiple entities, not all placed on one developer.

**Figure 38**

*General assumptions for option 2*

<b>General Assumptions</b>	
<b>Category</b>	<b>Assumption</b>
Residential Gross Square Feet (GSF)	1,160,000 SF <i>height restrictions may reduce the sqft of the building</i>
Commercial Gross Square Feet (GSF)	116,000 SF <i>both towers accounted for in these sqft</i>
Total Gross Square Feet (GSF)	1,276,000
Percent Rentable	90%
Residential Rentable Square Feet (RSF)	1,044,000
Commercial Rentable Square Feet (RSF)	104,400
Land Acquisition - Transaction Costs	5.00%
Hard Costs per GSF	\$304 <i>Calculated from existing cost of construction/total gross sqft</i>
Soft Costs (as percentage of Hard Costs)	0% <i>Soft costs already accounted for in cost of construction analysis</i>
Construction Start (Year)	1.0
Construction Period (Years)	2.0
First Year of Operations	3.0
Tenant Improvements (TIs) Upfront per RSF (Commercial)	\$0.00
Leasing Commissions (LCs) Upfront per RSF (Commercial)	\$0.00
Projected Revenue Growth	3.50%
Lease Up Year (Year X)	3.0
Average Occupancy During Lease-Up Period	50.00%
1st Year of Stabilization	4.0
Stabilized Vacancy/Turnover	5.00%
General Inflation Rate	3.00%
Property Taxes per RSF	0.0 <i>Assumes tax break for development</i>
Property Tax Abatement Value	\$0.00
Other Operating Expenses (% of revenue)	20%
Exit Year	10.0
Exit Cap Rate	5.50%
Sale Costs	5.00%
Required Equity Return	9.50%

**Figure 39***Financing assumptions for option 2*

<b>Financing Assumptions</b>	
<b>Category</b>	<b>Assumption</b>
<b>Construction Loan</b>	
Loan to Cost (Hard & Soft Only)	65.00%
Interest Rate (Apply to initial balance + added principal)	6.00%
Eligible Costs (Hard & Soft) - \$\$	\$387,904,000
Loan Size	\$252,137,600
Equity Used	\$135,766,400
Construction Loan Fees	1.50%
<b>Permanent Loan</b>	
Max. Loan to Value (LTV)	70.00%
Min. Debt Service Coverage Ratio (DSCR)	1.25
Amortization (Years)	30.0
Term (Year)	10.0
Interest Rate	5.00%
NOI at Stabilization	\$87,480,167
Permanent Loan Fees	1.50%
Loan Size LTV-based	\$1,113,383,947
Loan Size DSCR-based	\$1,075,827,670
Final Loan Size	\$1,075,827,670

Figure 40

Unlevered cash flows for development option 2

Category	Total	Acquisition				Build			Operational			Stabilized			Sale/Valuation						
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11								
<b>Development Costs</b>																					
Purchase Price	(\$5,000,000)																				
Transaction Costs	(\$230,000)																				
Hard Cash	(\$307,900,000)																				
Soft Cash	\$0																				
<b>Total Development Costs</b>	<b>(\$309,134,000)</b>																				
<b>Net Operating Income (NOI) - show through Year 9</b>																					
Gross Potential Revenues	\$1,463,183,072																				
Vacancy/Turnover (Percentage)		100%																			
Less Vacancy/Turnover	(\$403,517,276)																				
Less Operating Expenses - Property Taxes	(\$261,251,425)																				
Less Operating Expenses - Other	\$405,240,327																				
<b>Total Net Operating Income</b>	<b>\$399,658,570</b>																				
<b>Total NOI through Disposition (Year 10)</b>	<b>\$65,863,928</b>																				
NOI of Subdivision																					
<b>Exit Sale</b>																					
Gross Proceeds	\$1,920,032,740																				
Less Cost of Sale	(\$6,001,637)																				
<b>Total Proceeds from Exit Sale</b>	<b>\$1,924,031,103</b>																				
<b>Total Project Cash Flows (Unleveraged)</b>	<b>\$2,292,291,474</b>																				
<b>Total Project Cash Flows (Unleveraged) - Assuming No Sale</b>	<b>\$302,734,351</b>																				



Figure 41

Levered cash flows for development option 2

Category	Total	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
<b>Levered Cash Flows</b>													
<b>Construction Loan</b>													
Initial Balance	\$446,089,600		\$329,132,600	\$19,982,000									
Construction Loan Draw	(\$321,377,600)		(\$30,162,600)	(\$192,522,000)									
Principal Repayment	\$0		\$0	\$0									
Final Balance	\$193,952,000		\$193,952,000	\$0									
Interest Payment	\$15,128,256		\$3,491,136	\$11,637,120									
Financing Fees	\$3,782,064		\$3,782,064	\$0									
<b>Total Construction Loan Cash Flow</b>	\$0		<b>\$5,458,800</b>	<b>\$205,891,120</b>	<b>(\$271,047,200)</b>								
<b>Permanent Loan</b>													
Permanent Loan Proceeds	\$1,055,951,219				\$1,055,951,219								
Initial Principal Balance					\$1,040,057,238	\$1,023,369,378	\$1,005,846,705	\$987,447,898	\$968,129,150	\$947,844,466	\$926,545,547	\$904,181,682	\$880,699,624
Debt Service Payment	(\$618,220,280)		(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)
Interest Payment	(\$442,966,684)		(\$32,297,561)	(\$32,002,882)	(\$31,160,461)	(\$30,292,333)	(\$29,372,395)	(\$28,406,438)	(\$27,392,223)	(\$26,337,277)	(\$25,250,084)	(\$24,140,058)	(\$23,002,058)
Principal Repayment (Loan Payoff)	(\$175,251,596)		(\$15,893,581)	(\$16,888,260)	(\$17,522,873)	(\$18,398,887)	(\$19,318,272)	(\$20,284,651)	(\$21,298,919)	(\$22,363,865)	(\$23,482,058)	(\$24,659,659)	(\$25,898,258)
Final Principal Balance	\$8,684,122,086		\$1,040,057,238	\$1,023,369,378	\$1,005,846,705	\$987,447,898	\$968,129,150	\$947,844,466	\$926,545,547	\$904,181,682	\$880,699,624	\$858,100,000	\$836,398,000
Financing Fees	(\$15,839,268)		(\$15,839,268)										
<b>Total Permanent Loan Cash Flow</b>	\$421,891,621		\$0	\$0	\$971,420,809	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)	(\$68,691,142)
<b>Total Project Levered Cash Flows - Assuming No Sale</b>	\$723,317,164		(\$5,250,000)	(\$128,493,200)	\$11,637,120	\$726,256,560	\$17,172,786	\$19,748,703	\$22,401,899	\$25,134,690	\$27,949,465	\$30,848,683	\$1,857,865,981

These development proformas assume that the developer building the project will build maximum number of units available on the site (2,800). This may generate some pushback from the community and may or may not be feasible in the final building design. For the purpose of understanding how the number of units can be altered a “pseudo-sensitivity analysis” has been provided below detailing how the project would react to a change in unit counts. In general, sensitivity analysis is conducted to measure how a financial or economic system would react to a change in an independent variable and is colloquially called “what-if analysis.” In our scenario we are analyzing “what if the unit count decreased?” In summary, the lowest number of units the project can create while still remaining financially viable for option 1 is 1,300 units with 20% of the units being affordable at the 30% AMI level. At this level, the project still qualifies for the financing needed to complete construction while providing a positive cash flow for the investment over 10 years without the sale of the asset. For option 2 the lowest number of units feasible is 900 units with the same conditions (20% affordable at 30% AMI). There are many ways that the units and levels of affordability can be altered but this analysis shows that the residential nature of the building can be significantly altered, responding to potential community concerns while still remaining financially possible.

### Figure 42

#### *Financial impact of unit count changes*

<b>Option 1</b>		<b>Total Levered Cash Flows (No sale of asset)</b>	<b>Maximum Final Loan Size</b>
Maximum Allowable Units	2,800	\$ 638,611,436	\$ 1,121,392,658
Median Units	2,050	\$ 327,260,588	\$ 844,292,533
Lowest Feasible Units	1,300	\$ 15,909,740	\$ 567,192,498
<b>Option 2</b>		<b>Total Levered Cash Flows (No sale of asset)</b>	<b>Maximum Final Loan Size</b>
Maximum Allowable Units	2,800	\$ 793,317,164	\$ 1,055,951,219
Median Units	1,850	\$ 389,939,424	\$ 704,957,728
Lowest Feasible Units	900	\$ 4,561,683	\$ 353,964,237

