

Housing and Demographics of the South Street Seaport

Final Report

Elizabeth Castillo, Jingjing Ge, Yichen Guo, Jackson Kao, Kevin Kim

NYU Tandon School of Engineering

Dec. 11th, 2019

## **Abstract**

In this report, a feasible waterfront extension project is proposed based on the analysis of the South Street Seaport condition and problem during research and site visits. Other physical or virtual plans are also proposed in the report as beneficial add-ons to the waterfront extension project. All the plans are aimed to increase the variety of the visitors who come to the South Street Seaport District. These variety includes but not limited to: age, gender, social background, income level, purpose of the visit. The plans will benefit the South Street Seaport economically, environmentally and at the same time increase the level of belonging, safety, and joy of the visitors.

## **Introduction (Jackson)**

A brief stroll through the neighborhood of Seaport or even a browse through their website reveals that there is something very particular about the demographic they seem to be attracting. Business folk in suits drink at outdoor bars and tourists dip in and out of the high-end retail stores. The colorful Seaport website largely reinforces these aspects of the neighborhood, advertising their flashy neighborhood events, restaurants, and clothing brands.

According to NYC planning, the current demographic within Seaport is comprised of 5,518 people, around 80% of that population being over 21 years old. The majority of the Seaport population is white, around 57%. 42% of the households in Seaport are family households, compared to New York's average of 59%. By occupation, 70% of the working population in Seaport work at blue collar jobs: Management, business, science, and arts. 85% of the workers earn some kind of private wage. The mean household income in Seaport is 141,408.

To put Seaport in perspective, we juxtaposed the Seaport demographic to another demographic, a neighborhood community bordering the east side of Seaport called Two Bridges. In particular, we focused on a sect of the neighborhood which holds a housing project called the Smith Houses, a sect we will be focusing on throughout this proposal. The neighborhood is made up of 4,869 people, evenly spread in terms of age. Racially, this area is majority latino and asian residents, with less than a percentage of white residents. Around 46% of legal workers in this demographic work in the service industry, compared to Seaport's 8%. The average household income in this neighborhood is \$27,181.

Seaport is clearly quite affluent compared with other neighborhoods in New York, the mean income being about \$50,000 greater than New York's average. It would seem that the neighborhood itself is currently working to attract a demographic that matches this demographic, and ultimately marginalizes the more underserved demographics that could thrive within their borders. The limited infrastructure surrounding Seaport exacerbates this issue, making the neighborhood highly inaccessible to other areas.

Within this broad issue of demographic, there are two primary points that must be addressed: access and attractors. These concerns have a significant impact in homogenizing the demographic of Seaport, and our aim is to provide better access to give more underserved groups within the population.

During the day, Seaport can be quite bustling, as we recently observed on a Saturday afternoon. The high-end restaurants are largely full, and shoppers browse the retail stores. At night, however, the neighborhood goes to sleep, and empties out. During our site visits, we've noticed a lack of adequate lighting, especially around Seaport's access points to the east.

Firstly, we have observed that there are many residential areas just outside the boundaries of the Seaport neighborhood that are largely excluded. The Smith Houses for example, are a large public housing complex just beyond the Brooklyn Bridge, to the east. Currently, there is incredibly minimal access to and from the surrounding areas, especially to the east of Seaport.

The Brooklyn Bridge separates Seaport from the residential areas like Smith House. What could be an access point under the bridge is currently a mass of utility vehicles, guarded by a large fence. It is a dingy, underlit area that becomes especially unfriendly at night. Dark streets and underpasses are the only access points to areas like the Smith Houses, which have equally

poor lighting. At night, these access points are subsequently unsafe for pedestrians. Our approach to this issue involves sprucing up these areas to provide more ample and safe access to the Seaport neighborhood. It is crucial that a wider demographic has friendly access to Seaport if the demographic is to make a shift.

The second aspect of our proposal addresses the current bias in neighborhood attractors. The Seaport District is heavily geared towards their extensive, high-end retail. One of the first promotions you see on the Seaport website invites you to have a holiday dinner at the Fulton. The Fulton's holiday special dinners are served on Christmas Eve, Christmas Day, and New Years Eve, and price tag of \$180, \$108, and \$168 per person, respectively.

Another highlighted page on their website urges the user to "shop the latest trends", touting luxury brands like 10 Corso Como and Scotch & Soda. The marketing of the Seaport website perpetuates the more affluent demographic that primarily frequents the neighborhood, and clearly a shift must be made in the actual neighborhood attractors themselves. Seaport does occasionally offer community events where anyone is invited, but overall the day to day attractors do not promote a socioeconomically diverse community. Focusing on luxury retail like they do, Seaport is effectively discouraging lower income demographics from enjoying the neighborhood, and therefore loses diversity.

Based on our assessment of the current conditions, our goals is centered around diversifying the population that visits Seaport. This means making the areas around Seaport more walkable and navigable, but more importantly, making Seaport more physically accessible to communities like the Smith Houses. It also involves tweaking the neighborhood attractors within Seaport to make the area more affordable, and thus welcoming to a broader demographic.

## Future Proposals

### Waterfront Extension Project (Jingjing and Yichen)

The first part is to build an extended waterfront park which connects the public housing apartments (Alfred E. Smith House) on the opposite (east) side of the bridge to the South Street Seaport. The plan also addresses the walkability and accessibility of pedestrians and bikers who wish to go to the South Street Seaport along the waterfront. Three car parking lots are planned and one bike parking lot before entering Pier 17. A zebra cross that links the park to the vacant Peck Slip allows people to access the Seaport commercial district easily. The extended park contains open green spaces for people to rest and socialize, an upgraded bikeway extended from the parking lot (one on South Street) of the public housing to the Pier 17 deck. The park also contains a walkway along the waterfront in the park that leads pedestrians from the public housing apartment to the Pier 17. Curved walkways also increase the walkability of pedestrians and seatings are provided along the walkways. Two large social event places are located in the



*Figure 2.1: West view of the water extension project*

park, one is an indoor venue ( can be used to have South Street Seaport exhibitions) and the other is an outdoor venue for outdoor events and activities.

The second part is to make the underbridge areas cleaner, safer, greener, and more organized. The main idea is to change the underbridge parking lot and parking spaces into greenbelts with trees and low bushes planted. Places for construction and repair service may remain in the original place with smaller areas occupied and with trees and low bushes surrounded.

### **Targeted problems and goals**

For this proposal, there are several problems that are specific targeted to address. The first problem that this proposal is going to target is the limited access to the South Street Seaport from surrounding communities, especially people who lived in the housing at the opposite(east) side of the Brooklyn bridge. Because of the existence of the Brooklyn bridge, the parking lots and large containers under it blocked the shortest way that people can go from the other side of the bridge to the South Street Seaport, the waterfront and piers. There is no direct path from there to the seaport as most people need to walk all the way down to the pearl street or to the south street in order to find the way. As figure 2.2 shown, the intersection of South Street and the housing area is too disordered and dark for people to walk both during the daytime and at night with no specific crosswalk or path created for people to pass. There is an obvious boundary between two areas which can be better connected to a whole community.



*Figure 2.2: Disordered intersection between the seaport and the Smith houses*

After noticing the problem of access, it is important to consider the demographic and housing in the area. As mentioned in the introduction, one of the major surrounding housing projects is the public housing built by New York City Housing Authority, which is called Governor Alfred E. Smith Houses (figure 2.3). There are 12 buildings, and each has 17 stories tall. According to American Community Survey (ACS), at that area, there is a total of 1931 apartment units with 98.6% occupancy. Population there is 5171 with 27.8% of them over 65 years old and 15.8% under 18 years old. Elder people make up a large proportion of the community. Most of them have household income lower than \$25,000, which is relatively low (figure 2.4). However, the target customers for South Street Seaport tend to be median to high income level according to the consumption of restaurants and stores there. Therefore, in order to address the problem, the first goal of the proposal is to find the best way to let people who lived in the public housing to engage with the seaport by creating a better access under the bridge that

is connected to the waterfront with a more greenery and public park. It needs to be a more open space that will welcome people of diverse ages and income levels.



