DRAFT SCOPE
Permanent World Trade Center PATH Terminal
Environmental Impact Statement

A. INTRODUCTION

The Port Authority of New York and New Jersey (PANYNJ), a municipal corporate instrumentality of the States of New York and New Jersey, is proposing to undertake, in cooperation with the United States Department of Transportation, Federal Transit Administration (FTA), a project (the Proposed Action) involving the reconstruction of a permanent terminal at the World Trade Center (WTC) site in Lower Manhattan for the Port Authority Trans-Hudson (PATH) system (see Figure 1).

Prior to the September 11, 2001 terrorist attacks, the PATH system consisted of four inter-urban rapid transit lines connecting the north New Jersey cities of Newark, Hoboken, and Jersey City with the business, residential, shopping, and cultural districts of Manhattan (see Figure 2). A daily ridership of 67,000 commuters passed through the WTC PATH Terminal alone. PATH also served as an interchange link for commuters using New Jersey Transit (NJT) rail and bus lines to continue their trips from termini on the west side of the Hudson River into New York City.

The terrorist attacks of September 11, 2001 resulted in extensive damage to the PATH system. The WTC PATH Terminal and a seven-car train were destroyed. Tunnels E and F (Hudson Tubes) under the Hudson River were flooded requiring total replacement of all tunnel track and related equipment. PATH's Exchange Place Station in Jersey City, New Jersey suffered damage and was rendered inoperable because the track configuration would not allow trains to turn around before entering the Hudson River tubes. (Prior to September 11, 2001, eastbound trains bound for the WTC Terminal would loop around through the station to return westbound to New Jersey.) As a result, the PATH system lost a significant portion of its capacity to serve commuters throughout the New York and New Jersey region and mass transportation access to Lower Manhattan was severely hindered.

Under the Proposed Action, the reconstructed Permanent WTC PATH Terminal would consist of a track and platform level, an associated mezzanine/fare-zone level, and a terminal building incorporating sub-grade pedestrian connections in all directions to adjacent streets, New York City Transit (NYCT) subways, and on and off-site developments. The PATH tubes, tracks, platforms, and mezzanine would be located within the WTC "bathtub" as they were prior to September 11, 2001.

The Proposed Action is part of the Federal government's $4.55 billion transportation relief package, committed to New York City following the terrorist attacks of September 11, 2001. The FTA will be the Federal lead agency for the environmental review to be undertaken in cooperation with PANYNJ, with respect to the Proposed Action. As such, an Environmental Impact Statement (EIS) is being prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the applicable regulations implementing NEPA as set forth in 23 CFR Part 771 and 40 CFR Parts 1500-1508.

This scoping document will frame the environmental review to follow and will facilitate a public discussion of alternatives and environmental issues to be considered in the EIS. This document presents the Proposed Action's purpose and need, its current planning context, and its goals and objectives; describes the alternatives that have been developed to date; outlines the technical analyses to be prepared; and describes the environmental review process that will be undertaken.

The scoping process formally began with the publication of a Notice of Intent (NOI) to prepare an EIS in the Federal Register on September 26, 2003. Public scoping meetings will be held on October 8 and October 9, 2003. Each meeting will have an afternoon and an evening session. Each will be preceded with a brief presentation of the project. The public will have an opportunity to view informational materials and make oral comments on the scoping document. The meeting dates, locations, and times are as follows:

Wednesday, October 8, 2003
Hudson County Administration Annex
Freeholder's Chambers
567 Pavonia Avenue, 3rd Floor
Jersey City, New Jersey
Afternoon session: 2:00PM to 5:00PM
Afternoon Presentation: 2:30PM
Evening session: 6:00PM to 9:00PM
Evening Presentation: 6:30PM

Thursday, October 9, 2003
The Alexander Hamilton U.S. Custom House
One Bowling Green, Lower Level Auditorium
New York, New York
Afternoon session: 2:00PM to 5:00PM
Afternoon Presentation: 2:30PM
Evening session: 6:00PM to 9:00PM
Evening Presentation: 6:30PM

The PANYNJ invite the general public and interested groups to participate in the scoping process. Comments can be made orally at a public meeting; electronically by visiting www.PANYNJ/pathrestoration.com; or in writing to the following address:

WTC PATH Terminal
Port Authority of New York and New Jersey
115 Broadway, 5th Floor
New York, NY 10006

The period for all public comments on this draft scope will remain open until October 29, 2003 at 5:00 p.m. Eastern Standard Time.

B. PURPOSE AND NEED

Trans-Hudson transit service has long been an integral part of the Lower Manhattan transportation system, but the terrorist attacks of September 11, 2001 destroyed the WTC PATH Terminal and severed PATH service between Lower Manhattan and New Jersey. The WTC PATH Terminal served some 67,000 daily commuters and was the gateway to Lower Manhattan for most commuters from west of the Hudson River. Since September 11, 2001, many of those commuting between Lower Manhattan and communities west of the Hudson River have sought other less convenient, more time consuming, and more expensive modes of travel. As described below, a Permanent WTC PATH Terminal is vital to the redevelopment and enhancement of the neighborhoods devastated by the terrorist attacks.

HISTORY

The Hudson & Manhattan (H&M) Railroad began operation of the Hudson Tubes to Lower Manhattan in 1909. The Hudson Tubes provided electric-powered, heavy rail train service

between Hudson and Essex Counties in New Jersey and the Hudson Terminal in Lower Manhattan. The Hudson Tubes served both as a commuter service as well as a connection to Manhattan for short and long-distance rail customers arriving at Newark Pennsylvania Station, Hoboken Terminal, and Exchange Place.

The Hudson Terminal was located between Greenwich, Cortlandt, Church and Fulton Streets parallel to the City's Greenwich and Church Street subway lines. Above street level, the H&M constructed what was then the world's largest office building, which consisted of two towers. Underneath was the station itself, which occupied two city blocks. The station contained three levels consisting of a pedestrian concourse with stores, restaurants, and services; a train level with five tracks; and a powerhouse. The H&M terminal formed a loop with the tubes to and from New Jersey. Eastbound trains would enter the station from the south river tube and would exit westbound through the north river tube.

When the H&M Railroad began to experience major financial difficulties, the States of New York and New Jersey looked to the PANYNJ to assume control of the system. In 1962, the States enacted legislation which authorized PANYNJ to undertake a port development project consisting of 1.) a World Trade Center; 2.) the Hudson Tubes, the interurban rail system between New York and New Jersey operated by the H&M Railroad; and 3.) certain extensions of the Hudson Tubes. The Port Authority was authorized to cooperate with other government agencies in the rehabilitation and redevelopment of the World Trade Center and Hudson Tubes for the purpose of the renewal and improvement of these areas as part of the port development project.

The legislation of 1962 provided for the PANYNJ to acquire, rehabilitate, and operate the rail transit property associated with the Hudson Tubes either directly or through a wholly-owned subsidiary corporation. Accordingly, PANYNJ established the Port Authority Trans-Hudson (PATH) Corporation, which acquired, by condemnation, the railroad and equipment owned by the H&M Railroad Company, including the Hudson Terminal Building in Lower Manhattan.

In connection with the construction of the WTC, PANYNJ razed the Hudson Terminal buildings. The H&M railroad terminal was replaced with a new PATH terminal in 1971, which was located beneath the office towers of the WTC. The WTC and its PATH terminal were destroyed during the terrorist attacks of September 11, 2001.

The loss of the PATH connection between Exchange Place in Jersey City and the World Trade Center was, and remains, a devastating loss for Lower Manhattan transportation infrastructure. Since September 11, 2001, tens of thousands of commuters accessing Lower Manhattan from west of the Hudson River have been forced to use other more time-consuming and more expensive modes or patterns of travel each day. This has caused congestion at other transportation facilities and has resulted in longer and more difficult commutes for many.

CURRENT PLANNING CONTEXT

Immediate Actions

Rescue and recovery operations began in and around the WTC site immediately following September 11, 2001. Work on the WTC site continued 24 hours a day, seven days a week for approximately nine months. During this period, the City of New York (the "City") controlled the WTC site and was responsible for material removal, including contracting with private entities to provide such services in coordination with various Federal and New York State entities.

