WATER STREET STUDY
Research and Analysis
Summary
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INTRODUCTION
The Starr Whitehouse/FXFOWLE team was retained by the Alliance for Downtown New York to conduct a study of Water Street and propose a design for the Street’s future. The first phase of this study was dedicated to research and analysis. For a two month period the team has poured over existing conditions reports, proposals for projects adjacent to Water Street, and initiatives undertaken by the Downtown Alliance throughout Lower Manhattan. The team also conducted field surveys and inventories, documenting all streetscape elements, building plans, city regulations, and climate conditions. Sam Schwartz Engineering conducted a traffic analysis. During this research and analysis phase, the team held bi-weekly meetings with the Downtown Alliance and one meeting with the Ad Hoc Committee (made up of board members, property owners, and tenants) to confirm the goals and a vision for the Street. In the following pages are the findings of these actions, as well as an analysis of opportunities and constraints.

In Phase 2, the Starr Whitehouse/FXFOWLE team will be joined by Sam Schwartz Engineering for traffic, Sylvia Harris for wayfinding and branding, Karin Bacon Events for programming, JDF Realty for real estate, and L’Observatoire for lighting to conduct a series of interactive themed participant workshops. These sessions will establish a set of principles, alternative programs, and concept visions. Workshops will address program, branding, economics, and transportation, and, ultimately, streetscape design. A final report and vision plan will follow in Phase 3.

Strengths, Weaknesses, Opportunities, and Threats
Water Street’s activity dates back to the city’s beginnings when Water Street was the water’s edge; its buildings reflect a varied architectural palate of history from the Fraunces Tavern block to the high-density One New York Plaza. Today, Water Street is home to some of the most prominent corporate offices in New York City and has a reputation as a Class A commercial corridor, with over 19 million square feet of office space. With some of the largest office buildings not only in New York, but in the country, Water Street has a high concentration of office workers, with 70,000 employed in 2008. Anchored by the South Street Seaport to the north and Battery Park to the south, the commercial core of Water Street attracts tourists who can easily access the area from the many nearby public transit options. Water Street also benefits from being one of the few two-way streets in Lower Manhattan, allowing easy access by taxi or personal vehicle to and from the area - a characteristic of the Street that many downtown residents and workers recognize as a positive feature of the street.

Despite its historical importance, Water Street today lacks many of
the vibrant characteristics that make streets desirable. As described by Ad Hoc Committee members advising this study, Water Street has a “perception of decline,” and “lacks an identity” and was described as not meeting the needs of today’s working demographic. The street’s wide sidewalks are dominated by large, imposing buildings that, for the most part, lack retail and other street-level amenities to engage pedestrians. Committee members point out that the street’s commercial space is threatened by more attractive, newer, and better priced office space elsewhere in Manhattan. As commercial tenants leave, Water Street’s brand as a Class A commercial corridor is pressured to convert to residential buildings. Ad Hoc Committee members recognize that there is a commitment to change in other areas of Lower Manhattan, while Water Street is lagging behind.

If action is taken through Streetscape initiatives, there is opportunity to shape and invest in Water Street’s future, while maintaining Lower Manhattan as a business center of choice. The Ad Hoc Committee views this economic downturn as the proper time to encourage excitement and poise Water Street for an upsurge. They see an opportunity to envision a neighborhood for a generation of office workers seeking interaction with public space and technology. Furthermore, as city agencies such as the Department of Transportation enact new sustainability initiatives, there is opportunity to use Water Street as a demonstration site for new patterns of movement and green infrastructure. Taking advantage of its wide sidewalks, underutilized plazas, and two-way traffic, Water Street can be transformed into a modern “great street,” and a destination in itself.

As determined by the Ad Hoc Committee, this study seeks to provide a path for achieving the following goals:

• Create an identity for Water Street that holds interest to area employees, residents, and visitors;
• Steward a reinvestment in the Street’s future within the context of Lower Manhattan;
• Improve multi-model access as a complete street, responding to Water Street’s setting;
• Soften the streetscape through enticing program and creative design;
• Inject vibrancy into the sidewalks and create engagement with pedestrians;
• Build an economically sustainable retail component, commensurate with the market;
• Develop a theme to Water Street that is based around area users;
• Complete a comprehensive vision for Water Street, encompassing all elements of the street;
• Establish momentum through an incremental implementation strategy.
CONTEXT

