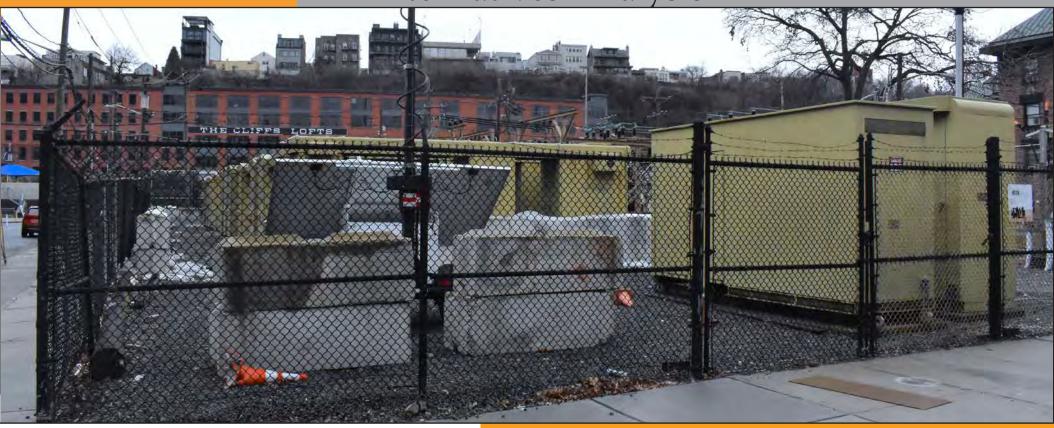
Marshall Street Substation Hoboken, NJ Alternatives Analysis



Rutgers Graduate Studio Edward J. Bloustein School of Planning and Public Policy Rutgers University May 2020



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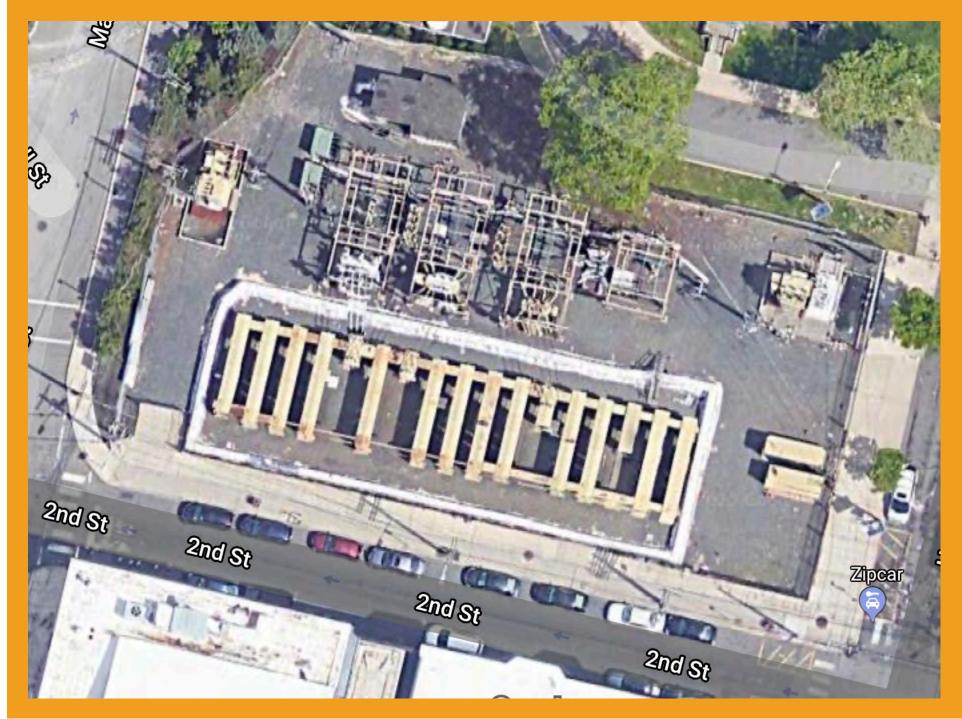
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EXECUTIVE SUMMARY

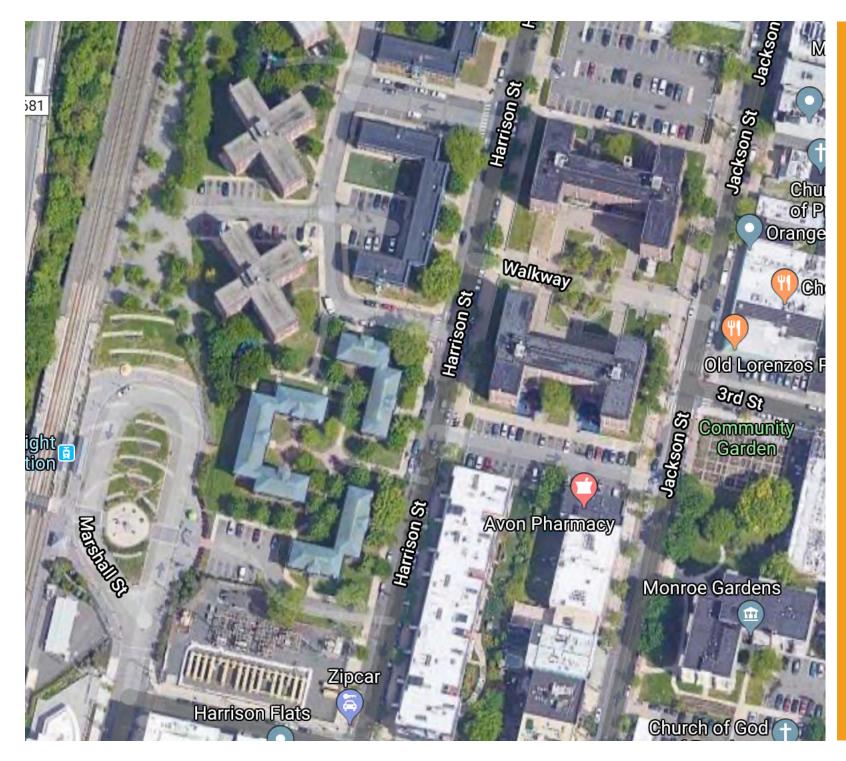
The City of Hoboken, New Jersey, faces limited undeveloped land opportunities in the densely populated urban municipality. Just two percent of the square mile city constitutes vacant land, which makes the practices of redevelopment and infill development a necessity. It is for this reason that the Marshall Street Substation site located on half an acre of land presents a unique opportunity to provide desperately needed community uses to Hoboken residents. Once fully remediated, per the City of Hoboken's 2017 Land Transfer Agreement with the site's current owner PSE&G, the property will transferred back to the city vacant, with unlimited options for its development potential.

With this in mind, the City of Hoboken tasked a team of graduate planning students at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University to prepare the following report as part of their Spring 2020 studio course. The studio was conducted in conformance with professional planning practice standards in order to develop an Alternatives Analysis for the Marshall Street site. The analysis recognized the opportunities inherent in the location and proposes the best development options possible for after the city acquires the property. It is important to note that there is no intention to choose one option over another, but rather to explore the development potential of the site in context with citywide planning goals. The report is structured to reflect the order and process in which this analysis was conducted. By examining existing conditions, and demographic data and conducting a public survey, the studio team confidently developed three viable development options with supportive uses for the community. These three conceptual development options include:

- A Mixed-Use Retail and Inclusionary Residential Development
- A Health and Fitness Wellness Center, including a swimming pool
- A Work and Play Center that includes a Children's Museum, Incubator Space and Senior Center

Each of the three conceptual development options took into consideration five specific areas of concern: Land Use, Design, Market Demand and Financial Feasibility, Transportation, and Resiliency. Through the employment of these five common criteria, comparison of the three alternatives was enabled.

This report should help the City of Hoboken focus and navigate the next steps in the development process. The future of the Marshall Street property should not be underestimated, as it holds a wealth of opportunity to support a rapidly growing city with much needed community uses and amenities.



NTRODUCTION

INTRODUCTION

The alternative development scenarios presented in this report are part of a process that will lead to a plan for the redevelopment of the Marshall Street substation site in Hoboken. The primary objective of the Alternatives Analysis is to provide the City of Hoboken with multiple options as to what can be developed on the site.

In October 2012, Hoboken experienced severe flooding as Superstorm Sandy made landfall. A combination of rainfall, storm surge and rising sea levels caused flooding in the western part of the City as water entered through the southern and northern areas of town. The storm knocked out the power grid, which included the Marshall Street and Madison Street Substations. To protect the City from future flood events, Hoboken and utility provider PSE&G entered into a land swap agreement that would decommission the Marshall Street substation, and in exchange, create one large elevated substation on Madison Street. The Marshall Street substation site would be transferred back to the City.

The 2018 Hoboken Master Plan Reexamination Report and 2018 Land Use Element identified the City's desire to use the substation site as a supportive use for the community. The reports revealed Hoboken's need for recreational facilities and amenities for residents, particularly in the southwest area of the City.

The Marshall Street Substation Alternatives Analysis will provide a vision for transforming the site into a valuable community asset. In addition to providing new retail opportunities, the Alternatives Analysis will also explore the opportunity to provide new residential housing, recreation, and health and wellness facilities for Hoboken residents to enjoy while minimizing traffic, enhancing the surrounding neighborhood, and protecting the environment. Through the formulation and analysis of alternatives, the Marshall Street Substation Alternatives Analysis is intended to establish the appropriateness of retail, determine a mix of housing, and identify the appropriate location and distribution of various uses, such as a museum, community swimming pool and health & wellness facilities.

Based on input from City officials and the community, the following preliminary goals have guided formulation of the alternatives presented in this report:

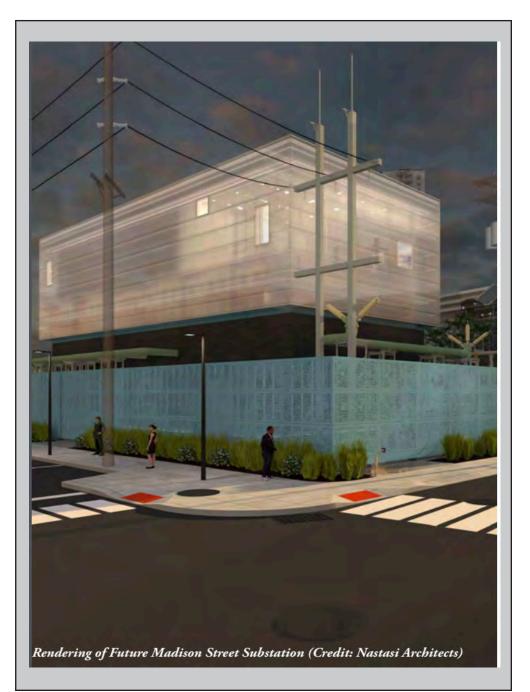
- A mix of economically and socially sustainable mixed-uses
- Developing an attractive, pedestrian-oriented site
- Creation of a site that is well-served by and supportive of transit
- New development that minimizes impacts to the environment
- Integration of development that protects and enhances neighboring uses

ALTERNATIVES DEVELOPMENT

Building upon prior reports, public input, and census data, three alternatives of the project area have been formulated. The alternatives are informed by factors such as:

- The unique ownership of the site by the City of Hoboken
- The proximity of the site to public transit
- The number of recreational facilities in the City
- The presence of market rate housing and the Hoboken Housing Authority (HHA) in the neighborhood

The alternatives in this report have been developed collaboratively by members of the Rutgers Graduate Planning Studio with input from City staff. The purpose of the alternatives is to inform discussion on the future of the area and the implications of the different scenarios that have been presented. Given the unique properties of the site, and the desire to achieve multiple objectives, it is assumed that the project area will not develop as a single use, but is more likely to have multiple uses. The alternatives provide comprehensive scenarios with different land use/development options. The analysis explores how different land uses can be integrated into the community and enhance the character, quality and vibrancy of the neighborhood.



REPORT CONTENT AND ORGANIZATION

The Marshall Street Substation Alternatives Analysis presents three conceptual development alternatives formulated for the project site and provides a summary evaluation of the scenarios according to land use/design, financial feasibility, transportation, and infrastructure. The report discusses the challenges of the alternatives in achieving the project goals and objectives.

The alternatives presented are preliminary concepts that are intended to provide a foundation for discussion as the development of the site moves forward, and are not final recommendations. Considerable discussion and additional development and refinement of concepts will be needed to identify a preferred direction for the project area.

The Marshall Street Substation Analysis of Alternatives Report is organized into the following chapters:

Introduction Existing Conditions Data Collection and Methodology Conceptual Development Alternatives Land Use and Design Financing Programs and Opportunities Transportation and Circulation Resiliency Summary and Next Steps Chapter 2 describes the existing conditions of the site, as well as the demography of the surrounding community, and City of Hoboken. Chapter 3 explains methodology surrounding data collection, including public meetings, site visits, and the results of an online survey. Chapter 4 describes each of the alternatives and their basic characteristics with respect to development program, land use mix, parking strategy, and other features. Chapter 5 discusses the possible land use and urban design implications of each scenario. Chapters 6-8 examine the alternatives with relation to financing programs and opportunities, traffic and circulation, and resiliency. Chapter 9 concludes with a brief summary of the findings and next steps.



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EXISTING CONDITIONS

Located on New Jersey's Gold Coast, Hoboken is a mile-square city sandwiched between Jersey City to the south and Weehawken to the north. Bound by the Hudson River to the east and a natural escarpment to the west, Hoboken is a densely populated municipality with approximately 50,000 residents. With its low-lying topography, Hoboken is susceptible to flood events, and experienced a consider-

Image 2.1 Aerial image of site 1997



Source: NJ Office of Geographic Information Services

able amount of damage during Superstorm Sandy in 2012, particularly in the western part of the city where the elevation is at its lowest. Flooded during the storm, the Marshall Street substation will be decommissioned and remediated as part of a land transfer agreement with PSE&G, and the site transferred back to the City.

Constructed in 1948, the site, located at 742 2nd Street in a primarily residential district, has been owned and operated by PSE&G for use as an electrical

Image 2.2 Aerial image of site 2019



Source: Google Earth

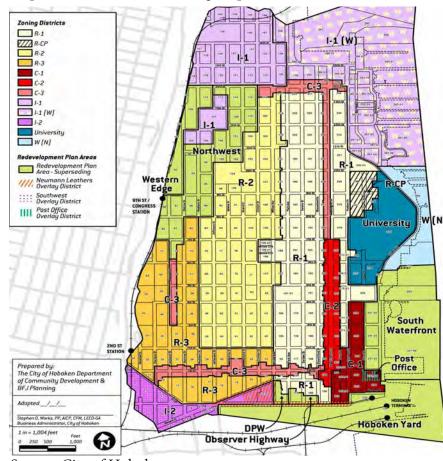
substation that services Hoboken's southern half, and has seen very little change over the previous decades. Prior to 1948, the site was undeveloped. In addition to 2nd Street, the site is further bounded by Marshall and Harrison Streets, which run north and south, respectively. The site is approximately 0.52 acres in size across nine individual adjacent tax lots, identified on the City of Hoboken Tax Map as Block 35, Lots 1 through 5.2, and 33 to 36. Since the site is still operating as a substation until the Madison Street substation is complete, the mechanical equipment and wires are still visible from street level, surrounded by a chain link fence.

When it comes to the area surrounding the site, to the south is a publicly accessible private six-story parking garage operated by Sylvan Parking and luxury rental housing, including Harrison Flats and the Sky Club. To the west of the site is the 2nd Street light rail station that is part of the Hud-son-Bergen Line operated by New Jersey Transit. To the north of the site is an affordable housing development operated by the Hoboken Housing Authority (HHA), and directly to the east is five-story market rate housing.

In terms of accessibility, street parking is available along 2nd St and Harrison St, although a residential parking permit is required by the Hoboken Parking Utility (HPU). There is currently no street parking available along Marshall Street as it serves as a drop off and pick up point for the light rail station.

LAND USE AND ZONING

The Marshall Street substation site is located in Hoboken's R-3 Residence District (Redevelopment), which extends north from Paterson Avenue to 7th Street and east to Willow Avenue in the city's southwest section. According to Hoboken's zoning ordinance, the purpose of the R-3 district is to create viable residential neighborhoods and establish a variety of different housing types. Permitted uses in this district include residential buildings,



Map 2.1: Hoboken 2020 Zoning Map

Source: City of Hoboken

places of worship, public buildings, and retail businesses and services, while conditional uses include public parking facilities, bars, loft buildings, restaurants and more. With regards to the building envelope and density, the lot coverage for principal buildings is 60%, while the maximum building height is 40 feet above design floor elevation.

SELECT DEMOGRAPHICS

In addition to studying the physical characteristics of both Hoboken and the area surrounding the project site, it is imperative to analyze the city's demographics in order to understand recent trends, which can lead to important planning decisions and help shape the alternatives presented in this report. For the past decade or so, Hoboken has seen steady growth in terms of population and number of households, including median household income as a result of its proximity and ease of access to New York City, as well as a growing number of persons with a college education. The tables below provide a look at changes not just in Hoboken's population, but in race, age, and housing vacancy as collected from the decennial census and 2018 American Community Survey (ACS). When it comes to more site specific data, Block Group 4, which spans from 2nd St to 6th St, and contains the substation site, notably has the highest concentration of individuals in Hoboken under the age of 18 at 32%, which is almost double the same statistic citywide. As for residents over the age of 65, the southern section of Hoboken has a higher rate of seniors compared to the rest of Hoboken. The same Block Group 4 has a population where 8% of the residents are over the age of 65.

Hoboken Population & Race					
	2000	2010	2018	2018 Share of Total	% Change 2000 - 2018
Total Population	38,577	50,005	53,211	100%	+37.9%
White	31,178	41,124	43,784	82%	+40.4%
Black	1,644	1,767	1,646	3%	+0.12%
Asian	1,661	3,558	4,865	9%	+192%
Other/Multiple	4,694	3,483			
Ethnicity: Hispanic/Latino	7,783	7,602	8,393	16%	+7.8%

Table 2.1: Hoboken Population & Race

Source: Census.gov (2000 - 2018)

Examining the data from the 2018 ACS, several characteristics stand out. First, as with the rest of Hoboken, a large majority of residents around the site are white at 66%, although that percentage is lower than the Hoboken average of 82%. In the case of this census tract, there is a far higher concentration of African-Americans when compared to Hoboken overall. Second, the median household income of \$46,992 is far less than the rest of Hoboken, which has median household income of \$136, 402. Lastly, a majority of residents in both the census tract and Hoboken rent, rather than own.