Control of the portion of the WTC site that contained 7 WTC was returned to PANYNJ on May 7, 2002. The balance of the site was returned to PANYNJ control on June 30, 2002.

In February 2002, PANYNJ commenced work on the expansion of PATH's Exchange Place Station as well as repairs to the tunnels under the Hudson River. This work included electrical and signal replacements for components destroyed by water damage as well as excavation for new track crossovers and other improvements required to bring the station back on line. The Exchange Place Station was reopened to passenger service on June 29, 2003.

Construction of a temporary WTC PATH station began in July 2002. Scheduled to open in November 2003, the temporary station is be located in the WTC "bathtub" and has substantially the same configuration as the terminal that existed on the WTC site before September 11, 2001. It will provide five tracks and three 8-car platforms, as compared to the three, 10-car platforms that existed before September 11, 2001. The station will provide street-level pedestrian access through a single entry/exit at the intersection of Fulton and Church Streets and will have direct connections to stations on NYCT's E, N, and R routes. The temporary WTC PATH station is expected to be in operation until a permanent WTC PATH Terminal is constructed.

The temporary WTC PATH station has been designed and constructed with the primary objective of restoring PATH service to Lower Manhattan as quickly as possible following the terrorist attacks of September 11, 2001. The operating capacity and functionality as well as equipment systems in the temporary station are, therefore, limited. If a Permanent WTC PATH Terminal is not constructed, that is the No Build Alternative described below, it is expected that the temporary station would be retired from service or would require ongoing replacement as portions of the structural systems and/or equipment reaches the end of their useful life, or when redevelopment at the WTC site precludes further operations.

Lower Manhattan Recovery and Revitalization Efforts

Since September 11, 2001, several projects have been planned to redevelop and revitalize Lower Manhattan. Presently, four environmental reviews are being prepared under NEPA independent of this Proposed Action, as described below.

World Trade Center Memorial and Redevelopment Plan The Lower Manhattan Development Corporation (LMDC), a subsidiary of the New York State Urban Development Corporation, was formed in November 2001 by New York Governor George Pataki and then New York City Mayor Rudolph Giuliani. LMDC will oversee the revitalization and rebuilding of Lower Manhattan, defined as the areas south of Houston Street.

LMDC is undertaking, in cooperation with the United States Department of Housing and Urban Development (HUD) and PANYNJ, a World Trade Center Memorial and Redevelopment Plan. The plan includes the construction of a WTC Memorial and memorial-related improvements as well as office, retail, and hotel space; museum and cultural facilities; new open space; new street configurations, and; certain infrastructure improvements at the WTC site and adjacent parcels.

The World Trade Center Memorial and Redevelopment Plan is a project that is independent of the Proposed Action and it is undergoing a separate environmental review. LMDC is conducting a coordinated environmental review of their proposed action, pursuant to federal statute, as the recipient of HUD Community Development Block Grant program funds (42 USC 5304(g)) and as lead agency under NEPA and the New York State Environmental Quality Review Act (SEQRA) and its implementing regulations (6 NYCRR Part 617). LMDC will prepare a Generic Environment Impact Statement (GEIS) as part of that review.

Fulton Street Transit Center The Fulton Street Transit Center is a project being proposed by the Metropolitan Transportation Authority New York City Transit (MTA/NYCT). The Fulton Street Transit Center will rehabilitate, reconfigure, and enhance the multilevel complex of subway stations serving nine different lines in the area of Fulton Street and Broadway. The project will improve platforms, mezzanines, and connecting corridors and will provide a new central concourse with an above-grade presence. The facility has a proposed below-grade concourse connection to NYCT's N/R station at Cortlandt Street and the Permanent WTC PATH Terminal. The Fulton Street Transit Center is projected for completion in 2007. The Fulton Street Transit Center is a project that is independent of the Proposed Action, and it is undergoing a separate environmental review by the FTA and MTA/NYCT.

Route 9A Project The New York State Department of Transportation (NYSDOT) is currently considering the reconstruction of Route 9A south of Chambers Street with either at-grade improvements or a below-grade bypass for vehicular through traffic. The reconstruction of Route 9A is a project that is independent of the Proposed Action, and it is undergoing a separate environmental review by FHWA, FTA, and NYSDOT.

South Ferry Terminal MTA/NYCT plans to reconstruct the South Ferry Station on the Seventh Avenue Local line (1/9 routes). Presently, South Ferry is a loop station with a single platform that can only accommodate 5-cars trains. NYCT proposes to replace the loop station with a stub-end terminal having two tracks and one platform able to accommodate 10-car trains. This project would increase both the capacity of the South Ferry Station and the Seventh Avenue Local line during peak periods. MTA/NYCT is in the beginning stages of its environmental review for this project.

Other Downtown Projects

Before September 11, 2001, several projects were planned downtown that are still under study. These include residential buildings at Battery Park City and within the Washington Street Urban Renewal Area, open space and cultural institutions, and modest commercial development.

Federal, State, and local initiatives have been implemented to encourage private development in Lower Manhattan. The Liberty Bonds program provides Federal funds for residential development in Lower Manhattan, which has resulted in the conversion or construction of several new apartment and condominium buildings. LMDC is overseeing Governor Pataki's short-term capital projects, which include temporary pedestrian connections across West Street; streetscape improvements; a Greenmarket at Liberty Plaza; security improvements at the New York Stock Exchange; the reopening of Millennium High School; and public open space and art.

PROBLEM DEFINITION

Pre-September 11, 2001 PATH Ridership

Prior to September 11, 2001, Lower Manhattan had approximately 108 million square feet of office space, ranking as the nation's third largest Central Business District. More than 388,000 employees worked in Lower Manhattan. Approximately 15 percent of downtown's office workers commuted from New Jersey and other points west of the Hudson River, and PATH served as their primary mode of travel.

Commuters from west of the Hudson River, including New Jersey and Rockland, Orange, Sullivan, and Ulster Counties in New York, comprised a significant portion of the workforce in Lower Manhattan. As shown in Table 1, the largest percentage of Lower Manhattan's workers

commuted from New York City (72.2 percent), followed by those from west of the Hudson (15.1 percent). All other areas, including Long Island, Westchester County, and Connecticut, totaled 13.8 percent.

Table 1
AM Peak Hour Origin and Destination of Lower Manhattan Commuters

FROM	TO LOWER MANHATTAN			
	South of Chambers and West of Broadway	South of Chambers and East of Broadway	Canal Street to Chambers Street	Total
New York City				
Manhattan	15.7%	15.5%	18.9%	16.7%
Bronx	7.5%	7.6%	8.2%	7.8%
Brooklyn	20.5%	21.0%	23.2%	21.6%
Queens	18.5%	16.8%	25.6%	20.3%
Staten Island	6.2%	6.9%	4.2%	5.8%
Total New York City	**68.4%**	**67.8%**	**80.1%**	**72.2%**
West of Hudson (NY/NJ)	18.7%	18.3%	8.3%	15.1%
Long Island	7.5%	7.3%	7.8%	7.5%
Other New York State	4.2%	5.0%	2.6%	3.9%
Connecticut	0.8%	1.0%	0.4%	0.7%
All Others	0.6%	0.6%	0.6%	0.6%
Total	**100.2%**	**100.0%**	**99.8%**	**100.0%**

Notes: "West of Hudson" refers to commuters from New Jersey and Rockland, Orange, Sullivan, and Ulster Counties in New York. "Other New York State" refers to Westchester, Putnam, and Dutchess in New York.

Source: U.S. Department of Commerce, Bureau of the Census, *1990 Census of Population and Housing.*

West of Hudson commuters were an even greater percentage of those working south of Chambers Street, comprising 18.7 percent of the workforce west of Broadway and 18.3 percent east of Broadway.

The primary mode of travel for West of Hudson Commuters was transit, representing 65 percent of the AM peak hour trips to Lower Manhattan. The largest percentage, of which, traveled by PATH.

The WTC PATH station served over 67,000 daily passengers and was operating at capacity during peak hours. In 2000, AM peak hour ridership was 26,000. Approximately 85 percent were inbound to Lower Manhattan. The remaining 15 percent traveled from downtown New York to New Jersey, making PATH an important mode for "reverse" commuters.

