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ENVIRONMENTAL ASSESSMENT

PENNSYLVANIA STATION REDEVELOPMENT PROJECT



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EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This Environmental Assessment (EA) evaluates a proposal by the Pennsylvania Station Redevelopment Corporation (PSRC) to transform portions of the James A. Farley Post Office (the Farley Building) in New York City into an intermodal transportation facility and commercial center which will provide Amtrak, commuter rail, and subway passengers with a contemporary, safe, and efficient facility that meets present and future transportation needs. This work will complement ongoing rehabilitation within the Pennsylvania (Penn) Station Complex by Amtrak, Long Island Rail Road, and New Jersey Transit.

The proposed Pennsylvania Station Redevelopment Project (the Project) has been designed to meet New York's transportation needs into the 21st century. The Project proposes to redevelop the Farley Building into an intermodal transportation facility and commercial center, which includes an Amtrak station, an intermodal hall, a sky-lit train concourse, a postal loading dock below grade, and a commuter concourse as well as Eighth Avenue subway connection improvements. The new station would have two midblock entrances on West 31st and West 33rd Streets. At these entrances (complemented by entrances at the north and south corners of Eighth Avenue), at-grade, Americans With Disabilities Act-compliant access would be provided for all passengers and postal retail customers and covered areas would be included for taxi pick-up and drop-off. The United States Postal Service (USPS) would improve and continue to occupy the historic postal lobby, the offices on the upper floors of the original Farley Building, and the postal rail access facilities and mail processing and distribution functions on all floors of the Farley Building Annex. New, modern USPS loading facilities would be built on the train concourse and first-floor levels of the 1934 Farley Building Annex, accessible by ramps from Ninth Avenue. Finally, the proposed Project would include traffic improvements, operational measures, and pedestrian improvements to streets in the vicinity of the Farley Building. These improvements would retain acceptable levels of service for vehicular and pedestrian traffic.

Congress has appropriated funds to the Federal Railroad Administration (FRA) to be transferred, through a series of grant agreements, to PSRC for improvements to the Penn Station Complex. The FRA has determined that these fund transfers would constitute a "major Federal action" as defined by the National Environmental Policy Act (NEPA). Such actions require Federal agencies to conduct an analysis of the anticipated impacts to the physical, social, natural, and cultural environments in the vicinity of the proposed action. FRA has prepared this EA in accordance with NEPA, the New York State Environmental Quality Review Act (SEQRA), and related laws and regulations, including the Council on Environmental Quality's regulations implementing NEPA, and FRA's "Procedures for Considering Environmental Impacts." The EA will also be used by Empire State Development (ESD) as lead agency for conducting the environmental assessment of the Project under SEQRA.

ES.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

Efforts to improve Amtrak's New York City rail passenger facilities began in 1991 with the preparation by Amtrak of a Facility and Needs Assessment that highlighted the many operational, safety, and accessibility deficiencies existing in Penn Station. Combining the existing deficiencies with the expected growth of intercity and commuter rail traffic, Amtrak became convinced that it had to undertake a major program of improvements to the facility. Amtrak's initial planning focused on rehabilitating its existing facility in Penn Station. During this effort, Amtrak learned that space might be available within the Farley Building, which shares platforms and rail access with Penn Station, and decided to evaluate the feasibility of moving its rail terminal facility to the Farley Building. Amtrak's analysis indicated that this option had significant benefits and Amtrak's proposal included the Farley Building. In addition to renovation and correction of structural and capacity deficiencies, and creation of a new terminal facility, Amtrak proposed to create new and additional retail space that was expected to generate income to help support the operational costs of the facility.

As the scope of Amtrak's proposal was further developed and more-detailed cost estimates were prepared, it became clear that the proposal could progress only through a funding partnership between the Federal Government and the State of New York and the City of New York. In recognition of this consideration, the State and City began to play a larger role in project development. In order to lead and coordinate this relationship, a new corporation, PSRC was formed in 1995 with two representatives each from the State of New York and the City of New York and the Secretary of Transportation and the Federal Railroad Administrator, ex officio.

Amtrak and PSRC agreed to work together to improve the Penn Station Complex. Amtrak assumed lead responsibility for making life-safety improvements to the existing Penn Station along with improvements necessary to meet the needs of Amtrak's high-speed rail service scheduled to start in late 1999. PSRC assumed lead responsibility for redeveloping the Farley Building for use as Amtrak's new intercity rail passenger terminal.

ES.3 ALTERNATIVES CONSIDERED

Because of the constraints imposed by the existing Northeast Corridor rail infrastructure, all project alternatives must continue to use the existing terminal trackage and platforms. This limits the range of available and practical alternatives to accomplish the objective of improved rail passenger service in New York City. Reasonable alternatives are further restricted by the historic nature of some of the structures in the Penn Station Complex, including the Farley Building and the Service Building, which precludes significant street-level modifications, and by the level of development (Madison Square Garden and Two Penn Plaza) that is already in place above the existing terminal. These restrictions reduce consideration to two basic alternatives: the No-Build Alternative and the Build Alternative.

The first alternative would include only routine maintenance and repairs. It is referred to in this analysis as the No-Build Alternative because it reflects those actions that would be reasonably expected to occur absent any approval to develop new rail terminal facilities. The No-Build

Alternative includes the following components: (1) *Penn Station*: the only changes anticipated at Penn Station would be routine repairs and maintenance at the station; Amtrak has underway and will very soon complete life-safety improvements and modifications to meet the start-up of Acela high-speed rail service in late 1999. (2) *Farley Building*: the only changes anticipated on the exterior or interior of the Farley Building would be routine repairs and maintenance of the structure. (3) *Eighth Avenue Subway*: the Metropolitan Transportation Authority is undertaking minor work at the Eighth Avenue Subway concourse at 33rd Street. (4) *Train Operation Systems*: Amtrak and its partners at Penn Station will complete a program to improve train operations in the area, including communication and control system enhancements, tunnel ventilation, and life-safety upgrades.

The second alternative involves modifications to portions of the Farley Building for use as Amtrak's New York City terminal and is referred to as the Build Alternative. The Build Alternative could accommodate an intermodal transportation facility and commercial center. The Build Alternative would accommodate all transportation and postal functions within and beneath the existing Farley Building with Amtrak facilities, a midblock, at-grade intermodal hall, a train concourse with ancillary retail facilities, a postal loading-dock facility below grade, a commuter concourse, and Eighth Avenue subway connection improvements as well as certain traffic and pedestrian improvements.

Project scoping meetings explored practical alternatives that would support these elements. The environmental assessment process contributed to design modifications that addressed a number of important considerations including historic preservation issues, conceptual cost estimates, and functional operations involving pedestrian, patron, and vehicular traffic. Project elements were screened and adjusted to ensure that the proposed renovation would address all regulations and guidelines and would avoid or minimize negative impacts. This process resulted in the findings summarized below.

ES.4 ENVIRONMENTAL IMPACTS

ES.4.1 Rail Transportation

No changes to the existing rail system are anticipated in the No-Build Alternative. In the Build Alternative, one additional crossover may be installed at the west end of the station. Accordingly, no negative impacts to rail transportation are expected to result from either of the alternatives.

ES.4.2 Vehicular and Pedestrian Traffic

Development of other projects in the study area will affect vehicular and pedestrian traffic. There will be no additional impacts associated with the No-Build Alternative and incremental changes associated with the Build Alternative would not create any exceedances of accepted thresholds to the area's traffic, pedestrian movements, or parking supply provided the Project's traffic and pedestrian improvements are implemented.

ES.4.3 Noise

Potential noise impacts are related primarily to traffic volume increases. Since there would be no traffic increase associated with the No-Build Alternative and only a small projected increase associated with the Build Alternative, no significant noise impact from either of the alternatives is projected.

ES.4.4 Vibration

Vibration levels are associated with train operations, which would not be affected by either of the alternatives. Accordingly, no vibration impacts are projected from either of the alternatives.

ES.4.5 Air Quality

Potential air quality impacts are related primarily to traffic volume increases. Since there would be no traffic increase with the No-Build Alternative and only a small projected increase associated with the Build Alternative, no significant air quality impacts from either of the alternatives are projected. In addition, no significant impacts or exceedances of Federal standards are predicted.

ES.4.6 Natural Environment

There are no natural environmental features in the study area to be evaluated.

ES.4.7 Land Use/Socioeconomics

Since most of the construction under either the No-Build or Build Alternatives would take place within existing structures, potential impacts to neighborhood character from either alternative would be limited to the Project area and would not be adverse.

ES.4.8 Historic and Archeological Resources

Historical resources that may be potentially affected have been identified, potential effects on those resources from the two alternatives have been examined, and measures have been identified to avoid or reduce anticipated impacts from the Build Alternative. The No-Build Alternative would involve only minimal work at Penn Station (which is not historic) and no improvements at the Farley Building. With respect to the Build Alternative, FRA has concluded after reviewing the full scope of the proposed Project (in the context of the criteria found in 800.5(a), of the Advisory Council on Historic Preservation's regulations), that the proposed Project would not have an adverse effect on properties listed or eligible for listing in the National Register of Historic Places, in a manner that would diminish the integrity of the building's location, design, setting, materials, workmanship, feeling, or association.

ES.4.9 Environmental Risk Sites

Considering the age of the facilities and the uses to which they have been devoted, it is anticipated that some lead paint, asbestos insulation, or PCBs from electric motors, transformers or other equipment would be found during implementation of either of the alternatives. For the Build Alternative, PSRC would develop and implement an environmental control/remediation plan in accordance with Federal, state, and local regulations and requirements. Compliance with such a program would ensure that the Project would have no significant impact.

ES.4.10 Energy/Utilities

The No-Build Alternative would produce some improvement in energy efficiency as a result of currently planned improvements in Penn Station. Further energy efficiency would result from renovations in the Farley Building associated with the Build Alternative, although the amount of energy used would increase.

ES.5 CONCLUSION REGARDING ENVIRONMENTAL IMPACT

Based upon the results of the analysis summarized above (and described in detail in this EA), FRA does not believe that the proposed Project would have significant impact as the term is used in Section 102(c) of the NEPA. FRA seeks public comment regarding this proposed conclusion.

ES.6 PROJECT DOCUMENTATION AVAILABILITY

All Project documentation that supports this EA is available to the public for examination during normal business hours by appointment at the following locations:

Washington, D.C.: Federal Railroad Administration, 1120 Vermont Ave. NW Room 6060, Washington, D.C. 20005, (202) 493-6380.

New York, NY: Pennsylvania Station Redevelopment Corporation (PSRC), 633 3rd Avenue, 36th Floor, New York, NY 10017, (212) 803-3642.

Boston, MA: McGinley Hart & Associates, 77 N. Washington Street, Boston, MA 02114, (617) 227-2932.

Comments on this EA should be submitted in writing by September 9, 1999 to:

Mr. Alexander V. Chavrid
Office of Railroad Development
RDV-13, Mail Stop 20
1120 Vermont Avenue, N.W.
Washington, D.C. 20590

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CHAPTER 1

DESCRIPTION OF THE PROPOSED ACTION

1.0 INTRODUCTION

Pennsylvania (Penn) Station in New York City is the busiest station on Amtrak's system and the most intensively used intermodal passenger transportation facility in the nation. Almost 38 percent of all Amtrak trips originate or terminate at Penn Station. In addition, it is a major origin/termination point for commuter rail service operated by the Long Island Rail Road and New Jersey Transit. The Penn Station Complex also connects to the Seventh Avenue and Eighth Avenue Subway lines at West 33rd Street. The level of use of this facility has increased dramatically over the last several years, and this rapid growth is expected to continue as Amtrak adds new high-speed rail service on the Northeast Corridor and various commuter rail improvements come on line.

Penn Station is an aging facility. Over the past several years, Amtrak has undertaken a program of improvements designed to upgrade the existing Penn Station including life safety, accessibility and building code-related improvements, and improvements to accommodate the new Acela Express high-speed service. While these actions have improved life safety within the Penn Station Complex, they do not address the larger issues of insufficient capacity to meet the continuing demand for intercity and commuter rail service in New York City. To address the larger issues of inadequate capacity at Penn Station, the Pennsylvania Station Redevelopment Corporation (PSRC)¹ has proposed a program of improvements at the Penn Station Complex, principally at the James A. Farley Post Office Building (Farley Building), that will transfer Amtrak's intercity rail passenger operations to a new rail passenger terminal to be constructed within a portion of the Farley Building and significantly improve access to and egress from the platforms and the connections between Penn Station and the Farley Building and the existing New York subway lines.

The proposed Pennsylvania Station Redevelopment Project (the Project) has been designed to meet New York's transportation needs into the 21st Century. The Project proposes to redevelop the Farley Building into an intermodal transportation facility and commercial center, which includes an Amtrak station, an intermodal hall, a sky-lit train concourse, a postal loading dock below grade, and a commuter concourse as well as Eighth Avenue subway connection improvements and ancillary retail. The new station would have two midblock entrances on West 31st and West 33rd Streets. At these entrances (complemented by entrances at the north and south corners of Eighth Avenue), at-grade, Americans With Disabilities Act-compliant access would be provided for all passengers and postal retail customers and covered areas would be

¹ PSRC is a New York State business corporation and subsidiary of the New York State Urban Development Corporation d/b/a Empire State Development (ESD), chartered in 1995 to carry out the engineering, design and construction activities to permit the James A. Farley Post Office in New York, NY to be used as an intermodal transportation facility and commercial center.

included for taxi pick-ups and drop-offs. The United States Postal Service (USPS or Postal Service) would improve and continue to occupy the historic postal lobby, the offices on the upper floors of the original Farley Building, and the postal rail access facilities and mail processing and distribution functions on all floors of the Farley Building Annex. New, modern USPS loading facilities would be built on the train concourse and first-floor levels of the Farley Building Annex, accessible by ramps from Ninth Avenue. Finally, the proposed Project would include traffic improvements, operational measures, and pedestrian improvements to streets in the vicinity of the Farley Building. These improvements would preserve acceptable levels of service for vehicular and pedestrian traffic.

1.1 PURPOSE AND NEED

1.1.1 Project Background The Penn Station Complex includes the Penn Station intercity and commuter rail passenger terminal facilities beneath Penn Plaza, Madison Square Garden, and the Farley Building; post office and rail mail handling functions of USPS housed in the Farley Building; various connecting passages; the Service Building on West 31st Street; the tracks and operations facilities serving the passenger terminal; the track and platform serving the post office that lie below street level; and connections to the Seventh and Eighth Avenue subways. The Farley Building comprises the original building, completed in 1913, and the Annex, completed in 1934. The plan relationship of these components is shown in Figure 1-1. This plan evidences that from inception, Pennsylvania Station, completed in 1910, and the Farley Building have been integral, functioning transportation facilities directly dependent upon the railroad trackage and operations as their base. The interrelationship of these two buildings has permitted the transfer of mail and cargo within the Penn Station Complex. The physical relationships of tracks and platforms support Amtrak's intercity rail service, the postal operations, and the commuter rail services of the Long Island Rail Road (LIRR) and New Jersey Transit (NJT). The commuter authorities operate within the Penn Station Complex as lessees from Amtrak. As noted above, the Penn Station Complex also connects to the Seventh Avenue and Eighth Avenue Subway lines at West 33rd Street.

In April 1991, Amtrak issued a Facility and Needs Assessment Report² that identified many operational, safety, and accessibility deficiencies in the existing facility. The report identified a need to manage more effectively the movements of the patrons of the various rail services in the passenger terminal and recommended creating additional retail space in the passenger terminal to generate income to help support the operational costs of the facilities. In proposing a master plan for carrying out required renovations as well as proposed changes and upgrades in the Penn

Station Complex, Amtrak learned that portions of the Farley Building, just across Eighth Avenue from the Penn Station passenger terminal, might become available to augment redevelopment of the passenger facilities. The Farley Building, owned and operated by the USPS, was constructed over and has access to the track network of the Penn Station Complex.

² Penn Station Associates, Inc., *Penn Station Redevelopment Phase II Planning Study, Volume I: Facility and Needs Assessment Report*, April 1991.

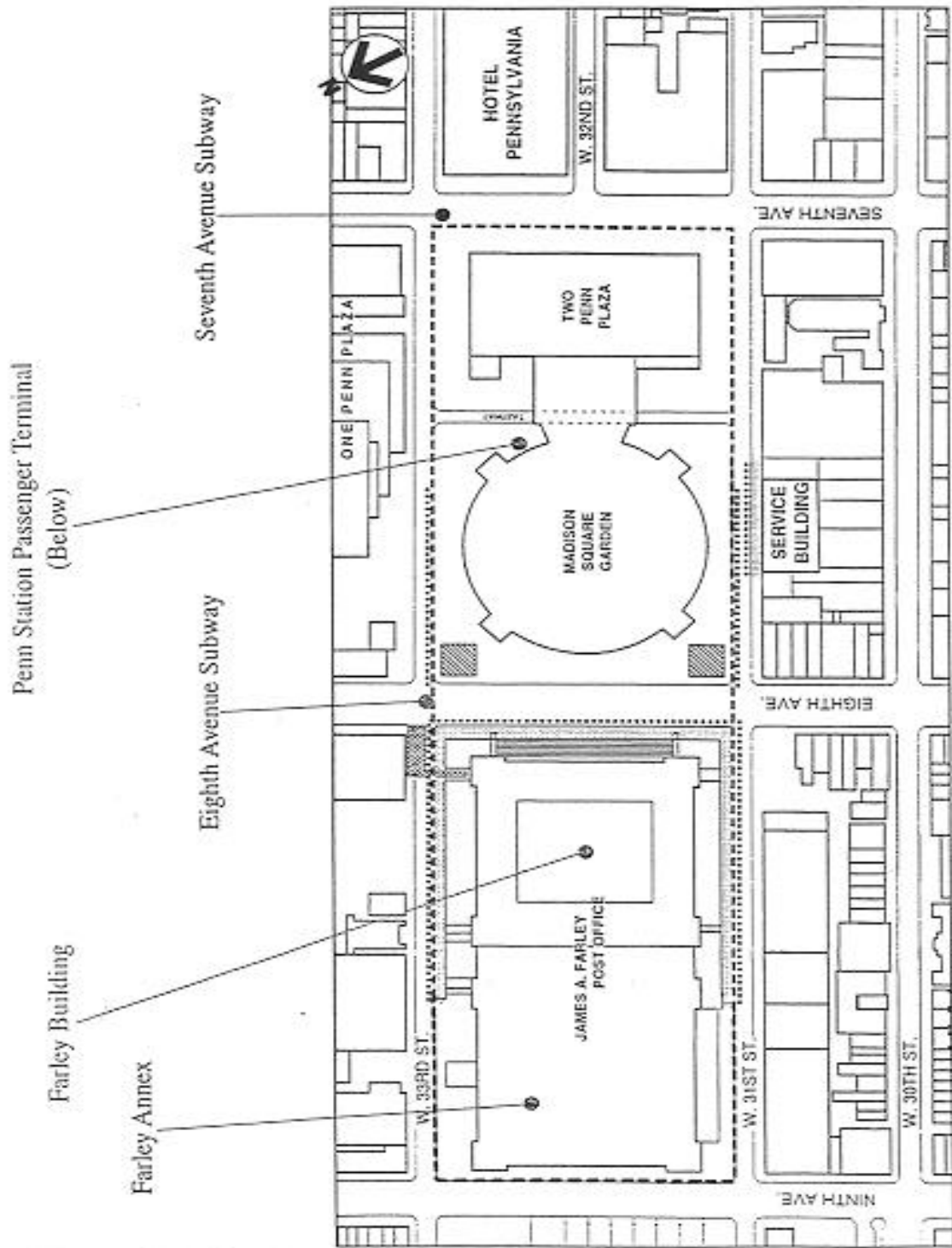


FIGURE I-1
PENN STATION COMPLEX

In May 1992, Amtrak released a feasibility study concluding that renovation of the Farley Building to include new Amtrak facilities and linking portions of it to the existing Penn Station had many benefits, and recommending that the Farley Building be included in the redevelopment program. Subsequently, Amtrak developed a plan (Master Plan III)³ that proposed to convert portions of the Farley Building into the passenger terminal for Amtrak service, retail space, and nonpublic space for Amtrak. Amtrak concluded that separation of its patrons from commuter rail users would lessen passenger congestion and conflicting movements at Penn Station, especially during peak-hour operations. In addition, providing new vertical circulation connections between the proposed new Amtrak passenger facilities and the underlying, existing platforms would enhance utilization of the present platforms by commuter rail patrons who would continue to use the passenger terminal facilities.

In the spring of 1994, Congress appropriated the first of several grants of Federal funds to further develop plans for the proposed Penn Station redevelopment. In May 1994, the FRA, as the lead Federal agency, initiated the environmental and historic preservation reviews mandated by the National Environmental Policy Act of 1969 (NEPA) and related laws and regulations. In addition to environmental studies, surveys of the buildings and site were made, and agencies, organizations, and/or officials with oversight or interest in the proposed project were consulted. A review and consultation with the New York State Historic Preservation Office (SHPO) regarding design and preservation issues for the Farley Building and the Service Building was initiated on September 13, 1994. A series of meetings with the SHPO was held to discuss a variety of preservation concerns. In December 1995, FRA issued for public comment a draft environmental assessment analyzing the environmental and historic preservation impacts of Amtrak's proposed project.

As the scope of the project was further developed and more-detailed cost estimates were prepared, it became clear that the project could progress only through a funding partnership between the Federal Government and the State of New York and the City of New York. In recognition of this consideration, the State and City began to play a larger role in project development. In order to lead and coordinate this relationship, a new corporation, the Pennsylvania Station Redevelopment Corporation (PSRC), was formed in 1995. PSRC is a subsidiary of the New York State Urban Development Corporation, which does business as the Empire State Development Corporation, a public benefit corporation of the State of New York with substantial experience in constructing large-scale development projects in New York State. PSRC is led by a six-member board of directors consisting of two representatives of the State of New York, two representatives of the City of New York, and the Secretary of Transportation and the Federal Railroad Administrator, ex officio.

Amtrak and PSRC agreed to work together to improve the Penn Station Complex. Amtrak assumed lead responsibility for making life-safety improvements to the existing Penn Station along with improvements necessary to meet the needs of Amtrak's new high-speed rail service scheduled to start in late 1999. These improvements were funded with a Congressional

³ Penn Station Associates, Inc., *Penn Station Master Plan, Vols. II and III: James A. Farley Building Feasibility Study*, May 1992.

appropriation provided for this purpose. PSRC assumed lead responsibility for redeveloping the Farley Building for use as an intermodal transportation facility and commercial center including Amtrak's new intercity rail passenger terminal and for securing the necessary funding to accomplish the Project.

PSRC assembled a new design team of architects and engineers led by Skidmore, Owings and Merrill, LLP (SOM) and preservation and design consultants Hardy Holzman Pfeiffer Associates LLP (HHPA) to develop plans for the reuse of extensive portions of the Farley Building to serve as the principal site of Amtrak's presence in New York City, while maintaining the 24-hour postal lobby and other critical Post Office operations throughout the building. PSRC and its team worked closely with USPS to coordinate the transportation improvements with the continuing needs of the Postal Service. The FRA and their environmental consultants began meetings and discussions with the PSRC/SOM/HHPA team on the proposed design for the alterations to the Farley Building. FRA reinstated the Section 106 review process with the SHPO and held the first formal consultation meeting with the SHPO to review the PSRC/SOM plans on February 24, 1999. These consultation meetings continued from March through June 1999.

1.1.2 Purpose of the Environmental Assessment Congress has appropriated funds to the FRA to be transferred, through a series of grant agreements, to PSRC for improvements to the Penn Station Complex. The FRA has determined that these fund transfers would constitute a "major Federal action" as defined by NEPA (as it had for the earlier Amtrak proposal). Such actions require Federal agencies to conduct an analysis of the anticipated impacts to the physical, social, natural, and cultural environments in the vicinity of the proposed action. Accordingly, FRA initiated a second phase of the Environmental Assessment (EA) to evaluate the anticipated effects of the proposed Project. This document has been prepared in accordance with Federal requirements for implementing NEPA outlined in 40 CFR, parts 1500-1508, related Federal guidelines, and the recently updated FRA Procedures for Considering Environmental Impacts (64 Fed. Reg 28545, May 26, 1999). The purpose of this EA is to document anticipated effects of the proposed action and to assist the FRA in making a determination about the magnitude of impacts associated with the action.

This EA evaluates a site-specific project (PSRC's proposed Project) that is also a supporting element of the Northeast Corridor Improvement Project (NECIP). The NECIP is a comprehensive program of improvements being advanced by Amtrak on the Northeast Corridor mainline between Washington, D.C. and Boston, MA. Prior to initiating the NECIP, the FRA prepared a programmatic environmental impact statement in 1977 analyzing the NECIP as a whole and at a level of detail commensurate with the decisions being made by the Administrator at that time. This EA is one of a series of environmental documents prepared by the FRA since 1977 addressing individual site-specific NECIP projects, such as station renovations and bridge replacements. This EA will also be used by ESD as lead agency for conducting the environmental assessment of the Project under the New York State Environmental Quality Review Act (SEQRA).

1.1.3 Project Purpose and Need The purpose of PSRC's proposed action is to renovate a portion of the Farley Building, as part of the existing Penn Station Complex, to create a contemporary, safe, and efficient intermodal transportation facility and commercial center. A new facility in the Farley Building would connect to the existing rail infrastructure and would be coordinated with passenger operations in other sections of the Penn Station Complex.

PSRC's proposed action has been designed to help ease congestion of rail traffic, redirect pedestrian movements in the vicinity of the Penn Station Complex, and reduce crowding and conflicting movements of intercity and commuter rail users within the passenger terminal and connecting passages. Amtrak estimates that nearly 38 percent of the intercity trips in the entire country originate or terminate at Penn Station,⁴ making it the most heavily used passenger facility in the Amtrak system. Penn Station is used by approximately 300,000 Amtrak, Long Island Rail Road, and New Jersey Transit passengers per day. In addition, the USPS continues to use the Penn Station Complex rail facilities for shipments of mail. The Penn Station Complex is also served by direct links to the Seventh Avenue and Eighth Avenue Subways.

Additional demands will be placed on the station over the next several years arising from anticipated growth in commuter rail ridership in general; off-site improvements by NJT intended to allow more of its commuters direct, one-seat access to Penn Station; and Amtrak's completion of improvements to the Northeast Corridor, resulting in the establishment of new Acela Express high-speed service between New York City and Boston by the end of 1999. Improved high-speed rail service in the Northeast Corridor between Washington and Boston is anticipated to foster a 17 percent increase in weekday Amtrak ridership by 2005. LIRR and NJT also anticipate an approximate 26 percent increase in combined commuter rail ridership during the same period. For Penn Station, this projected growth translates to a 25 percent increase in the number of weekday train movements to be accommodated by the three rail services.

Because Penn Station's track system is physically limited by the bedrock into which it is cut and by its connections to tunnels, increased efficiency in the use of platforms is the only cost-effective means for accommodating the projected growth. Current passenger facilities cannot accommodate such increases in ridership from the intercity and commuter rail services without lengthy, unacceptable delays that could also compromise safety. The limited number and size of stairs and escalators linking passenger waiting areas to the train platforms cannot adequately accommodate large volumes of passengers at times of peak traffic. There also is unacceptable crowding in the concourses and waiting areas. These crowded conditions on platforms, in the vertical circulation system, and in the waiting areas also create safety concerns.

Amtrak, the Metropolitan Transportation Authority (MTA), the Port Authority of New York and New Jersey, the City of New York, and the State of New York also are studying options and opportunities to further improve and upgrade service in the New York metropolitan region that could, if adopted, generate additional use of the Penn Station Complex. These options include: improved high-speed service on Amtrak's Empire Corridor from New York City to Albany and

⁴ U.S. Department of Transportation, Federal Transit Administration, Final Draft Pennsylvania Station Redevelopment Project Report, June 1994.

Buffalo, connections to allow LIRR trains access to Grand Central Terminal and Metro-North trains direct access to Penn Station, as well as provisions for direct rail access from Penn Station to the region's two international airports. These proposals are not analyzed in this document because they are not under the jurisdiction of PSRC and do not involve any FRA approvals or funding at this time. However, the accomplishment of the PSRC proposal would facilitate the adoption of these proposals at some time in the future. In light of the growing use of the Penn Station Complex for passenger operations, and the aging of the Penn Station Complex's infrastructure, there are several specific areas of needed improvements.

Code Compliance—Egress: With the present configuration of stairs, escalators, and elevators, it can now take more than seven minutes to get all passengers off a train, onto the platforms, and up to the station areas above. This condition is inconsistent with up-to-date design criteria as outlined in both the National Fire Protection Association's 130 Standard for Fixed Guideway Transit Systems (NFPA 130) and the draft Society of Fire Protection Engineers document, "The SFPE Engineering Guide to Performance-Based Fire Protection Analysis and Design," due to be formally published this year. Although NFPA 130 does not apply to railroad stations and does not affect Penn Station, it provides useful guidance. It requires that rapid transit passengers be able to exit to an area of refuge in four minutes. The necessity to reduce platform congestion, solve conflicting pedestrian and commuter movements, and address these guidelines all indicate a need to provide additional egress from each existing platform. Providing egress through the Farley Building, which spans above most platforms, would separate intercity and commuter rail patrons and provide a measure of additional egress from the platforms.

Code Compliance—ADA Accessibility: One of PSRC's goals for this Project is to provide improvements that ensure compliance of the rail passenger facilities with the Americans With Disabilities Act. Accessibility for passengers with disabilities is limited and difficult in the Penn Station Complex, where only portions of the overall facility are in compliance with the ADA. Amtrak platforms are accessible with assistance from staff who must operate mixed-use keyed elevators. While recent improvements have been made at platform level, few elements in the present Penn Station Complex or the adjoining Eighth Avenue Subway concourse are designed to accommodate visually or hearing-impaired patrons. The Farley Building contains minimal accessibility provisions for the visually, hearing, or mobility impaired. In its present configuration, the Eighth Avenue Subway does not provide an ADA-compliant route for transfer between the subway system and the rail passenger station.

Conflicting Movements: Constraints imposed by the limited number of tracks and required headways through the North (Hudson) and East River Tunnels make it increasingly difficult to properly schedule time slots for arriving and departing trains. Trains must arrive and depart within increasingly tight time frames. Because of limited platform space at the rail terminal, arriving and departing passengers often are in conflicting movement patterns in crowded circumstances. In addition, access between the platform level and the concourses and waiting areas above is limited in number and size, contributing to conflicting or constricted movements. Additional and faster access paths between the individual platforms and the concourses, main ticketing area, and waiting areas are needed.

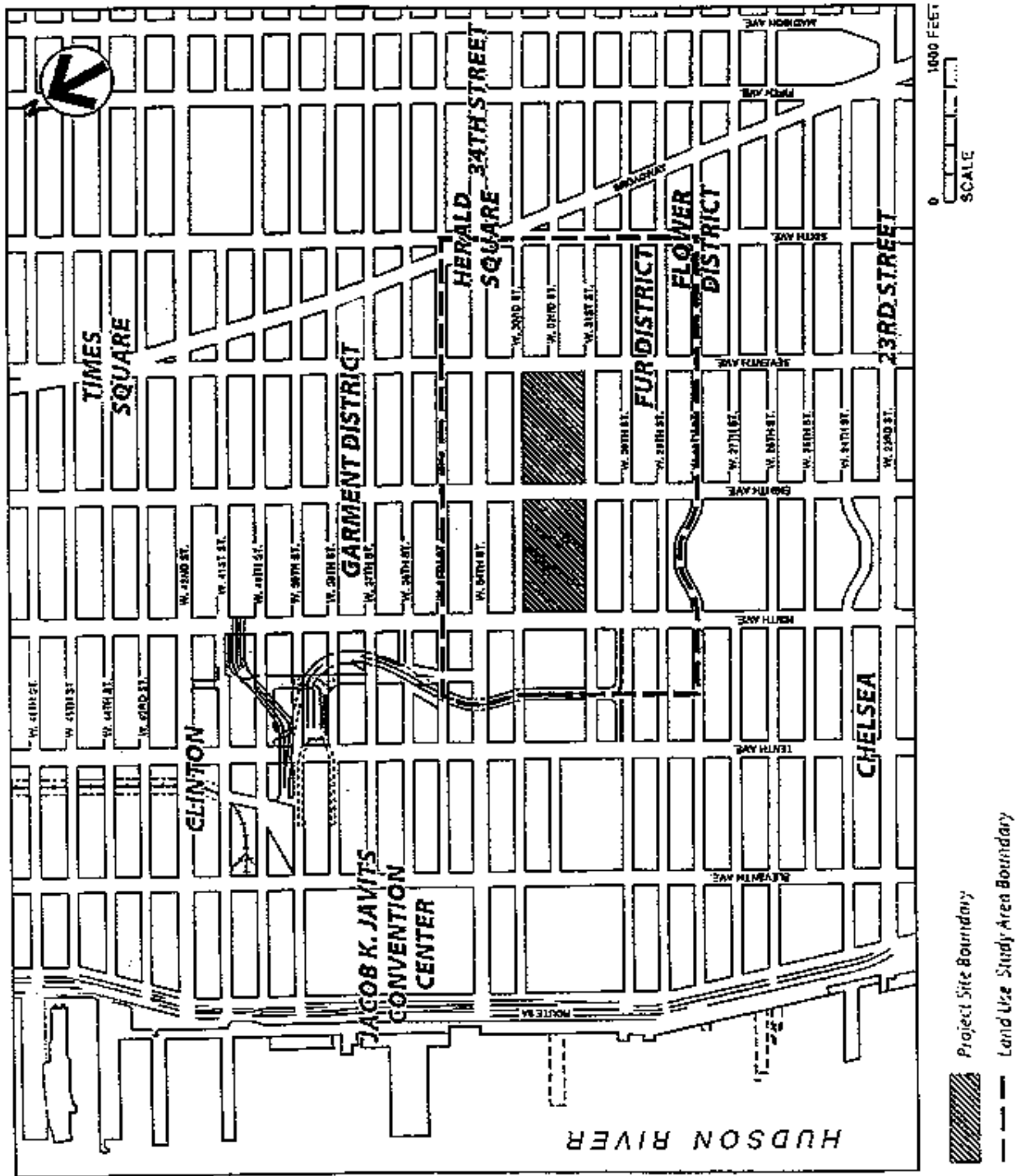
Passenger Terminal Capacity: To accommodate Amtrak's projected passenger demand and projected increases in NJT and LIRR ridership, it is necessary to find or develop additional facilities to handle the increased traffic. Due to constraints imposed by the present track layouts and limited access to and through the North and East River Tunnels, the only feasible and cost-effective locations for expansion are within or adjacent to the present station. The capacity of the station to handle passengers during peak periods is greatly influenced by the number and size of platforms and the vertical circulation system that links the platforms and the station areas above.

