1.0 PURPOSE AND NEED AND DESCRIPTION FOR THE PROPOSED ACTION

1.1 Introduction and Background

The Federal Transit Administration (FTA), in cooperation with the Metropolitan Transportation Authority (MTA), MTA Capital Construction, and MTA New York City Transit (MTA/NYCT), propose to construct and operate the South Ferry Terminal Project to improve access to and from Lower Manhattan. The South Ferry Subway Terminal Project is one of three currently identified priority projects meant to address the urgent need for comprehensive transportation improvements in Lower Manhattan in response to the events of September 11, 2001. The two other priority projects are the Permanent World Trade Center (WTC) Port Authority Trans-Hudson (PATH) Terminal, sponsored by Port Authority of New York and New Jersey (PANYNJ), and the Fulton Street Transit Center, sponsored by the MTA/NYCT. These priority projects were formally identified by New York Governor George Pataki as the "Lower Manhattan Transportation Recovery Projects" through a coordinated process conducted in late 2002 and early 2003 by the Transportation Working Group, a group of local decision makers including the State of New York, the City of New York, MTA, PANYNJ, and the Lower Manhattan Development Corporation (LMDC). The priority list and supporting documentation were transmitted to the FTA and the Federal Emergency Management Agency (FEMA) in a letter from Governor Pataki on February 6, 2003 (see Appendix A). On February 27, 2003, U.S. Transportation Secretary Norman Y. Mineta announced the selection of these projects as a group of nationally recognized transportation projects designated to receive high-level attention under President Bush's September 18, 2002 Executive Order 13274, *Environmental Stewardship and Transportation Infrastructure Project Review* (see Appendix A). This designation as priority projects is intended to help expedite the rebuilding of the transportation system damaged in the terrorist attacks as the projects advance through the National Environmental Policy Act (NEPA) review process. The transportation recovery projects are being undertaken with $4.55 billion in federal funding.

In addition to causing tremendous loss of life, the events of September 11, 2001 caused serious disruption to the economy, infrastructure and quality of life, and have made travel to and from Lower Manhattan difficult and time consuming. To successfully support revitalization of Lower Manhattan, improvements to transit facilities are not only needed to restore transportation functionality, but to accommodate the range of changes that September 11 has triggered in the broader context of Lower Manhattan's recovery. This includes the redevelopment of the World Trade Center site, anticipated increases in visitor activity, and shifts in land use from commercial to residential. Improvements to Lower Manhattan's existing transportation facilities will not only improve visitor experiences, but will also substantially raise the quality of life for the area's residents and workers. These advances are important to retaining and developing Lower Manhattan's commercial base.

The South Ferry Subway Station is the southernmost station of the MTA/NYCT 1 9 subway lines. These lines serve the full length of the west side of Manhattan, between South Ferry and the 242nd Street Station in the Bronx. The 1 9 Cortlandt Street Station in the WTC site was destroyed in the September 11 attack, along with portions of the subway line north and south of the station (between Barclay and Liberty Streets). This destruction resulted in the suspension of subway service on the 1 9 line to all stations south of the Chambers Street Station after September 11, 2001. The suspension of the 1 9 service also affected the 2 3 service. Due to the inability to turn 7th Avenue corridor local train service at the South Ferry Station, all 1 local service was extended to Brooklyn, all 2 service operated as a local between 96th Street and Chambers Street, and all 3 service was terminated at 14th Street. This resulted in a loss of capacity in Brooklyn, and a much slower trip for most 2 3 customers. To make the 1 9 service in Lower Manhattan operational as quickly as possible, MTA/NYCT rebuilt the damaged section of the line in its original alignment; service on the 1 9 line to South Ferry was restored in September, 2002. With this rebuilding, MTA/NYCT made a commitment to address the substandard operation and physical arrangement of the South Ferry Station because of its importance to overall transportation system connectivity in Lower Manhattan.

In addition to the WTC site, the South Ferry Station is also in the vicinity of other critical Lower Manhattan transportation infrastructure and cultural and commercial destinations. The station is adjacent to the Staten Island Ferry and nearby bus terminal points. The 4 5 and N R subway lines stop within steps of the South Ferry Station; their tunnels run through or are adjacent to the proposed terminal site before entering the East River tunnels to Brooklyn. The J M Z and 2 3 subways are also nearby. Battery Park and the ferry loading points for the Statue of Liberty and Ellis Island are among the cultural destinations that can be accessed by the South Ferry Station, along with Castle Clinton National Monument and the Museum of Jewish Heritage. New York Waterway also operates ferry service from Piers A and 11, in proximity to the project area, to several New Jersey locations. The financial district (Wall Street and environs), other commercial operations, and the U.S. Custom House (which houses the National Museum of the American Indian, the U.S. Bankruptcy Court, and other governmental offices) are located north and east of the project site. The Battery Park City residential neighborhood is also within walking distance of the station.