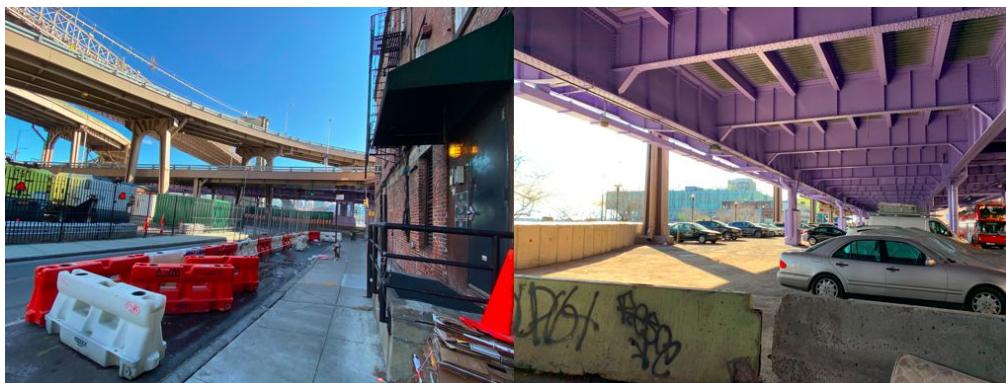
*Figure 2.3: Alfred Smith houses*



*Figure 2.4: Smith houses' income distribution*

The second problem that the proposal is going to target is the disorganized area under the highway FDR drive and Brooklyn bridge between the South Street Seaport and the piers. The area under the highway is basically underused and occupied by large containers and confusing parking lots (figure 2.5), which makes the path from the south street seaport to the piers really confusing for both local people and tourists. This leads to the problem of unlivable and unwalkable environment for the people live in the surrounding because the cars and trucks parked in that area blocked most of the views and roads toward the waterfront, creating an unnecessary separation between the seaport and the piers. Most of the space under the FDR drive is underused with a small portion of it being used for parking lots and places for constructions

storages. We've noticed that many people would choose to ride bicycles or walk along the waterfront, about one person per two minutes. There is a certain necessity for pedestrians and cyclist to get there. However, the disordered area also leads to the problem that the walkway and bikeway at the waterfront need to make a detour (figure 2.6) every time passing through these areas. Due to the lack of light under the bridge, safety might be a concern when walking or biking under this area, leading to inconvenience for local people. Therefore, in order to address the problem, the second goal of the proposal is to clean the area under the bridge with greeneries to make a more organized path of high walkability to the waterfront and piers for both local people and tourists. The removed parking areas can be put on the three designated area, two of them near Alfred E. Smith Houses, and one of them near Peck slip and Beekman street.



*Figure 2.5: Disorganized areas under the Brooklyn bridge and FDR drive*



*Figure 2.6: Detour and awkward path from seaport to piers*

The third problem is a more general issue with the engagement of local people with the South Street Seaport. Although many people would come to the district during the weekends and holidays, most of them are tourists or people who are interested in the piers. There are less people coming to the area during weekdays or at night as well as less social activities or interactions between local people who live in the surrounding and the waterfront. Hence, the third goal of this proposal is to create an extended greenery park for people, especially locals, to walk, bike and enjoy the beautiful waterfront near their home. Overall, this proposal of waterfront extension project aims to celebrate the unique ecological, cultural, and innovative contexts of the site's environment and history with both local people and tourists.



Figure 2.7: Current condition of South Street Seaport

## Inspiration:

The inspiration of the framework of the plan came from the design of a waterfront park in Shanghai: the Shanghai Expo Cultural Park. The park was built after the 2010 Shanghai World Expo ended on the site of the demolished pavilions. The park is aligned along an ecological “spine” on which the landscape framework was built upon. The framework links the riverfront and the city (figure 2.8 )

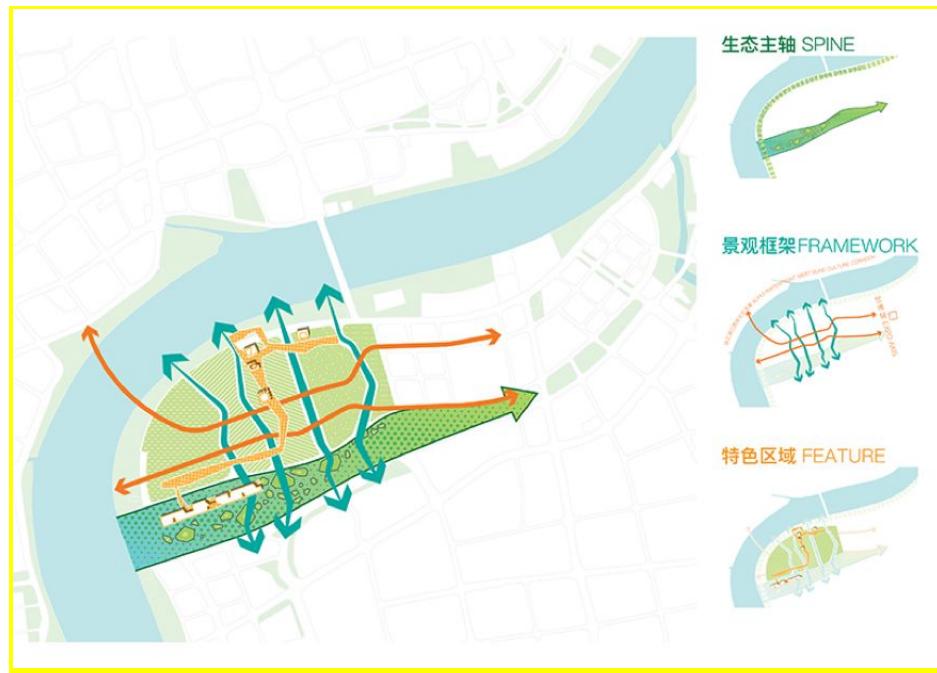


Figure 2.8: “Spine”of Shanghai EXPO Cultural Park

According to the designer, Sasaki, the park also targets multiple user groups with a wide range of activities and reflects a culture of equity and openness. The Shanghai Expo Cultural Park also deal with soil and groundwater remediation, storm water management and sewage treatment by integrating a series of phytoremediation strategies. A pedestrian and bicycle tunnel under the river linked the two sides of the river where cultural destinations (for example, China Pavilion, Long Museum) are located. In the Shanghai Expo Cultural Park, there are showrooms,

preserved pavilion, and an innovative living greenhouse. All of the features combined together form a riverfront park which integrates and demonstrate the culture of Shanghai and other countries. The park is currently the largest waterfront park in Shanghai's city center, attracting a lot of tourists and local residents, leading them around the important sites along the waterfront and the inner-city area.

The waterfront extension project covers 430575 square feet (around 4 hectare), while the Shanghai Expo Cultural Park covers 189 hectares, more than 40 times larger than the waterfront project. Thus, there will not be enough space for a lot of exhibitions and cultural activities. The plan will focus more on the walkability, connectivity, landscaping, sustainability and accessibility of the park and surrounding community. The extension project also takes future flood hazardous into consideration. The park is built on a landfilled levee and will act to regulate the water level.

## **Detailed plan**

### **- Pedestrian access**

As noted in the targeted problems, there were limited amount of well-planned passenger access to the South Street Seaport. The ways of access to the Seaport district and the park in this plan are mainly cars, bikes and walking. This part is about the renovated and added zebra crosses under the bridge that allow pedestrians to travel between the waterfront area and Seaport commercial area safely and easily. The first and the second pedestrian walk are near one another. One reason is to distribute the flow of entering pedestrian and bikers into the park, the other

reason is that people who park cars can follow the path directly to the east entrance of the park and retrieve their cars back easily without taking extra routes.

The first pedestrian access from the parking lot located at the exit of the parking lot (one on South Street) of the Alfred E. Smith House (figure 2.9). It is an under bridge walk way that people can have access to the east entrance of the park from the parking lot directly. A traffic light and zebra cross or a stop sign (not drawn in figure) will be placed at the intersection with the South Street for safety consideration.

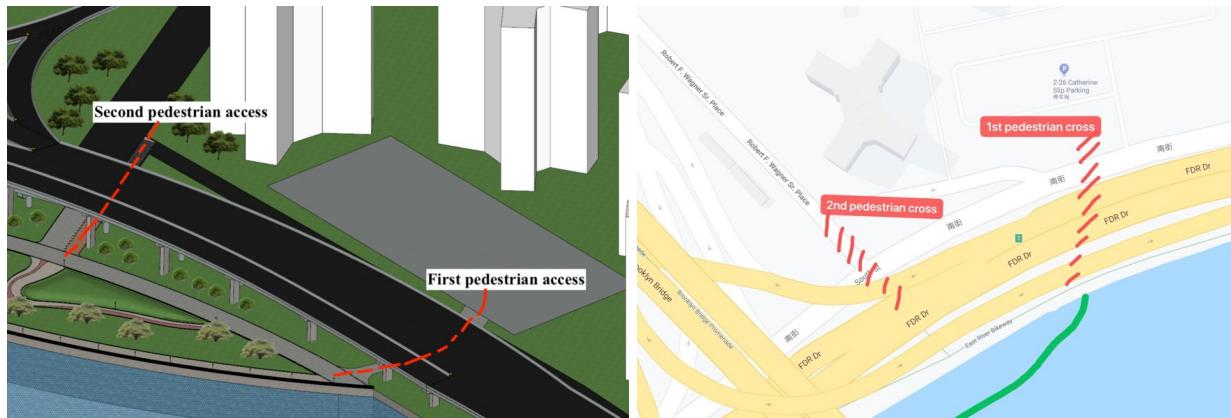
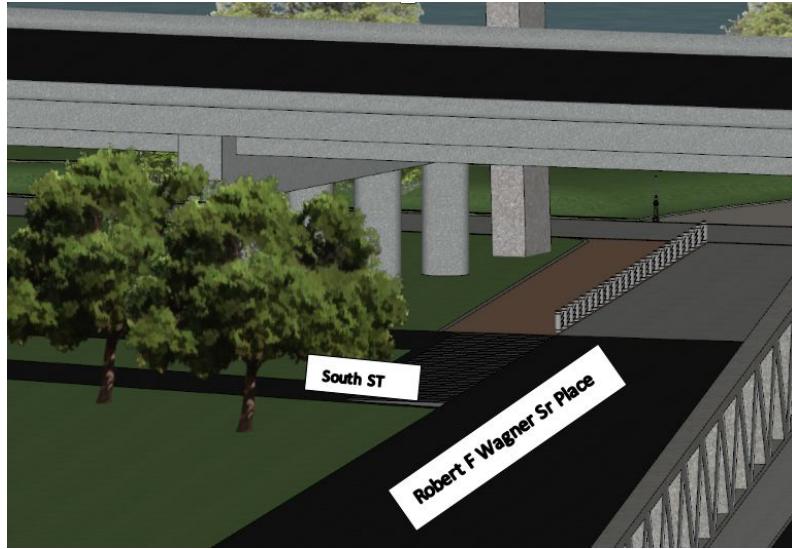