Hoboken Housing & Household Characteristics						
Select Characteristics	2000	2010	2018	2018 Share of Total	% Change 2000 - 2018	
Total Households	19,418	25,041	25,132	100%	+29.4%	
Families w/ Children	2,210	3,869	4,711	18.7%	+113.2%	
Median Age	30.4	31.2	32.0			
Age: <18	7,517	6,113	7,190		-4.3%	
Age: 18-64	31,060	40,737	42,589		+3.7%	
Age: 65+	3,483	3,155	3,432		-1.4%	
Median Houeshold Income	\$62,550	\$106,875	\$136,402		+118%	
Housing: Overall Vacancy	2.5%	6.8%	8%			
Housing: Rental	77.4%	67.9%	67.3%			

Source: Census.gov (2000 - 2018)

Select Characteristics	Total	Percent Tota
Total Population	4,822	
Race:		-1
White	3,203	66.4%
Black	860	17.8%
Asian	210	4.4%
Other	262	5.4%
Ethnicity: Hispanic/Latino	2,314	48%
Median Age	31.7	
Households	2,081	
Average Household Size	2.3	
Median Household Income	\$46,992	
Housing Tenure:		
Owner Occupied	355	17.1%
Renter Occupied	1,726	82.9%
Bachelor's Degree or Higher	950	28.4%

Table 2.3: General Characteristics of Census Tract 190

Source: Census.gov (2000 - 2018)

COMMUNITY FACILITIES AND ASSETS

There is a noticeable lack of retail options, community facilities, and other services surrounding the site. The studio team analyzed the types of facilities that exist within a quarter and half-mile radius of the site, since those are the average distances most people are willing to walk to a destination such as a transit facility (New Jersey Department of Transportation, 2019). Based on our research, it was determined that the area surrounding the site lacks crucial daily-life retail and food options such as supermarkets, pharmacies, restaurants, coffee shops, and more. With regards to community facilities, there is a scarcity of recreational options including fitness centers, and other community driven facilities including a library, community center, and other valuable services that residents desire when choosing where to live. The maps below provide an inventory taken from Google Maps of existing facilities around and near the site.

Map 2.2: Existing Community Facilities Near Site

Source: Google Maps



ENVIRONMENTAL CONTAMINATION

Prior to anything being built on the site once the substation has been decommissioned by PSE&G, it is important to study whether or not the soil around the site has been contaminated by any chemicals, metals or other substances that may pose a risk to human health in the future. Currently, the site is being reviewed and tested by a New Jersey Licensed Site Remediation Professional (LSRP) with Langan Engineering, with a final report expected to be published in 2021. If the site is found to be contaminated, PSE&G will cover the cost of any remediation methods as agreed upon in the land transfer agreement with the City of Hoboken. Possible remediation methods may include the cleanup and removal of contaminated soil and implementation of a cap over remaining soils, which would ensure that the site can be used for the purposes proposed in this report.



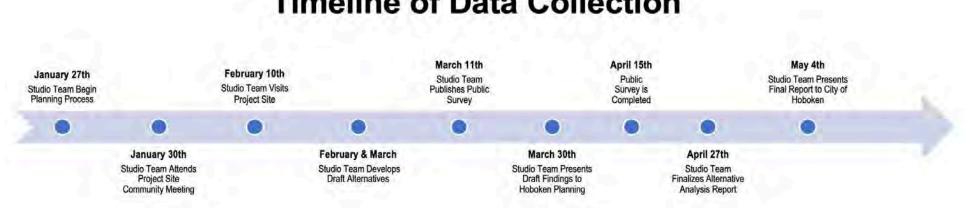
DATA COLLECTION

The studio team first began study of the project site in January 2020, with a review of Hoboken's existing planning documents, including the 2018 Master Plan Reexamination Report, 2018 Land Use Element, media outlets, including The Hudson Reporter, and social media platforms, such as Facebook and Twitter. On January 30th, 2020, the team attended a community meeting held by the City to hear from the public what they wanted developed on the site. At this meeting, the studio team informally gathered opinions from members of the public pertaining to the site's future. Mayor Ravi Bhalla, Council members Ruben Ramos and Vanessa Falco, Hoboken Housing Authority member, David Mello, approximately thirty members of the public, and representatives from the Hoboken Planning Department were in attendance. Based on feedback heard during this meeting, the studio team took several ideas under consideration.

Some of these ideas included:

- Developing the site into a destination or anchor institution
- Green space/mixed-use space
- Recreational space and swimming pool
- Branch or storage space of the Hoboken Historical Museum
- Medical arts building
- Shared senior/student space
- Children's learning center or computer lab
- Technology hub .
- Housing (affordable and market-rate)
- Selling the site for revenue

On February 10th, 2020, the studio conducted an in-person visit to the project site and surrounding area in order to determine existing conditions on the ground. Concurrently, the studio team used community and demographic data from the US Census Bureau, market data from



Timeline of Data Collection

comparable municipalities and geospatial data from the New Jersey Department of Environmental Protection's Bureau of GIS to supplement available information. Census data, in particular, was invaluable in comparing the project area's Block Group demographics with citywide demographics. Based upon these data sources, the studio team worked on developing early drafts of the presented alternatives throughout the months of February and March. The alternatives were based upon an analytical planning process that was geospatially analytical, data-driven, and prioritized publicly expressed community needs.

In order to direct the final form of the alternatives and corroborate the studio team's understanding of community conditions, the team produced and published a digital eight question survey using the platform SurveyMonkey. This survey, which was publicly accessible from March 11th to April 15th, was published to the City of Hoboken's website, Facebook and Twitter pages, as well as a number of Hoboken community Facebook groups.

During this month-long period, the survey gathered 354 unique responses, with 79.4% of respondents reporting that they lived between 4th Street and Observer Highway. Respondents were asked a series of eight questions, consisting of a mix of multiple choice, Likert scale, and open-ended format questions (see Appendix A). These included:

- In what part of Hoboken do you reside?
- From your experience, what do you think the biggest issue is near the Marshall Street Substation?
- What amenities do you think are missing from the area of the Marshall Street Substation site?
- What would you like to see built at the Marshall Street Substation?

In addition, two of the questions allowed respondents to write-in any additional thoughts on issues with the project site and provide recommendations on any future development. Respondents were further asked if they would like to be involved in the planning process related to theMarshall Street Redevelopment and if they would like to be contacted in the future by the City of Hoboken in relation to this project. For those that answered in the affirmative to the latter question, respondent email addresses were gathered and provided to the City of Hoboken Planning Department.

The results of the survey revealed several significant trends in public opinion pertaining to the Marshall Street Substation. The results for each question and a summary of the key conclusions are provided as follows:

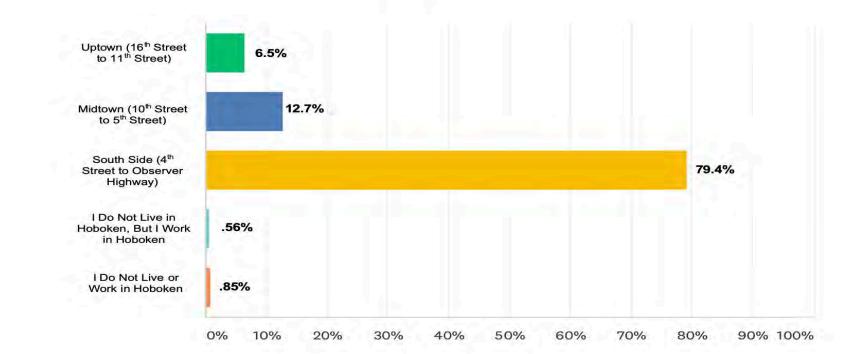
Image 3.1 Residents at January Community Meeting



Source: NJ.com/ Teri West of the Jersey Journal

Question One

A supermajority of 79.4% of respondents answered that they reside within the immediate area around the project site. This area was defined as all residences located between Fourth Street and Observer Highway, which was referred to as either South Hoboken or informally as "downtown". Of the respondents, 12.7% reported living near between 10th Street and 5th Street and 6.5% reporting living uptown between 16th Street and 11th Street. This breakdown increases the accuracy of the survey in gauging public sentiments of those most impacted by the project site.



In what part of Hoboken, NJ do you reside? Select the option that best applies?

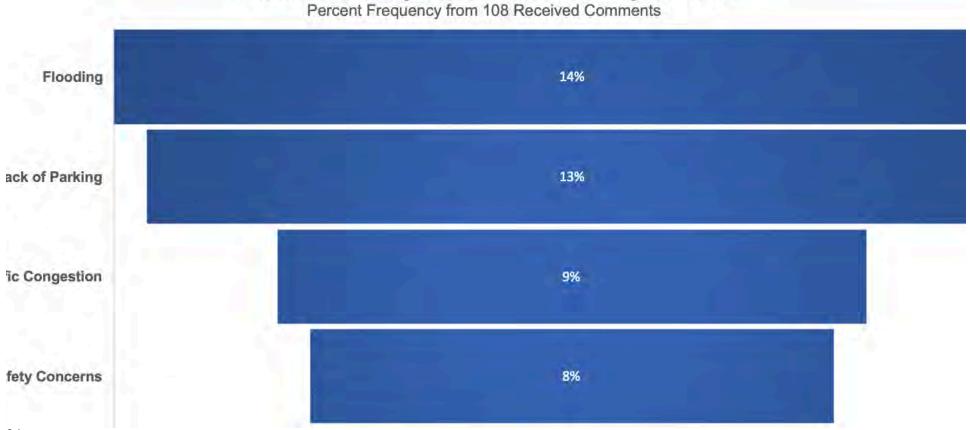
Question Two

In terms of challenges to the project area, respondents overwhelmingly ranked traffic congestion as the most pressing concern (28.53%). A lack of food and grocery options and public safety were tied for the second most pressing issue (\sim 21%). A lack of medical services was predominantly viewed as the least pressing concern in the area, with 62.99% of respondents ranking the issue as the least concerning.

From you experience, what do you think the biggest issue is near the Marshall Street Substation? (1 = Biggest Issue, 6 = Least Pressing Issue) **ISSUES OF SURRONDING PROJECT AREA RANKED** 1 2 3 4 5 6 56 62. 28.53 68 26.55 21.75 21.47 21.19 20.34 20.34 20.05 19.49 20.34 18,08 18.08 18.64 16.95 16.67 14.69 82 13.56 12.71 11.02 10.45 7.63 TRAFFIC CONGESTION LACK OF PUBLIC SAFETY LACK OF LACK OF RETAIL LACK OF MEDICAL PUBLIC/COMMUNITY FOOD/GROCERY OPTIONS SERVICES OPTIONS SPACES

Question Three

By giving respondents the opportunity to expand on their answers regarding the major issues surrounding the area, it was hoped that the current conditions would be expanded upon. When given the option to include written comments, 108 respondents broadened the range of issues. Frequent flooding was referenced as a major concern by 14% of respondents. This was followed by a lack of parking in the area (13%) and traffic congestion (9%).

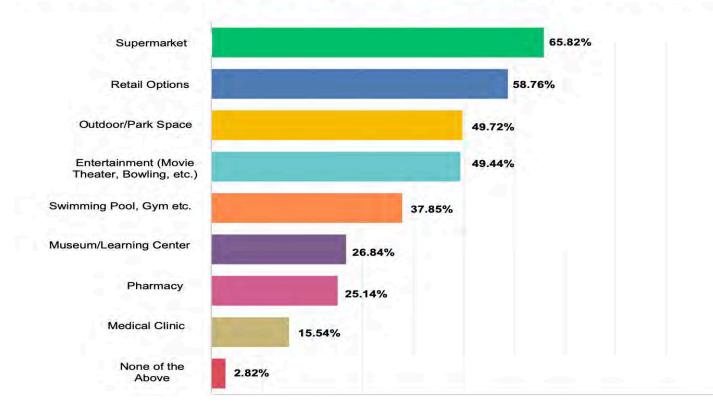


Most Commonly Cited Issues for Project Area

Question Four

Reflecting on concerns over a lack of food options in the area as seen in Question #2, 65.82% of respondents identified a supermarket as a missing amenity from the area around the project site. This was closely followed with 56.76% of respondents believing retail options are missing from the area and 49.72% expressing a shortage of park space.

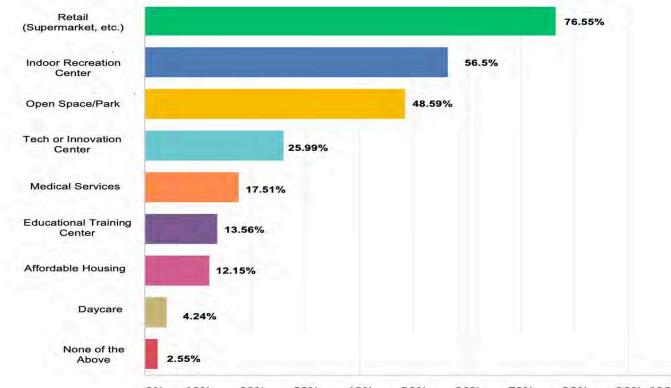
What amenities do you think are missing from the area of the Marshall Street substation site? (Check all that apply)



Question Five

Further supporting the answers gathered through the team's public survey, 76.55% of respondents identified retail, including a supermarket, as a use that should be built on the site of the Marshall Street substation. This use was followed by an indoor recreation center at 56.5% and open space at 48.59%

What would you like to see built at the Marshall Street substation?



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

The results of the team's data collection, including the month-long public survey, indicates a clear vision for the project site by the public. However, it is important to note several limitations in the studio team's data collection process.

First, consideration must be given to the short four month timespan in which the alternatives analysis was conducted. As this report was conducted as part of a graduate studio course at Rutgers University, the analysis was limited to the schedule of the Spring 2020 semester.

The studio team was further limited in its ability to contact residents of the Hoboken Housing Authority - a major constituency within the project area. In February 2020, the studio team unsuccessfully made an effort to meet with HHA residents to gauge their specific concerns. In analyzing the public survey, the studio team was additionally limited in its ability to distinguish HHA residents from all survey respondents. As this survey was published online and primarily advertised on social media platforms, limitations in terms of access for those without internet or social media accounts are further recognized.

Lastly, the analysis was impacted by the COVID-19 Pandemic. Social distancing measures instituted in response to this public health crisis restricted communication between members of the studio team and the City of Hoboken to web-conferencing platforms from March 2020 to May 2020.

While keeping in mind these limitations, the studio team was still able to triangulate our data through the survey, observations, and analysis of existing planning documents, and formulate three alternatives that reflect the needs of residents for new community based assets.



CONCEPTUAL DEVELOPMENT ALTERNATIVES

This section presents three conceptual development alternatives for the Marshall Street Substation site. The first alternative examines a mixed-used housing/retail development, the second alternative "Health and Wellness" presents a scenario with a swimming pool, gym, medical facilities, and pharmacy. The final alternative is a "Work/Play space" that focuses on the site as a destination area with a children's museum, senior center, and incubator space.

The formulation of these alternatives began with an examination of the 2018 Hoboken Master Plan Reexamination Report and 2018 Land Use Element which identified supportive community uses for the site, including recreational facilities that are described in Alternative II. Further analysis was conducted after a public meeting regarding the site was held on January 30th, 2020. Public commentary from this meeting cemented the need for recreational uses, but also suggested the need for housing, senior and medical facilities. Site visits by the team, and demographic analysis suggested the need for retail options. The neighborhood lacks necessary retail establishments, such as a pharmacy and grocery store, especially given the high rate of senior citizens, and young children in the area. The site area is pedestrian-oriented with close proximity to the 2nd Street Light Rail Station. Market analysis supports the need for retail and housing in the area. Ideally, the site would include a mix of uses to capitalize on the proximity to the light rail station and ridership.

The alternatives identify general land use and design parameters for the site. While certain retailers are specified, the alternatives are not de-tailed designs and do not promote one retailer over another. The intent is to illustrate the development potential and capacity of the site, and how a mix of uses might be configured to create a successful project.

ALTERNATIVE I - MIXED-USE HOUSING AND RETAIL

The first alternative considered in this report is a mid-rise 3 to 6-story building with mixed income residential units above ground floor food and retail shops.

Development Program

Hoboken's population is best served by the addition of smaller and more affordable units to the existing housing stock. In this alternative, floors 2 through 6 are occupied by a mix of affordable and market rate residential units of various sizes ranging from studios to two-bedroom apartments, as well as shared amenity space, including a fitness center and lounge. The retail component on the ground floor of the building is anchored by an 'essentials' grocery store with in-house pharmacy, while the ancillary food retail options include a coffee shop and a small-sized dine-in and takeout establishment. These retail establishments would front the corner of Harrison and 2nd Streets, which would allow them to attract already substantial foot traffic to and from the adjacent 2nd Street light rail station. In total, the ground floor includes approximately 14,000 square feet of rentable space. The retail space will be rented at below-market rents in order to support the sustainability of tenants in an area characterized by high retail turnover.

Land Use Considerations

This alternative considers three development scenarios, as well as three ownership structures. Both retail and residential uses are allowed under the current R-3 zoning of the site. However, while all development options require an increased maximum building height, some of these options also entail a higher residential density than is currently allowed. The current maximum density is one dwelling unit for each 660 square feet in site area, meaning the area covered by the site. As the substation site covers about half an acre, the density currently allowed is 33 units. For a variety of reasons, a higher density is considered appropriate for this site. First of all, a variance for height can be considered contextually appropriate when taking into account the site's surrounding buildings including the Sky Club, Harrison Flats, and 100 Marshall Street. Since many of the existing buildings near the site, including recently developed sites, are six-stories or higher, the proposed alternative would not dwarf buildings in the immediate vicinity. Secondly, a number of previously adopted and built redevelopment plans in Hoboken are based on a density higher than one dwelling unit per 660 square foot in site area. Third, the site's close proximity to a transit station and the existing scarcity of smaller

	Development Options (Residential)						
33 mixed-income units, 10% affordable		80 mixed-income units, 10% affordable	80 mixed-income units, 1/3 affordable				
Per existing residential densityRequires zoning variantand affordability regulationsfor density		Requires zoning variance for density					
	2 floors, 30,800 GSF	5 floors, 77,000 GSF	5 floors, 77,000 GSF				
Studio 600 SF	8 units @ \$2,300 1 units @ \$802.50	21 units @ \$2,300 3 units @ \$802.50	16 units @ \$2,300 8 units @ \$802.50				
One-Bed 800 SF	14 units @ \$2,700 2 units @ \$917.50	32 units @ \$2,700 4 units @ \$917.50	24 units @ \$2,700 1 2 units @ \$917.50				
Two-Bed 1,100 SF	6 units @ \$3,500 1 units @ \$1032.50	18 units @ \$3,500 2 units @ \$1032.50	13 units @ \$3,500 7 units @ \$1032.50				

Table 4.1: Development Options

Development Options (Retail)				
1 floor	13,860 RSF	\$30/SF mo. NNN		
15,400 GSF	3 - 5 tenants			

residential units justifies an increase in density. As discussed in more detail in the next section, recent developments in Hoboken have led to an undersupply of smaller and, therefore, more affordable units. An increase in density might thus be an appropriate way to accommodate such a need. Furthermore, the New Jersey Department of Transportation (NJDOT), as part of their Transit Village initiative, encourages the development of taller buildings closest to the transit station, which includes light rail stations. Specifically, as NJDOT points out, "highest density uses are clustered immediately around the transit station" and "the transition between higher- and lower-density neighborhoods is managed by stepping down building heights." For these reasons, a higher density of up to 80 dwelling units is considered both appropriate and acceptable in this location.