## **Economic Impact Analysis**

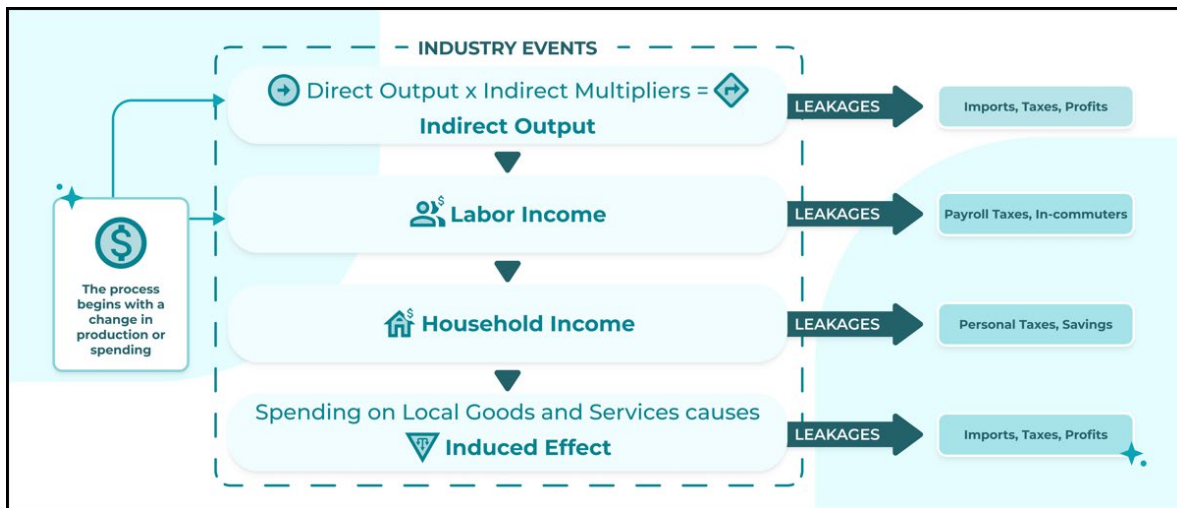
Economic impact analysis is an assessment tool used by urban planners, project managers, government entities, consultants, economists, and economic development professionals. The purpose of this assessment is to determine what the expected economic benefit (or in some rare cases, harm) of a proposed development will be. This benefit is measured through a number of factors such as jobs, business to business spending, fiscal revenue, among others. There are three main layers to this assessment: direct, indirect, and induced. These three layers refer to the relationship between the benefit and the proposed development. There is also a temporal aspect to consider, as the economic benefits can often be reaped well beyond the lifespan of the construction of a physical building. The long term jobs needed to maintain operations of the built site are an example of an economic benefit beyond the temporal scale of construction. Finally, it should be noted that this analysis utilized the software IMPLAN which is industry standard for best practices in the economic development field.

Due to the nature of economic impact analysis, much of the observed economic benefits rest upon the cost of the projects construction. The cost of construction is of course the primary driver of economic impact due to it being the primary flow of money we are analyzing. As discussed previously, at this point in time when there is no active project, the ability to accurately predict construction costs is diminished. We can expect the cost of construction used in this economic impact analysis to range as much as 30% in either direction. Another important caveat to this analysis is that it only considers the construction event for the uses of this site, it does not incorporate ongoing operations which could increase or decrease the economic benefit. The chain of analysis is shown below, the results from this analysis are the number of jobs created, the labor income, the value added, the total output, and the fiscal impacts of the analyzed event.

What is occurring during this analysis is essentially a modeling of the reaction of an economic system to a new “stimulus.” The introduction of new cash flows into an economy creates impacts that multiply and create value that was previously not part of the economic system.

**Figure 43**

*Chart showing industry event analysis chain.*



Source: IMPLAN

The results of this analysis are provided below and split into individual events that make up the three options for development. Due to the fact that this project deals with theoretical development options, each event has been analyzed to understand where the main drivers of economic impact come from. It is important to note that each development option proposed is made up of some combination of these events, not every option proposed contains each event. The results have also been analyzed at the neighborhood level (zip code) and the county level (King’s County). The reason for this is due to the nature of economic activity. When considering a construction event, drivers of economic impact arise from purchases of material, hiring construction firms, design firms, and importing any other necessary skills or materials. The scale

of analysis (zip code or county) captures how much of this occurs within that geography. The Coney Island neighborhood obviously would not be able to source all the necessary construction material or skills needed to complete the industry event in question. Expanding to the county level captures more of this economic activity but not necessarily all of it. Although it is possible with the software used (IMPLAN), analyzing these industry events at a larger scale than the county level is unavailable for the purposes of this research due to the increased cost associated with the increased scale.

The development options described in the previous section “Land Use Options for Abe Stark” described in detail three development options for the site and the individual events associated with each. These individual events were combined into their respective options and then put through the economic impact analysis a second time, developing the economic impact for all three proposed developments. Finally, the values in the tables below incorporate all scales of economic impact, direct, indirect, and induced into one value per factor (employment, labor income, value added, total output, and fiscal benefits).

#### Figure 44

*Individual event impacts at the zip code level (11224).*

Event	Employment	Labor Income	Value Added	Total Output	Fiscal Benefits
Underground Parking	184	\$ 12,443,461.91	\$ 16,429,396.40	\$ 30,650,645.92	\$ 2,533,409.37
Commercial North	278	\$ 16,626,128.41	\$ 17,205,782.58	\$ 31,671,012.91	\$ 3,216,557.09
Commercial South	289	\$ 17,253,443.76	\$ 17,854,968.68	\$ 32,865,982.17	\$ 3,337,920.01
Residential North	2503	\$ 147,664,357.96	\$ 197,915,765.74	\$ 256,161,069.84	\$ 31,843,124.36
Residential South	2517	\$ 148,382,052.39	\$ 198,877,697.54	\$ 257,406,091.82	\$ 31,997,891.79
Residential North (1 tower option)	3027	\$ 178,470,451.70	\$ 239,205,429.10	\$ 309,602,008.72	\$ 38,486,313.60
Commercial North (1 tower option)	170	\$ 10,167,969.49	\$ 10,522,466.08	\$ 19,368,904.00	\$ 1,967,135.91
Recreation Area South	238	\$ 14,264,054.30	\$ 14,761,356.99	\$ 27,171,512.00	\$ 2,759,580.81
Renovation of Abe Stark	11	\$ 682,411.21	\$ 1,140,186.09	\$ 2,799,272.83	\$ 184,547.58
Amusement Area South	153	\$ 9,114,092.85	\$ 9,431,847.04	\$ 17,361,381.14	\$ 1,763,248.74
Building Abe Stark on another lot	82	\$ 4,953,337.37	\$ 5,126,031.14	\$ 9,435,583.00	\$ 958,292.46

**Figure 45***Individual event impact the county level (King's).*

Event	Employment	Labor Income	Value Added	Total Output	Fiscal Benefits
Underground Parking	246	\$ 16,003,349.64	\$ 23,222,572.78	\$ 42,860,355.80	\$ 5,360,103.11
Commercial North	356	\$ 21,018,778.29	\$ 25,481,666.32	\$ 46,691,962.76	\$ 6,712,586.76
Commercial South	369	\$ 21,811,831.36	\$ 26,443,107.24	\$ 48,453,682.86	\$ 6,965,857.31
Residential North	3080	\$ 180,156,538.16	\$ 260,080,587.37	\$ 360,880,992.42	\$ 60,285,364.36
Residential South	3095	\$ 181,032,154.63	\$ 261,344,659.43	\$ 362,634,985.60	\$ 60,578,369.87
Residential North (1 tower option)	3722	\$ 217,741,228.73	\$ 314,339,225.44	\$ 436,168,853.58	\$ 72,862,242.16
Commercial North (1 tower option)	217	\$ 12,854,363.38	\$ 15,583,712.52	\$ 28,555,201.83	\$ 4,105,187.67
Recreation Area South	305	\$ 18,032,640.39	\$ 21,861,485.90	\$ 40,058,435.46	\$ 5,758,929.54
Renovation of Abe Stark	17	\$ 1,055,419.46	\$ 1,858,047.50	\$ 4,072,938.32	\$ 444,616.01
Amusement Area South	195	\$ 11,522,050.85	\$ 13,968,511.91	\$ 25,595,548.97	\$ 3,679,698.45
Building Abe Stark on another lot	106	\$ 6,262,017.52	\$ 7,591,623.02	\$ 13,910,698.57	\$ 1,999,846.77

**Figure 46***Proposed development options for the site.*

Option	Event 1	Event 2	Event 3	Event 4
1	Underground Parking	Commercial North and South	Residential North and South	Rebuild Abe Stark
2	Underground Parking	Renovate Abe Stark	Recreation Area South	Commercial and Residential North
3	Underground Parking	Renovate Abe Stark	Amusement Area South	-

**Figure 47***Economic impact for each proposed development option at the zip code level (11224).*

Event	Employment	Labor Income	Value Added	Total Output	Fiscal Benefits	Total Construction Cost
Option 1	5857	\$ 347,322,782.16	\$ 453,409,642.00	\$ 618,190,386.17	\$ 73,887,195.00	\$ 617,450,578.33
Option 2	3632	\$ 216,028,348.60	\$ 282,058,834.66	\$ 389,592,343.94	\$ 45,930,987.28	\$ 389,123,148.38
Option 3	348	\$ 22,239,965.97	\$ 27,001,429.53	\$ 50,811,299.90	\$ 4,481,205.69	\$ 50,738,932.78

**Figure 48**

*Economic impact for each proposed development option at the county level (King's).*

Event	Employment	Labor Income	Value Added	Total Output	Fiscal Benefits	Total Construction Cost
Option 1	7254	\$ 426,284,669.00	\$ 604,164,216.00	\$ 875,432,678.00	\$ 141,902,128.19	\$ 617,450,578.33
Option 2	4510	\$ 256,687,001.61	\$ 376,865,044.14	\$ 551,715,784.98	\$ 88,531,078.49	\$ 389,123,148.38
Option 3	459	\$ 28,580,819.94	\$ 39,049,132.19	\$ 72,528,843.08	\$ 9,484,417.58	\$ 50,738,932.78

Due to the highest cost of construction, option 1 provides the most economic activity as measured in the economic impact analysis. It is worth re-emphasizing that the main difference between county level results and zip code level results is the degree of economic activity captured at the respective geographic scale. It should be expected that a “tighter” geography like a zip code should capture less economic activity than a county. The county level data may not entirely capture the total economic impact of each development option; however, this is largest geography available at the time of research. Interpretation of these results rests on the understanding of the resulting values. Each value has three levels of consideration: direct, indirect, and induced. These levels measure the degree of connectivity between the event and its impact.