Surveys conducted by PANYNJ in 1996 showed that the principal destination of PATH's customers exiting the station in the AM peak hour were off-site developments as shown in Table 2. Approximately 13.2 percent exited to the World Financial Center; 15.1 percent traveled south or north of the WTC complex; and, 36.0 percent crossed Church Street to the east.

Approximately 20.8 percent remained on-site, and the remaining 14.9 percent connected to NYCT subways.

Table 2
AM Peak Hour Origin and Destination of PATH Customers at the WTC Station

Origin/Destination	From PATH To	To PATH From
NYCT Subways		
1/9	1.6%	3.8%
E	6.8%	48.1%
Downtown N & R	1.7%	5.8%
Uptown N & R	4.8%	8.1%
Total Subway	**14.9%**	**65.9%**
Off-Site		
WFC	13.2%	1.7%
North to Vesey St.	10.1%	6.1%
South to Liberty Street	5.0%	0.3%
Northeast via Church Street	10.4%	19.5%
Southeast via Church Street	25.6%	4.0%
Total Off-Site	**64.3%**	**31.6%**
Within WTC Complex	20.8%	2.6%
Grand Total	**100.0%**	**100.0%**
Notes: Based on surveys conducted by PANYNJ at the WTC complex in 1996.		

For outbound customers in the AM peak period, NYCT subways were the principal mode of entry to the PATH system. Approximately 65.9 percent used NYCT subways to access PATH. Another 31.6 percent entered from off-site developments, and 2.6 percent connected from the WTC itself.

The combined volume of inbound and outbound passengers to the PATH system would rely upon its connections to the WTC site, off-site development, and NYCT subways. During the AM peak hour on an average weekday, approximately 4,700 passengers would stay within the WTC complex using all-weather connections within its retail concourse. Slightly more than 5,900 passengers would transfer to or from NYCT subways. Nearly 3,000 passengers traveled across Route 9A between the WFC and the WTC station and nearly 8,900 passengers would travel across Church Street. These volumes indicate the need for pedestrian connections between PATH, NYCT, and off-site developments.

New Jersey Intermodal Connections

An important component of the PATH system is its inter-modal connections to other transit services in New Jersey. PATH directly serves communities in Jersey City, Newark, and Hoboken but also provided connections for other West of Hudson residents. At Newark-Penn Station, PATH customers can access AMTRAK, New Jersey Transit's (NJT) Northeast Corridor, Raritan Valley, and North Jersey Coast commuter rail lines; the Newark City Subway; and bus/rail service to Newark Liberty International Airport. In Hoboken, PATH connects with NJT's Boonton, Morris & Essex, Main/Bergen County, Pascack Valley, and North Jersey Coast commuter rail lines; numerous NJT bus routes; and the Hudson-Bergen Light Rail System.

These connections to and from PATH's WTC routes allowed many customers to reach Lower Manhattan without first traveling to Midtown Manhattan.

Future Growth

The terrorist attacks of September 11, 2001 resulted in the loss of approximately 12 million square feet of office space on and around the WTC site. It is anticipated that approximately 10 million square feet of office space will be reconstructed by 2015. Proposals for other sites in Lower Manhattan would result in development in excess of that which was lost on September 11, 2001. These projects could result in an additional 3.2 million square feet of offices and 9,000 residential units in the area south of Canal Street. It is expected that a portion of the new trips to these sites will access Lower Manhattan via PATH.

Long-Term Limitations of Temporary WTC PATH Station

Although the temporary WTC PATH station will allow restoration of service, it will not fully restore the pedestrian connections or the capacity that existed before September 11, 2001.

The temporary station will consist of five levels—platform, mezzanine, 1/9 underpass, concourse, and street-level. The station will have five tracks and three platforms, located in the WTC "bathtub", in substantially the same configuration as before September 11, 2001. Passengers will use a series of stairs, escalators, and/or elevators to travel between the platform and the street-level and concourse-level entrances near the eastern boundary of the WTC site.

The temporary station will have 8-car platforms as compared to 10-car platforms that existed before September 11, 2001, and it will have 20 percent less capacity than its pre-September 11, 2001 configuration. Vertical elements within the station have a limited service life, and the station's design will not allow for new construction above, as planned for the WTC redevelopment, nor will it easily support connections to future buildings on the WTC site.

Because construction of the WTC site is anticipated to continue after the opening of the temporary station, pedestrian access is limited. All patrons will enter and exit the station at street-level near the intersection of Church and Fulton Streets at the eastern boundary of the WTC site. Thus, patrons traveling to the World Financial Center will need to double-back along Vesey Street. The temporary station will have a connection to NYCT's N, R, and E routes, but access to the 1/9 trains cannot be provided.

To expedite service restoration, the temporary station's tracks and platforms will be located outdoors in the WTC "bathtub". Rain protection is provided, but the station will not be climate-controlled. Local radiant heating will be provided in waiting areas, but many portions of the station complex will not be heated during winter months or cooled during summer months. The station will include security and fire protection equipment, but advanced passenger amenities will not be provided. The station will be accessible to people with disabilities in accordance with the Americans with Disabilities Act (ADA), but the station's configuration will require four separate elevator rides to reach street-level. Emergency exists will be provided, but they will lead passengers to the WTC bathtub area with access to the street via the temporary access ramp and one temporary stairway to West Street.

GOALS AND OBJECTIVES

The Permanent WTC PATH Terminal is proposed to be a full service, regional transportation hub that will be coordinated with the existing and future transportation infrastructure, WTC site development, and the surrounding area. The project is needed to re-establish and enhance

transportation facilities and infrastructure that existed at the WTC complex prior to September 11, 2001 and to ensure the long-term accessibility and economic vitality of Lower Manhattan. To this end, the following goals and objectives have been established for this project:

Effectively restore long-term PATH service between New Jersey and Lower Manhattan.

- Accommodate pre-September 11, 2001 PATH ridership.
- Provide for additional capacity at the Terminal to support ridership growth.
- Provide for modern station design with ADA accessibility, climate control, and station security.
- Minimize disruption to temporary PATH service during construction.

Establish an intermodal transportation facility in Lower Manhattan.

- Improve street-level visibility and access.
- Provide for adequate and state-of-the-art pedestrian circulation within the facility.
- Provide for connections to NYCT subways and other major origination and destination points.

Plan and construct a Terminal that would support the future WTC site development.

- Construct a facility that is consistent with the master plan for the WTC site.
- Provide for future connections to WTC buildings and functions, including the proposed memorial.
- Coordinate PATH facilities with other sub-grade uses at the WTC site.

Minimize adverse impacts to the environment.

- Reuse existing infrastructure to the extent possible.
- Provide for efficient and environmentally friendly construction techniques.
- Minimize disruption to PATH and NYCT subway service during construction.
- Provide for green and sustainable design standards.

C. ALTERNATIVES

A review has been undertaken by the PANYNJ to examine reasonable alternatives for the reconstruction of a PATH station. In developing these alternatives, PANYNJ considered the limitations of the pre-September 11, 2001 WTC PATH Terminal and the goals and objectives identified above.

NO ACTION ALTERNATIVE

The EIS will consider a No Action Alternative. The No Action Alternative consists of the transportation facilities and real estate development most likely to be in place in the design year if the proposed project is not built. The future No Action Alternative assumes that Lower Manhattan development is expected to exceed pre-September 11, 2001 development levels in the vicinity of the project and that the temporary WTC PATH station has exceeded its useful life and is no longer in operation. The No Action Alternative will serve as the baseline against which the operational impacts of the proposed project are compared. The baseline for measuring the construction impacts of the project will be the conditions at the time of construction if the project were not built. Today's traffic, noise, air quality, and other conditions provide the best available estimate of the construction-period conditions without the project.