Passenger Perceptions: Penn Station, although the busiest station in the Amtrak system, has received only limited upgrades in the past decade and much of the infrastructure is more than 35 years old. The condition of the Penn Station Complex, including the appearance of the passenger terminal facilities, does not reflect the importance of Penn Station in the national transportation system or its prominent location in New York City. Independent of the proposed renovation of the Farley Building for Amtrak's use, Amtrak has, over the last four years, undertaken several projects that provide improved life safety and provide improvements that enhance the functionality and appearance of Penn Station, including the platform level.

Summary: Penn Station's passenger facilities do not meet the goals of the standard related to safe egress times and ADA regulations. In addition, the Penn Station Complex has an inadequate and aging infrastructure. Extensive renovations have improved some of these problems, but have not addressed the need to serve increasing volumes of patrons within very constrained time periods. Present physical configurations and volumes of patron movement result in crowded conditions with significant conflicting movement patterns. Use of the station's platforms is limited by the vertical access between the platform level and the waiting and dispersment areas above. These circulation constraints are an important, limiting factor for the number of trains per hour that can use the station. Expected growth in commuter and intercity passengers will compound safety concerns, current crowding and discomfort, and cannot be adequately accommodated in the existing facilities.

1.2 EXISTING CONDITIONS

1.2.1 Description of Project Study Area The study area, shown in Figure 1-2, is bounded by West 35th Street on the north, Sixth Avenue on the east, West 28th Street on the south, and midblock between Ninth and Tenth Avenues on the west. It is part of the area historically known as Chelsea, but is now frequently referred to as Midtown-South. The Penn Station Complex is located in a residential/commercial zone at the southwest corner of midtown Manhattan that has lacked the cachet of more prominent residential, commercial, and business districts found uptown and to the east of Fifth and Park Avenues. Manufacturing uses in the loft buildings have, in part, been replaced by commercial office use and by residential use. Large-scale retail uses have moved west from Herald Square (the location of Macy's) toward the study area, corresponding with the recent growth of the retail sector of Manhattan. Smaller shops catering to the fashion markets and mid- and off-price stores predominate in the area. At present, the general perception of the quality of the area declines gradually west of Seventh Avenue.



**FIGURE 1-2
STUDY AREA**

To the north, West 34th Street is a major cross-town commercial street with two-way traffic, generally fronted by small commercial outlets and discount stores, restaurants, and bars. While the Penn Plaza office spaces built during the 1964 and subsequent Penn Station redevelopment are generally considered first-class office space, the majority of commercial space available in the immediate vicinity is considered second-class or loft space. In an effort to improve the character and perception of the area, local merchants and property owners have joined together to create the 34th Street Partnership Business Improvement District. Both Penn Station and the Farley Building are located within this district.

Seventh Avenue is a major downtown thoroughfare that serves as the nexus of the fashion industry in the city and is often referred to as Fashion Avenue. North of the study area, between Seventh and Eighth Avenues, large loft buildings, typically rising to about 17 stories, house garment manufactures and related industries, such as fabric showrooms. Building heights generally taper down to the west, and except for taller buildings at corners and at midblock opposite Madison Square Garden, the buildings are generally low- to mid-rise. South of the study area, between Seventh and Eighth Avenues, the area is characterized by residential and commercial uses, scattered institutional uses, parking lots, a number of design and music-oriented businesses, and a concentration of fur industry (manufacturing, retail, and office) uses.

North of the Farley Building, buildings on Eighth Avenue become mid- and high-rise approaching Times Square and West 42nd Street. This area contains mostly commercial uses. Except for the original Morgan Postal Annex, three blocks south of the Farley Building, existing structures along Ninth Avenue present a low scale of six stories or fewer. South of the Farley Building, Eighth Avenue has a scale of low- to mid-rise buildings that retain a nineteenth-century character similar to the neighborhood appearance when the Farley Building was constructed. This area, between Eighth and Ninth Avenues, contains row houses, tenements, and two tall apartment buildings south of West 29th Street.

The area west of Ninth Avenue appears to have had less conversion of manufacturing to commercial use, although some conversion has taken place. East of the study area, the section east of Sixth Avenue is solidly commercial in character, including mid- and high-rise office buildings and the Herald Square shopping area. South of West 32nd Street, the area contains a mixture of commercial, manufacturing, residential, and institutional uses.

Except for the southwest corner of Seventh Avenue and the southeast corner of Ninth Avenue, West 31st Street is fronted by low- to mid-rise structures including parking garages, storefront businesses, and the Service Building. Along West 33rd Street between Seventh and Eighth Avenues, the One Penn Plaza office tower sits on a raised plinth with a one-story pavilion at each end. Except for two mid- to high-rise buildings at the northwest corners of West 33rd Street at Eighth and Ninth Avenues, and the former YMCA building near Ninth Avenue, West 33rd Street retains its turn-of-the-century scale opposite the Farley Building.

1.2.2 Penn Station Passenger Terminal The Penn Station passenger terminal, constructed between 1964 and 1969, occupies the below-grade portions of the original Pennsylvania Station passenger terminal demolished to make way for Two Penn Plaza and Madison Square Garden.

The terminal is located between Seventh and Eighth Avenues and between West 31st and West 33rd Streets (see Figure 1-3). The terminal encompasses four levels: track level, two mezzanine levels (Levels A and B) and a street entrance level (Level C). Level C provides independent entrances to Levels A and B. Level A provides direct connections to the Seventh Avenue and Eighth Avenue Subway stations that serve Penn Station from the 33rd Street Connector. The mezzanine levels are networks of north-south corridors that provide access to the station platforms and east-west corridors that connect the intersecting corridors to ticketing and waiting areas and station exits.

Level A, illustrated in Figure 1-4, includes four concourses and LIRR's main ticketing and waiting area. The main concourse (33rd Street Connector) extends east-west along the north side of the station under West 33rd Street from the Seventh Avenue Subway to the east side of the Eighth Avenue Subway entrance. There is a narrow extension of this concourse west of the Eighth Avenue Subway to the LIRR West End Concourse under the Farley Building lobby. The Exit Concourse, at right angles to the 33rd Street Connector, is located under the Amtrak/NJT ticketing and waiting area. This concourse is shared by all three railroads as it is the only Level A concourse to serve all platforms. At the center line of Penn Station and parallel to the 33rd Street Connector is the so-called Hilton Passageway that generally separates the LIRR operations on the north from the Amtrak and NJT operations to the south. Level A also includes LIRR operations offices and various Amtrak and NJT operating departments.

Above, on Level B, is the Rotunda, the concourse leading to the Seventh Avenue/West 32nd Street entrance and Amtrak and NJT's shared ticketing and waiting areas in the Main Concourse. Retail spaces on this level are leased from Amtrak. Some of Amtrak's New York Division operations also occupy space on this level.

Level C consists of the Seventh Avenue/West 32nd Street entry to Penn Station, access to the Eighth Avenue Subway, and corner entries from Eighth Avenue at both West 31st and West 33rd Streets. A taxiway separates Madison Square Garden from Two Penn Plaza between West 31st and West 33rd Streets and serves as the main entry to the Rotunda. Each entrance provides independent access to Level B via staircases or escalators. Access from street level to Level A must be accomplished by passage through Level B.

The existing vertical-access facilities between the levels became an increasingly important and limiting factor in the operation of the station as commuter passenger demand soared over the last decade. Many of the station platforms were sized for comparatively low volumes of intercity trains instead of the current, high volumes of commuter passenger flow that occur during peak periods. In addition, large structural columns, installed to support the buildings overhead when the site was redeveloped in the late 1960s, penetrate the concourses and platforms consuming valuable pedestrian space and prevent major track modifications to accommodate significant changes. From 1994 to 1996, the LIRR undertook a comprehensive upgrading of the platforms used as part of their operations, by providing additional vertical access with new elevators and improved stairways and adjusting track layouts so that they could lengthen two platforms to allow for longer trains. As part of their ongoing alterations and upgrades to the station, Amtrak and NJT are adding vertical access and improving the existing stairs and escalators.

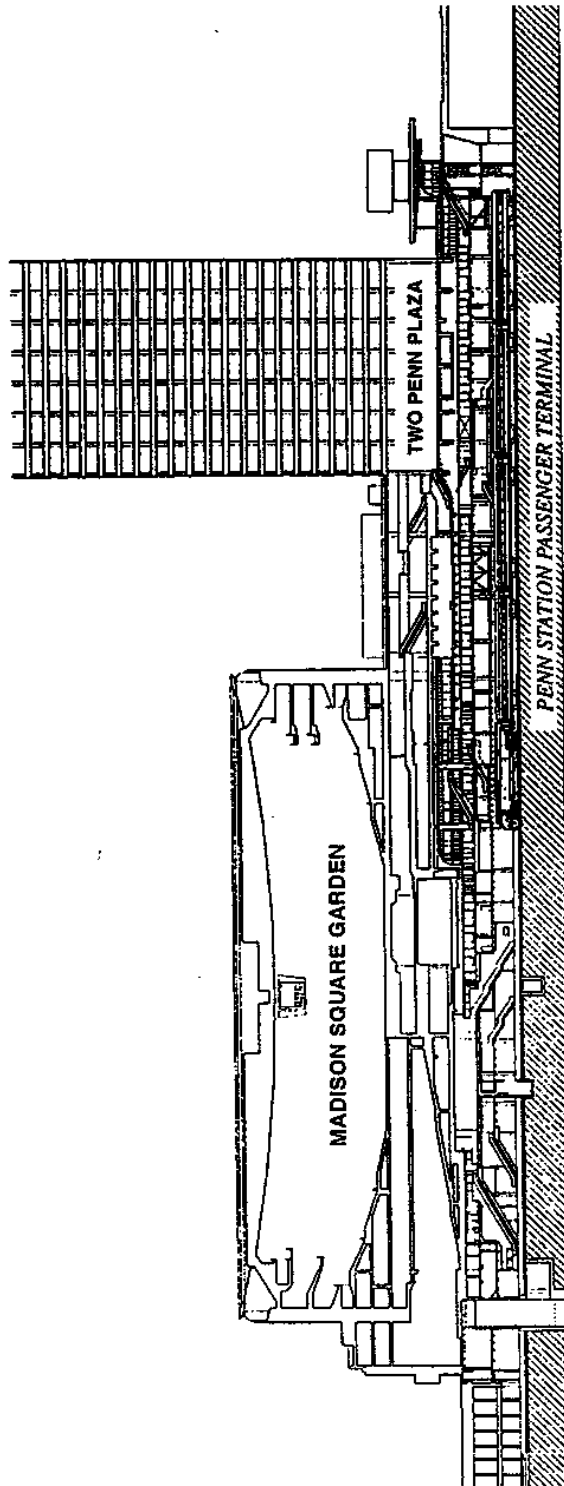


FIGURE 1-3
EXISTING PENN STATION PASSENGER TERMINAL

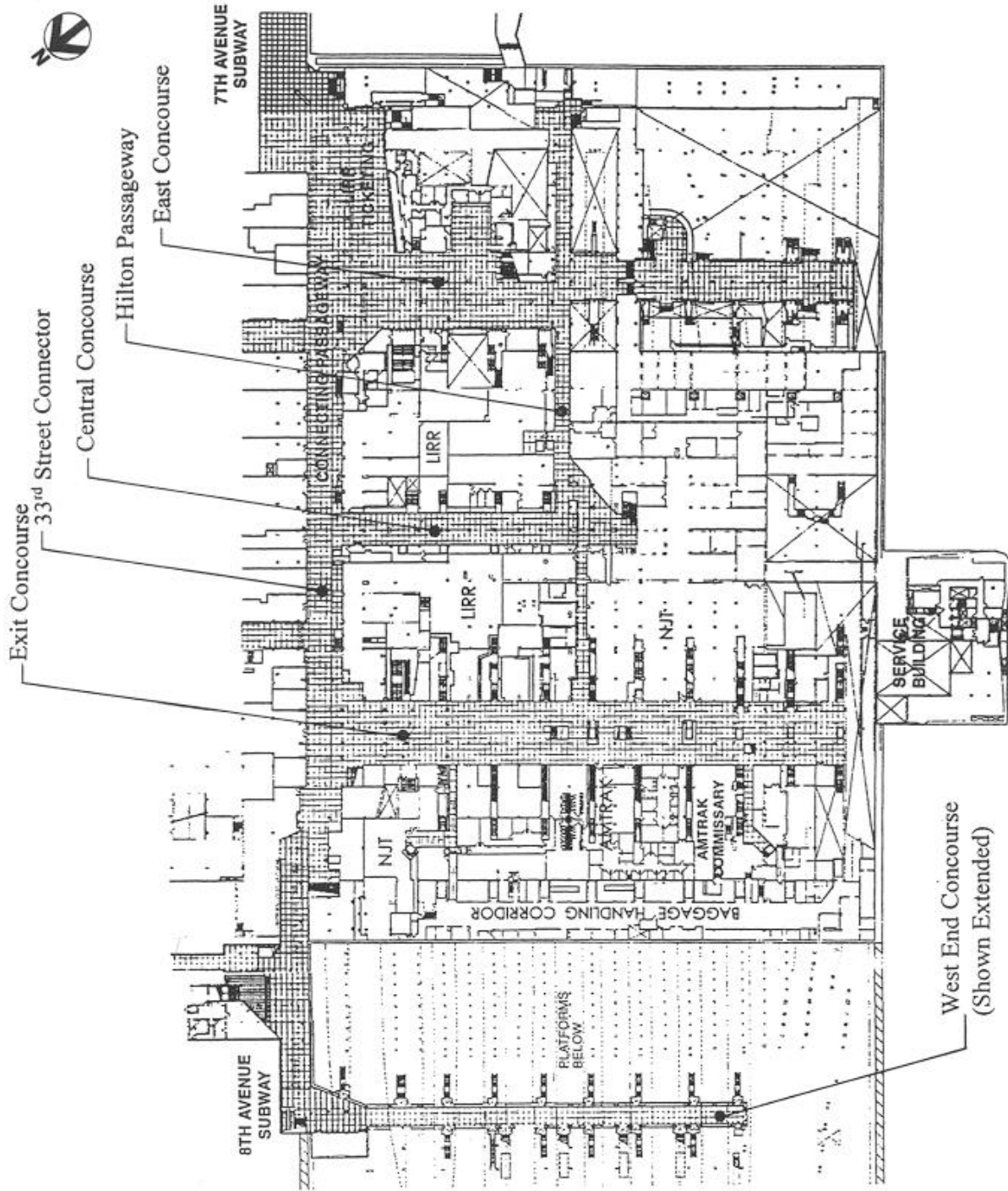


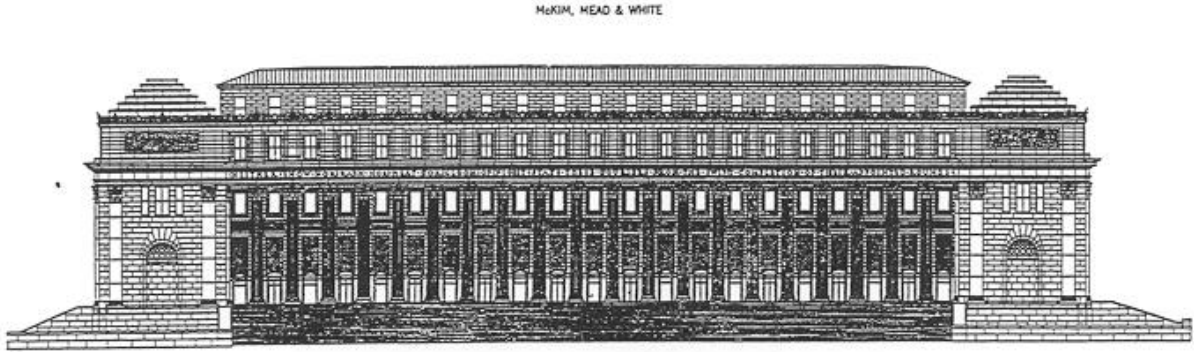
FIGURE I-4
EXISTING PENN STATION - CONCOURSE LEVEL A

As is common with most large urban transportation centers, Penn Station and its adjacent sidewalks often serve as a loitering and gathering spot, or even "home," for a substantial number of the city's homeless population. This situation has occasionally caused discomfort and uneasiness among commuters and Amtrak passengers.

1.2.3 Farley Building Figure 1-5 illustrates the original 1913 portion of this historic structure. The Farley Building was designed by the renowned architectural firm McKim Mead and White that also designed the original Pennsylvania Station and the facade of the Service Building. The original 1913 portion of the Farley Building was designed in the classical Beaux Arts style to complement Pennsylvania Station across Eighth Avenue. An annex was added in 1934, also by McKim Mead and White, but in a more restrained neoclassical style. The postal complex occupies the entire block between Eighth and Ninth Avenues, and West 31st and West 33rd Streets, and was constructed on the air rights above the Pennsylvania Railroad tracks and platforms serving Penn Station. The Farley Building has extant but abandoned vertical connections to most platforms but presently uses only the elevator to Platform 12, to and from which mail is still transported by train.

Only a few alterations have been made to the original Farley Building. In conjunction with the addition of the Annex between 1932 and 1934, there were required upgrades in the mechanical systems, and later occasional shifting of partition layouts, and the overlay of finishes (particularly drop-in ceilings and new flooring). Overall, the entire Farley Building complex remains remarkably intact. The interior of the building remains in generally good and serviceable condition. The exterior of the building was cleaned and partially repointed in the early 1980s. Recent observations indicate some staining and deterioration of the masonry, particularly in conjunction with joint failures at the cornice. The terra cotta cresting at the parapet level had deteriorated in certain areas to such an extent that it could pose a potential hazard to pedestrians. The existing monumental steel-framed window-and-door assemblies on the Eighth Avenue facade and the wooden, double-hung windows on the West 31st and West 33rd Street elevations of the Farley Building are in generally good to serviceable condition. All window sashes are single-glazed and have no weather-stripping. A spot survey of the metal, double-hung sashes in the annex revealed similar conditions. The Farley Building is cooled by a combination of central air conditioning systems supplemented by window units. In most areas the systems are inadequate to properly cool the building.

The "moats" at the Eighth Avenue corners and along the West 31st and West 33rd Street sides of the building were originally designed with glass prism blocks in a concrete grid frame to provide light to the tracks below. The floors of the moats are now cast-in-place concrete slabs set on exposed steel framing. A survey conducted in the winter of 1994-95 revealed areas of significant water infiltration, causing deterioration of steel and concrete. Emergency repairs to the deteriorated steel were completed in the fall and winter 1995-96 to rectify this condition. Additional information regarding the outlined repairs was included in Volume II, Appendix 4 of the 1995 Draft EA.



UNITED STATES POST OFFICE, NEW YORK CITY
1913

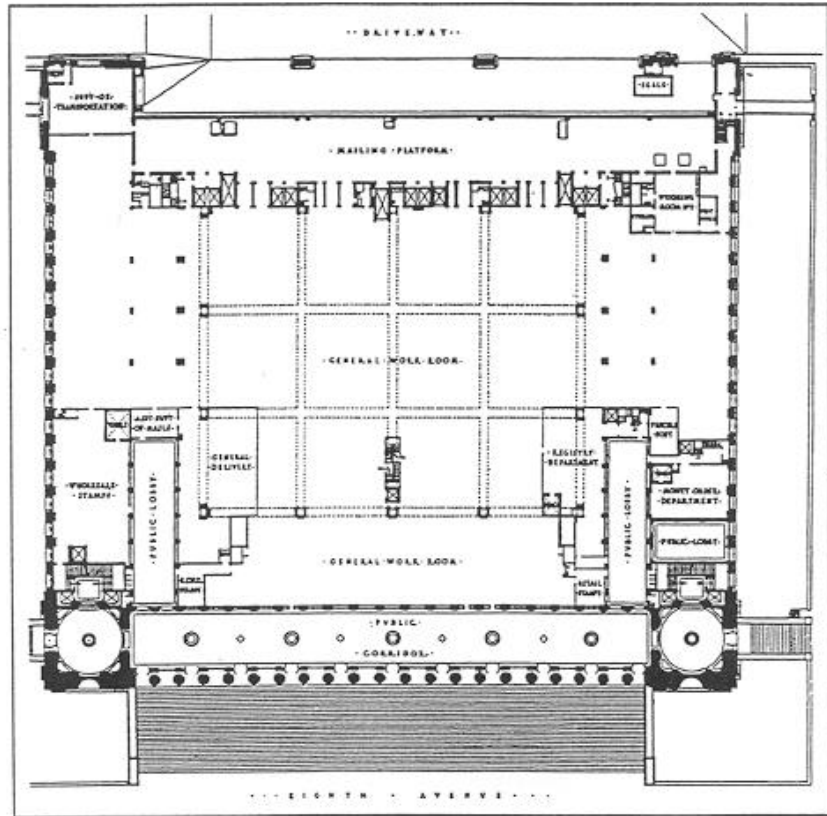


FIGURE 1-5
ORIGINAL PLAN AND EAST ELEVATION
OF THE 1914 PORTION OF THE FARLEY BUILDING

1.2.4 Subway Connection The Eighth Avenue Subway is currently linked via an east-west connector to Penn Station at Level A. Figure 1-4 illustrates the east and west portions of this connection. At present, the subway station is inaccessible to nearly all passengers with disabilities because of the steep ramps and stairs leading down to the connector under the subway tracks. Corridors, ramps, and stairs are cramped and barely adequate for rush-hour pedestrian volumes. Movement against the flow of pedestrians during rush hours is very difficult. The West 33rd Street/Penn Station entry area to the Eighth Avenue Subway is envisioned ultimately as the underground connecting link between the Eighth Avenue Subway, Penn Station, and the Farley Building. The subway entrance and concourse would retain their original configuration with some minor changes, including new tiles at the underground passageway and new turnstiles and token booths.

1.2.5 Penn Station Service Building Located at midblock across West 31st Street from the Penn Station passenger terminal, the Service Building was built as an integral element of the original Penn Station Complex and served as a power generation and control center for the Penn Station Complex's buildings, trackage, and traction and signal power. It is a four-story structure, with four basement levels and tunnel connections to other parts of the Penn Station Complex. Amtrak's 1995 plan for the Penn Station Complex included various improvements to and uses at the Service Building along with improvements at existing Penn Station and new rail passenger facilities at the Farley Building. The current PSRC plan does not involve any uses of the Service Building, which continues to be owned by Amtrak. Any future uses of this facility will be determined by Amtrak separate and apart from the current PSRC proposal.

1.2.6 Context of the Rail System Since the construction of Pennsylvania Station and its related trackage and tunnels under the North and East Rivers between 1905 and 1910, there have been only minor modifications to the track configuration serving the Penn Station Complex. Most were made to accommodate structural changes for buildings overhead or to allow for adjustments in track utilization. The track layout for the original station was intended primarily to serve intercity and long-distance through-train service, along with commuter service by LIRR. Access was provided to New England via four East River tunnels and the New York Connecting Railroad (Hell Gate Line, 1917), to the south and west via the two North River tunnels and Pennsylvania Railroad main lines. During the early 1930s, in anticipation of the construction of the Farley Building Annex, some minor changes were made to track alignments to accommodate piers and footings for the structure. Train movements within the station and through the river tunnels, east to the Harold Tower in Long Island City and west to the Hudson Interlocking in New Jersey, were controlled by towers at the station. During the late 1980s, connections were made west of Ninth Avenue that allowed access through the former New York Central's West Side Yards to the Hudson River Line. This provided access for Amtrak Empire corridor service north along the Hudson River to Albany and beyond.

The original Pennsylvania Station was designed with specific waiting and circulation areas as well as trackage and platforms set aside for the LIRR. At its inception, the LIRR served a series of small villages stretched across Long Island and generated substantial passenger and track utilization demand on Penn Station. After World War II, however, rapid residential development of Long Island's Nassau and Suffolk Counties as bedroom communities transformed the LIRR into the commuter railroad with the largest passenger volume in the United States. This growth

in ridership during the 1950s coincided with the slow and steady decline of intercity train trips during the same period. During the 1960s and 1970s, commuter rail service and equipment declined along with the general fortunes of the eastern railroads. With the advent of regional transportation agencies and federal funding during the last two decades, commuter equipment and service have significantly improved. As a result, there has been steady growth in ridership over the last decade.

As early as 1904, the track plans for Pennsylvania Station indicated the intent of the (then) United States Post Office Department to build a new post office building over the tracks west of Pennsylvania Station. The USPS has used this location over the tracks to facilitate shipping since the 1914 opening of the Penn Terminal Post Office, now the Farley Building.

1.2.7 Rail System Description As originally laid out and presently configured, the trackage at the Penn Station Complex combines features of both "through" and "terminal" stations.⁵ There are 21 tracks and 12 platforms serving the station, as shown in Figure 1-6. These tracks are utilized in different operational groups depending upon the time of day, with uses generally defined as follows:

- Platforms 1 and 2, serving Tracks 1 through 4, are used exclusively by NJT. These terminal tracks dead-end at the east end of Penn Station and do not connect to the East River Tunnels.
- Platforms 3 through 8, which serve Tracks 5 through 16, are shared by Amtrak and NJT with the majority of NJT usage during commuter rush hours. Tracks 5 through 16 are through tracks that experience heavy usage in either direction because they directly connect to the tunnels of the North and East Rivers. The tracks are also heavily used by Amtrak and NJT for access to the Sunnyside Yard.
- Platforms 7 and 8, which serve Tracks 13 through 16, are shared by Amtrak, NJT, and LIRR, with nearly exclusive LIRR usage during rush hours and more-frequent Amtrak use during off-peak hours.
- Platforms 9 through 11, which serve Tracks 17 through 21, are used primarily by LIRR, but can be used to access the North River tunnels, for emergencies, and to route trains to/from the recently constructed LIRR storage yard located west of Tenth Avenue.

Amtrak generally assigns its long-distance trains to Tracks 9 through 14, which have the longest platforms in the station. The track reconfiguration at the west end of the station, which enables Empire Corridor trains to use Penn Station rather than Grand Central Terminal, also limits these trains to Tracks 5 through 8. For ease of operations, Amtrak Metroliner service is generally

⁵ These terms refer to train movements with only brief stops (through), compared to being the starting or ending point (terminal).

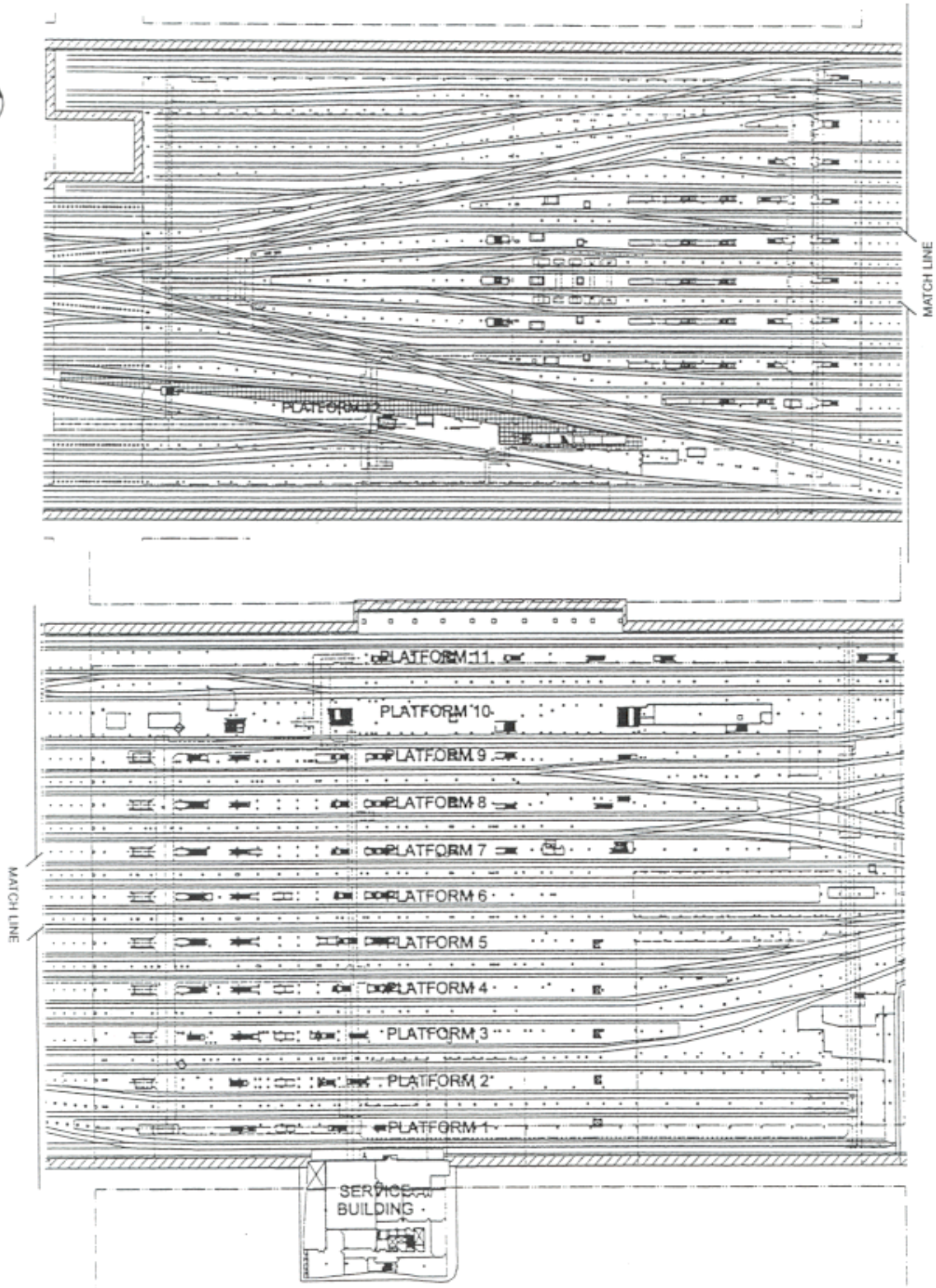


FIGURE 1-6
EXISTING TRACKS AND PLATFORMS

assigned to Tracks 7 through 14. Platform 12 is presently used by the USPS for mail train operations.

1.2.8 Current Rail Service The total number of trains, including “deadhead” movements (nonrevenue service trains that do not carry passengers), through the East River Tunnels is nearly six hundred trains per weekday. These include the LIRR, Amtrak, and NJT. All NJT train movements through the East River Tunnels are deadhead movements between Pennsylvania Station and Sunnyside Yard in Queens. Approximately two-thirds of the East River Tunnel train movements are LIRR. There is a comparatively small volume of LIRR deadhead movements since the West Side Yard is available to the LIRR for midday storage.

The total number of train movements per weekday through the North River Tunnels is three hundred, of which two-thirds are NJT trains. In addition, there are 26 Amtrak Empire Service trains per weekday that originate or terminate in Penn Station and serve Albany and points west via the Hudson River line. Thus there are over nine hundred train movements per weekday arriving and departing Penn Station's 21 tracks. Peak-period train length for LIRR and NJT ranges from eight to twelve cars. Amtrak train length for Northeast Corridor Metroliner and Northeast Direct trains is normally from six to eight cars.

The function of the Penn Station Complex is influenced by several operational constraints: limitations on the number of trains that can reach the Penn Station Complex via the area's railroad tunnels; signal system, switching and storage issues; and physical limitations within the Penn Station Complex. Physical limitations include platform lengths and capacities that do not meet the demands of commuter service, restricted vertical access between platforms and concourse levels, and crowded concourses and waiting areas during rush-hour periods. The railroads operating within Penn Station have undertaken projects to address the range of operational constraints. These include recent renovations of Level A by LIRR, and joint efforts by Amtrak, LIRR, and NJT to improve traction power distribution, signal switching and control systems, tunnel ventilation, and platforms configuration. NJT also has undertaken a major renovation, including construction of an East End Concourse.

1.2.9 Current Ownership The Pennsylvania Railroad entered the post-World War II era in a sound financial state. By 1951, however, the railroad's financial condition began to deteriorate and the railroad began to cut back on services and look for an improved return on its property holdings, including the Pennsylvania Station site. In June 1955, the president of the railroad entered into a secret agreement for the sale of the air rights above the street level of the station. In July 1961, the sale of the air rights was made public in conjunction with the announcement of the planned construction of a new Madison Square Garden to be built on the site of the main concourse. In return for its air rights, the railroad received a 25 percent share in the Madison Square Garden complex, and a new station (Penn Station) was constructed in the subterranean levels of the original passenger terminal. During the reorganization of the bankrupt northeastern railroads, which included Pennsylvania Railroad's successor, the Penn Central Railroad, the facilities and operations of the Penn Station Complex were transferred on April 1, 1976 to Amtrak. Subsequently ownership of the air rights above the station was transferred outright to Madison Square Garden Associates for the arena and to Penn Plaza Associates for Two Penn Plaza.