Figure 2.9: 1st and 2nd pedestrian access

Figure 2.10: 1st and 2nd pedestrian access on map

The second pedestrian access (zebra cross) is located on the side of the public housing apartment (figure 2.9) at the intersection of Robert F Wagner Sr Place and South Street. The zebra cross extends all the way to the bikeway along South Street and the walkway in the park (figure ). For the safety of the pedestrian, a barrier is placed where the bikers and walkers will meet before separating apart into corresponding lanes (figure 2.11). A traffic light will also be placed (not shown in figure) for passenger safety.

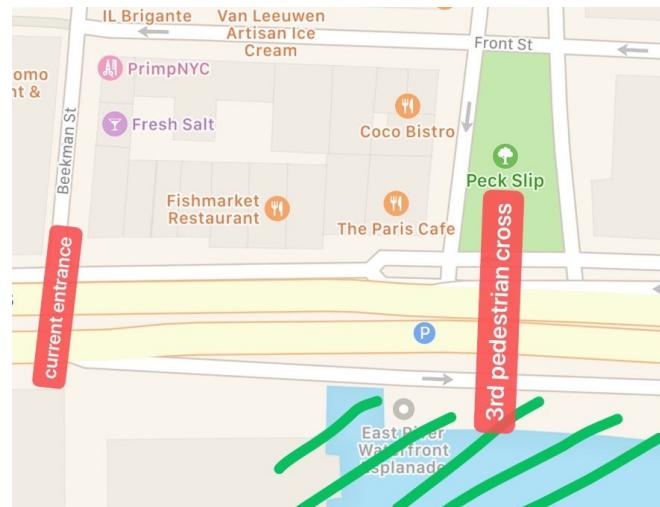


*Figure 2.11: Barrier between walkway and bike lane*

The third pedestrian crossing (figure 2.12 ) links the park directly to the vacant Peck Slip (which may be planned to have some local market fairs or hold events). A traffic light and zebra cross or a stop sign will also be added for pedestrian safety. This pedestrian crossing will serve as another major link from the Pier and the park to the South Street Seaport's commercial district beside the current one on Beekman Street.



*Figure 2.12: 3rd pedestrian access*



*Figure 2.13: Current and 3rd pedestrian access on map*

## - Parking lots

The current car parking lot (Central Parking) which is located within the South Street Seaport's commercial area on Pearl Street is disorganized and poorly paved and is relatively expensive for regular people to afford (figure 2.14). Another parking lot located at Front Street and John Street is more used for customers of the Marriott Hotel. The parking areas along Robert F. Wagner Sr. Place in the Alfred E. Smith House are undefined. People parked their cars in the three basketball courts and along the street side (figure 2.15, 2.16). Another parking lot is located on the South Street in the Alfred E. Smith House area.

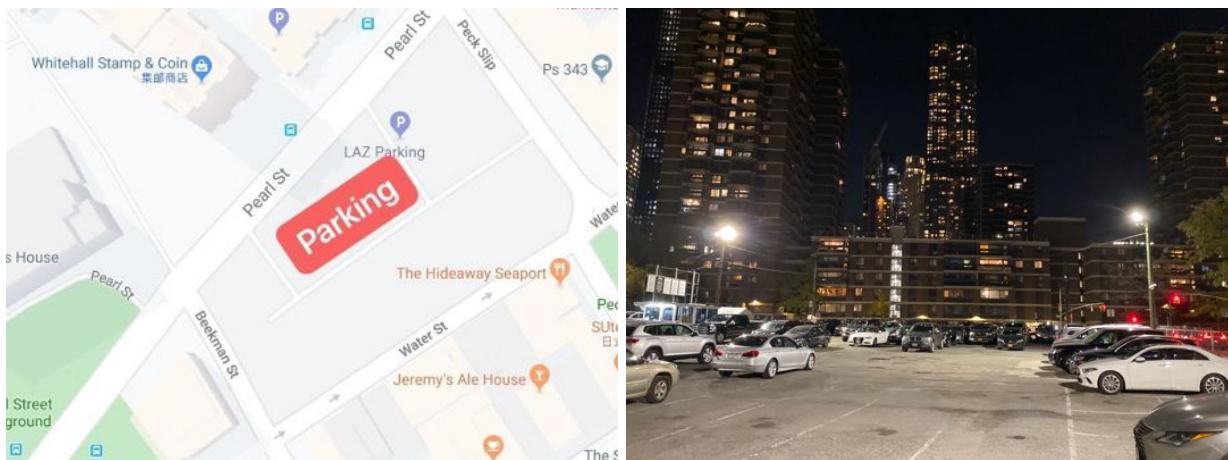


Figure 2.14: Current parking lot in seaport

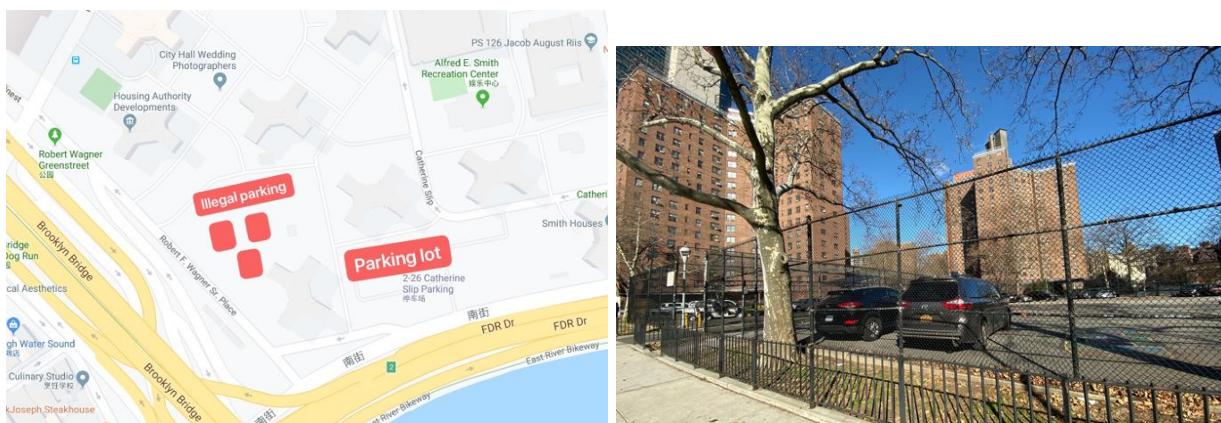


Figure 2.15: Current parking situation in the Alfred E. Smith House area



*Figure 2.16: Current parking situation in the Alfred E. Smith House area*

Three car parking lots are planned in the extension project (figure 2.17), which can hold 964 cars. Two of them already exist and one is added according to the site visit. No formal place was observed to park people's bike in the seaport area. Another bike park is planned at the end of the bike way under the bridge along South Street between Beekman Street and Peck Slip. This allowed bikers to lock their bikes right between the seaport commercial district and the Pier 17.



*Figure 2.17:Planned parking lots*

Two of the original car parking lot will be newly paved and use stacked parking system for cheaper and more organized parking, which also allows to park more cars within the same area. Parking lot 3 occupies around 4558 square meters (1.13 acre) and can hold around 320 cars if two-level stacked parking system is used. Parking lot 2 used around 6454 square meters (around 1.6 acre) and can accommodate around 454 cars is two-level stacked parking system is used. The price for the seaport parking lot should be lowered. The parking lot on the South Street in the Alfred E. Smith House area and the new parking lot should have relatively same parking fees. The newly built parking lot is planned beside the basketball courts with the stacked parking system implemented (figure 2.18). The new parking lot (Parking lot 1) occupied around 2700 square meters (around 0.672 acre), which can hold around 190 cars if using 2-level stacked parking system. The new bike park occupied 192 square meters (around 0.05 acre) and is expected to hold 60 bikes. The bike park will be open to the biker for free for the first few months of implementation to attract more visitors to the seaport area and encourage more people to bike here instead of driving.