Context Analysis

Water Street is anchored by South Street Seaport to the north and Battery Maritime Ferry to the south. It has great transportation access including subways, ferries, and buses, and is easy to catch cab and black car services. The proposed Bus Rapid Transit and Second Avenue Subway will further enhance the transportation advantage. However, unlike Midtown, workers using public transportation from the suburbs do not have a one-seat ride. There are new parks, residential and mixed-use developments around the study area that give the area diversity. Water Street has many surrounding attractions that give it an advantage over the World Trade Center enclave. However, the armature itself lacks a positive identity as a destination and is under served by retail.
Previous Studies
In recent years many planning studies have been conducted in the areas surrounding Water Street, including the East River Waterfront Concept Plan that proposes an uninterrupted greenway from Peter Minuit Plaza to East River Park. The South Street Seaport Redevelopment Plan calls for an entirely new mixed-use development with improved street grid connections and open space. Adjacent to the Seaport, the recent historic preservation and redevelopment of front street has proven how small scale retail can transform a neighborhood. Lastly, a hotel with food oriented open space is proposed above the Battery Maritime building.

Most important to note is while these plans all include Water Street as a major access route, none of them provide recommendations for the street itself, emphasizing that the focus in previous studies has been to move away from Water Street rather than stay on it.
**Historic Development**

1650: The Dutch settled a village, walled in to the north on Wall Street. Present-day Pearl St. was the shore line. The Water Street site was completely underwater.

1760: Exploiting the potential of its harbor, a mercantile economy grew during the colonial period, with infill and pier development. The first portions of Water Street were then built as East River wharves. The first concentrations of banks were sprouting along Wall Street.

1880: As the Erie Canal enabled a nation scaled shipping boom, pier development exploded, new shorelines were successively established along Front and then South Street. High priced real estate and a high concentration of banks led to the first and, at that time the only, commercial only district in the world centered on finance. Water Street businesses capitalized on the confluence of finance and shipping as a mercantile and warehouse district.

1960-Present: As modern shipping operations moved to other areas of the region, and FDR Drive severed access to the harbor, Water Street was rezoned and was almost exclusively established as a street for modern financial office space.
Historical Analysis

STREETS / BLOCKS: Water Street was previously a narrow street, perpendicular to the wide cross streets that were sized to accommodate heavy 19th century shipping needs. In the 1960’s, Water Street was rezoned and reconfigured to prioritize North-South metropolitan traffic flow and a need for large development parcels by widening the street to the scale of a midtown avenue. During the office tower building boom of the 1960’s and 70’s nearly every building that is currently on the site was constructed.

SLIPS / SPACES: As harbor development saw the continual infill and expansion of Manhattan Island, the regularly placed slips between blocks were often filled in but left open and free of development. These last remaining wedges of space were too small as development parcels, but too large for streets. Capitalizing on their views to the water, many have been transformed into parks and privately owned public spaces that now populate Water Street.
Operations and Streetscape Elements

The main role of the Alliance’s operations department is to oversee public safety through visitors’ services, security, and maintenance in the Lower Manhattan district, including Water Street. Operations staff are contracted and include 65 public safety officers, 62 maintenance staff, and 15 transportation/shuttle staff. They work 24 hours a day, seven days a week, with a reduced staff on the weekends. Their main duties include garbage collection, maintenance of streetscape furniture, sidewalk powerwashing, and providing the public with assistance.

In addition to the Alliance’s role in streetscape operations, the Department of Transportation (DOT) maintains and regulates traffic & bus designations, sidewalk furniture (lighting, bus stops, bike racks), traffic signage and street lanes. The Department of Parks and Recreation (DPR) maintains the parks on Water Street not associated with a building, including: Old Slip, Vietnam Veterans Memorial Plaza, Coenties Slip Park and Wall Street Park. The Alliance contracts concessions on the Parks sites. The twenty privately owned public spaces (POPS) on Water Street are regulated by Department of City Planning and maintained by associated building.

Any maintenance and operations concerns, as outlined below, must be considered in all design recommendations.

Lighting

Currently, DOT cobra light poles line Water Street, while a few Alliance branded poles are on Front and Fletcher Streets. The Alliance pays for their own lights and power, but not DOT lights. It is expected that all Cobra poles on Water Street will be replaced with the Alliance poles within the next 2-3 years. At that point DOT will pay for their maintenance. The Alliance checks all lights in the District three times a week to ensure they are working.
Sidewalks
The Alliance employs a mobile power-washing unit 5 days a week to clean the sidewalks. The Parks department is responsible for power-washing its public plazas. Building owners are responsible for maintaining the sidewalks in front of their buildings and their POPS.

The Alliance standard sidewalk material is a specific dark gray concrete plus a distinctive 12 inch granite curb, however, except for Broadway, they are not responsible for its installation.

Street Furniture
The Alliance conducts three complete surveys of streetscape furniture a year, unless there is an immediate maintenance problem, in which case it is resolved as soon as possible. The most persistent issue is protecting furniture from skateboarders, despite efforts to install straps on benches and rails.