The USPS continues to own the air rights above the Penn Station Complex trackage that the U. S. Post Office Department acquired from the Pennsylvania Railroad in 1907 and 1922 for construction of the General Post Office and its Annex, respectively.

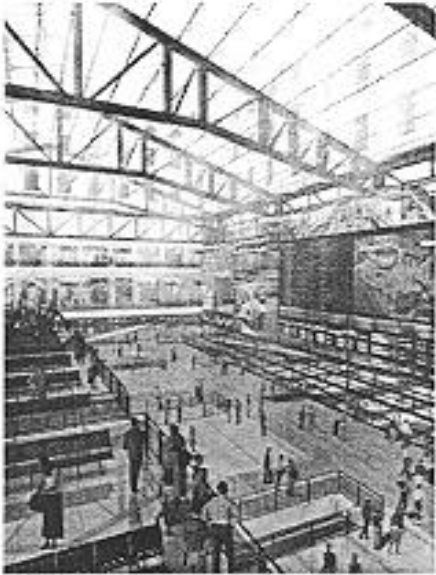
The LIRR and NJT have trackage rights and lease operations space in Penn Station from Amtrak. Recently, Amtrak and LIRR entered into a partnership to control train operations in the vicinity of Penn Station and onto Long Island, as well as connections to the West Side. All train movements are controlled from the Amtrak/LIRR Claytor-Scannell Control Center located diagonally across from the Annex at the southwest corner of West 31st Street and Ninth Avenue.

1.3 PROPOSED PROJECT IMPROVEMENTS

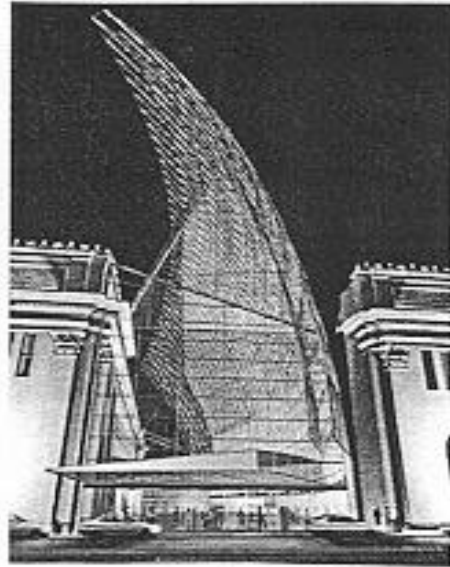
1.3.1 Main Elements of the Project The Project would accommodate all transportation and postal functions within and beneath the existing Farley Building with Amtrak facilities, a midblock, at-grade intermodal hall, a train concourse with ancillary retail facilities, a postal loading dock facility below grade, a commuter concourse, and Eighth Avenue subway connection improvements as well as certain traffic and pedestrian improvements. The layout of the new station is similar to that of the original Pennsylvania Station, with a sky-lit concourse and spacious intermodal hall. The types of improvements at each location are further described below.

1.3.1.1 Farley Building Several modifications to the Farley Building would be made to convert a portion of it into an intermodal intercity passenger terminal, as described below. Figure 1-7 shows renderings of various views of the Build Alternative.

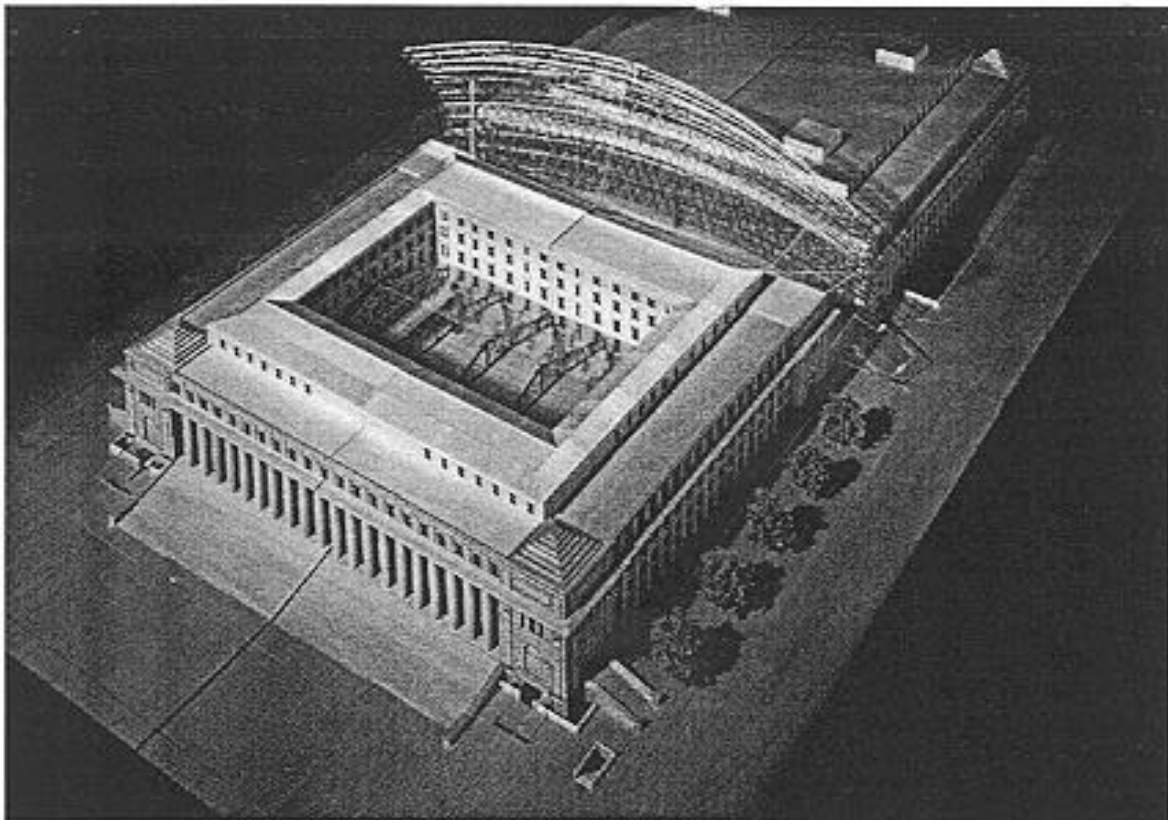
Intermodal Hall and Entrance Lobby: A major element of the PSRC/SOM plan is the construction of a new through-block intermodal hall extending from West 31st to West 33rd Streets at the link where the Annex is connected to the original building. Figure 1-8 presents the first-floor level floor plan of the Farley Building. In the present scheme the three-bay, five-story wall section between the midblock pavilions on West 31st Street and the two-bay, five-story wall section between the midblock pavilions on West 33rd Street are to be removed and the west wall of the original building is to be reconfigured in an appropriate interpretive manner. The new intermodal hall would be crowned by a prominent glazed roof structure rising over 186 feet above first-floor level and enclosing a space 180 feet high. The roof structure would consist of an elliptical, double-layer steel lattice shell. In the plan, the base of the shell structure would follow the curve of the west side of the intermodal hall. The shell itself would comprise two layers of steel compression members laid out in a diagonal grid. Stiffening rib trusses would be located within the depth created by the two layers. The end walls of the intermodal hall would be fully glazed, creating a transparent link between West 31st and West 33rd Streets at the middle of the Farley Building. New self-supporting bridges across the glazed link structure would provide required circulation between the original building and the Annex, allowing for continuity of USPS operations.



Passenger Concourse looking North



Looking south at the 33rd St. Entrance



Architect's Model of the Build Alternative

**FIGURE 1-7
RENDERINGS OF THE FARLEY BUILDING AND ANNEX
WITH THE BUILD ALTERNATIVE**

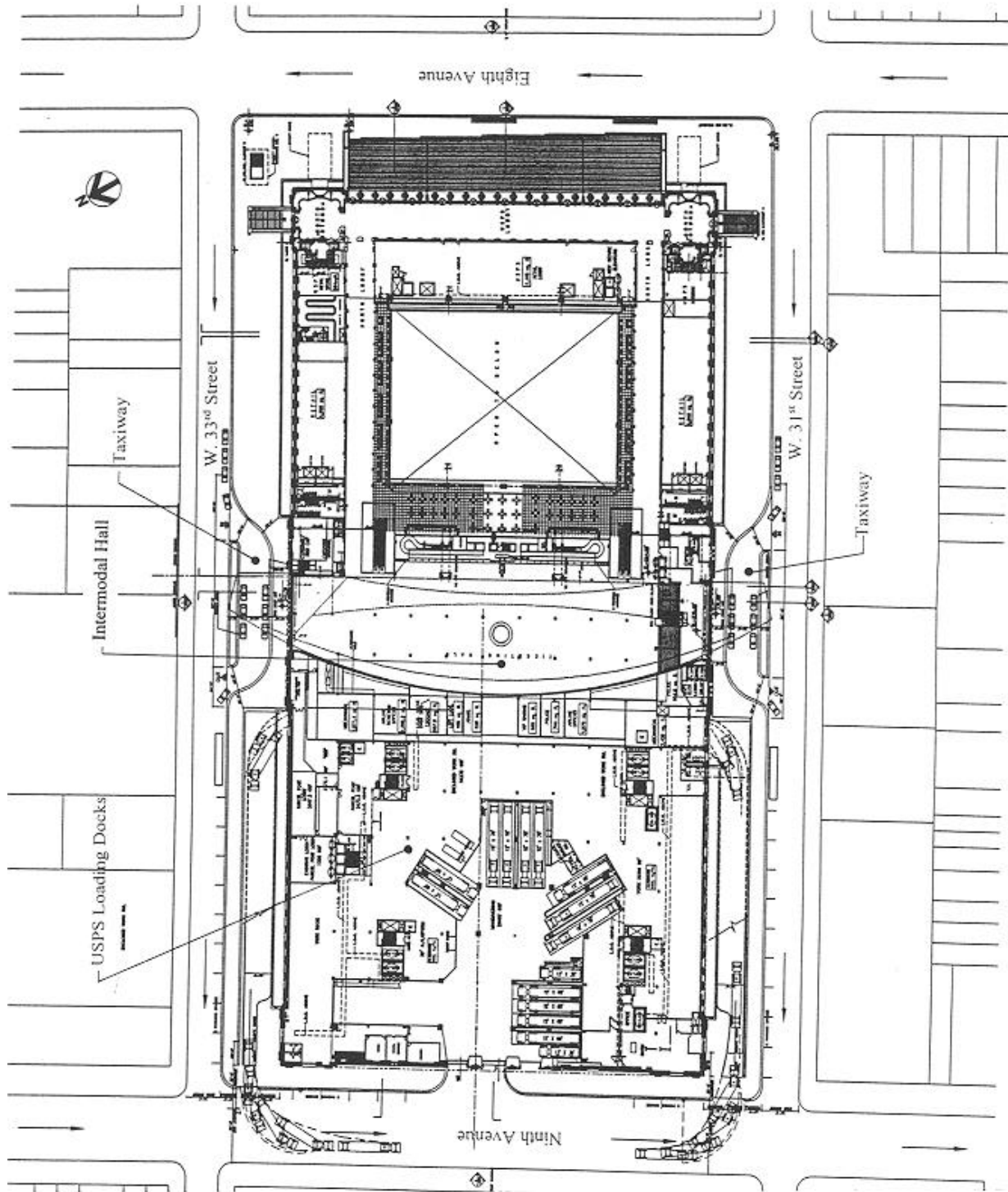


FIGURE 1-8
BUILD ALTERNATIVE - FIRST FLOOR LEVEL FLOOR PLAN
FARLEY BUILDING

The new station would have two midblock entrances on West 31st and West 33rd Streets. At these entrances (complemented by entrances at the north and south corners of Eighth Avenue), at-grade, Americans With Disabilities Act (ADA) compliant access would be provided for passengers and postal retail customers. In addition, covered areas would be included for taxi pick-ups and drop-offs and possibly for accommodating temporary parking for a number of passenger vehicles. Passengers would use these entrances to access the intermodal hall and retail areas to be created in the former space between the original building and the Annex.

Main Waiting Area and Concourse: A large public space would be created within the Farley Building to serve both as the main waiting area for passengers and to establish a Train Concourse as a focus for Amtrak service. Such large public areas are typical of railroad terminals in major cities. The area originally designated as the General Work Room easily lends itself to be adapted, along with changes in adjoining areas, to create the new waiting area and concourse with surrounding retail development and restaurant space. Under the PSRC proposal, the existing Work Room skylight structure would be modified to accept a contemporary glazing system. The design of this skylight is being developed to ensure its compatibility with the historic character of the building. The floor of the General Work Room as well as a portion of the basement floor would be removed to create a space of greater height and to expose the track level to view. The proposed waiting area and main concourse would then be at the level of the existing Farley Building basement (at approximately the current Penn Station Level A). See Figure 1-9.

Similar to the concourse of the original Pennsylvania Station, the new station's concourse would establish a visual connection to the track level so that the passengers would have a clear sight line to the trains below, and natural light would once again reach the platforms, providing an important orienting factor for arriving passengers. Elevators, escalators, stairs, and ramps would provide vertical access to a commuter concourse and platform below.

The commuter concourse, a level below the train concourse, would be allocated for commuter traffic and would be designed for quick access to and egress from the platform level. All arriving passengers would exit trains at this level and then disperse to exit the station. The existing West End Concourse, which lies beneath the Farley Building, currently provides access to Platforms 7 through 11. It would be extended south, linked to Platforms 3 through 6, and significantly enlarged to the west. See Figure 1-10. The Project would also improve access to the Eighth Avenue Subway and would improve circulation between the existing Penn Station and the Farley Building.

Incorporation of the existing Lower Concourse Level would result in a multistory space for the new Amtrak passenger facilities, supporting the Project goal to create an image appropriate to America's busiest terminal. The perimeter of the new multilevel, sky-lit space would be surrounded by Amtrak passenger services and restaurant and retail spaces. All new construction, including new Amtrak ticketing windows, storefronts, and other new interior finish treatments, would be compatible with the historic character of the Farley Building.

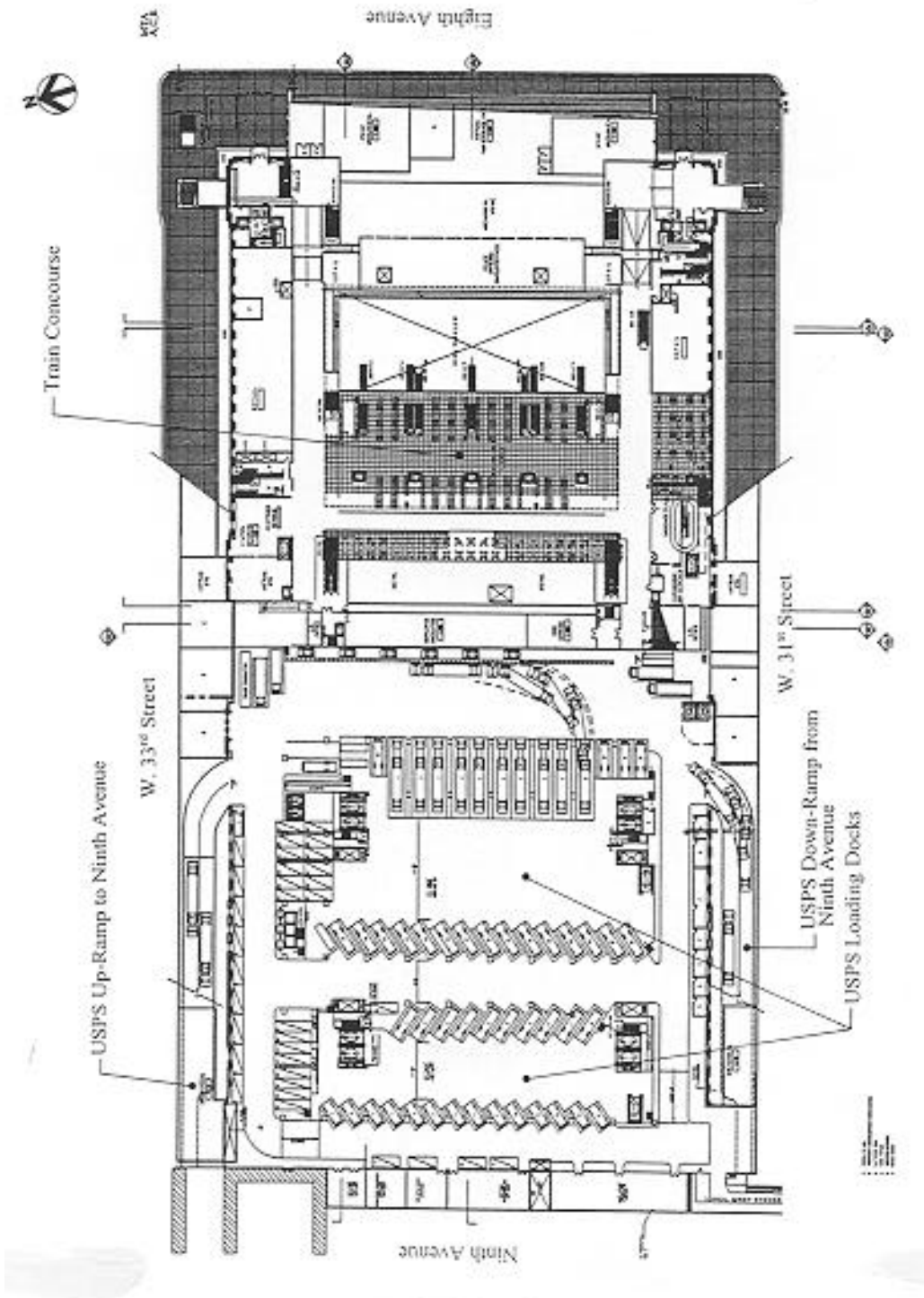


FIGURE 1-9
BUILD ALTERNATIVE - CONCOURSE LEVEL FLOOR PLAN
FARLEY BUILDING

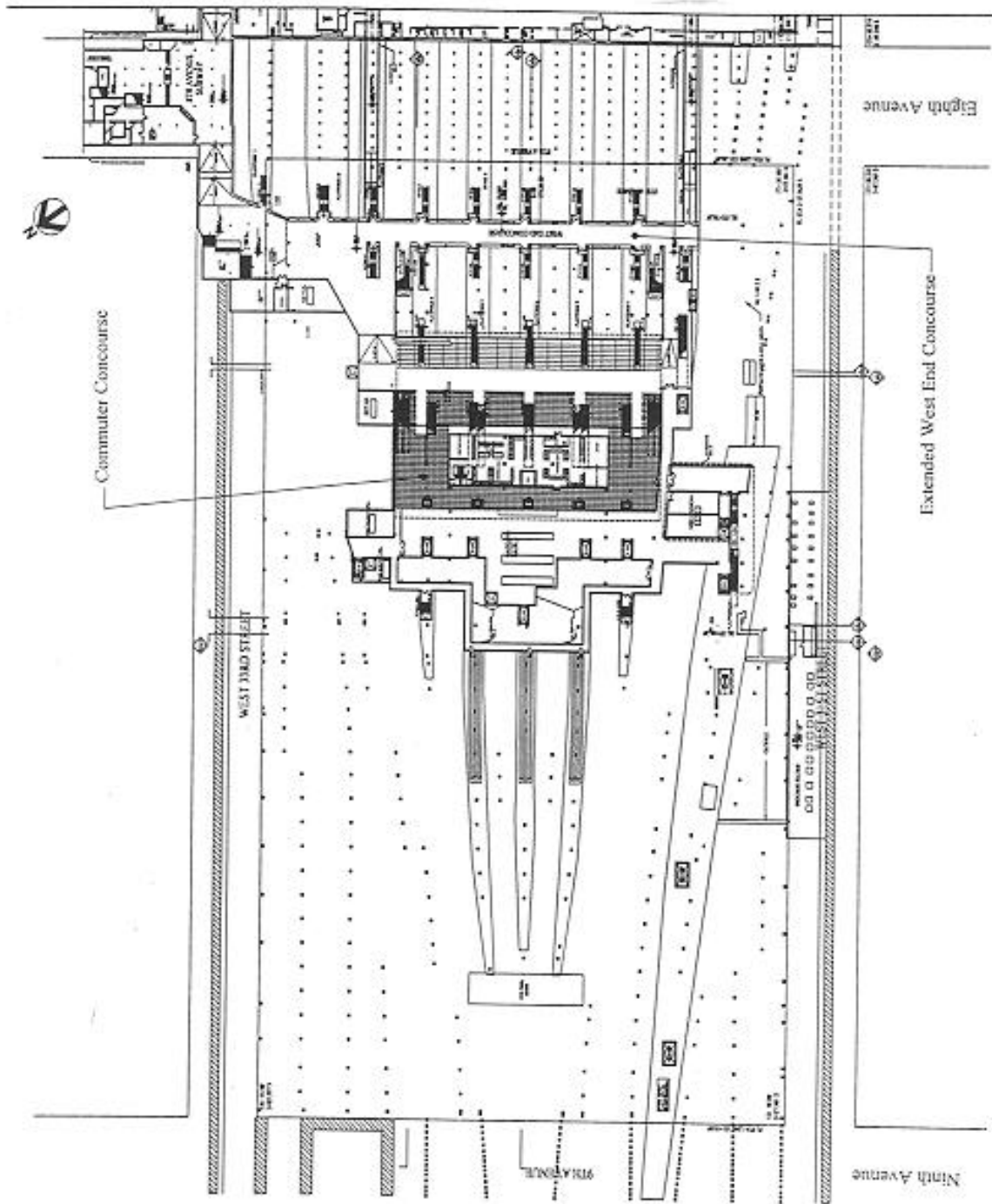


FIGURE 1-10
BUILD ALTERNATIVE - LOWER CONCOURSE LEVEL FLOOR PLAN
FARLEY BUILDING

Entrances at Eighth Avenue: An important component of the proposed design is the need to clearly separate Amtrak pedestrian traffic from that of the USPS in the Farley Building. On both sides of the exterior monumental stairs on Eighth Avenue that lead up to the main lobby of the Post Office in the Farley Building, new Amtrak pedestrian entrances would be installed in the areas presently occupied by corner moats. These entries would be clearly identified as leading to Amtrak facilities and would be designed to meet ADA requirements and the Secretary of the Interior's Standards for Treatment of Historic Properties (SI Standards).

Building Systems—Infrastructure: The proposed Project includes upgrading the Farley Building's mechanical systems, including installation of new domestic water, sanitary sewer, HVAC, and electricity supply and distribution systems throughout those areas of the building being redeveloped by PSRC for station use. The existing systems in the Farley Building would be altered, coordinated, and upgraded as required to meet the needs of the reconfigured facilities.

Planned Restoration Program: As part of the comprehensive restoration program envisioned as an integral component of the Project, all granite, terra cotta, and brick mortar joints on the original building would be raked out and repointed 100 percent and all soiling would be cleaned from the masonry using specified cleaners. The terra cotta cresting on the original building would be restored and replaced where missing or severely damaged. The existing standing-seam copper roof would be replaced in kind and the existing ballasted rubber roof would be replaced with a new EPDM membrane roof. The existing obsolete bird-deterrent system would be removed and replaced with an up-to-date deterrent system. The existing wood sashes on the original building are to be restored, or replaced in kind where they are beyond repair. The ferrous metal window wall on Eighth Avenue would be stripped, primed, and repainted. The incompatible cobra-head external light fixtures would be removed and replaced with compatible new lighting. The main postal lobby and flanking rotundas would be restored to their original condition. The postal side lobbies would be restored and adaptively reused as pedestrian links to and from the Amtrak passenger terminal. Other interior areas of significance, as identified in the historic building survey performed for the 1995 Draft EA, would be treated in a manner that respects their historical integrity and character. Where granite is missing or damaged, or where required at new openings, granite salvaged from the building would be reused where feasible. Any new granite required would match the existing as closely as possible. All restoration work would be in conformance with the SI Standards.

Access to Trains: Primary passenger access to Amtrak service would be moved from its present location in Penn Station to the proposed passenger terminal facilities in the Farley Building, although Amtrak would retain a presence in Penn Station and Amtrak passengers could continue to access trains from that location. Amtrak trains would be reached via escalators, stairs, or elevators connecting the proposed main waiting area/concourse (at the basement level of the Farley Building) with the existing platforms. This new vertical access would not only increase the number of access points to platforms, but also would enable alternate arrival and departure patterns for Amtrak patrons that would avoid conflicts with large numbers of commuter rail passengers. PSRC's proposed Project does not include any additional work at Penn Station. Moving the bulk of Amtrak's passenger-related facilities to the Farley Building would free up additional space at Penn Station which Amtrak expects to use for additional circulation space and

expanded retail. Platform 12, currently used for USPS mail service, would be divided and Amtrak's Empire Corridor Service line would use the north side. USPS would continue to use the south side of Platform 12 for mail service.

Taxi Access: Taxi access to the new Amtrak terminal would be at street level, midblock on West 31st and West 33rd Streets at the new intermodal hall and entrance lobby.

Continuing USPS Functions: The USPS would continue to occupy its historic retail lobby and would retain the top floors of the original Farley Building for administration functions. USPS would retain most areas of the Annex and would consolidate its operations to those areas. In addition, USPS would maintain access to the railroad below for mail freight operations on Amtrak rail lines. Passage from the main Eighth Avenue lobby of the Farley Building, which would continue to be a Post Office, to the Amtrak station would be from new elevators and via extensions of the two side lobbies that flank the main postal lobby. The transitional elements between the side lobbies and the station area would be compatible with the existing structure and in accordance with the SI Standards. USPS has been consulted to coordinate space needs and future facility utilization planning for the postal functions that would continue in the balance of the Farley Building and their connections to the platforms and tracks. This coordination has resulted in an improved circulation and space utilization plan for both Amtrak and USPS.

Mail Truck Access: The Project would include a reconfigured first-floor loading dock for postal trucks and a new on-site loading dock in the basement of the Annex. The Project would eliminate the existing West 31st Street loading docks and the associated West 31st Street counterflow lane and the reserved lane on Ninth Avenue. The West 31st Street loading dock and the moat area adjacent to the building on West 33rd Street would be replaced by new truck ramps leading in and out of the building. These new ramps would both have curb cuts on Ninth Avenue, as shown in Figure 1-8. These alterations would also result in the West 31st Street counterflow lane and the reserved lane on Ninth Avenue becoming available for regular traffic use. The new openings for the truck entrances would be cased with granite salvaged from other areas in the building. As presently envisioned, this scheme would minimize the potential impact of the insertion of the delivery ramps into the historic fabric of the building. In conjunction with the construction of new delivery ramps in the moats, revisions would be required to the moat structural system. All work would be carried out in accordance with the SI Standards.

Traffic Improvements: The proposed action includes traffic improvements, operational measures and pedestrian improvements to streets in the vicinity of the Farley Building. These improvements would preserve acceptable levels of service for vehicular and pedestrian traffic. Traffic improvements at ten intersections in the study area include: reallocating the green time of a traffic signal to allow more time to the approaches that are operating poorly, thereby increasing the capacity and lowering the delays at these approaches, and changing on-street parking regulations (banning parking during certain hours) to allow for extra moving lanes where traffic flows are constrained. These improvements would be implemented by DOT if after construction of the Project it is confirmed that they are warranted.

1.3.1.2 Eighth Avenue Subway An integral component of the Project is the reconfiguration of the Eighth Avenue Subway connector at West 33rd Street that serves as the underground link between Penn Station and the Farley Building (see Figure 1-11) . The east-west ramps along the passageway would be lengthened to meet ADA requirements. The corridor would be widened by removing a stair on the eastern ramp and by relocating a stair on the western ramp to avoid pedestrian congestion, clear the lines of travel, enhance passenger orientation, and improve the degree of ADA access for rail station users. This work would not alter present access to the Eighth Avenue Subway at West 33rd Street.

1.3.2 Construction Sequencing Construction of the various Project components would need to be staged over a period of about three years to minimize disruptions and inconvenience for patrons and ongoing transportation services, meet available funding, and allow orderly transitions of functions and operations. Preliminary schedules are described below. Construction timing and duration would be contingent upon the availability of funding. It is anticipated that construction in the Farley Building could be expected to start in 2000 and be completed in late 2003. A detailed construction schedule would be developed as the Project is further designed.

1.3.3 Staging/Sequencing Restrictions PSRC has proposed a conceptual phasing scheme consisting of five phases, each with multiple stages. The phasing scheme would be reviewed by USPS, LIRR, NJT, and Amtrak to minimize negative construction impacts and to accommodate the needs of the various users. There is a critical need to maintain an adequate number of loading docks to meet USPS operating requirements. Temporary loading platforms may be employed to achieve this. Construction would be scheduled and sequenced to avoid or minimize impacts to rail operations. Work that would impact train operations would be scheduled for off-peak hours.

Project implementation would include preparation of a plan, in coordination with the City's Department of Transportation, to minimize disruption of roadway traffic and pedestrian flows during the construction period. Anticipated actions that would accompany construction include the following:

- Some closing of curb-side traffic lanes and sidewalks bordering the site for limited periods of time, possibly up to one year.
- Temporary rerouting of some pedestrian traffic both at street level and below-grade in conjunction with the proposed improvements at the Eighth Avenue Subway station and the 33rd Street Connector link at the West End Concourse. Temporary pedestrian detours would likely be required also within both public and nonpublic areas of USPS operations in the Farley Building. Similar reroutings and some minor disruptions within the Penn Station concourses and on the station platforms would occur for periods of time as construction progresses in any given area.
- Construction materials and demolition debris would be transported via rail or truck, and scheduling of transport would be an important consideration in each case. Truck traffic haul routes would be coordinated with City officials.

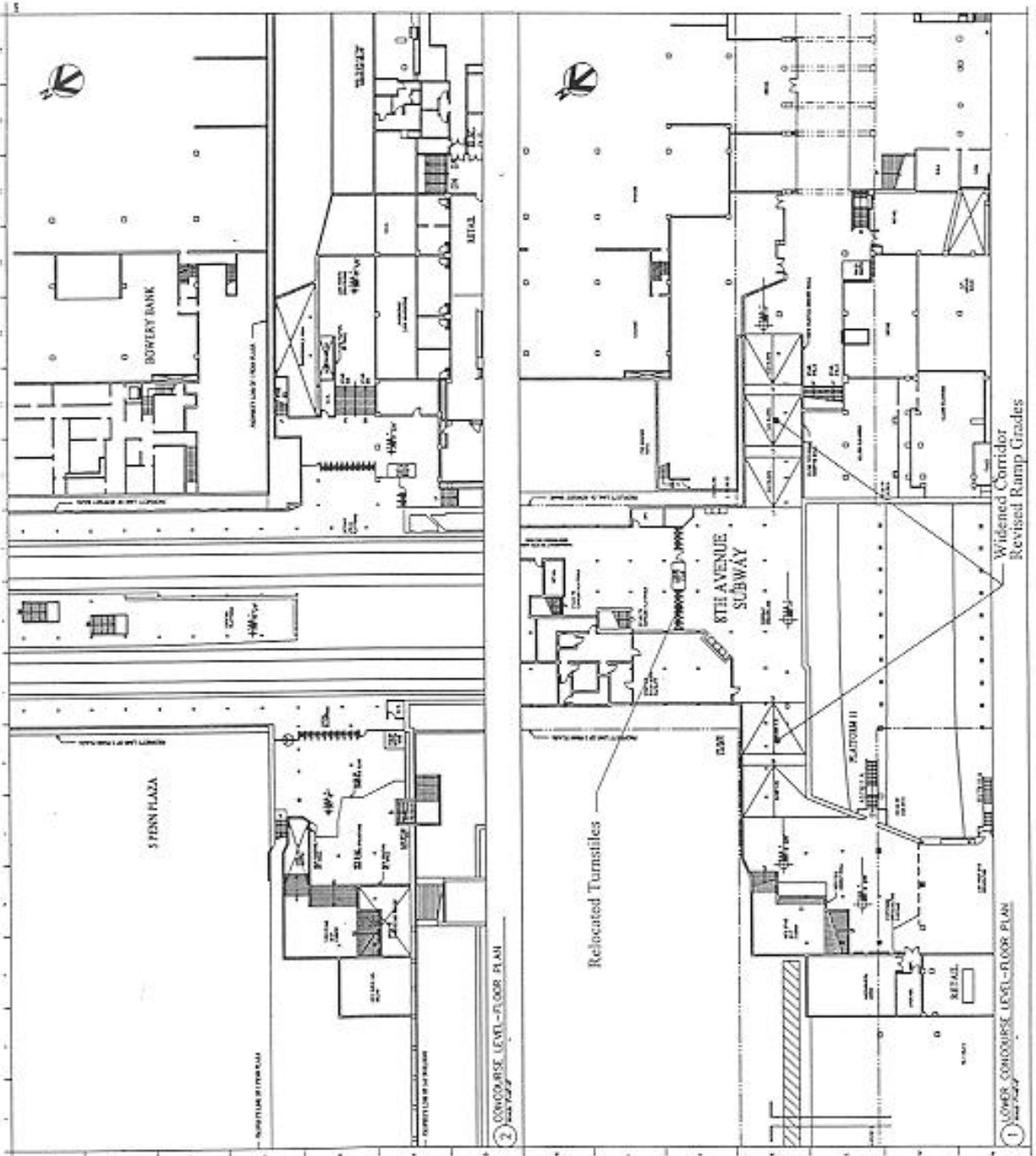


FIGURE 1-11
 BUILD ALTERNATIVE - IMPROVEMENTS TO 8th AVENUE
 SUBWAY STATION AND CONNECTIONS

1.4 OTHER PROJECTS WITHIN THE PENN STATION COMPLEX

Activities currently underway or recently completed:

Penn Station Renovations in Progress: At present, there are several projects in design or construction by the railroads operating in Penn Station intended to upgrade passenger services and building systems, and to improve code compliance within the Penn Station Complex. Amtrak is completing life-safety and code-related alterations in Penn Station funded by a variety of Federal appropriations between fiscal years 1994 and 1996. This work is programmed for Penn Station at the platform level and at Levels A, B, and C. Projects include asbestos abatement, electrical and track ventilation improvements, ADA compliance, and fire-safety improvements, as well as high-speed rail improvements.