Ownership Structures

As previously noted, after the land transfer agreement between the City and PSE&G is complete, the City of Hoboken will have full and unencumbered ownership of the property. In response to existing fiscal challenges, the City of Hoboken seeks an ownership structure that will balance the benefits of community use and financial soundness of site development and/or disposition. The three ownership options are:

- City sells land to a private (nonprofit or for-profit) developer, affordability secured by covenant
- City retains ownership of land, offers ground lease to private developer
- City owns, develops, and manages (or pays to outsource) the property

The most common course of action would be to dispose of the land to a private entity who would then develop and manage the property in accordance with a prior agreement with the city. Municipalities often dispose of public assets at concessionary prices in order to entice private investment, however, in the case of Hoboken, we believe the strength of the real estate and housing markets (pandemic notwithstanding) empowers the city to pursue fair market value (i.e. RLV) for the Marshall Street property. Land disposition enables the city to realize a large one-time financial gain and shift the responsibilities of development and asset management to a specialized private partner, however, the city cedes the privileges of ownership and cannot guarantee long-term (past the terms of the agreement) housing or retail affordability.

A less common approach, but not without precedent, is for a municipality to retain ownership of the land and offer a ground lease to a private developer. In this case, the city would not realize gains from land sale but would earn rents over the course of a 10 - 15 year lease. The city would still cede development and asset management responsibilities to a private entity, but maintain limited oversight of the property. The challenge with this approach will be finding a willing and appropriate partner to forgo land ownership, as land is a major and nondepreciable component of a property's value. Private developers will not be keen to pay market rents to the city while forgoing the capital gains of future land sale. As such, the city may have to offer concessionary rents in order to attract private investment.

The least common approach would be for the city to retain ownership and itself develop and manage the property. In this case, the city can guarantee oversight of the property as well as long-term affordability of units. The primary challenge with this approach is the city's organizational and financial capacity to develop the property and manage the asset. While the project is profitable to the city over the long term, the city must assume the high upfront costs of development, which may require bonding for the project or establishing a special purpose entity that can bond for and develop the property. Additionally, the city would be precluded from taking advantage of various financial incentives that are contingent on private investment.

Market Demand

An optimal development and leasing scenario for the site is to have a grocery store serve as an anchor tenant with grab-and-go retail stores as complimentary options. As noted above, such retailers are well-equipped to take advantage of foot traffic near the transit station and also serve as a neighborhood retail stabilizer, especially in an area that lacks retail options. Previously in 2018, Whole Fresh Market Place, an organic based supermarket, opened at 101 Marshall St on the ground floor of the Sky Club apartment building to serve residents in the neighborhood. However, only after a year or so of operating, the supermarket closed, meaning the need for a grocery store in the area is even greater, especially considering the growing residential population.

Market research has shown that in walkable urban areas, a 15,000 square feet grocery store needs about 10,000 people to be a viable operation. Over 15,000 Hoboken residents live within a 0.5 miles radius of the site, the assumed catchment area of a transit facility.

Figure 4.1 Housing and Retail Building



This number does not include people that live within a 0.5 mile distance from the site but in neighboring Jersey City. As previously mentioned, the light rail station's ridership also provides a strong base for retail. Over 95% of total ridership, about 2,200 people per day, walk to the station and do so over an average distance of 0.9 miles. Therefore, a significant number of people who live outside the assumed half-mile catchment area will walk by these retail establishments. Market studies also show that 40.9% of all light rail riders frequent businesses within a half-mile of their boarding station. Combined, they spend \$3.4 million per month, an annual total of \$41 million of retail spending. Recently opened retail options surrounding the 9th Street Light Rail Station have already shown to be successful in a comparable location. Retail development near the station is also in accordance with Hoboken's Master Plan 2018 Reexamination Report, as it promotes the goal of, "convenience retail at the new Light Rail transit stops".

With regard to building residential units on-site, Hoboken is widely known for its strong housing market. The market is actually so strong that median home values have consistently risen in recent years, and the city has very low vacancy rates. Hoboken has seen steady population growth and a rise in the number of families seeking to relocate to the city. However, local realtors, as well as current Hoboken planning documents, point to a growing imbalance in Hoboken's real estate market. Recent multifamily developments in Hoboken have catered to an increasingly affluent population which has resulted in an oversupply of large, expensive units. At the same time, the number of available smaller and more affordable market units has lagged behind despite the high demand. For this reason, our development scenario only entails those much-needed smaller units: studio apartments, one-bedroom, and two-bedroom units. Hoboken's Affordable Housing Ordinance mandates a set aside of 10 percent of new units for affordable housing. As noted above,

we provide development models and analysis that reflect this set-aside requirement, as well as a model with a higher percentage of affordable housing units within the overall development. All models consider amenity space that have become a standard feature in multifamily development in the New York metro area. Comparable developments within Hoboken have proven to be successful in recent years. A brief overview of these comparable developments including their most pertinent details is listed in Table 4.3.

Figure 4.2 Street View of Retail



Table 4.2 Comparable Residential Buildings in Hoboken

	Studio	1 BR	2 BR	3 BR	Building Amenities
Vine	Not Available	\$3,000+ 700 - 850 sq. ft.	\$3,000+ 1,000 - 1,400 sq. ft.	No Price Provided	Outdoor Pool Fitness Center Parking Garage Ground Floor Retail
The Harlow	\$2,700 - \$3,000 525 - 615 sq. ft.	\$3,400 sq. ft. 700 - 850 sq. ft.	No Price Provided 1,000 - 1,340 sq. ft.	No Price Provided 1,317 - 1,410 sq. ft.	Outdoor Pool Fitness Center Parking Garage Ground Floor Retail
Harrison Flats	Not Available	Not Available	No Price Provided 1,369 sq. ft.	No Price Provided 1,369 sq. ft.	Parking Garage
The Lexington	Not Available	\$2,800 - \$3,000 750 -850 sq. ft.	\$3,300 sq. ft. 1,000 - 1,175 sq. ft.	Not Available	Parking Garage Fitness Center Fire Pit

Source: CoStar; Original Research

Parking and Circulation

The proposed mixed-use development makes full use of its pedestrian-friendly surroundings and rich public transit options. Building on an existing Hoboken initiative, it was decided that the development would not provide structured on-site parking as many of the neighboring developments have done. In an effort to reduce automobile usage and the supply of parking spaces, the City of Hoboken most recent redevelopment plans require developers to prepare a Transportation Demand Management (TDM) Plan as part of their project applications. A TDM Plan describes all of the alternative modes of transportation that a development will supply to their users, in exchange for reducing parking requirements. As noted, this development aims to attract young professionals and young families with below-average household incomes that are willing to make full use of existing transit options and walk to Washington Street. According to a recent 2016 study by New Jersey Future, Americans are walking more and driving less, especially young people. Instead of car ownership, a greater number of families and young adults in the United States are choosing to use public transportation or rideshare services such as Uber and Lyft. According to Walk Score, a website which tracks and grades walkability and access to transit in cities across the country, the proposed developed site has a score of 90/100 for walkability, meaning it is easy to get around without a vehicle. A high score like this can be attributed to the fact that the proposed development is located next to an extremely convenient transit amenity - the 2nd Street Light Rail Station - and both a bike share station provided by Hoboken Bike Share program and a Zipcar spot can be found across on Harrison St. Additionally, ride sharing services such as Uber and Lyft, have become ubiquitous in the New York metropolitan area in recent years. Lastly, the Hop, Hoboken's free shuttle service, allows residents to visit any part of the city or and put them

within close proximity to major destinations, which can be beneficial to the project site.

Any remaining parking demand for the development can be addressed by using or improving existing parking capacity in the vicinity. First, recent development surrounding the site has underutilized parking facilities such as the six-story Sylvan Sky Garage, tenants have the option of paying a monthly fee and parking there instead. Second, for retail tenants, the light rail station's park & ride facility, as well as the adjacent parking lot and driveway can be upgraded to better use the existing space and increase capacity. As in Chapter 7, only a very low percentage of ridership reaches the light rail station by car. Currently, a vast space and driveway in front of the station is dedicated to cars dropping off and picking up passengers. Instead, additional short-term on-street parking spots could be created along Marshall Street. Furthermore, an adjacent building operated by the Hoboken Housing Authority (HHA) has a dedicated driveway and parking lot located behind the site. By rearranging this parking facility and directing foot traffic to Second Street instead, additional parking capacity can be created here for both the HHA residents and future tenants of the proposed development.

Financial Feasibility

We created financial models and performed a cash flow analysis of all three development models in the scenario where the city disposes of the property and secures affordability (accessible to households earning 50% of AMI) through covenant. We also model for a higher-density, more affordable development in a scenario where the city owns, develops, and manages the property. We only considered traditional debt and equity instruments in our financial analysis. We did not consider the use of financial incentives in our models because the capital 'stack' and level of subsidy can be high-ly particular and variable, however, we outline various opportunities for incentives and subsidy later in this report. Additionally, we do not account for residential amenity fees as these can also be highly variable (and problematic to levy on residents in affordable units).

In the case of property disposition to a private (non-profit or for-profit) developer, analyses were performed with a target internal rate of return (IRR, which is a measure of an investment's financial growth) of 10% for development models with 10% residential affordability and 5% for the development models with 33% residential affordability, over a 12-year property holding period inclusive of site acquisition, construction, operation, and exit sale. It is important to note that the expected costs of construction and tenant improvements are quite high in the current market and are also all realized upfront. We also assume that the cost to build a quality affordable unit is virtually the same as the cost to build a market-rate unit. Given our target IRR, Hoboken would mostly likely need a not-for-profit or community-oriented partner in developing the property according to our model, because 20% IRR is the typical minimum market return a for-profit developer would require in order to invest in any given project The use of federal or state subsidies (e.g. tax credits) would greatly improve the IRR of the project, as they would significantly decrease the upfront equity investment; per the concept of time-value of money, upfront cash outlays are weighted more heavily than future rent inflows, so reducing upfront financial commitment will positively impact IRR and thereby elicit broader partner

> interest. Additionally, the rents per unit and/or square foot can be iterated until the city achieves its preferred mix of project IRR and affordability level. In these models, we assume the return to the city to be the residual land value (RLV), or the maximum amount a developer can afford to pay the city for the land while still being able to achieve the target IRR. The RLV is much lower than the city's current estimate of \$4 million likely because our residential mix includes smaller and less expensive units, of which the market units all are priced below market and the affordable units are all priced for very-low income (50% AMI) households.

Table 4.3 Financial	Feasibility	of Housing.	/Retail Development
Inclo Inc I manora	I Cable III (or rrowoning,	

Ownership	Development Mix	Construction Analysis	IRR	Residual Land Value (RLV)
Private	33 Residential Units, 10% Affordable Affordable Retail	\$13,028,400	10% 14 yrs	\$866,393
Private	80 Residential Units, 10% Affordable Affordable Retail		10% 14 yrs	\$1,096,150
Private	80 Residential Units, 1/3 Affordable Affordable Retail	\$26,056,800	5% 14 yrs	\$699,121
Public	80 Residential Units, 1/3 Affordable Affordable Retail		9% (unlevered) 39 yrs	n/a

In the scenario where the city retains ownership of and develops the property, we find that the city realizes a return of 9% unlevered (i.e. no debt financing) IRR across a 39-year holding period (with no terminal sale) and could likely realize improved financial returns if it used some type of debt financing. This scenario, however, will preclude the use of many subsidy programs which are contingent upon having a private entity as a development partner.

Infrastructure and Resiliency

Alternative I is designed to be sensitive to the surrounding area and adopts sustainable measures promoted in the 2018 Reexamination Report, as well as Hoboken's Resilient Building Design Guidelines. With regard to the proposed development, the DFE is set at 13 feet, meaning that residential units are not located on the ground floor of the building. The proposed development includes green infrastructure such as a green roof, additional trees, and bioswales, which are designed to reduce impervious surface area and the chance of further flooding. The building itself will utilize floodproofing materials to protect the ground floor retail establishments in the event of any flood events. The southwest corner of the building at the intersection of Marshall and 2nd St is designed to draw attention from commuters and residents traveling to and from the light rail station with the inclusion of a small pedestrian plaza for meetups.

Figure 4.3 Street view of Alternative I from 2nd Street



ALTERNATIVE II – HEALTH AND WELLNESS CENTER

The second alternative is the construction of a health and wellness center that includes a swimming pool, medical offices, pharmacy and coffee shop. The overarching objective in developing the "Wellness Center" alternative was to provide residents with a comprehensive "wellness destination", centered around a community swimming pool. With significant populations of vulnerable residents residing in close proximity to the project site, the main focus of this alternative is the health of Hoboken's residents. Each of the site's uses and programming options have been deliberately chosen to best fit this framework.

Figure 4.4 Health and Wellness Center



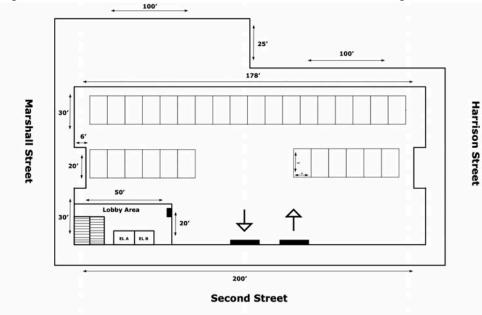


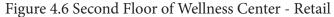
Figure 4.5 Floor Plan of First Floor of Wellness Center - Parking

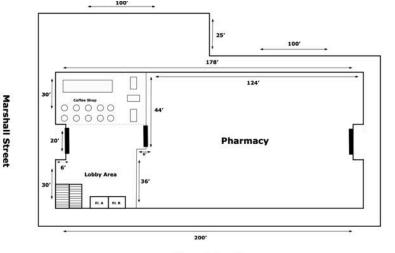
Development Program

First Floor - Parking

The first floor of this center will be reserved to fulfill the Design Flood Elevation requirements listed in the city's Zoning Code for R-3 zones sites and Resilient Design Guidelines. The ground floor will serve as indoor parking space for visitors to the "wellness" center, with an estimated maximum capacity of 30 parking spaces. This parking garage area will be at-grade and fitted with wet floodproofing structures in the case of a flood event. Aside from this parking area, it is expected that a majority of visitors will arrive to the site either on foot, via the 2nd Street Light Rail Station, or other methods of transportation. Second Floor - Pharmacy and Coffee Shop

The second floor in the center is envisioned to be shared by a full-service pharmacy and a local coffee shop. Due to the corner location of the site, it is believed that the pharmacy space will appeal to large scale chains like CVS, Rite Aid or Walgreens. This pharmacy will fulfill a significant unmet need in the immediate area. A coffee shop and small lounge (seating area for the coffee shop's customers) will be constructed alongside this pharmacy in order to make this wellness center a community "destination". With the site located adjacent to a Light Rail Station, this coffee establishment would not only serve those visiting the building itself, but those commuters waiting for or just disembarking from a train. The coffee shop and the pharmacy will be connected to the parking garage via a common lobby equipped with an elevator and stairway.





Second Street

Harrison Street

Third Floor - Medical Offices

Fulfilling the "health" aspect of a health and wellness center, the third floor will consist of a variety of medical services and offices - the most important of which will be an urgent care center. Accompanying this urgent care facility will be rentable space for four specialist spaces.

Figure 4.7 Third Floor of Wellness Center (Medical Offices)

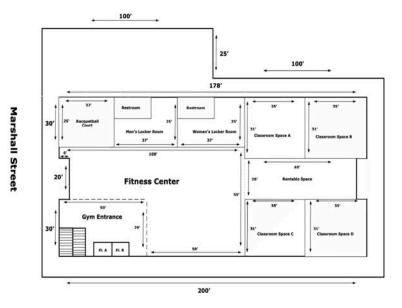
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Second Street

Fourth Floor - Fitness Facility

The main focus of the fourth floor will be on providing exercise opportunities to residents in the form of a community fitness center. This center will include an 8,000 square foot state-of-the-art gym, including a weight room, exercise stations, aerobic machines and locker rooms, as well as a racquetball court. In addition, four spaces will be made available to serve as multi-service classrooms. The programming for these spaces is envisioned to include yoga classes, kickboxing classes and children's parties. The space directly outside of these spaces may additionally be used as rentable space for parties or other functions.

Figure 4.8 Fourth Floor of Wellness Center (Fitness Facility)



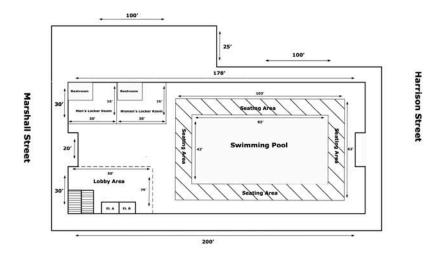
Harrison Street

Marshall Street

Fifth Floor - Swimming Pool

As an extension to the fourth floor fitness center, the top floor will incorporate a short course swimming pool (82 x 42). In accordance with the standard design guidelines of indoor swimming pools, it is estimated that the height of the fifth floor will measure roughly 32 feet (compared with 12 - 13 feet for all other floors). Surrounding the pool will be a perimeter of 10 feet for safety and to provide adequate space for seating. By incorporating the community pool in its final design, the "wellness center" will be fulfilling a long awaited public amenity in Hoboken.