The Alliance has designed its own bench but has not employed it yet because of the cost. Most benches on Water Street are installed and maintained by the building owners. The lighted benches at Wall Street Park are maintained by the Parks department, but are currently in disrepair.

While the Alliance has designed its own bike rack, they will continue to use DOT’s city rack so not to incur the cost of manufacturing and installing of new custom designs. The City plans to install 200 new bike racks throughout Lower Manhattan.

Landscape
Currently, landscaping is paid for by private building owners and the Parks Department. Any planters need to be approved by DOT and typically have to be proven as a security measure.

The district is undergoing huge reconstruction, leading to a bigger rodent problem. Rainwater collection landscapes may create habitat for more rats and rodent issues must be considered when adding green horticulture elements.

Garbage
The Alliance has placed 400 garbage cans throughout the district. The operations department collects litter on the street and ties the garbage bag; city sanitation picks up the bags. Commercial and residential buildings are responsible for the disposal of their own garbage.

Vendors
Food vendors most often appear where there are no bollards or

Lunchtime Vendors
other sidewalk barriers. Many building owners complain of the garbage and grease left behind, but employees tend to support them. Vendors are expected to maintain their area.

ENVIRONMENTAL CONDITIONS

Open Space and Green Connections

In addition to the twenty POPS, four pocket parks exist on Water Street. These include:

- Peter Minuit Plaza (north of the Staten Island Ferry Terminal)
- Vietnam Veterans Memorial Plaza (between 2 and 4 New York Plaza and 55 Water Street)
- Coenties’ Slip Park (between Pearl and Water Streets at Coenties Slip)
- Wall Street Park (in front of 110 Wall Street and 120 Wall Street)

There are also trees along the street, although they are unequally distributed and their plant beds are inconsistent. Despite trees being sparse, existing green areas do provide some level of visual connections along the street. The significant amount of public space provides an opportunity for a greener Water Street.
Solar Analysis
Water Street is usually overshadowed by the tall towers throughout the year. In the morning, sun exposure falls on the open areas along waterfront. During lunch time the sun exposure swings into the open spaces and side streets. Water Street enjoys sun exposure in summer lunch hours. In the evening, sun exposure swings to Peter Minuit Plaza and the south tip of Water Street.
Wind Analysis
The summer prevailing wind comes from the south and south-west with average speed at around 13mph. Wind speed at the north half of Water Street is generally calm while the south portion and the intersection at Old Slip is more windy. The two open gateways at both end and the parks that connect to waterfront see windier condition but can be desirable during hot summer days.

The winter prevailing wind comes from north-west with average speed at around 20mph, a level that is uncomfortable for pedestrians. Water Street itself is generally shielded by tall buildings except at the intersections of Coenties Slip, Old Slip, Wall Street and Maiden Lane. Peter Minuit Plaza and other parks see higher wind speed. The sidewalk widening at 88 Pine Street is also windier. These areas may need special treatment to ease uncomfortable winter wind.
**Sustainability**

As shown in the diagram below, Water Street is almost entirely impervious surface. There are scattered pockets of permeable land at planting beds, but their total effect is negligible. This means almost all water goes into catch basins and to the river without filtration. Alternatively, if more planting areas were installed, bioswales were cut into the curbs, and buildings were to install green roofs, the volume of water entering the sewer system could be significantly reduced thus lessening the amount pollutants being discharged into the river during storms.

**Climate Change**

Located so close to the East River, Water Street is at risk of severe flooding during the probable future of sea level rise caused by climate change. According to a study by the Goddard Institute of Space Studies, with the predicted sea level rise Water Street could be completely inundated if a category 3 hurricane were to hit New York City by 2050. While there are few drastic measures that can be made to protect the existing built environment on Water Street, any sustainability initiatives, including stormwater management or building retrofits, will help curtail this threat.
BUILDINGS

Ground Floor Use

Building facades along Water Street are not as vibrant of pedestrian friendly as streets of similar width in Manhattan. While pedestrians on 34th Street or 14th Street walk by retail and other engaging entries, on Water Street some entire blocks are blank walls or devoted to grand lobbies of office buildings reflecting the corporate image of a Class A commercial corridor. This is particularly the case on the east side of the Street.

Also lining the Street are loading docks, vacant retail sites, parking entrances, and blank walls, such as at 180 Maiden Lane and 4 New York Plaza. This is in part a result of developers having chosen to locate building entrances on the smaller streets surrounding Water Street prior to its widening. These inactive streetscape spaces create psychological barriers to a passer-by.