Amtrak has completed seven emergency safety-related repair projects valued at \$21.5 million. These projects include:

- closed-circuit TV, public address and dynamic signage at platform level,
- static signage on Platforms 1 through 8 and station Levels A, B, and C,
- structural remediation,
- moat leak remediation,
- smoke and firestopping between the platform and station levels,
- crew services center renovation, and
- Service Building chimney stacks removal.

Amtrak has also completed five ADA-compliance projects:

- extension of the P4 elevator one floor to stop at concourse level,
- installation of new signage,
- tactile edging at platform level,
- accessibility modifications to ticket window, information kiosk, and baggage area, and
- upgrading six elevator control panels.

Finally, Amtrak has begun life-safety and high-speed rail improvements to Penn Station:

- replacement of three stairs with escalators from the Concourse Level to Platforms 5, 6, and 7,
- replacement of one stair with an escalator from the Concourse Level to Level A,
- creation of a new high-speed rail passenger waiting area and general passenger waiting area (as shown in Figure 1-12), which will be fully enclosed and have a new ceiling, new lighting, new flooring, and an upgraded HVAC system,
- replacement of the flooring throughout the Concourse Level,
- installation of two new train departure boards, and new gate signs on the Concourse Level and Level A,
- installation of new entrance doors at three entrances to the station,

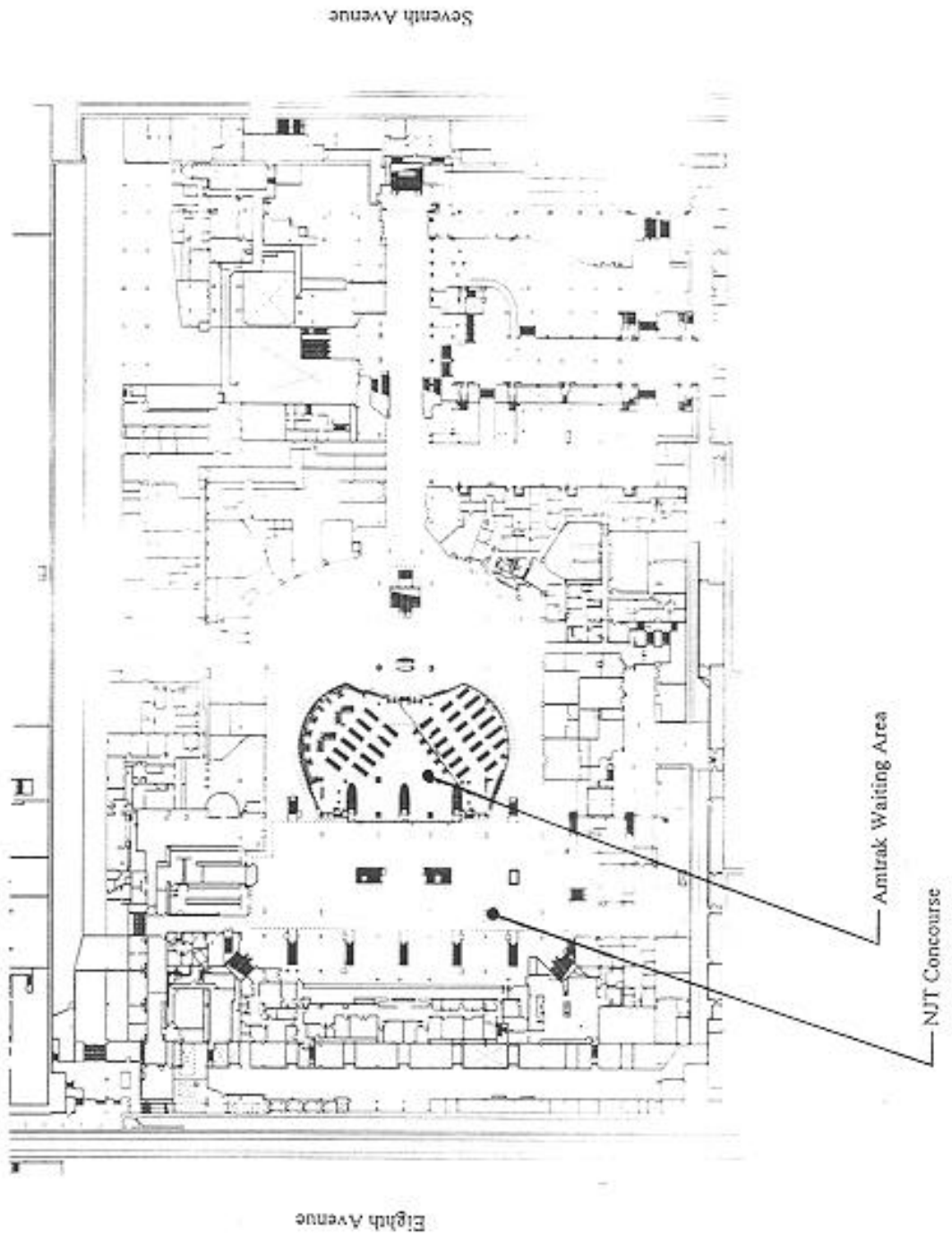


FIGURE 1-12
BUILD ALTERNATIVE - CONCOURSE LEVEL FLOOR PLAN
PENN STATION

- installation of new lighting at the platform level on Platforms 5, 6, and 7, and
- installation of new signage at various locations throughout the station.

The LIRR has extended Platform 11, serving tracks 20 and 21, and recently completed a \$200 million reconstruction and refurbishment of portions of Level A of the station. This work includes a new entry structure on West 34th Street, concourse renovations, vertical circulation improvements, and installation of new air conditioning, ADA-compliant signage, graphics, new building finishes, and audio-communication systems. NJT began construction of similar improvements in early 1999, with completion scheduled for August 2001.

Transportation Projects: Railroad improvements recently completed, underway, or under study that affect train service into Penn Station include the following:

- In late 1999, Amtrak will initiate its new Acela Express service, providing high-speed service to Boston and Washington, D.C. on the Northeast Corridor. This service will provide improved trip times and, between New York and Boston, increased service frequency (from the current 10 weekday round trips to 34 weekday round trips by late 2000).
- The Farley Building would accommodate passengers using a new airport access rail link to and from New York's John F. Kennedy International Airport. A link is already underway connecting Newark International Airport's Monorail to the Northeast Corridor. These connections will provide passengers with better and faster alternatives than traveling by private car, taxi, or bus.
- NJT has recently completed an improvement called the Kearney Connection to allow NJT's Morris-Essex lines direct access to Penn Station. NJT is also developing the Secaucus Transfer Project to provide a new station, track reconfigurations, and additional signaling to enable a transfer point for patrons from diesel-powered trains on NJT routes to the electric-powered trains that are required to pass through the North River Tunnels to Penn Station.
- Within Penn Station, NJT has begun a general upgrading and redesign of the space it presently occupies on Levels A and B using materials, finishes, and design elements similar to those employed in the renovations recently completed by LIRR on Level A. In addition, NJT is constructing a new east-end concourse at the present Levels A and B to provide additional passenger access to and from their platforms.
- A new river crossing to provide LIRR access from the east into Grand Central Terminal is under study.
- MTA is studying options to improve the Grand Central/Penn Station link to enable some Metro-North trains access to Penn Station. All Metro-North trains now terminate in Manhattan at Grand Central Terminal.

1.5 OTHER PROJECTS IN THE AREA SURROUNDING THE PENN STATION COMPLEX

Real Estate Developments: Several projects are currently underway or have been proposed in the study area. Additional development can be accommodated within the existing zoning of the area.

- Special permits for a major office development were approved in 1990 on Ninth Avenue opposite the Farley Annex on the mostly vacant superblock between West 31st and West 33rd Streets. Olympia & York Company proposed to construct a 51-story commercial building, with below-grade parking and one acre of landscaped public open space around its perimeter on a platform over the rail yards. This development could contain up to 1.67 million gross square feet of space. The special permit for this project expires in 1999 and can only be renewed for one year. Reportedly, the rights held by Olympia & York are now held by another entity and the future of the proposed development is uncertain at this time.
- A private developer has recently completed the conversion of the former YMCA Sloan House at the northeast corner of West 33rd Street and Ninth Avenue north of the Farley Annex. The street level of the building is occupied by a very large photo and video store and the upper levels are upscale apartments.
- A 300-unit rental apartment building is under construction on Sixth Avenue between West 24th and West 25th Streets, just south of the study area. There has been significant interest in construction of new apartment buildings in the Flower District, some of which was enabled by the 1995 rezoning along Sixth Avenue. It is also possible that new residential buildings might be constructed along Ninth Avenue north of the study area.
- A 500,000-square-foot development is underway at 17 Penn Plaza, the former site of a parking lot between West 33rd and West 34th Streets (just west of the Eighth Avenue intersection and east of the Glad Tidings Baptist Church). It will consist of a twenty-six-story office building and a multiscreen cinema complex.
- There is the potential to construct 300,000 square feet of additional unspecified office and commercial space along the West 34th Street corridor in the study area. This potential space is the aggregate of as-of-right development that property owners can build to the allowable limits of zoning envelopes.
- There is great development potential for the rail yards west of the Farley Building, bordered by West 34th Street and West 30th Street between Eighth Avenue and the Hudson River. A mixed-use building is anticipated to be built on the block between Eighth and Ninth Avenues and West 33rd and West 34th Streets, immediately west of the Project site, by the build year. Given New York City's improving economy and the residential real estate market in Manhattan, it is reasonable to assume that some new development will occur on underutilized sites in this area. An international design competition focusing on this area was sponsored by the Canadian Center for Architecture in early 1999. The winning design was announced June 28, 1999, and incorporates a sports stadium and a rooftop park. Other public and private developers have expressed

interest in the site for an addition to the Javits Center (an exhibition facility), a new Madison Square Garden, and a new sports stadium.

CHAPTER 2**ALTERNATIVES CONSIDERED****2.1 INTRODUCTION**

Any assessment of reasonable alternatives for improving the passenger terminal facilities in New York City must recognize the constraints imposed by the existing Northeast Corridor infrastructure. In particular, limitations include the tunnel approaches to the Penn Station Complex, the passenger terminal trackage and platforms, and the highly developed nature of Midtown Manhattan. The railroad infrastructure was largely developed in conjunction with the construction of Pennsylvania Station and completed in 1910 through excavation of bedrock. Any significant alteration to this infrastructure would be prohibitively expensive. As a consequence, any reasonable alternative for improving the terminal facilities must include continued use of the existing infrastructure.

The requirement for continued use of the existing terminal trackage and platforms limits the range of available alternatives to modifications to those structures between Seventh and Ninth Avenues and West 31st Street and West 33rd Street. The range of alternatives is further restricted by the historic nature of some buildings in this area (the Farley Building and the Service Building) or the level of development (Madison Square Garden and Two Penn Plaza) that preclude significant street-level modifications.

The various operational and site restrictions limit the range of reasonable alternatives to two basic alternatives, although there are clearly some possible variations within each of these alternatives. The first alternative is referred to in this discussion as the "No-Build Alternative" because it reflects those actions that would be reasonably expected to occur absent any approval to develop a new intermodal transportation facility. The No-Build Alternative includes only periodic maintenance and upkeep by Amtrak at Penn Station and by USPS at the Farley Building. The second alternative involves modifications of portions of the Farley Building for use as an intermodal transportation facility. The facility would also accommodate in public spaces the passengers using the Port Authority of New York and New Jersey's possible future airport access systems to John F. Kennedy International Airport. This is referred to as the "Build Alternative." Both of these alternatives are discussed in detail in the following sections.

FRA evaluated an earlier version of the Build Alternative in a December 1995 Environmental Assessment. However, the 1995 Build Alternative is no longer being pursued as a viable option. Sections 1.1.1 and 2.3.2 describe the evolution of the design from 1995 to the current Build Alternative.

2.2 NO-BUILD ALTERNATIVE

The No-Build Alternative would include the following components:

Penn Station: For the No-Build Alternative, the only changes anticipated at Penn Station would be routine repairs and maintenance at the station. Amtrak has underway and will very soon complete life-safety improvements and modifications to meet the needs of the start-up of Acela high-speed rail service in late 1999. The No-Build Alternative would not satisfy the significant long-term transportation needs identified in Section 1.1.

Farley Building: For the No-Build Alternative, the only changes anticipated on the exterior or interior of the Farley Building would be routine repairs and maintenance of the structure, such as the terra cotta cresting restoration by USPS. Most of the previous renovations to the Farley Building by USPS have been sensitive to the existing building fabric or have been installed to be reversible. This policy is expected to continue.

Eighth Avenue Subway: In the No-Build Alternative, the MTA is undertaking minor work at the Eighth Avenue Subway concourse at West 33rd Street. In its present configuration, this portion of the station does not meet ADA requirements and without alterations would remain inaccessible from West 33rd Street for passengers with disabilities. MTA is, however, planning ADA-compliance work for the West 34th Street entrance to the subway.

Train Operation Systems: Amtrak and its partners at Penn Station would complete a program to improve train operations in the area, including communication and control system enhancements, tunnel ventilation, and life-safety upgrades.

2.3 BUILD ALTERNATIVE

2.3.1 Alternative Screening Process The Build Alternative is described in Section 1.3. The Build Alternative was developed through a process that began in the early 1990s with Amtrak's initial efforts. The alternative screening process also included two scoping meetings held in August and October 1994. Comments received at these meetings, along with issues raised at numerous meetings with community boards, civic and business interests, and agencies, were considered in developing and refining the Build Alternative. Comments on the 1995 Draft Environmental Assessment were also considered. Chapter 5 provides additional information on the program of public and agency awareness. The proposed renovation of the Penn Station Complex, including the modification of the Farley Building to include Amtrak facilities, commuter facilities, subway facilities, and airport access facilities, has received widespread support. Comments, and thus much of the screening process, focused on refining elements of the proposed renovation to address regulations and guidelines, to avoid or minimize negative impacts, and to coordinate transportation and postal service needs.

2.3.2 1999 Plan Updates The plans that were developed by Amtrak and analyzed in the 1995 Draft Environmental Assessment have been updated by PSRC in 1999 to enhance the transportation features of the Project, including improved transportation flexibility and capacity, enhanced building security, improved vehicular traffic circulation, increased public circulation and passenger-handling space, a higher level of service to the traveling public, and greater coordination with the needs of the USPS. The current plans have been configured (1) to increase areas for commuters and subway passengers; (2) to provide public-use areas that can accommodate future airport-bound passengers to Kennedy and Newark airports, including

facilities for the separately proposed "two-seat" rides and the future development of a "one-seat" ride between the Farley Building and Kennedy Airport; (3) to renovate and expand the 33rd Street Connector; and (4) to create new USPS loading area in the Farley Building. ("Two-seat" indicates a transfer is required, "one-seat" would be direct.) The plans have also been configured to allow for future station expansion into the Annex if USPS were to relocate out of the building. PSRC's proposed Project does not include any additional work at Penn Station. Moving the bulk of Amtrak's passenger-related facilities to the Farley Building would free up additional space at Penn Station which Amtrak expects to use for additional circulation space and expanded retail.

Five major elements that differ from the 1995 plans are:

- addition of a midblock intermodal hall,
- addition of a lower-level commuter concourse contiguous with the West End Concourse,
- a reduced moat area to accommodate expanded sidewalks and dedicated exterior taxi drop-offs,
- a new below-grade USPS loading dock in the basement of the Annex portion of the Farley Building, and
- deletion of planned taxiways under the Farley Building or in the moats.

Since the current proposal involves a significant historic building, the Build Alternative has been developed with an important focus on historic preservation concerns and the requirements of Section 106 of the National Historic Preservation Act. Actions by a Federal agency (in this case, FRA) that might affect properties listed on or eligible for the National Register of Historic Places are subject to review by the State Historic Preservation Officer (SHPO). Project funding by FRA requires compliance with Section 106, which outlines procedures and criteria to consider the effects of the proposed Project on the historic characteristics of National Register properties (i.e., the Farley Building and the Service Building). The analysis conducted as part of the Section 106 process is contained in Section 3.8. FRA has determined that the Build Alternative can be implemented without an adverse effect on historic resources.

2.3.3 Identification of the Preferred Alternative As a result of the process described above, PSRC has developed a preferred alternative to meet the transportation and postal service program needs and design and budget requirements. The proposed action is reflected in the schematic design submission dated February 26, 1999 as supplemented by the March 12, 1999 Draft Concept Plan Report, Design Guideline Manual, and Preliminary Outline Specifications, and is described in Section 1.3.

Information about the schematic design is available for review by appointment during normal business hours at the following locations:

Washington, D.C.: Federal Railroad Administration, 1120 Vermont Avenue NW, Room 6060, Washington D.C., 20005, (202) 493-6380.

New York, NY: Pennsylvania Station Redevelopment Corporation (PSRC), 633 Third Avenue, 36th Floor, New York, NY, 10017, (212) 803-3642.

Boston, MA: McGinley Hart & Associates, 77 N. Washington Street, Boston, MA,
02114, (617) 227-2932.

CHAPTER 3**PROBABLE IMPACTS**

This chapter assesses the likely impacts of the Build Alternative by comparison to those of the No-Build Alternative. For analytical purposes, this chapter uses a conservative estimate of a build year of 2003, since the Build Alternative is expected to be completed and fully operational by that time.

3.1 RAIL TRANSPORTATION

3.1.1 Summary The track layouts under Penn Station and the Farley Building have remained almost unchanged since the completion of the station in 1910. Modifications to accommodate structural changes for buildings overhead or to allow for adjustments in track utilization have been made over the past 40 years. Due to the limitations imposed by the bedrock cut in which the station is located, the existing platform and column layouts, and the access limitations imposed by the North and East River Tunnels, few changes to the existing rail system are anticipated. The No-Build Alternative would not address the need to accommodate increasing demands on Penn Station. Additional demands on the station's rail system must be met by improving the efficiency of the present facilities, as PSRC, Amtrak, and its operating partners at Penn Station would do through the Build Alternative.

Section 1.2, "Existing Conditions," presents a description of existing conditions.

3.1.2 Impacts of the No-Build Alternative Projected increases in commuter rail and intercity rail traffic would place greater pressures upon the rail system serving the Penn Station Complex, thus leading to tighter scheduling and further potential for delays. Recent and near-term improvements in vertical circulation by LIRR and NJT address current congestion problems to a degree, but would not accommodate the anticipated growth. Adding passengers without improving the limited platform egress would likely increase the amount of time needed to board or unload passengers (dwell time) during peak hours, affecting the scheduling of train movements. Trying to accommodate greater passenger volumes without adding vertical access would contribute to congestion, patron discomfort, and safety concerns.

3.1.3 Construction Impacts of the Build Alternative The impacts of constructing the Build Alternative on the existing rail system are expected to be minimal. The greatest potential for impact would occur as the result of scheduling conflicts when construction work must take place at the platform/track level, or when power outages are required on the catenary for installation of working platforms above the catenary and below the basement floor slab. Project elements that interface directly with the rail system and could therefore affect operations include changes of access to platforms and utility work. To the extent possible, work that could affect train movements would be done during off-peak periods to minimize potential conflicts or scheduling problems.

3.1.4 Long-Term Impacts of the Build Alternative Completion of the proposed Farley Building renovation and alterations would shift access to Amtrak trains away from the present shared access with LIRR and NJT commuter rail trains. This reduction in conflicting passenger movements and congestion, along with the proposed improvements in other parts of the Penn Station Complex to address goals reflected in NFPA 130 and ADA regulations, is estimated to reduce the time needed to unload trains at the platforms from more than seven minutes to four minutes or less. This improvement in unloading time could allow each track to service more trains per hour, subject to the overall constraints of train access to Penn Station, such as tunnel limitations and other operational factors. In addition, the Build Alternative would convert the north side of Platform 12, now used for mail, to a new Amtrak passenger platform for Empire Corridor Service trains. This proposed use would increase the platform capacity of the station by 3 percent, requiring track reconfiguration. An increase in platform space and additional use of the existing trackage would result in improved customer service and on-time performance for both Amtrak and commuter rail transportation.

3.1.5 Comparison of the Current and 1995 Build Alternatives There are no appreciable differences in rail transportation impacts between the current Build Alternative and 1995 Build Alternative.

3.2 VEHICULAR TRAFFIC, PARKING, AND PEDESTRIAN CONDITIONS

3.2.1 Introduction The Project would change vehicular and pedestrian traffic patterns and volumes, as well as parking conditions. However, technical analyses of projected future conditions indicate that other developments in the study area rather than the Project would generate most of the vehicular and pedestrian traffic increases in the study area. The incremental changes associated with the Build Alternative would not produce significant impacts to the area's traffic, pedestrian movement, or parking supply. Additional information, including all relevant tables, figures, and more-detailed descriptions of the methodologies used, can be found in Volume II, Appendix 6, "Traffic, Parking and Street-Level Pedestrian Conditions," and Volume II, Appendix 7, "Transit and Indoor Pedestrian Circulation."

3.2.2 Methodologies and Impact Criteria Conditions at the study locations were assessed for 1998 existing conditions, 2003 future-year analysis conditions without the Project (No-Build), and 2003 Build conditions with the addition of Project-generated traffic and associated diversions. Peak-hour Project-generated traffic was added to the network peak-hour volumes in the study areas, even though the peak times do not always coincide, to ensure a conservative analysis of impacts. Conditions in the No-Build and Build Alternatives for the study area intersections were then compared to enable an evaluation of potential impacts.

Vehicular Traffic Analyses: The operations of signalized intersections were analyzed applying the methodologies in the 1994 *Highway Capacity Manual (HCM-94)* (Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 1994). The *HCM-94* procedure evaluates signalized intersections for an average delay per vehicle and a level-of-service (LOS) measurement. Peak-hour traffic (a.m. and p.m.) information was developed and analyzed using the methods of the *HCM-94* as implemented in version 2.4g of the Highway Capacity Software. Guidelines promulgated in the City of New York's *City Environmental*

Quality Review (CEQR) Technical Manual were used both to establish current conditions and to forecast future impacts.

At signalized intersections, impacts are considered significant (and require examination of mitigation) according to the guidelines presented in the *CEQR Technical Manual* if they result in an increase of 5 or more seconds in a lane group when the No-Build LOS is D. For No-Build LOS E, 4 seconds of delay is considered significant. For No-Build LOS F, 3 seconds of delay is considered significant. However, if the No-Build LOS F condition already has delays in excess of 120 seconds, more than 1.0 second of delay is considered significant unless the proposed action generates fewer than five vehicle-trips through that intersection in the peak hour. In addition, impacts are also considered significant at signalized intersections if LOS deteriorates from acceptable LOS A, B, or C in the future No-Build condition to unacceptable LOS D, E, or F in the Build condition.

These impact criteria are also applicable to unsignalized intersections, although they are somewhat different from those for signalized intersections. For an unsignalized intersection, mid-LOS D equates to a delay of 25 seconds. For an unsignalized intersection, any Build LOS change with a Build delay of 25 seconds or less would not be considered a significant impact. In addition, for the minor street to cause a significant impact, 90 passenger-car-equivalents must be identified in the Build condition in any peak hour.

Pedestrian Analyses: The *HCM-94* also provides methodologies to determine the adequacy of sidewalk, crosswalk, and corner reservoir capacities in relation to the demand imposed on them. Sidewalks were analyzed in terms of pedestrian flow. The basis for the LOS analysis is the average number of pedestrians per minute per foot of effective walkway width.

For street-level pedestrian conditions, Project-related impacts were also evaluated according to the guidelines presented in the *CEQR Technical Manual*. Impacts are considered significant (and require examination of mitigation) at sidewalks if there is an increase of 2 pedestrians per minute per foot over No-Build conditions that are characterized by flow rates greater than 15 pedestrians per minute per foot. For corners and crosswalks, a decrease of 1 square foot per person under the Build condition when No-Build conditions have an average occupancy less than 15 square feet per pedestrian is considered significant, and requires examination of mitigation.

In determining whether there is a significant impact on pedestrians at any location, an increase of fewer than 30 pedestrians within a 15-minute time period is not considered significant, because such increases would not typically be noticeable.

3.2.3 Existing Conditions

Traffic: Figure 3-1 shows the study area defined for analyzing traffic conditions. This area comprises the zone where impacts resulting from Project implementation would be most likely to occur. The traffic analyses focused on 18 signalized intersections and one unsignalized

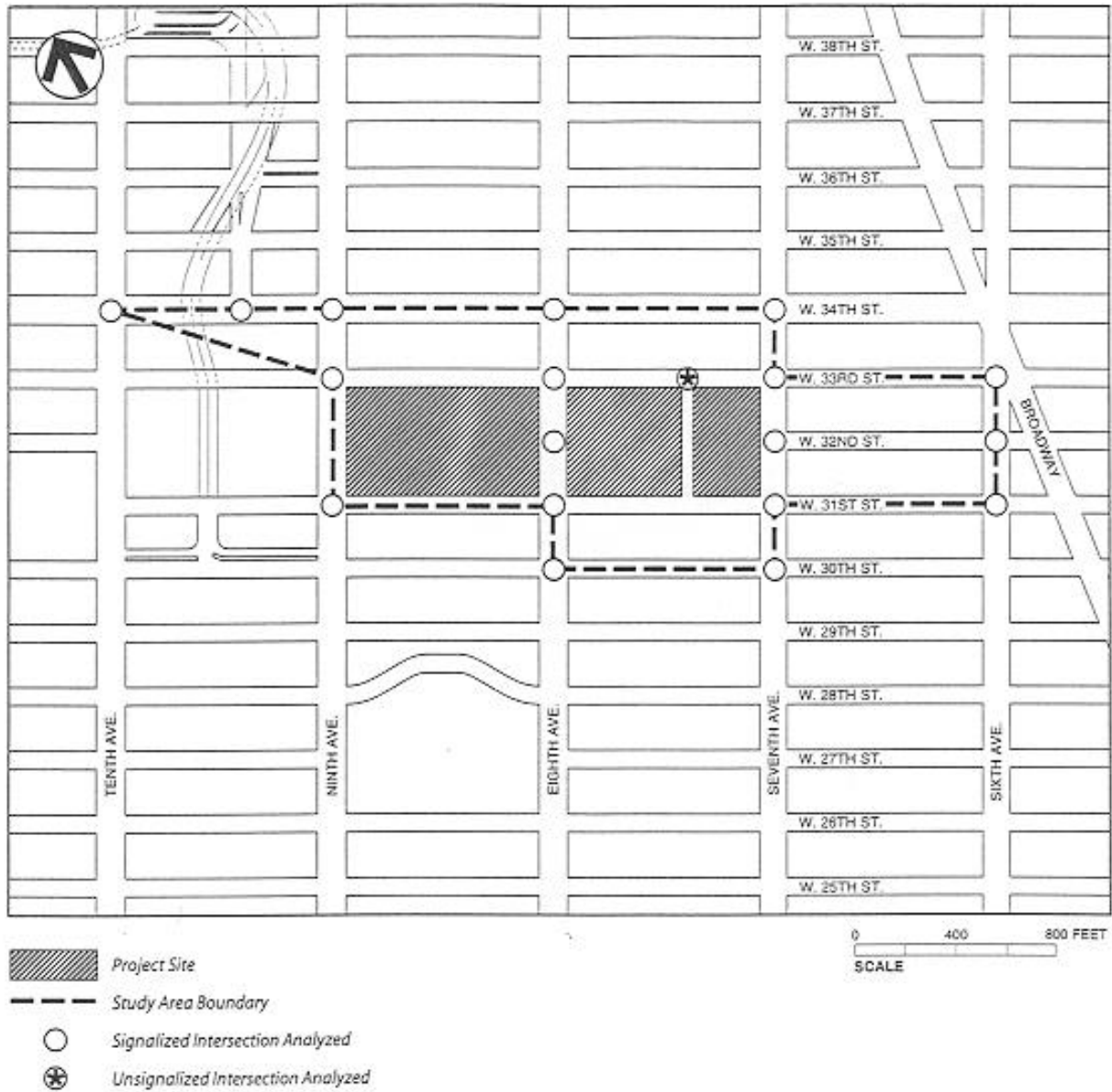


FIGURE 3-1
TRAFFIC ANALYSIS STUDY AREA

intersection —i.e., controlled by stop signs—the taxiway exit from the existing Penn Station at West 33rd Street between Seventh and Eighth Avenues.

Traffic data gathered by field surveys (observations and automatic traffic recorders) for these intersections included traffic volume counts, intersection turning movement counts, vehicle classification counts, and vehicle speed measurements. In addition, a physical inventory was conducted to include the number of moving lanes, roadway widths, traffic signal cycle length, signal progressions and the presence of bus stops, curb cuts, parking regulations, or other features that might affect capacity.

Analysis of existing traffic data shows that at 14 of the study-area intersections, all approaches currently operate at acceptable levels of service (LOS A-D) during both the a.m. and p.m. peak periods. During the a.m. period, the westbound through/right-turn movement at West 31st Street/Sixth Avenue, the westbound through/right-turn movement at West 33rd Street/Eighth Avenue, and the eastbound through/right-turn movement at West 30th Street/Seventh Avenue all operate at LOS E. All north-south approaches operate at LOS C or better, except for the Sixth Avenue northbound approach to West 32nd Street and the Eighth Avenue northbound approach to West 34th Street, which both operate at LOS D during the p.m. peak period. The unsignalized taxiway exit at West 33rd Street operates at LOS C and LOS D during the a.m. and p.m. peaks, respectively.

Parking: Field surveys were conducted to identify and establish 1998 existing conditions. The availability of off-street parking was inventoried within a 1/4-mile radius of the Project site, indicating an availability of 8,082 spaces at 54 locations. Telephone surveys of parking operators were conducted to determine the percent occupancy of these spaces at midday. Approximately 71 percent of the available spaces are used during the midday period, indicating a surplus of 2,367 spaces. There is almost no legal, on-street, daytime parking allowed in the study area, except for a few spaces on Seventh, Eighth, Ninth, and Tenth Avenues. Near the Project site, the predominant posted parking regulations prohibit standing vehicles during business hours (generally 7 a.m. to 7 p.m.) except for deliveries.

Street-Level Pedestrian Conditions: The areas expected to receive the largest Project-generated street-level pedestrian demand are along Eighth Avenue, between West 31st Street and West 33rd Street. Field measurements were made of effective sidewalk width (width at the narrowest point), crosswalk widths, pedestrian volumes, and the total area within corner reservoirs at these intersections on the west side of Eighth Avenue. All obstructions were located. The *HCM-94* methodologies were used to determine the adequacy of sidewalk, crosswalk, and corner reservoir capacities in relation to demand. The existing conditions in the analysis area were rated LOS C or better for sidewalk, crosswalk, and street corner components during both peak hours, except the west crosswalk at the Eighth Avenue/West 33rd Street intersection, which operates at LOS D in the p.m. peak hour.

Internal Pedestrian Circulation: Two distinct conditions were examined: 1) Pedestrian flows through station elements that occur in the morning peak period as passengers arrive on trains and pass through the station to exits, and 2) The pedestrian accumulations that occur in the evening peak period as passengers arrive at the station and wait for their trains to be announced for

boarding. The existing morning pedestrian flow conditions are at a pedestrian LOS C/D or better for all station elements. The 33rd Street Connector east of the Central Concourse, Eighth Avenue Subway stairs, and West 34th Street/Penn Station stairs have the most congestion. Although the LIRR has indicated a desire to widen the 33rd Street Connector, it is not currently included in the Project nor relied on in this EA. Existing evening pedestrian accumulation conditions are at pedestrian LOS C or better for all station areas. Additional information and analyses of internal circulation issues can be found in Appendix 7, “Transit & Indoor Pedestrian Circulation.”

3.2.4 The No-Build Alternative Most potential increases in traffic volumes and decreases in service levels for traffic, street-level pedestrians, and parking conditions would be attributable to development of other sites in the study area, and to the planned service improvement by LIRR and NJT, rather than as a result of the Project. Projected No-Build conditions for each of these resources are described below.

Traffic: Future No-Build traffic volumes and conditions were forecast based upon implementation of all currently planned and approved developments in the study area. Since current market conditions may not support all approved projects, the forecasted traffic volumes are conservative. Several of the 18 intersections in the traffic analysis study area would deteriorate from current conditions to LOS D or worse. These intersections and affected approaches are:

- westbound approach to Sixth Avenue/West 31st Street—change from LOS E to LOS F during the a.m. peak and the p.m. peak;
- northbound approach to Sixth Avenue/West 32nd Street—change from LOS D to LOS F, during the p.m. peak;
- westbound approach to Sixth Avenue/West 33rd Street—change from LOS E to LOS F during the p.m. peak;
- eastbound approach to Seventh Avenue/West 30th Street—change from LOS E to LOS F during the a.m. peak and the p.m. peak;
- westbound approach to Seventh Avenue/West 33rd Street—change from LOS C to LOS D during the a.m. peak;
- eastbound approach to Eighth Avenue/West 30th Street—change from LOS C to LOS D during the a.m. peak and the p.m. peak;
- westbound approach to Eighth Avenue/West 31st Street—change from LOS D to LOS F during the a.m. peak and from LOS D to LOS E during the p.m. peak;
- westbound approach to Eighth Avenue/West 33rd Street—change from LOS E to LOS F during the a.m. peak and the p.m. peak;
- northbound approach to Eighth Avenue/West 34th Street—change from LOS C to LOS D during the a.m. peak and from LOS D to LOS F during the p.m. peak;

- westbound approach to Ninth Avenue/West 31st Street—change from LOS C to LOS D during the p.m. peak;
- westbound approach to Ninth Avenue/West 33rd Street—change from LOS C to LOS D during the a.m. peak and p.m. peak;
- westbound approach to Ninth Avenue/West 34th Street—change from LOS C to LOS F during the p.m. peak;
- eastbound approach to Dyer Avenue/West 34th Street—change from LOS C to LOS D during the a.m. peak and the p.m. peak; and
- eastbound approach to Tenth Avenue/West 34th Street—change from LOS D to LOS E during the a.m. peak.