For the foreseeable future, planned improvements and development are expected to draw increased pedestrian traffic to the Lower Manhattan area. The WTC site and memorial, which is expected to become one of the most important destinations in the United States, is located on the 1 9 line two subway stops north of the South Ferry Station. The 1 9 line's Cortlandt Street Station is expected to be rebuilt by MTA/NYCT in conjunction with the WTC site redevelopment. In addition, the Lower Manhattan residential population is growing as Battery Park City continues to expand and new downtown commercial-to-residential conversions are being completed. Finally, the Staten Island Ferry Terminal (known now as the Whitehall Ferry Terminal) is currently being renovated, and there are plans for improvements to Battery Park.

Because of its position as a key intermodal point, as well as a stepping off point to numerous important commercial, historic, and cultural destinations in Lower Manhattan, addressing the deficiencies of the existing South Ferry Station is integral to improving the functionality of the area's transportation infrastructure, thereby supporting Lower Manhattan's full economic recovery. Improvements are also needed to enhance line reliability, which will be required to meet the increased demand anticipated with the recovery and growth in Lower Manhattan. For these reasons the South Ferry Subway Terminal Project has been identified as one of the priority transportation improvements in Lower Manhattan. Figure 1 illustrates the relationship of the South Ferry Station to the transportation network and major destinations in Lower Manhattan.

1.2 Description of the Local Area

As indicated in Section 1.1, the South Ferry Subway Station is located at the southernmost tip of Manhattan, in the midst of other critical Lower Manhattan transportation infrastructure and cultural and commercial destinations. Transportation facilities in the vicinity include the Whitehall Ferry Terminal immediately adjacent and to the south of the South Ferry Station, express and local bus routes, and other MTA/NYCT subway facilities including the 4 5, N R, J M Z, and 2 3 lines. Cultural, historic, and recreational facilities in the project vicinity include Battery Park, Castle Clinton National Monument, ferry loading points for the Statue of Liberty and Ellis Island, Robert F. Wagner Jr. Park, and a number of museums. Wall Street and the downtown financial district are located north of the station, and the Battery Park City residential neighborhood is to the northwest.

The intersection of Battery Place and Greenwich Street forms the northern boundary of the project limits. At the northwest corner of this intersection is the entrance and exit to the Brooklyn Battery Tunnel. The northeast corner of this intersection contains the historic International Mercantile Marine Building at One Broadway. Immediately east of this building is Bowling Green Park and the U.S. Custom House, which houses the National Museum of the American Indian and other governmental offices.

Battery Park is approximately 23 acres in size, and is one of the oldest parks in New York City. Battery Park currently houses a total of 21 monuments and sculptures honoring soldiers, explorers, inventors, and immigrants. Castle Clinton National Monument is located within Battery Park, and houses the ticket booth for the Statue of Liberty and Ellis Island ferries. Peter Minuit Plaza, currently used as a construction staging area for the Whitehall Ferry Terminal renovation project, is located at the southeast portion of the project limits, between State, Whitehall and South Streets.

1.3 Project Purpose and Need

The September 11 attacks destroyed critical portions of the Lower Manhattan transportation system, compounding existing deficiencies and jeopardizing the area's sustainability as a Central Business District, emerging residential area, and key tourist destination. Rebuilding the Lower Manhattan transportation network – restoring service,

eliminating deficiencies, and anticipating future needs – is a critical basis for its successful neighborhood revitalization. The function of the South Ferry Station as a key intermodal point, and its proximity to numerous important commercial, historic, and cultural destinations in Lower Manhattan, make its improvement integral to this revitalization process. In order for the South Ferry Station to realize its potential for contributing to the revitalization of Lower Manhattan and the region, its existing functional and operational deficiencies need to be addressed, and its connectivity with other transit services and the street network need to be improved.

The purpose of the South Ferry Terminal Project is to replace the existing substandard station with a new terminal that addresses the functional and operational deficiencies of the existing station. The development of a new terminal in this location would reduce congestion at the existing subway access and platform, improve the overall experience of transit users, improve safety, provide full Americans with Disabilities Act (ADA) - compliant access for passengers, and enhance intermodal pedestrian connectivity to the ⓃⓇ subway lines and the Whitehall Ferry Terminal. In doing so, the project would address the need for improved access to Lower Manhattan in support of economic recovery and growth.

1.4 Project Goals

In conjunction with the project's purpose and need, the following project goal and objectives support the need for improved transit access to Lower Manhattan and economic revitalization. The goal of the project is to:

- Build a modern, operationally and functionally efficient subway terminal that is sensitive to public open space and other resources, to serve the transportation needs of the area, in order to, along with other priority projects, facilitate the economic recovery and revitalization of Lower Manhattan through attractive, accessible and convenient public transportation infrastructure.