PROPOSED ACTION ALTERNATIVE

Development of Alternatives

PANYNJ conducted a preliminary review of alternatives for the restoration of Permanent PATH service to Lower Manhattan. As described above, the primary goal of the project is to effectively restore long-term transit service between New Jersey and Lower Manhattan. Because a large portion of the PATH infrastructure remains in tact, including the Hudson Tubes and the connections to stations in New Jersey, the most effective means of restoring transit service is the reuse of existing facilities, where possible. Since PATH continues to operate within New Jersey and Midtown Manhattan, it would not be cost or time effective to replace the system with an alternative mode. Thus any transit service to Lower Manhattan through the Hudson Tubes must be heavy-rail of the same specifications as the existing PATH system. Given these conditions, the only logical alternatives for a future Permanent PATH Terminal in Lower Manhattan would be alternate station locations, as compared to the pre-September 11, 2001 WTC Terminal.

PANYNJ studied four locations on and off the WTC site that would accommodate the existing PATH infrastructure. These sites are described below:

- WTC "bathtub": A loop-track facility would be constructed in the same location as the temporary station within the WTC bathtub.
- Church Street Terminal: A loop-track facility would be constructed within the WTC site with the platform and tracks oriented adjacent to and along Church Street.
- Broadway/Nassau Street Stub-end: A stub-end terminal would be constructed east of the WTC site with an east/west orientation beneath the proposed Fulton Street Transit Center.
- Vesey Street Terminal: A loop-track facility would be constructed within the WTC site with the platform and tracks oriented adjacent to and along Vesey Street.

Preliminary analysis showed that both the Vesey and Broadway-Nassau Street options would not provide for significant improvements in service as compared to the pre-September 11, 2001 condition and would result in suspension of temporary PATH service during construction. While the Church Street option would provide for similar service and local transit connections as the "bathtub" option, it would be more costly, would result in a more difficult connection to the World Financial Center, and would limit the development potential for the WTC site. Therefore, these alternatives have been eliminated from further consideration.

Description of the Proposed Action Alternative

The Permanent WTC PATH Terminal would consist of five levels—platform level; mezzanine level; lower concourse level; upper concourse level; and street level terminal building (see Figure 3). The platform and mezzanine levels would have a north-south orientation and would be located immediately west of NYCT's 1/9 train tubes and the proposed Greenwich Street extension. The four newly constructed platforms would be long enough to accommodate 10-car trains in accordance with PATH's long-range goal to increase the operational capacity of the system, and five tracks will allow for increased queuing capacity during peak periods. Fare equipment would be located on the mezzanine level. The platforms and mezzanine will be fully enclosed with heating, air conditioning, and advanced communication and security systems.

The lower concourse, upper concourse, and street-level concourse as well as the terminal building would be located on the eastern portion of the WTC site extending from Greenwich to

Church Streets. The mezzanine and lower concourse levels would connect via a passage under the NYCT's 1/9 train tubes and over to the western side of the site. The lower concourse would have pedestrian passageways in the north, south, and west directions. The south passageway would extend across Church and Liberty Streets, terminating within Liberty Plaza. The west passageway would cross beneath Route 9A to the World Financial Center. These passageways will also provide access to the proposed towers on the WTC site at intermediate points along their routes.

The upper concourse level would provide access to NYCT's Cortlandt Street Station on the 1/9 routes; the Cortlandt Street Station on the N/R routes; the World Trade Center Station on the E route; and the existing corridor to One Liberty Plaza; and street-level at the intersections of Fulton and Greenwich Streets and Vesey and Church Streets. The passageway to the N/R station would also connect with the proposed pedestrian connection to the Fulton Street Transit Center.

A terminal building would provide street-level access to the WTC site and Greenwich and Church Streets. It would also provide natural light to the concourses below.

The Proposed Action would also include certain ancillary facilities and systems, including mechanicals, ventilation, communications, and security. Accessory retail would be located within the Permanent WTC PATH Terminal.

Assuming the timely completion of the environmental review process, construction of the Permanent WTC PATH Terminal is expected to begin in late 2004 or early 2005. Components of the station, including the platforms, mezzanine, and certain pedestrian connections would be completed by the end of 2006. The remaining portions of the Terminal, including pedestrian connections and the terminal building would be completed in phases between 2007 and 2009.

Additional Design Alternatives

The EIS will evaluate certain components of the project that would not preclude the intent of the Terminal but may alter its potential environmental affects. Such alternatives may include the inclusion or deletion of certain pedestrian connections; revisions to the location of station facilities; and options for the location of ancillary facilities. The EIS will also consider any reasonable alternatives proposed during the scoping process.

ANALYSIS FRAMEWORK

To fully assess the future affects of a Permanent WTC PATH Terminal, the EIS will consider three analysis years—construction-period; opening year; and design year. The framework for these analysis years is described below.

Construction-Period

PANYNJ estimates that construction of the Permanent WTC PATH Terminal could begin in late 2004 or early 2005 concurrent with other sub-grade work for the proposed redevelopment of the WTC site. The platform and mezzanine levels; and portions of the pedestrian connections could be completed in 2006, while the remaining portions of the station would be completed in phases from 2007 to 2009.

The EIS will consider the potential environmental affects of the entire construction process for the Permanent WTC PATH Terminal. A qualitative analysis of the entire construction period will be conducted and where site-specific issues may arise such as exposure to hazardous materials, effects to historic or archaeological resources, or utility relocation, the potential

impacts will be disclosed. A quantitative analysis of a reasonable, "worst-case" construction condition will also be conducted. This analysis will characterize potential impacts to transportation, air quality, and noise during the peak construction year.

Opening Year

Construction activity at other sites in Lower Manhattan would continue after the Permanent WTC PATH Terminal is fully operational in 2008 or 2009. Due to concerns about potential cumulative effects, an analysis of opening year conditions will be included in the EIS.

Design Year

Typically, the analysis of impacts associated with a transit facility anticipates future conditions at a period of 20 years after its initial operation, also known as the design year. The design year varies from the initial year of operation because it anticipates future development that might increase transit demand and behavioral changes that may result in varied patterns of travel. For consistency with analysis being conducted for other downtown transportation projects and regional forecasts prepared by the New York Metropolitan Transportation Council (NYMTC), this EIS will consider a 2025 design year for the Permanent WTC PATH Terminal.

D. THE AFFECTED ENVIRONMENT

Upon its completion, the proposed Permanent WTC PATH Terminal would restore and enhance the transit service to Lower Manhattan. However, its construction and long-term use may have local environmental impacts in the vicinity of the WTC site or secondary impacts in areas served by PATH.

Potential short-term impacts associated with the construction of the Proposed Action include access and circulation, noise and vibration, air quality, architectural and archeological resources, water quality, hazardous materials, economic conditions, and neighborhood character. The cumulative effects of construction of this project and other Lower Manhattan recovery projects will also be a major focus of the short-term impact assessment.

The long-term operational issues and impacts of the alternatives to be considered in the EIS include economic development; neighborhood character, cultural resources; off-site pedestrian and transit operations and circulation. In addition, the EIS will describe the methodology used to assess impacts; identify the affected environment; and identify opportunities and measures for mitigating adverse impacts.

In addition, the EIS will consider green design and construction objectives that will be incorporated into the Permanent WTC PATH Terminal project. These design objectives may include various air quality and water and energy conservation measures that would be implemented for both construction and operation of the project.

LAND USE AND NEIGHBORHOOD CHARACTER

Neighborhood character embodies the physical and social conditions of an area that contribute to its unique character and the quality of life of its residents and workers. With the recent influx of new residents south of Canal Street, there has been a shift in the character of downtown from a 9 to 5 commuter destination to a 24-hour community. Support services have been established to enable downtown to maintain both a presence as a world class business center and as a desirable

neighborhood to live. Such services are also an important part of the planning for the future of Lower Manhattan.

There are numerous land use and public policy initiatives being programmed for Lower Manhattan, which would be supported by the Proposed Action, including the redevelopment of the WTC site and a memorial.

This assessment will also frame other analyses to be included in the document including transportation, air quality, noise, and cumulative impacts. Not only will this analysis address issues in the immediate vicinity of the Permanent WTC PATH Terminal, but it will consider the potential effects of the Proposed Action on other parts of Lower Manhattan as well as the communities served by PATH.

The EIS will also consider the potential construction-period impacts of the proposed project, which may result from limited access within the vicinity of the WTC site or short-term changes to neighborhood character that would alter local land use patterns and social conditions.