The unsignalized taxiway/West 33rd Street intersection is projected to operate at LOS E and F during the a.m. and p.m. peak hours, respectively.

Parking: Background development within the study area can be expected to eliminate seven parcels currently used for parking, resulting in a decrease of 675 parking spaces. The forecast overall No-Build demand of 5,858 spaces can still be accommodated by the remaining number of off-street parking spaces (7,407), with an attendant utilization rate of approximately 79 percent.

Street-Level Pedestrian Conditions: No-Build pedestrian conditions in 2003 were forecast for the area along the west side of Eighth Avenue between West 31st and West 33rd Streets, using an estimated annual increase of 0.50 percent per year (or 2.5 percent total), plus the pedestrian flows associated with increased transportation services at the Penn Station Complex by the various railroads. Most of the pedestrian elements (sidewalks, crosswalks, and corner reservoirs) are projected to continue to operate at pedestrian LOS C or better. Only three crosswalks and one corner are projected to drop to LOS D or worse during the a.m. and/or p.m. peak (from existing LOS D or better under surge conditions). These are:

- west crosswalk of Eighth Avenue/West 33rd Street—decrease from 17 square feet per pedestrian (sf/p) to 14 sf/p during the a.m. peak and from 23 sf/p to 18 sf/p during the p.m. peak;
- south crosswalk of Eighth Avenue/West 33rd Street—decrease from 20 sf/p to 16 sf/p during the a.m. peak and from 26 sf/p to 20 sf/p during the p.m. peak;
- west crosswalk of Eighth Avenue/West 31st Street—decrease from 24 sf/p to 20 sf/p during the a.m. peak and from 26 sf/p to 22 sf/p during the p.m. peak; and
- southwest corner of Eighth Avenue/West 33rd Street—decrease from 29 sf/p to 21 sf/p during the a.m. peak and from 38 sf/p to 27 sf/p during the p.m. peak.

Interior Pedestrian Circulation: The No-Build Alternative reflects improvements in Penn Station being made or under construction by LIRR and NJT. These improvements are intended to meet the needs of commuter rail passengers served by these agencies and are not targeted to Amtrak riders. In congested areas, the forecast pedestrian LOS would generally decrease from LOS C to LOS D due to the overall increase in pedestrian traffic. Pedestrians would continue to encounter an LOS C at the north end of the West End Concourse.

3.2.5 Impacts of the Build Alternative

Traffic: The majority of new trips near the Project would be associated with other developments included in the No-Build Alternative. The incremental traffic associated with the Project would increase traffic volumes at a number of intersections in the study area, with the greatest increases focused on the block bordering the Farley Building. At some locations in the network, because of the rerouting of Amtrak-related traffic to the Farley Building, there would actually be modest decreases in peak-hour volumes. The projected increases in traffic volumes resulting from the addition of Project-generated traffic and rerouted traffic would result in 10 locations exceeding the criteria in the *CEQR Technical Manual*. This would include four during the a.m. peak hour and six during the p.m. peak hour. However, the rerouting of existing Amtrak-related traffic to the Farley Building would also decrease congestion and delay at locations to the east, where traffic would be removed. The analysis shows 16 improvements during the a.m. peak hour and 14 improvements during the p.m. peak hour in delay and LOS at study area intersections as a result of the Project. The unsignalized taxiway intersection under 2003 Build conditions would improve, operating acceptably at LOS C during both the a.m. and p.m. peak hours.

For the locations where the 2003 traffic conditions with the Build Alternative are projected to deteriorate, a number of traffic improvements are included as part of the Project. Therefore, the Build Alternative was evaluated taking the Project's traffic improvements into consideration, including the following:

- Reallocating the time of a traffic signal to allow more green time to the approaches that are operating poorly, thereby increasing the capacity and lowering the delays at these approaches; or
- Changing on-street parking regulations (banning parking during certain hours) to allow for extra moving lanes where traffic flows are constrained. This increases the capacity of the roadway at the particular approach of concern and is very effective where the existing parking regulations and street geometry allow for this type of improvement.

After the Project is built and operational, field inspection of the operations of the various intersections would be conducted to see if the proposed improvements are warranted, because projected traffic generated from the Project is fairly small, consisting mostly of rerouted trips. More important, traffic from other projected projects proposed in the area is included in the No-Build traffic volumes may be less than expected.

Another result of the Project is the reconfiguration of the access/egress points for the USPS trucks that dock at the Annex. Currently, these trucks use the docks located on the West 31st

Street counterflow lane east of Ninth Avenue or go into the building at the midblock driveway on Ninth Avenue. The Project would eliminate the West 31st Street docks, the associated West 31st Street counterflow lane, and the related reserved lane on Ninth Avenue (which would revert to regular traffic use). The Project would replace them with truck ramps in and out of the building that would both have curb cuts on Ninth Avenue. Because the USPS trucks currently enter and exit on Ninth Avenue and would continue to do so with the Project, this change in operations would not affect the results of the traffic analyses. The new configuration of ramps would improve USPS truck circulation and would eliminate bottlenecks on West 31st Street and Ninth Avenue that result from trucks using the counterflow and reserve lanes and backing in to the existing docks on West 31st Street. The increased capacity resulting from the removal of the loading docks and the reserved and counterflow lanes at the Ninth Avenue/West 31st Street intersection was accounted for in the 2003 Build condition traffic analyses.

Accounting for the incremental increase in traffic associated with the Build Alternative, most intersections would retain the same LOS as under No-Build conditions. However, a small decrease in peak-hour traffic volumes is forecast for some intersections, while other intersections are projected to have a small increase in volumes. In summary, the Build Alternative would not exceed the *CEQR Technical Manual* criteria at the study area's signalized or unsignalized intersections.

Parking: The incremental change in parking demand associated with the Build Alternative would not produce a notable impact on the area's parking resources. Most of the trips to new retail locations associated with the Project would be transit trips. Given the anticipated development, there would still be sufficient capacity to accommodate the overall parking demand in the study area. The Build Alternative would not require additional curbside parking because of the very low number of Project-generated auto trips (seven or fewer during the peak hours). By 2003, overall weekday capacity in the area's parking facilities is projected to be 7,407 spaces. Of this supply, 5,858 spaces are used for No-Build traffic. This leaves 1,549 spaces available in the area for Project-related parking demand. This excess capacity would be sufficient to accommodate the incremental demand of the Build Alternative.

Street-Level Pedestrian Conditions: For the Build Alternative, all sidewalks analyzed would continue to operate acceptably with average LOS B or better and Platoon LOS D or better for Build conditions. All the corners in the study area would continue to operate acceptably at LOS B or better, generally showing improvement over 2003 No-Build conditions because of the increased circulation opportunities within the station, which would reduce the number of pedestrians at the sidewalks, and the wider corner reservoirs that the Project's design would allow. With the Project, most crosswalks under both normal and surge conditions would continue to operate with average pedestrian spaces of 24 sf/p (LOS C) or better. However, under surge conditions, the projected increases in pedestrian volumes resulting from Project-generated and rerouted pedestrians would result in one crosswalk location exceeding the criteria in the *CEQR Technical Manual*. This would occur during the a.m. and p.m. peak hours at the west crosswalk of the Eighth Avenue/West 33rd Street intersection. At this location, widening the crosswalk from its existing 12 feet to 20 feet is included as part of the Project. For the purposes of the assessment presented here, the Project has been evaluated taking the Build Alternative's recommended

crosswalk improvement into consideration. This improvement would be implemented, as warranted, to improve pedestrian conditions at this location.

Creation of the new taxi drop-off area would narrow the West 31st Street north sidewalk adjacent to the Farley Building; over the remainder of the block, the sidewalk would be wider or at least as wide as at present. The relocation of the USPS loading docks from the Annex along West 31st Street would remove pedestrian obstructions caused by USPS trucks. An acceptable pedestrian area would be retained at the northwest corner area at Eighth Avenue/West 31st Street. Similar to current conditions for the taxi drop-off area serving Penn Station, the new taxi drop-off areas at the Farley Building would require pedestrians on West 31st and West 33rd Streets to be observant of taxi movements.

After the Project is built and operational, field inspection of the operations of the west crosswalk of the Eighth Avenue/West 33rd Street intersection would be conducted to see whether the Build Alternative's improvement is warranted. The resulting LOS for the pedestrian facilities examined under the Build Alternative do not represent any significant impacts.

Internal Pedestrian Circulation: Implementation of the Build Alternative would result in a major change to internal pedestrian patterns because Amtrak patrons would use new facilities in the renovated Farley Building. This separation of commuter and intercity patrons would reduce conflicting movements and provide additional space for each market. Additional and improved vertical circulation facilities throughout the Pennsylvania Station Complex and improved entries at street level represent a 29 percent increase in vertical circulation capacity from the train platform level to Level A, a 32 percent increase from Level A to Level B, and a 40 percent increase in exit capacity to the street level.

The Build Alternative would improve the overall pedestrian flow and accumulation conditions within the Penn Station Complex. At many locations within the complex, there would be a notable improvement in both flow and accumulation conditions. At certain locations, there would be some additional crowding, although at no location would pedestrian LOS be reduced. The Build Alternative, which includes the shift of Amtrak passengers to the Farley Building, would result in improved pedestrian conditions within the complex.

3.2.6 Construction Impacts Construction would involve temporary inconveniences and partial blockages of pedestrian routes, coincident with work areas. The effects of construction would occur at work areas within the Farley Building and along sections of Eighth and Ninth Avenues adjacent to the Penn Station Complex. Typical construction management techniques would be implemented, such as warning signs and barricades, to ensure public safety. During construction, it can be expected that work would be scheduled for off-peak times to the extent possible to minimize pedestrian delays or congestion.

The Build Alternative would also involve construction within an operating postal facility and above active railroad platforms. Accordingly, the work will be planned in phases, designed to minimize the effect of construction on ongoing activities within and beneath the building. Detailed phasing plans will be developed and submitted to both Amtrak and USPS for review and comment before beginning construction. Those plans will call for the installation of a protective barrier

to separate the Lower Concourse work areas from the tracks below, and for construction activities to be scheduled to avoid disrupting postal and train operations to the extent feasible. Among other things, construction will be phased to assure that the required number of postal truck loading bays is maintained throughout the course of the Project.

3.2.7 Comparison of the Current and 1995 Build Alternatives The overall relative improvement in traffic operations for the Build Alternative compared to the No-Build is not significant for the current plan in comparison to the 1995 Plan. For all but two locations analyzed, there is at most a relative difference of one LOS in the change from the No-Build; the distribution of the changes does not exhibit any pattern that indicates a consistent relative improvement for one plan over the other. The current plan exhibits a relative improvement of two levels at the intersection of Eighth Avenue and West 33rd Street, and a worsening of two levels in the a.m. peak at the intersection of Eighth Avenue and West 34th Street.

There would be no differential impact on parking between the current plan and the 1995 plan; the changes in the parking supply and demand are related to background developments, not the Project. The relative improvement in internal pedestrian flow for the Build Alternative relative to the No-Build is generally not significant for the current plan in comparison to the 1995 Plan.

3.3 NOISE IMPACTS

3.3.1 Summary No significant noise impact from the Project is expected due to traffic volume increases in the vicinity of the Farley Building. According to the noise impact criteria used by the Federal Highway Administration (FHWA) and New York State Department of Transportation (NYSDOT) for assessing potential impacts, pre-Project noise levels already meet or exceed appropriate criteria levels, and noise mitigation would not be considered feasible. In addition, the projected noise increases under Build and No-Build conditions are significantly less than the limits prescribed by New York State or City guidelines, and would not be considered to exceed any relative noise criteria.

Noise from train traffic is not expected to have a major impact on the noise environment in the vicinity of the building, or inside the building's office/commercial spaces, since the trains are already operating and are part of the existing ambient noise condition. Potential changes in noise levels due to train operations associated with future passenger demand would occur regardless of which alternative is implemented and therefore such increases were not considered in the analysis.

3.3.2 Noise Impact Criteria Noise associated with changes in street traffic was assessed in terms of peak-hour noise exposure according to criteria established by FHWA and NYSDOT. Noise was assessed by considering absolute and relative terms. A traffic noise impact occurs when the predicted traffic noise levels approach or exceed the noise abatement criteria (NAC) shown in Table 3.3-1, or when the predicted traffic noise levels substantially exceed the existing levels. Absolute criteria are intended to limit the noise from a project that would interfere with outdoor activities at nearby noise-sensitive receivers categorized according to Categories A through D. The exception is Category E, which includes indoor activities for the same types of activities included in Category B. Generally, outdoor activities are given precedence as long as such facilities exist that would benefit from such a noise limit. Relative impact criteria are also

considered where there may be significant increases in the existing ambient noise level due to a project. Significant increase is defined differently from state to state; in New York City, NYSDOT defines "substantial" noise increase as an increase of six decibels or more above existing noise levels.

Table 3.3-1
FHWA NOISE ABATEMENT CRITERIA

Activity Category	$L_{eq}(h)$, dBA	Description
A	57, Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67, Exterior	Picnic areas, recreation areas, playgrounds, active sports areas, parks residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72, Exterior	Developed lands, properties, or activities not included in A or B above.
D	None	Undeveloped lands.
E	52, Interior	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

In addition, New York City (NYC) has established noise criteria that apply to projects within the city. The NYC guidelines differ from FHWA/NYSDOT traffic noise criteria in two respects: (1) instead of a limit on project noise increase over *existing* levels, the NYC limits increases between the project *Build* and the *No-Build* levels for the same design year, and (2) the limit for noise increase is 3 dBA versus 6 dBA for the NYSDOT criterion.

This Project was assessed by determining:

- whether the peak-hour equivalent sound level for the Build Alternative would approach or exceed the NAC established by FHWA,
- whether the increase over existing levels would exceed 6 dBA defined as substantial by NYSDOT, and
- whether the increase over the No-Build Alternative would exceed 3 dBA as defined by the City of New York.

3.3.3 Noise Assessment Method Noise impact assessments involve the prediction of future conditions for the Build and No-Build Alternatives, and a comparison of these projections with baseline existing conditions. Impact criteria for a project like this depend on the dominant source of noise related to the Project. In this case, the changes to the building's noise environment relate to increased traffic associated with the use of the facility as a train station. Vehicular traffic near the Farley Building would increase due to taxi access to the building for passenger drop-off, limousine traffic, and light truck traffic. Traffic volumes would also increase on Eighth and Ninth Avenues due to passenger drop-offs.

Noise predictions were performed using the equations and noise source levels from Appendix H, Noise, of the Route 9A Reconstruction Project.⁶ The Route 9A Noise Study covered an area that includes the Farley Building, and is generally recognized as the most-comprehensive study to date characterizing traffic noise in New York City. As part of that study, noise emission levels were measured for city street conditions, and extensive modeling of noise propagation conditions in the city was carried out. Although the noise projections for Route 9A did not extend as far as Ninth Avenue, ambient noise measurements were taken within a block of the Farley Building, as discussed in Section 3.3.4. These data were supplemented with additional data taken in 1995 and 1999. Traffic noise projections for the streets around the Farley Building were made using the traffic volumes for the following alternatives: Existing, No-Build, and Build. Traffic volumes were developed from the same 94-HCM analysis used for the traffic analysis..

Noise projections require a categorization of traffic mix by autos, trucks, and, in the case of New York City, buses. Based on traffic counts taken during noise measurements in June 1999, April 1995, November 1992, and October 1992, as well as turning-movement projections, the following distribution of traffic was assumed for purposes of noise modeling in the analysis: 86 percent automobiles, 11 percent trucks and 3 percent buses. Speed was assumed to be 30 mph when traffic is moving freely. Projected noise levels under the foregoing assumptions are shown in Table 3.3-2.

Changes in train traffic are not expected to affect the environmental noise in the neighborhood or the use of the building, since the trains are already in place. The only differences from current operations will be the new access points to the tracks, which are internal to the Penn Station Complex and would have no effect on noise in the street environment being assessed.

3.3.4 Existing Conditions The Farley Building is located in a busy urban area dominated by motor vehicle traffic noise. The building is bordered by Eighth and Ninth Avenues on the east and west, and by West 31st and West 33rd Streets on the south and north. These streets all have heavy stop-and-go traffic. Traffic on Eighth Avenue is especially heavy. Private passenger cars and taxis dominate the traffic mix. Heavy trucks serving Madison Square Garden and the Farley Building contribute to the noise experienced by the people on the sidewalk and any buildings overlooking the streets surrounding the Farley Building.

Table 3.3-2
TRAFFIC NOISE LEVELS AT SIDEWALKS
P.M. PEAK-HOUR L_{eq} *(dBA)

* Noise exposure levels rounded to nearest 0.5 dB.

Sidewalk Location	Existing Condition	No-Build Alternative	Build Alternative
West 33 rd Street between Eighth & Ninth Avenues	70.0	70.5	70.5
West 31st Street between Eighth & Ninth Avenues	70.0	71.0	70.5

⁶ U.S. Department of Transportation, *Route 9A Reconstruction Project Final Environmental Impact Statement*, Appendix H, May 1994.

Eighth Avenue between West 31st & West 33rd Streets	75.5	76.0	76.0
Ninth Avenue between West 31st & West 33rd Streets	74.5	75.0	75.0

Typical noise conditions in downtown urban locations are described by the U.S. Environmental Protection Agency (EPA) as a day-night sound level (L_{dn}) of 65 to 75 dBA. The on-site estimate of noise at the Farley Building at street level is $L_{dn} = 74$ dBA, based on measurements taken in 1995 and 1999. For purposes of comparison with the federal and state noise criteria, the existing peak-hour traffic noise exposure was measured and estimated for sidewalk positions around the Farley Building. The range of peak-hour equivalent noise levels (L_{eq}) ranged from $L_{eq} = 70$ to 75.5 dBA.

Although the noise environment is dominated by traffic, other transient noise sources in the vicinity include aircraft flights, sirens, and mechanical equipment on nearby buildings. Existing noise was monitored midblock on West 31st Street, West 33rd Street, Eighth Avenue, and Ninth Avenue to serve as calibrations for the noise level estimates from the projected 1999 existing traffic volumes for these roadways. The estimates are shown in Table 3.3-2, along with the projected noise levels for the No-Build and Build Alternatives.

3.3.5 Impacts of the No-Build Alternative Noise is expected to increase slightly under the No-Build Alternative due to projected developments in the area. Traffic on West 31st and West 33rd Streets may increase in volume, resulting in level-of-service changes. Speed is not expected to increase significantly, so the noise increase is related to volume alone. This 25 percent traffic volume increase is expected to produce a 1 dBA increase in peak-hour noise exposure levels. Traffic volumes on other streets in the area are expected to increase for the No-Build Alternative, although not as much as on West 31st and West 33rd Streets. Traffic volumes on Eighth and Ninth Avenues are projected to increase by 10 percent, resulting in negligible increases of 0.5 dBA in the peak-hour L_{eq} .

3.3.6 Impacts of the Build Alternative Traffic noise is expected to continue to dominate the noise levels near the Farley Building in the Build Alternative. The noise analysis focused on peak-hour traffic on the streets providing access to the station. Table 3.3-2 shows that the noise exposure levels in the vicinity of the Farley Building are all above the outdoor NAC given in Table 3.3-1. The conclusion of the first step in the assessment, therefore, was that there are already noise impacts at the sidewalk level everywhere in the study area. Mitigation of existing conditions would not be feasible in any case.

The second step was to consider noise increases that would result from Project implementation. The analysis results, based on NYSDOT and NYC criteria, are shown in Table 3.3-3. Ordinarily, noise levels are expressed to the nearest decibel, sometimes to the nearest one-half decibel, but since calculations were based on the projected traffic changes, the differences are shown to the nearest one-tenth decibel to illustrate how small the changes in noise levels would be.

None of the increases shown in Table 3.3-3 exceed either the NYC criterion, where B (the change from the future No-Build Condition) should not exceed 3 dBA, or the FHWA/NYSOT

criterion, where A (the change from Existing Conditions) should not exceed 6 dBA. Therefore, the Build Alternative would not have an impact on the noise environment in the immediate vicinity of the Farley Building nor the buildings facing the streets included in the analysis.

3.3.7 Construction Noise Impact and Mitigation Noise from construction would be generally confined within the Penn Station Complex, except during demolition and construction of the openings on both sides of the Farley Building for the intermodal hall. At this stage in the environmental process, a full construction scenario has not been developed. Therefore, a definitive description of construction noise levels is not possible. Typical construction of this type would generate noise from mobile equipment, including trucks, cranes, and loaders; stationary equipment, such as air compressors and concrete pumps; and special tools, such as pavement breakers and hoe rams.

**Table 3.3-3
COMPARATIVE NOISE EXPOSURE INCREASES
IN VICINITY OF FARLEY BUILDING**

(Differences compared to: [A] FHWA/ NYSDOT Criteria and to [B] NYC Criteria)

Sidewalk Location	No-Build Alternative	Build Alternative	
	(dBA) Difference	(dBA) Differences	
	A	A	B
West 33rd St. between Eighth & Ninth Avenues	+0.9	+0.7	-0.5
West 31st St. between Eighth & Ninth Avenues	+0.9	+0.4	-0.2
Eighth Ave. between West 31st & West 33rd Streets.	+0.4	+0.4	0
Ninth Ave. between West 31st & West 33rd Streets.	+0.4	+0.4	0

A = Difference from Existing Conditions (per FHWA, NYSDOT)

B = Difference from No-Build Conditions (per NYC)

All equipment used during construction would be subject to the NYC Noise Code, which prescribes the following limits on noise emission levels for specific pieces of equipment:

Trucks:	86 dBA at 50 feet,
Air Compressors:	70 dBA at 1 meter, and
Pavement Breakers:	90 dBA at 1 meter.

Other equipment would be required to be among the quietest of its type available, with mufflers in place and effective for all internal combustion engines.

Interior construction would be carried out in a manner that minimizes noise impact on patrons. Noise limits on equipment would be placed in the construction documents to meet the NYC Noise Code and to control excessively loud operations.

3.3.8 Comparison of the Current and 1995 Build Alternatives The No-Build noise assessment is consistent with the previous analysis, and indicates a slight overall increase in noise levels near the Farley Building due to developments in that area. However, the projected increase in noise levels is less than projected in the earlier analysis because the future traffic will not grow as much as previously assumed.

For the Build Alternative, the significant change is the elimination of the taxiway through the building, but the revised traffic indicates less of an increase than assumed for the 1995 analysis, so no additional noise impact is anticipated.

3.4 GROUND-BORNE VIBRATION

3.4.1 Summary No vibration impact is expected as a result of Project implementation for buildings near the Farley Building. Inside the Farley Building, the future vibration levels from trains is expected to be the same as existing levels, which are in the acceptable range according to criteria for vibration impact.

3.4.2 Vibration Impact Criteria Criteria for vibration impact have been established for transportation projects by the Federal Transit Administration. Table 3.4-1 summarizes these criteria.

3.4.3 Ground-Borne Vibration Assessment Method For the Build Alternative, the present use of the original Farley Building basement area as a mail sorting facility would change use to a passenger terminal, eliminating the mail carts and forklifts. The major remaining source of vibration would be train movements, as in the existing and No-Build conditions. Vibration is assessed on a single-event basis, unlike noise, which is assessed on a cumulative basis.

Consequently, the vibration level generated by one event, provided it is repeated somewhat regularly and is associated with the Project, is what establishes whether a vibration impact occurs.

**Table 3.4-1
VIBRATION IMPACT CRITERIA**

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 inch/sec)		Ground-Borne Noise Impact Levels (dBA re 20 Pascals)	
	Frequent Events ¹	Infrequent Events ²	Frequent Events ¹	Infrequent Events ²
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB ⁽³⁾	65 VdB ⁽³⁾	_ ⁽⁴⁾	_ ⁽⁴⁾
Category 2: Residences and buildings where people normally sleep.	72 VdB	80 VdB	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	83 VdB	40 dBA	48 dBA

Notes:

- (1) "Frequent Events" is defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.
- (2) "Infrequent Events" is defined as fewer than 70 vibration events per day. This category includes most commuter rail systems.
- (3) This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
- (4) Vibration-sensitive equipment is not sensitive to ground-borne noise.

U.S. Department of Transportation, Federal Transit Administration. *Transit Noise and Vibration Impact Assessment*, Chapter 8, Final Report DOT-T-95-16, April 1995.

3.4.4 Existing Conditions Ground-borne vibrations are generated by a number of sources in the vicinity of the Farley Building, including traffic on nearby streets, trains on tracks in the station and in the nearby subway, and construction activities. The area of effect is generally within 10 feet to 50 feet of a vibration source. Ground-borne vibration is noticed by people inside buildings through an audible rumble sound in a room where the walls, floors, and ceiling have been set into slight motion by the vibration, or through perceptible vibration in the form of a floor shaking, or sometimes both. In the former case, the phenomenon is known as ground-borne noise. Either situation can be annoying and can interfere with building use activities. Hence, criteria have been established for annoyance and for interference from these sources. The threshold for vibration perceptibility is 65 VdB.

Outside the Farley Building, existing sources of vibration are vehicles moving on the streets, the type of which will not change as a result of the Build Alternative. The frequency or severity of vibration will not be affected by the Project. Consequently, the external vibration environment was not considered as part of this environmental assessment.

Existing vibration conditions in the Farley Building vary, and include rolling forklifts and mail carts on the basement floor, trucks loading on the ground floor, quiet offices on upper floors, and the trains continually moving on the tracks directly below the building. Existing vibrations were measured on the basement floor just above the track level to characterize existing levels and to determine if the train vibrations would be a problem in the proposed use of the space for passenger ticketing, waiting areas, and other uses. The greatest levels measured were due to the rolling of mail carts (62 VdB to 68 VdB) and passing of forklifts (67 VdB). Train vibrations, however, were seldom detectable even when the train was on the track directly adjacent to a major support column near the measurement position. The highest vibration level from a train was measured to be 55 VdB, well below the 65 VdB threshold of perceptibility. A detailed analysis of the frequency spectrum of train vibration and other sources of vibration failed to reveal any special characteristics of train vibrations that would pose a problem for the proposed building use. The floor appears to be slightly more responsive at 8 Hz and 31 Hz than at other frequencies, but no significant vibration levels were measured even at these frequencies.

3.4.5 Impacts of the No-Build Alternative For the No-Build Alternative, the use of the Farley Building would be unchanged and the vibration environment both outside and inside would be much the same as today.

3.4.6 Impacts of the Build Alternative Because trains will continue to operate in the same manner as they do at present and the vibration levels generated by trains are well below the 65 VdB impact level, no vibration impact is expected.

3.4.7 Construction Vibration Impacts Construction activities can be a major source of ground-borne and structural vibration. For example, demolishing walls and floors to provide openings for the new intermodal hall could cause vibration to the Farley Building that would be felt by the occupants. Potential concerns can be alleviated, however, with proper notification and by making information available about the nature of the vibration. The level and frequency of construction vibration are not expected to affect the structural integrity of the Farley Building.

3.4.8 Comparison of the Current and the 1995 Build Alternatives The vibration assessment of the effects from train operations in the building is unchanged. Construction vibrations may be more noticeable by occupants of the building than was assessed in the previous plan since the floors are expected to require more demolition and construction.

3.5 AIR QUALITY

3.5.1 Summary The Project is subject to the Transportation Conformity section of the Clean Air Act Amendments of 1990 (CAAA90) and the Transportation Conformity Regulations appearing in 40 CFR Parts 51 and 93. To demonstrate conformity with these regulations, the regional effects of the Project must:

- be included in a regional assessment which is itself in conformity, and
- not create any localized exceedances of the State or Federal air quality standards, nor exacerbate any existing Exceedances of those standards.

The Project is listed in the regional Transportation Improvement Plan, which has been found to conform with the State Implementation Plan (SIP) and, therefore, the goals of the CAAA90.

An analysis was performed to determine the potential for direct and/or indirect effects on air quality. Direct effects would be caused by emissions from stationary sources at the Project site, while indirect effects would be caused by mobile sources generated or diverted by the operation of the Project. Carbon monoxide (CO) was found to be the principal pollutant of concern at the Project level. CO concentrations were forecasted using the MOBILE 5B and CAL3QHC (Version 2) models for the No-Build and Build Alternatives. The results were compared to local and Federal air quality standards, and no significant impacts or exceedances of Federal standards are predicted.

Since the Project meets both regional and Project-level air quality requirements, it conforms to the requirements of the Clean Air Act. A detailed discussion of the regulations and the analysis methodology are in Volume II, Appendix 8, "Air Quality."

3.5.2 Pollutants of Concern, Impact Criteria, and Standards National Ambient Air Quality Standards (NAAQS) have been established for various pollutants of general concern. A table of the NAAQS for these pollutants is in Volume II, Appendix 8, "Air Quality." The local effects of

projects are assessed based on whether or not they could cause an exceedance of the NAAQS. The regional effects of projects are based on the cumulative emissions burdens of all transportation projects in the New York City area.

Ambient concentrations of CO, ozone, and lead are predominantly associated with mobile source emissions; oxides of nitrogen emissions are associated with both mobile and stationary sources; and inhalable particulate matter is associated with both stationary sources and diesel-fueled vehicles.

Carbon Monoxide (CO): CO is a vehicular emission associated with crowded intersections, congested roadways, and areas where air flow may be restricted. CO concentrations are predicted on a localized, or microscale, basis to account for vehicle trips in the study area that are attributable to Project implementation. While creating or exacerbating a violation of the NAAQS would be a significant impact, New York City has also developed *de minimis* criteria to assess the significance of increases in CO concentrations from a proposed development. These criteria set the minimum *change* in CO concentration that constitute a significant environmental impact per CEQR. The *de minimis* criteria are:

- 1) an increase of 0.5 ppm or more in the maximum 8-hour average CO concentration at a location where the No-Build 8-hour concentration is at least 8.0 ppm, or
- 2) an increase of more than half the difference between No-Build concentration and the 8-hour standard (9.0 ppm), when 8-hour No-Build concentrations are below 8.0 ppm.

The microscale CO analysis is summarized in the following sections of this EA, and detailed in Volume II, Appendix 8, "Air Quality."

Sulfur Dioxide and Particulates (PM₁₀): Sulfur dioxide and particulate matter are pollutants associated with stationary sources and are not likely to occur in the Build Alternative. While diesel-fueled vehicles, such as heavy trucks and buses, emit quantities of PM₁₀, most Project-induced or Project-diverted vehicles are taxis, which are not diesel-fueled. As a result of the proposed increased retail and rail operations from the Build Alternative, there would be an increment of up to 17 trucks per hour. Even assuming that all of these incremental trucks are diesel, when added to the on-street levels of diesel traffic near the Project site, the total number of on-street diesel vehicles with the Project would be similar to those processed at Seventh Avenue and West 34th Street. Historical monitored PM₁₀ concentrations have demonstrated compliance with the PM₁₀ standards.

There would be no significant relocation of USPS diesel trucks accessing the facility in the Build Alternative. As discussed in the traffic impact assessment section, the USPS trucks would continue to enter the facility from and exit to Ninth Avenue between West 31st and West 33rd Streets. In addition, the Build Alternative would eliminate trucks backing into the loading docks on West 31st Street and their potential idling on-street. There would also be no significant increase in diesel emissions from locomotives that would affect pedestrians. Therefore, the Project would not result in any significant impacts on PM₁₀ levels.

Sulfur dioxide (SO₂) emissions are primarily associated with the combustion of sulfur-containing fuels: oil and coal. No significant quantities are emitted from mobile sources. Monitored sulfur dioxide concentrations in Manhattan are below the national standards. The Project would not emit any significant quantities of sulfur dioxide.

Nitrogen Oxides and Ozone: Nitrogen oxides are of principal concern because of their role as precursors in the formation of ozone. There is a NAAQS for nitrogen dioxide (NO₂), but this is normally examined only for large energy sources (e.g., power plants). The Project would not implement any new stationary sources of emissions.

The effects of nitrogen oxide emissions from mobile sources as precursors to the formation of ozone are generally only examined on a regional basis, since the formation of ozone occurs far from the source of emission. The Build Alternative would not have a significant effect on the overall volume of vehicular travel in the area and, therefore, would not have any measurable impact on regional nitrogen oxide emissions or on ozone levels.

3.5.3 Regulatory Setting The CAAA90 defines nonattainment areas as those geographic regions that have been designated as not meeting one or more of the Environmental Protection Agency's (EPA's) NAAQS. The Project is located in New York County, an area that is currently designated as:

- a severe nonattainment area for ozone, and
- a moderate nonattainment area for carbon monoxide.

A SIP is a state's plan for how to meet the NAAQS under the deadlines established by the CAAA90, which prohibits the Federal government from engaging in, supporting, financing, licensing, permitting, or approving any activity that does not conform to a SIP's purpose (defined as conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of the standards).