Employment is a straightforward output, this is simply the number of jobs created by the event or option at all levels of activity, direct, indirect, and induced. Direct employment is the number of full time equivalent positions (FTE) that can be supported by the economic activity occurring as a result of the event. Indirect employment refers to the jobs necessary to support the business to business transactions that occur as a result of the event. A helpful way to understand this concept is to refer to indirect employment as jobs needed to support direct employment. In

the case of a construction event like the one we are considering; these indirect jobs could be ones that create construction materials or process development plans. Induced employment is a tertiary level of economic activity and refers to the jobs necessary to support the spending by direct and indirect employees. This could be something like the jobs needed to support spending by construction employees in the labor area such as purchasing food while at work or something similar. It is very important to make clear that in most scenarios many of these jobs will not draw from the individuals living within the geographic boundaries that encompass the analysis. In the case of Abe Stark, it would be infeasible to assume that thousands of people from the Coney Island neighborhood would engage in heavy construction. These jobs are the employment opportunities necessary to create the project we are analyzing, not jobs provided to residents of the geographic boundary used in the analysis.

Labor income is exactly that, money spent on labor costs to achieve the event in question. Direct labor income is the full cost of employee compensation in the first realm of economic activity. In the case of the construction events we are discussing, this can be understood as the full cost of employment, i.e. salary, insurance, benefits, etc. for all employees working directly on the event. Indirect labor income is the labor income spent on activities that support the primary event. In this case it can be understood as the full cost of employment for employees creating construction materials to be sold to the direct labor employees or some similar supporting operations. Induced labor income is the tertiary category of cost of employment and refers to the employees needed to support the household spending as a result of the economic event in question.

Value added can be best understood as GDP or gross domestic product equivalent. GDP is the market value of the total goods and services produced and is typically used in geographic



analysis but can be applied to our individual events or options. In this case, value added refers to the fair market value of all goods and services associated with the event. Direct value added includes labor income, taxes on imports or other products, and other sources of property related income. Indirect value added is essentially the same definition but applies to business to business transactions that occur as a result of the event in question. Induced value added is the tertiary category of value added and refers to the value added by household spending that occurs as a result of the economic event being analyzed.

Output is the total value of production that has occurred and is equal to value added plus any intermediate inputs. Direct output is the total value of production for the primary event being analyzed. Indirect output incorporates the business to business interactions necessary to sustain the primary event in question. Induced output is the tertiary category of output and includes household spending that occurs as a result of an economic event. Finally, fiscal benefits are simply the tax revenues generated from all aspects of economic activity associated with the event and include local, state, and federal tax revenues. Each option along with the varying categories of factors are shown in the tables below. Attached below are tables containing both county level and zip code level results containing separated values for direct, indirect, and induced categories.

## Figure 49

### *County level employment impacts*

<b>Event</b>	<b>Direct Employment</b>	<b>Indirect Employment</b>	<b>Induced Employment</b>
Option 1	5,853	462	938
Option 2	3,630	295	584
Option 3	348	48	62

**Figure 50***County level labor income impacts*

<b>Event</b>	<b>Direct Labor Income</b>	<b>Indirect Labor Income</b>	<b>Induced Labor Income</b>
Option 1	\$ 347,080,806.13	\$ 27,976,077.81	\$ 51,227,785.67
Option 2	\$ 215,875,059.56	\$ 17,897,682.31	\$ 31,914,259.74
Option 3	\$ 22,216,778.07	\$ 2,962,226.83	\$ 3,401,775.05

**Figure 51***County level value added*

<b>Event</b>	<b>Direct Value Added</b>	<b>Indirect Value Added</b>	<b>Induced Value Added</b>
Option 1	\$ 452,943,400.80	\$ 51,265,891.14	\$ 99,954,924.21
Option 2	\$ 281,764,302.63	\$ 32,829,790.94	\$ 62,270,950.57
Option 3	\$ 26,959,234.91	\$ 5,451,687.36	\$ 6,638,209.91

**Figure 52***County level output*

<b>Event</b>	<b>Direct Output</b>	<b>Indirect Output</b>	<b>Induced Output</b>
Option 1	\$ 617,450,578.33	\$ 94,830,984.74	\$ 163,151,114.93
Option 2	\$ 389,123,148.38	\$ 60,951,249.14	\$ 101,641,387.46
Option 3	\$ 50,738,932.78	\$ 10,955,134.47	\$ 10,834,775.83

**Figure 53***County level fiscal impact*

<b>Event</b>	<b>Local Fiscal</b>	<b>State Fiscal</b>	<b>Federal Fiscal</b>
Option 1	\$ 12,910,632.70	\$ 31,292,331.83	\$ 97,699,163.64
Option 2	\$ 8,080,356.11	\$ 19,547,010.18	\$ 60,903,712.21
Option 3	\$ 874,482.12	\$ 2,127,440.00	\$ 6,482,495.46

**Figure 54***Zip code level employment impacts*

Event	Direct Employment	Indirect Employment	Induced Employment
Option 1	5,853	1	2
Option 2	3,630	1	1
Option 3	348	0	0

**Figure 55***Zip code level labor income*

Event	Direct Labor Income	Indirect Labor Income	Induced Labor Income
Option 1	\$ 347,080,806.13	\$ 11,636.62	\$ 130,339.41
Option 2	\$ 215,875,059.56	\$ 72,495.94	\$ 80,793.09
Option 3	\$ 2,216,778.07	\$ 15,542.18	\$ 7,645.72

**Figure 56***Zip code level value added*

Event	Direct Value Added	Indirect Value Added	Induced Value Added
Option 1	\$ 452,943,400.80	\$ 169,642.68	\$ 269,598.00
Option 2	\$ 281,764,302.63	\$ 110,680.51	\$ 183,851.52
Option 3	\$ 26,959,234.91	\$ 24,796.47	\$ 17,398.15

**Figure 57***Zip code level output*

<b>Event</b>	<b>Direct Output</b>	<b>Indirect Output</b>	<b>Induced Output</b>
Option 1	\$ 617,540,578.33	\$ 325,772.19	\$ 414,035.65
Option 2	\$ 389,123,148.38	\$ 212,548.70	\$ 256,646.87
Option 3	\$ 50,738,932.78	\$ 48,080.14	\$ 24,286.99

**Figure 58***Zip code level fiscal impact*

<b>Event</b>	<b>Local Fiscal</b>	<b>State Fiscal</b>	<b>Federal Fiscal</b>
Option 1	\$ 5,184,043.12	\$ 10,736,126.78	\$ 57,967,025.17
Option 2	\$ 3,220,845.15	\$ 6,663,616.50	\$ 36,046,525.62
Option 3	\$ 274,301.65	\$ 613,618.46	\$ 3,593,285.59

### **Non-Economic Benefits for Land Use Options**

Traditional economic development project assessments in land use often focus largely on economic benefits produced by land use options. While this is certainly a reasonable metric by which to measure success due to the nature of economic development, success can and should consider non-financial benefits that may be produced by operational choices. These non-economic benefits can take a variety of forms depending upon what the current situation is in the area being developed. In the case of Coney Island there are a number of benefits in the proposed development options that do not show up in the financial or economic impact analysis.

The proposed residential developments include over 500 inclusionary housing units which are priced at an average of 50% AMI. The number of inclusionary residential units included in this development alone is higher than the largest residential development in recent years in Coney Island. The market rate units number at over 2,200 which will also contribute to easing pressure on the housing market as there will be more supply coming online. The commercial element of the proposed development options is sizeable and provides enough square footage to accommodate a number of uses. These uses can address community needs including a grocery store or a community center. The recreation element of option 2 addresses the health of the community as established in the literature review, recreational and sports centers have been shown to have positive benefits for community health, an area in which Coney Island is worse than average. The amusement area included in development option 3 has the potential to re-establish the identity of Coney Island as an area that is expanding its amusement parks and honoring its historical heritage.

### **Formal Recommendation**

The formal recommendation as a result of this analysis is to engage in development at the Abe Stark site mirroring option 2. The residential and commercial space included in this development option allows for community needs to be addressed through new commercial uses and an easing of housing pressure. The recreation element expands on Abe Starks current use and addresses the expressed wish of the community to have more athletic options throughout their neighborhood. This option moves the current parking lot underground to accommodate the desire of the Cyclones baseball team, retaining their interest in the area. The opportunity to include open/green space throughout the development is also significant.

The economic impact of option 2 is extensive, we can expect this development to provide 3,632 jobs at the neighborhood level. When the geographic scope of economic activity is expanded to include the county level, the jobs created is increased to 4,510. The total output, meaning the total economic activity generated by option 2 is over \$875 million. The city can expect over \$8 million in fiscal impact as a result of this development at the county level, likely significantly more if the economic scope is increased to the metro area. The financing for a development of this size can be supported by the cash flows of the development. The financial analysis shows that over the course of a 30 year amortization schedule, the full debt on the project can be repaid by cashflows from the residential and commercial element alone. This does not necessarily mean that individual developers involved in the project have the exact same financial outcomes, this means that at the scope of paying for all construction, it can be covered for by commercial and residential operations. This repayment is not at the loss of positive financial outcomes for investors as the financial models incorporate a 9.5% minimum equity return as well. So, this project is possible to complete while qualifying for appropriate debt levels and offering a reasonable attraction for equity.