SOCIAL AND ECONOMIC CONDITIONS

The creation of a Permanent WTC PATH Terminal is a vital component of the redevelopment of Lower Manhattan. However, the potential relocation of entrances and below-grade connections to adjacent buildings may alter local trips to the area and may change the economic character of adjacent blocks. The EIS will also identify potentially vulnerable categories of populations, businesses, and institutions and will characterize the potential long-term effects of the proposed project, including changes in the value of space that may result from enhanced PATH service or direct connections with adjacent structures; potential indirect effects from the redistribution of vehicular and pedestrian trips in the study area; and potential impacts to the quantity or characteristics of local residential populations. The EIS will also characterize potential short-term effects to residents and local businesses during the construction-period.

CULTURAL RESOURCES

Lower Manhattan is the oldest and one of the most culturally rich sections of New York City. Thus, numerous buildings, street fixtures, and other structures have been identified as historically significant. Furthermore, the long social history of this area has led to the presence of archeological resources on a number of sites. Although the bulk of the proposed project would be located within an area that was previously disturbed with the construction of the WTC, resources may be present but were not previously identified.

Through coordination with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP), an appropriate area of potential effect (APE) for the proposed project will be determined. APEs will be developed separately for the architectural and archeological assessments. Additional materials will be submitted to the OPRHP and the New York City Landmarks Preservation Commission to determine the any potential for archaeological resources in and around the project site. The EIS will characterize any potential short-term and long-term impacts to both known and potential resources within the APEs. Should adverse impacts be identified, mitigation will be identified consistent with Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act.

VISUAL RESOURCES AND AESTHETICS

The visual impacts assessment will consider potential changes in urban design and visual character resulting from the above-grade portions of the Proposed Action, including the Terminal Building, the possible vent structures, and any proposed entrance structures within Liberty Plaza. This assessment will focus not only on the project's effect on existing development but also its consistency with plans for the redevelopment of Lower Manhattan, including the WTC site and the memorial.

TRANSPORTATION

The transportation analysis for the EIS will provide an assessment of potential operational and construction-period impacts to traffic; parking; transit; and pedestrian facilities in the vicinity of the WTC site. It will also describe the proposed operational changes to PATH service that could result from construction and operation of the Permanent WTC Terminal. It will also qualitatively describe the long-term impacts to Lower Manhattan if PATH service were not restored.

The pre-September 11, 2001 WTC PATH terminal generated a minimal volume of auto and taxi trips. (Approximately 1 percent of connecting trips to or from the pre-September 11, 2001 WTC PATH Terminal were made by auto, and less than a half-percent were made by taxi.) The long-term traffic conditions will be considered in the EIS. Furthermore, impacts during the construction-period will be assessed, identifying the volume of construction traffic generated, potential street and/or lane closures, and routes expected to be used by trucks to and from the site. The EIS will identify and evaluate traffic capacity improvements or other measures to mitigate significant impacts if such impacts are identified.

PATH ridership is expected to increase through 2025. Much of this increase will be attributed to the construction of new office towers on the WTC site, but additional growth, which was anticipated prior to September 11, 2001, is expected.. The EIS will identify the linkages of PATH riders to other transit services (primarily nearby subway lines) and to the street network. It is possible that different access/egress points to the street network above could alter pedestrian crossing locations and require pedestrian analyses at selected intersections in the immediate area. These conditions and the potential for significant impacts will be addressed in the EIS.

AIR QUALITY

Based on preliminary ridership projections, the proposed Permanent WTC PATH Terminal would likely result in no increase in the emission of air pollutants. Similarly, the number of new riders and how they arrive at various stations would determine whether the proposed project would result in localized air quality impacts. However, it is unlikely that this would be the case, even considering additional pedestrian congestion at intersections adjacent to the site and their effect on local CO levels. Finally, if any additional increase in on-site fuel consumption is required (e.g. for cooling or heating the Terminal), a stationary source analysis will be conducted.

The greatest potential for adverse impacts to air quality would occur during the construction of the Permanent WTC PATH Terminal. Emissions from construction equipment and airborne particulates may degrade air quality to pedestrians on adjacent sidewalks and to residents and workers in nearby buildings. In recognition of these potential air quality impacts, NYSDOT, PANYNJ, MTA/NYCT, and LMDC have coordinated in cooperation with FTA to develop environmental performance commitments (EPCs) in an effort to reduce emissions during

construction. This EIS will assess construction-period impacts under the guidelines set forth in the EPCs.

A detailed construction-period analysis will be performed for emissions of particulate matter (PM_{10} and $PM_{2.5}$), CO, SO_2, and NO_2 for the specific averaging periods specified in the National Ambient Air Quality Standards. Analyses will be conducted for construction equipment exhaust, paved and unpaved road dust, material delivery and demolition removal truck emissions, construction worker private vehicles and material handling. The analysis will utilize standard EPA dispersion models for mobile and stationary sources. Emission estimates will be made using EPA models with provisions for the use of low-sulfur fuel and emission controls as specified in the EPCs.

NOISE AND VIBRATION

A general assessment analysis would be required to determine if service conditions associated with the Permanent WTC PATH Terminal could result in increases in noise (air- or ground-borne) that exceed the FTA criteria at sensitive receptors in close proximity to the rail right-of-way, including proposed future uses of the WTC site. Mitigation measures will be recommended, if necessary.

During the construction-period, the project has potential to increase noise levels at nearby sensitive receptors from the generation of temporary power, demolition activities, and use of construction equipment. EPCs have been established to address potential noise impacts during construction, and these guidelines will be incorporated into the quantitative assessment of construction-period noise. Analysis results will be disclosed, and a review will be conducted to determine if additional noise abatement measures will be necessary.

CONTAMINATED MATERIALS

The EIS will describe the existing conditions at the WTC site with respect to hazardous materials and the larger area to be potentially disturbed by construction activities through site inspection, examination of historical mapping and aerials, existing environmental reports and analytical data and review of environmental database information including a review of the material related to the post-September 11, 2001 cleanup. This discussion will include a description of land form focusing on geology and hydrogeology that will be based on technical sources (United States Geological Survey, state and regional soil surveys, NYSDEC records, etc.), as well as available site specific soil boring information.

The EIS will include an evaluation of the potential for exposure to contaminants associated with site demolition and construction, including the removal of debris and ground disturbance. This analysis will address the potential exposure to contaminants for both workers and the general public, with particular attention to handling and disposal of impacted debris, soil, and groundwater.

NATURAL RESOURCES

Through research of existing data and coordination with appropriate Federal, state, and local agencies, the EIS will identify any wetlands, aquatic and terrestrial resources, and sensitive habitats in the vicinity of the project site and the Hudson River. Any potential construction-period or long-term disturbance to these habitats will be identified, and mitigation will be recommended, where necessary.

WATER RESOURCES

The water resources assessment will examine potential construction-period and long-term impacts to the quality, navigable operation, and hydrology/flooding of the area's waterways. It will identify any potential changes in drainage patterns both during and after construction and will examine the ability of the area's water treatment facilities to accommodate project-generated demand. Mitigation measures will be recommended, where necessary.

INFRASTRUCTURE AND ENERGY

The Permanent WTC PATH Terminal would be supported by existing power supplies and planned future utilities being considered as part of the WTC site redevelopment. During the construction-period, there would be potential impacts to utilities with the construction of pedestrian concourses beneath Church and West Streets. In addition, construction equipment will require a source of energy and possibly additional infrastructure.

The EIS will evaluate energy consumption associated with the Permanent WTC PATH Terminal during the construction- and operations-periods and will determine if local infrastructure is adequate to support this demand. The construction-period analysis will also identify potential impacts to utilities from the disturbance of on- or off-site infrastructure.

ENVIRONMENTAL JUSTICE

Executive Order 12898 requires federal agencies to consider whether actions they might fund or approve have any disproportionately high human health or environmental effects on low-income or minority populations. The EIS will consider both short-term and long-term impacts and their potential risk to environmental justice communities.

