Chapter 18: Response to Comments on the DEIS and SDEIS[1]

A. INTRODUCTION

This chapter responds to all substantive comments received on the DEIS published in February 2007 and the SDEIS published in March 2008.

The DEIS and its Notice of Availability was distributed to interested agencies and individuals and were posted on the ARC website in advance of the February 9, 2007 *Federal Register* notice. NJ TRANSIT advertised information about the public hearings in over 20 publications in New York and New Jersey. The DEIS public hearings were held on March 12, 2007 in Newark, New Jersey, on March 14, 2007 in North Bergen, New Jersey and on March 27, 2007 in Manhattan, New York. The DEIS public comment period began on February 9, 2007 and concluded on April 10, 2007.

The SDEIS and its Notice of Availability were distributed to interested agencies and individuals and was posted on the ARC website in advance of the March 14, 2008 *Federal Register* notice. NJ TRANSIT advertised information about the SDEIS public hearings in nine publications in New York and New Jersey. The SDEIS public hearings were held on March 31, 2008 in Newark, New Jersey and on April 1, 2008 in Manhattan, New York. The SDEIS public comment period began on March 14, 2008 and concluded on April 28, 2008.

This chapter presents the agencies, organizations and individuals that commented on the DEIS and SDEIS, and summarizes and responds to those comments. Section B of this chapter lists the resource agencies, elected officials, local governments, community boards, organizations and individuals that provided comments on the DEIS and the SDEIS. A summary comment code is shown following each commenter name. The comment code begins with the Name/Organization, followed by a number starting with 1, and the Comment Type [L=letter; T=testimony; E=email]. For example, "*Amtrak 1E"* is the first comment submitted by Amtrak via email.

Section C summarizes the comments and the responses to the comments. The comment summaries convey the spirit of the comments, but do not in all cases quote the comments verbatim. The comments are organized by subject area (**Table 18-1**). Within each subject area, DEIS comments are listed first, followed by SDEIS comments. The DEIS comment numbers are followed by the letter "D" and the SDEIS comment numbers are followed by the letter "S". Following each comment is a list in parenthesis of the people or organizations that commented. If multiple comments were received on the same subject, they are summarized into a single comment with each commenter code listed afterwards. All reference letters, testimony, and emails included in Appendix 18 are annotated with the comment code in the margin.

[1] This entire chapter is new for the FEIS.

TABLE 18-1: COMMENT SUBJECT AREAS

• Purpose and Need (Chapter 1)
• Project Alternatives (Chapter 2)
• Public Transportation (Chapter 3, Section 3.1)
• Station Access and Parking (Chapter 3, Section 3.2)
• Roadways (Chapter 3, Section 3.3)
• Pedestrians (Chapter 3, Section 3.4)
• Freight (Chapter 3, Section 3.5)
• Land Use (Chapters 4 and 5, Sections 4.2 and 5.2)
• Community and Environmental Justice (Chapters 4 and 5, Sections 4.3 and 5.3)
• Visual and Aesthetic Resources (Chapters 4 and 5, Sections 4.5 and 5.5)
• Air Quality (Chapters 4 and 5, Sections 4.6 and 5.6)
• Noise & Vibration (Chapters 4 and 5, Sections 4.7 and 5.7)
• Ecology (Chapters 4 and 5, Sections 4.8 and 5.8)
• Water Resources (Chapters 4 and 5, Sections 4.9 and 5.9)
• Parklands (Chapters 4 and 5, Sections 4.10 and 5.10)
• Soils & Geology (Chapters 4 and 5, Sections 4.11 and 5.11)
• Contaminated Materials (Chapters 4 and 5, Sections 4.12 and 5.12)
• Safety and Security (Chapters 4 and 5, Section 4.13 and 5.13)
• Utilities, EMF, Energy (Chapters 4 and 5, Section 4.15-4.17 and 5.15-5.17)
• Indirect and Cumulative Effects (Chapters 4 and 5, Sections 4.18 and 5.18)
• Construction Methods (Chapters 3 and 5, Section 3.6 and Chapter 5)
• Archaeological and Historic Resources (Chapters 6 and 7)
• Financial (Chapter 10)
• Permits (Chapter 11)
• Public Participation, Consultation and Coordination (Chapters 12 and 13)
• Project Support and Opposition
• Miscellaneous

The SDEIS Refined Build Alternative addressed many of the concerns and issues raised during the DEIS comment period. Nearly 100 of the 630 DEIS comments were addressed by the SDEIS Refined Build Alternative.

The ARC FEIS indicates with double-underlining changes and additions that were not included in the DEIS or the SDEIS. Responses to comments that were addressed by the SDEIS refinements are not highlighted in the FEIS, but are described in this chapter.

B. LIST OF COMMENTERS

AGENCIES

FEDERAL

Federal Highway Administration - New Jersey Division, Lawrence Cullari, letter of 4/10/2007 (Comments *FHWA NJ 1L through FHWA NJ 7L*)

Federal Railroad Administration, David Valenstein, email of 2/6/2007 (Comment *FRA 1E*)

Federal Railroad Administration, Mark Yachmetz, letter of 4/6/2007 (Comment *FRA 1L*)

National Marine Fisheries Service, Stanley Gorski, letter of 4/10/2007 (Comments *NMFS 1L though NMFS 23L*)

United States Coast Guard, Jeff Yunker, email of 3/16/2007 (Comment *USCG 1E*)

United States Coast Guard, Waterways Management Division, M. McBrady, letter of 3/27/2007 (Comments *USCG 1L through USCG 5L*); letter of 5/6/2008 (Comment *USCG2 1L*)

United States Department of the Interior, Willie R. Taylor, letter of 4/16/2007 (Comments *USDOI 1L through USDOI 32L*); letter of 5/15/2008 (Comments *USDOI2 1L through USDOI2 4L*)

United States Environmental Protection Agency, Region II, John Filippelli, letter of 4/10/2007 (Comments *EPA 1L through EPA 27L*); letter of 4/28/2008 (Comments *EPA2 1L through EPA2 10L*)

REGIONAL

Amtrak, Jared Roberts, email of 4/10/2007 (Comments *Amtrak 1E through 4E*)

Amtrak, Alexander Kummant, letter of 4/28/2008 (Comments *Amtrak2 1L through 5L*)

Amtrak, Anne Witt, letter of 8/11/2008 (NJ TRANSIT response letter dated October 27, 2008)

Conrail, Leo McGlynn, email of 4/13/2007 (Comments *Conrail 1E through Conrail 2E*)

Port Authority of New York & New Jersey, Cedric Fulton spoken testimony of 4/1/2008 (Comments *PATH 1L*)

Office of Budget Administration, Scott Webber, email of 4/9/2008 (Comments *OBA 1E through 2E*)

STATE/CITY

City of New York Parks & Recreation, Joshua Laird, letter of 4/10/2007 (Comments *NYP&R 1L through NYP&R 10L*)

Hudson County Improvement Authority, Norman Guerra, spoken testimony of 3/14/2007 (Comment *HCIA 1T*); email of 3/28/2008 (Comment *HCIA2 1E through 21E*)

Hudson River Park Trust, Noreen Doyle, letter of 4/9/2007 (Comments *HRPT 1L through HRPT 18L*)

STATE/CITY (CONTINUED)

Metropolitan Transportation Authority, William Wheeler, letter of 4/10/2007 (Comments *MTA 1L through MTA 29L*); letter of 4/18/2008, (Comment *MTA2 1L*); spoken testimony of 4/1/2008 (Comment *MTA2 1T*)

New Jersey Department of Community Affairs - Office of Smart Growth, Eileen Swan, letter of 4/11/2007 (Comment *NJ Smart Growth 1L*)

New Jersey Department of Environmental Protection, Frank Faranca, letter of 3/6/2007 (Comments *NJDEP 1L through NJDEP 2L*)

New Jersey Department of Environmental Protection, Gary Sondermeyer, letter of 4/19/2007 (Comment *NJDEP2 1L*)

New Jersey Department of Environmental Protection, Kenneth Koschek, letter of 4/19/2007 (Comments *NJDEP3 1L through NJDEP3 35L*); letter of 4/30/2008 (Comments *NJDEP4 1L through NJDEP4 4L*)

New Jersey Department of Labor and Workforce Development, David Socolow, letter of 4/10/2007 (Comment *NJLWD 1L*)

New Jersey Department of Transportation, Kris Kolluri, letter of 4/9/2007 (Comment *NJDOT 1L*)

New Jersey State Legislature, Loretta Weinberg, letter of 4/21/2008 (Comment *NJSL 1L)*

New York City Department of Environmental Protection, Terell Estesen, email of 4/10/2007 (Comments *NYCDEP 1E through NYCDEP 3E*)

New York City Department of Environmental Protection, Steven Lawitts, letter of 4/28/2008 (Comment *NYCDEP 1L*)

New York State Assembly, Daniel O'Donnell, spoken testimony of 3/31/2008 (Comment *NYStateAssem 1T*)

New York State Department of Transportation, Region 11, Ian Francis, letter of 4/9/2007 (Comments *NYSDOT 1L through NYSDOT 33L*)

New York State Office of Parks, Recreation, and Historic Preservation, Beth Cumming, letter of 3/26/2007 (Comments *NYSOPRHP 1L through NYSOPRHP 4L*)

Permanent Citizens' Advisory Committee to the MTA, William Henderson spoken testimony of 4/1/2008 (Comments *PCAC2 1T through PCAC2 5T*); email of 4/28/2008 (Comments *PCAC3 1E through PCAC3 3E*)

ELECTED OFFICIALS

Bergen County Board of Chosen Freeholders, Dennis McNerney, spoken testimony of 3/13/2007 (Comments *Bergen Freeholder 1T through Bergen Freeholder 2T*)

Manhattan Borough President, Scott Stringer, spoken testimony of 3/27/2007 (Comments *MBP Stringer 1T through MBP Stringer 7T*)

Middlesex County, Jun Choi, letter of 3/12/2007 (Comment *Mayor Choi 1L*)

ELECTED OFFICIALS (CONTINUED)

New Jersey House of Representatives, Albio Sires, spoken testimony of 3/14/2007 (Comment *Congressman Sires 1T*)

New Jersey House of Representatives, Frank Pallone, letter of 3/13/2007 (Comment *Congressman Pallone 1L*); spoken testimony of 3/31/2008 (Comment *NJRepPallone 1T*)

New Jersey House of Representatives, Bill Pascrell, spoken testimony of 3/31/2008 (Comment *NJRepPascrell 1T*)

New Jersey State Legislature, John Wisniewski, letter of 3/12/2007 (Comment *NJ General Assembly 1L*)

New York City Comptroller's Office, Steve Strauss, email of 2/27/2007 (Comments *NYC Comptroller 1E through NYC Comptroller 2E*)

New York City Council, Christine Quinn, spoken testimony of 3/27/2007 (Comments *Council Quinn 1T through Council Quinn 2T*); spoken testimony of 4/1/2008 (Comment *NYC Council 1T*);

New York City Council, Transportation Committee Chair John Liu, spoken testimony of 3/27/2007 (Comment *NYC Transportation Committee 1T*)

New York City Office of The Mayor, Daniel Doctoroff, letter of 3/26/2007 (Comments *Doctoroff 1L through Doctoroff 2L*)