This begins the question of ownership and who the involved parties will be in the project. It is of course not a recommendation that the city takes on a project of this size, multiple parties will have to be involved. An interesting funding mechanism could be the creation of a project specific entity, an investment vehicle solely dedicated to this development. This would enable multiple parties to buy into ownership, raising enough equity to then qualify for the appropriate amount of debt. This ownership model could allow community organizations to purchase equity in the project and receive the financial benefit along with the non-financial benefits of this

development. While outside the direct scope of the research intentions, there is significant future potential for the exploration of this ownership model.

The non-economic benefits of this development option are significant. There is a maximum of over 500 units of inclusionary housing included in the financial analysis as well as well over 100,000 square feet of commercial space. Due to this size, the options for commercial uses are essentially wide open, restricted only by zoning regulations governing appropriate uses. The community gets a recreation center while addressing the need to keep the minor league baseball team in the area. The increase in market rate units should ease pressure on rental prices by supplying a maximum of over 2,000 market rate units. There is also significant cohesion with past and future developments in Coney Island. Creating a high-quality recreation complex with commercial and residential elements near-by offers an attractive waterfront area. The presence of the baseball stadium and potentially redeveloped amusement areas, and the casino can create a hub of entertainment and athletics. This development in conjunction with already planned or potential developments can serve as a trigger to revitalize the local economy and pay homage to this historic neighborhood.

### **Limitations & Concerns**

As with all forms of research involving economic and financial analysis, there are of course many areas in which assumptions come into play. The most obvious limitation to this research is that the assumptions made in the course of this analysis are wrong. This can occur for a number of reasons as sources and opinions can differ as to what is appropriate or applicable information from which to form an assumption. The temporal aspect of a development of this size can also create an environment in which the projections are no longer accurate or have been made irrelevant by a significant change in some aspect of the economic or social environment.

Inherent in economic development and especially subjects dealing with property development is the issue of gentrification. The inclusion of affordable units in the residential development and previous affordable developments in the area work to combat this. However, any development can easily trigger an increase in property values, rents, and property taxes. All financial factors that can contribute to displacing current residents. Further study will be necessary to ensure that the need for affordable housing in the neighborhood is fully met. There would be little point in developing a community based project, like a recreation center, while removing the community. This goes hand in hand with the potential risk that comes with changing land ownership. New property owners or owners of equity in the development can bring in new priorities to the area with the potential to override current residents. Finally, there is a risk that the size of this development overwhelms the demand in the area leading to an environment where there is little demand for housing at the market rent. This can lead to changes in the financial feasibility of the project, although it may seem to be unlikely, it is possible. Ongoing developments not captured in the neighborhood analysis (due to the fact that they are proposed and not built) are bringing hundreds and in some cases thousands of units online. Concentrated development to this degree can overwhelm the market, posing a risk to future projects.

The methodology used to analyze and evaluate development options throughout this research can be improved upon and applied to other case studies or neighborhoods. Finally, there is the limitation that the time and scope of this research was not able to cover every factor that should be considered. Due to the geographic location of Coney Island, research into environmental risks may be necessary in the future. There are many opportunities for future research related to this work. A project of this scale may not happen for many years, further



proposals or viability studies should be completed as a project moves from the pre-development stage to the development stage.

### **Conclusion**

This research set out to assess the current conditions of the Coney Island neighborhood while identifying future development options that relieve certain concerns. Through economic impact analysis and financial analysis, it has been shown that addressing the communities needs while providing a development with attractive returns is possible. Moving forward, the Abe Stark site will have to be a part of some redevelopment plan, it is simply just not providing enough benefit to the community or the city. Coney Island is a neighborhood that has incredible potential at the local economy level. Not just due to the possibility of redevelopment or revitalization projects but due to the history associated with its name. There is certainly an attractiveness to Coney Island that can be leveraged to the benefit of the community.

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## Appendix

### Annotated Bibliography

Bates, T., Farhat, J., & Casey, C. (2021). The economic development potential of minority-owned businesses. *Economic Development Quarterly*, 36(1), 43–56.

<https://doi.org/10.1177/08912424211032273>

This journal article from *Economic Development Quarterly* looks into how minority owned businesses are able to thrive in the face of discrimination and disenfranchisement. Previous research in this sphere established that the scope of the minority owned business community has been limited by social and economic barriers. These authors use data from the US Census and the BLS to examine how the number of employees within minority owned businesses has grown steadily and significantly since the early 2000's. This article finds that easing of loan regulations and requirements in conjunction with targeted procurement programs have benefited the minority owned business community. Through regression analysis the authors compared the traits and credit worthiness of minority owned businesses with that of white-owned businesses. There is also an analysis of financial access and neighborhood investment programs which finds that minority businesses can increase their growth rates through many of these programs. Ultimately the article finds that one of the best predictive factors of sustained growth in minority owned businesses are the traits of the business owners and their ability to attract financing.

Branco, C., Dohse, D. C., Pereira dos Santos, J., & Tavares, J. (2023). Nobody's gonna slow me down? the effects of a transportation cost shock on firm performance and behavior. *Journal of Urban Economics*, 136, 103569.



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<https://doi.org/10.1016/j.jue.2023.103569>

This article from the *Journal of Urban Economics* observes the impacts on business and employment reactions to increases in the cost of transportation. This is applicable in New York City due to the recent MTA cost increase as well as debates over congestion pricing. These authors observe firm-level reactions to the implementation of tolls in a subsection of highways in Portugal. The article finds that the implementation of increased transportation costs resulted in the economic burden being passed through to the employees of these firms. Through observance of financial indicators the authors were able to find that profits were not impacted but firms often cut their labor costs as well as other non-transportation related costs. This means that as a result of higher transportation costs, firms decreased worker pay or eliminated positions in order to remain profitable. However, there is a possibility that the decreased worker pay could be due to the increase in part-time work and decrease in full-time work also observed during this time, creating a lower average wage. Overall, this article raises the issue that the implementation of transportation infrastructure in a neighborhood may result in the economic burden falling upon the workers of that community.

Chen, J. (2019). The impact of cluster diversity on economic performance in U.S. metropolitan statistical areas. *Economic Development Quarterly*, 34(1), 46–63.

<https://doi.org/10.1177/0891242419892338>

This article from the journal *Economic Development Quarterly* seeks to understand how clustering of economic specialization within metropolitan areas contributes to overall economic growth and stability. Previous economic understanding in the urban environment held the belief

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that economic diversity contributes to stabilization while economic specialization contributes to rapid growth. These authors challenge this belief, finding that clustering contributes positively to both economic growth and economic stabilization. Data from the US Census and BEA allowed for analysis of overall economic diversity and clustered economic diversity. The findings from this study have implications for economic development strategy at the regional and city level finding that high industry specialization and economic diversity can coexist within the same economic system without negative impacts. Regions do not have to choose between growth and stability, this means that at the neighborhood level, economies have the freedom to specialize or diversify without negative effect.

Churchill, N. (2023, June 16). The five stages of small-business growth. Harvard Business Review. <https://hbr.org/1983/05/the-five-stages-of-small-business-growth>

This article from the Harvard Business Review discusses the beginning stages of small business growth and common problems that entrepreneurs face when establishing their business. This subject is useful when considering economic development at the neighborhood level as understanding small business concerns can assist in routing useful resources where they are needed. Additionally, it could be useful to understand how businesses evolve and how to build support networks for small businesses in underserved communities. The article identifies four factors that a small business must have access to in order to maintain its growth rate. These are financial, personnel, systems of planning/control, and business specific resources. A neighborhood level economic development plan could address three out of these four. Financial, personnel, and in some cases business specific resources could be included in a business development plan.

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Dai, T., & Schiff, N. (2023). The structure and growth of ethnic neighborhoods. *Journal of Urban Economics*, 137, 103570. <https://doi.org/10.1016/j.jue.2023.103570>

This article appeared in the *Journal of Urban Economics* and studies the spatial and cultural growth of ethnic neighborhoods in a metropolitan environment. Adding to the depth of work on neighborhood characteristics like income and housing on the outcomes of residents, this paper attempts to combine spatial understanding and growth models. This effort found that ethnic neighborhoods have a structure and growth pattern similar to that of a city sub-center. These authors measured ethnic neighborhoods using economic metrics rather than official political boundaries. They found that in many cases, there are markets, stores and other cultural-economic indicators that exist outside of the political boundaries for ethnic neighborhoods. The paper goes on to establish ways of geographic processing that may not apply directly to the capstone but the economic understanding of distinct cultural neighborhoods is certainly important.

Hammer, J., & Pivo, G. (2016). The triple bottom line and sustainable economic development theory and practice. *Economic Development Quarterly*, 31(1), 25–36.

<https://doi.org/10.1177/0891242416674808>

This article from *Economic Development Quarterly* looks into the relationship between the economic, environmental, and social value (also known as ESG) of an investment and overall economic development strategy. The triple bottom line concept is a major consideration in large

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businesses, but some economic development professionals may not prioritize its importance in their own work. Through a number of surveys and observations, this article find that while economic development professionals voice concerns over environmental and social topics, very few implement the triple bottom line in their work. These authors suggest that the social and political environment in which economic development occurs leaves control of important factors outside the control of the jurisdiction in which the work takes place. Furthermore, a lack of communication and integration among the various organizations at work in a neighborhood may negatively affect the outcome of economic development work. Finally, this article finds that success in the case of economic development work often is very narrowly defined with the specific economic returns being the priority. This emphasizes considering other benefits of economic development work that may not take the form of an economic return.