COASTAL ZONE MANAGEMENT

The project site is located within the New York City Coastal Zone and therefore must be assessed according to the City's Local Waterfront Revitalization Program (LWRP). New York City's LWRP was adopted in 1999 as a 197-a Plan in coordination with local, State, and Federal laws and regulations, including the State's Coastal Management Program and the Federal Coastal Zone Management Act of 1972.

CUMULATIVE EFFECTS

Cumulative effects may result when projects, being evaluated under separate environmental documentation, are combined to result in adverse impacts. As described above, a framework for the assessment of cumulative impacts has been established for projects in Lower Manhattan. Since the Permanent WTC PATH Terminal would support the other planned transportation and development projects downtown, it is expected that the project's long-term cumulative effects would be mostly positive.

During the construction-period, the WTC PATH Terminal coupled with activities at other adjacent and nearby sites may result in significant adverse cumulative effects. Although PATH's construction may not be the greatest contributor to these adverse impacts, it may increase or elevate these impacts such that additional mitigation would be required. The analysis will focus on simultaneous construction projects in close proximity to the Permanent WTC PATH Terminal (WTC Memorial and Redevelopment Plan, Route 9A Project, Fulton Street Transit Center) that could have overlapping effects on traffic, noise, cultural resources, air quality,

economics, access and circulation as well as impacts further away (i.e., truck traffic along heavily traveled routes to the downtown area). The cumulative analysis will use the same procedures as outlined under the above tasks, but will incorporate additional information from other project sponsors.

OTHER CHAPTERS

Other chapters will be prepared for the EIS that will frame the technical analyses described above, summarize analysis results, and identify other issues related to the affected environment. Such chapters may include purpose and need, alternatives, construction methods, commitment of resources, secondary effects, financial analysis, an index, a list of contributors, and a list of references. These chapters will be prepared based on work conducted under the technical studies described above and in accordance with the guidelines of the CEQ, EPA, and FTA.

E. THE ENVIRONMENTAL REVIEW PROCESS

Following the scoping process, a DEIS will be prepared and made available for public and agency review and comment. One or more public hearings will be held on the DEIS, and a minimum period of 45 days will be established for interested parties to formally submit comments. On the basis of these comments and analyses conducted in the DEIS, a preferred alternative will be selected and will be fully described and assessed in the Final EIS (FEIS).

During the public scoping process, issues may arise which may need to be considered under Article 8 of the New York State Environmental Quality Review Act (SEQRA), NYCRR Part 617, and New York City's Environmental Quality Review (CEQR) Process. Should such evaluations be determined necessary, this document would be revised as appropriate.

AGENCY COORDINATION

The Lower Manhattan Development Corporation (LMDC), Metropolitan Transportation Authority New York City Transit (MTA/NYCT), PANYNJ, and New York State Department of Transportation (NYSDOT) have been coordinating with the FTA to develop a framework for environmental analysis that will apply to the transportation recovery projects in Lower Manhattan being reviewed under NEPA.

This framework establishes basic assumptions for analysis and describes commitments to be fulfilled by each agency's project-specific environmental documentation. It considers the regulations enacted by the Council for Environmental Quality (CEQ) and considers guidance in the State Environmental Quality Review Act (SEQRA), the *New York City Environmental Quality Review* (CEQR) *Technical Manual*, industry best practices, and public input.

The FTA issued a report titled "Approach to Cumulative Effects Analysis for the Lower Manhattan Recovery Projects" in July 2003. The report addresses cumulative effects analyses focusing on five subject areas: historic resources, access and circulation, air quality, noise, and economic considerations. It was developed to ensure consistency among the various environmental reviews underway for the federally funded transportation recovery projects in Lower Manhattan. To advance the approach to cumulative effects, the various sponsoring agencies coordinated to develop environmental analysis frameworks and environmental performance commitments.

COORDINATING AND PARTICIPATING AGENCIES

The PANYNJ and FTA will coordinate with other Federal, state, and local agencies and authorities throughout the NEPA process.

Federal

- Advisory Council on Historic Preservation (ACHP)
- Army Corps of Engineers (ACOE)
- Federal Emergency Management Agency (FEMA)
- Federal Highway Administration (FHWA)
- National Marine Fisheries Service (NMFS)
- National Park Service (NPS)
- U.S. Department of Housing and Urban Development (HUD)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (FWS)

State

- Battery Park City Authority (BPC)
- Lower Manhattan Development Corporation (LMDC)
- Empire State Development Corporation (ESDC)
- Metropolitan Transportation Authority and New York City Transit (MTA/NYCT)
- New York State Department of Environmental Conservation (NYSDEC)
- New York State Department of State (NYSDOS), Division of Coastal Resources;
- New York State Department of Transportation (NYSDOT)
- New York State Office of Parks, Recreation, and Historic Preservation (OPRHP)

Local

- New York City Department of City Planning (NYCDCP)
- New York City Department of Environmental Protection (NYCDEP)
- New York City Landmarks Preservation Commission (LPC)
- New York City Department of Transportation (NYCDOT)

PUBLIC PARTICIPATION

The FTA and PANYNJ invite the public to participate throughout the environmental review process for the Permanent WTC PATH Terminal. To this end, several forums have been or will be established to communicate information and to elicit public comments.

Website

The project's website, www.panynj.gov/pathrestoration, contains project information, published documents, public meeting notices, and a forum for the electronic submission of questions or comments.

Newsletters

FTA and PANYNJ plan to publish and distribute newsletters throughout the NEPA process. Newsletters will communicate project status, progress, and other pertinent issues. Persons interested in receiving project newsletters must provide contact information for the project's mailing list via the website, public meetings, or written request at the address noted above.

Public Meetings

Public meetings will be held during the scoping process and after publication of the DEIS. The public scoping meetings will be on October 8 and October 9, 2003 at the following locations and times.

Wednesday, October 8, 2003
Hudson County Administration Annex
Freeholder's Chambers
567 Pavonia Avenue, 3rd Floor
Jersey City, New Jersey
Afternoon session: 2:00PM to 5:00PM
Afternoon Presentation: 2:30PM
Evening session: 6:00PM to 9:00PM
Evening Presentation: 6:30PM

Thursday, October 9, 2003
The Alexander Hamilton U.S. Custom House
One Bowling Green, Lower Level Auditorium
New York, New York
Afternoon session: 2:00PM to 5:00PM
Afternoon Presentation: 2:30PM
Evening session: 6:00PM to 9:00PM
Evening Presentation: 6:30PM

A notice for the public hearings on the DEIS will be published with the Notice of Availability in the Federal Register. Advertisements will also appear in local publications and on the project's website.

PROJECT SCHEDULE

A preliminary schedule of the key milestone dates for the environmental review process is presented in Table 3 below.

Table 3
Preliminary Schedule for Environmental Review Process

Activity	Estimated Date
Publication of Notice of Intent and Draft Scoping Document; Beginning of Public Comment Period	September 26, 2003
Public Scoping Meetings – New Jersey	October 8, 2003
Public Scoping Meetings – New York	October 9, 2003
Close of Public Comment Period	October 29, 2003
Publish Final Scoping Document	December 2003
Publish and Distribute Draft EIS; Beginning of Public Comment Period	March 2004
Public Hearing on Draft EIS	March 2004
Close of Public Comment Period on Draft EIS	April 2004
Response to Comments and Completion of Final EIS	April to July 2004
Anticipated Record-of-Decision	August 2004