New York State Senate, Thomas Duane, spoken testimony of 3/27/2007 (Comments *Senator Duane 1T through Senator Duane 3T*)

Ocean County Board of Chosen Freeholders, Donna Flynn, spoken testimony of 3/31/2008 (Comment *OCBoCF 1L*)

Office of the NYC Comptroller, William Thompson, letter of 4/5/2007 (Comments *Comptroller NYC 1L through Comptroller NYC 4L*)

Paterson, Jose Torres, letter of 3/8/2007 (Comment *Mayor Torres 1L*)

Secaucus, Dennis Elwell, spoken testimony of 3/14/2007 (Comment *Mayor Elwell 1T*)

Somerset County Board of Chosen Freeholders, Kathryn Quick, letter of 3/6/2007 (Comment *Somerset Freeholders 1L*)

Somerset County Planning Department, Robert Bzik, letter of 3/27/2008 (Comment *SomersetPD 1L*); spoken testimony of 3/31/2008 (Comments *SomersetPD2 1T through SomersetPD2 2T*)

Summit City, Clerk, spoken testimony of 3/31/2008 (Comments *SummitCity 1T through SummitCity 3T*)

Union County, J. Christian Bollwage, letter of 3/13/2007 (Comment *Mayor Bollwage 1L*)

Union County Board of Chosen Freeholders, Angel Estrada, letter of 3/28/2008 (Comment *Union 1L*)

United States House of Representatives, John Hall, spoken testimony of 4/1/2008 (Comment *USRep 1T*)

ELECTED OFFICIALS (CONTINUED)

United States House of Representatives-District Office, Jerrold Nadler, spoken testimony of 3/27/2007 (Comment *United States Rep Nadler 1T*)

United States Senate, Hillary Clinton, spoken testimony of 3/27/2007 (Comment *Senator Clinton 1T*); spoken testimony of 4/1/2008 (Comment *Senator Clinton2 1T*)

United States Senate, Frank Lautenberg, spoken testimony of 3/13/2007 (Comment *Senator Lautenberg 1T*); spoken testimony of 3/31/2008 (Comment *Senator Lautenberg2 1T*)

United States Senate, Robert Menendez, spoken testimony of 3/13/2007 (Comment *Senator Menendez 1T*); spoken testimony of 3/31/2008 (Comment *Senator Menendez2 1T*)

Mayor of Wood-Ridge, Paul Sarlo, letter of 3/13/2007 (Comment *Mayor Sarlo 1L*)

LOCAL GOVERNMENT AND COMMUNITY BOARDS

Bergen County Department of Planning & Economic Development, Farouk Ahmad, spoken testimony of 3/13/2007 (Comment *Bergen Planning 1T*)

Community Board 4/Coalition of Pedestrian Issues, Christine Berthet, spoken testimony of 3/27/2007 (Comments *CB4 Pedestrians 1T through CB4 Pedestrians 6T*)

Community Board 5, David Siesko, letter of 5/7/2008 (Comments *CB5 1L through CB5 1L through 7L*)

City of Summit, Rita McNany, spoken testimony of 3/31/2008 (Comment *CityofSummit 1T*)

Essex County, John McKeon, letter of 3/31/2008 (Comment *EssexCounty 1L*)

Hudson County, Jerramiah Healy, letter of4/24/2008 (Comments *HC 1L through HC 1L*)

Hudson County, David Roberts, letter of 4/28/2008 (Comments *HC2 1L through HC2 7L*)

Hudson County Board of Chosen Freeholders, Thomas DeGise, spoken testimony of 3/31/2008 (Comment *HCBOCF 1T*)

Hudson County Division of Engineering, Borivoj Jasek, letter of 4/29/2008 (Comments *Hudson County Engineering2 1L through Hudson County Engineering2 15L*)

Hudson County Division of Planning, Stephen Marks, spoken testimony of 3/27/2007 (Comments *HCDP 1T through HCDP 16T*); letter of 4/28/2008 (Comments *HCDP2 1L through HCDP2 10L*)

Hudson County Engineering & Planning Department, Borivoj Jasek, letter of 4/9/2007 (Comments *Hudson County Engineering 1L through Hudson County Engineering 13L*)

Manhattan Borough President, Scott Stringer, letter of 4/28/2008 (Comments *MBP2 1L through MBP2 3L*)

Manhattan Community Board Four, J. Lee Compton, letter of 4/16/2007 (Comments *CB4 1L through CB4 16L*)

Manhattan Community Board Four, Jean-Daniel Noland, letter of 4/28/2008 (Comments *CB42 1L through CB42 16L*); letter of 5/8/2008 (Comments *CB43 1L through CB43 4L*)

LOCAL GOVERNMENT AND COMMUNITY BOARDS (CONTINUED)

Middlesex County Planning Department, George Ververides, letter of 3/5/2007 (Comment *Middlesex Dept of Planning 1L*)

Middlesex County Transportation Coordinating Committee, John Hogan, letter of 3/27/2007 (Comment *Middlesex TCC 1L*)

Monmouth County Planning Board, Joseph Rettagliata, letter of 3/21/2008 (Comments *MonmouthCountyPlBd 1L through MonmouthCountyPlBd 2L)*

Ocean & Monmouth Counties, Ralph Patterson, spoken testimony of 3/13/2007 (Comments *O&M Freeholders 1T through O&M Freeholders 2T*)

Rockland County Department of Planning, Sean Meyer, letter of 4/9/2007 (Comments *Rockland 1L through Rockland 12L*)

Rockland County - Office of the County Executive, C. Scott Vanderhoef, letter of 3/21/2008 (Comment *RocklandCE 1L*)

Rockland County Transportation Advisory Board, Orrin Getz, letter of 4/10/2007 (Comment *Rockland TAB 1L*)

Village Hall, Dennis McEnery, spoken testimony of 3/27/2007 (Comments *Village Hall 1T through Village Hall 2T*)

ORGANIZATIONS

34th Street Partnership, Dan Biederman, spoken testimony of 3/27/2007 (Comment *34th Partnership2 1T*); letter of 4/13/2007 (Comment *34th Partnership 1L*); spoken testimony of 4/1/2008 (Comment *34th Partnership4 1T*)

34th Street Partnership, Seth Taylor, spoken testimony of 3/27/2007 (Comment *34th Partnership3 1T*)

ABNY, Richard Loconte, spoken testimony of 3/27/2007 (Comment *ABNY 1T*)

ACEC- NJ, Peter Allen, letter of 3/31/2008 (Comment *ACECNJ 1L*)

AGC of NJ, Brian Tobin, spoken testimony of 3/31/2008 (Comment *AGCofNJ 1T*)

Alan M. Voorhees Transportation Center, Martin Robins, letter of 3/13/2007 (Comments *Voorhees 1L through Voorhees 2L*); spoken testimony of 3/27/2007 (Comment *Voorhees 1T*); spoken testimony of 3/31/2008 (Comment *Voorhees2 1T*); letter of 4/2/2008 (Comment *Voorhees3 1L through Voorhees3 2L*)

American Society of Civil Engineers, Robert Olmsted, letter of 4/2/2007 (Comments *ASCE 1L through ASCE 3L*)

American Council of Engineering Companies of New York, Hannah O'Grady, spoken testimony of 4/1/2008 (Comment *AmerCounEngineeNY 1T*)

Association for a Better New York, Michelle Adams, spoken testimony of 4/1/2008 (Comment *AssocforBetterNY 1T*)

Association of Public Transportation, Richard Arena, letter of 4/28/2008 (Comment *AssocPubTrans1L*)

ORGANIZATIONS (CONTINUED)

Blarney Rock Pub, Alison Dwyer, spoken testimony of 4/1/2008 (Comments *BlarneyRockPub 1T*)

Building Trades Employers Association, Louis Coletti, spoken testimony of 3/27/2007 (Comment *Building Trades 1T*)

C/S 12th Avenue LLC, Joseph Rose, letter of 4/10/2007 (Comments *C/S 1L through C/S 13L*)

Carpenters Union, Steve Merman, spoken testimony of 3/13/2007 (Comment *Carpenters 1T*)

CHEKPEDS, Christine Berthet, letter of 4/1/2008 (Comments *CHEKPEDS 1L through CHEKPEDS 10L*); spoken testimony of 4/1/2008 (Comments *CHEKPEDS 1T through CHEKPEDS 6T*)

Consolidated Edison of New York, Inc., John Banks, letter of 4/9/2007 (Comments *Con Edison 1L through Con Edison 17L*)

Consolidated Edison of New York, Inc., Eric Dessen, letter of 4/28/2008 (Comments *Con Edison2 1L through Con Edison2 10L*)

Consolidated Edison of New York, Inc., David Gmach, spoken testimony of 4/1/2008 (Comments *Con Edison2 1T through Con Edison2 11T*)

Delaware Valley Association of Rail Passengers, Matt Sera, letter of 3/15/2007 (Comments *DVARP 1L through DVARP 3L*)

East Coast Greenway Alliance, New Jersey Committee, Michael Selender, spoken testimony of 3/13/2007 (Comments *Greenway 1T through Greenway 3T*)

Empire State Passengers Association, Bruce Becker, spoken testimony of 4/1/2008 (Comments *EmpStatePasAssoc 1T through EmpStatePasAssoc 4T*)

Evergreen Environmental, LLC Mark Renna, letter of 3/22/2008 (Comments *EvergreenEnviroLLC 1L through EvergreenEnviroLLC 6L*)

Friends of the Hudson River Park, Albert Butzel, email of 3/26/2007 (Comments *Friends of HRP 1E through Friends of HRP 5E*)

General Contractors Association, Chris Ward, email of 4/5/2007 (Comments *General Contractors 1E through General Contractors 4E*)

General Contractors Association, Felice Farber, spoken testimony of 4/1/2008 (Comment *General Contractors2 1T*)

Hotel Association of New York City, Inc., Joseph Spinnato, letter of 3/23/2007 (Comment *Hotel NYC 1L*)

Hudson County Building Trades Council, Eric Boyce, spoken testimony of 3/13/2007 (Comment *Hudson Building 1T*)

Hudson County Building Trades Council/UA Plumbers Local 14, Michael Zaccardi, spoken testimony of 3/13/2007 (Comment *UA Plumbers 14 1T*); spoken testimony of 3/31/2008 (Comment *Local14 1T*)

ORGANIZATIONS (CONTINUED)

Hudson County Central Labor Council AFL-CIO, Peter Busacca, spoken testimony of 3/14/2007 (Comment *Hudson County Central Labor 1T*); spoken testimony of 3/31/2008 (Comment *Hudson County Central Labor2 1T*)

Hudson Yards Development Corporation, Lou D'Amico, letter of 4/10/2007 (Comments *HYDC 1L through HYDC 2L*); letter of 4/1/2008 (Comments *HYDC2 1L through HYDC2 3L*)

Institute for Rational Urban Mobility, George Haikalis, spoken testimony of 3/27/2007 (Comments *IRUM 1T through IRUM 2T*); email of 4/10/2007 (Comments *IRUM 1E through IRUM 3E*); spoken testimony of 3/31/2008 (Comments *IRUM2 1T through IRUM2 4T*); letter of 4/28/2008 (Comments *IRUM3 1L through IRUM3 2L*); spoken testimony of 4/28/2008 (Comment *IRUM3 1T*)