McNeil, A., Luca, D., & Lee, N. (2023). The Long Shadow of local decline: Birthplace economic adversity and long-term individual outcomes in the UK. *Journal of Urban Economics*, 136, 103571. <https://doi.org/10.1016/j.jue.2023.103571>

This study from the *Journal of Urban Economics* was conducted in the United Kingdom and observes economic, cultural, and political outcomes of individuals born in “high-economic adversity” areas. This paper highlights the idea that the economic environment of one’s birthplace can affect their individual attitudes towards a number of key societal issues. This is especially important when considering spatial inequality as it shows the psychological impact that economically struggling communities must contend with. Using unemployment as a measure of economic adversity, this study used the British Household Panel Survey to observe social and cultural attitudes on a number of factors. Also observing place based socialization, the paper

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found that individuals born in areas with high economic stress were more likely to hold left-wing economic beliefs and less likely to vote for the conservative party. The political findings are not relevant to the capstone but this paper shows that the presence of social services and adequate economic opportunity are clearly linked to more than future income.

Office of Policy Development & Research. (2014). Targeting strategies for neighborhood development. Targeting Strategies for Neighborhood Development | HUD USER.

<https://www.huduser.gov/portal/periodicals/em/winter14/highlight2.html>

This article from the Office of Policy Development and Research for HUD first appeared in 2014 in the Evidence Matters periodical and has now been republished on the HUD user site.

This article evaluates and puts forward a number of targeting development strategies for neighborhood revitalization. Using a case study from Richmond Virginia, this investigation shows that property values in low income neighborhoods can be raised with the right combination of government and non-profit resources. Dealing largely with the issue of vacancy

as an urban blight, the article discusses examples of dealing with targeting investment. The Richmond case study is particularly useful as the program administered there was still successful five years after implementation. This highlights the need for concerted effort between public and private resources to address vacancy and deteriorating physical conditions.

Sutton, J., Arku, G., & Sadler, R. (2023). You do not know what you have until it is gone:

Regional economic resilience: A scoping review. *Progress in Human Geography*. 47.

030913252311741. 10.1177/03091325231174183.

This article from the journal *Progress in Human Geography* deals with the concept of

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regional economic resilience and its use as a buzz word in development. Through an assessment of 168 articles the authors attempt to develop regional economic resilience from a buzzword into a conceptual framework. This is particularly useful to the field of economic development as much of the public discussion surrounding major projects/issues revolves around political catchphrases regardless of outcomes. The paper finds that regional economic resilience must consist of the ability of a region to react or transform to sudden major disruptions to the neighborhood's economic activities. While no regional economy can be completely shockproof, the authors observe some commonalities in economies that fair better under stress. A successful regional economy will understand its industry sensitivity to the economic cycle and be able to direct resources appropriately. An example of this is the particular vulnerability of tourism or manufacturing to economic shocks. The findings of this paper are especially useful in the case of neighborhood development as it offers a conceptual framework to understand and evaluate economic resilience.

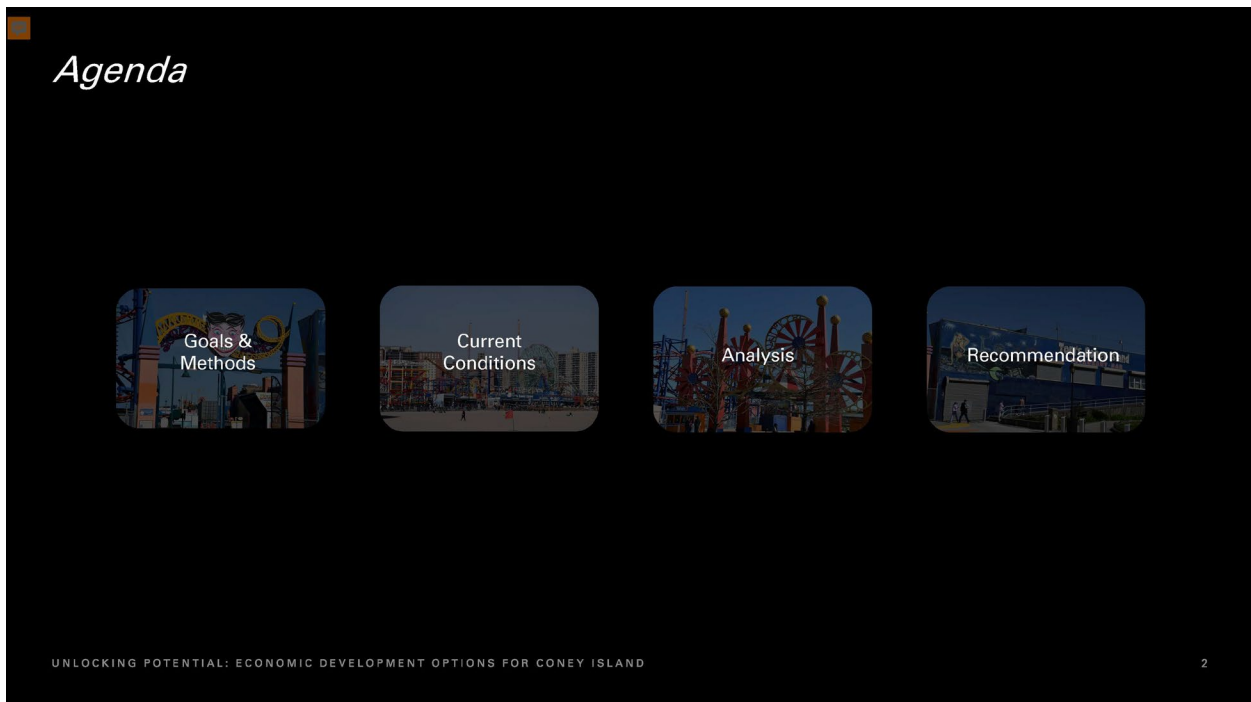
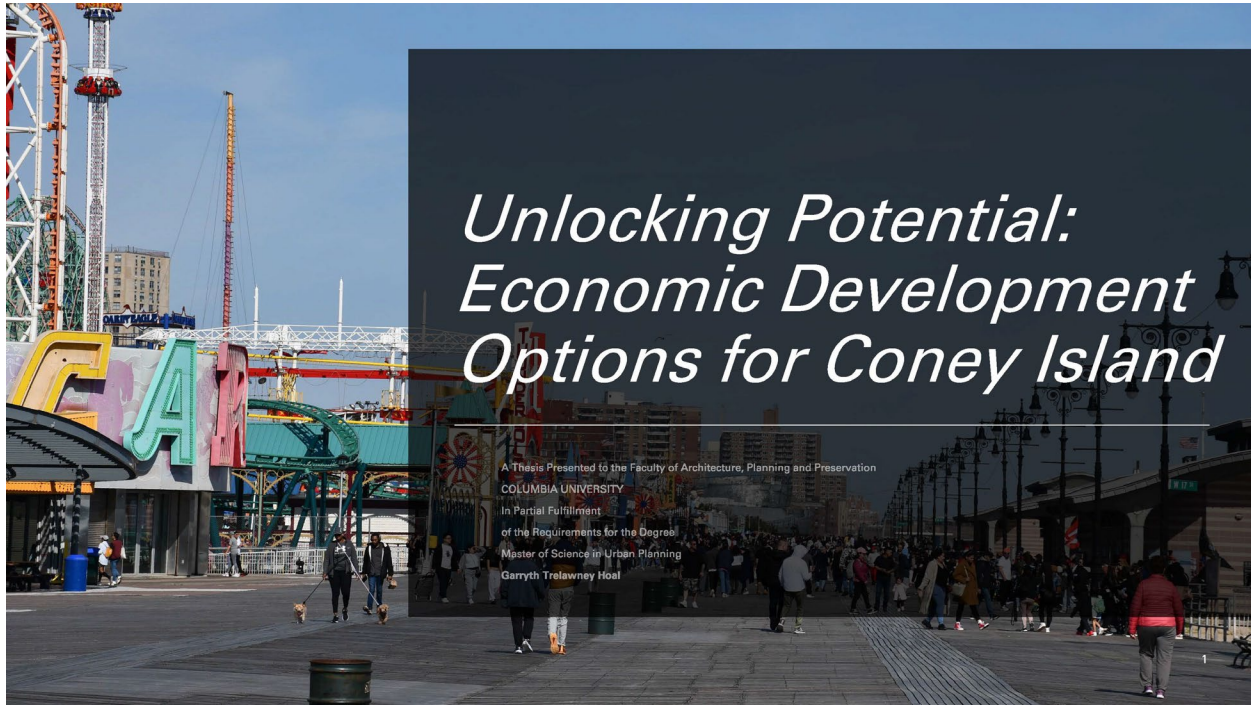
US Green Building Council. (2023). LEED v4: Neighborhood Development Guide: U.S. green building council. LEED v4: Neighborhood Development Guide | U.S. Green Building Council. <https://www.usgbc.org/guide/nd>

This article from the US Green Building Council is a reference guide for new development or redevelopment projects seeking to engage in green neighborhood development. The article outlines environmental factors that affect development and how the LEED rating system can be used to develop a green project. While the LEED specific guidelines are not specifically applicable to the capstone, the subjects discussed in regard to future development and environmental factors affecting buildable land are. There are also a number of useful

---

strategies within the article for conceptualizing many neighborhood level factors such as transportation methods, densities, and the physical connectivity of the urban space.

Slide Summary of Research





**Goals of Research**

Identify and propose development options for the Abe Stark ice rink that create a positive economic impact, address community needs, and are financially viable at a large scale.

Guided by the questions:  
 Is the site of the Abe Stark ice rink being used for the highest benefit of the community?  
 If not, what should take its place?