In support of this goal, the objectives of the project are to:

- Improve reliability, on-time performance, and operational flexibility, and to minimize service disruptions for the ❶❾ line subway service.
- Provide safer and simpler access, egress, and movement within the terminal.
- Achieve more seamless intermodal connectivity to the Staten Island Ferry and other nearby buses/subways, and improved integration with nearby commercial and cultural institutions.
- Comply with disabled access requirements for terminal features and entry/exits, consistent with ADA.
- Minimize temporary and permanent impacts, including construction duration and impacts to parkland.

1.5 South Ferry Subway Station Deficiencies

The existing South Ferry Subway Station is operationally and functionally substandard. The station was originally constructed in the early 20th century with two tracks arranged in a loop with a platform located on the outside of the loop. This small-radius loop was built to service the original subway trains, which were shorter in length and used cars with doors that opened at each end. Thus, the station currently accommodates only half the length of a normal passenger train (five out of ten cars). Before the train arrives at the South Ferry Station, passengers must make their way from the rear five cars to the front five cars in order to exit the train. Figure 2 shows the existing station configuration, and Figure 3 is a schematic drawing showing the existing station in relation to surrounding facilities.

Current subway trains are longer and have different door spacing, which creates gaps for passengers entering and exiting the subway cars from the platform. The gaps are negotiated by use of mechanical platforms that move into place to fill the gap between the subway car and the platform to allow passengers to board and alight from the train. These gap fillers, also referred to as "platform extenders," are subject to frequent breakdowns; the average length of interruptions in service due to gap filler maintenance is 15.1 days in a six-month period. Gap fillers also do not allow access to all disabled subway riders. In addition, the sharpness of the 190-foot radius curve causes the flanges on the car wheels to squeal loudly as trains negotiate the loop.

Probably the most deficient feature of the South Ferry Station is that it cannot function as a terminal even though it is the southernmost station for the 1 9 lines. Terminal operations typically consist of vehicle cleaning and maintenance, train crew dispatching, and scheduled train recovery time (described below), none of which are available with the existing station configuration. This adversely affects subway service by limiting the operational flexibility of the 1 9 system. As a result of the station's age, coupled with a lack of system integration, the existing station is substandard and inefficient in accommodating the current ridership. Furthermore, the station lacks the operational flexibility necessary to maximize the efficiency of a modern transit system.

The following is a discussion of how the physical deficiencies of the existing station restrict operations of the 1 9 subway lines. Photographs of the existing station and its environs are provided in Figure 4.

1.5.1 Recovery Time

A key feature of an efficient subway terminal is sufficient lay-up track capacity for briefly holding trains until their scheduled departure time. Lay-up track capacity refers to an area of track that is used to temporarily store or hold trains while they are not in use. This holding time is also called "recovery time" and refers to a percentage of the total length of time required for a train to travel one-way from the terminal of origin to the terminal of destination on a given line. Recovery time is normally built into the subway line schedule on both ends of the line. This provides an important means of ensuring

reliability in train operations, by reducing the likelihood of customer service delays caused by late arriving trains being unable to depart for their return trips on time. In day-to-day operations, recovery time is flexible, and can be reduced as needed to allow the trains to depart on schedule.

The existing single-track station functions as a midline station, not as a terminal, and thus does not permit adequate time for arriving trains to recover from delays prior to departing. Currently a train arriving at South Ferry Station must depart before the next train can arrive; with trains scheduled three minutes apart during rush hours, there is little time for arriving trains to recover from delays en route. The current maximum rush hour recovery time of 1½ minutes at peak frequencies represents 2.7 percent of the end-to-end one-way running time of 55 minutes over the entire 1 9 route, which is substantially less than is required to ensure reliable on-time departures. A second track with a waiting train at the terminal would help the system recover from delays.

1.5.2 Station Curve and Short Platform Length

The sharp, 190-foot radius curve, the single-track terminal, and the short platform length all combine to lengthen the 1 9 running time and affect overall operations, as described below:

- The sharp curve requires slow train operation through the station (it reduces travel speed into the station by 30 to 60 seconds).
- As indicated above, the sharp curve requires the use of mechanical platform extenders (gap fillers) at every open train door for safe passenger boarding and alighting. Upon arrival, the gap fillers must deploy after the train comes to a complete stop and before the doors open, a process that averages approximately five seconds. Upon departure, the gap fillers must withdraw after the doors close before the train can accelerate normally out of the station, a process that averages approximately 10 seconds. This "delay penalty" is experienced by all passengers departing from the existing South Ferry Station.
- To compensate for the limited recovery time at the single-track station, additional en route recovery time is scheduled at Chambers Street north and southbound (up to two minutes in each direction) to ensure greater reliability. The 1 9 passengers who stay on board while the trains dwell at the Chambers Street Station (approximately 25 percent of all riders traveling to/from stations south of Chambers Street) are delayed an average of 0.7 minutes southbound and 1.8 minutes northbound while trains wait for scheduled departure times.
- As mentioned above, the short platform length requires that passengers in the rear cars of southbound trains move up to the front five cars in order to exit at South Ferry Station. The South Ferry Station platform is approximately 250 feet in length; the standard platform length is approximately 600 feet. Southbound trains frequently provide longer dwell times at the Chambers Street Station to allow passengers to walk forward while the train is stationary. While this additional dwell time can also be considered part of the en route recovery time, it can delay trains further if a large volume of riders are walking forward. This

requirement to move forward also can be confusing to infrequent subway passengers such as tourists, or those for whom English is not their primary language.