Figure 4.9 Fifth Floor of Wellness Center (Swimming Pool)



Second Street

Market Demand

As noted, all of the uses for the wellness center originate from empirical evidence of community needs.

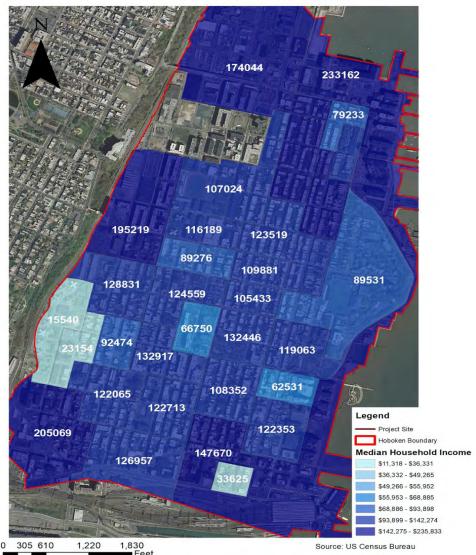
Pharmacy

The proposal for a pharmacy on the project site originated out of the observed dearth of full-service pharmaceutical facilities within the general study area. Within a ½ mile buffer from the project site, there are no full-service pharmacy locations such as a CVS or Walgreens. Seeking to promote walkability, this ½ mile radius represents the average distance of a ten-minute walk. After ten minutes, residents are less likely to be willing to walk to a certain location. With the site's proximity to the Hoboken Housing Authority (as well as its location in the lowest income Census Block Group in Hoboken at a median household income of \$15,540), the absence of pharmacies creates a significant equity issue as low-income households are more vulnerable to "pharmacy deserts" (Map 4.1).

In terms of equity, the shortage of pharmacies also severely impacts the considerable concentration of senior citizens in the surrounding area (Map 4.2). Not only do elderly patients, on average, require four or five prescription drugs and two over-the-counter medications, they are more likely to suffer from adverse drug reactions (ADR). Studies have shown that close collaboration between doctors offices and pharmacies can prevent ADR. By having a pharmacy on the same site as medical offices, this close collaborative relationship between doctors and pharmacies can be fostered.

Map 4.1 Hoboken Median Household Income

Census Block Groups, Hoboken, NJ, 2017



Lastly, the incorporation of a full-service pharmacy on site can help to meet the expressed public need for greater food retail options within the area. Based on the online public survey, it was revealed that 76.5% of respondents would like to see a grocery store and retail constructed on the site. As wellknown pharmacies like CVS, Rite Aid and Walgreens, not only offer pharmaceutical services, but a limited section of grocery and retail options, it is believed that the incorporation of a pharmacy into the design of Alternative II will fulfill a major community need.

Medical Services

Our analysis has revealed that the census tract containing the project site has the highest concentration of uninsured residents (10%) in the entire city (Map 4.3). For those uninsured, medical costs can be significant, especially when relying on hospital systems. For this reason, urgent care serves as a practical avenue to providing medical access to those uninsured and unable to afford the high prices of ER visits. The Urgent Care Association of America has found that "Nearly half of all visits to urgent care centers result in an average charge of less than \$150 — compared to the average cost of an ER visit at \$1,354". Despite this affordability, however, only one urgent care facility is located within a $\frac{1}{2}$ mile radius of the project site. By incorporating an urgent care facility within the proposed alternative, the site will increase the medical access of the more than 15,000 residents who live within the $\frac{1}{2}$ mile radius of the project site.

Map 4.2 Population of Individuals 65 Years or Older

Census Block Groups, Hoboken, NJ, 2017



In terms of general medical need, a standard measure has been the Community Need Index. With this index, municipalities are ranked on a 1 - 5 scale (1 = least medical need, 5 = most medical need) to measure the true effectiveness of a locality's medical institutions. According to the RWJBarnabas Health Community Need Index, the City of Hoboken as a whole is designated as a moderate-need municipality (3.0/5.0) based upon the criteria of income, proportion of elderly and rate of insured. Following these standards, the specific area of the project site can be expected to have a much higher need than the rest of the city. With lower income, a greater proportion of elderly and relatively low numbers of insured, the project area could be considered an area with the most need. By offering specialist space, in addition to an urgent care, the proposed alternative would diversify medical options for the more than 15,000 residents living within proximity to the project site.

Fitness Center

Hoboken currently has no public facilities dedicated to resident fitness. While both the multi-service center and the city's new 7th and Jackson Street multi-purpose gym offer some recreational opportunities, no facility exists for formal aerobic and weight exercise. The National Recreation & Parks Association recommends the operation of one fitness center/community gym per 26,418 residents. At a population of more than 53,000 people, the city should offer two such facilities. Additionally, the construction of a fitness center offers greater opportunities to the city's recreational program offerings. For instance, a survey by the National Recreation and Parks Association found that 81 percent of Park and Recreation agencies in the United States offer health and fitness education classes and 83 percent offered fitness enhancement classes. The proposed fitness classroom space will especially help to amplify Hoboken's recreational capacity.

Map 4.3 Uninsured Residents

Census Tracts, Hoboken, NJ, 2017



Swimming Pool

The City of Hoboken currently has no publicly accessible, free-ofcharge community pool. However, public sentiment has long favored a public community swimming pool. A survey conducted for the 2018 Master Plan Reexamination Report drafted by the city found that 69% of respondents favored a public indoor recreation center with a swimming pool. This was subsequently supported by the studio team which found that 57.14% of respondents supported indoor recreational uses (with 10 out of 55 submitted written comments referencing a pool). This exemplifies the community support for such a recreational use. Furthermore, the City of Hoboken has fallen behind the national standards for swimming pool amenities. In 2016, the National Recreation and Parks Association found that the median jurisdiction per community pool facility is 47,800 residents.

Land Use

In order to conform with the overall character of the surrounding neighborhood, this "Wellness Center" is envisioned to consist of five stories at an estimated building coverage of 14,086 square feet (see Chapter 5). The gross floor area over these five stories is estimated to be 70,430 square feet. In terms of access to the building, the entrance and exit to the site's first floor parking garage will be located on 2nd Street. Pedestrian entrances will be located on both the Marshall Street and Harrison Street sides, with the Marshall Street entrance serving as a pickup/drop-off point. The development of Alternative II was formulated with the applicable bulk standards of the city's Zoning Code in mind. While the R-3 designation for the site can be retained, a number of variances for the code's bulk standards are envisioned, including.

Building Height

A variance will need to be needed for the building height. It is estimated that the predicted alternative will require a building height of 80 feet in order to incorporate recommended safety and design standards for swimming pools on the fifth floor. For R-3 zones areas, the Zoning Code limits maximum building height of 40 feet beyond the required Design Flood Elevation. At a 13 foot DFE, the proposed alternative's height is expected to exceed this maximum height by 27 feet. However, this excessive height is believed to still retain the character of the surrounding community. For instance, the adjacent "Sky Club Fitness and Spa" consists of seven stories (>80 feet).

Swimming Pool Use

It is believed that a variance will need to be sought for the use of a swimming pool in the R-3 District. Under permitted uses for the city's R-3 districts, all retail services and businesses and commercial facilities are permitted in accordance with Section 196 -33. By reviewing Section 196-33, it can be concluded that the proposed swimming pool use does not conform to the standard that a retail business must be located on the first floor in a residential district to conform to Section 196 - 19. Due to the absence of further guidance on the siting of swimming pools in R-3 districts, it is recommended that a use variance be sought.

Resiliency

Alternative II is designed in order to help reduce flooding in the project area, and contribute to city-wide efforts of sustainability and resilience. As noted above, the required Design Flood Elevation for Alternative II will be converted into parking spaces in order to create multi-modal accessibility to the site. This parking garage will be wet floodproofed, in conformance with Hoboken Resilient Building Design Guidelines, and will provide the opportunity for the installation of electric vehicle charging stations. The sidewalk surrounding the building will be decorated with streetscaping fixtures, including tree planting. A plaza will also be incorporated on the North Side of the building along Marshall Street that will include trees and benches. These streetscape features are designed to improve stormwater retention and reduce site's impervious surface coverage. In terms of stormwater retention, a publicly accessible rooftop rain garden will help to serve both the citywide resiliency goals and the site specific goals of "wellness".

Figure 4.10 Entrance and Exit of Parking Garage on Second Street



Figure 4.11 Streetscaping of Wellness Center



Financial Feasibility

Financial feasibility for the facility includes the cost of construction, as well as the cost of operation.

Construction Cost: Indoor Swimming Pool

In terms of construction cost, the indoor pool would carry the highest cost. Publicly available 2013 data from RSMeans, an industry leader for construction cost estimates, approximates the cost per square foot of construction of an indoor pool in a number of major U.S. cities. Table 4.5 below shows this data for several comparable cities, along with a 2020 estimate using the Consumer Price Index (CPI) to adjust for inflation.

Table 4.4 RSMeans 2013 Indoor Pool Construction Cost Estimates for Major Cities

City	2013 Cost Per Sq. Ft.	2020 Cost Per Sq. Ft.
New York City, NY	\$314.65	\$352.68
Boston, MA	\$282.55	\$316.70
Philadelphia, PA	\$271.22	\$304.00

Table 4.6 provides the construction cost per square foot of recently completed aquatic center projects, both in New Jersey and across the United States. It is important to note that while these projects are larger in scope and size compared to the one proposed for Hoboken, they help provide a rough estimate for recently completed facilities.

Table 4.5 Recently Completed Pool and Fitness Center Projects Breakdown by Cost and Size

Facility Name	Facility Type	Year Opened	Construc- tion Cost	Sq. Ft.	Cost per Sq. Ft.
Piscataway Community Center YMCA, NJ	Indoor Aquatic Center, Fitness Center, Outdoor Spray Park	2020	\$32,000,000	83,000	\$385.54
Berkeley Heights YMCA, NJ	Fitnes Center, Outdoor Pool	2020	\$15,016,970 (Guaranteed Maximum Price)	40,000	\$375.42
New Jersey Institute of Technology Wellness and Events Center, Newark, NJ	Indoor Aquatic Center, Fitness Center, Athletic Facilities, Arena	2019	\$102,000,000	220,000	\$463.64
Suffolk County Community College Eastern Campus Health and Wellness Center, River- head, NY	Indoor Acquatic Center, Fitness Center	2017	\$21,000,000	40,000	\$525.00
Reynoldsburg Community Center YMCA, OH	Indoor Acquatic Center, Fitness Center	2020	\$30,000,000	75,000	\$400.00
YMCA and Yakima Rotary Aquatic Center, WA	Indoor Acquatic Center, Fitness Center	2019	\$22,000,000	72,000	\$305.56

Construction Cost: Medical Facilities

According to recent data from CDM, a firm that provides construction data, the average construction cost for medical facilities in the New York City area is \$257 to \$307 per square foot.

Construction Cost: Miscellaneous

An industry standard estimate of \$150 per square foot of new commercial construction was used for lobby space, multi-purpose classrooms, HVAC, elevator, and storage space outlined in the design.

Construction Cost: Fitness Center

Table 4.7 provides cost per square foot of projects that have included fitness centers, providing an estimate of the combined indoor pool and fitness center we have proposed. For estimates on the equipment needed for the fitness center, one estimate for the standard equipment, delivery and installation for 500-600 square foot space was \$30,000 plus tax. Using the lower square footage of 500 and applying it to the \$150 standard used for new commercial construction, the estimate for the fitness center space is \$210 per square foot. For the racquetball court space, 2013 RSMeans construction cost estimate data for New York City was \$239.61 per square foot, and \$268.57 adjusted for 2020 inflation.

Use	Construction Cost Estimate per Sq. Ft.	Square Footage	Construction Cost Estimate
1st Floor- Parking	\$64.77	13,100	\$848,487.00
2nd Floor- Pharmacy	\$227.04	10,088	\$2,290,379.52
2nd Floor- Coffee Shop	\$227.04	1,620	\$367,804.80
3rd Floor- Medical Space	\$282.00	9,500	\$2,679,000.00
4th Floor- Fitness Center	\$210.00	7,670	\$1,610,700.00
4th Floor- Multi-purpose Classroom	\$150.00	4,340	\$651,000.00
4th Floor- Racquetball Court	\$268.57	800	\$214,856.00
5th Floor- Swimming Pool and Supporting Space	\$352.68	12,600	\$4,443,768.00
Total Remaining Space (Lobbies, HVAC, elevator, storage, etc.)	\$150.00	11,582	\$1,737,300.00
TOTAL			\$14,843,295.32

Table 4.6 Construction Cost Estimates for the Wellness Center

Construction Cost: Retail

The 2014 Hoboken Yards Redevelopment Plan provided an estimate of \$208.85 per square foot for construction of retail shell space, at \$227.04 adjusting for inflation.

Construction Cost: Parking

Research from the WGI firm's Parking Solutions division found the median cost per square foot for a new parking structure to be \$64.77

Revenue Opportunities: Medical Facilities

One financial model possible for the wellness center would be for the city to retain ownership of the entire building and rent out the first three floors. Market research from 2018 showed that in Northern New Jersey, the asking rates for base rent for medical facilities was \$20.16 per square foot.

Management Structures

Pools and fitness centers require staff expertise in managing hygienic, safe and efficient operations, including programming, continuing education, and insurance needs that are unique. For this reason, municipalities can choose to:

- 1. Manage operations of a pool and fitness center within the existing Department of Recreation,
- 2. Contract out and partner with a non-profit or community entity, or
- 3. Contract out to a for-profit service provider

According to a 2018 study on pool management conducted by Ballard * King & Associates (BKA)- Recreation Facility Planning and Operation Consultants for the City of Davis, CA, the reasons a municipality might want to contract out include: limiting legal liability, subsidies, and day-today operations which require significant staff time and expertise, and in cases where a partnership is developed, to have buy-in from local community organizations (such as a YMCA, Boys and Girls Club, Community-based youth recreation programs and leagues). However, academic research conducted from the University of South Florida in 2013 and Stanford University and University of California, Berkeley in 2008 confirms what practitioners are likely already aware of in terms of the trends and tradeoffs. Namely, effective contracting of services requires clear standards of measurable performance metrics, which may be easier in building management or service provision rather than recreational programs. However, there are proxy methods of evaluating success, such as attendance rates, surveys to evaluate constituent support of programming, or even hours of operation and staff ratios, but this is more complex than simply stating a required frequency of sanitation services, for example. Additionally, they note that contracting requires staff time in contract administration, and in particular, the Florida study pointed out that for-profit contracting of services has a correlation with decline in service over time.

Some New Jersey public swimming pools provide information regarding the financial operations of their pools. Table 4.8 reveals the 2019 budget for municipally-operated pools. These pools charge a price of admission for attendees, though residents have a discount and the fee is generally lower than attending a privately run facility. This is likely because the same BKA report mentioned above noted that free community pools only recover 50-75% of their costs, and this range is dependent on the length of the season and the availability of other amenities. Aside from attendance, amenities, and concession fees, the other significant revenue source is a shared service agreement with the Board of Education providing a regular, dependable, fixed fee, which is particularly useful with year-round indoor pools. Given that Hoboken High School and Stevens Institute already have their own pools, this may not be as feasible in Hoboken, but outside competitive swimming leagues often serve a similar purpose. The most significant expenditures for pools are wages, debt service, and utilities. Capital outlays are often appropriated to address a mismatch of the timing of expenditures and revenues and to account for the fact that wages tend to increase each year and are also the greatest expense. Surpluses from the previous year seem to be a significant portion of the current year's revenue, and that is the pattern for these northern New Jersey fee-based municipal pools.

Nearby Union City, NJ does not disaggregate their pool appropriations from the rest of the Department of Recreation, Parks, and Public Property budget. Union City's pools are free to attend - there are two indoor pools, two outdoor kids' pools, and an outdoor pool as part of the Firefighters' Memorial Park, which was built in 2009 for \$6 million with a \$600,000 NJDEP Green Acres grant thus requiring all state residents access. However, Union City does have a shared service agreement with the Board of Education to contribute \$136,000 annually towards the use of the 47th Street pool, which is an indoor pool at the Ronald Dario Swimming Complex. There is also a \$49,746 expenditure towards debt service on this pool. Overall, for 2019, Union City's Parks and Recreation appropriations, excluding the director's office, playground, and public grounds categories, was \$692,000 for wages and salaries and \$250,000 for other expenses.

Another option for operations that has been used in the region is to contract out operations to a YMCA. Both Berkeley Heights, NJ and Piscataway, NJ chose this route for new recreation and fitness centers to open this year, but had different methods of doing so. Piscataway's YMCA, which only operates but did not build the aquatic center, has membership rates for residents that are close to municipal rates, which is not the case for Berkeley's YMCA, which does not provide a resident discount.

The Berkeley Heights Community Pool at the YMCA (Summit Area YMCA) was created through a lease agreement (see Appendix 2) between the township and the Summit Area YMCA (SAY), allowing for inexpensive

Municipality	Allocated Appropriations	Revenues	Attendance
Municipanty	Anocated Appropriations	Revenues	Fee(s)
Paramus	Total: \$654,000	Total: \$654,000	seasonal member-
Boro, NJ	Salaries/Wages: \$284,000	Surplus: \$134,000	ship for residents,
outdoor pool	Other Operations: \$233,000	Membership: \$355,000	guests (\$250 for
population:	Debt: \$110,635.94	Concession: \$74,000	resident family of
27,000		Fees: \$91,000	four, seasonally)
Lyndhurst	Total: \$325,928	Total: \$335,287	seasonal or yearly
Township, NJ	Salaries/Wages: \$157,973	Rent: \$155,000	membership (\$280
indoor pool	Other Operations: \$60,000	Operations Surplus: \$92,287	for resident family
population:	Utilities: \$70,000	Board of Education: \$60,000	of four seasonally
22,000	Waterpark/Concession: \$10,000	Waterpark/Concession:	or \$760 annually)
	Capital Outlay: \$21,000	\$28,000	

Table 4.7 Nearby municipal pool appropriations and revenues

rent - starting at \$1/year for the first six years, rising to \$65,000/year - that would slowly increase over time in exchange for the SAY's commitment to taking on the community pool's \$105,000 debt and spending at least \$210,000 developing a new outdoor community pool next to a new YMCA recreation facility development on the same land. The lease agreement set out size and programming requirements, including opening deadlines (which were not met) for the facility. The agreement did not require residents to have a discounted membership, but did require residents to have the option to join the pool seasonally, rather than committing to join the entire YMCA facility. The Berkeley Heights Community Pool at the SAY website specifically notes that it is operated independently from the Township of Berkeley and is not subsidized, so its membership fees fund the facility. Consequently, fees for a family of four are approximately \$500-\$600 for the summer, which is close to double the municipally managed pools' membership cost of attendance.