UNLOCKING POTENTIAL: ECONOMIC DEVELOPMENT OPTIONS FOR CONEY ISLAND

3

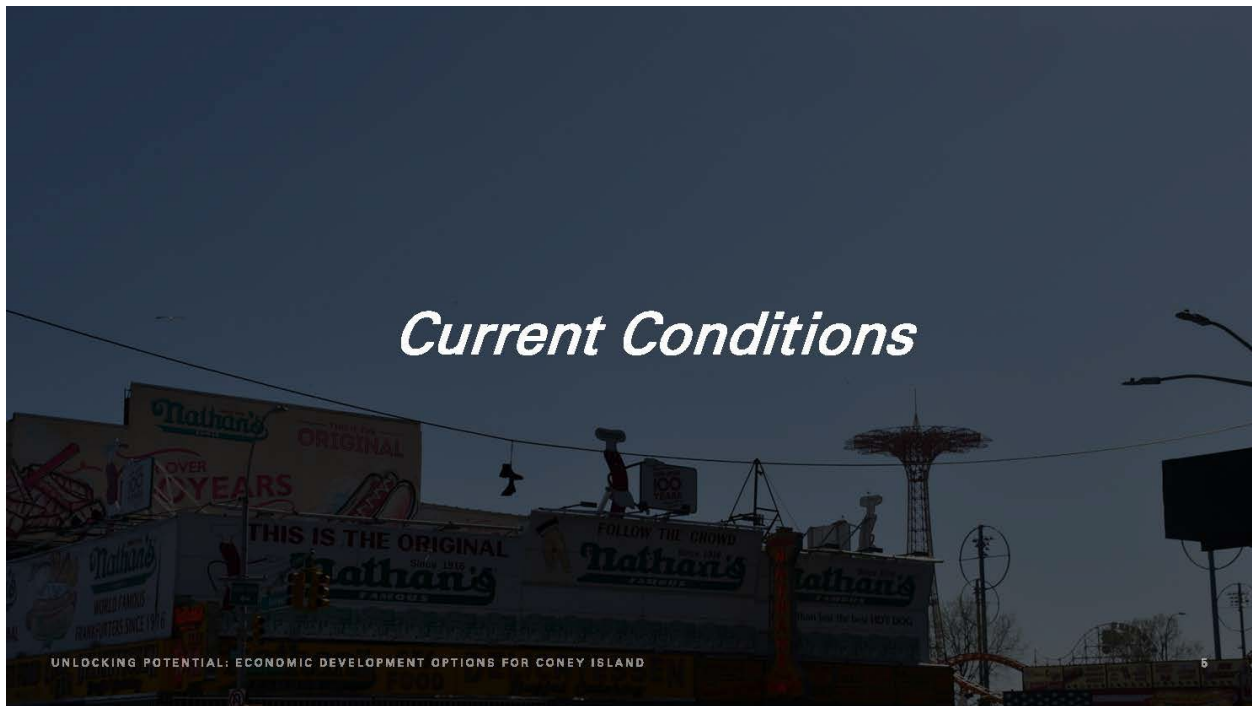
**Methodology**

```

    graph TD
        subgraph Qualitative
            CR[Community Resources] --> SN[Community Needs]
            SV[Site Visits] --> SN
            SI[Stakeholder Input] --> SN
        end
        subgraph Quantitative
            Soc[Socioeconomics] --> SN
        end
        SN --> PDO[Possible Development Options]
        PDO --> EIA[Economic Impact Analysis]
        PDO --> FA[Financial Analysis]
        EIA --> Rec[Recommendation]
        FA --> Rec
    
```

UNLOCKING POTENTIAL: ECONOMIC DEVELOPMENT OPTIONS FOR CONEY ISLAND

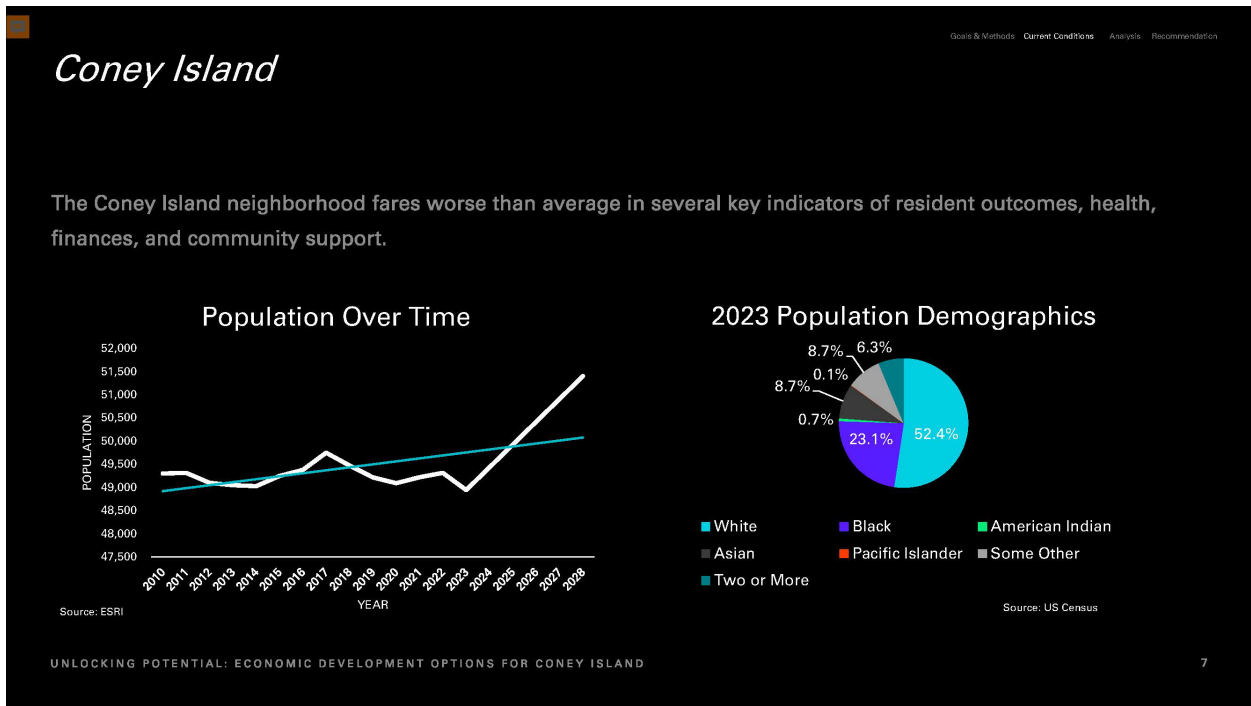
4



Goals & Methods Current Conditions Analysis Recommendation

## Coney Island

Source: OpenStreet Maps



## Coney Island

Goals & Methods   Current Conditions   Analysis   Recommendation

Site	2023 Median Household Income	2028 Median Household Income	Expected Growth Rate 2023-2028
→ 11224 (Brooklyn)	\$37,100	\$40,893	10%
Kings County, NY	\$70,220	\$79,967	14%
New York	\$77,077	\$85,392	11%
USA	\$72,603	\$82,410	14%

Source: ESRI

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# Coney Island

Goals & Methods Current Conditions Analysis Recommendation

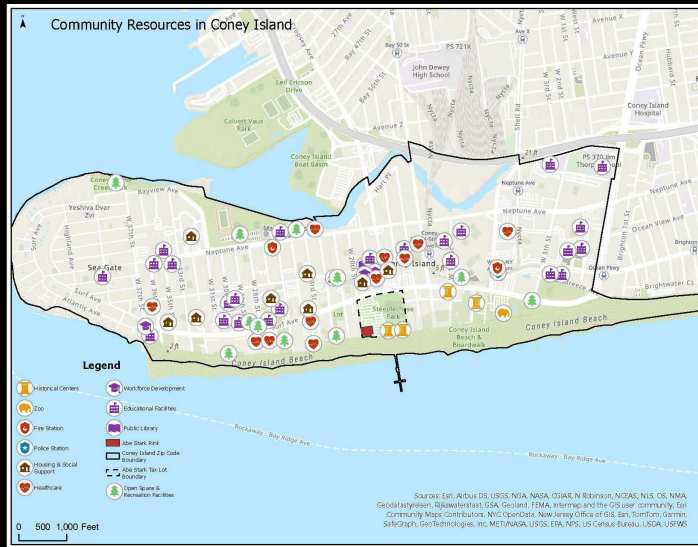
Site	2021 HHS w/Gross Rent At Least 50% of Household Income
11224 (Brooklyn)	27.38%
Kings County, NY	27.08%
New York	26.08%
USA	22.91%



Source: US Census

# Community Resources

Goals & Methods Current Conditions Analysis Recommendation



Goals & Methods | **Current Conditions** | Analysis | Recommendation

## Previous Analysis

Coney Island is considered a **moderate low risk community** by the data and policy organization Citizens' Committee for Children of New York.

Community Health Profiles completed by the NYC Health department found that Coney Island residents suffered from **higher all cause mortality** than the average New Yorker.

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Goals & Methods | **Current Conditions** | Analysis | Recommendation

## Resident Needs

- Economic Opportunity
- Improved Health Outcomes
- Easing of Housing Pressure
- Physical Space Improvement

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# Abe Stark

Goals & Methods | Current Conditions | Analysis | Recommendation

**Abe Stark Site Location in the Coney Island Neighborhood**

The map shows the Abe Stark site (red rectangle) located between Coney Island Beach and the Coney Island Boardwalk. Key landmarks include the Coney Island Boardwalk, Wonder Wheel, and Coney Island Beach. The map includes a legend, a scale bar (0 to 0.1 miles), and a north arrow.