EPA's final transportation conformity rule, dated August 15, 1997, requires metropolitan planning organizations (MPOs), FHWA, and FTA to make conformity determinations on metropolitan long-range transportation plans (LRTPs), transportation improvement programs (TIPs), and projects before they are adopted, approved, or accepted. Transportation conformity regulation, "Criteria and procedures for determining Conformity to State and Federal Implementation Plans of Transportation Plans, Programs, and Projects funded or Approved Under Title 23 U.S.C." or the Federal Transit Act (40 CFR Parts 51 and 93) is used for conformity determinations.

The MPO for New York City is the New York Metropolitan Transportation Council (NYMTC). NYMTC prepared a 1998 TIP/SIP Conformity Determination and supporting analysis for the 1998-2002 Transportation Improvement Program (TIP) in July 1997. The TIP/SIP conformity determination and supporting analysis was approved by NYMTC on September 30, 1997. On September 30, 1997, EPA concurred with NYMTC's findings that the area's 1998-2002 TIP conforms to the SIP and, on the same date, FHWA approved the SIP/TIP conformity determination.

The currently conforming LRTP was adopted by NYMTC in March 1994. A Finding of Conformity was prepared for this LRTP, and the FHWA/FTA concurred with this finding on December 29, 1994. In conforming the 1998-2002 TIP, the LRTP was also conformed. Therefore, NYMTC approved the conformity determination for the LRTP on September 30, 1997. On the same date, FHWA approved the conformity determination of the LRTP.

The Build Alternative is included in the Long Range Plan (LRP) and the 1998-2002 TIP, both of which have been found to conform to the New York State Implementation Plan (SIP) by the FHWA and FTA in coordination with the EPA.

Since this Project is in an approved TIP that has been found to be conforming to the SIP, there is no need to separately analyze the Project's effects on regional emissions. Therefore, the air quality analysis focused on microscale air quality concerns.

Pursuant to the requirements of Transportation Conformity for microscale assessment:

- The air quality analysis was based on the latest planning assumptions used by NYMTC, including estimates of traffic volume growth rates and other traffic parameters. NYMTC has developed these estimates based on current and future population, employment, and travel and congestion information. These planning assumptions are consistent with those in the current conformity determination for the transportation plan and TIP.
- The air quality analysis has used emission factors from the latest emission model (MOBILE5B).
- The Project is consistent with the policies and purpose of the conforming transportation plan and will not interfere with other projects in the transportation plan.
- The Project design scope and concept have not changed since the TIP conformity determination was made and the facility's design scope and concept have not changed from that assumed in the conforming TIP.

The CAAA90 also contains a general conformity section (40 CFR Parts 51 & 93), which addresses projects funded (or partly funded) by non-transportation agencies. The Project is exempt from the general conformity requirements because its total annual emissions of ozone precursors, carbon monoxide, and particulate matter are below *de minimis* levels.

3.5.4 Analysis Methodology The CO analysis employed an EPA-approved modeling approach that has been widely used for evaluating the air quality impacts of projects in New York City, New York State, and throughout the country based upon a series of worst-case assumptions. This combination results in a conservative estimate of expected CO impacts. The analysis methodology followed the procedures outlined for air quality assessments in the City of New York's CEQR Technical Manual and the NYSDOT Environmental Procedures Manual.

The discussion below summarizes the tools and methods applied in the analysis. Greater detail is provided in Volume II, Appendix 8, "Air Quality." Maximum 1- and 8-hour CO concentrations

were projected for the year of completion of the Project (2003), which was demonstrated to be the worst case for future analysis year, using the CAL3QHC model version 2 to model line source dispersion and the contribution of idling vehicles in the overall pollutant concentrations.

Emissions Model: Vehicular emissions for vehicles in general use were computed using the EPA-approved MOBILE 5B program to determine emission estimates for the vehicle types in the traffic fleet. Credits were assumed for oxygenated fuel and for an enhanced Inspection and Maintenance Program (I & M) that was implemented for New York State starting in 1998.

Taxis represent a substantial portion of the vehicle fleet in the study area. NYCDEP has developed an approach to best represent the emissions of the taxi fleet using a combination of new and used police vehicles to represent the emissions of the taxi fleet. I & M credits, which are supplied by NYCDEP and NYSDEC and reflect the operation, inspection, and maintenance of this taxi fleet, were used to generate emission rates for these vehicles.

3.5.5 Analyzed Locations Based on the guidance in the CEQR Technical Manual and the NYSDOT Environmental Procedures Manual, three sites with high traffic volumes and the greatest potential for air quality effects from the Project were chosen to evaluate CO concentrations. They are:

- Seventh Avenue and West 33rd Street,
- Eighth Avenue and West 31st Street, and
- Ninth Avenue and West 31st Street.

No receptor sites were placed along the busy West 34th Street corridor because no significant traffic changes are anticipated on that street. The only intersection that is listed in the CEQR Technical Manual and the NYSDOT Environmental Procedures Manual as a critical air quality location near the Project site is the one at Herald Square. The Herald Square site was analyzed in the November 1992 Carbon Monoxide SIP demonstration (prepared by NYSDEC), and the results of these earlier analyses indicated that carbon monoxide levels near Herald Square were well within the applicable standards. Incremental and diverted traffic from the Build Alternative would be relatively small at the Herald Square location and well below the 5 percent screening threshold established by the CEQR Technical Manual and, therefore, did not require analysis.

3.5.6 Existing Conditions

Attainment Status: New York City is currently designated as a moderate non-attainment area for CO and a severe non-attainment area for ozone. New York County (including Manhattan) is also designated as a moderate non-attainment area for PM₁₀. New York City is in attainment of the NAAQS for all other criteria pollutants.

Representative Monitored Pollutant Levels: The most recently monitored ambient concentrations of CO, sulfur dioxide, particulates, NO₂, lead, and ozone for the area were used in this analysis. With the exception of ozone, monitored pollutant levels for all criteria pollutants were below the applicable NAAQS in 1997. A table of air quality concentration data for the

NAAQS pollutants, recently collected (as of 1997) by NYSDEC, is shown in Volume II, Appendix 8, “Air Quality.”

3.5.7 Impacts of the No-Build Alternative Application of the models indicated no predicted exceedances of carbon monoxide standards, as shown in Table 3.5-1. The analyses presented for the No-Build Alternative conditions are consistent with the traffic impact assessment.

Table 3.5-1

Future No-Build (2003) Maximum Predicted 1- and 8-hour Carbon Monoxide Concentrations in the Project Study Area (parts per million)

Receptor Site	Location	Time Period	1-Hour	8-Hour
1	Eighth Avenue and West 31st Street	p.m.	11.4	7.3
2	Eighth Avenue and West 30th Street	p.m.	11.3	7.2
3	Ninth Avenue and West 31st Street	p.m.	9.1	5.5

3.5.8 Impacts of the Build Alternative Table 3.5-2 shows the maximum predicted future (2003) carbon monoxide 8-hour concentrations with the Build Alternative at the three analysis locations. Although not shown in the table, corresponding maximum predicted Build 1-hour concentrations in 2003 are all well below the applicable standard. The values shown are the highest predicted concentrations for each receptor location for the two peak traffic conditions. Comparisons between the maximum predicted No-Build and Build conditions were also made at each individual receptor for comparison to the City of New York’s recommended *de minimis* criteria. The results of this analysis indicate that there would be no significant impacts or exceedance of the standard in 2003 for Build conditions.

Table 3.5-2

Future (2003) Maximum Predicted 8-hour Carbon Monoxide Concentrations For No-Build and Build Alternatives (parts per million)

Receptor Site	Location	Time Period	No-Build	Build
1	Eighth Avenue and West 31st Street	p.m.	7.3	7.1
2	Eighth Avenue and West 30th Street	p.m.	7.2	7.3
3	Ninth Avenue and West 31st Street	p.m.	5.5	5.7

3.5.9 2003 Build Conditions With Project Traffic Improvements Carbon monoxide concentrations with the Build Alternative and with the proposed traffic improvements were determined using the methodology previously described. Table 3.5-3 shows the maximum predicted future (2003) carbon monoxide 8-hour concentrations with the Build Alternative with Project Traffic Improvements (as described in Volume II, Appendix 6, “Traffic, Parking and Street-Level Pedestrian Conditions”) at the three analysis locations. The values shown are the highest predicted concentrations for each receptor location for the two peak traffic conditions. Comparisons between the maximum predicted No-Build and Build Alternatives with Project Traffic Improvements conditions were also made at each individual receptor for comparison to the City of New York’s recommended *de minimis* criteria. This comparison showed that all incremental carbon monoxide

concentrations were within *de minimis* guidelines. The results of this analysis indicate that the Build Alternative with project traffic improvements would have no significant effect on the maximum predicted carbon monoxide concentrations, and there would be no significant adverse impacts or exceedances of the NAAQS.

Table 3.5-3
Future (2003) Maximum Predicted 8-hour Carbon Monoxide Concentrations
Both With and Without the Project Traffic Improvements (parts per million)

Receptor Site	Location	Time Period	No-Build	Build	
				Without Traffic Improvements	With Traffic Improvements
1	Eighth Avenue and West 31st Street	p.m.	7.3	7.1	7.1
2	Eighth Avenue and West 30th Street	p.m.	7.2	7.3	7.3
3	Ninth Avenue and West 31st Street	p.m.	5.5	5.7	5.7

Conclusion: With or without the Project traffic improvements, the Build Alternative would neither create nor exacerbate any exceedances of the NAAQS, and is therefore consistent with the New York SIP. Further, the Build Alternative would not cause a significant adverse air quality impact under guidelines recommended in the *CEQR Technical Manual*.

The number of total on-street diesel vehicles near the Project site with the Build Alternative would be similar to nearby locations that have historically recorded PM₁₀ concentrations less than the applicable standards. In addition, there would be no significant increase in diesel locomotive emissions from the Project site. Therefore, the Build Alternative would be in compliance with the requirement of the CAAA90 and the final rule on transportation conformity.

3.5.10 Construction Impacts Potential construction impacts, including those relating to both traffic and the treatment of potentially hazardous materials, are discussed more fully in Volume II, Appendix 9, “Construction Impacts.” Effects of construction on traffic-related CO emissions are not typically assessed, since elevated concentrations caused by construction activities are temporary, and decrease to normal levels once the construction activities are completed. Further, while there would be some temporary lane closings and additional truck traffic during construction, the Build Alternative is not expected to cause significant traffic impacts during construction activities.

Local PM₁₀ concentrations can become elevated from construction work and, depending on factors such as meteorology, particulate matter can remain airborne for several hours. Typical measures to control PM₁₀ during construction include the use of watering and cover materials, and the application of desiccants such as calcium chloride. These measures have proven effective in limiting the amount of PM₁₀ that results from using construction equipment. Therefore, while PM₁₀ levels would be elevated in the vicinity of construction work, the implementation of effective countermeasures would be included in the construction contracts and may be assumed to limit the impacts of construction on PM₁₀ levels.

The existing structures are very likely to contain asbestos and lead paint. Asbestos may be present in a variety of building materials, including pipe insulation, floor tiles, transite panels, and roofing materials. Since the Farley Building was constructed when the use of paint containing high levels of lead was very common, it is probable that most of the painted surfaces in the building contain lead. Asbestos-containing materials in the buildings would be abated prior to any renovation activities following procedures set forth in the regulations. City, state, and federal regulations specify abatement procedures that prevent dispersal of asbestos into the air. These include the use of containment barriers, keeping work areas under negative air pressure, and monitoring for the presences of airborne asbestos before, during, and after abatement work. Federal Occupational Safety and Health Administration (OSHA) regulations require precautions to minimize exposure to lead during demolition activities such as demolition of interior walls painted with lead-based paint. Any other hazardous materials that may be disturbed by renovation work would be identified during the final design stage and removed prior to construction following proper handling and disposal procedures. In this manner, potentially hazardous materials would not be permitted to become airborne, thus averting exposure through inhalation.

3.5.11 Comparison of the Current and 1995 Build Alternatives The analysis method presented in this EA has been updated over that presented in the 1995 EA to comply with the current regulatory guidance. In addition, the current Build Alternative incorporates a slightly later analysis year, 2003, which includes higher general traffic volumes. These factors result in slightly higher CO projections for the current Build Alternative compared to the 1995 Build Alternative. However, the results of the air quality analysis show that neither the 1995 nor the current Build Alternative would cause significant CO impacts nor exceedences of the NAAQS.

3.6 NATURAL ENVIRONMENT

3.6.1 Summary The west side of Manhattan between West 20th and West 39th Streets has been densely developed since the 1860s. A recent survey of the area, particularly at the Penn Station Complex, found no remaining natural environmental features.

3.6.2 Existing Conditions The Penn Station Complex and the Study Area have been developed for more than 120 years, and any remnants of the natural environment have generally been eradicated. Based in part upon the archeological survey of the Penn Station Complex, it can be concluded that there is no potential for any significant natural environment (i.e., soil, water, flora, and fauna) to be present on the site. There are a few well-maintained green spaces with lawns and trees in the vicinity. These sites are associated with churchyards and an apartment complex a few blocks to the south.

3.6.3 Impacts of the No-Build Alternative Due to the absence of a natural environment in the vicinity, the No-Build Alternative would have no effect on the natural environment.

3.6.4 Impacts of the Build Alternative Due to the absence of a natural environment in the vicinity, the Build Alternative would have no effect on the natural environment.

3.6.5 Construction Impacts Due to the absence of a natural environment in the vicinity, construction activities would have no effect on the natural environment.

3.6.6 Comparison of the Current and 1995 Build Alternatives There are no appreciable differences in terms of natural environment resource impacts between the 1995 Plan and the current Build Alternative.

3.7 LAND USE, COMMUNITY FACILITIES, AND SOCIOECONOMICS

3.7.1 Summary The Project site is located at the southwest corner of midtown Manhattan. Since the proposed work is primarily internal within existing structures, it is anticipated that potential impacts to neighborhood character would be limited to the immediate Project area and would not be adverse.

3.7.2 Existing Conditions The transportation infrastructure at the Penn Station Complex handles more than 508,000 person trips each weekday. Except for development associated with Penn Plaza, the neighborhood retains much of the low- to mid-rise character it has had since construction of the original Pennsylvania Station completed in 1910.

While the area is zoned primarily for light manufacturing and commercial uses, some pockets of residential use remain. While there is evidence that many industrial loft buildings are increasingly being converted to residential uses, the primary character remains industrial, commercial, and institutional. Several large discount department and specialty stores have begun to occupy large vacant blocks of space in the area between Herald Square and Penn Station. Parking lots and large garages are located throughout the area.

This section of Manhattan is becoming increasingly popular for tenants with needs for large space and low overhead costs such as architectural, advertising, graphics, and other creative types of firms. To the north, West 34th Street is a major crosstown commercial street where the 34th Street Partnership Business Improvement District continues to improve the street's image and marketability.

Easily accessible public buildings in areas of high-volume pedestrian traffic have become a magnet for panhandlers and the homeless. Because of its large, open, warm spaces and the large commuter population that can be approached for handouts, Penn Station is no exception. As a result of outreach programs begun by Amtrak, the 34th Street Partnership, and local church and service groups, some progress has been noted in directing the homeless toward available training and rehabilitation programs. Security measures and outreach programs instituted in Pennsylvania Station by Amtrak, the LIRR, and the MTA will be maintained.

The primary community facilities likely to be affected by the Build Alternative are publicly accessible open space and postal, police, and fire services, because of the numbers of employees and other users that will be added to the area. The community facilities serving the study area (other than publicly accessible open space) are listed in Table 3.7-1.

Table 3.7-1	
COMMUNITY FACILITIES SERVING THE STUDY AREA	
Facility	Location
Post Office	

1.	James A. Farley Post Office	Eighth to Ninth Avenues; West 31st to West 33rd Streets
2.	Morgan General Mail Facility	Ninth to Tenth Avenues; West 29th to West 30th Streets
3.	Morgan General Mail Facility	Ninth to Tenth avenues; West 28th to West 29th Streets
<u>Police</u>		
4.	Midtown South (14th) Precinct	357 West 35th Street
5.	10th Precinct	250 West 20th Street
6.	13th Precinct	230 East 21st Street
7.	Manhattan Traffic Area	138 West 30th Street
<u>Fire and Rescue</u>		
8.	Engine Co. 1 and Ladder Co. 24	142 West 31st Street
9.	Engine Co. 26	220 West 37th Street
10.	Engine Co. 34 and Ladder Co. 21	440 West 38th Street
11.	Rescue Co. 1	530 West 43rd Street

Twelve publicly accessible passive open spaces, totaling 4.39 acres, lie within the ¼-mile study area (see Appendix 5, “Neighborhood Character,” section 5.2.4, “Open Space,” for a complete listing of the open space resources in the area). Several of these are outdoor parks and plazas. These open spaces generally provide passive amenities (e.g., benches, chairs, and landscape plantings). The remaining sites consist of other outdoor spaces, including the steps of the Farley Building, which function as a public sitting area and lunchtime gathering place. In the study area, there are a total of 4.39 acres of passive open space and a total population of 87,355 (which is composed of approximately 85 percent workers and the balance residents). Therefore, the existing passive open space ratio (OSR) is 0.05 acres per 1,000 workers and residents. This existing OSR is below the nonresidential goal of 0.15 per 1,000 workers and well below the recommended residential ratio of 0.5 acres per 1,000 residents. This indicates a shortage of passive recreational space for the residential and nonresidential populations within the study area.

3.7.3 Impacts of the No-Build Alternative If the Project does not proceed, the study area will continue to evolve and develop as it has over the last 15 to 20 years. While the No-Build Alternative would in time create serious overcrowding within the station and its entrances, it is anticipated that the No-Build Alternative would have a neutral effect on the area.

One potential change to open space is anticipated by 2003. The potential development at Ninth Avenue between West 31st and West 33rd Streets could add about one acre of landscaped open space around its perimeter. This would increase the amount of passive open space in the study area to 5.39 acres. Other open-space conditions are expected to remain unchanged. In the area used for the open-space analysis, residential population and local employment are expected to increase by 2003. Two large developments would increase the number of workers in the area by 6,467 and residents by 1,124. The resulting total population increase to 94,946 would change the overall OSR to 0.06 acres per 1,000 workers and residents. The area would continue to have a shortage of passive open space.

3.7.4 Impacts of the Build Alternative It is anticipated that the Build Alternative would create a new, efficient, intermodal transportation center within the Farley Building, with two passenger facility areas: one primarily for intercity (Amtrak) passengers, and the second primarily for

commuter (LIRR and NJT) patrons. Each section of the passenger facility would have a substantial retail component that should generally help to improve the retail character of the area. Some changes in pedestrian and taxi circulation patterns are anticipated with the Project. Pedestrian activity would increase along Eighth Avenue between West 31st and West 34th Streets and along West 31st and West 33rd Streets between Seventh and Ninth Avenues, improving the character of those blocks. With the anticipated improvements, public transportation would become an increasingly desirable commuting alternative to this part of the city. This improved access should help support the ongoing improvements in the area. The addition of retail uses, the new train station, and possibly new passengers who would use the improved facilities would reinforce retail upgrading of Seventh and Eighth Avenues.

The Build Alternative is consistent with the substantive requirements established by the New York City Zoning Resolution for the construction of railroad passenger stations. The principal access points to the Project for rail-related activities would be situated on West 31st and West 33rd Streets, which also carry the majority of Project-generated traffic, along with Eighth and Ninth Avenues. Those streets serve as feeders carrying traffic toward Lincoln Tunnel access points and to the West Side Highway. Accordingly, they are not functioning as local streets. In addition, the Build Alternative is located in Manhattan's CBD and will draw a minimum of vehicular traffic through local streets in residential areas.

The Build Alternative would provide two new driveways for USPS truck use on Ninth Avenue. The proposed USPS access driveway, just north of West 31st Street, would be approximately 175 feet from the existing USPS midblock driveway on Ninth Avenue, while the proposed USPS egress driveway, just south of West 33rd Street, would be approximately 150 feet from the existing USPS midblock driveway. This would eliminate the loading bays on West 31st Street, but overall, the number of loading bays for USPS use would be maintained inside the building. In addition, two porte-cocheres would be provided for taxi pickup and drop-off activities. The entrances and exits for these porte-cocheres would be approximately 107 feet apart. They would be located midblock on West 33rd and West 31st Streets between Eighth and Ninth Avenues. Curbside drop-off activities would be located on the west side of Eighth Avenue. The Build Alternative would not require additional curbside parking because of the very low number of Project-generated auto trips (seven or fewer during the peak hours). In addition, there is adequate parking available in the area to accommodate the demand from the Build Alternative (see Appendix 6, "Traffic, Parking, and Street-Level Pedestrian Conditions").

Allocation of police officers and other personnel is determined by budgetary factors and crime trends within specific precincts. No actions are made based on anticipated future developments, but adequate levels of police protection can be altered as needs become evident. Additional Amtrak police officers would be assigned to the Project site commensurate with the increased concourse area available to passengers.

The New York City Fire Department anticipates that the separation of Amtrak facilities from LIRR and NJT operations would simplify and positively impact its ability to respond to emergencies. The Build Alternative is also expected to improve life-safety conditions for users of the Penn Station Complex by further expanding egress capacity over the No-Build improvements and adding a full complement of modern life-safety systems to the Farley Building.

The net increase of 711 workers in the Build Alternative would result in a 2003 population of 95,657 in the area used for the open-space analysis. The Build Alternative would not increase the number of residents in the area. The OSR for the Build Alternative would remain unchanged from No-Build conditions at 0.06 acres per 1,000 workers and residents; the area would continue to be underserved by passive open space. There would be no significant adverse impact to open space resources as a result of the Build Alternative. However, improvements to public spaces proposed as part of the Build Alternative would include construction of a major pedestrian through-block passageway and a large public concourse. While they would be publicly accessible, high-quality spaces, these improvements would not be included in the calculation of the open-space ratio.

The creation of a new enclosed public space in the Farley Building might attract some homeless people. At the same time, the reduction in public circulation space in Penn Station could result in some movement of the homeless population from Penn Station to the new facilities in the Farley Building. Overall, there could be a small increase in the total homeless population in the study area as a result of increasing the amount of climate-controlled public space. However, Amtrak would provide security measures and homeless outreach programs at the Farley Building similar to those that exist at Penn Station, thereby limiting the number of homeless who spend the night in either the new or existing train stations. Since there is little evidence of homeless people currently living in tunnels or platforms under the Farley Building, the renovation of the tracks and platforms would have no significant impact on displacing homeless persons.

3.7.5 Construction Impacts Construction activities would have no impact on the land uses or socioeconomics of the Project area. An analysis of the economic impacts estimated that the Build Alternative would create 6,520 jobs in New York City during construction. The number of jobs created statewide during construction was estimated to be 7,656.

The Build Alternative would involve construction within an operating postal facility, and above active railroad platforms. Accordingly, the work would be planned in phases, designed to minimize the effect of construction on ongoing activities within and beneath the building. Detailed phasing plans would be developed and submitted to both Amtrak and USPS for review and comment prior to the commencement of construction. Those plans would call for the installation of a protective barrier to separate the Lower Concourse work areas from the tracks below, and for the scheduling of construction activities to avoid disruption to postal and train operations, to the extent feasible. Among other things, construction would be phased to assure that the required number of postal truck loading bays would be maintained throughout the course of construction of the Build Alternative.

3.7.6 Comparison of Current and 1995 Build Alternatives There are no appreciable differences in terms of land use and socioeconomic resource impacts between the current Build Alternative and the 1995 Build Alternative.

3.7.7 Environmental Justice Environmental justice is a term used to label any disparity in environmental impacts that may exist between minority and/or low-income populations compared with other populations. Environmental justice is intended to ensure that any such disparities in

federally funded projects are evaluated and mitigated such that all communities share equally in the project's environmental costs and benefits. Guidance to Federal agencies concerning environmental justice is documented in Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

Impacts of the No-Build Alternative. The No-Build Alternative would include upgrades or replacement of services in Penn Station recently completed or underway. The use of the Farley Building would be unchanged and the existing conditions of the study area would be similarly unchanged. The No-Build Alternative would have no environmental impacts to create environmental justice issues.

Impacts of the Build Alternative. The impacts of the Build Alternative on community structure and function would not result in any significant change in the original purpose of the Penn Station Complex. The Build Alternative:

- would not split existing neighborhoods,
- would not promote social isolation of a particular population,
- would facilitate economic growth, development, and urban renewal opportunities,
- would not promote urban blight,
- would not result in any drastic decrease in adjacent property values, but rather would enhance them,
- would not reduce neighborhood or community access or mobility, but rather would enhance it,
- would not diminish the quality of life of the neighboring community, but would improve it with the attraction of new businesses and services to the area,
- would not promote the separation of residences and/or sections of a neighborhood from community facilities or services, and
- would not have disproportionately adverse impacts on a specific segment of the population.

Thus, the Build Alternative would have no significant negative environmental justice impacts. The Build Alternative would improve not only the transportation infrastructure of the region but also the socioeconomic aspects of the surrounding West Side neighborhood and the region as a whole. It would adapt, through reuse, restoration and enhancement, existing facilities without disrupting preexisting community cohesion and land use. It would add to community and regional resources and would not remove, fragment, or diminish existing resources. It would be compatible with the existing community structure and function. No households will be displaced, no businesses will be displaced, and the opportunity for increased employment will result from retail business development within the Project. Minority and disadvantaged populations, regardless of their numbers in the study area, would receive economic and social service benefits.

The Build Alternative would have no disruptive effects on community mobility, so there would be no environmental justice issues associated with the traffic and pedestrian safety and circulation. Improved pedestrian flows, coupled with the reduction of mail truck maneuvering on surface roads, would provide community benefits and increase cohesion and safety.

3.7.8 Secondary and Cumulative Impacts Secondary and cumulative impacts to land use and social and economic conditions of neighborhoods in the Project area would be separate and distinct from the direct impacts previously described in this section of the EA. Secondary impacts would be those reasonably foreseeable effects that have the potential to indirectly result from a project, but that might occur later in time or would be farther removed in distance. Cumulative impacts would be those that might result from incremental effects of a project when added to other past, present, and reasonably foreseeable future actions. Secondary and cumulative socioeconomic impacts, therefore, would be indirect changes to land use and economic and social conditions within the study area but that could also affect a larger geographic area. Indirect socioeconomic impacts might take a variety of forms including changes to land use patterns over time, changes in population growth or density, changes to the economic vitality of an area, growth or decline of the local tax base, and a transformation in the character of a neighborhood. These types of changes might also be attributed to a number of factors unrelated to the project including local land use policy and the local state, regional, and national economy. Therefore, secondary and cumulative socioeconomic impacts resulting from any one transportation project might be difficult to isolate. The effort to define secondary and cumulative socioeconomic impacts would be one of distinguishing the variation in future socioeconomic conditions attributable to the project.

Secondary and cumulative impacts might overlap in their influence and would not always be clear and distinct from one another. For example, if a transportation facility expansion redirects pedestrian flow towards underdeveloped properties, a secondary impact of that project could be an eventual increase in commercial development, an increase in available local employment, and growth in the local tax base. If the local government subsequently provides infrastructure and service enhancements for the increased development, then the impacts of the expanded facility would be considered both secondary (occurring over time) and cumulative (resulting from a combination of local government projects and the facility expansion).

It is likely that the Build Alternative would slightly increase incentives for development in the immediate vicinity of the Project. This could be caused by both the redistribution of pedestrian and vehicular traffic slightly westward and a potential desire for real estate proximate to the new, highly visible presence of the Intermodal Hall, which would make a dramatic aesthetic statement. The renderings in Figure 1-7 portray an architectural design that may attract developers wishing to be associated with the new image that the Project would create for the neighborhood. However, the influence from the Build Alternative would be minor compared to overall economic trends in this section of Manhattan. The area surrounding and to the west of the Farley Building is considered to have great development potential because it features large, underdeveloped spaces. Continuing increases in intercity and commuter ridership also would overshadow the impacts specifically attributable to the Build Alternative.

Based on existing zoning, there is an estimated 300,000 square feet of unused as-of-right development in the study area. It is likely that the Build Alternative would slightly increase the pace of build-out of that space.

3.8 HISTORIC AND ARCHEOLOGICAL RESOURCES

3.8.1 Summary The National Environmental Policy Act of 1969 (NEPA) and the National Historic Preservation Act of 1966 require Federal agencies to consider the effects of their actions on historic properties, particularly those properties listed on or eligible for listing on the National Register of Historic Places. Section 4(f) of the Department of Transportation Act (49 U.S.C. 5303(c)) also applies in instances involving a use of historic resources by the component agencies of the Department of Transportation (in this case, the FRA.) During the environmental assessment process, historical resources that may be potentially affected by a federally funded project are identified, potential effects on those resources from the project are examined, and measures are considered to avoid or reduce any adverse impact.

In May 1994, a comprehensive survey of the Farley Building and site was conducted to identify significant historical resources. In June 1994, informal meetings began with the New York State Historic Preservation Office (SHPO) to review the proposed renovation project and to discuss potential effects to the historical components of the Farley Building. The first formal consultation meeting was held on September 13, 1994 with representatives of Amtrak, its developer, and their architects. In addition to these meetings with the SHPO, formal Scoping Meetings were held in August and October 1994 to solicit comments from the general public on the proposed action.

The SHPO consultation meetings during 1994 and 1995 advanced to a point where it was clear that Amtrak's proposed renovations of the Farley Building could be accomplished without adverse impacts to the historic resource. As described in Section 1.1.1 and 2.3, a decision was made not to progress the Amtrak proposal to final design. Responsibility for the redevelopment of the Farley Building was assumed by PSRC. PSRC assembled a new design team of architects and engineers lead by Skidmore, Owings and Merrill, LLP (SOM) to develop plans for the reuse of extensive portions of the Farley Building to serve as the principal site of Amtrak's presence in Penn Station while maintaining the 24-hour postal lobby and other critical Post Office operations throughout the building. The FRA and their environmental consultants began meetings and discussions with the PSRC/SOM team on the proposed design for the alterations to the Farley Building. The Section 106 review process was reinstated by the FRA with the SHPO on February 17, 1999. On February 24, 1999 the first formal consultation meeting with the New York SHPO was held to review the PSRC/SOM plans. These consultation meetings continued from March through June, 1999.

The most recent scheme for the Penn Station Complex has evolved to a point where the design respects the historic character of the Farley Building and its traditional functions while providing a dramatic new identity for the proposed Amtrak station. A key component of the project is the comprehensive preservation program involving the conservation of exterior materials and the restoration of all the significant interior public spaces of the Farley Building in accordance with SI Standards. After reviewing the full scope of the Build Alternative in the context of the criteria listed in Section 800.5 (a) of the Advisory Council's regulations, the FRA has determined that the proposed Pennsylvania Station Redevelopment Project "will not have an adverse effect on the Farley Building because the project will not alter directly or indirectly, the characteristics of the building that qualify it for inclusion in the National Register in a manner that would diminish the integrity of the building's location, design, setting, materials, workmanship, feeling or association." In accordance with Section 800.5, FRA notified the SHPO of this determination in a July 28, 1999 letter (included in Attachment 3-1 to this chapter.) In light of this determination,

the agency has also concluded that the PSRC proposal does not involve the use of land of an historic site of national, State, or local significance under section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. §303(c)).

3.8.2 Historical Overview and Existing Conditions At the turn of the century, New York City was the largest city in the United States, with a population of three and a half million people, and a center of international commerce and shipping. The city suffered major transportation problems because of the location of its business and residential core on Manhattan Island. Passengers and freight from the south and west had to be ferried between train terminals on either side of the Hudson River, an arduous and time-consuming process.

The Pennsylvania Railroad began aggressively advancing plans for rail extensions into Manhattan in the 1890s. With the Pennsylvania Railroad's acquisition of the Long Island Rail Road in 1901 and a charter that allowed it to construct a direct rail link into Manhattan, the stage was set for construction of a tunnel system linking the Pennsylvania Railroad through Manhattan and on to Long Island. This system was later connected with the New York, New Haven & Hartford Railroad to New England and Boston in 1917.

The railroad turned to Charles Follen McKim, partner in McKim Mead and White, the preeminent architectural firm of the day, to design a station complex for the Pennsylvania Railroad and the Long Island Rail Road. The new station was to be a grand presence in the city and was to serve as a magnificent gateway to both the city and the railroad. By all accounts, McKim succeeded handsomely by creating a grand Beaux Arts neoclassical structure. The architectural detailing relied heavily on Roman precedents, with the details and spatial configuration of the Main Waiting Room recalling the Baths of Caracalla. The building embodied the principles of the City Beautiful Movement, first demonstrated in 1893 at the World's Columbian Exposition in Chicago. The completed structure, tunnels, tracks, traction power, and control systems were described widely in popular and professional publications of the day both in this country and abroad. Several reports marveled at this new image of a railroad station, devoid of a trainshed because trains arrived at platforms located under the station.

Another important element of the original Pennsylvania Station design was the Service Plant (now called the Service Building), located at midblock across West 31st Street from the station. This structure remains with its original exterior virtually intact. Any interior alterations are clearly identifiable and a large amount of the original equipment is extant but has been abandoned in place. The structure originally contained systems for heating and hot water as well as domestic water distribution for all of the Pennsylvania Station components in addition to a vacuum system for switch control and power generation and distribution of building lighting, traction power, and signaling. McKim Mead and White designed the exterior of the building to harmonize with the station across the street, while the railroad's engineers designed the building's structural system. Westinghouse, Church & Kerr served as consulting engineers. The railroad control systems housed in the building were considered to be the state of the art and technically innovative at the time of construction. One feature, the power control system board, displayed the operational conditions of and controlled traction power from the Manhattan Transfer in New Jersey to the Harold Interlocking in Long Island City, New York. The control board remained in operation in the Power Director's office on the top floor of the Service Building until March, 1997 when the

operations were moved to the Claytor-Scannell Control Center at West 31st Street and Ninth Avenue.