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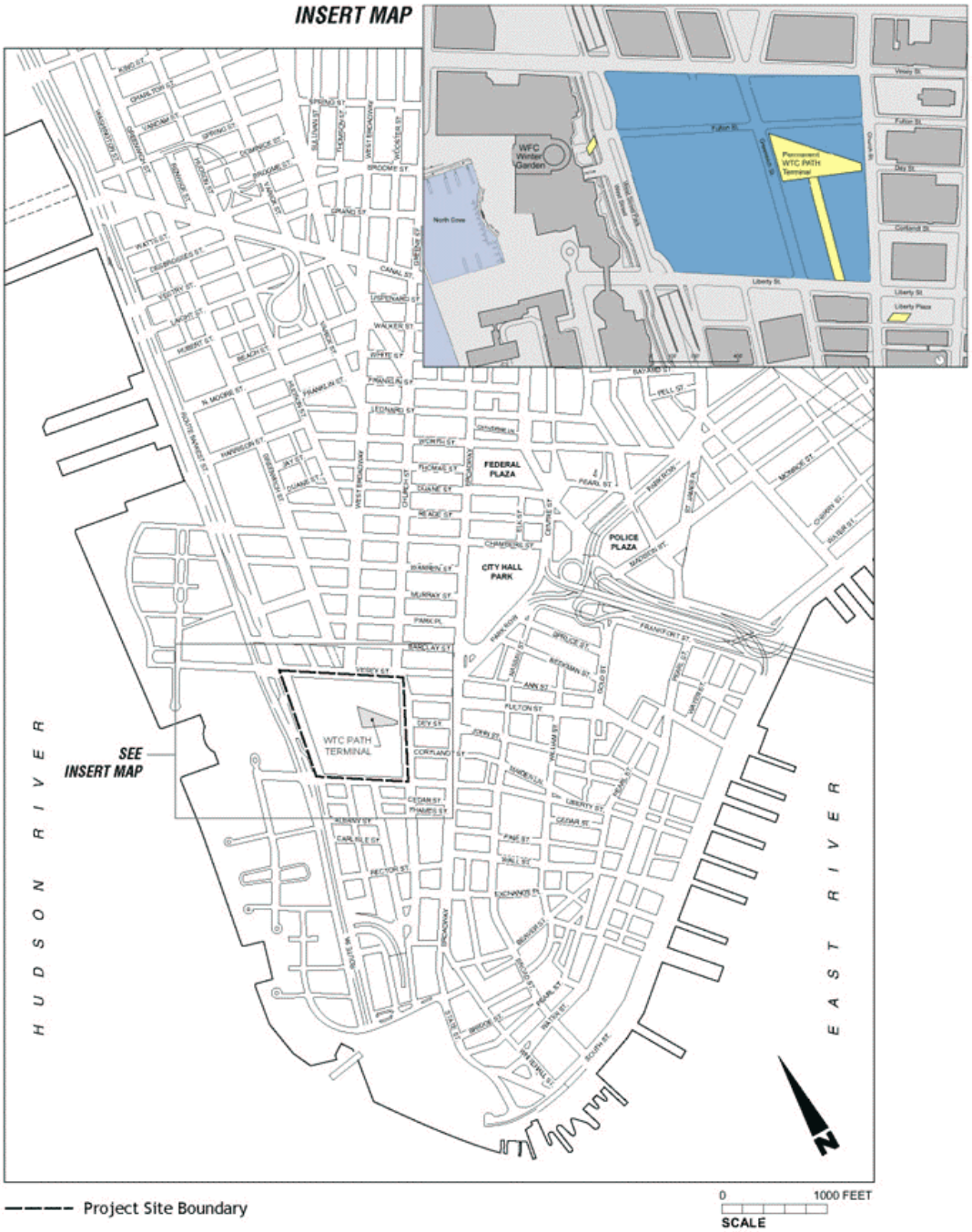
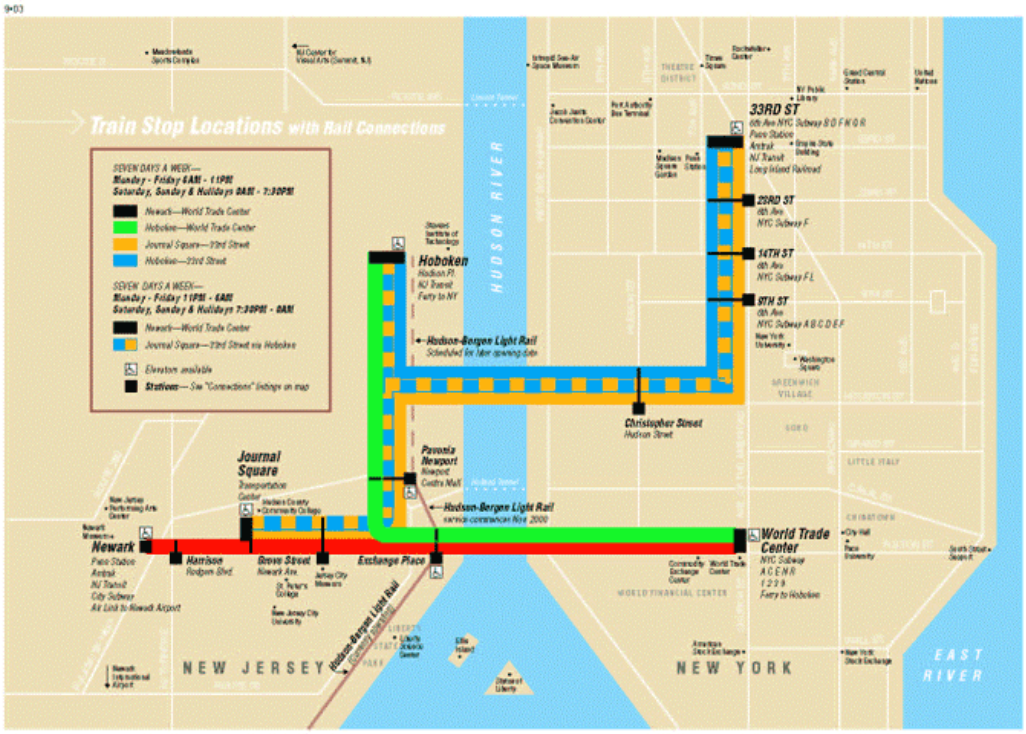