Gap fillers are not a common feature at MTA/NYCT subway stations. They are currently in use at only two other stations: the 14th Street-Union Square station on the 4 5 6 Lexington Avenue Line (downtown express and local tracks), and at the Times Square terminal of the S line 42nd Street Shuttle. Similar to the South Ferry Station, the use of gap fillers at these other stations also causes delays in both arrivals and departures by approximately 5 to 10 seconds.

1.5.3 Terminal Operations

The current South Ferry Station configuration also affects overall terminal operations on the 1 9 lines. Currently, if a train experiences mechanical difficulties, there is no place to store it out of the way, and it must run in out-of-service mode back to the mechanical shop at 240th Street in the Bronx. During rush hours and other busy times, this can adversely affect operations.

1.5.4 Single Entry/Exit and Narrow Platform

The existing South Ferry Station is small by MTA/NYCT standards, and has only one entrance and platform stair. The combined area of the existing fare control space, the inner and outer loops, and the platform is approximately 16,800 square feet. The platform itself is also narrower than a standard subway station platform. South Ferry is the busiest station in the MTA/NYCT system that has only one stair to the platform. Approximately 11,000 riders enter at South Ferry Station on an average weekday (22,000 passenger trips). Of these passengers, an estimated 43 percent are Staten Island Ferry riders transferring to/from the 1 9 line, another 43 percent are commuters who work in the Lower Manhattan area, and the remaining 14 percent are tourists visiting Battery Park, Ellis Island, the Statue of Liberty and other Lower Manhattan cultural attractions.

The station has approximately 1,400 passenger entries and 1,000 exits during the morning peak hour. Approximately 93 percent of the entering traffic in the morning peak is transferring from the Staten Island Ferry, often arriving in surges of 300 or 400 passengers. The station also has approximately 1,400 riders entering in the evening peak hour. Of these riders, 80 percent work in the surrounding area, and the remaining 20 percent are tourists or Staten Island Ferry riders. The combination of a constrained configuration, and the surge of passengers entering and exiting, adversely affects service by creating an overcrowded platform, an overcrowded entry/exit stairwell condition, longer dwell times for subway trains, and reduced or poor passenger flow.

1.5.5 Americans with Disabilities Act (ADA) Facilities

South Ferry Station presently is not accessible to all persons with mobility impairments. Access to the platform is via stairs; there is no elevator in the station. The platform extenders also present a barrier to mobility-impaired passengers.

1.6 Description of the Proposed Action

The Proposed Action consists of replacing the existing South Ferry Station with a new and improved terminal that would eliminate the physical and operational deficiencies of the existing station. New approach tracks on a new alignment would also be constructed. The new terminal and associated improvements would be located under Peter Minuit Plaza, which is owned by the City of New York and located at the tip of Lower Manhattan. Figure 5 shows the conceptual site plan, and Figure 6 shows schematic diagrams for the Proposed Action. The project corridor, illustrated in Figure 7, would extend from just north of the Greenwich Street/Battery Place intersection to Peter Minuit Plaza. The total length of the project is approximately 1,700 linear feet. The project corridor is bordered by State Street and Whitehall Street to the east; Whitehall Ferry Terminal and the Coast Guard Station to the southwest; residential and office buildings along Battery Place to the north; the Brooklyn Battery Tunnel tubes, Battery Park Underpass and Castle Clinton National Monument to the west; and New York Harbor to the south.

The Proposed Action can be divided into three general segments or components as follows and described below:

- Tunnel bellmouth and fan plant
- Approach tunnels
- New terminal

1.6.1 Tunnel Bellmouth and Fan Plant

This segment of the project includes reconstruction and widening of the existing 1 9 subway tunnel in the vicinity of Greenwich Street and Battery Place so that the new track alignment to the new terminal can diverge from the existing South Ferry loop alignment. A tunnel bellmouth is a widened portion of the tunnel structure at which the rail track can diverge into two separate alignments via track turnouts. Construction of the bellmouth would require reconstruction of about 275 feet of existing subway tunnel.