Using a different approach, Piscataway built their 83,000 square foot \$32 million indoor aquatic center and recreation facility using funds from redeveloping industrial land, and then contracted out operations to the YMCA of Metuchen, Edison, Woodbridge, & South Amboy, thus creating the YMCA at Piscataway Community Center (YPCC).

ALTERNATIVE III - WORK AND PLAY Figure 4.12 Hoboken Children's Museum, Tech Incubator, and Senior Holistic Center SPACE

The third alternative envisions a destination center featuring opportunities for both work and play. In this scenario, the site is occupied by two buildings. A children's museum occupies the first three floors of one building, with three floors of incubator tech space above. The last remaining floors include access to a rooftop patio on the 5th and 6th floor. The second building, which is attached to but separate from the first, features a four-floor senior center providing activities and medical services for Hoboken's elderly population. The museum building is raised 13 feet, with parking located at ground level on the western part of the site. A small landscaped plaza on the eastern part of the site provides public gathering space and ensures that the entire development is integrated into the existing neighborhood.



Children's Museum

The first three floors of the larger building are devoted to a children's museum. The lower floor is raised above ground level, with a landscaped staircase and ramp providing access to the museum's main entrance. Onsite parking is provided underneath this floor on the western portion of the property.

The inclusion of a children's museum is intended to address several community needs. According to Hoboken's 2018 Master Plan Reexamination Report, more young families have been moving into the city. Between 2000 and 2018, Hoboken saw an 8.4% growth in adults aged 34 to 49 and a 13.4% increase in the number of children aged 18 or younger. With few comparable attractions in the area, a museum with exhibits and programming geared toward children would be a welcome addition to the community.

Moreover, there exist several potential partners in the city that would be able to assist with programming and outreach. According to the 2018 Master Plan Reexamination Report, the Hoboken Historical Museum increased its overall attendance by 40% between 2011 and 2017, doubling the number of children attending in that period. The museum has hired more staff and is seeking to expand into an education and research center where it can host educational programs, lectures, and its collection of historic objects and archives. The 2018 report recommends supporting these efforts and identifying locations for mini-exhibit spaces. The Hoboken Public Library is also seeking to expand in accordance with its five-year strategic plan. Between 2011 and 2016, the library increased attendance by 35% and is identifying locations for "pop-up" branches. The construction of a children's museum on this site presents opportunities to address these needs and broaden the capacity of community facilities that already provide valuable educational services. The Stevens Institute of Technology, which already partners with the Hoboken Board of Education and the Hoboken Family Alliance to conduct K-12 STEM programming, could also serve as a potential partner. There are also opportunities to connect museum programming with local organizations that already offer out-of-school education, including the Boys & Girls Club, the Jubilee Center, and Lightbridge Academy.

Overall, a children's museum would not only create new jobs within the City of Hoboken, but would establish a destination space that attracts parents and children from Hudson County and the New York City area. A children's museum that effectively partners with existing local organizations would foster community development through the expansion of the informal educational system and improve quality of life by creating a community asset that Hoboken residents can take pride in.

Land Use & Design

The museum occupies 28,000 square feet over three floors. Exhibit space, which is generally two to three times less than total floor space, would be approximately 9,300 to 14,000 square feet. Programming within this space is flexible, and may include exhibits and activities related to STEM, history, or health.

Financial Feasibility

A children's museum in this location would likely be run as a 501(c)3 non-profit, which allows the museum to pursue funding opportunities, including grants and sponsorships. Common expenses for children's museums include the following:

- Exhibit production and maintenance
- Utilities and building maintenance
- Staffing and training
- Community outreach
- Educational research
- General administration
- Marketing and fundraising

Common sources of revenue for museums are divided into earned income and additional support. Earned income includes revenue generated by services provided by the museum itself, such as:

- Admissions
- Memberships
- Event fees
- Gift shop sales

Additional support includes funding from outside sources, such as:

- Sponsorship
- Grants
- Monetary and in-kind donations

The share of earned income versus additional support varies by museum, but is generally close to an even split. For this particular museum, it is recommended that the city pursue sponsorship from PSE&G, which provides an application for non-profits who wish to secure funding from the company. PSE&G also offer grants for STEM education initiatives, which may apply to this museum depending on the type of programming that is ultimately established.

Revenue and expenditure breakdowns from four case study museums are included in Table 4.9.

Research presented at the 2018 InterActivity Conference shows that construction costs for children's museums in urban settings range from \$477 to \$673 per square foot (an average of \$575 per square foot). This museum is planned to be 28,000 square feet, meaning total construction costs are estimated to be approximately \$16.1 million (28,000 x \$575).

	Revenue	Expenses
Children's Museum of Indianapolis 2018	Total: \$36,151,332 Endowment: \$15,545,073 Donations: \$3,615,133 Admissions, Membership, Tours: \$13,737,506 Program Fees, Museum Store, Leased Restaurant: \$3,253,620	Total: \$36,130,420 Exhibit Maintenance, Staffing and Training, Programs, Educational Research: \$15,174,776 Utilities, Building Maintenance, General Administration, Debt Service: \$11,561,734 Communication Services, Admissions, Memberships: \$5,058,259 Capital and Artifact Additions and Exhibitions: \$3,251,738 Museum Store, Food Service: \$1,083,913
Minnesota Children's Museum 2019	Total: \$8,823,000 Admissions: \$1,613,000 Memberships: \$1,699,000 Groups, Parties, Events: \$1,629,000 Net Investment Return: \$208,000 Other Revenue: \$564,000 Grants and Contributions: \$2,646,900 Government Grants: \$490,000	Total: \$8,145,000 Program Services: \$6,250,000 Administrative and Marketing: \$1,250,000 Fundraising: \$646,000
World of Wonder Children's Museum 2018	Total: \$776,501 Admissions: \$313,837 Memberships: \$133,948 Corporate Contributions: \$22,084 Individual Contributions: \$86,870 Foundation Contributions: \$62,325 Government Contributions: \$80,409 In-Kind Donations: \$65,482 Other: \$11,546	Total: \$717,992 Museum Operations: \$355,792 Exhibits: \$135,205 Fundraising: \$97,373 Programs and Events: \$95,468 Administrative: \$34,254
Kohl Children's Museum 2016-2017	Total: \$3,864,583 Contributions and Grants: \$1,110,960 Special Events: \$453,573 Admissions: \$858,691 Memberships: \$940,861 Educational Programs: \$167,220 Facility Rental Income: \$229,437 Exhibit Rental Income: \$68,925 Other: \$34,917	Total: \$4,573,884 Program Services: \$3,845,262 Management & General: \$357,238 Fundraising: \$371,384

Table 4.8 Revenues and Expenses From Four Children's Museums

Senior Holistic Center

The senior center would fill in the missing senior services that are in need in the city. In Hoboken, there are 3,432 seniors over 65 which is 6.4% of the total Hoboken population. According to the 2018 American Census Survey, 37.3% of those citizens have disabilities including cognitive difficulty (9.2% of the seniors), ambulatory difficulty (26.4%), self-care difficulty (8.2%), and independent living difficulty (19.2%). Taking care of these difficulties often goes beyond the capacity of a senior person herself or the caretakers. As a result, families look for nursing homes, adult daycare services, or visiting home health care services.

The Senior Holistic Center will be an off-home senior daycare service center. It will provide professional medical and social work services including Alzheimer programs, physical/occupational/speech therapy, and coordination of health services/medical appointments/treatments. It will also have programs to help seniors maintain a vital life. It will provide nutritious hot meals, and the scheduled routines will include exercises, entertainment, and socializing programs. The senior center would also serve as a community support center for the families that take care of the seniors and run education programs as well as counseling services for the caregivers.

There are several services (both public and private) existing in Hoboken to serve senior citizens, but we observe the absence of a holistic senior center that includes nursing and medical care. There is one nursing home in Hoboken, Hoboken University Medical Center TCU, but it has only 15 units and is not affordable for many families. There is a Senior Center at the Hoboken Multi Service Center but it only provides recreational programs. There are several in-home health care service providers, but the offhome adult daycare center is absent. There are assisted nutrition services, transportation to medical appointments, referral services to hospitals, and medical equipment rental programs, but these programs all require a senior citizen or a family caretaker to supervise all the activities, lacking a holistic service that coordinates all these needs.

Financial Feasibility

Anticipated costs for building and operating the senior center include construction cost, wages and benefits of the professional service providers (registered nurse supervisors, social workers, dietitians), other labor costs, food, building operating costs, and equipment/supplies. These costs should be covered by two major revenue sources. One is the revenue generated from the operation of the business. The service cost should be affordable enough to the population in need, yet the center will not be the primary entity that subsidizes low-income households. Many government programs provide financial aid for caring or medical services that seniors with specific needs are eligible for. The cost of the senior holistic center's service should be designed under the consideration of these conditions. Another revenue source is grants directly offered to the institutions. Some of the available opportunities include Policies for a Healthier, More Equitable New Jersey (Robert Wood Johnson Foundation), Incubation & Action Grants (New Jersey Council on Humanities), New Jersey Health Initiatives Grants, Upstream Action Acceleration (Robert Wood Johnson Foundation's New Jersey Health Initiatives), Central and South Jersey Grants (OceanFirst Foundation), and Major Grants Available for Eligible Organizations in New Jersey and Pennsylvania (Provident Bank Foundation).

Lynch (2018) conducted the case study of Providence Health Care Inc. which is an institution in Saint Mary-of-the-Woods, Indiana that provides a similar set of services as our proposed senior center. According to the study, total revenue was about \$610,000 and the total operating expenses was about \$585,000. Net income was about \$25,000 and the financial projection showed that the senior healthcare center could be feasible. Availability of the grants, service cost, cost of expense elements can differ in our project due to the difference in the region, but this data can be a reference to predict the rough feasibility of the project.

Table 4.9 Operating revenues and expenses projection from Prov-idence Health Care: Adult Day Care Business Plan

	Revenue	Expenses
Providence	Total: \$612,520	Total: \$587,176
Health Care Inc.	Gross Revenue From	Salaries and Wages: \$173,240
2018	Services: \$587,520	Employee Benefits: \$53,099
	Grants: \$15,000	Food Services: \$106,841
	Fundraising: \$10,000	Lease Payment: \$60,000
		Building Costs: \$70,280
		Marketing/Promotion: \$12,251
		Administrative Functions: \$40,330
		Commercial Insurance: \$4,578
		Equipment/Supplies: \$58,093
		Transportation: \$5,964
		Community Involvement: \$2,500

Incubator Space

The last three floors of the larger building are devoted to an incubator space that is meant to solve pressing urban challenges, while also serving the community and collaborating with technology through innovation.

Innovation is a central component to New Jersey's economy. The innovation state has a long history of commitment towards this end. The incubator space is intended to address several community needs. In Hoboken's 2018 Plan Reexamination Report, the city is looking to create space for business incubators and accelerators throughout Hoboken. Hoboken is also interested in partnering with Universities and private sector industries to have a space that is ripe for growth and dedicated to advanced technology and design. In Hoboken, Stevens Institute of Technology is a major stakeholder for the town and is also known as the innovation University. Stevens Institute of Technology has an Office of Innovation and Entrepreneurship (OIE) facilitates entrepreneurship and technology commercialization programs and activities that would be a perfect tenant for a space of this kind. Stevens' has multiple programs that grant students the opportunity to learn about entrepreneurship and innovation. Yet, according to NJ Tech Council Hoboken still lacks an innovation center that specifically targets technology innovation even with Stevens' in their city.

Hoboken however, is home to multiple locations of flexible workspace for startup companies. What we are proposing targets entrepreneurs, researchers, and others to come together in a space that makes Hoboken a hub of urban technology & innovation in New Jersey and gives a space for the innovation University to have a permanent location to create more innovative ideas.

Land Use & Design

The incubator spaces will provide roughly 37,500 square feet over three floors. It has direct access to the 1st floor parking garage and has its own entrance facing Harrison Street. The incubator space also will provide tenants with two balconies, one which can be accessed from the fifth floor, and another on the sixth floor.

Financial Feasibility

An incubator space in this location can be operated through various ways. For example, partnering with Universities that can utilize a facility that is dedicated to entrepreneurial and technologicalbased businesses. It could also be done with two important tools to New Jersey, the Incubator and Collaborative Workspace Rent Initiative (ICWRI) and a modernized Research and Development (R&D) tax credit, to support new and established high-tech companies in growing the Garden State's Innovation Economy. The plan to drive innovation in Hoboken around collaboration among local universities and businesses has been proven to benefit cities where incubators are. In 2018 the State of New Jersey's EconomicDevelopment Authority said it will put an initial investment of \$500,000, to assist new startups with half the cost of short-term rent at incubators, accelerators and other collaborative workspaces, with a maximum of \$15,000 per startup.

Other options to help this project be financially feasible is for the city to issue a RFP (Request for Proposal) to solicit investments from private companies that are interested in Hoboken, its location, and its potential. Doing so could potentially bring Venture Capital investments to the city that would allow it to have a facility for startups and innovation.

New York City's EDC (Economic Development Corporation) for example has utilized tax incentives, partnered with other agencies, and private firms to create thousands of square feet dedicated to innovation hubs throughout the city. Another case study for an innovation hub is from Texas Tech University, Research Park Innovation Hub. Texas Tech University created a 40,000 square foot facility, similar to what we are proposing, designed as a resource for faculty and students of both Texas Tech University and Texas Tech University Health Sciences Center, as well as business communities to promote entrepreneurialism and research efforts in numerous areas. This project was valued over \$2 million dollars but was a part of Texas Tech University System's endowment of over \$1.1 billion to renovate its growing campus and to contribute to the economy.

Transportation

This alternative relies on Hoboken's dense, walkable environment and the site's proximity to transit. The Hudson-Bergen Light Rail's Second Street station is adjacent to the site's western boundary, making transit a convenient option for those traveling from Weehawken, Jersey City, and Bayonne. There also exist other transit options within the city, including the Hoboken Hop and the Senior Shuttle. The Hop, which operates Monday-Friday, from 7 am to 8 pm, twice per hour, stops at destinations like senior housing/supermarkets/multi-service centers, and is free for seniors. The Senior Shuttle runs from 10 am to 4 pm, once per hour, and also stops at major destinations beneficial to senior citizens. There is also free medical transportation which offers a ride to medical appointments, and the center can also utilize this service as part of holistic care. The site is also within walking distance (15 minutes) from much of Hoboken and it is expected that most residents will walk to the site.

Parking is still provided on-site, though less than what the current zoning requires. The design strategy for Alternative III includes 23 parking spac-

es located at ground-level on the western portion of the site. The entrance and exit from the parking lot is located on Marshall Street across from the light rail station. The eastern side of the parking area abuts the ground floor of the children's museum and sits beneath the larger second floor of the museum.

Hoboken's zoning in this location does not specify off-street parking requirements for a museum, but does provide requirements for similar types of establishments. These requirements, along with the number of spaces each would mandate in this case, are listed below:

- Community center: zero spaces for first 5,000 sq ft of floor area, 1 space for every additional 1,000 sq ft (28 spaces)
- Educational facility: 2 spaces per classroom (not clear)
- Instructional use: 1 space per 400 sq ft of instructional space (23-35 spaces)
- Public buildings, including libraries: 1 space for each 400 square feet of office area, plus 1 space per 1,000 square feet for other uses (approximately 28 spaces)

For the purposes of off-street parking requirements, the senior center would likely be defined as a clinic, and would therefore require 1 parking space per 800 square feet of floor area, which totals 5 spaces.

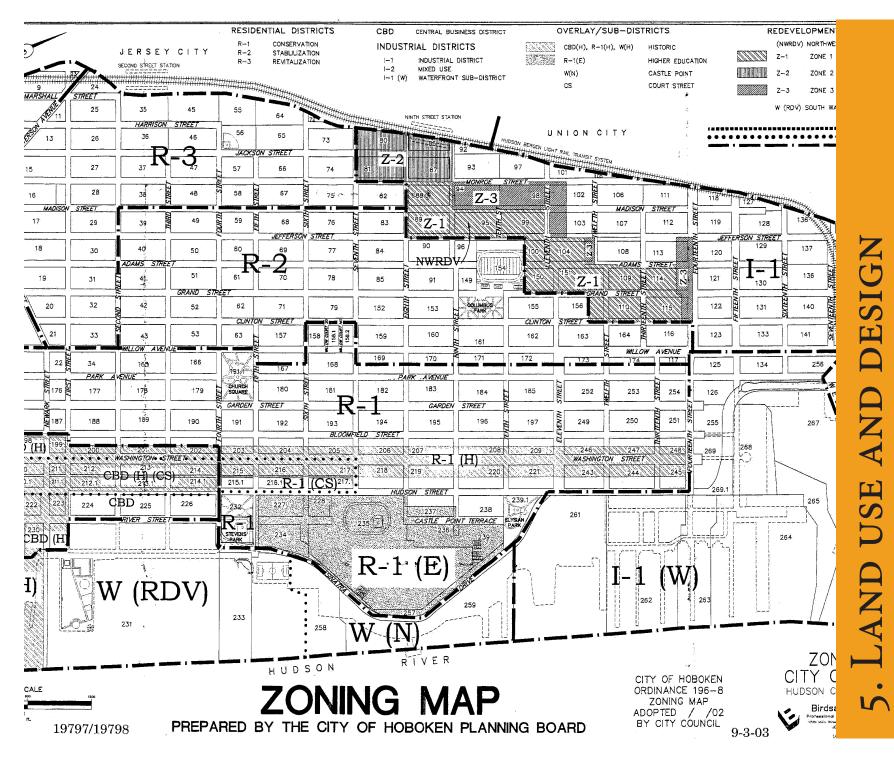
Off-street parking requirements for office spaces are 1 space per 400 square feet of gross floor area, resulting in a requirement of 93 spaces.