IVOE Local 825, Greg Lalevee, spoken testimony of 3/14/2007 (Comment *Lalevee 1T*)

Lackawanna Coalition, Gary Kazin, spoken testimony of 3/13/2007 (Comments *Lackawanna 1T through Lackawanna 4T*); letter of 3/27/2007 (Comments *Lackawanna2 1L through Lackawanna2 4L*); spoken testimony of 3/27/2007 (Comment *Lackawanna3 1L*); letter of 3/31/2008 (Comments *Lackawanna5 1L through Lackawanna5 33L*); spoken testimony of 3/31/2008 (Comment *Lackawanna7 1T*)

Lackawanna Coalition, David Peter Alan, letter of 4/10/2007 (Comments *Lackawanna4 1L through Lackawanna4 15L*); spoken testimony of 3/31/2008 (Comment *Lackawanna6 1T through Lackawanna6 8T*); spoken testimony of 3/31/2008 (Comments *Lackawanna9 1T through Lackawanna9 2T*); spoken testimony of 4/1/2008 (Comments *Lackawanna8 1T through Lackawanna8 8T*); letter of 4/28/2008 (Comments *Lackawanna10 1L through Lackawanna10 11L*)

Local 825 IVOE, Howard Ferguson, spoken testimony of 3/13/2007 (Comment *Local 825 IVOE 1T*)

Macy's, Thomas Zapf, spoken testimony of 3/27/2007 (Comment *Macy's 1T*); spoken testimony of 4/1/2008 (Comment *Macy's2 1T*)

McCarter English - Block 758/Lot 28, Laura Kyler, spoken testimony of 4/1/2008 (Comments *KylerL 1T through KylerL 6T*); letter of 4/3/2008 (Comments *KylerL2 1L through KylerL2 3L*); letter of 5/16/2008 (Comments *KylerL3 1L through KylerL3 19L*)

Meadowlands Chamber of Commerce, James Kirkos, spoken testimony of 3/13/2007 (Comment *Meadowlands COC 1T*)

Moynihan Station Venture, James Samuelian, spoken testimony of 4/1/2008 (Comments *MoynihanStVenture 1T through MoynihanStVenture 2T*)

NARP, Jan Lindberg, email of 4/12/2008 (Comment *NARP 1E*)

National Association of Railroad Passengers, Ross Capon, spoken testimony of 4/1/2008 (Comments NatlAssRailPas 1T through NatlAssRailPas 4T); email of 4/28/2008 (Comments *NatlAssRailPas 1E through NatlAssRailPas 10E*)

New Jersey Association of Railroad Passengers, Philip Craig, spoken testimony of 3/27/2007 (Comments *NJ ARP 1T through NJ ARP 4T*)

ORGANIZATIONS (CONTINUED)

New Jersey Association of Railroad Passengers, Albert Papp, spoken testimony of 3/27/2007 (Comment *NJ ARP2 1T through NJ ARP2 5T*); spoken testimony of 3/27/2007 (Comment *NJ ARP3 1T*); spoken testimony of 3/31/2008 (Comment *NJ ARP4 1T through NJ ARP4 12T*); letter of 4/28/2008 (Comment *NJ ARP5 1L*)

New Jersey Business & Industry Association, Philip Kirschner, spoken testimony of 3/31/2008 (Comment *NJBIA 1T*)

New Jersey Future, Tim Evans, spoken testimony of 3/31/2008 (Comment *NJFuture 1T*)

New Jersey Institute of Technology, Sean Vroom, spoken testimony of 3/31/2008 (Comment *NJIT 1T*)

New Jersey Laborers'-Employers' Cooperation and Education Trust (NJ LECET), Steven Gardner, spoken testimony of 3/13/2007 (Comment *NJLECET 1T*); spoken testimony of 3/31/2008 (Comment *NJ LECET2 1T*)

New Jersey Meadowlands Commission, Robert Ceberio, spoken testimony of 3/31/2008 (Comment *NJMeadowlandsCom 1T*)

New Jersey Regional Council of Carpenters, Kevin McCabe, spoken testimony of 3/1/2008 (Comment *NJRCC 1T*)

New Jersey Sports & Exposition Authority, Dennis Robinson, letter of 3/28/2008 (Comment *NJSEA 1L*); spoken testimony of 3/31/2008 (Comment *NJSEA 1T*)

New Jersey Sierra Chapter, Hudson-Meadowlands Group, Mike Selender, spoken testimony of 3/13/2007 (Comments *Sierra NJ 1T through Sierra NJ 4T*)

New Jersey Society for Environmental and Economic Development, Joseph McNamara spoken testimony of 3/31/2008 (Comment *NJ Society for EED 1T*)

New Jersey State League of Municipalities, William Dressel, letter of 3/5/2007 (Comment *NJLM 1L*)

New Jersey State League of Municipalities, William Dressel, letter of 3/7/2007 (Comment *NJLM2 1L*)

New York Building Congress, Richard Anderson, spoken testimony of 3/27/2007 (Comment *NYBC 1T*); spoken testimony of 4/1/2008 (Comment *NYBC2 1T*)

New York City Central Labor Council/AFL-CIO, Edward Ott, spoken testimony of 3/27/2007 (Comment *NYCCLC 1T*)

New York League of Conservation Voters (NYLCV), Marcia Bystryn, spoken testimony of 3/27/2007 (Comment *NYLCV 1T*)

New York State AFL-CIO, Denis Hughes, letter of 3/29/2007 (Comments *NYS AFL CIO 1L through NYS AFL CIO 2L*)

New Yorkers for Parks, DEIS, Comment, spoken testimony of 4/6/2007 (Comments *NY for Parks 1L through NY for Parks 6L*)

ORGANIZATIONS (CONTINUED)

Newport Associates Development Co., Marsilia Boyle, letter of 4/25/2008 (Comment *NewportAssDecCo 1L through NewportAssDecCo 7L*)

Newark Regional Business Partnership, Chip Hallock, spoken testimony of 3/13/2007 (Comment *NRBP 1T*)

Newark Downtown District, Anthony McMillan, letter of 4/17/2008 (Comment *NewarkDD 1L*)

NJ AFL CIO, Steve Lenox, spoken testimony of 3/13/2007 (Comments *NJ AFL CIO 1T*)

NJ Alliance for Action, Phil Beachem, spoken testimony of 3/31/2008 (Comment *NJ Alliance2 1T*)

NJ Alliance for Action, Jerry Keenan, spoken testimony of 3/13/2007 (Comment *NJ Alliance 1T*)

N.J. Commerce Commission Kevin Drennan, spoken testimony of 3/31/2008 (Comment *NJCommerceComm 1T*)

NJ Regional Council of Carpenters, Kevin McCabe, spoken testimony of 3/13/2007 (Comment *NJRCC 1T*)

NJ State AFL-CIO, Charles Wowkanech, letter of 3/13/2007 (Comment *NJ AFLCIO 1L*)

N.J. State Building & Construction Trades Council, AFL-CIO, William Mullen, spoken testimony of 3/31/2008 (Comment *NJ AFL CIO2 L*)

NJ State Chamber of Commerce, Joan Verplanck, spoken testimony of 3/31/2008 (Comment *NJStateCommerce 1T*)

North Jersey Transit Advisory Committee, Suzanne Mack, letter of 3/12/2007 (Comment *North Jersey Transit 1L*)

NYU/Wagner Rudin Center, Allison C. De Cerreno, spoken testimony of 4/1/2008 (Comment *HunterN 1T*)

Partnership for New York City, DEIS Comment, Partnership for NYC, letter of 3/27/2007 (Comment *Partnership 1L*)

PlanSmart NJ, Christopher Wightman, spoken testimony of 3/31/2008 (Comment *PlanSmartNJ 1T*)

Prudential Center/AEG Facilities, Dale Adams, spoken testimony of 3/31/2008 (Comment *PruCenAEG 1T*)

Raritan Valley Rail Coalition, Jack McDougal, letter of 3/31/2008 (Comment *RVRC 1L*)

Raritan Valley Rail Coalition/North Jersey Transportation Planning Authority, Peter Palmer, spoken testimony of 3/13/2007 (Comment *RVRC 1T*)

Real Estate Board of New York, Brian Klimas, spoken testimony of 3/27/2007 (Comment *Real Estate NY 1T*)

ORGANIZATIONS (CONTINUED)

Regional Business Partnership – Transportation, Council Bill Rutherford, spoken testimony of 3/31/2008 (Comment *RBPTransCouncil 1T*)

REBNY, Robert Mackowski, spoken testimony of 4/1/2008 (*REBNY 1T through REBNY 3T)*

Regional Plan Association, Carlos Rodrigues, spoken testimony of 3/31/2008 (Comment RPA2 1T)

Regional Plan Association, Jeffrey Zupan, spoken testimony of 3/27/2007 (Comments *RPA 1T through RPA 4T*); spoken testimony of 4/1/2008 (Comments RPA3 1T through RPA3 3T)

Regional Rail Working Group, Joe Clift, spoken testimony of 3/31/2008 (Comment *RRWG2 1T through RRWG2 1T*)

Regional Rail Working Group (IRUM/RRWG), Art Nudell, spoken testimony of 3/27/2007 (Comments *RRWG 1T through RRWG 2T*)

Ridgefield Park Village, Clerk, letter of 3/31/2008 (Comment RPV 1L)

Rutgers University – Newark, Byron Price, spoken testimony of 3/31/2008 (Comment *PriceB 1T*)

Sailfast Development, Joseph Herbert, email of 3/1/2007 (Comments *Sailfast 1E through Sailfast 3E*)

Service Group, Inc., Michael Baccile, email of 4/3/2007 (Comment *Service Group 1E*)

Sierra Club, Patrick Centolanzi, email of 2/21/2007 (Comment *Sierra 1E*); spoken testimony of 3/27/2007 (Comment *Sierra2 1T*)

Sierra Club, Bart Chezar, spoken testimony of 4/1/2008 (Comment *Sierra3 1T through Sierra3 2T*)

Sive, Paget & Riesel, P.C. (C/S 12th Avenue, LLC), Mark Chertok, email of 4/28/2008 (Comment *C/S2 1E through C/S2 16E*)

Smart Growth, Benjamin Spinelli letter of 3/31/2008 (Comment *SmartGrowth 1L*)

Smart Growth, Benjamin Spinelli letter of 3/31/2008 (Comment *SmartGrowth 1L*)

The Keepers, NY/NJ Baykeeper, Betsy McDonald and Andrew Willner, and Hackensack Riverkeeper, Captain Bill Sheehan, letter of 4/10/2007 (Comments *Baykeeper 1L through Baykeeper 9L*)

The Leonia Environmental Commission, Matthew Brennan, email of 4/9/2007 (Comment *Leonia 1E*)

Transit Committee of Bergen County, Albert Cafiero, email of 4/8/2007 (Comments *Cafiero 1E through Cafiero 3E*)

Transport 2000 Atlantic Canada, Clark Morris, email of 4/9/2007 (Comments *Transport 1E through Transport 9E*)

ORGANIZATIONS (CONTINUED)

Trip-2-Work +, Jefferson Chase, spoken testimony of 3/27/2007 (Comments *Trip 2 Work 1T through Trip 2 Work 4T*); letter of 3/31/2008 (Comments *Trip 2 Work2 1L through Trip 2 Work2 3L*); spoken testimony of 3/31/2008 (Comments *Trip 2 Work2 1T through Trip 2 Work2 6T*); spoken testimony of 4/1/2008 (Comments *Trip 2 Work3 1T through Trip 2 Work3 4T*)