The tunnel bellmouth section also includes a ventilation or fan plant to be located beneath Battery Place just west of its intersection with State Street. The fan plant would be connected to the east sidewall of the existing 1 9 subway tunnel, just opposite of the widened portion of the tunnel. The fan plant's function is to protect the tunnel sections and adjacent stations to the north and south in emergency situations of fire and/or smoke, in conjunction with the ventilation plants to be installed in the new terminal's mezzanine

level. The fan plant would be designed to supply or exhaust approximately 350,000 cubic feet of air per minute from the street gratings into the tunnel. A surface vent grate for the fan plant would be located within a reconstructed center median in Battery Place, just west of its intersection with State Street. The street grate would be approximately 600 square feet in area and would not extend above curb height.

1.6.2 Approach Tunnels

This segment of the project includes a new tunnel underneath the eastern edge of Battery Park between the tunnel bellmouth and the new terminal under Peter Minuit Plaza. The new track alignment would diverge to the west of the present 1 9 track right-of-way along Greenwich Street in the vicinity of Battery Place, and proceed in a southerly direction under a portion of the east side of Battery Park on a descending grade. The line would then turn southeast and cross beneath the existing two-track approach to the South Ferry loop, and beneath the two-track approach to the Joralemon Street tunnel to Brooklyn. The alignment would continue in a southeasterly direction adjacent to State Street and terminate at the new terminal under Peter Minuit Plaza in front of the newly reconstructed Whitehall Ferry Terminal. The approach tunnel would accommodate two tracks and would contain the track crossovers for flexible routing of trains into and out of the terminal. Where the new alignment crosses beneath existing subway tunnels, the new tracks would be placed in two, single-track tunnels to facilitate underpinning of the existing tunnels.

1.6.3 New Terminal

The new terminal would consist of two general levels: the upper level would house fare control mezzanines, electrical and mechanical facilities, and other MTA/NYCT uses; the lower level would contain two transit tracks serving a single island platform. The terminal would have three surface entry/exit locations: two within the reconfigured Peter Minuit Plaza and one on the State Street sidewalk adjacent to the eastern edge of Battery Park. The elevator access to the terminal would be located with the entrance facility nearest to the Whitehall Ferry Terminal. The total area of the new terminal, including the platform, two mezzanines, and concourse is approximately 76,820 square feet.

To enhance connectivity between the 1 9 and N R lines, a direct connection would be made between the southernmost mezzanine of the new terminal and the south mezzanine of the nearby N R line station at Whitehall Street. To enhance intermodal connectivity to ferry service, the terminal would have a clearly identifiable surface connection to a canopied walkway in Peter Minuit Plaza that will be installed as part of the Whitehall Ferry Terminal reconstruction project.

The south end of the terminal would cross beneath a portion of the existing two-track South Ferry loop and station (which will be retained), as well as the existing Lexington Avenue line (4 5 lines) tunnel to Brooklyn, and would be supported by the new construction. The tracks and platform would be located at a depth of approximately 50 feet below the surface. The full-length platform would be approximately 600 feet in

length to accommodate a full-length (ten-car) subway train. The platform would be 25-feet wide to eliminate the platform crowding and congestion that occurs at the existing station. Vertical circulation elements, including an elevator, would be provided in accordance with ADA guidelines.

Ventilation of the South Ferry Terminal in emergency situations of fire and/or smoke would be achieved by installing two fan plants in the station mezzanine, one on the north side, and another on the south side; each fan plant would have a capacity of exhausting approximately 150,000 cubic feet of air per minute. The fans would not operate under normal conditions. The fan plants would exhaust air to the street level through an elevated louvered structure approximately 27 feet long by 22 feet wide and 15 to 20 feet high. The louvered structure would be located aboveground in Peter Minuit Plaza close to and west of the new terminal, where it would be screened with landscaping and designed to blend with other existing ventilation structures in this vicinity.

1.6.4 Benefits of Proposed Terminal

The Proposed Action as currently conceived represents not only a much-needed enhancement of a key downtown transit facility, but also forms an important node within the larger context of the regeneration of Lower Manhattan. In combination, the operational improvements of the 1 9 line and customer egress improvements resulting from the new South Ferry Terminal would save some customers as much as six minutes, and all customers would benefit from an average of almost four minutes of time savings per trip. Total travel time savings is projected to exceed 365,000 hours per year.

With the proposed terminal design, the following functional and operational benefits are expected to occur:

- With a two-track terminal, a train arriving at South Ferry would not need to depart before the next train has arrived. This overlapping of train arrivals and departures is important to improving reliability on the 1 9 line, as late arriving trains are less likely to become late departing trains. The new terminal's ability to overlap train arrivals and departures would also eliminate the schedule "hold" on trains before continuing north at Chambers Street.
- Travel times would be reduced through improved operating speeds resulting from elimination of the tight curves entering and leaving the South Ferry Station.
- Delays related to operation of the mechanical platforms would be eliminated
- The new terminal design would provide improved accessibility for boarding and alighting customers. By providing three entrances rather than the current single stairway, the congestion currently experienced by customers entering and exiting the terminal would be reduced. The new entrance at the north end of the platform would also reduce egress times for customers who walk to destinations north of Water Street.
- The two-track terminal would enable a train with mechanical difficulties to be stored on one of the two tracks until service is less frequent and the train could be transferred to the repair shop with less disruption to the 1 9 line. Terminal

operations could then continue on the other terminal track. The disabled train could also be moved onto the existing loop track, which will remain in place, while terminal operations continue on both terminal tracks.