Given these regulations, the cumulative requirements for off-street parking are in the range of 126 to 133 spaces. The amount of parking provided in the plan is therefore significantly lower than the requirements for all three uses (museum, senior center, incubator space) combined. The rationale for this reduction relies on the strong existing public transportation network in Hoboken, as well as the high degree of walkability. It is assumed that most residents will either walk to the site or use public transit, and these parking spaces are intended primarily for outof-town visitors.

The senior holistic center is a facility mainly suited for senior citizens that cannot fully serve themselves. These users will likely use public transportation or get a ride from a caretaker rather than drive their own vehicle when visiting the center. Therefore, it is reasonable to assume that the users will not require parking spaces in usual circumstances. The parking needs will be only generated by the workers of the facility, and they will share the parking space on the ground floor with the users of the children's museum and the technology/innovation hub.

Resiliency

Alternative III is designed as a six story building built to Hoboken's zoning ordinance and covers 60% of the lot. The remainder of the lot is utilized as a neighborhood park that can be used for a number of events. Given the site's history as a marsh and Hoboken's current flooding issues, we focused heavily on flood proofing the first floor while also elevating the building 12 feet above the ground. We also made sure to adopt sustainable measures that were promoted in the 2018 Reexamination Report such as including a green roof, planting native species, using permeable materials, and adding bioswales throughout the site.



The following section examines the physical character and function of the alternatives as they relate to various uses, and the creation of an attractive, resilient, and useful site for the community. Providing a comparative analysis of the alternatives in terms of land use and design, it opens up a space for critical analysis and informed discussion of what would be the best way to proceed.

The Marshall Street Substation site is an ideal location for a new development with multiple uses. Proximity to the 2nd Street Light rail Station provides quick and convenient access to the site, as well as the high visibility. The existing street grid pattern and walkability of Hoboken makes the site well-suited to the already existing pedestrian friendly environment. The site is also adjacent to a public parking garage, and on-street parking, all which provide multiple ways in which a user can visit the site. the In addition, the neighboring mix of market-rate housing, and the Hoboken Housing Authority provide a base for visitors who will support retail and recreational facilities. The site is currently zoned R-3, and allows for residential, retail businesses and services, with community centers and restaurants as conditional uses. A maxi-

Table 5.1 Land V	Use Amongst All	Three Alternatives

Land Use	Alternative I: Mixed use Housing/ Retail	Alternative II: Neighborhood Wellness	Alternative III: Work/Play
Residential	Yes	No	No
Retail	Yes	Yes	No
Office Space	No	Yes	Yes
Open Space	No	No	Yes
Recreational	No	Yes	Yes
Parking	No	Yes	Yes

mum height of 40 feet is allowed above design flood elevation. Given the mix of uses and need for greater height, each scenario will require a variance.

Residential

Only Alternative I provides space for affordable and market-rate housing. A mixed-used residential building with first floor retail helps to maintain the residential character of the area.

Retail

In Alternatives I & II, retail serves as an anchor for the site, and provides a much needed amenity to the community. A grocery store, pharmacy, and coffee shop are the types of retail suggested. In walkable urban areas, a 15,000 square foot grocery store needs 10,000 residents to be successful, and approximately 15,000 people live within a half mile radius of the project site. Location of retail at the site would also support the transit oriented character of the neighborhood.

Office Space

Alternatives II & III allocate space for office use. The Neighborhood Wellness Center provides space for medical offices, while the Work/Play space utilizes the top three floors of the innovation center to provide space for technology companies. These uses not only support the complimentary uses but are also supported by the Lightrail ridership.

Open Space

Alternative III provides an open space area along Harrison and Second Streets. The frontage of the building has been pulled back to provide a public plaza that serves as a community gathering space. A public plaza can also provide children who attend to the museum with a place to play, as well as a space for those visiting the senior center to socialize and relax. The plaza opens up a primarily residential block and creates green space in an area where it is currently lacking. The public plaza also acts as an on-site stormwater retention system with bioswales and rain barrels. Private open space is also provided by a rooftop patio on the fifth and sixth levels of the office space.

Recreation

Alternatives II & III provide indoor spaces for recreational purposes. The Neighborhood Wellness Center includes a fitness center and a community swimming pool, while the Work/Play space includes an interactive children's museum.

Parking

While Alternative I does not provide on-site parking for residents and customers, Alternatives II & III do provide a set number of spaces for visitors. The Neighborhood Wellness Center has an indoor parking lot on the ground floor which includes 30 spaces, while the Work/Play concept also has an indoor parking space on the ground floor which includes 23 spaces.

Urban Design

Table 5.2 summarizes the urban design elements of each alternative, and a sense of place each alternative is creating.

	Alternative I	Alternative II	Alternative III
Height (# stories)	64 feet (6 stories)	80 feet (5)	64 feet (6)
Coverage	15,360 sf	14,086 sf	13,500 sf
Gross Area	92,160 sf	70,430 sf	69,500 sf
Landscaping	Green roof Trees on the sidewalk Bioswales Small pedestrian plaza in the southwest corner	Publicly accessible rooftop Trees on the sidewalk Plaza in the northside with trees and benches	Green roof Large open space with trees of native species, bioswales, benches, and streetlights
Ground Floor Use	Retail	Indoor parking space	Entrance and lobby of chil- dren's museum and senior center
Sense of Place	Strengthen the character- istic of a highly residen- tial neighborhood, while providing viability through generating pedestrian pop- ulation with retail destina- tion.	Make the place one of the city centers of Hoboken by providing services that all Hoboken citizens want to visit and use.	Provide a beautiful street- scape through creating a green open space. Give a sense of a safe place for the vulnerable population (se- niors and children) which expands to a sense of a safe neighborhood.

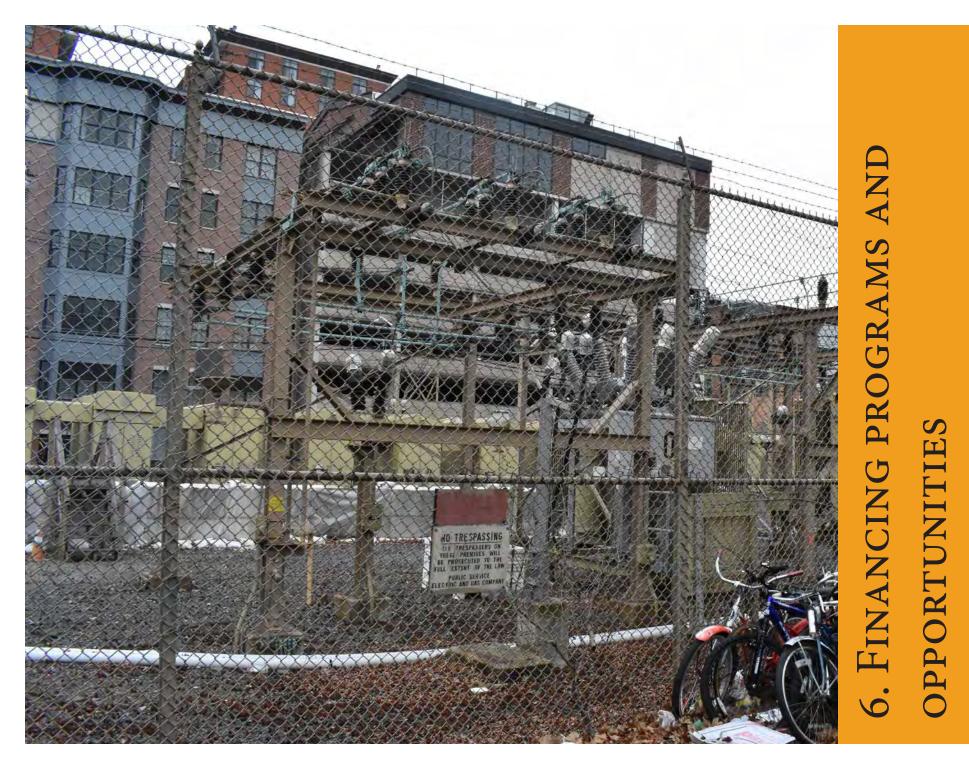
Table 5.2 Urban Design Elements of Each Alternative

'AREA IN NEED OF REDEVELOPMENT' ANALYSIS

New Jersey's Local Redevelopment and Housing Law (LRHL) empowers local governments to initiate a process by which designated properties that meet certain statutory criteria can be transformed to advance public interest. Once an area is designated "in need of redevelopment" in accordance with statutory criteria, municipalities may adopt redevelopment plans and employ several planning and financial tools to make redevelopment projects more feasible to remove deleterious conditions. A redevelopment designation may also qualify projects in the redevelopment area for financial subsidies or other incentive programs offered by the State of New Jersey.

Based on the existing conditions, an initial assessment of the site was conducted to see if the site could qualify as "an area in need of redevelopment." The LRHL authorizes municipalities to designate parcels in need of redevelopment if the parcels meet any of the criteria listed in Appendix C.

Based on the current conditions, the site qualifies as an Area in Need of Redevelopment as the statutory criteria "D" and "H" are met. At the same time, it is important to take note of the existing land transfer agreement as well as of the intent of the LRHL. First, the current owner, PSE&G, has agreed to remediate the site and transfer ownership of a clean and vacant lot back to the City of Hoboken in 2021. Considering that the land is zoned for economically viable uses, including residential, and that Hoboken has had a strong real estate market in recent years, it can be assumed that the site will be developed in the short term. This is important to consider as the powers that the LRHL grants to municipalities are meant to deal with "improper, or lack of proper, development which result from forces which are amenable to correction and amelioration by concerted effort of responsible public bodies, and without this public effort are not likely to be corrected or ameliorated by private effort" (40A:12A-2, LRHL). The same consideration applies to a potential designation of the site as "an area in need of rehabilitation". Rehabilitation is defined in the LRHL as "extensive repair, reconstruction, or renovation of existing structures". However, while one or more of the qualifying conditions might apply as the site currently exists, no structures will remain on site once the land transfer agreement is executed.



FINANCIAL PROGRAMS AND OPPORTUNITIES

Each of the development alternatives analyzed in this report addresses key neighborhood needs by presenting a mix of community uses that closes gaps in housing, retail, and/or amenities.. The uses and programming outlined for each alternative are quite distinct and, therefore, varied in their potential to generate revenues for the city or need for city expenditure. At the same time, the city has an opportunity to take advantage of various state and federal financing and grant programs that reduce development costs and greatly facilitate the city's pursuit of a given alternative.

Transit Village Initiative

The Transit Village Initiative is a multi-agency program run by the New Jersey state government. The New Jersey Department of Transportation (NJDOT) and NJ TRANSIT spearhead the effort. The Transit Village Initiative creates incentives for municipalities to redevelop or revitalize the areas around transit stations using design standards of transit-oriented development (TOD). TOD helps municipalities create attractive, vibrant, pedestrian-friendly neighborhoods where people can live, shop, work and play without relying on automobiles. Based on an initial analysis, Hoboken appears to be eligible for participation as it meets the Transit Village criteria. Acceptance for the Transit Village Initiative does not result in direct funding, but has a number of advantages for the City of Hoboken, such as priority funding from state agencies, eligibility for NJDOT grants, as well as technical assistance.

Community Development Block Grant (CDBG)

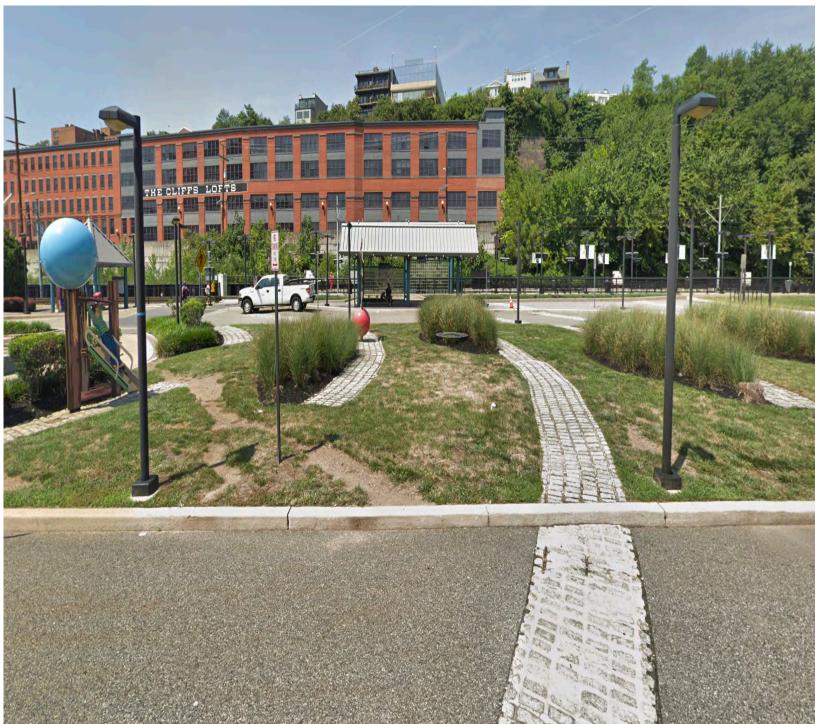
CDBG is a U.S. Department of Housing and Urban Development grant program that funds local community development activities. Use of funds is largely at the discretion of allocees (state and local governments) or their grantees, so as long as proposed uses are consistent with the national CDBG priority of activities that benefit low- and moderate-income people or activities to address an urgent threat to public health or safety. The range of specific uses for CDBG funds is broad and includes real estate acquisition, construction and rehabilitation of housing and/ or commercial buildings, construction of public facilities, infrastructure improvements (e.g. water and sewer), construction and maintenance of neighborhood centers, and broader economic development and job creation/retention activities. CDBG can be particularly useful in funding the necessary extension of water and sewer infrastructure to the Marshall Street property, and funds can also be used for development of retail and residential uses on the property. Furthermore, CDBG funds may be used post-development to support programming at the site. It is important to note that CDBG is often 'spoken for' by various city officials who may have programming priorities and/or by prominent community organizations that rely on CDBG to sustain their programming. In such cases, the city would benefit from coordinating and planning with various stakeholders before commiting CDBG funds to service, development, and programming at the site.

New Market Tax Credits (NMTC)

NMTC are a dollar-for-dollar subsidy provided directly to investors participating in commercial, community, or other non-solely-residential projects in distressed communities. The program is meant to support revitalization of low-income communities by offering private investors tax credits if they invest in local enterprise through Community Development Entities (CDE). The development site is located within a qualified "distressed" census tract, characterized by 20% poverty and median income at 80% of AMI. Each of the alternatives includes uses that qualify for NMTC subsidies, which are effectively delivered as a loan of which a large portion is forgiven at the end compliance term. The size of the tax credit award is based on the total capital amount of a qualified equity investment (QEI) for the development of a qualified active low-income community business (QALICB), with qualification criteria set forth by the CDFI Fund. Note that a QALICB can be either for-profit or non-profit entity, but not a municipal government or public authority. Eligible development costs can include real estate acquisition and site work, and the total QEI. The CDFI Fund and IRS jointly monitor NMTC investments to ensure their compliance with program restrictions and require CDEs to consistently report investment status to the federal monitors.

Payment in Lieu of Taxes (PILOT)

Should the city declare the site as an Area in Need of Redevelopment (ANR), it may offer PILOT benefits to a private developer. A PILOT is a property tax abatement with a maximum term of 30-years and is a tool often used to attract reluctant private capital and make development financially feasible. Under state law, a municipality may offer 30-year PILOTs only if it formally declares a site as an ANR or may offer a more limited 5-year PILOT if it declares the site in need of rehabilitation. It is important to note that the opportunity to pursue these options is rather limited as the conditions to designate ANR exist right now, pending site remediation by PSE&G pursuant the company's land transfer agreement with the city; the city must pursue designation prior to conveyance of the property by PSE&G as the site will no longer meet statutory requirements for redevelopment or rehabilitation post-remediation. Another forward-thinking alternative is to consider the broader plans to redevelop the adjacent Hoboken Housing Authority (HHA) properties and designate the larger area, inclusive of the Marshall Street property, as an ANR.



TRANSPORTATION ANI RCULATION

TRANSPORTATION & CIRCULATION

Hoboken benefits from both its dense street network and a variety of public transit options that reduce the need for personal vehicles. This particular site's proximity to the Hudson-Bergen Light Rail Second Street station is a significant advantage, making the site transit-accessible from West New York, Union City, Weehawken, Jersey City, and Bayonne. Intra-city services such as the Senior Shuttle and the Hoboken Hop, both of which pass directly in front of the site along Harrison Street, further improve access. The site is also located within walking and bicycling distance of much of Hoboken, and it is expected that many residents will choose to either walk or bike to the site. Consequently, all three alternatives take advantage of these conditions and attempt to discourage driving to and from the site by minimizing the amount of off-street parking provided. Table 7.1 compares and contrasts each of the three alternatives' parking strategies.

	Alternative I: Mixed-Use Housing/Retail	Alternative II: Neighborhood Wellness	Alternative III: Work/Play
On-site Parking Required by R-3 Zoning	28 or 75	71 minimum	126 to 133
On-site Parking	No	Yes	Yes
Number of Spaces		30	23
Location of Parking		Ground-level garage	Ground-level garage accessed via Marshall Street
Parking Square Footage		13,100	7,500

Alternative I provides no on-site parking, while Alternative II and III include parking in their design, though both alternatives provide less off-street parking than is required by the current R-3 zoning ordinance.

Additional parking options in the area include the Sylvan Sky Garage (with both daily and monthly rates), located just south of the site as well as on-street residential permit parking in the surrounding neighborhood. Alternative I, while noting that many residents will likely not own cars, relies on the use of the Sylvan Sky Garage for those residents who do own private cars. Alternative I also suggests the creation of short-term parking spaces in the Marshall Street loop to the west of the site to support the ground-floor retail use.

All three alternatives attempt to minimize on-site parking by leveraging Hoboken's existing transit assets and high level of walkability. When parking is included, it is incorporated as a resilient design strategy that protects the building's primary uses from flooding.

Public Transit

All three alternatives take advantage of Hoboken's robust public transit system. The Hudson-Bergen Light Rail Second Street Station sits just 200 feet to the west of the site. A ridership survey published in 2019 by New Jersey Department of Transportation and Rutgers University Voorhees Transportation Center showed that 40.9% of all light rail riders frequent businesses within a half-mile of the boarding station, spending \$3.4 million per month and \$41 million annually, indicating a strong link between transit use and patronage of businesses in the area. Since all three alternatives include some retail or business component, all will benefit from the proximity of the light rail station.