Street level retail does exist on Water Street, though it is largely located on the west side of the street where there are smaller floor plates. The retail tends to cater toward lunchtime crowds, such as low-cost food and banks, though some reflect the needs of residents in newly converted buildings.
Building Conversion Suitability

Office buildings with a smaller floor plate size have the physical potential to be converted to either residential or hotel uses. The majority of buildings with this potential are located on the west side of Water Street. A concentration of already converted buildings and buildings with high physical potential for conversion can be found around the Wall Street Park area. Conversely, large floor plate office buildings that have minimum physical potential to be converted are located close to South Street.
Public Plazas and Arcades

Twenty privately owned public spaces (POPS) are located along the length of Water Street. While many of the POPS offer public amenities, such as seating and sculpture, others are bare and underutilized. There is potential to enhance the POPS through landscape and program, thereby attracting an engaged crowd and activating the Street.

All of the POPS were built before the current Department of City Planning (DCP) zoning regulations were put in place, and all of them are out of compliance with the new regulations. If built now the POPS would require a designated number of seats, trees, art pieces and other amenities, based on their size. The diagram below shows a rough estimate of how many amenities would be needed at each space to meet regulation. While adding temporary structures, events, or repairing existing conditions to the spaces would not require review, any change in design would have to be considered by DCP. Because of the uniqueness and prevalence of POPS on Water Street, it is understood that they will never fully meet all regulations, but design changes are expected to bring them closer to compliance.

Similar to POPS, there is a profusion of arcades along Water Street. Arcades tend to hide retail entrances and deter pedestrians. Design changes to arcades are much less regulated than POPS, but are reviewed on a case-by-case basis by DCP. Temporary structures and events are permitted within them.
Zoning
The study area falls within the Lower Manhattan Special District in several different zoning districts with max. as-of-right FAR at 15.0. With plaza bonus and purchase of development right from landmark buildings, the FAR can achieve 21.6. The bulk regulations are looser and allow denser development within the Historic and Commercial Core. Public Plaza floor area bonus is not permitted within Core and Subdistrict.
Street Wall Regulations

Along Water Street the minimum street wall height is 60’ and the maximum height of street wall is 135’ except street wall Type 4 which is 100’. Setback depth depends on lot size with 10’ for lots less than 15,000sf and 20’ for lots greater than 30,000sf. Lot coverage is 65% above the maximum base height up to 300’ and 50% above 300’. Maximum building dimension is 175’ above 300’ height. However, almost all buildings on Water Street were built before the Lower Manhattan District was established and most do not comply with the regulations.
Special Provisions
Designated retail streets include Whitehall, John and Fulton Street. Water Street is not considered a retail corridor. Curb cuts for loading and parking are prohibited on Water Street as well as on Wall, John and Fulton streets. Some preexisting curb cuts can be found on these streets and have a negative impact on pedestrian activity. New developments fronting sidewalk subway entrances will have to relocate entrances onto zoning lot.
Soft Sites
There are some landmark designated lots and several lots that are not built to maximum allowed floor area. Two sites show the potential to be assembled for significant development. The site located on the intersection of Moore Street and Water Street has been assembled and a hotel has been proposed.
TRANSPORTATION

AM Peak Hour Pedestrian Volumes
This figure shows AM peak hour pedestrian volumes from 2004 (NYCDOT). Pedestrian volumes are greatest on the south side of Water Street, presumably due to the greater concentration of large commercial buildings. Water Street’s intersections with Whitehall and Wall Streets show the greatest volumes of pedestrians. At Whitehall Street, pedestrian volumes are relatively large in the westbound direction due to passengers exiting the Staten Island ferry terminal. At both Whitehall and Wall Streets, pedestrian volumes are relatively large in the eastbound direction, most likely due to pedestrians traveling from upland transit connections to the large commercial buildings on the south side of Water Street.

PM Peak Hour Pedestrian Volumes
This figure shows PM peak hour pedestrian volumes from 2004 (NYCDOT). Pedestrian volumes are greatest on the east side of the southern portion of Water Street, but generally equal on both sides of the northern portion of the street. Water Street’s intersections with Whitehall and Wall Streets show the greatest volumes of pedestrians. At Whitehall Street, pedestrian volumes are relatively large in the eastbound direction due to those traveling to the Staten Island ferry terminal. At both Whitehall and Wall Streets, pedestrian volumes are relatively large in the westbound direction, presumably due to pedestrians traveling from the large commercial buildings on the east side of Water Street to the upland transit connections. Both AM and PM pedestrian volumes mirror what would be expected based on the locations of large commercial buildings, the Staten Island ferry terminal, and subway stations.
Pedestrian Accident Data
The figure below shows pedestrian accident rates at five intersections along Water Street: Whitehall Street, Broad Street, Hanover Square/Old Slip, Wall Street, and Fulton Street. Intersections with a large red circle have a relatively high crash rate, compared to the other intersections; intersections with a small red circle have a relatively small crash rate. The crash rates were determined by calculating the 2001-2005 average annual pedestrian crashes (Transportation Alternatives) and dividing the average by the sum of the 2004 AM and PM peak pedestrian volumes. By portraying pedestrian accidents relative to pedestrian volumes, this methodology should provide a better indication of the relative safety of a given intersection than simply reporting the actual number of crashes by intersection. Based on the data, it may be appropriate to analyze pedestrian safety conditions at Whitehall and Fulton Streets. However, these crash numbers are not considered high as compared with other sites around New York.
Public Transportation