- The new terminal would provide full access to customers in compliance with ADA.
- The new terminal would provide enhanced intermodal connectivity to nearby transportation facilities.

1.7 Coordination with Other Lower Manhattan Projects

Ongoing and effective coordination with other Lower Manhattan projects is an important aspect of the management of the South Ferry Terminal Project. Since shortly after September 11, 2001, MTA/NYCT has participated in ongoing special coordination with other project sponsors in Lower Manhattan, initially through the offices of New York City Department of Transportation (NYCDOT). Additional working group sessions were held during the spring, summer and fall of 2003 with New York State Department of Transportation (NYSDOT), PANYNJ, LMDC, NYCDOT and others to develop and refine the approach and methodologies for cumulative effects analysis, described in Chapter 2 of this EA. All of the projects are sharing information such as background data, schedules, construction plans (methods and phasing), and monitoring data. This multi-agency coordination will continue through the completion of project construction.

MTA/NYCT is coordinating with many projects that overlap with the South Ferry Terminal Project geographically, temporally, or both. These projects include:

- NYSDOT Route 9A/Battery Underpass project – This project will permanently restore the functionality of Route 9A , and includes work on Battery Place between West Street and State Street;
- PANYNJ Permanent WTC PATH Terminal – This project involves construction of a permanent regional transportation hub that will be integrated with the existing and future transportation infrastructure on and near the WTC site.
- PANYNJ/LMDC WTC Memorial and Redevelopment – This project includes the construction of WTC Memorial and memorial-related improvements, as well as commercial, retail, museum and cultural facilities, new open space areas, new street configurations, and certain infrastructure improvements at the WTC site.
- MTA/NYCT Fulton Street Transit Center (FSTC) – This project consists of the rehabilitation, reconfiguration, and enhancement of the four subway stations that currently comprise the Fulton Street-Broadway Nassau Station Complex.
- New York City Economic Development Corporation (NYCEDC)/NYCDOT Whitehall Ferry Terminal Reconstruction – This project involves the remodeling and reconstruction of the Whitehall Ferry Terminal and Peter Minuit Plaza.
- NYCDOT Street Reconstruction Program – This project is the reconstruction of streets throughout Lower Manhattan that were damaged directly or indirectly by the events of September 11.

- National Park Service/NYCEDC Castle Clinton Redevelopment – This project involves the redevelopment of Castle Clinton in Battery Park to provide an entertainment venue and enhanced ferry ticketing facilities.
- New York City Department of Parks and Recreation (NYCDPR)/Battery Conservancy Master Plan for Battery Park – This project involves the redesign of large portions of Battery Park, as well as ongoing enhancements in park maintenance, signage, and pedestrian circulation.
- NYCDOT Bike Path – This project, also known as the Manhattan Waterfront Greenway, is a 32-mile trail around the island of Manhattan, a portion of which will pass near the South Ferry Terminal Project area, including a segment through Battery Park.
- U.S. Department of Transportation (USDOT)/FTA East/Harlem River Ferry Landings Project – This project is examining strategies for developing a ferry corridor along the East River, including the potential use of the Battery Maritime Building (adjacent to the east of the Whitehall Ferry Terminal) as a ferry landing.

For the South Ferry Terminal Project, special coordination efforts are also underway for Battery Place, Battery Park, and Peter Minuit Plaza. For the work on Battery Place, MTA/NYCT is coordinating with NYSDOT and NYCDOT to ensure maintenance and protection of traffic and that the work is phased to eliminate rework. For the work in Battery Park, MTA/NYCT is coordinating with NYCDPR, the Battery Conservancy, NYCEDC, and National Park Service to ensure that park access, safety, and security is maintained, and that restoration work is consistent with the Master Plan for Battery Park. The Conservancy developed a Master Plan for Battery Park in 1994 that includes redesigning large portions of the park. MTA/NYCT will endeavor to negotiate a Memorandum of Understanding (MOU) with NYCDPR regarding construction of the South Ferry Terminal Project within Battery Park. For the work in Peter Minuit Plaza and on State Street, MTA/NYCT is coordinating with NYCEDC and NYCDOT regarding the use of the Plaza for construction of the terminal and as a project staging area to minimize rework, and to ensure safe access routes for pedestrians who use the transit services located here.