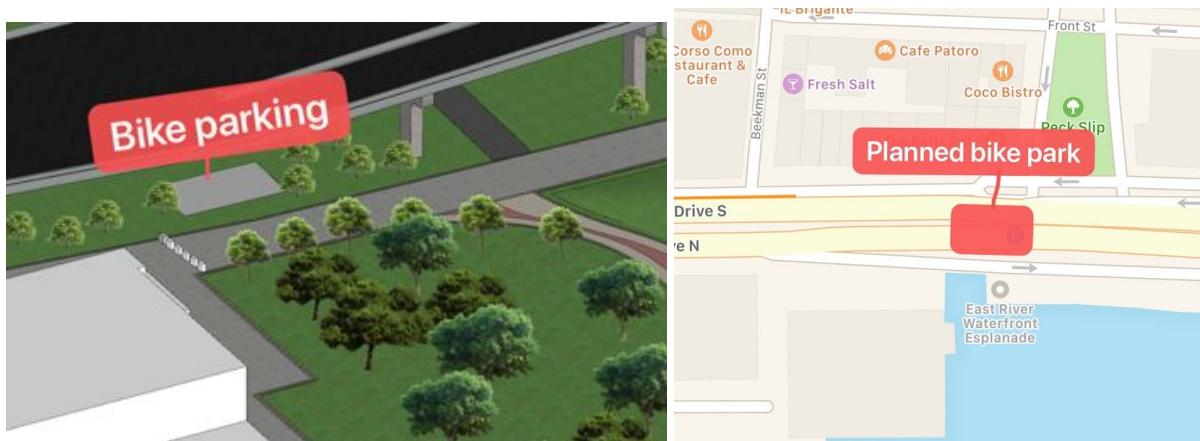


Figure 2.18: Planned bike parking lot

- **Under-highway clearance**

As the second part proposed the new parking lots, the third part of the proposal targets at the second goal of re-planning the disorganized area under the highway in order to bring more local community to the seaport area for more social interactions. There are two areas that need to be changes; one is under the FDR drive, and another is under the Brooklyn bridge (figure 2.5). The first area under the Brooklyn bridge is bounded by the Dover Street, South Street and Pearl street, which blocked the path from the housing projects at the opposite side of the bridge to the South Street Seaport (figure 2.20). Total area would be near 70000 square feet. The parking lots originally occupied whole area under the bridge will be shrink to 1/3 of the original space closer to the pearl street. The remaining area which is closer to the south street will be replaced by a public area with greenery and simple recreation facilities such as bench, physical exercising facilities that can reduce the chaos under the bridge by providing green elements. This can not only freshen the air but also increase a sense of community that connects areas at two sides of the bridges. A referenced example is shown in figure 2.19. People who live in South Street Seaport as well as the public housing will be able to use this area under the bridge both as a cross path and also as gathering spaces.



*Figure 2.19 John Whitton Bridge Open Space (Landezine)*

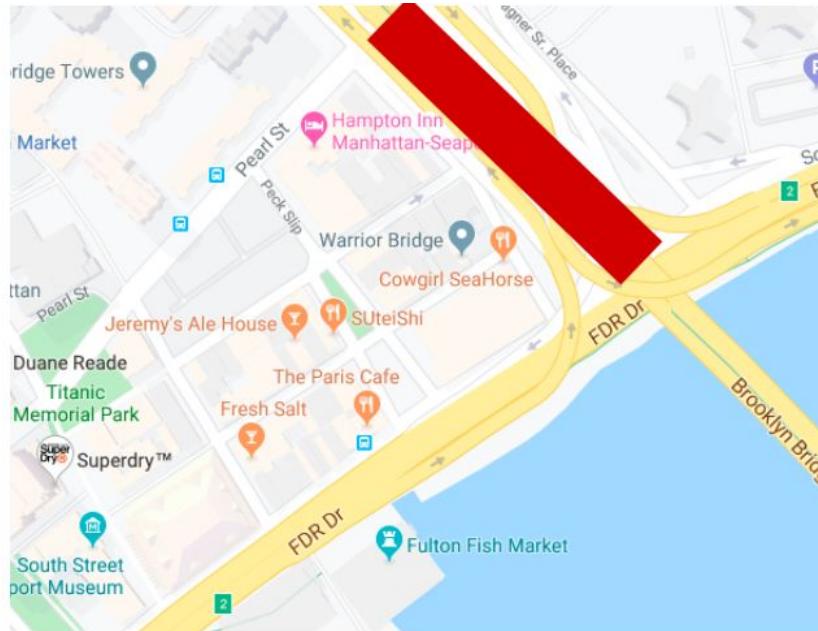


Figure 2.20: Area needed to change under the Brooklyn bridge

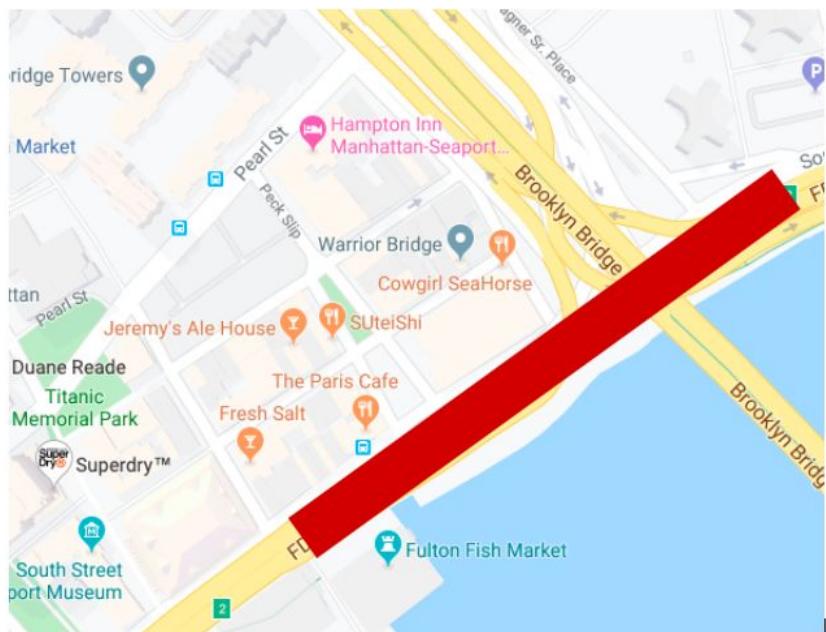


Figure 2.21: Area needed to change under the FDR drive

The second area proposed to change is the area under the FDR drive along South Street bounded by Robert F. Wagner Sr. Place and all the way to the pier 17 near peck slip (figure

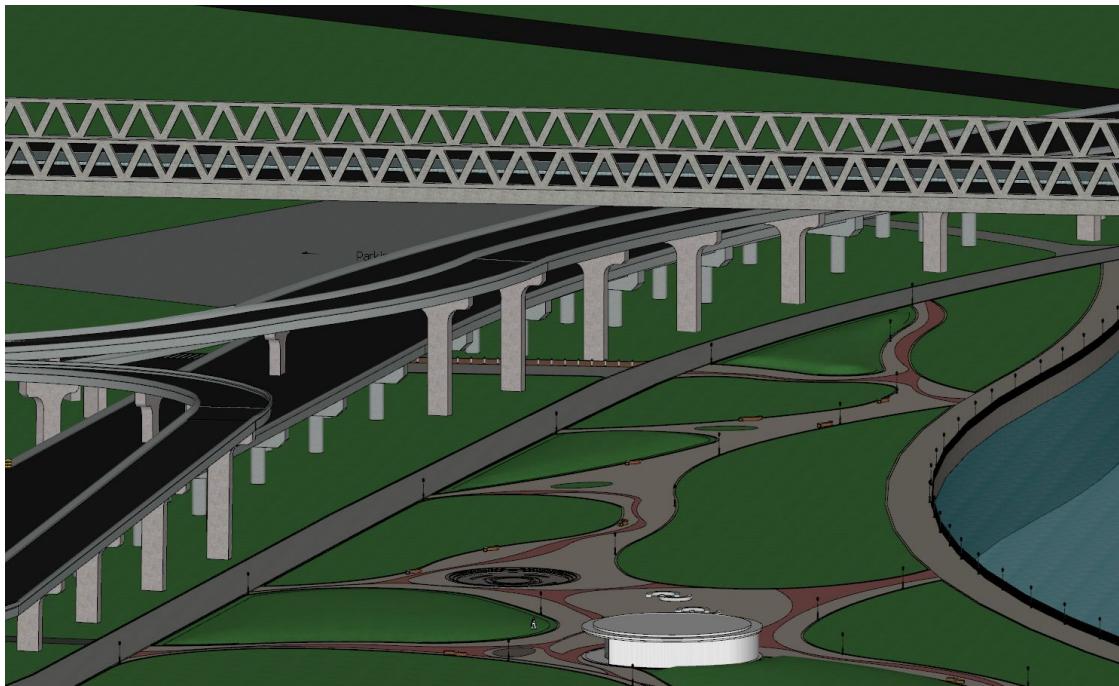
2.21). The area targeted is about 76000 square feet. The original area of parking lots will be replaced by a large area of greenery that connected to the existing east river bikeways and the proposed extended waterfront park discussed in part four. The area under it acted as transition and connection for the nearby community to the waterfront area for a better living and recreational experience. Some seating edges will be added under the highway to create a gathering space for social interactions as well as opportunities for informal seating and playing area. By putting a bikeway beside the area under the bridge, people are able to enjoy the waterfront view at the same time they are cycling. Figure 2.22 shows the expected model created for this area under the bridge.