Other transit options within the city, including the Hoboken Hop and the Senior Shuttle, further support the three alternatives. The Hop and Senior Shuttle, both of which are free, are support the senior center component of Alternative III. The light rail, which connects Hoboken with many parts of Hudson County, also runs to Hoboken Terminal, meaning residents in Alternative I would be able to commute not only to and from Jersey City and Bayonne, but to and from New York City via PATH as well.

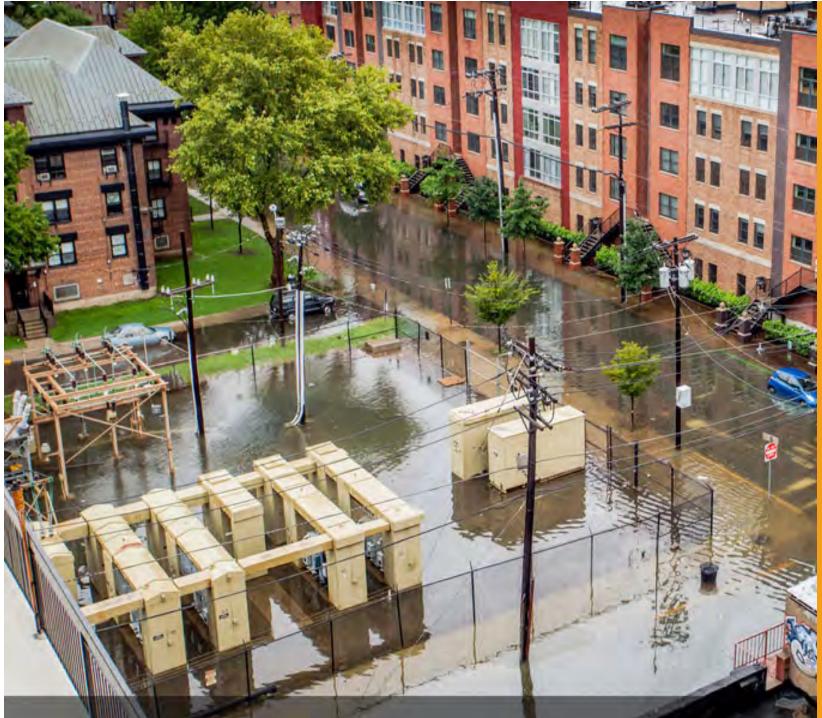
Walkability

Hoboken's density, coupled with the presence of sidewalks and crosswalks throughout much of the city, increases accessibility and makes it possible

Image 7.1 Access Points

to walk to and from the site with relative ease. The 2019 ridership survey data of the Hudson-Bergen Light Rail showed that 95.2% of riders access 2nd Street Station by walking, signaling the link between transit and walkability.





8. RESILIENCY

RESILIENCY

Recognizing the location of more than two-thirds of Hoboken's land area within the Federal Emergency Management Agency's Flood Zones, each of the alternatives outlined in this report present the City with the opportunity to strengthen Hoboken's position as a leader of sustainability and urban resilience. The historic flooding around the Marshall Street substation during Superstorm Sandy in 2011 is representative of a larger concern of frequent flooding for the project area. During Hurricane Sandy alone, the

Image 8.1 PSE&G Worker Shows Three Level Flood Line of Hurricane Sandy

substation experienced flood levels of more than three feet. Using these experiences as a lesson, each alternative was designed with the goal of withstanding future unprecedented flood events that are expected with climate change.

To guide this objective, each design relied upon principles outlined in the city's Resilient Building Guidelines, the Green Building and Sustainability Element of the Master Plan, the Climate Change Action Plan, and the Complete Streets Design Guide. These planning documents provided sufficient guidelines to conform with the City of Hoboken's resilience vision.



72 Source: PSE&G Twitter Account

Resilient Building Guidelines

Adopted in 2015, the city's Resilient Building Design Guidelines provide the laws and regulations governing construction in Hoboken's flood prone areas - a jurisdiction that includes the project site. In addition to providing standards for the retrofit of existing buildings, the guidelines direct all new construction. Specifically, while many of the guidelines pertained to the actual construction of a site, which is outside of the scope of this analysis, the following standards were taken into consideration for each of the three alternatives:

- The designated DFE may only be used for parking, storage and building access
- Only commercial/non-residential portions of a mixed-use building are allowed to be dry floodproofed
- Residential uses below DFE must be wet floodproofed (including all parking, storage and building access points)
- All emergency exit stairwells and corridors shall be wet floodproofed and designed with hydrostatic openings
- Automatic sewage backflow prevention devices shall be required on sewer lines below DFE

Special consideration was also given to the streetscaping of the site in order to respect "the flow of street life and remain pedestrian friendly. Specifically, the use of streetscaping helps to soften the appearance of the site's required design flood elevation. Among the design guidelines given for streetscaping are:

- Limiting the negative effects of blank walls at street level by adding a green buffer.
- Using windows around a lobby or commercial entrance to draw the attention of passers-by to the building.

• Stairways and ramps should be located within the building, with street-level entryways and high levels of transparency.

Above all, the resilient building design guidelines were used as a framework for the design of each alternative to, not only conform to the city's prescribed remedies to the experienced frequent flooding and help reduce the occurrence of flooding in the project area, but stylize each building in a way that fits with the overall character of the surrounding community.

Climate Change Action Plan

In the course of its work, the studio team also recognized the responsibility for each building in Hoboken to contribute to the city's carbon emission reduction goals laid out in its Climate Change Action Plan. As this plan notes, the City of Hoboken's largest contributors to greenhouse gas emissions are Commercial Energy, Transportation and Residential Energy. While each of the alternatives paid close attention to each of these three sectors, the area of transportation was the center of focus as both commercial and residential energy reduction strategies will be decided by those developing the site. With its proximity to the 2nd Street Light Rail Station and natural walkability, it is believed that the project site will naturally help to reduce transportation related carbon emissions by reducing automobile travel. The design of each of the three alternatives targeted enhancing these benefits. Master Plan Green Building and Environmental Sustainability Element

Adopted in 2017, the policy document includes a section with recommendations for "Land Use and Green Building Design" to achieve the goals of mitigating hazards through resilient and efficient building design, mitigating the urban heat island effect, reducing the stress of development on infrastructure, and maintain diversity via a strong local economy and housing options. Recommendations that would apply to the project site include:

- Design the building with consideration to the Leadership in Energy and Environmental Design (LEED) third-party ratings system for sustainable infrastructure.
- Utilize a cool roof material as required by the city's Green and Cool Roofs Policy for roofs with a surface area over 1,000 square feet, as well as a potential green roof.

Street Design Guide

Published in 2019, Hoboken's Street Design Guide includes a stated goal to "improve resiliency and sustainability through increased green infrastructure investments", which specifically addresses the needs of the city as it pertains to flooding through natural water management processes to capture, store, and filter stormwater. For the site examined in the report, elements of green infrastructure are important to the design of the alternatives, all of which will add to increased pedestrian and automobile traffic on the surrounding sidewalks and streets. Elements of green infrastructure that would enhance all alternatives based on the Street Design Guide include:

• Bioswales- Described as "shallow, open, vegetative, channels", these can be used as curb extensions to treat runoff stormwater while also removing pollutants. The design recommendation states they are a good element for green street retrofit projects since they are narrow in size, which would make them a good fit for the existing sidewalks around the site.

- Stormwater Trees- Street trees that are contained in a tree well or pit typically constructed from concrete to route stormwater to treatment, these are an important streetscape design element for all alternatives and can be contained in a small space on existing sidewalks.
- Permeable Pavement- Coming in several forms, this material creates a surface that allows for stormwater infiltration while still providing a stable surface for both walking and driving. The three types recommended for use in Hoboken are pervious concrete, porous asphalt, and permeable interlocking concrete pavers (PICP). Permeable pavement can be applied in a variety of ways on the site, including parking lots, walkways, and pedestrian plazas.

Image 8.2 Green Roof Infrastructure at the Hostess Building in Hoboken



Source: Bijou Properties Twitter Account

With these policies in mind, the resilience of each alternative was considered using the criteria of their adherence to the Design Flood Elevation, Floodproofing, Stormwater and Wastewater Management and Transportation.

Design Flood Elevation:

Each alternative creatively incorporates the city's Design Flood Elevation requirements listed within the city's Zoning Code and Resilient Building Design Standards. Alternative I incorporates plans to design the required 13 foot DFE in a way that benefits the alternative's residents. From a lobby to a bike facility, Alternative I's DFE is flexible to allow a beneficial use for the site's residents that aligns with the goals of the project site's developer. In accordance with the Resilient Building Design Guidelines, this alternative, additionally, anticipates the opportunity to provide commercial space within DFE constraints of the requirement of dry floodproofing. Both Alternative II and Alternative II plan to use the required DFE space as parking in order to make the site accessible to both designs' anticipated visitors. Both

Map 8.1 Flood Map of Hoboken



Source: Hoboken Green Infrastructure Plan

are anticipated to require the addition of wet floodproofing. Each alternative will use creative measures from windows to greenery in order to soften the appearance of the 13 foot Design Flood Elevation and conform with the flow of the community.

Stormwater Retention:

Each alternative is designed with the opportunity for stormwater retention systems to be incorporated both within the planning and development stages. Alternative I anticipate the addition of green infrastructure to its exterior in order to reduce impervious surface flooding, as well as the installation of bioswales. Alternative II has incorporated streetscaping designs around the perimeter of the site, including a small plaza on the north side of the building, as well as the possibility of a public rain garden on the roof of the building to promote stormwater retention as well as further the site's connection with "wellness". Alternative III incorporates an intricate front lawn that can be designed with vegetation ideal for stormwater retention.

Wastewater Treatment:

According to the North Hudson Sewerage Authority's map of the project area, the project site currently has no sewer connection. It is anticipated that each of the three presented alternatives will require connections to NHSA's service area.

Transportation:

A combination of the project site's proximity to the 2nd Street Light Rail station as well as the city's bike share and ride share programs, connection to the Hoboken Hop and Hoboken's general walkability is expected to reduce the project site's greenhouse gas production on the basis of transportation. Alternative I's absence of parking is expected to further help encourage public transit ridership and reduce polluting modes of transportation like automobiles. Both Alternative II and III provide parking, with the anticipation of the use of a portion of the provides spaces as electric vehicle charging stations in conformance with the city's Climate Action Plan.

Resliency Element?	Alternative I	Alternative II	Alternative III
Design Flood Elevation	Yes (13 feet)	Yes (13 feet)	Yes (13 feet)
Dry Floodproofing	Yes	No	No
Wet Floodproofing	No	Yes (Parking - at grade)	Yes (Parking - at grade)
Streetscaping	Yes	Yes	Yes
Stormwater Retention	Yes	Yes	Yes
Need Sewer Connection?	Yes	Yes	Yes

ENVIRONMENTAL REMEDIATION IN PROGRESS AT THIS SITE

FOR FURTHER INFORMATION CONTACT: LICENSED SITE REMEDIATION PROFESSIONAL (LSRP): **ELANA SEELMAN - LANGAN ENG. & ENV. SERVICES** (973) 560-4695

PSE&G ENVIRONMENTAL PROJECT MANAGER: STEVEN NASCIMENTO - (908) 412-7305 NJDEP Site Name: MARSHALL STREET SUBSTATION NJDEP SRP PI# 757392 NOTE: This sign must remain posted until its removal is authorized by LSRP

SUMMARY AND NEXT STEPS

This Alternatives Analysis is a starting point in the visioning process concerning the redevelopment of the Marshall Street Substation. The document does not recommend one alternative over the other, but rather presents a diverse range of opportunities that can benefit the community. Each alternative presents a mix of uses and programming for which the neighborhood has need as identified in the 2018 Master Plan Reexamination Report, our own survey of Hoboken residents, and in our market and spatial analyses. Each alternative considers a common set of feasibility and sustainability factors, including a mix of uses and programming with a tenant or program that anchors the larger project, a critical mass of activity that stabilizes and supports the long term sustainability of the project, and an opportunity to create a 'sense of place' that attracts people and investment to the neighborhood.

The potential uses and development scenarios outlined in each alternative are varied, and each has unique benefits and costs that must be weighed against challenges with developing the site and within the context of the city's planning and community vision. We also considered the precedent of zoning variances for recent development in the neighborhood as a gauge for the city's ambition to capitalize on this rare development opportunity. While the city can pursue some form of each alternative in a manner consistent with existing zoning regulations, our analysis highlights the opportunity to maximize community benefit by building higher and/or with greater density without overwhelming the neighborhood.

A key consideration, especially in light of the city's pre-pandemic budget deficit and pending post-pandemic recovery efforts, is whether the city itself has the capacity to absorb the upfront costs of development and then manage a property in the short- and long-term; financial constraints and triage allocation of human capital will have a large impact on the city's strategy concerning the Marshall Street site. A key purpose of this report is to provide a base of information and analysis that empowers the city to ascertain the best fit alternative or components thereof.

Table 9.1 compares the alternatives against each other in terms of the greatest costs - financial, time, and variances - and benefits, which are represented through community needs, assets, and desires as reflected by the survey.

	Alternative I	Alternative II	Alternative III
Fit with Community Need	High	High	High
Community Asset	Market Housing Affordable Housing Retail stabilizer	Pool & Fitness Center Medical Center Retail Stabilizer	Children's Museum Innovation Center Senior Center
Survey Responses	 77% would like supermarket/retail 66% think a supermarket in particular is a missing amenity 59% think retail is a missing amenity 12% would like affordable housing 	 57% would like indoor recreation 38% think a swimming pool/gym is a missing amenity 1 8% would like medical services 25% think a pharmacy is a missing amenity 5 9% think retail is a missing amenity 	 57% would like indoor recreation 27% think a muse-um/learning center is a missing amenity 25% would like a tech center 14% would like an educational training center 50% think outdoor park space is missing here
Time to Develop and Lease	Low	High	High
Cost to Develop Base Construction	\$\$	\$\$\$	\$\$\$
Cost to Operate	\$	\$\$\$	\$\$\$
Need for Zoning Variance	Variable	Yes	Yes
Level of City Commitment (Organizational)	Medium - Low	High	High

Table 9.1	Summary	^r Comparison	Table
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Next Steps

Below are some suggested next steps for selecting the appropriate alternative, or even components of an alternative.

Complete remediation of project site

• This is an immediate priority that is currently the responsibility of PSE&G, but is overseen by the city. Ultimately, nothing can move forward without remediation.

Create a pop-up park in the interim after the site has been remediated

• A pop-up park will give the site a use that many residents support while the city considers options for site development.

Conduct a study to ascertain feasibility of ANR designation

• ANR designation was evaluated above, but a study taking a closer look at the specific details will help determine financing options and potential development partners.

Conduct public outreach with hard to reach population

• This report used multiple forms of data collection, including an online survey. However, there are gaps in access and reach when using this voluntary method, which were previously discussed. The study team reached out to Hoboken Housing Authority (HHA) staff to find ways to ensure community voice and participation was included, but timing did not work out. Given that the HHA is right next to the site, the input of HHA residents must be considered and there should be directed outreach. Additional hard to reach populations may include seniors or English language learners.

Market studies to determine demand for retail and housing

• This report considered market demand for retail and housing based on comparable scenarios and existing catchment areas, but a study with

proprietary information might yield more detailed quantitative and financial information.

Inventory analysis of development pipeline

• This report took into account existing surrounding amenities and needs in order to provide rationales for the alternatives and their components. However, there are other ongoing development projects being considered in Hoboken that might impact the alternatives chosen for the site. For example, if the Western Edge Redevelopment includes a swimming pool, that might change the calculations for choosing an alternative. Similarly, an inventory analysis of the other development projects in process and in consideration, and their likely timelines, by both private housing developers and public entities such as the HHA, Multi-Service Center, Board of Education will provide additional guidelines as to the needs around the site.

Determine appropriate development partners

• The city can evaluate existing and develop new and potential partners and strengthen these relationships. Having strong partnerships will demonstrate a level of support and buy-in while also allowing for the evaluation of partner feasibility.

Ultimately, the city will need to evaluate each of the alternatives with their costs and benefits and determine how the concepts fit within the planning vision for the neighborhood and the needs identified in the community survey. These alternatives presented here continue an important conversation about priorities, community assets, and project feasibility.

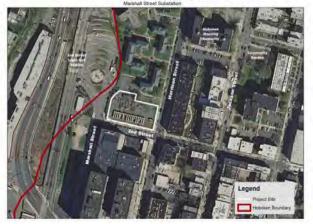
APPENDIX

MARSHALL STREET SUBSTATION REDEVELOPMENT

Questionnaire by the Rutgers University Redevelopment Graduate Studio

This questionnaire was created by graduate students at Rutgers University, on behalf of the City of Hoboken, to determine resident support for a variety of land uses for the soon to be redeveloped Marshall Street Substation. The site has been operated by PSEG as an electrical substation for years, but will soon be transferred to the City of Hoboken for redevelopment as a new substation is built on Madison Street. The results of this survey will assist the Studio Class and the City of Hoboken in better understanding potential redevelopment alternatives for the site that will support community assets and take into account residential needs. If you are a resident of Hoboken, we want to hear from you!





1. In what part of Hoboken, NJ do you reside? Select the option that best applies:

O Uptown (16th Street to 11th Street)

- Midtown (10th Street to 5th Street)
- O Downtown (4th Street to Observer Highway)
- O I Do Not Live in Hoboken, But I Work in Hoboken
- I Do Not Live or Work in Hoboken
- * 2. From your experience, what do you think the biggest issue is near the Marshall Street substation? (Please rank from 1 = biggest issue, 6 = least concerning issue):
 - Traffic Congestion Ξ Public Safety
 - Ξ Lack of Retail Options
 - = Lack of Public/Community Spaces
 - Ξ Lack of Food/Grocery Options
 - Ξ Lack of Medical Access

3. Please specify if there are any other issues around the surrounding area of the Marshall Street substation site:

* 4. What amenities do you think are missing from the area of the Marshall Street substation site? (Check all that apply):

- Retail Options Museum/Learning Center
- Supermarket
- Medical Clinic
- Pharmacy
- Outdoor/Park Space Swimming Pool, Gym etc.
 - None of the Above

Entertainment (Movie

Theater, Bowling Alley, etc.)