Tri-State Transportation Campaign, Jon Orcutt, spoken testimony of 3/27/2007 (Comments *Tri-State 1T through Tri-State 5T*)

Tri-State Transportation Campaign, Damien Newton, spoken testimony of 3/14/2007 (Comment *Tri-State 2 1T*)

Tri-State Transportation Council, Kyle Wiswall, spoken testimony of 4/1/2008 (Comment *Tri-State2 1T through Tri-State2 5T*)

Union Square Hospitality Group, Danny Meyer, letter of 3/31/2007 (Comment *USHG1L*)

United Transportation Union, Dan, O'Connell, spoken testimony of 3/13/2007 (Comment *United Transportation 1T*)

Utility and Transportation Contractors Association, Doug Hritz, spoken testimony of 3/31/2008 (Comment *UTCA 1T*)

Wolff and Samson, PC Block 758, Lot 25, Lori Grifa, letter of 3/19/2008 (Comments *Grifa 1L through Grifa 4L*); spoken testimony of 4/1/2008 (Comments *Grifa2 1T through Grifa2 9T*); spoken testimony of 4/10/2008 (Comment *Grifa3 1T*); email of 3/24/2008 (Comment *Grifa4 1E)*; email of 4/25/2008 (Comment *Grifa4 2E through Grifa4 7E*)

INDIVIDUALS

Eric Andersen, spoken testimony of 3/20/2007 (Comment *Anderson 1T*)

Vince Caravello, email of 4/28/2008 (Comment *CaravelloV 1E through CaravelloV 2E*)

Peggy Darlington, email of 3/7/2007 (Comment *Darlington 1E*); email of 3/11/2008 (Comment *DarlingtonP 1E through DarlingtonP 2E*)

George Davenel, spoken testimony of 3/13/2007 (Comment *Davenel 1T*); letter of 4/18/2008 (Comment *Davenel2 1L through Davenel2 3L*)

Tom Dwyer, email of 4/11/2008 (Comment *DwyerT 1E through DwyerT 2E*)

Irving Feiner, spoken testimony of 3/20/2007 (Comment *Feiner 1T*)

Ted Gassman, email of 2/15/2007 (Comments *Gassman 1E through Gassman 9E*)

Jeffery Getz, spoken testimony of 3/20/2007 (Comment *Getz 1T*)

Kevin Hale, letter of 4/17/2007 (Comments *Hale 1L through Hale 3L*); letter of 4/25/2008 (Comments *Hale2 1L through Hale2 4L*); letter of 4/28/2008 (Comments *Hale3 1L through Hale3 2L*)

INDIVIDUALS (CONTINUED)

Joseph Herbert, letter of 3/24/2008 (Comments *Herbert 1L through Herbert 4L*)

David Helm, email of 4/10/2007 (Comments *Helm 1E through Helm 13E*)

Blair Hofherr, Counsel to Judith M. Brener, Esq., email of 4/28/2008 (Comments *HofherrB 1E through HofherrB 2E*)

C. Kasenetz, email of 3/23/2008 (Comment KasenetzC 1E); email of 3/30/2008 (Comments *KasenetzC2 1E through KasenetzC2 2E*)

Joe Leiper, letter of 4/10/2007 (Comments *Leiper 1L though Leiper 2L*)

Bernard Lobel, email of 4/1/2007 (Comments *Lobel 1L through Lobel 2L*)

Andrew Ludasi, email of 4/23/2008 (Comments *Ludasi 1E through Ludasi 5E*)

William Lay, spoken testimony of 4/1/2008 (Comment *WilliamL 1T through WilliamL 3T*); letter of 4/7/2008 (Comments *WilliamL2 1L through WilliamL2 2L*); letter of 5/12/2008 (Comments *WilliamL3 1L through WilliamL3 8L*)

John Madden, letter of 4/9/2007 (Comments *Madden 1L through Madden 33L*)

Jack May, spoken testimony of 3/27/2007 (Comments *May 1T through May 4T*); letter of 3/17/2008 (Comment *May2 1L*); email of 4/25/2008 (Comment *May3 1E through May3 2E*)

Mike McGuire, spoken testimony of 4/1/2008 (Comments *McGuireM 1T)*

Bird Mervilus, spoken testimony of 3/27/2007 (Comments *Mervilus 1T through Mervilus 3T*)

Jishnu Mukerji spoken testimony of 3/31/2008 (Comments *MukerjiJ 1T through MukerjiJ 7T*)

Paulus, Sokolowski and Sartor, LLC (HCIA), John Bolan, email of 4/18/2008 (Comments *PSS LLC 1E through PSS LLC 2E*)

James Raleigh letter of 3/31/2008 (Comments *Raleigh2 1L through Raleigh2 3L*); testimony of 3/31/2008 (Comments *Raleigh2 1T through Raleigh2 5T*); spoken testimony of 4/1/2008 (Comments *Raleigh3 1T through Raleigh3 7T*)

John Raleigh, spoken testimony of 3/14/2007 (Comments *Raleigh 1T through Raleigh 7T*)

Gary Reilly, email of 4/3/2007 (Comments *Reilly 1E through Reilly 3E*)

Lisa Rodriguez, email of 3/9/2007 (Comment *Rodriguez 1E*)

Rachel Romero, email of 2/19/2007 (Comment *Romero 1E*)

Tierra Solutions, letter of 2/1/2007 (Comments *Tierra 1L through Tierra 11L*)

William Stanford, spoken testimony of 3/27/2007 (Comment *Stanford 1T*)

INDIVIDUALS (CONTINUED)

Theresa Tah, email of 8/5/2007 (Comment *TAH 1E*)

Gail Thompson letter of 3/28/2008 (Comment *ThompsonG 1L*)

Gregg Thompson, email of 2/28/2007 (Comment *Thompson 1E*)

Laine Tigane, spoken testimony of 3/14/2007 (Comment *Tigane 1T*)

Kenneth Vogel, email of 3/14/2008 (Comment *VogelK 1E*)

Maurice Wells, spoken testimony of 3/13/2007 (Comment *Wells 1T through Wells 3T*)

Art White, email of 3/15/2008 (Comment *WhiteA 1E*)

Jonathan Woolley, spoken testimony of 3/14/2007 (Comment *Woolley 1T through Woolley 8T*); spoken testimony of 3/31/2008 (Comments *Wolley2 1T through Wolley2 5T*)

C. COMMENTS AND RESPONSES

PURPOSE AND NEED (CHAPTER 1)

DEIS COMMENTS

Comment 1-D:

The U.S. Department of the Interior (DOI) reiterated their previous recommendation to add a consistent set of summary statistics for a series of target years (e.g., 1985, 2005, 2025) to more clearly demonstrate the growing shortfall in cross-Hudson commuter capacity across all modes of transportation, and the likely consequences of the shortfall that would occur under the "no action" alternative. (*DOI 3L*)

Response:

The summary findings of FEIS Chapter 3 (Section 3.1 Public Transportation and 3.3 Roadways) have been included in Chapter 1 to show the relationship between growth in population and employment and the resulting increased demands on the existing trans-Hudson transportation facilities. Chapter 1 has been updated to include summary statistics based on actual data available for 1990 and 2000 and forecast data for 2030. The anticipated consequences of the shortfall in trans-Hudson capacity have been identified with regard to increases in delay on roadways and the potential impact on population and employment location decisions in the region.

PROJECT ALTERNATIVES (CHAPTER 2)

DEIS COMMENTS

Comment 2-D:

One commenter stated other alternatives such as routing the new Hudson River tunnel via Hoboken could be considered. (*IRUM 2E*)

Response:

The ARC DEIS and the previous Major Investment Study provided opportunities for the public to identify multi-modal alternatives for improving access into midtown Manhattan, consistent with the purpose and need for the project, as described in FEIS Chapter 1. Among these alternatives, a routing to Midtown via Hoboken was identified during the MIS, but was screened from further consideration since: routing via Hoboken would require four miles of additional tunneling, which would increase trip times to Midtown Manhattan; additional infrastructure, such as a new bridge over the Hackensack River and a new mined cavern station would be required; to continue to Midtown Manhattan, the station in Hoboken would need to be constructed on a curve/slope, which is not physically feasible; and construction of a new station would also temporarily impact the existing historic station, as well as existing NJ TRANSIT rail, HBLRT, PANYNJ PATH and ferry services.

Comment 3-D:

The MTA stated ARC should develop a West Side Branch Tunnel Alignment that does not impair or interfere with the MTA/LIRR West Side Yard, or the lay down/logistical space needed by the Flushing Line extension project whose construction will begin in a few months. (*MTA 1L, MTA 4L, MTA 6L*)

Response:

In the Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River, which made it infeasible to construct the connection from the new ARC tunnels to PSNY to meet NJ TRANSIT operating requirements. This information can be found in FEIS Chapter 2. As a result, the SDEIS/FEIS tunnels alignment from the Hudson River Shore to Tenth Avenue avoids interference with the MTA/LIRR West Side Yard, the No. 7 Line lay-down areas and the proposed No. 7 Line tunnels.

Comment 4-D:

Multiple commenters stated the project should consider less costly ferry service with bus and rail connections in Manhattan. (*Helm 12E, Salifast 3E*)

Response:

The ARC MIS identified 137 multi-modal alternatives for improving access into midtown Manhattan, including ferry alternatives. It was found that commuter rail alternatives best met the goals and objectives of the study. The commuter rail alternatives expand transit capacity between midtown Manhattan and points in New Jersey and New York, extend the reach and improved connectivity of the region's commuter rail system, increase one-seat ride opportunities, and improve access, travel time, and reliability of the region's commuter rail system.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 5-D:

One commenter stated a Kips Bay Station, which would serve both the Long Island Rail Road and NJ TRANSIT, would be a better value for the money. (*Transport 3E*)

Response:

As described in Chapter 2 of the DEIS and FEIS, the Kips Bay Station option east of PSNY was identified, evaluated, and then dropped because it did not meet project goals of station capacity and redundancy, compared to focusing improvements within and near PSNY. The separate ARC DEIS Screening Results Report (November 2004) provides more information on the selection and evaluation of alternatives. The NYPSE design does not preclude future extension to the East Side.

Comment 6-D:

Several commenters stated a comparison of the dual-mode locomotive approach versus a fully-electric operation (Electric Multiple Units or Electric Locomotives) has not been considered. They stated the dual-mode locomotive, which will be heavier and with less power than the comparable straight electric locomotive, is also less environmentally friendly. They stated electrification of the North Jersey Coast, Raritan and Boonton lines is a far better value for the money. (*May 2T, May 3T, Helm 5E, Transport 6E, Baykeeper 5L*)

Response:

The capital cost of electrification of the five NJ TRANSIT lines beyond the project area on which dual-power locomotives would operate would be several billion dollars. This cost is far greater than the $470 million (2007$) estimated to purchase the dual-power locomotives to run one-seat ride service on these five lines. Without this capital investment, it would not be possible to operate full-electric service on these lines, including the North Jersey Coast Line (south of Bay Head), Raritan Valley Line and Montclair-Boonton Line (west of Montclair State University.