*Figure 2.22: Model of under-highway greenery*

For both areas under the highway and bridges, features lighting infrastructures are to be added at the platform and bridge abutments in order to make the space more attractive and safety

at night. As mentioned in part 1 of the plan, clear pedestrian and cycle route through the South Street Seaport and the Smith Houses will be directed under the highway (figure 2.23).



*Figure 2.23: Bikeway under the highway*

- **Extended waterfront park**

The final part of the proposal is to create an extended waterfront park based on land reclamation. The additional space added for the park is elevated to +19.0 feet NAVD88 for the purpose of the flood control. The total extended waterfront park occupies area of 430575 square feet. It is extended from Robert F. Wagner Sr. Place to the Pier 17 along the South Street and East River bikeway (figure 2.24). The land reclamation will be 394207 square feet, excluding the existing bikeway with area of 36368 square feet. The main purpose of this extended waterfront park is to create an ecological and cultural recreational place for people to enjoy the waterfront and bridge view. The park's targeted people are not only tourists, but also local people in nearby community who are willing to take a walk along the river. The park is also pet friendly, which

allows people to walk with their pets. Figures 2.24, 2.25 and 2.26 below shows the 3D model of the expected park.



Figure 2.24: 3D Model of the location and area of extended waterfront park

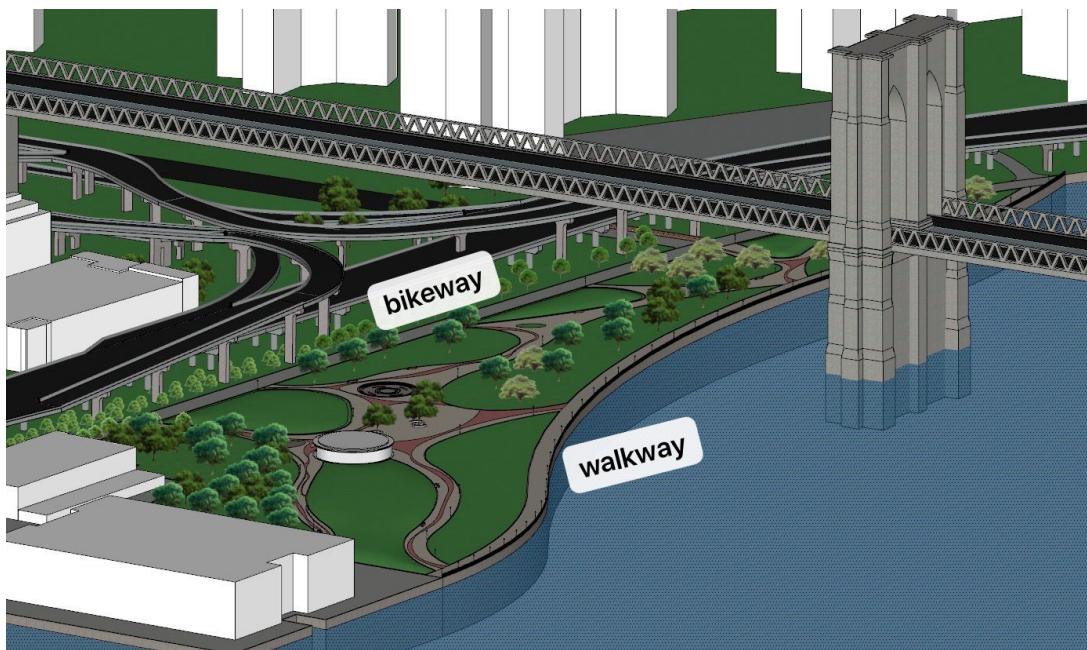


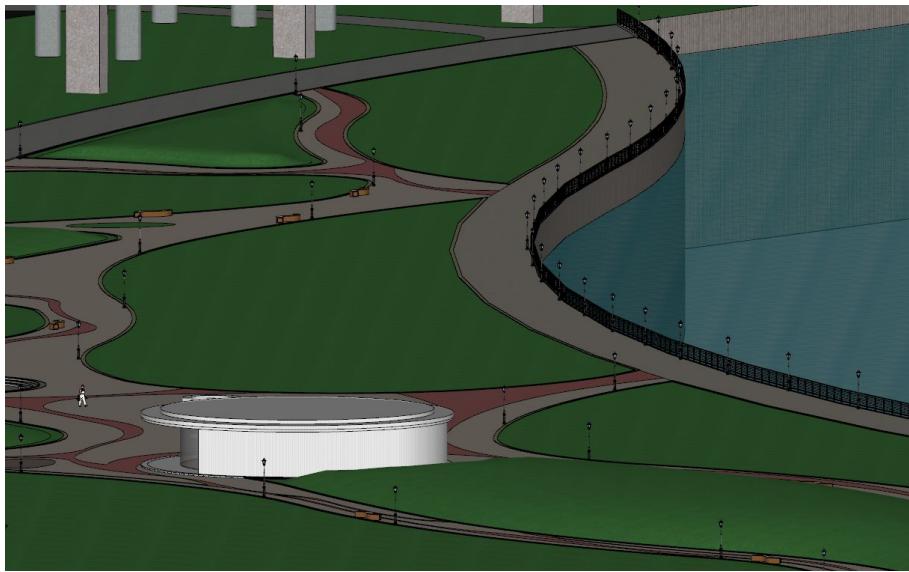
Figure 2.25: 3D Model of the extended waterfront park - Side view



*Figure 2.26: 3D Model of the extended waterfront park - Top view (day and night)*

Some key elements within this space include:

- An occupiable zone along the water's edge with a large area of greenery that has clear walkable routes inside the greenery for people to visit. The routes will connect to two main resting place/shed at the center of the park for people to sit and gather.



*Figure 2.27: Resting area (white building) and the walkway(both in red and grey)*

- A walkway along the water's edge that is started from the end of the Robert F. Wagner Sr. Place intersected with the south street to the pier 17. It is a wide independent pedestrian friendly road separated from the greenery for people to walk and exercising just beside the river.



*Figure 2.28: Rendered walkway near the river edge at night*

- Signs and descriptions about South Street Seaport or the history of the lower Manhattan on several designated boards along the walkway. In order to create a both cultural and ecological park and attract tourists, it is necessary and meaningful to put some descriptions about the historical landmark near the waterfront park such as the history about the peck slip, Fulton fish market, South Street Seaport, the Brooklyn bridge, pier 17 and so on.
- A bikeway that is renewed from the existing East River bikeway. The redesigned bikeway starts from Robert F. Wagner Sr. Place and ends at the pier 17 with a planned parking lots for bikes such as Citi bikes. As the area under the highway is cleaned to be an organized area connected to the park, the bikeway will be paved and designed to be a straight route with no detour and barriers from the parking lots or the construction work under the FDR drive.
- Feature lighting in the parks and along the walkways and bikeways to make the whole area more attractive and safer at night.
- Material used for the project may include concrete walking routes and synthetic tracks that is friendly and comfortable for people to walk.