**Legend**

- Abe Stark Site
- Site Lot Boundaries

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# Abe Stark

Goals & Methods | Current Conditions | Analysis | Recommendation

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# Abe Stark

Goals & Methods | Current Conditions | Analysis | Recommendation

The map shows Coney Island with various landmarks labeled: Coney Island Beach, Coney Island Boardwalk, Wonder Wheel, Coney Island Race & Boardwalk, Coney Island Park, Coney Island School, and Coney Island Amusement Park. A red square on the map indicates the location of the Abe Stark site. Four inset photos provide visual context: top-left shows a parking lot with cars; top-right shows the entrance to the Coney Island Boardwalk; bottom-left shows a large, modern building; bottom-right shows the Ferris wheel on the boardwalk.

Legend

- Abe Stark Site
- Lot Boundaries

0 0.03 0.05 0.1 Miles

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# Abe Stark

Goals & Methods | Current Conditions | Analysis | Recommendation


A photograph of the Abe Stark building, a large, modern structure with a curved roof and a prominent entrance. The building is situated in an urban setting with cars parked in the foreground and a tall, multi-story building in the background. The sky is clear and blue.

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*Abe Stark*

Goals & Methods   Current Conditions   Analysis   Recommendation




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*Abe Stark*

Goals & Methods   Current Conditions   Analysis   Recommendation



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# Zoning

Goals & Methods | Current Conditions | Analysis | Recommendation

The left side of the slide features a zoning map of Coney Island, showing various districts such as CB-1, M3-1, M1-2, R6, and R7-1. A legend identifies symbols for current zoning, district boundaries, proposed zoning, and other planning elements. The right side shows a 3D architectural rendering of several multi-story buildings, with labels indicating 'New construction under R7D regulations' and 'R7D basic envelope'.

Source: NYCEDC

Source: NYC ZoLA

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# Stakeholder Input

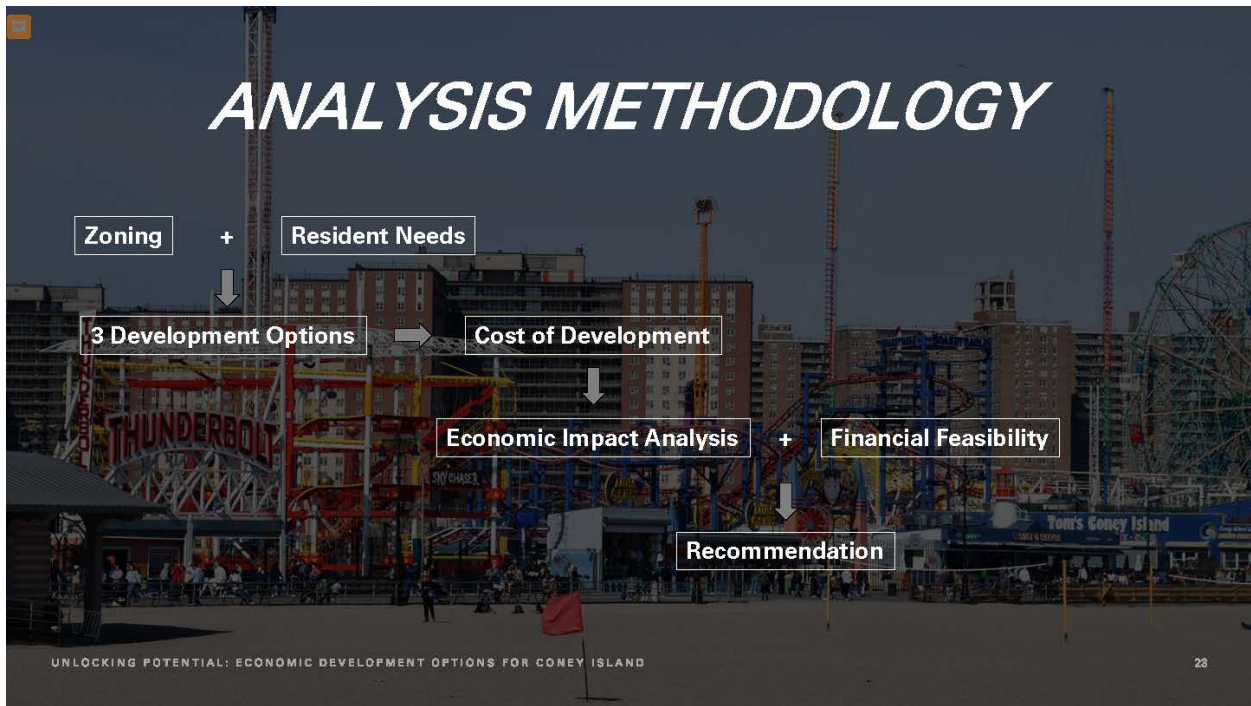
Goals & Methods | Current Conditions | Analysis | Recommendation

The slide features an aerial rendering of a proposed development on Coney Island, including a large red Ferris wheel. Five speech bubbles contain stakeholder feedback: "The business is so seasonal.", "Coney Island isn't what it used to be...", "The area just does not feel safe...", "Affordability is a big issue for everyone.", and "Interest rates will likely slow development." The source is cited as Taconic Development.

Source: Taconic Development

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## Development Options

Three options were developed, each made up of up to four events.

	Underground parking	Commercial and Residential North	Commercial and Residential South	Recreation Area South	Amusement Area South	Rebuild Abe Stark	Renovate Abe Stark
1	+	+	+			+	
2	+	+		+			+
3	+				+		+

The cost of each event was used to calculate overall option cost.

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Goals & Methods   Current Conditions   **Analysis**   Recommendation

## Cost of Development

**Assumes inclusionary housing in Res**

Event	SQFT	LF	Total Cost
Underground Parking	232,000	2,200	\$ 30,609,738.86
Commercial North	232,000	1,350	\$ 31,620,673.88
Commercial South	238,000	1,460	\$ 32,813,743.81
Residential North	952,000	1,350	\$ 255,871,111.41
Residential South	952,000	1,460	\$ 257,114,724.11
Residential North (1 tower option)	1,160,000	1,350	\$ 309,251,558.47
Commercial North (1 tower option)	116,000	1,350	\$ 19,338,118.84
Recreation Area South	160,500	1,605	\$ 27,128,324.64
Renovation of Abe Stark	53,000	1,000	\$ 2,795,407.57
Amusement Area South	160,500	1,605	\$ 17,333,786.35
Building Abe Stark on another lot	53,000	1,000	\$ 9,420,586.26

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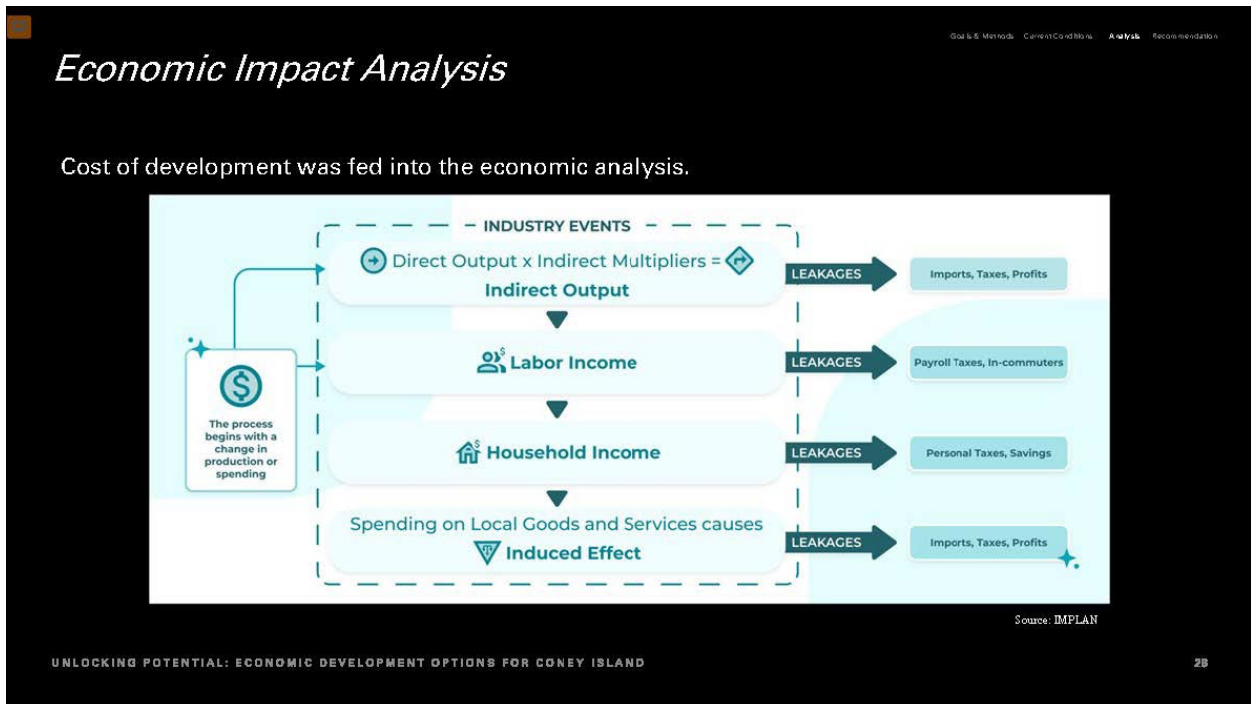
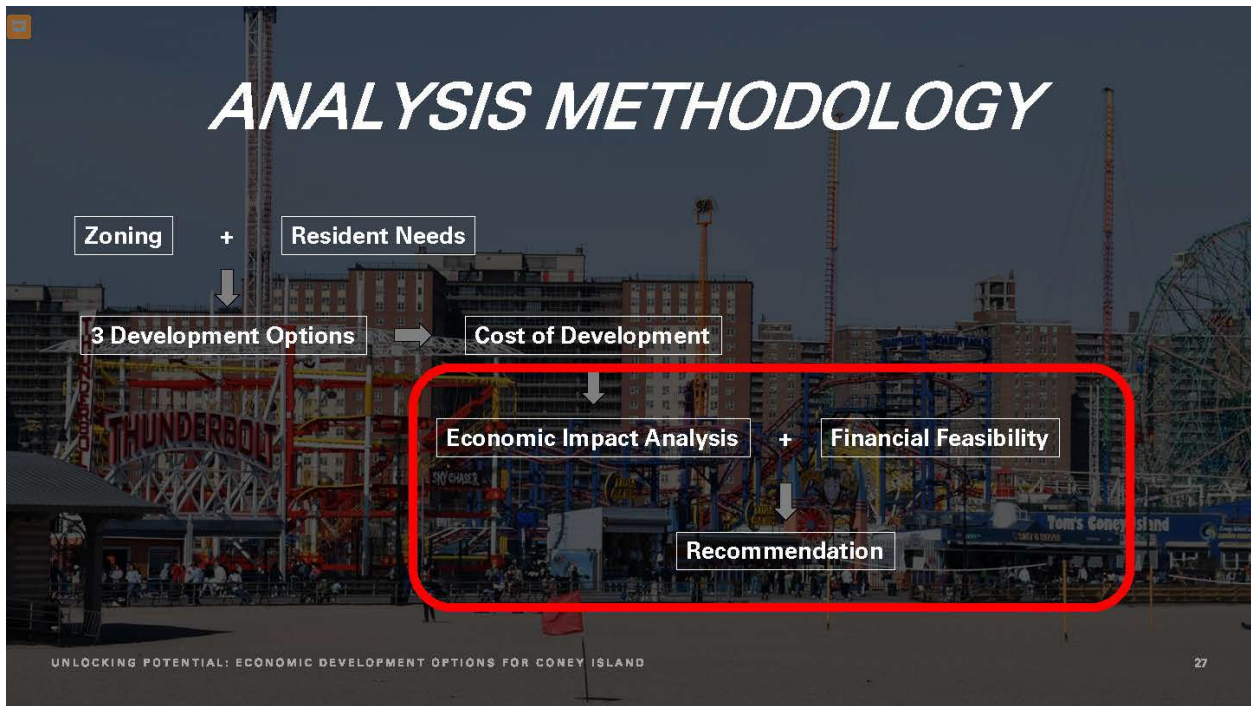
Goals & Methods   Current Conditions   **Analysis**   Recommendation