The Service Building was designed as two separate elements. The western half was devoted to coal bunkers and two banks of boilers. The eastern half was devoted to electrical control and distribution equipment, various offices, and service spaces. In the lower basements were air compressors for track switching operations, stationary steam engines, and steam turbines used to generate power for station lighting, track signaling, and traction power within the Penn Station Complex. A steam distribution system was used to heat the entire station and for domestic hot water. At the time of its construction, the system was unique in the world for its scope and complexity. Nearly all of the original power generation equipment has been abandoned in place and replaced by commercially supplied electric service. Much of the original and 1927 upgraded power distribution and control equipment remains in regular service although it is being systematically phased out as new equipment is installed as part of the overall upgrade of systems in the present Penn Station. The two severely deteriorated chimneys were demolished in April 1997 to eliminate a hazardous condition on West 31st Street.

At the turn of the century, railroads carried most of the country's long-distance mail. To take advantage of direct rail access to the south and west that the new North River Tunnel would provide, the U.S. Post Office Department (now USPS) considered locating its principal New York City mail handling facility in proximity to the proposed Pennsylvania Station. As early as the summer of 1904, track layout plans for Pennsylvania Station indicate a postal facility on the air rights available over the depressed Pennsylvania Railroad tracks west of Eighth Avenue. The concept was to build a large facility between West 31st and West 33rd Streets, fronting on Eighth Avenue and extending a half block west toward Ninth Avenue. Partly on the strength of their design for Pennsylvania Station rising across the street, McKim Mead and White also were selected as architects for the new Penn Terminal, later called the General Post Office, and still later, the James A. Farley Building. Construction of the building began in 1909 and was completed in 1913.

The design of New York's General Post Office sensitively and efficiently combined appropriate grand and monumental public spaces with extensive gross square footage of secondary spaces to support the complex postal operation. These spaces are wrapped in a monumental neoclassical granite facade that related particularly well to Pennsylvania Station and created a sense of design completeness that was noted in *American Architect* in the fall of 1922 as being worthy of an architect's study.

By the late 1920s, the existing space in the General Post Office had become inadequate and the (then) U.S. Post Office Department studied numerous options for building a new facility on the Pennsylvania Railroad air rights over the tracks west of the original Post Office. McKim Mead and White again were selected to design the addition to the original building, filling the balance of the block to Ninth Avenue. The 1934 Building, or Annex, was conceived as a fully integrated addition to the original structure. Its design is also neoclassical recalling the principal design elements of the original building in the somewhat stylized manner typical of Works Progress Administration projects of the New Deal era (1933-1941).

In the years following World War II, the growth of the interstate highway system and the use of the private automobile, coupled with developments in commercial aviation, led to the decline of the nation's railroads as the primary means of long-distance passenger travel. Railroads, increasingly operating at a deficit, made drastic cutbacks in services and looked for new ways to increase their revenues. As early as 1951 the Pennsylvania Railroad considered plans to sell its air rights over the tracks near Pennsylvania Station for a proposed world trade center. Although that particular proposal never materialized, it set in motion a series of development proposals that climaxed in December 1954, when a prominent real estate development firm purchased the air rights between Seventh and Eighth Avenues, the site of Pennsylvania Station.

By 1960, plans had been developed for the Madison Square Garden Complex, but little was divulged to the public about plans to demolish Pennsylvania Station. In the meantime, the station was allowed to fall into a state of decay and disrepair. Architects concerned about the loss of a significant McKim Mead and White building formed the Action Group for Better Architecture in New York (AGBANY), and the proposed demolition became a controversy of national interest. Despite AGBANY's extensive efforts, the demolition of Pennsylvania Station began in 1963. By late 1966 the old station had entirely vanished, a modern station (the current Penn Station) had been built underground, and the Madison Square Garden Sports Complex and a high-rise office tower known as Two Penn Plaza had been erected on the site.

The destruction of the original Pennsylvania Station served as a catalyst for the modern historic preservation movement and gave impetus for the creation of the New York City Landmarks Preservation Commission in 1965. The General Post Office was among the first group of buildings given landmark status under the City's new Landmark Preservation Ordinance. The landmark designation on May 16, 1966, noted:

The United States General Post Office is an outstanding example of the Roman Classic Style, and it is notable for its monumental scale, impressive colonnade, attic and outside steps, that all of its four handsome elevations can be seen and that it has contributed significantly to the appreciation of notable Classic architecture in this country.

In 1973, the General Post Office was listed on the National Register of Historic Places. Nine years later, on May 24, 1982, the building was renamed in honor of James A. Farley, who served as Postmaster General of the United States from 1933 to 1940 under President Roosevelt. The building has served continuously in its original postal capacity since 1913, and as the main Post Office for the city of New York since 1918.

3.8.3 Evaluation of Potential Effect Determining the potential effects of the proposed renovation of the Farley Building includes several steps that are discussed below. Briefly, these include identifying the characteristics of a property that help qualify it for the National Register, assessing the potential effects of project elements to these characteristics, and judging whether the effects are adverse.

Documentary and Historical Research: Available source material about the Farley Building, Pennsylvania Station/Penn Station, and the surrounding area was surveyed, with the specific objective of locating original drawings and specifications and builders' photographs. Records and

files of the General Services Administration (GSA) and the Federal Records Service, as well as the collections of the National Archives and the New York Historical Society were reviewed. The two main depositories of original drawings are in the office of Mr. Bart Basile, USPS Project Representative at the Farley Building, and in the collection of the New York Historical Society. The New York Historical Society also has a representative collection of construction photographs of the buildings. Researchers found a more comprehensive set of construction and publicity photographs in the New York District Postal Museum on the third floor of the Farley Building. Original specifications have not been found. Files of the USPS Construction Department, New York District, were made available for review. These files, containing information from the past 25 years, and the consultant's survey indicate that the Farley Building has remained virtually unaltered.

Harvard University Libraries and Avery Index of the Avery Architectural Library at Columbia University were consulted for publications and articles relating to the Farley Building and the Penn Station Complex. The research team also reviewed the indexes of several professional architectural publications and the popular press available during the period of the Farley Building's design and construction. Other sources consulted include: Engineering News, Scientific American, The New York Times Index, and the Historic American Buildings Survey (HABS) documentation of Pennsylvania Station.

Summary of Survey Findings: Because the Farley Building is on the National Register of Historic Places and has been designated a New York City landmark, the significance of the exterior of the building had already been established. A brief survey of the exterior of the building was conducted to identify existing conditions.

A thorough survey of the interior was needed to identify historically intact and/or significant areas of the building, so a room-by-room and area survey was conducted of the Farley Building and Annex and the Service Building. A brief survey of the existing Penn Station was also conducted to identify the presence of any original fabric and/or finishes remaining from the original construction. Survey forms were completed for each room or area to note details of construction, significance, and condition of various elements. Each room was evaluated for historical integrity and level of significance and ranked in terms of an appropriate level of preservation treatment. Volume II, Appendix 2, of the 1995 Draft Environmental Assessment discusses the criteria and methodology for assigning the numerical ratings and includes figures that illustrate the results of the building survey and the evaluation of historical significance.

The Farley Building was designed by McKim Mead and White with a four-part hierarchy of spaces and finishes. First were the grand public spaces created at the lobby and entrances. Second were the public/ceremonial spaces such as the postmaster's and departmental offices, finished in a manner befitting the occupants' rank. The elaborate neoclassical detailing of these spaces remains in evidence even under more-recent inappropriate color schemes and finishes. The details are typical of the firm's better commercial work. The third level of finishes reflects the needs of the Post Office's administrative departments. For these offices the architects designed spaces at the building perimeter typical of general office spaces of the period. The fourth level of finishes was developed for functional, almost industrial, space to serve the utilitarian purpose of

sorting and distributing the mail. For this purpose, there are several large open areas with minimal or restrained detailing in the original building.

During the course of the survey, it became apparent that the building had undergone few alterations and that these alterations had generally been sympathetic to the original design. Where more-significant changes have taken place, enough evidence of original elements usually remains that would allow restoration of the spaces to nearly original condition. Much of the original mechanical equipment also remains intact and in use, supplemented by more-modern equipment where and when necessary. Some of this original equipment was detailed in publications at the time of original construction.

A survey and assessment of existing conditions in the Farley Building was made to identify and rate remaining elements of historic or character-defining features (See Volume 2, Appendix II of FRA's 1995 Draft Environmental Assessment). The public and ceremonial spaces, including the public stairways at the northeast and southeast corners, the lobbies and third-floor administrative offices remain virtually intact and were deemed most worthy of restoration. The second tier of offices and circulation spaces relating to character-defining features and original operational functions were felt to be worthy of preservation, with sensitive alterations possible. Also noted for sensitive treatment was a representative selection of other more-utilitarian spaces, including a sampling of intact toilet rooms and general office areas that had retained a high degree of historical integrity. Most of the third- and fourth-tier spaces, while intact, were deemed appropriate locations for alterations.

3.8.3.1 Application of the Criteria of Effect and Adverse Effect Potential effects to historic resources listed on, or determined eligible for listing on, the National Register of Historic Places, have been identified and evaluated through Section 106 and the application of the Criteria of Effect, published in the Advisory Council on Historic Preservation's Regulations, 36 CFR Part 800, to determine whether the Build Alternative would have an effect on the historic resources. Application of the Criteria of Effect is the standard procedure used for Federal projects in assessing potential impacts to historic resources. The Farley Building is listed on the National Register of Historic Places. Emergency repairs and temporary equipment changes have been completed to the Service Building in compliance with the Section 106 review process and no additional work is contemplated there in the foreseeable future. Because the Build Alternative will alter the Farley Building to a certain extent, the Assessment of Adverse Effects, also published in 36 CFR Part 800, has been applied to identify any changes that may compromise the historic integrity and National Register eligibility of the structure or its setting. According to 36 CFR, Part 800.5(a)(2) adverse effects may include: physical destruction or alteration of a property in a manner not consistent with the SI Standards; change of the character of the property's use or physical features within the property's setting that contribute to its historic significance; visual, atmospheric or audible elements that diminish the integrity of the property's significant features; neglect of a property that causes its deterioration or destruction; or transfer, lease or sale of property without restrictions to ensure preservation of the property's historical significance.

Each element of the Build Alternative has been examined in the context of these Section 106 procedures, and the results are discussed below. The 1999 proposed alterations to the Farley

Buildings have been analyzed in accordance with the revised Section 106 review procedures adopted by the Advisory Council on Historic Preservation, and which became effective on June 18, 1999.

3.8.4 Impacts of the No-Build Alternative The No-Build Alternative assumes only periodic maintenance and upkeep by Amtrak at Penn Station and by USPS at the Farley Building. The impact of these activities to each of the historic structures in the Penn Station Complex is described below.

Penn Station: When Pennsylvania Station was demolished in 1963-68, several elements from the original structure remained and were incorporated into or were obscured by elements of the new Penn Station. These elements are no longer in context and therefore have no historic integrity. The periodic maintenance and repair activities included in the No-Build Alternative would not have an impact on these randomly located elements.

Eighth Avenue Subway: The No-Build Alternative does not include proposed work for the Eighth Avenue Subway Station at West 33rd Street/Penn Station. Accordingly, there is no impact to historic resources.

Farley Building: For the No-Build Alternative, the only changes anticipated by USPS on the exterior or within the interior of the Farley Building would be the result of routine maintenance and repairs to the structure and completion of a terra cotta restoration project by the USPS. In 1993, shortly before Amtrak began planning to upgrade Penn Station, the USPS began a project to replace all the missing, damaged, and unstable terra cotta cresting around the perimeter of the roof parapet at the fifth floor level on the main building and the Annex. The project had progressed to the point where the samples of the replacement cresting had been approved for fabrication. The terra cotta cresting restoration project was put in abeyance by USPS pending development of the full scope of the Penn Station Complex project. USPS would be expected to reinstitute its restoration project. This replacement in kind of lost, missing, or damaged historic elements would help maintain the historic features of the building. In the past, most of the renovations made to the Farley Building have been sensitive to the existing building fabric or have been installed so as to be reversible. It is expected that the USPS would continue these practices.

3.8.5 Impacts of the Build Alternative Any remaining elements of the original Pennsylvania Station and the context of those elements have been so significantly altered as to no longer have historical integrity. Furthermore, since the present Penn Station is not historic, no Adverse Effect would result to it from the Build Alternative.

The PSRC/SOM design modifications to the Farley Building to reconfigure and adapt it for use as an intermodal transportation facility and commercial center have been used to determine potential effect. Discussions held to date with the SHPO about design options and a commitment to develop design details in accordance with the SI Standards were included in the schematic design and are reflected in the following paragraphs. It should be noted that the USPS space needs and future facility utilization have been assimilated into the Build Alternative. The schematic design is

the result of the coordination of program and design between the USPS as building owner with PSRC as developer and Amtrak as principal tenant.

The two principal elements of the design for the renovation of the Farley Building are the reuse of the major elements of the original skylight structure over the former Work Room, or East Court, at the center of the original building and the construction of a new 186-foot-high, glass skylight structure replacing the present 2- and 3-bay elements linking the original Farley Building to the Annex in the vicinity of the original loading dock. The principal element of the PSRC/SOM plan is the construction of a new through-block intermodal hall extending from West 31st to West 33rd Streets at the link where the Annex is connected to the original building. In the present scheme the three-bay, five-story wall section between the midblock pavilions on West 31st Street and the two-bay, five-story wall section between the midblock pavilions on West 33rd Street would be removed and the west wall of the original Farley Building would be reconfigured in a manner evocative of and sensitive to its original historic appearance. The new intermodal hall would be crowned by a prominent glazed roof structure rising over 186 feet above first-floor level and enclosing a space 180 feet high. The roof structure would consist of a double-layer elliptical steel lattice shell. In plan, the base of the shell structure would follow the curve of the west side of the intermodal hall. The shell itself would comprise two layers of steel compression members laid out in a diagonal grid. Stiffening rib trusses would be located within the depth created by the two layers. The end walls of the intermodal hall would be fully glazed creating a transparent link between West 31st and West 33rd Streets at the middle of the Farley Building. In light of the project's comprehensive preservation program, the detailed analysis undertaken by PSRC's architects with regard to design alternatives and the considerable efforts undertaken to minimize removal of stone, reduce the visibility of the midblock skylight, and provide for adequate signage, FRA has concluded that the penetration of four percent of the facade at midblock is not significant when seen in light of the overall adaptive reuse project.

In the course of initial project development, the SHPO noted that Amtrak's earliest conceptual design, featuring a 120-foot-high parabolic, arched skylight structure springing from the present basement floor level, was not compatible with the historical character of the Farley Building. Discussions continued for some months, with the SHPO reviewing skylight design options and their potential effects on the historical characteristics of the building. After reviewing a comparative analysis of various options, including modifications to the existing Work Room skylight, the SHPO agreed in a letter dated January 20, 1995 that a compatible new skylight, designed in accordance with the SI Standards, could be incorporated into the renovation project along with good preservation work elsewhere in the project as an acceptable alternative to the rehabilitation of the existing skylight structure. When the study of the building was again taken up in 1998 by the PSRC/SOM team, they resolved to retain as much of the original Work Room skylight structure as practicable given structural design and code requirements.

Under the proposed PSRC/SOM plan, portions of the present Work Room and basement floor would be removed and a new partial floor would be added below and to the west of the proposed opening in the basement floor, creating two concourse levels below the present first-floor level that would open onto the skylighted space above and evoke the appearance of the glass-enclosed train rooms of the great 19th and early 20th Century stations. This resulting multilevel space

would be the principal retail and waiting area at the center of the new Amtrak station. The SHPO has commented that removal of a portion of floor area would have no significant impact on the historical character of this massive structure since the present column and floor structure occurs throughout the building. The perimeter of the new multilevel skylight space would be surrounded by circulation corridors, passenger waiting areas, some retail and open seating. It is anticipated that all new construction in these areas would be designed in accordance with the SI Standards so as to be compatible with the historical character of the building. No Adverse Effect is anticipated at the first floor, concourse floor at the basement level, and the new lower concourse level under the original Work Room skylight.

Passage into the Amtrak station from the Postal Lobby would occur through the west end of the two flanking side lobbies. Detailing of the transitional elements between the side lobbies and the main station circulation spaces would be compatible with the existing structure and finishes and would be designed and constructed in accordance with the SI Standards. The present lobby, flanking pavilions, and stairs would be preserved and restored to their near original appearance. No Adverse Effect is anticipated in this area. The USPS space needs and future facility utilization have been assimilated into the Build Alternative.

The Build Alternative includes a proposal to reduce the width of the moat areas along West 31st and West 33rd Streets between Eighth Avenue and midblock by 60 to 75 percent creating a wide sidewalk plaza leading to the proposed main station entrances at midblock and leaving the remaining moats as a large continuous lightwell. The widened sidewalks would be planted with a row of large trees. No adverse effect is anticipated in this area.

West of the new midblock station entrance on the south side of the Farley Annex, the present loading dock structure would be removed and a new access ramp would be constructed from Ninth Avenue down to a new Postal Service loading dock area in the basement of the Annex. The north moat along West 33rd Street would be reconfigured for the construction of an exit ramp from the new basement Postal Service loading dock. Because of the minimal detailing at the basement level, the new openings for the truck entrances at that level would minimize the potential impact of the insertion of the ramping system into the historic features of the structure. No Adverse Effect is anticipated in this area.

An important component of the successful integration of the proposed design for Amtrak and the Postal Service is the clear separation of the Amtrak pedestrian traffic from that of the Postal Service. On both sides of the monumental Post Office stairs rising from Eighth Avenue, new Amtrak pedestrian entries would be installed from sidewalk level down to the present basement, in the area now occupied by the corner moats. These entries would be clearly identified as leading to Amtrak facilities. Final entrance details will be developed to ensure conformance with SI Standards to ensure compatibility with the historical character of the building. No Adverse Effect is anticipated.

Another significant aspect of the Build Alternative is to upgrade portions of the Farley Building that would become part of the Amtrak passenger facilities to meet ADA, life-safety, and building code guidelines and requirements. Any code-required changes would be coordinated with the SI

Standards to the extent possible. The proposed interior changes, as developed to date, appear to allow code compliance while meeting the SI Standards. Coordination with the SHPO and other reviewing agencies would continue on these issues.

The Build Alternative design for mechanical system upgrades calls for the complete removal of old systems and installation of new domestic water, sanitary sewer, HVAC, and wiring systems from the basement level up into areas to be operated by Amtrak for commercial tenants. All USPS mechanical systems impacted by the new layout design would be either replaced or rerouted in order to meet the individual needs of each space. USPS spaces located on the first floor of the Farley Building would be served by dedicated air handling units located in the main mechanical equipment room (MER) located at the concourse level. Similarly, a dedicated air handling system located in a local MER would serve the USPS Cafeteria. All impacted USPS areas would continue to receive their chilled water supply from the Morgan Facility.

Some of the present mechanical equipment in the Farley Building could be determined to be historic, but most of the systems do not operate efficiently or adequately. Some measures related to the preservation or documentation of historic equipment may be in order. No Adverse Effect is anticipated if care is exercised to minimize the impact of the demolition of any historic building components and historic documentation would be conducted for the removal of significant historic equipment.

Exterior granite masonry of the original building is scheduled for 100 percent cleaning and repointing. Where granite is missing or damaged, or where required at new openings, granite salvaged from the building would be installed. Any new granite required would match the existing as closely as possible. In addition, the PSRC/SOM plan calls for the restoration of all terra cotta cresting in serviceable condition and the replacement of all severely damaged or missing cresting on the original Farley Building. All proposed masonry restoration work would be in strict conformance with the SI Standards. No Adverse Effect is anticipated from these activities.

The Build Alternative includes the complete restoration and refinishing or, where necessary, selective replacement of the existing wood windows on the original Farley Building. In addition, the existing aluminum windows on the fifth floor of the original building would be removed and replaced with new aluminum sash. In locations where original sash have been replaced by now-abandoned louvers or where existing sashes have been reglazed with inappropriate materials, new windows designed to match the originals would be installed. All work undertaken would be in accordance with the SI Standards; thus, no Adverse Effect is anticipated.

Another component of the proposed restoration of the building exterior is the complete stripping, repair, and repainting of all decorative metalwork and the ferrous metal framing for the window wall on the Eighth Avenue facade. This work would be undertaken in accordance with the SI Standards. No Adverse Effect is anticipated.

Existing cobra-head lighting fixtures used for exterior building illumination are incompatible with the historic features of the Farley Building. They would be removed and replaced by a more-

compatible system. The present system is particularly inconsistent with the historical nature of the Farley Building when viewed in the daylight. The removal of the existing fixtures would have a positive benefit to the historic setting. Care and sensitivity would be exercised in the design of the new system, including relevant guidelines of the SI Standards. No Adverse Effect is anticipated.

3.8.6 Proposed Preservation Measures Extensive coordination and informational exchange meetings have been held to review and discuss the Build Alternative during the initial design phase. These review meetings provided opportunities to evaluate conceptual plans and options and to develop a design to mitigate potential adverse impacts.

The following proposed preservation measures have been considered and incorporated into the Build Alternative as assumptions.

Proposed General Preservation Conditions:

- All rehabilitation and restoration work on the Farley Building would be consistent with the SI Standards.
- Final plans and specifications would contain specific provisions and standards to ensure that the proposed activities meet the SI Standards and are undertaken in a manner that would not adversely affect the Farley Building.
- Construction activities would be undertaken in a manner that recognizes and protects the integrity of historic resources.

Proposed Preservation Conditions for the Farley Building:

- Renovation planning for the Farley Building would provide for the following measures to ensure that no Adverse Effect would result to its character-defining features. As noted in the Proposed General Preservation Conditions, the SI Standards would apply to all work.
- Exterior Rehabilitation would be undertaken to conserve and restore exterior building elements including masonry cleaning and repointing; replacement or rehabilitation of affected windows, doors, and associated trim to the original design intent; removal of incompatible cobra-head lighting; and installation of compatible new lighting, signs, and graphics.
- New midblock pedestrian entrances on West 31st and West 33rd Streets would be designed in compliance with the SI Standards. Modifications to existing historic fabric would be accomplished in a manner sensitive to the original design intent of the original Farley Building and the Annex.
- New pedestrian entrances at the corners of Eighth Avenue and West 31st and West 33rd Streets would be designed to be compatible with the historical features of the building.

- Vehicular ramps would be designed to be compatible with the historical characteristics of the building.
- Main postal lobby and flanking rotundas would be restored to their original condition.
- Postal side lobbies would be restored and adaptively reused as pedestrian links to the Amtrak intermodal transportation facility.
- Skylight designs in the proposed Amtrak passenger terminal concourse and ticketing areas, whether rehabilitation or replacement, would be designed and installed in a manner that respects the historical integrity and character of the Farley Building and are compatible with adjacent building components and spaces.
- Other Interior Areas of Significance, as identified in The Historic Building Survey (illustrated in Volume II, Appendix 2 of the 1995 Draft Environmental Assessment), would be treated in a manner that respects their historical integrity and character.

3.8.7 Comparison of the Current and 1995 Build Alternatives In terms of new construction, both schemes call for the removal of the first floor under the Work Room skylight to create a higher, grander space. However, there are substantial differences between the two plans in other areas. The current Build Alternative would require the reduction of the moat areas by approximately two-thirds, while the 1995 plan did not. The current Build Alternative proposes rehabilitation of the Work Room skylight that would retain its basic structural configuration with contemporary glazing. In contrast, the design treatment of the Work Room skylight was never resolved in the 1995 Plan. Two alternative treatments for the Work Room skylight were presented in the 1995 Plan: a replacement and a rehabilitation. The current Build Alternative includes a prominent 186-foot-high, glass-clad intermodal hall that would require reconfiguration of the interior of the present loading dock area and the removal of the two- and three-bay exterior wall sections linking the original building and the Annex at midblock. The removal of historic fabric in the 1995 Plan was generally limited to discreet areas out of general view at the basement level. The current Build Alternative features discreet at-grade entrances at infilled moat areas at the Farley Building's Eighth Avenue corners, while the 1995 Plan called for a more highly developed sunken plaza scheme with prominent signage at the corners.

Relative to the restoration effort, the two plans feature highly similar packages, focused in each case on the original Farley Building. Both plans include general cleaning, repair, and restoration of the building envelope, and the restoration of the main Postal Lobby fronting on Eighth Avenue. The 1999 plan provides a complete program for cleaning and restoring the original building as well as design guidelines for restoration of the Annex facade.

3.9 ENVIRONMENTAL RISK SITES

3.9.1 Summary Considering the age of the facilities and the uses to which they have been devoted, it is anticipated that some lead paint, asbestos insulation, or PCBs from electric motors, transformers, or other equipment would be found during implementation of either of the alternatives. During the review of the Project, the potential for hazardous materials within was

discussed with facilities management and maintenance personnel of Amtrak in Penn Station and of USPS in the Farley Building. In addition, hazardous materials mitigation efforts that had been completed in and around the project area were outlined.

3.9.2 Existing Conditions Within the last decade Amtrak and the USPS, as the owners of facilities within the Penn Station Complex, made a concerted effort to remove toxic chemicals, such as PCBs, from their equipment. The most common hazardous material remaining in buildings of the Penn Station Complex is asbestos. The site and records surveys of the facilities at the Farley Building indicate that while initial asbestos abatement work was accomplished by removal, the majority of subsequent asbestos abatement work in 1994 and 1995 was done by encapsulation of the asbestos-containing insulation materials in a fabric or fiberglass cover. No specific effort has been undertaken to remove any of the existing vinyl asbestos flooring material within the building. However, in areas that do not handle mail, the vinyl asbestos flooring has recently been covered with carpet. This carpeting should serve to protect and encapsulate asbestos in the existing flooring material. Given the age of the Farley Building, there are probably areas of lead paint and other commonly used toxic materials still present throughout the building.

While no specific areas of occurrence have been pinpointed, it should be assumed that the ground at the track level under Penn Station, between the east portal of the North River Tunnels and the west portal to the East River Tunnels, may contain concentrations of PCBs, lead paints, and a range of volatile organic compounds from solvents and cleaning compounds. The presence of asbestos used for insulation and PCBs used in electric control and transmission equipment also was anticipated at the 33rd Street Connector/Eighth Avenue Subway entrance.

3.9.3 Impacts of the No-Build Alternative The No-Build Alternative includes alterations to Penn Station to meet ever-increasing patron demands and safety and environmental system upgrades. The alterations would likely encounter hazardous materials such as asbestos, PCBs, lead paint and other toxic chemicals. Nearly all the environmental risk sites enumerated in the existing Penn Station will require attention within the next decade. According to Amtrak, all electrical equipment in Penn Station has had all the PCBs removed as part of a comprehensive program over the last decade. In addition, Amtrak has been conducting an ongoing asbestos abatement program that involves the removal of all asbestos-containing materials within Penn Station.

Currently known hazardous materials in the Farley Building have been identified and removed or encapsulated. The No-Build Alternative would involve only routine maintenance and repairs, which would result in no foreseeable new or additional impacts to the existing hazardous materials in the Farley Building. It is expected that Amtrak and the USPS will continue efforts to eliminate or reduce the presence of hazardous materials on their respective properties.

The No-Build Alternative includes only minor construction in the 33rd Street Connector/Eighth Avenue Subway station area. There are no anticipated impacts to hazardous materials that might be present in this facility.

3.9.4 Impacts of the Build Alternative In addition to the impacts noted in the No-Build Alternative above, there would be three principal areas affected under the Build Alternative.

Contaminants that may exist in the ballast and ground at track level may be disturbed by renovations to platforms to provide new vertical systems. Areas subject to demolition at the 33rd Street Connector/Eighth Avenue Subway station may disturb contaminants that are assumed to be present. The required structural changes at building foundations and at the basement floor level of the Farley Building can be anticipated to require ground disturbance where any new or supplemental foundation work is required which might disturb these contaminants and reintroduce them into the local environment.

3.9.5 Construction Impacts Construction impacts are discussed in sections 3.9.3 and 3.9.4.

3.9.6 Environmental Control/Remediation Measures PSRC would develop and implement an environmental control/remediation plan covering the construction period of the Build Alternative in accordance with Federal, state, and local regulations and requirements. Such a plan would typically involve the identification of potentially hazardous materials on site during the course of final project design. A field sampling program would then be implemented at the identified sites as part of the effort to determine the nature of the remediation to be undertaken. A health and safety plan to protect workers and others would be developed and instituted during the field sampling program and construction.

The Farley Building is very likely to contain asbestos and lead paint. Asbestos may be present in a variety of building materials, including pipe insulation, floor tiles, transite panels, and roofing materials. Since the Farley Building was constructed when the use of paint containing high levels of lead was very common, it is probable that most of the painted surfaces in the building contain lead. Asbestos-containing materials in the building will be abated prior to any renovation activities. City, state, and federal regulations specify abatement procedures that prevent dispersal of asbestos into the air. These include the use of containment barriers, keeping work areas under negative air pressure, and monitoring for the presence of airborne asbestos before, during, and after abatement work. Federal Occupational Safety and Health Administration (OSHA) regulations require precautions to minimize exposure to lead during demolition activities such as demolition of interior walls painted with lead-based paint. Any other hazardous materials which may be disturbed by renovation work would be identified during the final design stage and removed prior to construction following proper handling and disposal procedures.

Sampling for asbestos would be performed in accordance with the *Asbestos Hazard Emergency Response Act* (AHERA). Typical remediation would include the removal of any contaminated materials for off-site treatment or disposal at an appropriate site or encapsulation to prevent dispersion or contact. Analysis of suspected asbestos-containing materials would be performed per National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61, US Department of Labor, OSHA Standards, 29 CFR Part 1926 and the New York State Industrial Code. By following this approach, potentially hazardous materials would not be permitted to become airborne, thus averting exposure through inhalation.

If materials containing lead are identified, specifications would be prepared for their proper removal and disposal, in accordance with applicable rules and regulations, including but not limited to: the Federal Housing and Urban Development (HUD) guidelines, Federal statutes governing

lead exposure, and OSHA regulations 29 CFR Part 1926-62, Lead Exposure in Construction: Interim Final Rule.

All appropriate fugitive dust control measures—including watering of exposed areas and dust covers for trucks—would be employed. In addition, all necessary measures would be implemented to ensure that the New York City Air Pollution Control Code regulating construction-related dust emissions is followed. As a result, no significant air quality impacts from fugitive dust emissions are anticipated from construction of the Build Alternative.

For the Build Alternative, demolition, excavation, and construction would be conducted with the care mandated by the site's proximity to active uses. All remediation of hazardous materials would be conducted before construction begins.

3.9.7 Comparison of the Current and 1995 Build Alternatives There are no appreciable differences in terms of Environmental Risk Site issues between the 1995 EA and the Current Build Alternative.

3.10 ENERGY / UTILITIES

3.10.1 Summary The Farley Building currently operates with dated, inefficient utility systems. The No-Build Alternative would not have an impact on energy use. For the Build Alternative, energy efficiency would result from renovations in the Farley Building, even though the amount of energy used would increase.

3.10.2 Existing Conditions Penn Station is supplied with electricity and steam distributed from the nearby Service Building. High-pressure steam is piped to the basement of the Service Building by Consolidated Edison (ConEdison) and is then distributed through a tunnel under West 31st Street to Penn Station. Chilled water for the Penn Station air conditioning system was originally supplied from cooling towers located at the top of Two Penn Plaza. However, the owner of Two Penn Plaza requested that Amtrak remove the cooling towers from the roof of that building. Amtrak complied by temporarily relocating the cooling towers to a platform located above the parking lot east of the Service Building with permanent relocation to the roof of the Service Building. Most equipment in the heating, ventilation, and air conditioning (HVAC) system at Penn Station is almost 30 years old and past its economic design life. The equipment is generally energy-inefficient and unable to adequately meet heating requirements during the winter and fresh air demands during warmer months.

The Farley Building also is heated by high-pressure steam supplied by ConEdison. Two high-pressure steam connections are currently provided to the building, one from Ninth Avenue and the other from Eighth Avenue. Low-pressure steam is utilized for all air handling heating coils and perimeter heating in the Farley Building Annex, and hot water is used for perimeter heating in the Annex. Portions of the Farley Building are supplied with chilled water from the Morgan Facility Chiller Plant. The piping currently enters the building through the Morgan Annex Tunnel located at the basement level of the Annex. The mechanical ventilation system for the original portion of the Farley Building is inadequate for current needs. The entire system is antiquated and not as

energy-efficient as modern heating and cooling systems. Most offices in this portion of the Farley Building use window air conditioners to augment the existing central systems.

Electrical service lines for Penn Station are housed in the basement of the eastern half of the Service Building. There also is an 11,000-volt, 25-cycle feeder used as a back-up line for traction power. As part of the renovations undertaken at the Service Building, Amtrak replaced all antiquated power generating and distribution equipment and installed new traction power control equipment. Commercial electricity is presently supplied to the Farley Building via 3-phase, 60-cycle feeder lines.

Water is supplied to Penn Station and the Farley Building from New York City domestic and fire lines in the adjacent streets. Almost all of the water supply, sanitary sewer, storm water sewer, and heating piping above Level A (first level above platforms) in the Penn Station terminal dates to 1965-1968 alterations. Much of the piping below that level and in the service tunnels below the track level dates to the original 1905-1910 construction of Penn Station. Both systems are in need of replacement or major repair.

3.10.3 Impacts of the No-Build Alternative The No-Build Alternative would not have an impact on energy use. No major changes would be made in the Farley Building under this alternative.

3.10.4 Impacts of the Build Alternative The Build Alternative would increase energy use in the Farley Building because the intermodal transportation facility would bring additional uses into the building. The amount of the increase would be reduced because the Build Alternative would include upgrading the Farley Building's mechanical systems, including the complete removal of most old systems and the installation of new domestic water, sanitary sewer, HVAC, and wired systems from the basement level on up. These new systems would improve the efficiency of energy use.