Numerous subway routes serve the area (1,2,3,4,5,A,C,J,M,Z,R, W). However, the R,W Whitehall station is the only station within the study area; the next closest stations serving Water Street are South Ferry (1) and Wall Street (2,3).

As one of the three widest surface streets in Lower Manhattan (the others being Broadway and Church Street), Water Street is an important link in the city’s bus network. The following routes use all or a portion of Water Street: M6, M1, M9, M15; the X90 Manhattan express bus; the X8, X13, X15, X18, and X20 Staten Island express buses; and the Downtown Connection. The figure below also shows the locations of bus shelters on Water Street. Given the street’s extensive bus service, it may be appropriate to consider additional shelters.

Bike Routes

The figure below shows the locations of existing and planned/proposed bike routes and existing bike racks in the study area. NYCDOT currently proposes a bike route for Water Street, with connections to other existing or proposed routes at Whitehall Street and Maiden Lane. With the exception of the Class 1 bike route planned for Battery Park, the classification of the planned/proposed bike routes in the study area has not been determined yet. The proposed Water Street bike route would provide, via the Bowery, a direct connection from the Lower East Side and Chinatown to Lower Manhattan. While the figure shows numerous bike racks in the study area, the convenience of racks to building entrances and the perception of security at bicycle storage areas are primary factors influencing bicycle use.
Pedestrian Patterns
As shown below, pedestrian counts during am rush hour indicate the highest volumes of people are on the south side of Water Street, particularly at Whitehall and Wall Streets. This pattern reverses itself in the pm rush hour. These high pedestrian counts correspond to the commuter traffic patterns, as they are paths from the subway entrances/exits and ferry services. Over 79,470 ferry passengers traverse Water Street on a typical weekday, with the Staten Island Ferry as the busiest in the US, operating 24 hours a day. Understanding these pedestrian patterns will help determine traffic safety needs and retail potential.
AM Peak Vehicle Volumes
Traffic volumes in the morning are greatest in the northbound direction and generally increase moving north on Water Street from Whitehall Street to Fulton Street. Side street traffic is greatest at Water Street’s intersections with Whitehall and Broad Streets; this may be due to the relatively convenient route these streets provide for drivers traveling from the FDR Drive to Lower Manhattan.

PM Peak Hour Vehicle Volumes
Traffic volumes during PM rush hour are greatest in the northbound direction and vary along the corridor. Side street traffic is greatest at Water Street’s intersections with Whitehall and Broad Streets. In general, it might be expected that traffic volumes would reverse between the AM and PM peak hours, yet the heaviest traffic is in the northbound direction during both timeframes. This may be explained by the convenient route Water Street provides to the Brooklyn Bridge for northbound drivers. This may also be explained by the logical route Water Street provides for taxis that have dropped off passengers in Lower Manhattan and are returning north seeking additional fares. Both of these factors may offset the AM and PM variation in north- and southbound commuter traffic.

A cursory look at both the AM and PM peak hour vehicle volumes indicates that both are notably less than Water Street’s estimated capacity. The typical capacity of an urban street similar to Water Street, with two lanes in each direction, is about 1,570 vehicles per hour per direction. The actual peak hour volumes range from 154 to 944 vehicles per hour per direction, significantly less than the 1,570 estimated capacity. This suggests that all four travel lanes are not required from a vehicle volume standpoint along most of the street, and there may be opportunities for reconfiguration based on what appears to be excess capacity. This applies to the stretches between cross streets only, as intersections must each be examined individually taking into account turning volumes and traffic signals. Specific analysis should be conducted, and the result could indicate that a single lane in each direction with turning bays at certain locations would be adequate to accommodate existing traffic.