According to the NJ TRANSIT Dual-Power Feasibility Study (November 2006), these dual-power locomotives would be approximately 12,000 to 15,000 pounds heavier than the electric locomotives currently operated by NJ TRANSIT. However, they would be designed to output comparable horsepower levels as the current NJ TRANSIT fleet, and therefore, would perform at the same level as the single-power units.

Comment 7-D:

Several commenters questioned the viability of a dual-power locomotive and asked if NJ TRANSIT has a contingency plan if they are unable to successfully develop a financially feasible dual-power locomotive with diesel-power capability similar to NJ TRANSIT PL42-AC 4200 HP and an electric power rating commensurate with NJ TRANSIT ALP-46 8000 HP. (*Transport 6E, Madden 3L, Madden 13L, NYSDOT 3L, NYSDOT 13L*)

Response:

The feasibility of locomotives operating either as diesel or overhead catenary (AC) power was confirmed by the NJ TRANSIT Dual-Power Feasibility Study (November 2006). NJ TRANSIT is in the process of selecting a contractor to design and produce these Dual-Power Locomotives, and will implement a program to test and operate the equipment before it is used in ARC. The contract award is expected in Fall 2008. Since NJ TRANSIT has advanced this process and has commitments from manufacturers to produce this equipment, there is no need for a contingency plan.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 8-D:

One commenter stated since there are existing dual-mode engines (Amtrak and LIRR) that can meet the derived requirement, it is difficult to understand why a high risk and very expensive development has to be included as part of the ARC project. (*Helm 1E*)

Response:

Dual-power passenger rail systems in the United States use a third-rail (DC) electric power source exclusively. For consistency with the operational mode within its electrified territory, NJ TRANSIT is developing an FRA-compliant dual-power locomotive that would use overhead catenary (AC) as its electric power source. The new dual-powered vehicles would be able to operate within the entire NJ TRANSIT electrified and non-electrified territory.

Comment 9-D:

Many commenters stated the ARC alignment should continue to the East Side of Manhattan and provide a connection to Grand Central Terminal (GCT). The commenters stated MIS Alternative G would cost less to construct and operate, and would attract more riders than the current ARC Build Alternative. They further stated the current ARC Build Alternative is duplicative with existing services and would create extreme overcrowding on the West 34th Street area bus and subway lines. An extension east of 6th Avenue, with stairs to Fifth Avenue was also recommended. Several commenters noted that the ARC Build Alternative should preserve a future option to extend rail service to GCT. (*ASCE 3L, DVARP 3L, IRUM 1T, IRUM 2T, Reilly 3E, Lobel 1L, Lobel 2L, Helm 10E, Helm 11E, Madden 5L, Madden 10L, Madden 11L, Woolley 3T, Raleigh 4T, Anderson 1T, Lackawanna2 1L, Lackawanna 2T, Lackawanna 3T, Lackawanna 4T, Lackawanna4 15L, NJ ARP 4T, NJ ARP2 1T, NJ ARP2 2T, NYSDOT 5L, NYSDOT 10L, NYSDOT 11L, NYS AFL CIO 2L, O 2L, RPA 2T, Sierra2 1T, Transport 2E, Trip 2 Work 2T, Trip 2 Work 4T*)

Response:

Alternative G was dropped during the MIS and in DEIS scoping due to physical and operational constraints. Alternative G produced the smallest incremental increase in trans-Hudson capacity because of the limited capacity of PSNY Tracks 1 to 5, relatively slow operating speeds on a track connection between PSNY and GCT, and the capacity limitations from bi-directional operations (NJ TRANSIT and Metro-North) between PSNY and GCT.

The planning and project development process to address trans-Hudson transportation needs began in 1995 with a Major Investment Study (MIS). The MIS evaluated 137 multi-modal alternatives to address the project needs. These 137 alternatives were screened down to three main options that were fully evaluated in the MIS; Alternatives P, S and G. Alternative P included a new stub-ended terminal station beneath existing Penn Station New York (PSNY). Alternative S included a new rail link between PSNY and train storage and maintenance facilities at Sunnyside Yard in Queens, including a new East River tunnel. Alternative G connected to both PSNY and to Grand Central Terminal (GCT).

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (continued):

The three alternatives had similar capital costs and ridership. The major difference between the three alternatives was their ability to provide additional train capacity under the Hudson River into New York City. Alternative G provided the lowest number of peak hour trains, 36, compared to 40 for Alternative S, and 52 for Alternative P. The lower number of peak hour trains for Alternative G was a result of the limited capacity of PSNY Tracks 1 to 5, the relatively slow operating speeds on the track connection between PSNY and GCT, and the capacity limitations resulting from bi-directional operations (NJ TRANSIT and Metro-North) between PSNY and GCT. The slow track speeds between PSNY and GCT were determined by the tight turning radius and the steep grade needed to pass under the Sixth Avenue subway and still connect to GCT. Also, the relatively short distance between PSNY and GCT, combined with the slow acceleration and deceleration of commuter rail prevent high-speed operations.

Although Alternative G had the highest forecast ridership in the MIS phase, the analysis was conducted for a future year 2020. When the MIS was prepared, New York City plans for significant future West Side development had not been approved. The 2020 ridership projections did not take into account this major new destination, which would increase the proportion of trips destined for the West side (PSNY area) versus the East side (GCT area), further justifying the decision to look at alternatives that did not continue to the East side.

Based on these factors and the above evaluation, Alternative G was eliminated at the end of the MIS process because it was considered less effective than the other two. In 2003, the MIS recommended that Alternatives P and S be advanced to the Draft Environmental Impact Statement (DEIS) phase for further refinement and evaluation. MIS alternatives development and screening information can be found in FEIS Appendix 2, *Alternatives Development Process Report*.

The NYPSE design does not preclude future extension to the East Side. NJ TRANSIT and the MTA senior management are discussing the potential for extending beyond NYPSE east and north to serve the GCT area or just east, potentially to the Sunnyside Yard area in Queens. Either of these possibilities is allowed for in the ARC design. Once further progress is made on advancing the current NJ TRANSIT and MTA major projects, a decision will be made about next steps to elaborate on the attributes and needs associated with different alternatives for extending ARC.

Future bus and subway service in and around PSNY has been analyzed with the Build Alternative for 2030. Projected NYCT subway service levels would accommodate the additional NJ TRANSIT riders that would transfer to the subway. NJ TRANSIT will continue to work with MTA NYCT to develop a plan for providing additional AM peak hour buses on the M16/M34 line to accommodate Build Alternative-related demand.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 10-D:

One commenter stated a new track connection between the Amtrak West Side Line and the northern portion of PSNY would release platforms Tracks 1 - 6 on the south side of PSNY for exclusive use from the new Hudson River Tunnel, setting the stage for efficient run-through service to Grand Central. (*IRUM 3E*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River, which made it infeasible to construct the connection from the new ARC tunnels to PSNY to meet NJ TRANSIT operating requirements. The ARC Build Alternative design would not preclude the future extension to the East Side. While direct access to East Midtown is a desirable goal of NJ TRANSIT service, Alternative G was dropped during the MIS and in DEIS scoping due to physical and operational constraints (see Comment 9-D).

Comment 11-D:

Multiple commenters stated we need to look beyond just the tunnel and the limits that are confined in this study. We should use this opportunity to construct a rail system to connect our three operating railroads, Metro-North, Connecticut, and New York and Westchester Counties, Long Island Railroad for Nassau and Suffolk, and NJ TRANSIT within our State of New Jersey. (*Raleigh 5T, NJARP3 1T*)

Response:

ARC is consistent with other ongoing and planned rail improvements in New Jersey and New York, and does not preclude future rail system expansions. Proposed deployment of dual-power locomotives on five NJ TRANSIT lines beyond the project area in New Jersey and New York with the Build Alternative would offer one-seat-ride service to PSNY and NYPSE and increased peak-hour and non-peak-hour service frequencies. While direct access to East Midtown (and interconnection with Metro-North and LIRR) is a desirable goal of NJ TRANSIT service, this concept (Alternative G) was dropped during the MIS and in DEIS scoping due to physical and operational constraints. However, the Build Alternative design would not preclude the future extension to the East Side.

Comment 12-D:

One commenter stated since the level of pedestrian traffic and commerce is significant in the area of West 34th Street and Eighth Avenue, other more appropriate locations should be considered for the required fan plants. (*34th Street Partnership 1L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the fan plants/construction access shafts proposed to be located on West 34th Street in the DEIS were relocated to West 33rd Street and West 35th Street, where vehicular and pedestrian traffic would be lighter.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 13-D:

Multiple commenters stated a more direct connection from the Main, Bergen, and Pascack Valley Lines should be explored. The proposed connection at Secaucus Junction seems circuitous at best. A connection up and over the Croxton yard east on to the NEC would minimize wetlands and grasslands impacts. They questioned the assumption that the proposed loop around Secaucus Station could be traversed in three minutes. (*Lackawanna4 13L, NJ ARP2 5T, Transport 5E, Transport 7E, Woolley 8T*)

Response:

Alignment alternatives to the Secaucus Loop connection at Frank R. Lautenberg Station described in the FEIS underwent technical evaluation during the MIS and DEIS processes. These alternatives have been eliminated based on: connectivity to the NEC, construction cost, property acquisition, and environmental impacts to Penhorn Creek. ARC would create a one-seat ride to midtown Manhattan from Bergen County by connecting the Main/Bergen and Pascack Valley lines to the Northeast Corridor. This routing would be faster and more direct that the current options available to Bergen County residents.

The commenters are correct that the loop would take longer than three minutes to traverse. Additional analysis showed that the travel time changed. Train schedules for the Secaucus Loop, between departure from Frank R. Lautenberg Station Lower Level and the passing time at Lack Interlocking (where the trains join the Northeast Corridor right-of-way) indicate a time of seven minutes. Simulation has demonstrated that an unimpeded train can achieve the same run in less than five minutes. However, some recovery time has been built into the draft schedule to protect and ensure the proper order of trains and the terminal arrival pattern. The scheduling of recovery time on the Loop and the amount of recovery time would be consistent with current Midtown Direct schedules at Swift Interlocking (where the trains join the NEC).

Comment 14-D:

Several commenters stated ARC DEIS should provide a connection to the Passaic Bergen DMU (via NYS&W) and Northern Branch (via Conrail) Projects. (*Bergen Freeholder 2T, Bergen Planning 1T, Woolley 5T, NJARP 2T, Leonia 1E Hale 2L*)

Response:

FEIS Chapter 2 and Section 3.1 have been updated to identify that infrastructure (wye caverns) could be constructed within the proposed Build Alternative tunnels to not preclude the eventual connection from either the Northern Branch or the NYS&W tracks to the tunnels. The actual connection (beyond the referenced infrastructure) is not part of the ARC Build Alternative.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 15-D:

Several commenters stated the ARC and Portal Bridge projects should be combined since the FTA has determined that the improvements to the Portal Bridge are a prerequisite to any investment in the construction of the ARC project. The Portal Bridge wetlands, essential fish habitat, and other aquatic resource impacts should be considered as part of the ARC DEIS. As the ARC project advances toward the final EIS and Preliminary Engineering, the Portal Bridge Project is still at the scoping phase. It is improper for Preliminary Engineering or any other activity regarding the ARC project to go forward until a decision is made on the Portal Bridge Capacity Enhancement Project. (*IRUM 1E, Lackawanna4 3L, Lackawanna4 4L Lackawanna4 5L, NMFS 2L, NJ ARP2 3T*)

Response:

The Portal Bridge Capacity Enhancement Project Scoping process was initiated in December 2006, the DEIS was issued in February 2008, and the FEIS was published in October 2008. ARC Preliminary Engineering began in August 2007 after Portal Bridge scoping and before the issuance of the Portal Bridge FEIS. ARC construction would not begin prior to the issuance of the Portal Bridge Record of Decision.