*Figure 2.29: Rendered depark and the walkway in detail with light at night*

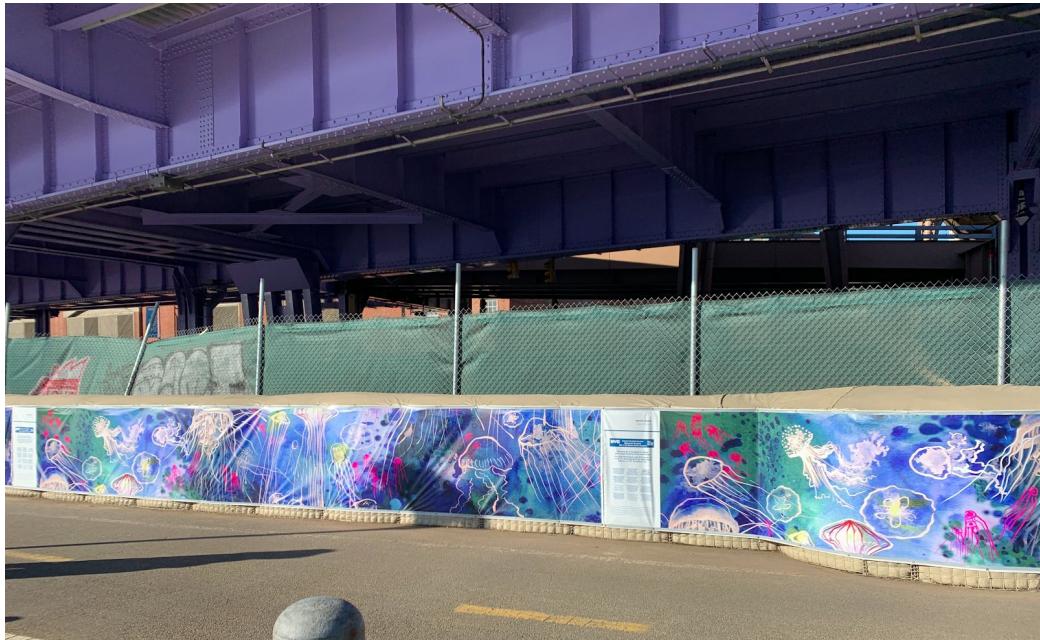
Together, the park will become a destination for multiple user groups with a variety of activities, creating a culture of equity and openness. More importantly, the park aims to make the waterfront not only a place for tourists but also a nearby place for nearby communities and local people to enjoy every day.

## **Implementation**

### **- Feasibility**

The feasibility of the plan is considered in three aspects: technical, environmental and financial. For the technical part, the first thing needed to be discussed is the structural consideration of the extended waterfront park as a passive flood protection solution. The inspiration comes from the “Southern Manhattan Coastal Protection Study” when it chooses the 500’ land reclamation as the best flood protection solution. The extended waterfront park with the land reclamation can act as the multiple-purpose levee with slope and elevation to +19.0 feet

NAVD88 that is suitable for the flood protection. It is able to protect the flooding due to the reason that MPL is less likely to experience mechanical failure and structural failure than active solutions such as flood walls. According to the study, in order to make the land reclamation feasible and build out from the edge of the city, “either a steel sheet pile cellular cofferdam system or pre-cast concrete cofferdam sections would be utilized to construct a perimeter wall that retains the proposed infill.” With the perimeter wall, the structural infill is assumed to use clean, well-graded sand fill. Before the park is built, the original interim flood protection measure program conducted by the NYC government would be remained(figure 2.30) to reduce the storm surge flooding.



*Figure 2.30: Interim flood protection measure program near waterfront*

The second part that need to consider for the technical part is the transportation around the area, especially the FDR drive. As the plan is going to change the area under the FDR drive, it is necessary to analyze the parking lots under it. Also, the extended waterfront park as an MPL may

have some typologies that need the highway to make some reconfiguration. More research can be done on the traffic study around the area for people to go there. Other technical aspects include ferry at the pier, utilities like water systems, lighting and paving also need to be discussed.

For the environmental aspect of the feasibility, it is important to protect the ecological environment of the coastal area. The land reclamation cannot disrupt the aquatic ecological system, as well as mitigate the impact on any other natural resources. In reference to the “Southern Manhattan Coastal Protection Study”, the mitigation measures and details need to be reviewed and consulted with local interest group and federal (e.g., U.S. Army Corps of Engineers, National Marine Fisheries Service, U.S. Fish and Wildlife Service, and U.S. Environmental Protection Agency), state (e.g., New York State Department of Environmental Conservation, New York State Department of State), and City agencies (e.g., DCP).

For the financial aspects of the feasibility of the plan, projects’ costs and revenues need to be considered. The cost will include the cost of onsite infrastructure creation, reconfiguration and mitigation, open space operating, flood protection and so on. Revenues might be generated from new tourism development and ongoing property taxes. Project financing may depend on the magnitude of the cost and the revenue predicted, the availability of the funds and the preference of the decision makers. The cost can be financed through city, state, or federal government budget, revenue bonds tied to on-site development and private developer.

- **Planning, review and permitting**

Before the implementation, there need a refined planning and design of the plan including the basic infrastructures and open spaces needed to be created, potential changes of the FDR drive and area under it, natural extend of the flood protection, and mitigation of negative impacts. Then, as the plan needs to build an extended waterfront park, there is a need to prepare an Environmental Impact Statement to acquire state or federal permits, which can be National Environmental Policy Act (“NEPA”) or the New York State Environmental Quality Review Act (“SEQRA”) to consider the environmental impact of the project. Lead federal agency also need to be selected to require permits.

### **Stakeholder engagement**

During the process of the implementation of the plan, one of the most important things to do is the stakeholder engagement that all related agencies need to acknowledge what is happening from beginning to the end of the plan. Other than New York City planning and government, for the transportation part of the plan, it is important to consult the New York City Department of Transportation about the FDR drive and areas under it. For the extended waterfront park, the egress easement agreement needs to be clarified by related agencies and government in lower Manhattan whether the place is restricted for any reason. The technical part needs to consult with engineers such as United States Army Corps of Engineers. Also, for the environmental aspects, department of environmental conservation and U.S Environmental Protection Agency can also be reached out for further discussion. It is also important to notice the historic characteristics of the South Street Seaport, so it is also necessary to consult historical conservation agencies and nearby public housing agencies such as NYCHA.

## **Expected benefits to the South Street Seaport and surrounding**

### **- Social**

The waterfront extension project will allow people who live east side of the bridge to come to the seaport in an easier, faster, safer and more enjoyable way. The project has fully prepared for visitors using different kinds of commuting methods. The three pedestrian crosses are expected to distribute the flow of pedestrian to avoid overcrowded in one intersection. The pedestrian crosses also allow multiple access to the park, the Pier17 and the commercial area in the South Street Seaport. Visitors from surrounding communities, people from more diverse groups (income, cultural, age, etc) are expected to come to the park and interact with one another through different events and activities. This will make the South Street Seaport a more equal, diverse and culturally embraced area in the lower Manhattan area.

The plan is also expected to increase the number of people who come to the seaport – local people, as well as tourists. The project is expected to become another major tourist attraction along the riverfront of lower Manhattan. This will be economically beneficial to the seaport area and lower Manhattan. The plan also removes the underdeveloped and disorganized area under the bridge, which make the whole area in the plan looks cleaner, nicer and makes visitors feel safer and more willing to come to visit.

Another benefit of the plan is that the open space and greenery in the park and under the bridge allows people to have more feeling of being in nature in a city center. The project prevents the dark corner and dead end under the bridge, which increase the level of safety people

would feel when travelling through the area. The lighting system in the park not only light up the walkway but will also add more lighting to the South Street. The view from the walkway and bike way also bring people the feeling of calmness and can, in the long term, relief stress experienced in the city area.

#### **- Environmental**

The expected benefits of the plan to the south street seaport regarding the environmental aspects is more open and public spaces and greenery. And the creation of the walkways and bikeways may decrease people's carbon footprint around this area.\_In addition, the extended waterfront park may help flood control by having certain elevation with the concept of multi-purpose levee.

## **Better South Street Seaport Neighborhood (Kevin and Elizabeth)**

### **- Targeted problems and goals**

The targeted problems we are looking to address with our “Better South Street Seaport” plan include creating a more diverse community and getting more people to enjoy what the seaport has to offer. On our tours, we have observed that there is not enough housing near the south street seaport, yet understandably because of the precautions that are being taken after Superstorm Sandy, that obstructed the area, leaving it scarred and many people in danger.

With its revitalization, the money that has been put into the South Street Seaport has also brought in a richer demographic, tailoring a lot of its consumer goods and supposed experiences for those of a higher socioeconomic status. “In the ’70s, ’80s and the early ’90s... people who moved down here wanted to be here because of the fish market. There was a considerable lack of amenities, but there was a wonderful charm and a connection with real, authentic history. When the fish market left, people came down here because it was gone, and sadly, much of the grittiness that made the area unique went with it.” (Satow) It helps bring more economic activity to the South Street Seaport, but silently excludes a lot of populations such as children and low-income folk despite the communities around the seaport.

Understanding these inequalities, we propose the following plans:

1. A local newsletter for residents of the South Street Seaport offering discounts to current residents

The Manhattan Community Board 1 would be in charge of distributing a newsletter to the residents within the Manhattan Community Board 1 jurisdictions, which “is bounded by Baxter Street, Pearl Street, the Brooklyn Bridge and the East River on the east, Upper New York Bay on the south, the Hudson River on the west and Canal Street on the north.” (Wikipedia) Based on

the income level of the resident, they would be eligible for discounts to South Street Seaport attractions such as the museum, venue tickets to the seaports new summer stage, the winter rooftop ice skating rink, and on the high-end stores and restaurants. With this effort, we also will include a contact email in the newsletter for local organizations to post their events for the next newsletter. This initiative will help bring the needs and wants of the neighborhood populations together, and advocate for local businesses and organizations that want to make a change and unite the communities. On the Community Board's website you will be able to sign up for the newsletter, and opt to get it through your email or sent physically to your address.