Typical Street Section
This diagram shows Water Street at Hanover Square/Old Slip, a typical Water Street cross-section. Moving right to left, the right-of-way consists of a 15’6”-foot sidewalk, an 8-foot parking/loading lane, a 12-foot northbound travel lane, a 10-foot northbound travel lane, an 11-foot southbound travel lane, a 10-foot southbound travel lane, an 8-foot parking/loading lane, and a 16-foot sidewalk. At 8-feet wide, the parking lanes are standard width, as are the travel lanes at 10- to 12-feet wide.
ACTIVITIES AND USES

Demographics
The figure below shows where the concentrations of people reside and work on Water Street, indicating existing and potential constituents for program and retail. Water Street is mostly known as a commercial corridor with over 70,000 employees, most working in the 25 largest buildings on the Street. The buildings hold a range of industries, with most being characterized as financial, technology, or service. The largest tenants include AIG, Standard & Poor’s, & Emblem Health.

In parallel with the rest of Lower Manhattan, newly converted residential buildings have emerged on Water Street in the past ten years. The study area now has 14 residential buildings, with a combined total of over 4,000 residents.

Water Street is anchored by tourist attractions at either end - the South Street Seaport to the north and the Battery to the south. Adding to the density of tourists in the area, the 53-room Exchange Hotel is located on Water Street. Two more hotels are scheduled to open on Water Street in the next year, adding an additional 362 rooms.

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Existing Program

The Alliance for Downtown New York and the Lower Manhattan Cultural Council have made a concerted effort over the past few years to attract visitors downtown through sponsored outdoor events. Throughout the summer, concerts, outdoor movies, and other free programs are held at various locations in the District as part of the “River to River” festival. This year (2009) three of these programmed sites were within the project area on Water Street.

On two Fridays, jazz musicians performed for a lunchtime crowd at 1 New York Plaza. The concerts were held on the plaza, just outside of the building entrance. A tent and approximately 100 chairs were set up for attendees. On Mondays in July, the Elevated Acre behind 55 Water Street attracted visitors from all over the City for an outdoor movie series. This event activated the project area after hours, sending movie-goers back onto Water Street around 10pm. Lastly, an antique car show was held one weekend outside of the Police Museum at Old Slip. Events are also held at Battery Park and the South Street Seaport.

The Alliance has also installed WiFi service as a means to attract people into public spaces throughout Lower Manhattan. Currently free WiFi is available within the project area at Vietnam Veteran’s Plaza and nearby at the British Memorial Garden, Stone Street, and South Street Seaport. The Alliance hopes to expand this service in the near future.
Street Activity

With 70,000 people employed within the study area, Water Street is most active during rush hour and at lunchtime on weekdays. Based on pedestrian counts, the busiest intersections during rush hour are at Fulton, Wall, Broad, and Whitehall streets, with 500-1,000 pedestrians crossing in one direction in an hour at each intersection. These are the most convenient cross streets to access the street from public transportation. Once crossing these intersections, pedestrians tend to disperse and mainly go to the office buildings on the east side of the street.

During summer, office workers venture to public spaces and sidewalks where street vendors are set-up. Food cart patrons gather nearby outside to eat or socialize, whether on nearby benches or in public plazas. Some plazas are more popular than others during lunch, particularly those with ample sun, minimal wind, and vegetation, such as Old Slip and 100 Wall Street. Some retail spaces have lunch cafes that are also busy at lunchtime.
Many open spaces and sidewalks on Water Street have minimal activity throughout the rest of the day. The sidewalks with the least amount of traffic tend to have blank facades or parking garage entrances, such as between Maiden Lane and Pine Street, or outside of 4 New York Plaza. With nothing to interact with or look at, pedestrians either avoid these blocks or walk quickly by them. Open plazas and arcades that have less activity include 7 Hanover Square, 1 New York Plaza, Gouverneur Lane (both sides of the Street), and the north side of Vietnam Veteran’s Plaza. These sites lack amenities, such as seating, and, for the most part, have less hospitable environmental characteristics.

On the weekend Water Street shows little activity, with no more than a dozen people walking the length at any given time. The two exceptions are pedestrian traffic around the seaport and waves of people heading to the ferries at Whitehall. Vehicle traffic is much lighter than weekdays as well with only 3-4 cars lined up at a red light.

Open Space have various volumes of people depending on time of day, sun, wind, and amenities.
Spatial Character
Cross Streets have the heaviest pedestrian commuter traffic with a series of spaces defined by the old slips and some of the POPS. They also provide connections to the surrounding districts and provide a clue to retail colonization of Water Street.