The Portal Bridge is a critical infrastructure element for Amtrak and NJ TRANSIT, enabling movement between destinations east and west of the Hackensack River. Twenty-three trains per hour currently cross the Portal Bridge eastbound in the AM peak hour. The existing Portal Bridge poses reliability concerns due to its aging and limiting infrastructure. The bridge miter rails, which allow the rails to disengage and the bridge to open and close, are unreliable and have been an ongoing problem since the bridge was constructed. As a result, while trains can operate at 90 miles per hour (mph) on adjacent portions of the NEC, speeds on the Portal Bridge were previously restricted to 70 mph, and most recently (December 2006) have been permanently restricted to 60 mph. The bridge openings required to accommodate marine traffic have increased the likelihood of mechanical malfunctions, which have in the past caused the bridge to remain in the open position for long periods of time. The two-track configuration of the Portal Bridge and the speed restrictions limit the number of trains that can cross the Hackensack River, which is especially problematic during peak commuter hours. NJ TRANSIT, in partnership with Amtrak, has studied the feasibility of alternative designs to either replace or rehabilitate the existing two-track bridge. The Portal Bridge Capacity Enhancement project DEIS was published on February 15, 2008. The Portal Bridge Capacity Enhancement is a separate project with independent utility, but will be necessary for the operation of the FEIS ARC Build Alternative service plan. The Portal Bridge project will be completed prior to the Build Alternative, and is included in the ARC No Build Alternative. The Portal Bridge project will begin construction in 2011 and will be completed earlier in 2017, in advance of the ARC Build Alternative, which is expected to be completed later in 2017. The Portal Bridge Capacity Enhancement impacts are disclosed within the FEIS in Sections 4.18 and 5.18, Indirect and Cumulative Effects.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 16-D:

If the "deep cavern" terminal and "loop" are placed into operation before Portal Bridge capacity is sufficiently increased, this ten-minute increase in running time for our trains would be a certainty. This forms the basis for the Coalition's strongest objection to the proposed plan. (*Lackawanna4 14L*)

Response:

FEIS Section 3.1 has been updated to explain that the ARC 2030 No Build Alternative is based on completion of the Portal Bridge Capacity Enhancement Project in 2017 before the projected start of ARC operations later in 2017. The Portal Bridge Capacity Enhancement is a separate project with independent utility, but will be necessary for the operation of the FEIS ARC Build Alternative service plan.

Comment 17-D:

Amtrak stated the issues of how many slots exist today in the two Amtrak-owned tunnels, and how many of those are used by Amtrak and NJ TRANSIT respectively, are not clear in the DEIS. Since the new ARC tunnels will likely be the last rail tunnels constructed under the Hudson River for many generations, it is important that additional slots be assigned for Amtrak use. Both Amtrak and NJ TRANSIT need to ensure that all options are pursued to maximize capacity beyond the 48 peak hour trains that are assumed under the Build Scenario. (*Amtrak 3E, Amtrak 4E*)

Response:

As described in FEIS Chapter 2 and Section 3.1, Amtrak operates three trains per hour in the AM peak hour into PSNY. In the 2030 No Build Alternative, this frequency would not change. The operating plan in the FEIS includes one additional Amtrak peak hour train, for a total of four peak hour trains. NJ TRANSIT is working with Amtrak to address future Amtrak needs for additional trains.

Comment 18-D:

One commenter stated the Raritan Valley line is "grossly under-represented and the project is geared to the affluent residents of Bergen County". (*Romero 1E*)

Response:

The Raritan Valley Line is one of five NJ TRANSIT rail lines that would be afforded one-seat-ride service to Manhattan (PSNY and NYPSE) with ARC in peak and off-peak hours.

Comment 19-D:

Several commenters stated other regional projects such as Metro-North Penn Station Access and Stewart Airport Rail Connections should be incorporated into the ARC plans. (*Madden 15L, MTA 7L, NYSDOT 15L, Woolley 6T*)

Response:

The Metro-North Penn Station Access project and Stewart Airport project are not included in the ARC No Build because they have not advanced far enough in the planning and design process. As both projects advance, coordination between NJ TRANSIT, Metro-North and PANYNJ would continue to optimize access and operations related to PSNY and NYPSE.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 20-D:

One commenter stated a third rail line in the new tunnels would allow LIRR trains to run into New Jersey so people from New Jersey can access Kennedy Airport. (*Woolley 2T)*

Response:

The proposed Build Alternative tunnels cross-section provides adequate space for the future installation of a third-rail propulsion system. Provision of this system is not part of the Build Alternative design or part of any future plans since NJ TRANSIT trains operate on an overhead catenary power supply system and the Build Alternative needs to be consistent with this system-wide operating requirement.

Comment 21-D:

One commenter stated the failure of the project to provide additional track capacity west of Secaucus Junction will force all Morris & Essex line rush hour trains to take a circuitous route to PSNY, adding 10 minutes to each commuter's trip twice a day. (*Lackawanna2 3L*)

Response:

Providing increased track capacity west of Frank R. Lautenberg Station is beyond the ARC scope. However, the separate NJ TRANSIT Bridge Capacity Enhancement Project addresses Morris & Essex (M&E) Line capacity west of Frank R. Lautenberg Station with two new bridges (and five tracks) that would replace the existing two-track Portal Bridge. With this bridge project and ARC in place, M&E trains would continue to connect to the NEC west of Secaucus with a direct route to Manhattan, passing through Frank R. Lautenberg Station on new tracks on the south side of the station and continuing on the new tracks through the ARC tunnels to Manhattan. M&E travel times to Midtown would be slightly improved over current times as a result of the new track capacity provided with the Portal Bridge Capacity Enhancement and ARC projects.

Comment 22-D:

The MTA stated ARC should further promote operating certainty for West-of-Hudson Services linking New York and New Jersey and should include the improvements as well as the necessary infrastructure improvements on the Port Jervis, Pascack Valley, and Main/Bergen lines to implement the expanded service. The impacts of these investments should be delineated. (*MTA 5L*)

Response:

The ARC project does not include improvements beyond the project area, aside from new dual-power locomotive operation on five NJ TRANSIT lines. Certain improvements beyond the project area in New Jersey, such as Pascack Valley Line sidings, are included in the 2030 No Build. Improvements beyond the project area in New York would be separate from ARC and would be subject to agreements with the MTA (Metro-North Railroad, Long Island Rail Road).

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 23-D:

One commenter asked during what phase will the future connections from the Pascack Valley Line and Main/Bergen Line to the ARC tunnel occur so that Rockland will have a one-seat ride to PSNY. (*Rockland 11L*)

Response:

The Build Alternative, as described in the FEIS, includes the infrastructure and equipment necessary to provide one-seat service to Manhattan from the Pascack Valley and Main/Bergen County lines. This service is an integral part of the service plan as described in FEIS Section 3.1, and would begin upon project completion (opening day of service in 2017).

Comment 24-D:

Amtrak stated they would oppose the elimination of the tunnel connection to PSNY. Amtrak has concerns that the trans-Hudson rail tunnels could not be properly dispatched and maintained without this added flexibility. (*Amtrak 2E*)

Response:

Investigations conducted during Preliminary Engineering indicated that the rock profile, particularly in the location of the station cavern on West 34th Street, was lower than anticipated during the DEIS period and was further characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue. As a result, the FEIS Build Alternative NYPSE cavern is deeper than the configuration in the DEIS to provide for a minimum of competent rock cover. As a result of the deeper cavern, the tunnels profile under the Hudson River and west side of Manhattan would also be deeper to align with the new station and to avoid impacts to the NYCT No. 7 Line extension. The deeper tunnels under the Hudson River and the west side of Manhattan would avoid risks associated with impacts to the river bottom and west side properties. Additionally, the deeper tunnels would preclude a connection to existing PSNY within an acceptable operating grade.

Engineering studies have demonstrated that the Build Alternative would preserve desired operating flexibility and redundancy via track connections in New Jersey rather than through the connector tunnel to PSNY. Also, the segregation of the new ARC tunnels from PSNY would allow for greater isolation of problems in each facility since they would not be physically connected. The Build Alternative will not preclude the future ability for Amtrak trains to access the new tunnels and NYPSE. NJ TRANSIT and Amtrak continue to work together to coordinate their operations in this corridor. NJ TRANSIT will analyze other parts of its rail network, beyond the NEC, to ensure that the entire Amtrak/NJ TRANSIT system has the capacity to reliably support the ARC operating plan.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 25-D:

One commenter stated the optional station entrances at Eighth Avenue, West 35th Street and West 34th Street should be part of the design build out. (*Reilly 2E*)

Response:

The entrance studied on the northeast corner of Eighth Avenue and West 35th Street was dropped from further consideration during Preliminary Engineering. Further analysis showed that this entrance was not needed to carry projected pedestrian loads. In the SDEIS Refined Build Alternative and the FEIS Build Alternative, five street-level entrances with three sets of high-rise escalators to the NYPSE mezzanine were selected as the most cost-effective way to meet anticipated demand, allowing the optional station entrances identified in the DEIS to be eliminated. The passenger circulation elements (stairways, escalators, and corridors) of the remaining five entrances were redesigned to provide the same ingress and egress capacity as achieved with the DEIS Build Alternative. Similar to the DEIS Build Alternative, underground pedestrian connections would be provided to existing PSNY, NYCT subway stations at Eighth, Seventh, and Sixth Avenues and Broadway, and PATH at Sixth Avenue.

Comment 26-D:

Multiple commenters stated it is the new stub-ended station design that limits train capacity, not the tracks between Secaucus Junction and PSNY. Since there is no through track connection to the East River Tunnels and Sunnyside Yards in Long Island City, this might create a backlog or delay in trains getting into and out of the new 34th Street Station. (*Wells 3T, Helm 2E*)

Response:

Several design refinements have been incorporated into the NYPSE design to provide sufficient capacity to meet the 48 train per hour (TPH) goal, including increased speeds in the terminal interlocking and onto station platforms. This includes an upgrade in turnout (switch) speeds in the interlocking, which would allow signal logic approaching the terminal to be configured for higher speeds entering the platforms. In addition, the possibility for extending to the East Side at some point in the future has not been precluded.

Comment 27-D:

Multiple commenters stated the importance and value of integrating operations at PSNY so that virtually all trains are through trains. Through running with both the Long Island and the Metro-North New Haven division could better integrate the region. In addition, looping and storage of trains in Sunnyside would avoid the creation of another maintenance base and storage facility, eliminating the wetlands impacts of the new yard in Kearny. (*Transport 4E, Helm 3E*)

Response:

No capacity is available for NJ TRANSIT to run additional trains through to Sunnyside Yard via the existing East River Tunnels. FEIS Chapter 2 discusses the potential feasibility and utility of having PSNY commuter rail operators (the LIRR today and, potentially, Metro-North in the future under its Penn Station Access Project) provide run-through train services that continue west to New Jersey at some point in the future.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 28-D:

One commenter stated the ARC project does not include information concerning interaction with, utilization of, and potential environmental impact on Long Island and Sunnyside Yard. (*Village Hall 1T*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River, which made it infeasible to construct the connection from the new ARC tunnels to PSNY to meet NJ TRANSIT operating requirements. As a result, the ARC service plan would not increase the number of peak hour NJ TRANSIT trains entering PSNY or traveling to Sunnyside Yard, and no impacts to Long Island and specifically Sunnyside Yard would occur from the additional ARC service.