1.8 Environmental Process and Required Reviews/ Approvals

As indicated in Section 1.1, this EA has been prepared by MTA acting by New York City Transit with the FTA. FTA is the funding entity for the project; thus it is the Lead Agency for the NEPA environmental review process. The EA has been prepared in accordance with regulations for implementing the National Environmental Policy Act of 1969 (NEPA) as issued by the FTA (49 CFR Part 662 and 23 CFR Part 771) in conformance with the regulations of the Council on Environmental Quality (CEQ) (40 CFR Parts 1500 – 1508). MTA/NYCT also will evaluate the potential impacts of the project under the New York State Environmental Quality Review Act (SEQRA) as found in Article 8 of the New York State Environmental Conservation Law (ECL Sections 8-0101 *et seq*.) and its implementing regulations in Title 6 of the New York Codes, Rules

and Regulations (NYCRR Part 617). That evaluation will be supported by this EA and will include, at a minimum, completion of a Full Environmental Assessment Form to determine the significance, or non-significance, of the project's potential impacts.

The Proposed Action would comply with all applicable federal regulations and standards, including the Clean Air Act, Clean Water Act, and the Executive Order on Environmental Justice. Table 1-1 provides a list of the approvals, permits, and coordination required for the project. Following is a description of some of the key reviews and approvals required.

1.8.1 Parkland Alienation

If an action entails the use of New York City parkland for a non-parkland purpose or the conveyance of municipal parkland, it must go through the parkland alienation process. Parkland alienation requires authorization of the New York State Legislature and approval from the New York City Council. The South Ferry Terminal Project would involve the acquisition of approximately 0.07 acres (3,000 square feet) of mapped parkland in Peter Minuit Plaza and in the sidewalk adjacent to the eastern edge of Battery Park for the three surface entry/exit features and a vent structure. A temporary construction easement of approximately 1.8 acres would be required in Peter Minuit Plaza. A temporary construction easement of approximately one acre in Battery Park would be required. Parkland alienation and easements are discussed in greater detail in Section 5.1: Land Acquisition and Displacement and 5.3: Public Open Space.

1.8.2 Section 4(f) Evaluation

Section 4(f) of the United States Department of Transportation Act of 1966 (49 U.S.C., Section 303 (c)), as implemented by regulations codified at 23 CFR Section 771.135, prohibits federal approval or funding of a transportation project if the project requires use of a publicly owned park, recreation area, wildlife or waterfowl refuge area, or any significant historic site, unless (a) there is no prudent and feasible alternative, and (b) all possible planning to minimize harm to the resource has occurred. MTA/NYCT has prepared a Section 4(f) Evaluation for potential use of Section 4(f) resources associated with the Proposed Action. The Section 4(f) Evaluation is included at the end of this EA. As indicated in the evaluation, MTA/NYCT has demonstrated that there are no prudent and feasible alternatives to using the Section 4(f) resources for the Proposed Action, and that the project would include all possible planning to minimize harm to the affected property.

Table 1-1
Approvals, Permits and Coordination Required
South Ferry Terminal Project*

Approval/Permit/ Coordination	Resource Agency	Description
Parkland Use Permits	NYCDPR	Permit for construction in parkland (excavation, staging, etc.)
Parks MOU	NYCDPR	Agreement between NYCDPR and MTA/NYCT re temporary and permanent impacts to parks and for park use.
Parkland Alienation	NYC Council & NYS Legislature	Approval for temporary and permanent takings of parkland. Project requires Home Rule approval from NYC Council and the passage of legislation by NYS Legislature.
Section 4(f) Evaluation	USDOT/FTA	Finding that there is no prudent and feasible alternative to use of Section 4(f) resources, and that MTA/NYCT has considered all reasonable avoidance alternatives to minimize harm to Section 4(f) resources.
6(f) L&WCF	NYSOPRHP/ NPS	Determination under Land & Water Conservation Fund Act, Section 6(f), regarding temporary and permanent takings in Battery Park.
Historic Preservation Consultation	SHPO (NYSOPRHP)	Programmatic Agreement among SHPO, FTA and MTA/NYCT to show consultation process under Section 106 of NHPA. Applies to treatment of both archaeological resources and historic structures.
Coordination at Whitehall Ferry Terminal	NYCEDC	Required for coordination and assumption of part of NYCEDC's work by MTA/NYCT in Peter Minuit Plaza. MOU to be executed.
Coordination at Battery Place	NYCDOT & NYSDOT	Agreement necessary for coordination and assumption by MTA/NYCT of utilities relocation, street work.
Water Discharge (Construction)	NYCDEP or NYSDEC	During construction, this permit will allow Contractor to discharge the water from his activities after appropriate treatment, including dewatering of excavation, wheel washing.
Water Discharge (Operation), New or modification	NYCDEP or NYSDEC	During operation, this permit will allow MTA/NYCT to discharge the water from the terminal and tunnel.
SPDES (State Discharge Pollutant Elimination System)	NYSDEC	General permit for stormwater management for construction site over 1.0 acre. Covers erosion control, storage of materials, best practices to avoid releases.
Coastal Zone Management	NYSDOS	Determination of consistency from NYS Dept. of State that project is consistent with State and Local coastal zone policies.
MPT Plans	NYCDOT	Approvals for use of sidewalks and street lanes
Easement at One Broadway	New York City	Approval required to use vaults at One Broadway for temporary easement.
Air Quality Conformity	ICG	Consultation with Interagency Consultation Group re AQ Conformity.
Interagency Coordination	All agency stakeholders	Ongoing coordination from planning through construction to minimize cumulative effects on Lower Manhattan