Views
Views from each end of Water Street are blocked by buildings at the bend at Coenties Slip, creating a visual barrier and divide of character along the Street.
**Character**

Water Street is a seam in the urban fabric and has a different feel on either side of the street. This is largely due to the size of the narrow streets on the west side, and the water views on the east side. Smaller shops, food and destinations are on the west side, and larger floor plates with the potential for large retail on the east side. Future development of the east side esplanade will further differentiate the two sides.
SECTOR ANALYSIS
Each block along the length of Water Street has its own distinctive qualities. For a more detailed understanding of Water Street’s characteristics the following analysis is divided into four sectors:

- Whitehall Gateway Sector “The South Gateway” – the southernmost area west of Broad St.
- Vietnam Veteran Plaza Sector “The Elbow” – between Broad St. and Old Slip with Vietnam Veteran Plaza as centerpiece
- Wall Street Park Sector “The Grid” – between Old Slip and Maiden Lane with Wall Street Park as centerpiece.
- Fulton Gateway Sector “The North Gateway” – northernmost area east of Maiden Lane.

The following pages analyze the existing conditions of each sector and some preliminary thoughts of site opportunities.
Sector 1: Whitehall Gateway

Existing Conditions

This sector is characterized by the openness created by Peter Minuit Plaza and the POPS of 1 NY Plaza. The open area enjoy great sun exposure throughout the year but have windy conditions. Subway and Ferry bring in high pedestrian and vehicular traffic volumes at Whitehall and Water Street. The raised plaza and underground retail of 1 NY Plaza separate building users from pedestrians, creating a psychological barrier. At 102 Broad Street there are blank walls at the ground floor resulting in an unpleasant pedestrian environment. A BRT stop is proposed in Peter Minuit Plaza. Taxi and black cars stand at the Plaza, enhancing the transportation service at this transit anchor.
Sector 1: Whitehall Gateway
Potential
Based on its location and high volume of foot traffic, the Whitehall sector is poised to become a gateway to Water Street. When approaching from Peter Minuit Plaza at the southern end pedestrians instantly feel a change of character in their surroundings. This is a crucial opportunity to create a welcoming draw for visitors into the corridor. To achieve this entrance, there must be improved pedestrian safety through traffic initiatives, such as a landscaped median or pedestrian plaza at the underutilized traffic island at Whitehall and Water Streets. There is also potential to activate building ground floors at specific buildings, as shown in the diagram below. Where there are blank walls, such as at 34 Whitehall, art and media can be added to stimulate pedestrians interest. Similarly, by modifying floor plates of office buildings there is opportunity to attract people on to the Street and change the image of the corridor as a place to shop, not just work. This is particularly important with consideration to the thousands of commuters walking through the sector to reach the subway and Staten Island Ferry.

Also unique to the Whitehall sector is its potential link to the green network at Battery Park for both pedestrians and cyclists. Through this design process there is an opportunity to determine where cyclists continue after leaving Peter Minuit Plaza and how the landscape vocabulary of the Park is carried through to Water Street.
**Sector 2: Vietnam Veteran Plaza Sector – The Elbow**

**Existing Conditions**

This sector is characterized by the pivot point of Coenties Slip and Vietnam Veteran Plaza. Water Street changes axis at this point and views of the street are blocked. Four NY Plaza has blank walls and a raised plaza and planting area on Water Street creating an unfriendly condition. An arcade at the base of 55 Water Street frames Vietnam Veteran Plaza. The Plaza provides great connection and views to East River. The south portion of the Plaza has good sun exposure during morning and lunch time but the entire plaza is affected by strong wind. Pedestrians tend to jay walk mid-block at 55 Water Street.

The low-rise historical buildings on the west side have warm texture and intimate scale. There is a potential to transfer the unused floor area of historical buildings to nearby parcels or assemble those low-rise north of Coenties Slip for development. There is a proposed Second Avenue subway entrance at Coenties Slip plaza and on the sidewalk widening in front of 55 Water Street.
Sector 2: Vietnam Veteran Plaza Sector – The Elbow
Potential
There is potential to enhance cultural and entertainment value in the Elbow sector by strengthening the links to nightlife on Stone Street and the future East River Waterfront. There are also strong opportunities to program more events and art on the elevated acre and Vietnam Veterans Plaza, attracting both the existing office worker constituents and outside visitors.

Leveraging the unique architectural contrast between the large floor plates on the east side of the street and the historic buildings on the west side could activate pedestrian interest and street character. On the east side modified floorplates could allow urban big box retail, while smaller retail sites on the west side could be more stimulating than what currently exists. There is also a soft site in the sector that could be re-developed.

Additional opportunities include enhanced landscape and a continuous median through the street. The sector should be re-designed with the anticipation of the future Second Avenue Subway stop at Coenties Slip, leading to increased foot traffic.
Sector 3: Wall Street Sector – The Grid

Existing Conditions

This sector is most represented by its grid character rarely seen in Lower Manhattan. The arcades at 110 and 120 Wall Street line alongside the Park and define its edge. The south portion of the Park has good sun exposure but experiences windy conditions. The intersection of Water Street and Old Slip is usually windy as well. The Police Museum anchors Old Slip attracting visitors from outside the area. The Park has good sun exposure during lunch hour.