Comment 29-D:

Several commenters stated effort must be made to minimize the tunnel grade into PSNY and the new station because effects of a steep grade will negatively impact operations over the entire life of the project. National Marine Fisheries Service stated the three percent grade should be used to reduce or eliminate impacts to the river bottom. (*ASCE 2L, Madden 4L, Madden 7L, NMFS 5L, NYSDOT 4L, NYSDOT 7L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River. These deeper tunnels would eliminate impacts to the river bottom. The proposed tunnels alignment under the Hudson River and Manhattan to NYPSE would have a maximum grade of 1.75%, considered within the acceptable range for commuter rail operations.

Comment 30-D:

The U.S. Coast Guard asked what the depth of the Hudson River bed would be above the top of the completed tunnel in the 40' and 45' channels. (*USCG 1E*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the deeper tunnels under the Hudson River would be between 50 feet and 70 feet below the Hudson River bottom in the 40' and 45' channels.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 31-D:

One commenter stated there appears to be a discrepancy between the combined total land area of 140 acres listed in the Executive Summary and the 226 acres of total property of the three brownfield sites (Standard Chlorine, Diamond Shamrock and Koppers Coke). The depiction on Figure ES-3 of the DEIS appears to be inconsistent with statements on page 5.12-97 [third paragraph] that "A portion of the proposed rail yard would be located adjacent to Standard Chlorine and Diamond Shamrock, both contaminated sites." It is recommended that NJ TRANSIT make a decision now about the need or lack of need for these sites. It would be helpful to identify in the first paragraph for the unknowing reader the designation of the brownfield site, its current owner, historical ownership and utilization, and environmental regulatory status (e.g., existing administrative consent order). (*Tierra 1L, Tierra 3L, Tierra 4L, Tierra 9L, Tierra 10L*)

Response:

The Koppers Coke site (on which the proposed Kearny Rail Yard would be located exclusively) has a total land area of approximately 122 acres, and 82 acres of that area would be used for the new rail yard. In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the Standard Chlorine and Diamond Shamrock sites would not be used for the new rail yard. This condition is reflected in FEIS Chapter 2 and Sections 4.8, 4.9 and 4.12. FEIS Section 4.12 and Appendix 4.12 describe the ownership, past utilization and remediation status of the Koppers Coke site as part of the discussion of the proposed Kearny Rail Yard.

Comment 32-D:

One commenter stated Page 1 of the Executive Summary says "We have the convergence of 10 out of 11 railroads in NJ." The problem is it's not a convergence; it's a crossing. (*Raleigh 2T*)

Response:

"Converge" was changed to "pass" in the FEIS Executive Summary.

Comment 33-D:

U.S. DOI recommended that the need for each major element of the project be demonstrated (i.e., indicate if the new tunnels and station could function without the proposed new NEC tracks, the Secaucus Loop, and/or the new rail yard). The final EIS should present the importance of each element to the overall ARC project in terms of ridership, travel times, safety, system redundancy, and other relevant measures. (*DOI 4L, DOI 11L*)

Response:

FEIS Chapter 2 has been updated to clarify the relationship between these components. Each of the five major components of the Build Alternative is necessary to meet the project's goal of increasing peak hour service into Manhattan to 48 trains per hour. New track capacity along the NEC, the Secaucus Connection between the Main Line and the NEC, tunnels under the Palisades, Hudson River and Manhattan, new station capacity under West 34th Street and a mid-day storage yard in Kearny together provide the infrastructure capacity necessary to operate an additional 25 trains per hour into Manhattan. As such, it is not possible to attribute travel time savings or other user benefits to these individual components of the project.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 34-D:

U.S. DOI recommended that a summary of the analysis that was conducted to arrive at the preferred alternative for infrastructure improvements in New Jersey be added to the document. (*DOI 5L*)

Response:

Additional descriptions of the analyses and decision-making processes followed to determine the preferred location for Build Alternative infrastructure improvements in both New Jersey and New York has been summarized in Chapter 2 and incorporated in detail in Appendix 2 of the FEIS. Additional description of the decision-making process and criteria used to evaluate rail yard sites is included in Appendix 8.

Comment 35-D:

U.S. DOI recommended that a summary of the ARC DEIS Screening Results Report be added to show how the listed screening criteria were used to evaluate alternatives, including how each criterion was measured, the methods for calculating scores, and the actual scores of each alternative. (*DOI 6L*)

Response:

The "ARC DEIS Screening Results Report" has been included in FEIS Appendix 2 to provide additional detail on the criteria and the respective rating of alternatives. Results of the screening are summarized in FEIS Chapter 2.

Comment 36-D:

U.S. DOI stated the document should indicate the expected operational life of the proposed ARC project (i.e., through what year is the project expected to adequately meet projected demand for commuter rail service into mid-town Manhattan. (*DOI 7L*)

Response:

The Build Alternative would meet forecast demand through 2030. The demand for service beyond 2030 has not been forecast.

Comment 37-D:

U.S. DOI stated the document should include schematic diagrams showing existing and proposed train movements at key points such as the new rail yard, the West End Wye, the Hackensack River bridges, and Secaucus Junction Station. (*DOI 9L*)

Response:

A schematic diagram (Figure 2-1) showing existing and proposed train routing at key points within the project area has been added to Chapter 2 of the FEIS.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 38-D:

U.S. DOI stated the document should indicate the total length of new tracks proposed along the NEC. (*DOI 10L*)

Response:

FEIS Chapter 2 has been updated to include the total length of the two new tracks proposed along the NEC, which is approximately 26,000 feet (each track is 13,000 feet).

Comment 39-D:

U.S. DOI stated the document should indicate if any environmental impacts are anticipated for traction power (i.e., electrification) and/or signals, specifically if construction of any new facilities is required. (*DOI 12L*)

Response:

FEIS Chapter 2 has been updated to include additional information available subsequent to the DEIS to describe the location of improvements to existing Amtrak substations, as well as the construction of a new power substation at Tonnelle Avenue and temporary TBM- power substations at Tonelle Avenue, Hoboken and at Twelfth Avenue in Manhattan. The environmental impacts of these improvements area addressed throughout the FEIS as appropriate. Additional information regarding systemwide traction power requirements area discussed as indirect and cumulative effects in FEIS Sections 4.18 and 5.18.

Comment 40-D:

U.S. DOI stated the term "rolling stock" should be added to the glossary. (*DOI 12L*)

Response:

The term “rolling stock”, defined as the wheeled vehicles of a railroad, including locomotives, freight cars and passenger cars, has been added to Chapter 16, Glossary and List of Abbreviations and Terms.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS

Comment 41-S:

Several commenters stated the project has changed significantly since NJTPA approved the ARC Locally Preferred Alternative (LPA) in 2005. The LPA selection does not apply to the project as presently constituted and the legitimacy of the 2005 approval is questioned. (*Lackawanna6 5T, Lackawanna6 8T, Lackawanna10 4L*)

Response:

FEIS Chapter 2 has been updated to reflect the fact that NJ TRANSIT is currently working with NJTPA to incorporate updates to the ARC project into the revised Regional Plan to be issued later in 2008. The Build Alternative remains consistent with the ARC Locally Preferred Alternative adopted by the NJ TRANSIT Board of Directors on July 27, 2005 and subsequently adopted by both the North Jersey Transportation Planning Authority and New York Metropolitan Transportation. The current Build Alternative meets ARC goals and objectives and retains the key elements identified in the resolutions adopted by these entities. As described in the resolutions for the NJ TRANSIT Board of Directors, NJTPA and NYMTC, "the ARC program will expand 'one seat' ride service to Manhattan by doubling the capacity of the Trans-Hudson commuter rail system. The centerpiece of the program is the Trans-Hudson Express Tunnel project (THE Tunnel). This project includes construction of a connection between the Main Line and NEC, added tracks along the Northeast Corridor Line, and a station under West 34th Street in Manhattan." The resolutions, as adopted, also identified improvements within existing PSNY, which included E-Yard Expansion, West End Concourse Extension, and Extension of PSNY Platforms 1 and 2. These elements were advanced separately from the ARC project by NJ TRANSIT.

Comment 42-S:

One commenter stated if the existing West End Wye track is not upgraded, this plan adds two minutes to the schedule of every train using this track. This time is not negligible, even for moves to and from a storage yard. (*Lackawanna5 15L*)

Response:

Constructability studies performed during Preliminary Engineeringindicated that reconstruction of the existing wye track would require taking that track out of service for up to 18 months, which was determined to be impractical from an operations perspective. Detailed operational analyses were then undertaken to determine if construction of a second higher-speed connection could allow the existing slow-speed single-track connection to be kept in service while still satisfying operational requirements. These analyses determined that this slow-speed and high-speed track configuration would support the desired operations to and from the yard. The elimination of the reconstruction of the existing wye track as proposed in the DEIS minimizes impacts to existing operations during construction.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 43-S:

We ask the FTA as an "early action" effort, fund an "interoperability" demonstration plan that initiates inter-railroad thru-running at NYP before the end of the current administration, bringing state transit agencies together to work out details of common equipment designs and marketing plan – best way to work out all actions necessary to successfully operate the NYP-GCT connection. (*NatlAssRailPas 10E*)

Response:

NJ TRANSIT is working with the MTA and both its railroads, the Metro-North Railroad (MNR) and Long Island Rail Road (LIRR), to implement an early demonstration of a regional service. The agreed to target, which fits with both technical ability and market need, is to operate MNR trains from Connecticut into New Jersey. NJ TRANSIT locomotives and passenger rail equipment is the most compatible with these two railroad operations and will be used to provide this demonstration service beginning in 2009 to serve Giants and Jets weekend football games. There are several technical interoperability issues that are being discussed and will take time and funding to resolve including the reliance of LIRR on direct current third rail powered equipment. West of the Hudson, the rail system in New Jersey uses overhead alternating current electrical power systems. Some 60 percent of NJ TRANSIT's rail services use overhead AC electrical power. As part of its capital equipment program, NJ TRANSIT is about to procure a number of dual-powered locomotives that can either operate using overhead AC electrical power or in a diesel mode. These locomotives will enable NJ TRANSIT to accomplish two things. First, NJ TRANSIT can offer direct one-seat ride service into Midtown for the seven current services that have diesel powered trains. Second, it can have its trains switch from diesel to electric power on those diesel services that are extensions off of electrical powered lines. It is possible these dual-powered locomotives can be an answer to the interoperability issues posed by a desire to operate LIRR run-through train service.

NJ TRANSIT and the MTA senior management are discussing the potential for extending beyond NYPSE east and north to serve the GCT area or just east, potentially to the Sunnyside Yard area in Queens. Either of these possibilities is allowed for in the ARC design. Once further progress is made on advancing the current NJ TRANSIT and MTA major projects, a decision will be made about next steps to elaborate on the attributes and needs associated with different alternatives for extending ARC.