Permanent WTC PATH Terminal

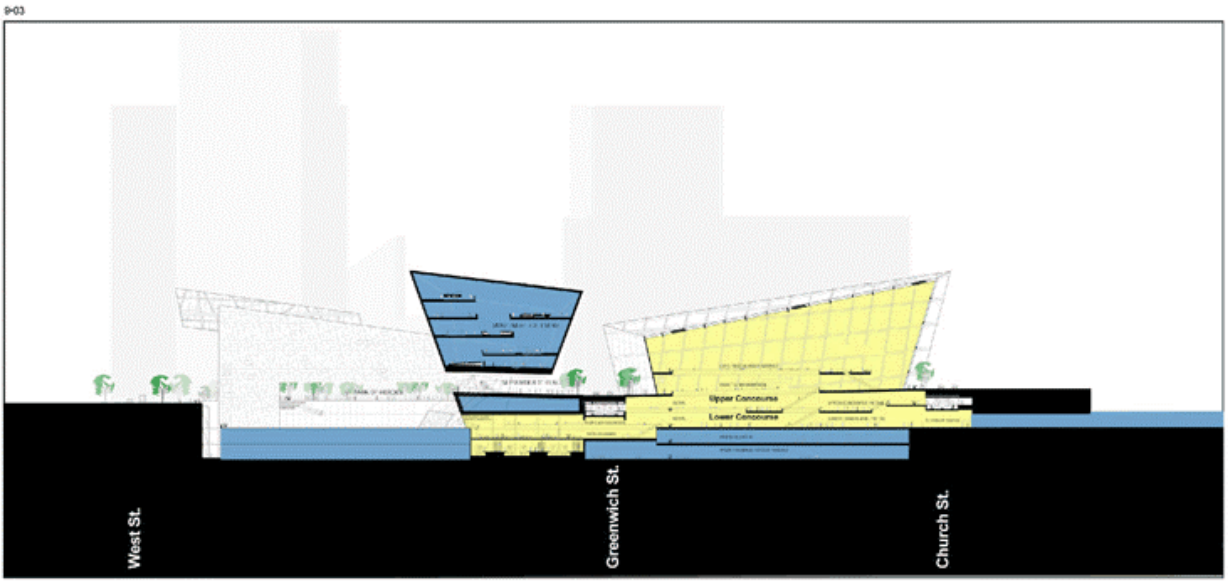
Project Location
Figure 1



Pre-September 11, 2001 PATH System Map

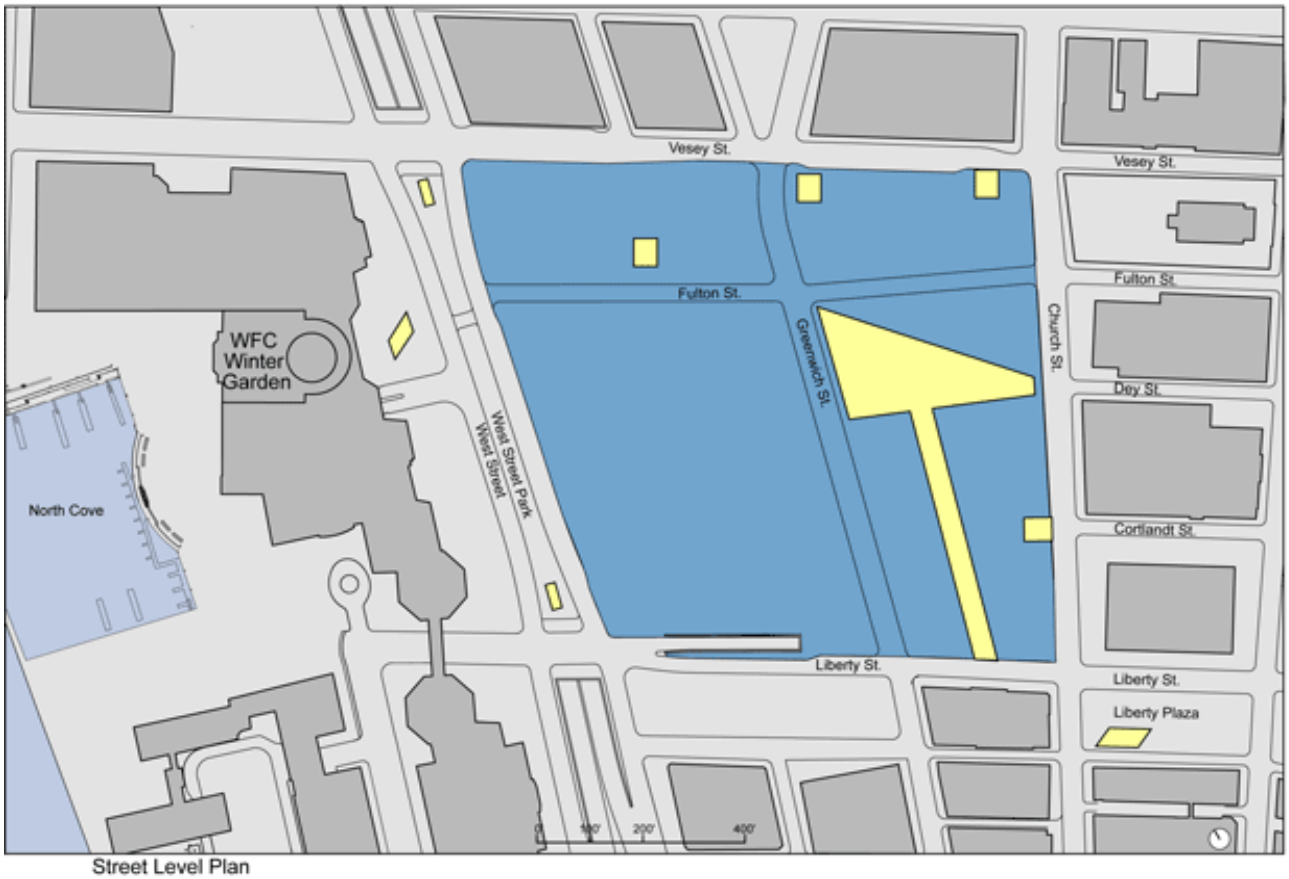
Permanent WTC PATH Terminal

Figure 2



Permanent WTC PATH Terminal

Cross Section of the Proposed Action Alternative
Figure 3



Street Level Plan

World Trade Center PATH Terminal

THE PORT AUTHORITY OF NY & NJ
Engineering Department

Upper Concourse Level

World Trade Center PATH Terminal

THE PORT AUTHORITY OF NY & NJ
Engineering Department

Lower Concourse Level

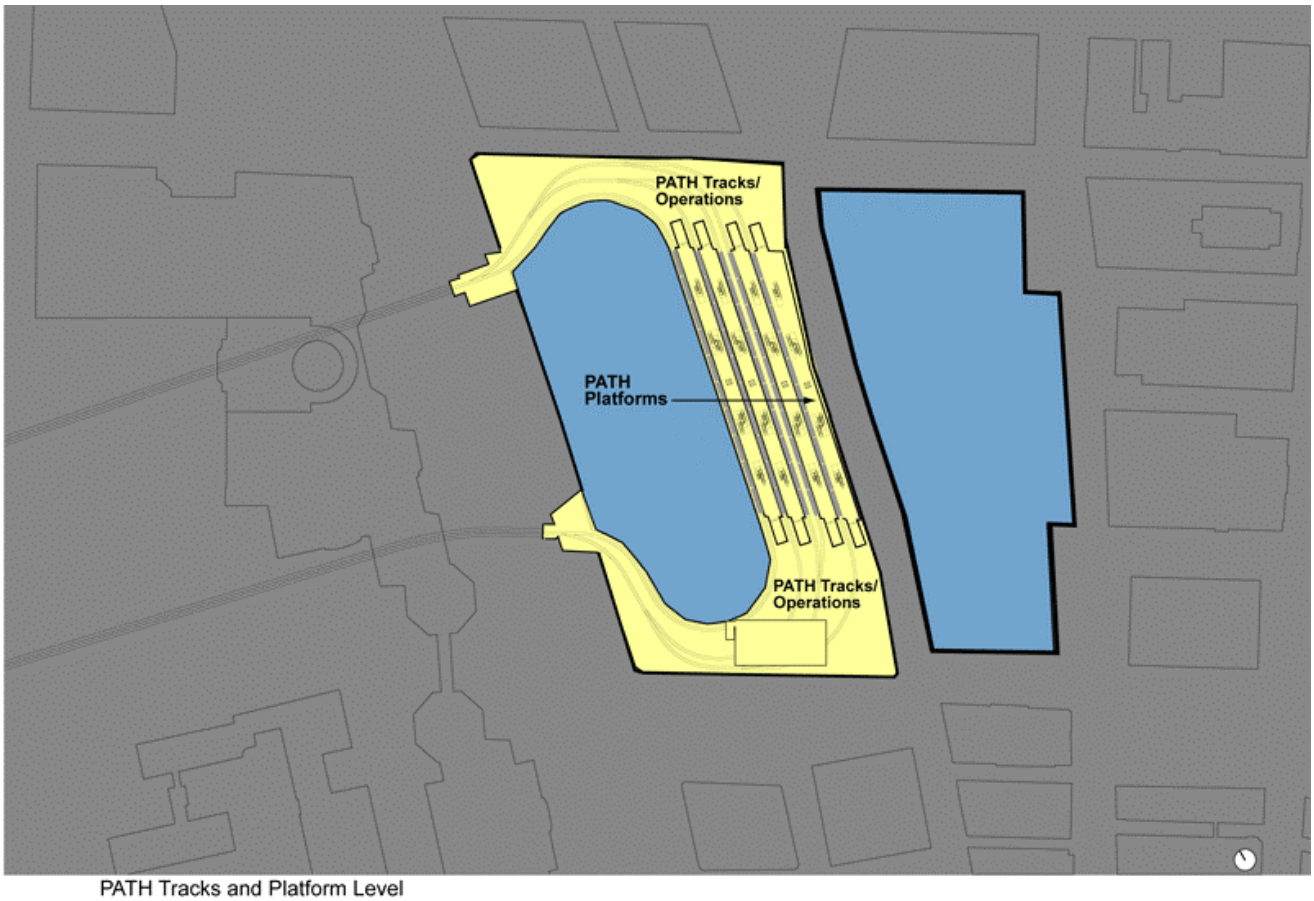
World Trade Center PATH Terminal

THE PORT AUTHORITY OF NY & NJ
Engineering Department

PATH Mezzanine Level

World Trade Center PATH Terminal

THE PORT AUTHORITY OF NY & NJ
Engineering Department



PATH Tracks and Platform Level

World Trade Center PATH Terminal

THE PORT AUTHORITY OF NY & NJ
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