Energy would be conserved as a result of more-efficient travel afforded by shifting Amtrak's access to train platforms from the current access in Penn Station to new locations in the renovated Farley Building. This shift would help relieve passenger congestion that constrains the number of trains per hour that can utilize the platforms. Increasing the number of trains that can use the existing platforms at Penn Station would make a substantial contribution to improved commuter and intercity rail passenger service in the New York area and the Northeast Corridor. Energy use would also be reduced by reducing train dwell times at the station. Improved rail service in the corridor, resulting in part from the renovated Amtrak passenger facilities in the Penn Station Complex, would attract more riders and make rail service more competitive with less-energy-efficient modes of transportation.

3.10.4.1 Farley Building Utilities

- ***High-Pressure Steam:*** Two high-pressure steam connections are currently provided to the building from ConEdison. These connections from Ninth Avenue and Eighth Avenue will be reused.

- **Electrical Service:** Two new ConEdison substation vaults would be created to replace the two existing vaults. These new vaults would be located at the bottom of each vertical ramp on West 31st and West 33rd Streets. Currently, discussions with ConEdison are taking place regarding the number of new services feeding the building and it is assumed that these new services would be rated at 480/277V. The new service feeders would replace seven existing services that are rated at 208/120V.
- **Communications Service:** Two communications ductbanks would be provided to connect the building to existing manholes. Discussions are being held with Bell Atlantic, which is presently the only Local Exchange Carrier (LEC) serving the building, to obtain further information on existing manhole locations and on existing ducts penetrating the building. The quantity of ducts in each bank would be sufficient to allow other service providers to serve the renovated facility.
- **Sewage:** A sewage ejector pump/duplex system would be provided for those levels below the public sewer.
- **Sanitary Drain:** Sump pumps would be provided to drain new elevator pits and other areas below the level of the existing system. Oil separators would be provided for the drainage system at the loading docks.
- **Domestic Water:** A new water service would be provided from the New York City water main.
- **Gas:** Gas service, gas meters, and gas regulators would be provided by ConEdison. The gas system would be sized for 50 percent future building expansion.
- **Storm Water Drainage System:** The storm water drainage system would convey roof water by gravity to the site storm water system from the existing and new roof areas. The storm water system would exclusively carry storm water. The drainage system would be sized for excess capacity to accept water from any adjacent drain that may be clogged. Trench drains would be provided for the loading dock ramps and would be connected to the storm water drainage system via new sump pumps at the concourse level. Due to the program space changes on the concourse level, existing storm water mains would be rerouted and reconnected to the existing or new (if required) connections to the city sewer.

3.10.4.2 Farley Building Systems

- **Primary Cooling System:** The feasibility of receiving chilled water from the Morgan Facility Chiller Plant was evaluated and it was determined that the Morgan Facility could not provide the additional chilled water required. Instead, it would be provided by a new 2000-ton chiller plant located on the roof of the Farley Annex. This chiller plant would

include chillers, cooling towers, a waterside economizer, pumps, etc. The USPS areas currently served by the Morgan Facility would continue to be served by this facility. The Morgan Facility chilled water piping currently enters the Farley Building through the Morgan Annex Tunnel located at the basement level of the Farley Annex. This existing chilled water piping would be rerouted in order to achieve coordination with the new loading dock planned for the basement level of the Farley Annex. PSRC and USPS building areas each would be supplied via separate chilled water piping networks; thus, two chilled water distribution systems would exist.

- **Primary Heating System:** High-pressure steam is provided to the Farley Building from ConEdison. High-pressure steam heating media would be utilized for a low-pressure steam system as well as a hot water system to be distributed to the heating equipment throughout the building. The building currently utilize low-pressure steam for all air handling heating coils and perimeter heating in the Farley Annex, and hot water for perimeter heating in the Farley Building. For all new air handling units and wherever else possible, hot water would be the preferred system for heating. PSRC and USPS building areas each would be supplied via separate low-temperature hot water piping networks; thus, two heating hot water distribution systems would exist.
- **Air Handling System:** The USPS HVAC systems impacted by the new layout design would be either replaced or rerouted in order to meet the individual needs of each space. The design is in development. A Smoke Purge System would also be provided for the efficient evacuation of smoke.
- **Electrical:** New services for the building would be provided by ConEdison at different locations than those currently serving the building. It is anticipated that the new services would be at 480/277V. A new main distribution switchroom would be located to serve each building quadrant. No allowances are being made within the building electrical system for track loads. A total building load of 12MVA is anticipated. Emergency power generators would be rated for 480/277V operation and would be located on the Concourse Level.
- **Fire Alarm System:** Analogue addressable design with a network of distribution intelligence would be employed. There would be a fire command station in the main control room, horns, pull stations, smoke detectors, elevator recall smoke detectors, and strobes provided.
- **Domestic Water—Cold Water Supply:** Source of the domestic water supply would be from a new water service from the New York City water main.
- **Hot Water Supply:** The hot water distribution system would consist of hot water generators and distribution piping. In areas requiring large water usage, storage-type water heaters would be installed with a hot water circulation system.
- **Sanitary System:** The system would convey waste by gravity. For levels below the New York City public sewer system, a sewer ejector pump/duplex system would be provided. Every sanitary drain would be equipped with a building house trap. Grease traps would be

provided as needed for various areas and systems within the building. For coordination with the proposed new loading dock location on the basement level of the Farley Annex, the existing sanitary piping would be partly removed and new street connections may be required for West 31st and West 33rd Streets.

- **Gas System:** Gas service, gas meters, and gas regulators would be provided by ConEdison. The gas system would be sized for 50 percent future building expansion.
- **Sprinkler System:** The building would have sprinklers throughout. Separate sprinkler and fire standpipe systems would be provided.
- **Building Management System:** A Building Management System would be used to control the mechanical and electrical systems needed to maintain environmental conditions. It would monitor energy consumption among other parameters.

3.10.5 Construction Impacts Energy consumption during construction would be typical for a major renovation project. No adverse effects are anticipated.

3.10.6 Comparison of the Current and 1995 Build Alternatives The energy and utility impacts are presented in greater detail in this document than was presented in the 1995 Environmental Assessment, making a direct comparison difficult. However, it can be noted that energy efficiencies of new building materials tend to improve over time, suggesting the current proposal could use more resource-efficient technologies. Conversely, the large intermodal hall skylight is likely to raise the energy consumption of the current Build Alternative above that in the 1995 plan.

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Attachment 3-1

**Letter from Federal Railroad Administration
to New York State Historic Preservation Office**



U.S. Department
of Transportation

**Federal Railroad
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

July 28, 1999

The Honorable Bernadette Castro
Commissioner
State Historic Preservation Office
New York State Office of Parks,
Recreation & Historic Preservation
Agency Building 1
Empire State Plaza
Albany, NY 12238

Re: Section 106 Review, Pennsylvania Station Redevelopment Project, New York City

Dear Commissioner Castro:

The Federal Railroad Administration ("FRA") is the lead Federal agency with respect to efforts to redevelop a portion of the James A. Farley Post Office ("Farley Building") in New York City into an intermodal transportation facility and commercial center. In accordance with the Advisory Council on Historic Preservation's regulations (36 C.F.R. Part 800), the FRA initiated a section 106 consultation process with the New York State Historic Preservation Office in August, 1994 with respect to an initial redevelopment proposal by the National Railroad Passenger Corporation (a proposal that was not progressed to final design). On February 17, 1999, the FRA notified you that we were re-opening the section 106 review with respect to a revised proposal to redevelop the Farley Building prepared by the Pennsylvania Station Redevelopment Corporation ("PSRC") and its lead architects, Skidmore Owings and Merrill ("SOM") and preservation and design consultants, Hardy Holzman Pfeiffer Associates LLP ("HHPA").

The purpose of this letter is to provide you with the FRA's determination of effect as required by section 800.5(b) and (c) of the Advisory Council's recently revised regulations. After careful review of the project as proposed by PSRC, the FRA has concluded that the undertaking will not have an adverse effect on properties listed or eligible for listing on the National Register of Historic Places. I have outlined below the basis for this conclusion as required in section 800.11(e) of the Council's regulations. I have also enclosed a copy of a *Summary of Historic Preservation Program Review: Pennsylvania Station Redevelopment Project, New York, New York* prepared by HHPA, which contains a detailed analysis of historic preservation considerations affecting the redevelopment project.

Description of the Undertaking

The FRA has several roles in the Pennsylvania Station Redevelopment Project. The

redevelopment of the Farley Building as an intermodal transportation facility and commercial center was authorized by Congress in the Intermodal Surface Transportation Efficiency Act of 1991 ("ISTEA") (Pub. L. No. 102-240, 105 Stat. 1914), as amended by the National Highway System Designation Act of 1995 ("NHSDA") (Pub. L. No. 104-59, 109 Stat. 568). Federal funds to help carry out the project have been appropriated by the Congress in several Department of Transportation and Related Agencies Appropriations Acts, through ISTEA as amended by NHSDA and through the Transportation Equity Act for the 21st Century (Pub. L. No. 105-178, 112 Stat. 107). These Federal funds are supporting PSRC's redevelopment project at Farley as well as life safety and high-speed rail improvements being undertaken by Amtrak at existing Pennsylvania Station. The FRA Administrator and the Secretary of Transportation also serve ex officio as members of PSRC's six member board of directors.

The proposed Pennsylvania Station Redevelopment Project has been designed to meet New York's transportation needs well into the 21st Century and creates a new station that models itself after the original Pennsylvania Station in both civic amenity and public accommodation. Integrating the new station within the historic Farley Building demands a commitment to historic preservation standards while satisfying United States Postal Service ("USPS") and PSRC programmatic requirements.

The Farley Project accommodates all transportation and postal functions within and beneath the existing Farley Building, with Amtrak facilities, a mid-block, at-grade intermodal hall, a train concourse, a postal loading dock below grade, and a commuter concourse as well as 8th Avenue subway connection improvements. The Project creates a sequence of functional spaces for the passenger station that is necessary to provide an efficient and clear path of arrival and departure for a very high number of mixed-mode passengers. The layout is similar to that of the original Pennsylvania Station, with a sky-lit concourse, a spacious intermodal hall and the potential for a prominent retail arcade that would extend to 9th Avenue.

The new station will have two mid-block entrances on 31st and 33rd Streets. At these entrances (complemented by smaller entrances at the corners of 8th Avenue), at-grade, Americans With Disabilities Act ("ADA") compliant access will be provided for all passengers and postal retail customers and covered areas will be included for efficient taxi pick-ups and drop-offs. Passengers will use these entrances to access the intermodal hall and retail areas to be created in the former space between the original building and the 1934 Annex.

A train concourse will be built adjacent to the intermodal hall. The train concourse will be a large public space under the Farley Building's historic skylight and will contain dedicated waiting areas for Amtrak passengers, circulation space, and retail and restaurant space. Similar to the concourse of the original Pennsylvania Station, the new station's train concourse will establish a visual connection to the track level so that passengers will have a clear sight line to the trains below, and natural light will once again reach the platforms, providing an important orienting factor for arriving passengers. Elevators, escalators, stairs, and ramps will provide vertical access to a commuter concourse and platform level.

The commuter concourse, a level below the train concourse, is allocated for commuter traffic and

is designed for quick access and egress to and from the platform level. All arriving passengers will exit trains at this level and then disperse to exit the station in an organized circulation pattern. The project also improves access to the Eight Avenue Subway and will improve circulation between existing Penn Station and the new Amtrak facilities in the Farley Building.

The USPS will continue to occupy its historic retail lobby and will retain the top floors of the East Building for administrative functions. The Project includes a reconfigured first floor loading dock and a new on-site loading dock in the West Building basement, accessible by ramps from 9th Avenue. USPS will maintain access to the railroad below for mail freight operations on Amtrak rail lines.

Program Objectives

By 2010, the new station complex, including the new station at Farley, is expected to handle more passenger volume than La Guardia, Newark, and Kennedy Airports combined, making it one of the busiest transportation facilities in the world. It will create a flagship passenger facility for Amtrak serving new high-speed trains, intercity rail, commuter rail lines, subways and airport access.

The PSRC plan provides a high level of passenger service and adequate flexibility for station expansion by responding to the following Project objectives:

- To create a well integrated expansion of the existing operation at Penn Station.
- To create a flagship passenger facility for Amtrak, serving new high speed trains and intercity rail.
- To accommodate future growth of intercity and high-speed rail.
- To provide for airport rail access to the region's airports, including the Masterlinks initiative, for a future one seat ride between Penn Station/Farley and Kennedy Airport.
- To provide adequate station access and emergency egress.
- To provide a high level of passenger service and passenger orientation.
- To serve the growing intermodal needs of commuters by improving street, bus, subway and commuter rail access.
- To create a visible presence on 31st Street and 33rd Street to announce the new station with a clear invitation to enter.
- To provide a visual connection at curbside to the intermodal hall and baggage check.
- To provide a shelter for vehicular drop-off and pick-up areas.

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- To respect the historic resource with minimal removal of historic fabric.
- To provide a significant public space, civic in scale and fully ADA accessible.
- To complement the new Long Island Rail Road and New Jersey Transit facilities in existing Penn Station.
- To reduce commuter congestion and improve life safety conditions within the existing transportation complex.
- To safeguard the billions of dollars in public investments in the Northeast Corridor by making sure that its gateway station is adequate both today and in the next century.

Identification of Historic Properties

Since the Pennsylvania Station Redevelopment Project will be carried out for the most part within the confines of the existing Farley Building, the existing Pennsylvania Station, and the platforms running below both buildings, the National Register listed Farley Building is the only historic property potentially affected by the Project. In making this determination, the FRA considered the nature and scope of the project and evaluated a study area comprising of an area bounded by West 35th Street on the north, Sixth Avenue on the east, West 28th Street on the south, and the midblock between Ninth and Tenth Avenues on the west. The original Amtrak proposal to create a passenger terminal at the Farley Building also included the use of the National Register eligible Service Building for certain functions supporting the new terminal at Farley. The Service Building is located mid-block across West 31st Street from Penn Station and was built as an integral element of the original station complex as a power generation and control center for the complex's buildings, trackage, traction, and signal power. The current PSRC plan does not involve any uses of the Service Building, which continues to be owned by Amtrak. Any future uses of this facility will be determined by Amtrak separate and apart from the Pennsylvania Station Redevelopment Project proposal. The remaining remnants of the original Pennsylvania Station that are located in the contemporary Penn Station have been so significantly altered as to no longer be historic. Accordingly, the FRA has concluded that the Project will not have an effect on any other property (other than the Farley Building) on or eligible for the National Register.

Description of Affected Properties

The Farley Building was designed by the notable firm of McKim Mead and White as a companion piece to the original Pennsylvania Station and as the embodiment of the City Beautiful Movement, the guiding principle for American urban design from the time of its demonstration in 1893 at the World's Columbian Exposition in Chicago until the Second World War. The design for the building was the responsibility of William Mitchell Kendall, Charles Follen McKim's protege at McKim Mead and White and McKim's chief assistant in the design of Pennsylvania Station. Mr. Kendall combined the appropriate grand and monumental public

spaces with extensive gross square footage of secondary spaces to support the complex postal operations. These spaces are wrapped in a monumental neo-classical granite facade that related particularly well to the original Pennsylvania Station. An Annex was added in 1934 when it became clear that the existing building contained insufficient space to meet growing Post Office needs. The Annex was also designed by McKim Mead and White, but in a more restrained neo-classical style that recalls the design elements of the original building.

In May 1966, the U.S. General Post Office (James A. Farley Building) became the seventh building to be designated a New York City Landmark and in January 1973 it was listed on the National Register of Historic Places under Criteria C (a property that embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction).

A room-by-room and area survey was conducted of the Farley Building (including the Annex) by McGinley Hart and Associates (as consultants to the FRA) to identify historically intact and/or significant areas of the building. Each room was evaluated for historical integrity and level of significance and ranked in terms of an appropriate level of preservation treatment. The Farley Building was evaluated with a four-part hierarchy of spaces and finishes. First were the grand public spaces created at the lobby and entrances and the second floor offices for key personnel such as the Postmaster and department heads. The elaborate neoclassical detailing of these spaces remains in evidence. The postal sorting area with its industrial skylight was the primary space classified as second rank. While some of the historic fabric has been removed over time, the skylight structure and scale of the room were deemed as integral to the character of the historic resource. The third ranked spaces typically include the Post Office's administrative departments. These spaces at the building's perimeter are typical offices with few character defining elements. The fourth ranking is typical of back of house spaces.

A survey and assessment of existing conditions in the Farley Building was made to identify and rate remaining elements of historic or character defining features. The public and ceremonial spaces, including the public stairways at the northeast and southeast corners, the lobbies, and third floor administrative offices remain virtually intact and were deemed most deserving of restoration. The second tier of offices and circulation spaces relating to character-defining features and original operational functions were felt to be deserving of preservation, with sensitive alteration possible. Most of the third and fourth tier spaces, while intact, were deemed appropriate locations for alterations.

Background documents supporting the assessment of historic properties include *Historic Resources Assessment, including Appendix A, Farley/Penn Station, New York* prepared by McGinley Hart and Associates and *Historic Building Survey, James A. Farley Post Office* also prepared by McGinley Hart and Associates. Copies of both of these documents have been provided to your staff.

Effects on Historic Properties

Since the proposed project will alter the Farley Building, FRA has evaluated potential effects on the building through application of the criteria of adverse effect found in the Advisory Council's regulations at 36 C.F.R. §800.5(a) in order to identify any changes that may compromise the historic integrity and National Register eligibility of the Farley Building or its setting.

SOM, working closely with HHPA and its restoration and conservation consultant, Building Conservation Associates (BCA), built on the background work that had been carried out by McGinley Hart and Associates and used the record developed during the course of the initial phase of the section 106 process with Amtrak to incorporate historic preservation considerations into the project design from the very beginning of concept design development. SOM and HHPA conducted a thorough review of the 1995 Plan, previous SHPO meeting minutes, and project correspondence in order to establish the starting point for the project's development. The 1995 plans were updated in 1999 to reflect the new project requirements as identified by the USPS and/or Amtrak. Whenever possible, the design team considered the SHPO's prior objections and concerns as part of their initial effort.

Once this effort had been completed in February 1999, the section 106 review process, which officially began in 1994, was reinitiated. A February 24, 1999 "kick-off" meeting concentrated on the history of the building, the identification of building components that define the character of the resource, evaluation of the existing conditions, an update on the programmatic needs of the project, review of the preservation elements included within the scope of work and a preliminary review of the new architectural elements required to satisfy the needs of this program. Consultation meetings with SHPO staff continued through the months of March, April, and May, 1999.

The proposed project respects the history of the Farley Building and retains its ceremonial, retail and distribution functions with connections to the railroad below. The Project incorporates the following historic preservation features:

- Preserves the original exterior facade, including restoration of broken and missing pieces and removal of inappropriate exterior lights.
- Preserves and restores the monumental 8th Avenue colonnade and steps.
- Locates primary station entrances at 31st and 33rd sidestreets to respect the historic facade.
- Preserves and restores the historic postal lobby.
- Provides full ADA access to the historic postal lobby and major public spaces.
- Accommodates all new programmatic elements in a way that is complementary to the historic resources yet clearly differentiated.

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- Achieves the program objectives with minimal modification of existing fabric and retains and preserves over 96 percent of the existing historic exterior.
- Reveals and opens the original work room and skylight structure to public use as the train concourse and commuter concourse.
- Reveals and restores the industrial character of the Post Office where appropriate.
- Incorporates a new intermodal hall to provide a new identity for the train station without conflicting with its historic postal use.
- Accommodates all original postal functions while introducing a major transportation use.
- Provides the Farley Building with a new transportation function that will insure its continued productive existence for many years.

The April 27, 1999 letter from Ruth L. Pierpont, Director, Field Services Bureau, highlighted several considerations relative to the project design and suggested three design parameters: retaining the existing skin of the building, with only minimal removal of stone, reducing the visibility of the new skylight over the intermodal hall, and providing for appropriate signage, canopies, etc. PSRC staff, including representatives from SOM and HHPA, met with SHPO staff as noted above to engage in intensive working meetings to review the outlined parameters and to present an extensive analysis of alternatives for discussion. This section 106 consultation process included amplification of the intended preservation scope of work, clarification of all program requirements, and the evaluation of alternative design approaches studied as part of the development of the concept design.

At the intermodal hall, program requirements necessitate a prominent and publicly visible entrance into the building and transportation facilities. SOM and HHPA used the SHPO's comments from the 1995 section 106 process as a guideline in order to develop a plan that balances all of the program requirements in such a way as to be minimally intrusive to the historic fabric. The project designers worked from the following assumptions in consideration of both the historic preservation and other program requirements:

- Penetrations at the 8th Avenue facade should be minimized as much as possible.
- The original work room skylight ranked as historic fabric worthy of preservation (second rank) and changes should be minimized with sensitive alternations possible.
- Removal of historic fabric should be limited as much as possible in spaces ranked by McGinley Hart and Associates as less significant (third and fourth rank).

The Architect thus decided to locate the principal station entrances at the mid-block loading dock area beyond the building line of the original 1913 building. However, from the standpoint of design, these new station entrances at mid-block posed a number of problems, including issues

related to ADA access, emergency egress, entrance visibility, weather protection and passenger orientation. In response to concerns expressed by the SHPO staff, SOM and HHPA evaluated a range of options to reduce the amount of historic fabric that would be removed on 31st and 33rd streets. These included a number of options for enclosure and signage for the primary mid-block entry as well as a variety of structural options. Chapters 10, HHPA's Analysis of New Program Elements, provides a summary of this review. These options did not satisfy basic transportation program needs (egress, ADA access, passenger orientation), USPS requirements, structural restraints, architectural concerns (differences in the 31st and 33rd street heights and facades) or historic preservation concerns (clear preference to limit disruption to 8th Avenue facade).

Also in response to the SHPO's concerns, SOM and HHPA undertook studies of the intermodal hall height to determine all critical sightlines. While the scale and proportion of this civic space is integral to its new function, PSRC has determined in consultation with SOM and the structural engineers that the height of the intermodal hall will be lowered approximately 10% in order to reduce its visibility from the street. SOM and HHPA have prepared detailed sight line analyses addressing the impact of the intermodal hall on the Farley Building, which are also included in HHPA's *Summary of Historic Preservation Program Review*.

Finding of Effect

The demanding programmatic requirements of this major transportation facility have been met in a way that requires minimal impact on existing historic fabric. In the design, the new is clearly differentiated from the old, and the project includes an extensive historic preservation program. All exterior facades of the original 1914 building, including the courtyard walls, are being preserved. A comprehensive program involving conservation of exterior materials will be undertaken to preserve existing historic fabric and to restore lost, missing or severely deteriorated materials. Disfiguring accretions that have been installed in recent years will be removed. All affected significant interior spaces have been treated in a manner that is sensitive to the original architecture and in compliance with the Secretary of the Interior's guidelines. The treatment of these areas includes extensive restoration and conservation of historic features and materials to preserve the architectural and functional integrity of the landmarked Post Office. The general public will experience the interior spaces in a way that was never before possible. The transformation of existing mail sorting rooms to the train concourse and commuter concourse has been carried out in such a way that the historic fabric in the previously non-public spaces can be seen and easily understood. In view of the Project's comprehensive preservation program, the detailed analysis undertaken by SOM and HHPA with regard to design alternatives, and the considerable efforts they have made to minimize removal of stone, reduce the visibility of the mid-block skylight, and provide for adequate signage, we have concluded that the penetration of 4% of the facade at mid-block is not significant when seen in the light of the overall adaptive re-use project.

With all of these considerations in mind, the FRA has concluded by applying the criteria found in section 800.5(a) of the Advisory Council's regulations that the proposed Pennsylvania Station Redevelopment Project will not have an adverse effect on the Farley Building because the Project will not alter, directly or indirectly, the characteristics of the building that qualify it for

inclusion in the National Register in a manner that would diminish the integrity of the building's location, design, setting, materials, workmanship, feeling or association.

Public Views

PSRC has conducted an extensive outreach effort and lecture program to present the proposed design to the public, including presentations to a number of civic groups and to the historic preservation community. Since the concept plan was released in March of this year, the design has received extensive and favorable coverage in the local and national press, both television and print. The public has had further opportunity to view the defining elements of the design at PSRC's project launch ceremony on May 19, 1999 led by President Clinton and Governor Pataki. A model of the project is currently on exhibit at the Museum of Modern Art in New York City and will remain on display until August 1, 1999.

Several prominent architectural critics, with extensive historic preservation credentials, have commented very favorably on the proposed design, including Herbert Muschamp of the *New York Times* and Paul Goldberger of the *New Yorker*. The Project has also received support from prominent leaders in the historic preservation community, such as Paul Byard, Director of Columbia University's Historic Preservation program and Philip Howard, Chairman of the Municipal Art Society. We have attached copies of several of these letters/articles for your information.

Finally, in accordance with the National Environmental Policy Act, FRA and its environmental consultants are currently updating a December 1995 environmental assessment of the Farley/Penn Station Project to reflect the revised PSRC proposal. The 1995 environmental assessment addressed the original Amtrak proposal and was circulated for agency and public comment in early 1996. However, no final action was taken on it since the Amtrak proposal upon which it was based was not progressed to final design. FRA intends to distribute the updated environmental assessment (which contains a section addressing impacts on historic resources and the section 106 process) for public and agency comment in the next few weeks. We will provide you with copies of comments we receive that address historic preservation issues.

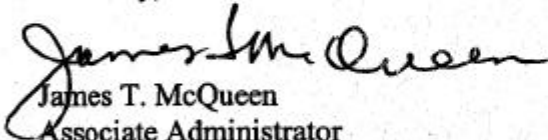
Conclusion

In conclusion, I would like to express our appreciation to you and your staff for the assistance you have provided to FRA and PSRC throughout the Section 106 consultation on the Farley Building proposal. We appreciate the input we received from your office which helped the PSRC team identify the key historic preservation issues and directed the team's focus on carefully identifying the essential transportation program needs and on conducting a rigorous analysis of alternatives with respect to any project components that might impact on historic fabric. Finally, let me assure you that FRA and PSRC will be vigilant in ensuring the historic

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preservation commitments that have been made will be carried out and that historic preservation concerns will remain an important focus of the design team as the project moves through the later stages of design. We will keep your office informed on any significant developments.

Sincerely,



James T. McQueen
Associate Administrator
for Railroad Development

Enclosures

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CHAPTER 5

PUBLIC AND AGENCY AWARENESS

5.1 PROJECT AWARENESS

The Penn Station Redevelopment Project has had a high community profile since its inception. Public and agency awareness of the Project began with Amtrak's Pennsylvania Station Associates Partnership that initially launched the Project in 1994. In the early stages of the Project, Amtrak undertook a public involvement program to introduce the proposed Project to agencies and organizations believed to have an interest. As part of that program, Amtrak conducted approximately 100 "one-on-one" meetings with public agencies, elected officials, business organizations and leaders, and community groups. Pennsylvania Station Redevelopment Corporation (PSRC) has expanded public and agency awareness since it assumed leadership for the redevelopment effort. PSRC has continued to brief interested parties as to the changing nature of the Project.

PSRC represents the interests of the City of New York, the State of New York, and the Federal Government. PSRC's Board of Directors consists of the following members: two appointees of the Governor of the State of New York; two appointees of the Mayor of the City of New York; and two ex-officio Federal representatives, the Secretary of the U.S. Department of Transportation and the Administrator of the Federal Railroad Administration. With this broad base of leadership, the planning of the station is incorporating the interests of all of these as well as the specific agencies that have executed funding agreements for the Project. In addition, PSRC coordinates with Amtrak, the United States Postal Service, the NYS-DOT, the Port Authority of New York and New Jersey, the Department of City Planning, and the Metropolitan Transportation Authority among others.

From its inception, PSRC has coordinated with local political leaders, civic groups, and community associations in an effort to ensure that the Build Alternative reflects the interests of the station's passengers and the surrounding community.

Local Political Leaders

- February 11, 1999: PSRC toured the Farley Building with State Commissioner of Parks, Recreation, and Historic Preservation.
- February 17, 1999: PSRC and U.S. Senator Daniel Patrick Moynihan met with Mayor Rudolph Guiliani, Landmarks Preservation Chairperson Jennifer Raab, New York City Planning Commissioner Joe Rose, and other New York City mayoral aides.
- February 17, 1999: PSRC and U.S. Senator Daniel Patrick Moynihan met with City Council Speaker Peter Vallone and New York City Council's Land Use Division Director Gail Benjamin.

- May 27, 1999: New York City Transportation Coordinating Committee (NYCTCC) Public Meeting. PSRC's application for Congestion Mitigation and Air Quality Program (CMAQ) funds, which detail the Build Alternative and its beneficial impact on air quality, was released for public review pursuant to metropolitan planning organization (MPO) guidelines for federal transportation funding.

Civic Groups

- PSRC has conducted tours of the Farley Building for groups including: Disabled in Action, Eastern Paralyzed Veterans Association, Municipal Arts Society, Project for Public Spaces, Landmarks Conservancy, New York Building Congress, and Hell's Kitchen Neighborhood Association.
- PSRC and Project architects Skidmore, Owings and Merrill spoke to the public about the Build Alternative and its relationship to the surrounding urban fabric at two separate lectures on June 10 and June 15, 1999 (at the request of the Architectural League of New York and the Hell's Kitchen Neighborhood Association).

Public Review

Public and agency awareness of the Project extends beyond the limits of New York City due to extensive media exposure. PSRC has provided representatives of the New York City and national print and broadcast media with information about the Project on a continuing basis and has received mention in the press.

- On May 19, 1999 a ceremony was held in the Farley Building to publicly unveil the Build Alternative. President Clinton attended the ceremony and was the featured speaker. Also in attendance were Governor Pataki, Senator Moynihan, and other political and public leaders. A week prior to the ceremony, 500 invitations were distributed to interested individuals, including local congressmen, community board leaders, and civic group participants. An estimated 300 people were in attendance.
- A model of the schematic design of the Build Alternative was displayed for public viewing at the Museum of Modern Art in New York City from June 21, 1999 through August 1, 1999.
- Amtrak has coordinated with the New York State Historic Preservation Office (SHPO) since the beginning of the Project. In June 1994, in the initial phases of the Project, Amtrak began a series of meetings with the staff of the SHPO to facilitate its participation in the timely identification of historic issues and concerns and in the development of ways of avoiding or minimizing potential impacts. Amtrak began formal consultation with the SHPO on September 13, 1994 and continued until late in 1996 when the Project was reconfigured and PSRC was created. The FRA furthered this relationship in 1999 by again involving the SHPO in the design process with PSRC. PSRC then reinitiated formal consultation with SHPO pursuant to Section 106 of the National Historic Preservation Act beginning in February 1999.

5.2 DOWNTOWN BUSINESS INVOLVEMENT

An extensive public involvement program was initiated by Amtrak in the early evolution of the Project, as reflected in the number of presentations made since the inception of the redevelopment concept. The Business Improvement District for this area of the city, the 34th Street Partnership, was involved early in the process.

5.3 NEIGHBORHOOD AWARENESS

Community Board 4 and Community Board 5 function in the area of the Penn Station Complex. These boards are neighborhood-oriented and are typically less focused on business concerns than the 34th Street Partnership. The areas of concern that they raised in 1994 were related to land use and the potential effects of zoning and development on the existing neighborhood fabric. The boards were informed about the proposed Project by Amtrak and of Amtrak's scoping meeting process. PSRC will continue to coordinate with the Community Boards and the 34th Street Partnership through the final planning stage for the Project, should the Build Alternative be approved.

5.4 SCOPING MEETINGS

Scoping meetings to help define the issues evaluated in the Environmental Assessment were held on August 16, 1994 and October 13, 1994. The first scoping meeting was intended for the ten public agencies identified as having a direct or indirect interest in the Project. The meeting was held in the Farley Building and was attended by 18 agency representatives who reviewed a presentation of the proposed Project and its objectives and then followed with questions. Written comments were encouraged. Provisions were made for those who wanted to submit their comments at the conclusion of the meeting.

The second scoping meeting was an advertised meeting for the general public and private and nonprofit organizations. A public notice, an approximately 5" x 6" display ad, announcing the time, place, and subject of the meeting was published in *the New York Times*, the *Clinton News*, and *el diario/La Prensa*, a Spanish-language newspaper with coverage in the neighborhood of the Penn Station Complex. The second scoping meeting was held in the Farley Building Annex to ensure adequate space would be available for all who might attend. In addition to the public notice, invitations were mailed to 65 people who were identified as having an interest in the proposed Project. This list included 19 private-sector or nonprofit organizations, four of which have the Project site within their direct area of concern. Appointed officials having an interest in the proposed Project were among those invited.

Approximately 50 persons attended the second scoping meeting. Each was given a comment sheet and encouraged to provide his or her comments and concerns with respect to the proposed Project. Again, questions were received from those in attendance and each was responded to by the appropriate presenter. FRA prepared a summary of the comments provided by participants at the two scoping meetings and a response indicating how each comment was addressed. All comments were reviewed and considered in the refinement of the original proposal, which has

formed the basis for the revised PSRC proposal. Since its inception, PSRC has presented the Project in a more informal setting to local community and activist groups to reintroduce the Project as it now exists.

5.5 1995 DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS AND RESPONSES

As discussed in section 1.1, FRA circulated in 1995 for public review and comment a Draft Environmental Assessment that analyzed the original Amtrak proposal. FRA prepared a summary of the comments received along with a response indicating how each comment was addressed. No final action was taken on the 1995 Environmental Assessment due to PSRC's assumption of responsibility for Project development and its preparation of revised Project plans.