## Cost of Development

Development Option	Total Cost	
1	\$ 617,450,578.33	<b>\$617 M</b>
2	\$ 389,123,148.38	<b>\$389 M</b>
3	\$ 50,738,932.78	<b>\$50 M</b>

Total development cost is the sum of the relevant event costs

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## Economic Impact Analysis

Goals & Methods Current Conditions Analysis Recommendation

Economic impact for each proposed development option at the **zip code level (11224)**.

Event	Employment	Labor Income	Value Added	Total Output	Fiscal Benefits
Option 1	5,857	\$ 347,322,782.16	\$ 453,409,642.00	\$ 618,190,386.17	\$ 73,887,195.00
Option 2	3,632	\$ 216,028,348.60	\$ 282,058,834.66	\$ 389,592,343.94	\$ 45,930,987.28
Option 3	348	\$ 22,239,965.97	\$ 27,001,429.53	\$ 50,811,299.90	\$ 4,481,205.69

Economic impact for each proposed development option at the **county level (King's)**.

Event	Employment	Labor Income	Value Added	Total Output	Fiscal Benefits
Option 1	7,254	\$ 426,284,669.00	\$ 604,164,216.00	\$ 875,432,678.00	\$ 141,902,128.19
Option 2	4,510	\$ 256,687,001.61	\$ 376,865,044.14	\$ 551,715,784.98	\$ 88,531,078.49
Option 3	459	\$ 28,580,819.94	\$ 39,049,132.19	\$ 72,528,843.08	\$ 9,484,417.58

## Economic Impact Analysis

Goals & Methods Current Conditions Analysis Recommendation

Although option 1 provides a higher economic benefit on both geographic scales, option 2 more directly addresses community needs and option 3 integrates into the existing entertainment economy.

Economic impact for each proposed development option at the **county level (King's)**.

Event	Employment	Labor Income	Value Added	Total Output	Fiscal Benefits
Option 1	7,254	\$ 426,284,669.00	\$ 604,164,216.00	\$ 875,432,678.00	\$ 141,902,128.19
Option 2	4,510	\$ 256,687,001.61	\$ 376,865,044.14	\$ 551,715,784.98	\$ 88,531,078.49
Option 3	459	\$ 28,580,819.94	\$ 39,049,132.19	\$ 72,528,843.08	\$ 9,484,417.58

**Financial Feasibility**

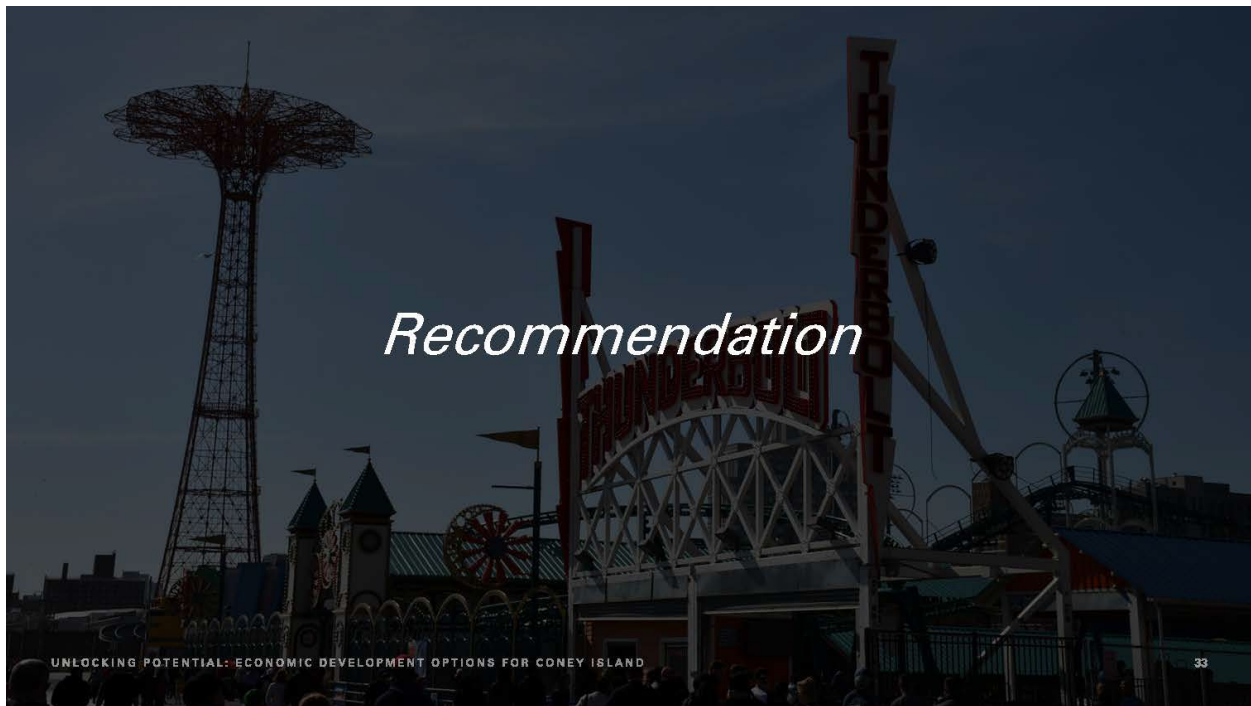
- Models the entire scale of development.
- Develops avg. residential and commercial market rate rent through comps.
- Develops avg. inclusionary rate rent through 50% AMI.
- Assumes construction of maximum allowable units by current zoning.
- Uses Debt Service Coverage Ratio (DSCR) and Loan To Value (LTV) to calculate allowable debt.
- Assumes shift to permanent loan after construction.
- Built in \$5 million cost for land purchase, development right purchase, or CBA.

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**Financial Feasibility**

	Development Option 1	Development Option 2	Development Option 3
Has a commercial or residential element that can be used to fund development.	✔	✔	✘
Covers cost of construction.	✔	✔	
Amortized loan in 30 years.	✔	✔	
Has a positive financial return in 10 years	✔	✔	
Addresses stakeholder needs		✔	

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Goals & Methods   Current Conditions   Analysis   Recommendation

## Recommend Option 2

Key Attributes

- Meets community needs.
- 3,632 jobs at the zip code level.
- 4,510 jobs at the county level.
- Up to 2,200 units of housing with 500 affordable units.
- Over \$550 million of economic activity is generated.

Source: Aviator Recreation

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## Limitations & Implications

Goals & Methods Current Conditions Analysis Recommendation

- Gentrification.
- Overwhelming the housing market.
- Potential structure for future case studies.
- Potential jumping off point for Coney Island research.
- Assumptions can be inaccurate.
- Temporal risk.

### First Year Revenue Calculations

Assumption	Source/Calculation
Market Rate Rent	Corcoran Group - January 2024 Market Report (Brooklyn)
Inclusionary Housing Rent	BFC Partners - January 2024 Affordable Rental Cost (Coney Island)
Retail Space Rent	Avg. retail space rent per SF 2024
First Year Revenue	DU Max x avg. rent (accounts for inclusionary)

[LINK TO FULL EXCEL FILE](#)