5. What would you like to see built at the Marshall Street substation? Note: A building in this location can have more than one use over multiple floors. Please select the uses you think would be appropriate for a building on this site:

Retail (Supermarket,	Educational Training
Pharmacy, Coffee	Center
Shop, etc.)	Tech or Innovation
Affordable Housing	Center
Open Space / Park	Medical Services (Urgent Care, Clinic,
Indoor Recreation Center	etc.)
Daycare	None of the Above

Other (please specify)

6. Please provide any other information you would like to share with us about your ideas for this site:

7. Do you want to be involved with the Marshall Street substation redevelopment? If so, please provide an email address:

* 8. Would you like to receive email updates and notifications from the City of Hoboken?

Yes (Please Include Your Email Below)

No No

APPENDIX B - AREA IN NEED OF REDEVELOPMENT

CRITERION	FINDINGS
A. Substandard, Unsafe, Unsanitary, Dilapidated, or Obsolescent Buildings	Several buildings are erected at the site and serve to transmit and distribute power throughout the electric grid. The buildings on-site are not deteriorated and have not fallen into a state of disrepair as the substation is currently in operation. Conclusion: The "A" criterion does NOT apply.
B. Abandoned Commercial and Industrial Buildings	The buildings are neither vacant nor abandoned as the substation is currently in operation. Conclusion: The "B" criterion does NOT apply.
C. Publicly-owned or Unimproved Vacant Land	Currently, the site is neither publicly owned nor unimproved vacant land. Conclusion: The "C" criterion does NOT apply.
D. Obsolete Layout and Faulty Arrangement or Design	The site contains a land use, an electrical substation, that in its cur- rent layout and design has an adverse impact on the surrounding, mostly residential, area. Most importantly, it is necessary to raise the elevation of the substation to prevent electrical outages caused by flooding of the type experienced during Superstorm Sandy. Howev- er, the improvements necessary to upgrade the site are impossible because of the existing spatial constraints of the site. Therefore, due to an obsolete layout of the site, the substation is a land use that has an adverse impact on the community's safety, health, morals, and welfare. Conclusion: The "D" criterion DOES apply.
E. Property Ownership and Title Issues	No circumstances related to the ownership or configuration of property have created a stagnant and unproductive condition of the site. Conclusion: The "E" criterion does NOT apply.
F. Fire and Natural Disasters	The site is not larger than 5 contiguous acres and is not destroyed by a fire or other natural disaster. Conclusion: The "F" criterion does NOT apply.
G. Urban Enterprise Zones	The site is not designated as an Urban Enterprise Zone by the New Jersey Urban Enterprise Zone Authority. Conclusion: the "G" criterion does NOT apply.
H. Smart Growth Consistency	The designation of the area is consistent with smart growth plan- ning principles adopted pursuant to law or regulation. The area's proximity to public transit makes it ideal for the promotion of smart growth principles that encourage compact building design, creating a range of housing options, and supporting a walkable area. Conclusion: The "H" criterion DOES apply.

APPENDIX C - SWIMMING POOL COSTS

• The pool shall retain the name "Berkeley Heights Community Pool" during the Lease Term; the YMCA may elect to co-brand the name of the pool (such as the "Berkeley Heights Community Pool at the YMCA").

7. <u>YMCA Assumption of BHCP Loan</u>:

 YMCA will assume and pay off the BHCP Investors Bank loan/credit facility; the current balance is roughly \$105,000.00.

8. End of Lease Term:

• All improvements on the Locust Avenue property shall become the property of the Township at the end of the Lease Term.

9. Maintenance/Capital Improvements:

• YMCA shall be responsible for all operations, maintenance and capital improvements related to the Property and all improvements thereon.

10. Liability:

 YMCA shall defend, indemnify and hold the Township harmless from and against any and all claims and liability related to the Property and all improvements thereon.

11. Miscellaneous:

- Lease is subject to (i) YMCA completion of environmental due diligence; and (ii) achieving preliminary 10% fundraising goal of the total project cost (+/- \$1 million in fundraising).
- Township of Berkeley Heights to be given priority access to the gymnasium during the winter season (November – March) for overflow use by school/recreation/PAL. Times, frequency and terms to be negotiated in good faith by both Parties upon completion of construction of the project.
- The terms of this non-binding term sheet will be memorialized in a lease which shall be subject to vote and adoption by Ordinance by the Township Council.

5/2/2020

Membership | Summit Area YMCA

MEMBERSHIP

- BHCP HOME
- BHCP MEMBERSHIP
- BHCP GUEST PASSES
- BHCP SWIM LESSONS
- ▶ BHCP SWIM TEAM
- BHCP SWIM EVALUATIONS
- BHCP EXERCISE SCHEDULES
- ▶ BHCP RULES,
- REGULATIONS & FAQ
- ▶ BHCP ABOUT US
- ▶ BHCP EVENTS
- ▶ BHCP CONTACT
- ▶ BHCP HOURS

BERKELEY HEIGHTS YMCA



At the Y, you're not just a member of the pool or the gym, you're part of a community that is here for everyone and works towards providing practical and affordable answers to large-scale community issues focusing on youth development, healthy living and social responsibility. We're excited to welcome you to enjoy our brand new state-of-the-art, Olympic-sized (50m x 25m), outdoor, heated pool with a slide, two diving boards, zero-entry kiddle pool, playground and pool house surrounded by beautiful landscaping.



https://www.thesay.org/berkeley-heights-ymca/Berkeley-Heights-Community-Pool-at-the-YMCA/membership

1/7

5/2/2020



59 LOCUST AVENUE BERKELEY HEIGHTS, NJ 07922

GET DIRECTIONS

SCHEDULE A TOUR

CONTACT

MIKE MIRABELLA AQUATICS DIRECTOR 908-464-6214 Mike.Mirabella@theSAY.org



Register Online

If you are a current or returning Summit Area YMCA or Berkeley Heights Community Pool at the YMCA member with an online account, complete your membership purchase using your existing login by clicking on the register button below next to the membership option of your choice. First time registration? Welcome! Get started by clicking on the register button below next to the membership option of your choice and create an online account.

SUMMER 2020 POOL MEMBERSHIP REGISTRATION DETAILS

Active Summit Area YMCA (MP) members receive the benefit of reduced pricing versus non-Summit Area YMCA (NMP) members*. If you are not an active member, we invite you to join <u>either the Berkeley Heights YMCA or the Summit YMCA</u> so that you can take advantage of the reduced pricing and all the great 5/2/2020

Membership | Summit Area YMCA

benefits our Ys have to offer.

MEMBERSHIP	MEMBERSHIP
ТҮРЕ	PRICE
	NMP: \$600
FAMILY	MP: \$500
	REGISTER
	NMP: \$350
ADULT	MP: \$300
	REGISTER
	NMP: \$250
SENIOR	MP: \$200
FAMILY	REGISTER
	NMP: \$160
SENIOR	MP: \$125
ADULT	REGISTER
	NMP: \$250
TEEN	MP: \$200
	REGISTER
	NMP: \$250
NANNY	MP: \$200
	REGISTER
	NMP: \$250
MOTHER'S	MP: \$200
HELPER	REGISTER

*To receive member pricing, your YMCA membership must be current through the end of your pool membership. If your family has an active Youth or Teen membership, please <u>contact us</u> for inhouse registration so you can receive member pricing.

https://www.thesay.org/berkeley-heights-ymca/Berkeley-Heights-Community-Pool-at-the-YMCA/membership

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Membership | Summit Area YMCA

MP = Active Summit Area YMCA Member NMP = Non-Summit Area YMCA Members

MEMBERSHIPS TYPES

Unsure which membership type you qualify for? Read through our membership type definitions below.

MEMBERSHIP TYPE	DEFINITION
FAMILY	Two adults (18+) and all dependents (22 years old and under), permanently residing within the same household.
ADULT	Member is turning 18+ during the pool season.
SENIOR FAMILY	Two adults (one whom is 62+ during the pool season) and all dependents (22 years old and under), permanently residing within the same household.
SENIOR ADULT	Member is turning 62+ during the pool season.
TEEN	Member is 13-17 in the calendar year of pool season. A teen member must be a minimum age of 13 or entering the 7th grade in the fall of 2020. Teen memberships do not qualify for free guest passes.

Membership | Summit Area YMCA

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MEMBERSHIP TYPE	DEFINITION
NANNY	Member is 16+ during the pool season and is added as a third adult onto a family membership as a caregiver who brings the family to the pool. Nanny memberships do not qualify for free guest passes.
MOTHER'S HELPER	Member is 12+ during the pool season and is added onto a family membership as a babysitter who accompanies the family to the pool. The Mother's Helper must be accompanied by an adult on the family membership at all times. Mother's Helper memberships do not qualify for free guest passes.

Membership fees are determined by the estimated cost it will take to run and operate the entire facility. The Berkeley Heights Community Pool at the YMCA operates independently from the town of Berkeley Heights and therefore is not subsidized nor is access included as a part of other Summit Area YMCA memberships.

ACCESS ID CARDS

Facility access ID cards will be issued for all members over ages 18 months and photos can be taken prior to the member's first visit to BHCP. Each member is required to swipe their ID card at the Front Desk every time they enter the facility. Members may pick up their swipe cards and have their photos taken beginning May 1, 2020 at the membership desk of the Berkeley Heights YMCA located at 59 Locust Ave, Berkeley Heights, NJ, 07922.

Members may also use the <u>SAY Mobile App</u> (available for Android

https://www.thesay.org/berkeley-heights-ymca/Berkeley-Heights-Community-Pool-at-the-YMCA/membership

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https://www.thesay.org/berkeley-heights-ymca/Berkeley-Heights-Community-Pool-at-the-YMCA/membership

5/2/2020

Membership | Summit Area YMCA

& Apple devices) for easy check-in. <u>Click here for app download</u> <u>links, features and FAQ</u>, like how to add multiple barcodes.

FINANCIAL ASSISTANCE

As a nonprofit, the Summit Area YMCA is committed to enhancing the lives of individuals and families in our community. We do so by offering financial assistance to those with demonstrated need so that they may enjoy all the Y has to offer, regardless of their ability to pay. This helps us ensure that everyone, regardless of age, income, or background has the opportunity to learn, grow and thrive.

LEARN MORE

QUESTIONS

Questions about membership, registration or <u>financial assistance</u>? Please <u>contact us</u> using the form below.

<u>YMCA- BERKELEY HEIGHTS COMMUNITY POOL LEASE TERM SHEET</u> <u>LOCUST AVENUE PROPERTY</u>

1. Lease Payment Terms:

- \$1.00/ years 1-6
- \$25,000.00/ years 7-20
- \$50,000.00/ years 21-30
- \$65,000.00/years 31-50
- All lease payments to be made in monthly installments (1/12 of annual payment).
- Total rent during lease term = \$2,150,000.
- Additional 25 Year Renewal Option upon the mutual consent of the Parties at a rent TBD.
- 2. Pool Operation:

YMCA to assume operation of the Community Pool beginning in the summer of 2017, and throughout the entire lease term.

3. <u>Immediate Repair Expenditures</u>: YMCA to spend a minimum of \$210,000.00 on or before Memorial Day to allow for the opening of the pool for the 2017 summer season.

4. Construction of New YMCA Facility:

- YMCA to complete construction of a +/- 36,000 sq. ft. YMCA facility that will include the following amenities:
 - o gymnasium allowing for full court basketball;
 - o wellness center;
 - o child day care; and
 - o multi-purpose rooms/community space.

5. Construction of New Swimming Pool:

- YMCA to complete construction of the following pool related facilities and amenities:
 - A new pool approximately the same size as the existing pool;
 - o A new "kiddie" swimming pool; and
 - Changing room facilities and a snack shack that will be operated during the outdoor swimming season.
- YMCA expenditures on the pool improvements +/- 900,000.00 and construction shall be completed within the first 6 years of the lease.

6. Pool Membership:

• YMCA will provide a pool only membership option for Berkeley Heights residents (i.e., Berkeley Heights residents may join the pool without paying membership dues for the full YMCA facility).

§ 395-5Fees.

[Amended 11-26-1974 by Ord. No. 74-36; 2-24-1977 by Ord. No. 77-8; 2-23-1978 by Ord. No. 78-2; 3-8-1979 by Ord. No. 79-1; 6-28-1979 by Ord. No. 79-27; 11-8-1979 by Ord. No. 79-39; 3-25-1980 by Ord. No. 80-4; 6-24-1980 by Ord. No. 80-17; 2-24-1981 by Ord. No. 81-3; 12-28-1982 by Ord. No. 82-32; 2-28-1984 by Ord. No. 84-4; 4-9-1985 by Ord. No. 85-9; 3-25-1986 by Ord. No. 86-8; 4-21-1987 by Ord. No. 87-8; 4-12-1988 by Ord. No. 88-9; 3-28-1989 by Ord. No. 89-13; 2-27-1990 by Ord. No. 90-5]

A. Season rates.

[Amended 3-26-2002 by Ord. No. 02-7; 3-25-2003 by Ord. No. 03-9; 4-28-2009 by Ord. No. 09-9; 4-21-2015 by Ord. No. 15-11]

2015 RATES	MONTHLY RATES PARAMUS RESIDENTS ONLY July <u>or</u> August	SEASONAL RATES PARAMUS RESIDENTS ONLY	MONTHLY RATES OUT OF TOWN July <u>or</u> August	SEASONAL OUT OF TOWN RATES
INDIVIDUAL	\$175.00	\$225.00	\$425.00	\$525.00
FAMILY OF 2	\$200.00	\$275.00	\$450.00	\$625.00
FAMILY OF 3	\$225.00	\$325.00	\$475.00	\$675.00
FAMILY OF 4	\$250.00	\$375.00	\$500.00	\$725.00
FAMILY OF 5	\$275.00	\$425.00	\$525.00	\$775.00
FAMILY OF 6	\$300.00	\$475.00	\$550.00	\$825.00
FAMILY OF 7	\$325.00	\$525.00	\$575.00	\$925.00
FAMILY OF 8	\$350.00	\$575.00	\$600.00	\$975.00
AFTER A FAMILY OF 8 EACH ADDITIONAL PERSON	\$25.00	\$50.00	\$25.00	\$50.00
SENIOR CITIZEN (60) YEARS OLD	\$75.00	\$110.00	\$200.00	\$225.00

Paramus Grandparent-Out of Town Grandchildren: under the age of 13 years old. Resident membership monthly or seasonal rate will apply. A maximum of 2 grandchildren (grandparent must be at the pool with the grandchild).

Out-of-town without a sponsor: without a qualifying sponsor applicants will incur an additional surcharge of \$100 for an individual and \$200 for a family membership in addition to your membership fee.



520 Hoes Lane Piscataway NJ ymcaofmewsa.org

The YMCA at The Piscataway Community Center

NON-RESIDENT MEMBERSHIP OPTIONS

Membership Type	Monthly Credit	One-Time	
	Card Draft	Joiner's Fee	
7 th Grade Student	FREE		
Must show valid school ID	Sept. – June	-	
Teen (Ages 13-17)	\$21	\$39	
Young Adult (Ages 18-29)	\$30	\$39	
Adult (Ages 30-62)	\$42	\$59	
Senior (Ages 62+)	\$30	\$39	
Senior Couple (Ages 62+)	\$48	\$59	
living in the same household	T -	Ψ00	
Family	\$78	\$59	
Up to 2 adults and 4 children with proof of residence	+ +•	+	
Family Plus	\$90	\$59	
Up to 4 adults and 4 children with proof of residence	400	400	
2 Adults (no children)	\$78	\$59	
Senior + Children	\$42	\$59	
One senior (62+) and up to 4 children (ages 12 and under)	φ42	φυσ	
Senior Couple + Children	\$60 \$59		
Two seniors (62+) and up to 4 children (ages 12 and under)	φου	a 09	
Program Child (Ages 0-5)	\$72/year	-	
Required for participation in Programs without a Family membership			
Program Youth (Ages 6-12) Required for participation in Programs without a Family membership	\$108/year	-	
Spray Park Adult for non-members			
	\$10/day		
(Memorial Day-Labor Day)	φ10/uay	-	
(Ages 18+)			
Spray Park Child for non-members	* * • * •		
(Memorial Day-Labor Day)	\$13/day		
(Ages 2-17)			
Spray Park Family for non-members			
(Memorial Day-Labor Day)	\$35/day	-	

Daily Guest Pass Rates			
Age With Member Without Member			
Adult (18-61)	\$15	\$20	
Child (2-12)	\$5	Must be accompanied by a member	
Teen(13-17)	\$10	Must be accompanied by a member	
Senior (62+)	\$10	\$15	
Spray Park Adult (13+)	\$10	n/a	
Spray Park Child (2-12)	\$13	n/a	

Daily Guest Pass Rates			
Age	With Member	Without Member	
Adult (18-61)	\$10	\$15	
Child (2-12)	\$5	Must be accompanied by a member	
Teen(13-17)	\$8	Must be accompanied by a member	
Senior (62+)	\$8	\$15	
Spray Park Adult (18+)	\$7	n/a	
Spray Park Child (2-17)	\$10	n/a	



520 Hoes Lane Piscataway NJ ymcaofmewsa.org

he The YMCA at The Piscataway Community Center

RESIDENT MEMBERSHIP OPTIONS			
Membership Type	Monthly Credit Card Draft	One-Time Joiner's Fee	
7 th Grade Student Must show valid school ID	FREE Sept. – June	-	
Teen (Ages 13-17)	\$18	\$29	
Young Adult (Ages 18-29)	\$25	\$29	
Adult (Ages 30-62)	\$35	\$49	
Senior (Ages 62+)	\$25	\$29	
Senior Couple (Ages 62+) living in the same household	\$40	\$49	
Family Up to 2 adults and 4 children with proof of residence	\$65	\$49	
Family Plus Up to 4 adults and 4 children with proof of residence	\$75	\$49	
2 Adults (no children)	\$65	\$49	
Senior + Children One senior (62+) and up to 4 children (ages 12 and under)	\$35	\$49	
Senior Couple + Children Two seniors (62+) and up to 4 children (ages 12 and under)	\$50	\$49	
Program Child (Ages 0-5) Required for participation in Programs without a Family membership	\$60/year	-	
Program Youth (Ages 6-12) Required for participation in Programs without a Family membership	\$90/year	-	
Spray Park Adult for non-members (Memorial Day-Labor Day) (Ages 18+)	\$7/day	-	
Spray Park Child for non-members (Memorial Day-Labor Day) (Ages 2-17)	\$10/day	-	
Spray Park Family for non-members (Memorial Day-Labor Day) (Up to 5 members in family)	\$25/day	-	

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