Figure 3.1: Example of Newsletter

2. The South Street Seaport hosting a “Smorasburg”

There are many high-end restaurants in the seaport advocating for healthy food options, but they are usually at a very high price point that the average New Yorker, much less it's low income sister communities would pay for. We propose for the seaport to coordinate a “Smorasburg” which traditionally, from inspirations from Chelsea Market and Gansevoort Market, is a combination of many food businesses selling their delicious slices of food. Having a low-income fair or market with health-based events and programs can increase the local community population to visit the seaport.

3. Creating an interactive screen interface that offers wayfinding, historical knowledge, and a game tour

The use of technology is rampant in its everyday use. Why not use it to help someone learn about the South Street Seaport? The screen would be similar to those already being used in New York City; inspirations for this development are the MTA subway screens that alert you when the train comes and the already heavily used LinkNYC kiosks on the street that offer a lot of helpful resources if in need, like Google Maps, a web browser, a phone charger, wifi, emergency calls, and more.

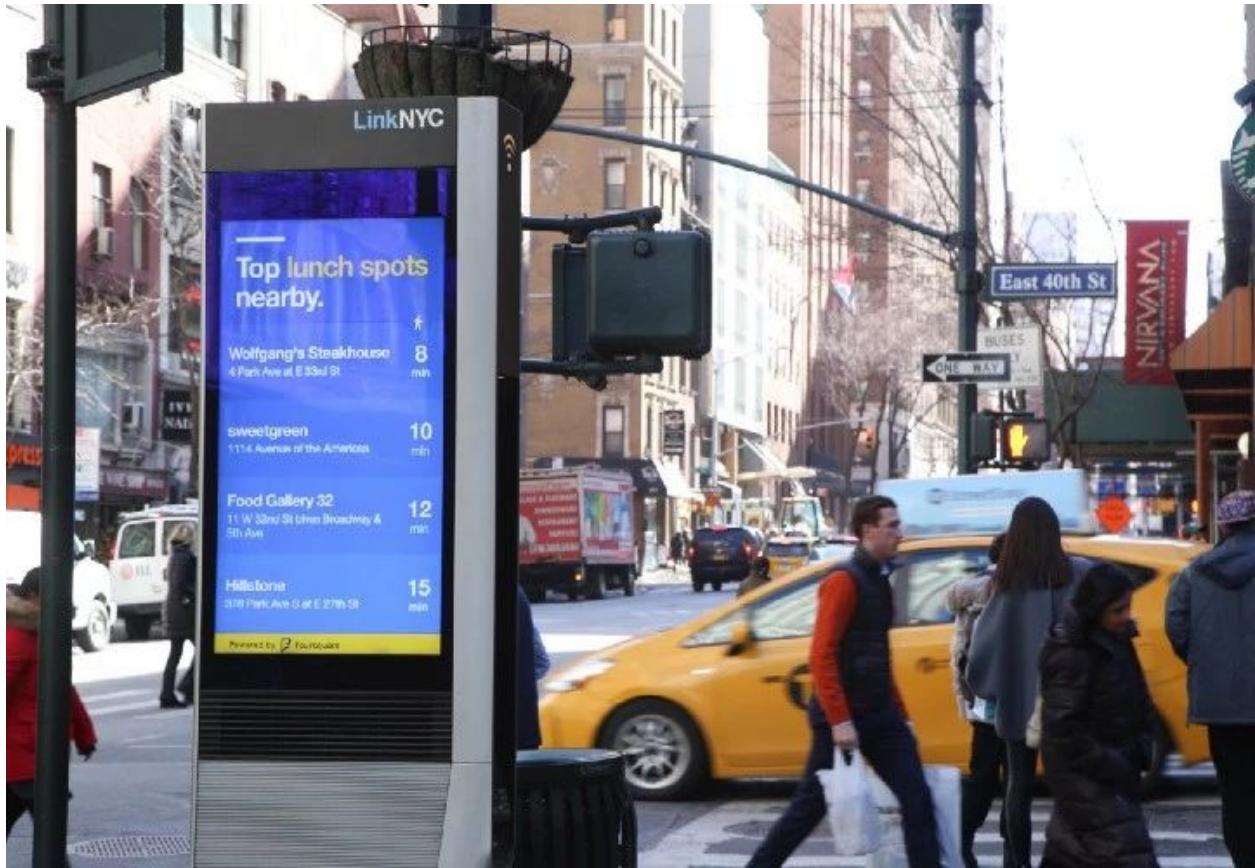


Image 3.2: LinkNYC Kiosk



Image 3.3: MTA Subway Technological Pathfinder & Train Schedule

The interactive board would have many applications to it: It would include a directory of all of the restaurants, events, and experiences in the seaport, in which you could add your email to get newsletters and notifications of the seaport, it would have Google Maps to help people get to their destinations, it will have an application called “The Captain’s Log”, where people can write a message as short as 140-250 characters as a way to visualize the amount of people that visit the seaport.

The boards would also have three augmented reality applications: the first would be a scavenger hunt which would visit the historical buildings in the district, including the bar, the Seamen’s Church, Schermerhorn Row, Peck Slip, and Pier 16 and 17. At each stop the user

would learn about the history of the building, what it was like during different time periods in the existence of the seaport, along with photos and sketches of what the insides of the buildings looked like. They would be able to continue the scavenger hunt from screen to screen, as the plan is to put the screens in the populated and pedestrian zoned areas of the common streets and near understood landmarks for it to be easy to find, using them as an “Eye Spy” game to look around the area for landmarks and special details of the seaport.

The second would be an audio tour of the seaport, in which you could register your email or phone number to send you a link to a tour describing the seaport’s development and customs of the diversity of people that lived there. You would be able to choose between the time periods of 1800s, 1850s, 1900s, 1950s, and 2000s. You will be directed by the voice to walk to the next location, with pause buttons and buttons to make sure you are going the right way. The programs will be time limited and location limited, in which the user would have to have their location on to ensure that only the people in the location are using it. It will not overload the server and gives the location accuracy to tell you where to walk in the seaport. A great data point for this audio tour would be the Landmark Commission Report of 1977 that instituted the Seaport as a historical landmark neighborhood.

The third augmented reality would be a role-playing game that someone can download and interact with the South Street Seaport as a specific character. The characters would differ in gender, ethnicity, and socioeconomic status and will show the history of the South Street Seaport from the 1800s to the 1990s. The characters created will be created from the South Street Seaport Museum archives and other historical archives from the Tenement Museum, the Black Gotham Experience, and many library and city archives. The research will also be used to replicate what

the seaport looked like in each of those time periods. On the screen or on your phone, you would be able to choose certain choices to learn about the different lived experiences of this character and the seaport. The technology would also have a kid's application, where they can play seaport related games and learn about the history of the seaport.

At the end of the session, there would be an optional survey to take to track down more demographics and user experience. Each of these screen technologies will have its own QR code to be able to connect to an online version of the applications which will only be accessible while you are at the seaport. This aspect of it will help us and not let the system be overcrowded by random people wanting to access it and actually get the data we need. If people are accessing the program through the QR code on their phones, it will require them to turn on their location to verify that they are at the South Street Seaport in order to take safety precautions in case someone is looking at their screen too much and is not aware of their surroundings. The location tracker will alert the person that they are too close to streets. There will be 5 to 10 proposed screens in the seaport area. The design will be a sleek, two-sided screen with QR code sign on each side of it. The best way to initially test this screen would be in the summer where there will be many people enjoying themselves.

The stakeholder opinions that would be most important to us is where to put these screens so that they don't obstruct the traditional design of the seaport, yet still offer these cool applications. We would also be heavily in collaboration with the historical society and the Seaport Museum to design the augmented reality game and tour to recreate the authenticity through the knowledge they have on the history of the seaport. In fact, the augmented reality applications can become extensions of the seaport museum, but one without a cost.

#### 4. Reconstructing the Fulton Fish Market into a Mixed-Use Space

The famous Fulton Fish Market would be a great mixed-use space for housing, landmark restoration, and a community space. First, it is important to note that despite it being an important landmark, it has not been preserved; it is graffiti-ed, abandoned, and a very dark, broken building; a metaphor for how the Howard Hughes Corporation has gotten rid of mom and pop stores destroying the accessibility of the middle and low income access to the seaport. Proposing a clean-up and restoration of it, creating a narrow version of it to be in between the housing and the community space as an extended exhibit of the Museum, can still root the space in its history while also upgrading it for the needs of the community.

On the left side of the narrow fish market restoration project that becomes an extended exhibit can be the new low income housing that would be modelled after two great projects that won the design competition “Big Ideas, Small Lots” for American Institute of Architecture. The plans we will follow will be in a following section detailing the low-income housing portion that will also follow those two plans.