The plaza at 88 Pine Street is underused and does not provide good connection for pedestrians to the waterfront. It is also overshadowed and windy most of the time. The excessively wide sidewalk does not encourage pedestrian usage due to lack of stimulating ground floor activity. 80 Pine has blank walls and parking entrances fronting Water Street and Front Street is dark and narrow with parking and loading entrances to buildings.
Sector 3: Wall Street Sector – The Grid

Potential
There is great opportunity to re-brand and design the grid sector as the nexus of activity on Water Street, leveraging its heavy pedestrian foot traffic from the 2,3 subway station and the increasing number of residential units along Wall Street. Building off of the pedestrian usage there is an opportunity to program Wall Street Park with events and art. Additionally, Front Street can be enhanced as a small scale pedestrian space with temporary closures for fairs or lunchtime events.

This sector also has the strongest existing retail frontage, however, the retail offerings could be re-branded to cater more towards residents and visitors, and not just office services. Combined with increased open space and pedestrian scale interventions, the Grid sector can assume a character more like a neighborhood rather than a work environment.
Sector 4: Fulton Gateway Sector – The North Gateway
Existing Conditions
This sector is characterized by the strong edge at the intersection of Fulton and Water Street that creates the feeling of a canyon of office buildings when looking down Water Street. The South Street Seaport gives openness as gateway but has windy condition and tourists generally stay at the Seaport without venturing south. Water Street feels narrower at this sector and is usually overshadowed by tall buildings built to the property lines without setbacks, with the exception of 127 John Street. The clock at the corner of John Street defines the corner as an identifiable piece of public art, but the low rise buildings reduce its merit. Fletcher Street does not provide good connection to the waterfront or adjacent streets because of its narrow street width and service uses. The Second Avenue Subway is scheduled to be built north of Fulton St.
Sector 4: Fulton Gateway Sector – The North Gateway
Potential
Similar to Whitehall, the Fulton Sector has the potential to be defined as a gateway to Water Street drawing pedestrians, including Seaport bound tourists, down the corridor. Enhanced landscape, such as a median, may be a way to soften the streetscape and attract new visitors. Using art and light to activate many of the blank walls and underutilized areas, such as Fletcher Street, would also increase pedestrian interaction. An improved program on Front Street, extending into the Wall Street sector, would also draw in tourists from the Seaport and increase foot traffic. The clock at 200 Water Street is an iconic piece of public art and stylistically provides a potential brand for the Street.
OPPORTUNITIES & CONSTRAINTS

Activation Analysis

Based on the preceding sector analysis, there are broad opportunities that can be applied to the existing conditions and uses along Water Street as a whole, including four major areas from which to activate the street and engage pedestrians:

1. **Public open spaces**
   Both POPS and Parks provide the greatest opportunity for change on Water Street. Currently, many of these spaces include amenities, such as seating, that attract a regular lunchtime crowd. These used spaces also tend to be in the summer sun, and out of the wind.

   However, there are also many spots along the Street that have good environmental characteristics, but are largely underutilized because they do not provide an amiable setting. These spaces can be enhanced through landscape and program, further strengthening the aesthetics and activity along Water Street.

2. **Blank facades and loading docks**
   Blank facades and loading docks are stark and bland to the pedestrian, creating a sense of insecurity and disengagement. With little activity or stimulation pedestrians tend to walk quickly by, or avoid the block altogether. These spaces must be activated in some way to make the street more interesting and inviting. Temporary interventions may include public art or lighting displays.

3. **Streetscape elements and traffic interventions**
   Water Street is perceived to be unsafe for pedestrians because, compared to the rest of Lower Manhattan, it is wide and vehicular traffic moves at high speeds. Interventions such as a median, additional streetscape amenities, and re-allocation of traffic lanes can help enhance pedestrian safety, while also softening the Street’s character. Furthermore, there are design opportunities to create pedestrian plazas or outdoor events spaces on Front Street. Alternative modes of transportation, such as bicycling, can also be incorporated into the design concepts.

4. **Retail facades and floorplates**
   Most of the retail on Water Street caters to workers leaving their office at lunchtime and does not attract visitors who would not already be on the Street. Modifying floorplates and ground floors to convert retail or lobby areas will help attract increased foot traffic and change the perception of Water Street as a 9-5 weekday district.
The workshops in Phase 2 will further explore activation interventions, with input from area building owners, residents, and users.