*See Acronym list at end of EA for acronyms used in this table.

1.8.3 Section 6(f) Compliance

The United States Department of Interior (DOI) provides funding under the Land and Water Conservation Fund Act (LWCFA; 16 U.S.C, Sections 4601-4 to 4601-11) for state

and local efforts to plan, acquire, or develop land to advance outdoor recreational opportunities. Battery Park received a federal grant under this funding program in 1981. Section 6(f) of the LWCFA prohibits the conversion of a park that has received LWCFA funding to a non-recreational use without the prior consent of the Secretary of the DOI. The DOI Secretary has delegated the duty of reviewing and approving conversion requests to the Regional Directors of the National Park Service (NPS). MTA/NYCT is in consultation with the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), the designated liaison for the NPS on 6(f) matters in New York State, regarding the temporary construction period in Battery Park (expected duration of nine months) and the permanent use of a portion of the sidewalk between the eastern edge of Battery Park and State Street (sidewalk in this location is part of Battery Park) for one of the new terminal's entry/exit points. NYSOPRHP responded to MTA/NYCT in a letter dated November 7, 2003 (see Appendix G) requesting a formal submittal of project information. MTA/NYCT is currently preparing this submittal.

1.8.4 National Historic Preservation Act (Section 106 Review) and New York State Historic Preservation Act (Section 14.09)

Under Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. Section 470), as implemented by federal regulations codified at 36 CFR Section 800, the local agency, MTA/NYCT, must take into account the effects of its undertaking on historic properties either listed on or eligible for listing on the National Register of Historic Places. Under the New York State Historic Preservation Act (Section 14.09), State agencies must take into account the effects of their undertaking on historic properties listed on or eligible for listing on the State Register of Historic Places. Two historic structures would be affected by the Proposed Action: 1) the International Mercantile Marine Building at One Broadway, listed on the State Register of Historic Places and a designated New York City Landmark; and 2) the existing South Ferry Subway Station, which has been determined to be eligible for listing on both the National and State Registers. In addition, the Proposed Action has the potential to impact historic archaeological resources ranging from the period of Native American occupation and use through all aspects of historic period colonization, growth, and development in this area of Lower Manhattan. A Phase IA Archaeological Assessment of the project corridor was conducted and is included in this EA as Appendix C.

Because of the significance or potential significance of these resources that could be affected by the project, and to meet the consultation requirements of Section 106 and Section 14.09, MTA/NYCT and FTA are developing a Programmatic Agreement with the New York State Historic Preservation Office (SHPO) regarding treatment of archaeological and historic resources that may be affected by the Proposed Action. The draft Programmatic Agreement is included in this EA document as Appendix B.

1.8.5 Coastal Zone Management Act of 1972

Under the Coastal Zone Management Act (16 U.S.C. Sections 1451-64), any federal agency supporting activities affecting the coastal zone shall conduct or support those

activities in a manner which is, to the maximum extent practicable, consistent with approved state management programs. Given the project's location within New York City's designated coastal zone, consistency with applicable coastal zone management policies must be demonstrated. These policies are administered at the state level by the New York State Department of State (NYSDOS) Coastal Management Program (CMP), and at the City level by the New York City Department of City Planning (NYCDCP) Local Waterfront Revitalization Program (LWRP). MTA/NYCT has demonstrated consistency with these policies (see Section 5.5 of this EA).

1.8.6 Floodplain Management (Executive Order 11988)

Federal Executive Order 11988 - *Floodplain Management* directs Federal agencies to "take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains…." USDOT Order 5650.2, Floodplain Management and Protection, contains USDOT's policies and procedures for implementing the executive order. The Order requires that if the Proposed Action involves "significant encroachment" on the floodplain, the environmental document must identify why the Proposed Action is the only practicable alternative, and provide supporting documentation reflecting the consideration of alternatives to avoid or reduce adverse impacts on the floodplain. One portion of the project site is located within the 500-year flood boundary and another portion is located within the 100-year flood boundary, as indicated on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM). Section 5.8 of this EA describes the project's compliance with Federal Order 11988 and USDOT Order 5650.2.