The community space would have the historical context of the market and it can be a point of pride for the residents and nearby communities of the South Street Seaport. In the new space, organizations from the community can have informational events, and the surrounding low-income communities can have a place where they can access bi-weekly services such as applying for healthcare insurance, accessing applications for food stamps, housing, and many other things that we as New Yorkers take for granted. We would hire a team of coordinators, event planning professionals, teachers and ask for experienced volunteers to develop and manage more programs for children, including day camps, summer day camps, and extracurricular

activities for young children, and a plan for safe working spaces and fun spaces for the growing youth and teenagers in the seaport. The recreation center will also have a grand meeting spaces for conferences or fairs, and a stage for the arts that are very common and people are drawn to in the seaport.



Image 3.4: Photo taken of South Street Seaport

We would build it to the beat of our ability using the LEED requirements, such as using a water filtration system that does not take up so much energy for the waste water from bathrooms, using waste reduction techniques to recycle bathroom water, using a water dam system along with solar panels to generate more energy, using window pane treatments that maximize the efficiency of temperature preservation, using recycled materials that exemplify the historical attributes and designs. The facades will be made to look like much of the older

buildings in the area that were constructed during the 1800s, and the interior would be designed with the mosaic honoring the buildings history as a fish market and as a strong enterprise during the colonial and industrial time periods of the seaport.

## 5. Reconstructing and Revitalizing Older Buildings for Historical Preservation

We propose that some of the historical and landmark buildings be fully preserved. Most of the historical buildings are being reused as galleries and other storefronts because space is so limited in New York City. To preserve this history of the spaces, we would propose that at least a part of the uses of the buildings for example, Schermerhorn Row, are also preserved and can be another extension of the Museum exhibitions.



Figure 3.5: Photo taken of Schermerhorn Row

## 6. Creating more affordable housing

The South Street Seaport is becoming home to families and rich stakeholders. “Demand to buy in the residential enclave is so strong... that some properties are sold before they are

publicly listed. In response, Prudential Douglas Elliman recently categorized the Seaport as a separate neighborhood on its Web site, rather than a subcategory of the financial district. So far this year, there have been 273 sales in the Seaport/Fulton Street neighborhood, which stretches west to Broadway, with an average sales price of more than \$915,000, according to Streeteasy. The average rent for the area is \$3,775.” (Satow) 106 South Street is a mixed use building that follows the traditional building style in the seaport where stores are on the first floor and the housing is on the top.



Figure 3.6: Photo taken of 106 South Street

The inspiration for our designs are the “Fold and Stack Design” by OBJ team, & “Narrow Living Designs” by Only If firm. We propose that for 106 South Street to be made only for

housing and create the lobby or what was intended to be a retail space to be a lounge or communal area for the new residents of the building. If not, it should be reconstructed to follow the following designs:



Figure 3.7: Rendering plan of OBJ's "Fold and Stack"



Figure 3.8: Floor plans of OBJ's "Fold and Stack"

The plans are also useful for the low income housing that will be built on the left side of remnants of the Seaport Fish Market. We chose these plans because they follow the similar heights and can be formed to follow the similar design looks of the other buildings in the South Street Seaport. These designs do not compromise on the privacy of the residents, keeping their lives in their separate one bedroom, or two bedroom apartments. The “Fold and Stack” is a 5,540 square foot building that easily tucks away into the pre-existing buildings, offering 5 units instead of a one family townhouse. It’s compact design still offers all of the necessities for a home and includes a balcony on each of the floors.



Figures 3.9 and 3.10: Rendering and Floor plan of Only If's “System for Narrow Living”

The “Systems for Narrow Living” design is an even smaller building at 4,900 square feet with traditional row house aesthetics. The build is taller due to the building incorporating two stories in one to create higher ceilings in the building; an aesthetic usually deemed for high-income homes. Instead of individual balconies, there is a shared green roof for the residents to enjoy.

The other common spaces that will be created by the new park extension plans will make it easier for the residents to get to their homes and provide a safe and peaceful walkway to their homes.

### **Detailed plan**

The power of illumination can deter many crimes from happening, while also providing a sense of security for any person walking by. Being unable to see where you walk, causes one to have anxiety and fear. Lights would illuminate paths allowing for reassurance of safety during traveling. Lights would allow for more visitation to the area during the night, and be able to have a more productive neighborhood as people wouldn't be under the constraints of sunlight. The lights installed would provide historical context as the lights would be modeled after the gas lamps used in the past, but instead of using oil, we would use electricity and LEDs to have a modern take on a classic.

Open lots are subject to any renovations or projects. A playground is considered to be placed in a few empty lots in order to provide a recreational area for the children. Also public exercise equipment would be placed outside to allow free public workouts. Open lots can also be used for any festivities or even temporary markets. A farmers market would accept any empty lot, and it would provide goods to the residents, and even give the residents a chance to sell any goods themselves. The open lots can also be used to provide area for food trucks and provide restaurant quality food to them.

Affordable housing is required in order to have a plentiful population. If the property is too expensive to rent, only a minority of the city population is able to afford such land. In order to have a neighborhood that is bustling, affordable housing is required to have the majority

populate the area. Many of the buildings can be repurposed or at least rebuilt into housing, but that requires Governmental support or a private entity fully supporting the process.

Local residents require necessities for the area they are inhabiting. Whether it's for groceries or wanting to start a new house project, the residents of South Street Seaport require stores in order to supply their needs. Standard facilities such as laundromats are required for the residents to be able to wash and dry their clothing. Grocery stores for residents to be able to purchase food, and not go to other areas for ingredients. Daycare centers would allow parents to have the ability to drop off their kids and also provide the kids a learning experience. The addition of a few private schools would also reassure parents who move their that they would be provided an ample education.

Places of Worship are required for any resident who wants to practice their faith. Adding these types of buildings would help support many religious residents and give them reassurance of practicing their faith wherever. There would be religious buildings that would pertain for each dominant religion. Churches for Christains and Catholics, Mosques for Muslims, Temples for Jewish people, etc.

Vacant lots can also be converted into urban gardens, these gardens would provide the community a project that they can work together on. The garden would also provide the community with their own produce and also be able to educate the citizens on gardening and other urban gardening projects. An urban community garden would allow them to have a personal connection with their neighborhood. If all these facilities are available for a resident, it would attract them to the Seaport and give them incentives to move there permanently.

Above ground parking lots should be abolished and the land reused for other buildings.

Cars are unnecessary for such a cramped neighborhood, and if parking is required then it should at least be underground to allow for above ground space for the neighborhood. If possible there could be underground helix parking space in order to have the maximum amount of cars in the underground parking area.

By allowing more local residents to be able to own local businesses we are able to foster a community that is able to support one another, and have a small ecosystem for it. Incentives should be applied to allow small local businesses to flourish in the South Street Seaport. If a neighborhood is educated about any future changes they will be more responsive in any proposals and may even start to make changes themselves.

Having an included neighborhood brings a sense of community between all the residents living in the area. If all the residents are involved in their neighborhood, they would be more responsible for any changes and plans to their neighborhood. Also, safety is increased as residents would be more watchful and vigilant of their territory. If South Street Seaport is seen as a friendly neighborhood then more people wouldn't mind visiting or even living their in the future.

Focusing on environmental programs that are aimed towards making a more sustainable neighborhood will help in making the South Street Seaport a more clean and livable environment. Allowing programs that educate the residents on how to properly dispose of their waste will make the Seaport a cleaner area.

## **Conclusion**

It is important that Seaports surrounding communities have inclusive access to the Seaport neighborhood and its benefits, but that is not currently the case. As the housing and demographics group, we aim to make a change through our proposals which address generating easier and more pleasant access to the neighborhood, as well as creating neighborhood attractors that encourage visitors from a wider range of socioeconomic backgrounds. There are many reasons to visit Seaport, including its historical architecture and pleasant waterfront. The end game of our proposals is to allow for a wider, more racially and socioeconomically diverse demographic to be encouraged to enjoy what Seaport has to offer.

The extension park serves as a path to bring people together directly to the Seaport Commercial District. All the other proposed plans aim at serving the “left-behind” groups which make them more engaged in and embraced by the South Street Seaport District. Overall, making the South Street Seaport a place where everyone in the city or outside the city is welcomed.

## **Reference**

“John Whitton Bridge Open Space.” *Landezine*,

<<http://landezine.com/index.php/2015/04/public-space-under-bridge-waterfront-oculus-landscape-architecture/>>

“Lower Manhattan Coastal Resiliency.” *NYCEDC*,

<https://edc.nyc/project/lower-manhattan-coastal-resiliency>.

“NYC Planning Population FactFinder.” *NYC Population FactFinder*,

<popfactfinder.planning.nyc.gov/profile/1236/economic/>

Satow, Julie. “The Fish Market Cleans Up Good” *New York Times*, September 16, 2011. Web.

<<https://www.nytimes.com/2011/09/18/realestate/south-street-seaport-fish-market-cleans-up-good.html>>

Seaport District. “Stroll the Seaport.”<<https://www.seaportdistrict.nyc/explore/experiences.html>>