Comment 44-S:

Several commenters proposed alternative alignment options including: a tunnel under 49th/50th Streets; a tunnel under 56th/57th Streets; a track connection to the 7 line; and a tunnel connection through Jersey City/Hoboken, converting Hoboken terminal into a through station. (*CHEKPEDS 6T, HC 1L, HC2 2L, HC2 5L, HC2 6L, HC2 7L, NewportAssDecCo 1L, NewportAssDecCo 5L, NewportAssDecCo 6L, NewportAssDecCo 7L, OBA 2E, Trip 2 Work3 1T, Trip 2 Work2 3L*)

Response:

As stated in the response to DEIS Comment 2-D, the ARC DEIS and the previous Major Investment Study provided opportunities for the public to identify multi-modal alternatives for improving access into midtown Manhattan, consistent with the purpose and need for the project, as described in FEIS Chapter 1. As shown in FEIS Appendix 2, the ARC MIS identified 137 multi-modal alternatives for improving access into midtown Manhattan. Among these alternatives, a routing to Midtown via Hoboken and tunnel alignments north of West 34th Street were identified during the MIS, but were screened from further consideration.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 45-S:

One commenter stated they object to the removal of certain "near term" improvements from the original ARC project. These improvements would have significantly expanded Penn Station capacity at a modest cost. We object to the removal of these elements as improper, and we call for a new comparison to be made of the project as currently proposed with a base line option including the former "near term" improvements. (*Lackawanna10 9L*)

Response:

As described in FEIS Chapter 2, the No Build Alternative includes the "near term" planned improvements from the original ARC project for which the need, commitment, financing, and public and political support have been identified, and which may reasonably be expected to be implemented by 2030. Near-term PSNY improvements in the ARC No Build are: 1) West End Concourse Extension; 2) Extension of PSNY Tracks 1-4 and Platforms 1 and 2; and 3) PSNY 31st Street Entrance. The West End Concourse Extension would extend the proposed Farley/Moynihan West End Concourse Extension to Platform 3 to Platforms 1 and 2 and further enhance passenger distribution in PSNY.

Comment 46-S:

Amtrak is seeking NJ TRANSIT's commitment and partnership to ensure that future NEC improvements will be made without impinging on ARC-related infrastructure and with amendments to the existing Operating Agreement to permit expansion of service for both parties as a condition of our support. (*Amtrak2 2L, Amtrak2 5L*)

Response:

NJ TRANSIT remains committed to working in partnership with Amtrak with regard to the operation of services on the NEC. In this regard, NJ TRANSIT would continue to work with Amtrak to invest in future NEC improvements consistent with the existing Operating Agreement. The NEC would continue to be a key component of the NJ TRANSIT systemwide rail network with or without ARC.

Comment 47-S:

One commenter stated the SDEIS contains no indication that the alternative of pure-electric operation has been fully considered. It is not known if this unproven dual-mode technology will meet the needs of train riders. (*May2 1L*)

Response:

As described in the response to DEIS Comment 6-D, the capital cost of electrification of the five NJ TRANSIT lines beyond the project area would be several billion dollars, which is far greater than the $470 million (2007$) estimated to purchase the dual-power locomotives.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 48-S:

Many commenters stated the ARC project should address the original goals of the study and create a connection to the east side of midtown Manhattan and Grand Central Terminal (Alternative G). (*AssocPubTrans1L, CaravelloV 2E, CB43 1L, CB5 2L, EmpStatePasAssoc 3T, Hale2 2L, Hale2 3L, Hale3 1L, IRUM2 3T, IRUM3 1T, Lackawanna10 2L, Lackawanna10 3L, Lackawanna5 1L, Lackawanna5 29L, Lackawanna5 31L, Lackawanna6 1T, Lackawanna6 4T, Lackawanna6 7T, Lackawanna7 1T, Lackawanna8 3T, Lackawanna8 6T, Lackawanna9 1T, Ludasi 3E, MukerjiJ 2T, MukerjiJ 5T, NARP 1E, NatlAssRailPas 1E, NatlAssRailPas 7E, NJ ARP4 10T, NJ ARP4 1T, NJ ARP4 2T, NJ ARP4 3T, NJ ARP4 9T, PCAC2 1T, PCAC3 2E, Raleigh3 3T, Raleigh3 4T, Raleigh3 6T, RPA3 2T, RPA3 3T, RRWG2 2T, RRWG2 4T, RRWG2 6T, Sierra3 2T, SomersetPD2 2T, SummitCity 3T, Trip 2 Work2 1L, Trip 2 Work2 1T, Trip 2 Work2 3T, Trip 2 Work3 4T, Voorhees3 2L*)

Response:

As described in the response to DEIS Comment 9-D, Alternative G extension to GCT was dropped during the MIS and in DEIS scoping due to physical and operational constraints. The ARC Build Alternative design would not preclude the future extension to the East Side. Independent further study of the potential extension from NYPSE to the East Side is being considered by NJ TRANSIT.

Comment 49-S:

The SDEIS states that one of the reasons that Alternative G was eliminated was due to the relatively short distance between PSNY and GCT, combined with the slow acceleration and deceleration of commuter rail, preventing high-speed operations. One commenter stated one reason for the slow acceleration is the use of locomotive-hauled trains instead of multiple-unit equipment. They suggested that NJ TRANSIT should shift to more self-propelled equipment on its electrified lines. (*Lackawanna5 24L*)

Response:

As described in the response to DEIS Comment 9-D, Alternative G extension to GCT was dropped during the MIS and reinforced in DEIS scoping due to physical and operational constraints. The impact on high-speed operation between PSNY and GCT was linked to the track curvature and grade, not the equipment type or distance.

Comment 50-S:

Many commenters stated the track connection to existing PSNY should be included in the ARC project. The elimination of the connection has operational impacts to Amtrak and eliminates flexibility and redundancy. It precludes Amtrak to access the new tunnels and station. (*Amtrak2 1L, CB42 3L, CB5 7L, EmpStatePasAssoc 2T, Hale2 4L, IRUM3 2L, Lackawanna10 7L, Lackawanna5 21L, Lackawanna5 22L, Lackawanna5 30L, Lackawanna5 9L, Lackawanna6 2T, Lackawanna8 1T, Lackawanna8 4T, Lackawanna8 5T, Lackawanna9 2T, Ludasi 2E, MukerjiJ 1T, MukerjiJ 4T, MukerjiJ 7T, NatlAssRailPas 2T, NatlAssRailPas 8E, NatlAssRailPas 9E, NJ ARP4 4T, NJ ARP5 1L, OBA 3E, PCAC2 4T, Raleigh2 1L, Raleigh2 1T, Raleigh2 3L, Raleigh2 3T, Raleigh2 5T, Raleigh3 1T, Raleigh3 2T, Raleigh3 7T, RRWG2 1T, RRWG2 3T, RRWG2 5T, RRWG2 7T, RRWG2 8T, SummitCity 1T, SummitCity 2T, Wolley2 5T*)

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

Investigations conducted during Preliminary Engineering indicated that the rock profile, particularly in the location of the station cavern on West 34th Street, was lower than anticipated during the DEIS period and was further characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue. As a result, the FEIS Build Alternative NYPSE cavern is deeper than the configuration in the DEIS to provide for a minimum of competent rock cover. As a result of the deeper cavern, the tunnels profile under the Hudson River and west side of Manhattan would also be deeper to align with the new station and to avoid impacts to the NYCT No. 7 Line extension. The deeper tunnels under the Hudson River and the west side of Manhattan would avoid risks associated with impacts to the river bottom and west side properties. Additionally, the deeper tunnels would preclude a connection to existing PSNY within an acceptable operating grade.

Engineering studies have demonstrated that the Build Alternative would preserve desired operating flexibility and redundancy via track connections in New Jersey rather than through the connector tunnel to PSNY. Also, the segregation of the new ARC tunnels from PSNY would allow for greater isolation of problems in each facility since they would not be physically connected. The Build Alternative will not preclude the future ability for Amtrak trains to access the new tunnels and NYPSE. NJ TRANSIT and Amtrak continue to work together to coordinate their operations in this corridor. NJ TRANSIT will analyze other parts of its rail network, beyond the NEC, to ensure that the entire Amtrak/NJ TRANSIT system has the capacity to reliably support the ARC operating plan.

Comment 51-S:

Under the No Build Alternative there is no way to increase service due to track and platform constraints-even if the LIRR moves all service to Grand Central-which will not happen, they already stated they intend to keep their slots at Penn NY and sue East Side Access (Grand Central) to increase their own service. (*DarlingtonP 2E*)

Response:

The comment is acknowledged.

Comment 52-S:

One commenter stated the solution for increased throughput across the Hudson River is to greatly expand the NYCT's Ferry Operation, adding operations in the Hudson, East and Long Island Sound Service areas. As a further notation on the Ferry Operation, these boats cannot be the small 100-300 passenger boats like those operated by New York Waterways or its competitor Water Taxi; they must be the big 1,000-3,000 passenger boats like those on NYDOT's Staten Island Ferry. (*Herbert 3L*)

Response:

The ARC MIS identified 137 multi-modal alternatives for improving access into midtown Manhattan, including ferry alternatives. It was found that commuter rail alternatives best met the goals and objectives of the study. The commuter rail alternatives expand transit capacity between midtown Manhattan and points in New Jersey and New York, extend the reach and improved connectivity of the region's commuter rail system, increase one-seat ride opportunities, and improve access, travel time, and reliability of the region's commuter rail system. Ferries would not provide the peak hour capacity possible with increased commuter rail service and would not meet future demand.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 53-S:

One commenter asked if the new Kearny Rail Yard design would adversely affect operability. (*Lackawanna5 14L*)

Response:

The Kearny Rail Yard design, which was consolidated to use only a portion of the Koppers Coke site, would provide the same storage and track capacity (28 trainsets) and functional facilities as the yard described in the DEIS Build Alternative. The Build Alternative configuration would allow future track additions that could store at least 20 more trainsets.

Comment 54-S:

Multiple commenters stated the present preliminary discussions regarding extending proposed passenger service on the Susquehanna Line from Paterson to Hackensack ought to be expanded to allow such service to continue through Bogota and Ridgefield Park to connect to the anticipated light rail extension on the Northern Branch. (*RPV 1L*, *NJSL 1L*)

Response:

As described in the response to DEIS Comment 14-D, wye caverns could be constructed within the tunnels to not preclude the eventual connection of the Northern Branch or the NYS&W to the tunnels. The actual connection (beyond the referenced infrastructure) is not part of the ARC Build Alternative.

Comment 55-S:

USEPA stated the Palisades Tunnels will include a wye cavern for future connection to the Northern Branch. This possible future connection must be discussed, and indirect impacts analyzed in the final EIS. (*EPA2 9L*)

Response:

The Northern Branch project is an NJ TRANSIT initiative that would introduce passenger rail service (with diesel multiple-unit vehicles) in Bergen and Hudson Counties, NJ on an existing freight line. This project has independent utility and logical termini, proposed for running from Tenafly to North Bergen, where it would connect to the Hudson–Bergen LRT for service along the Hudson River Waterfront. The proposed project, as it is being assessed by NJ TRANSIT in a separate FTA-sanctioned EIS process, does not include a proposed connection to the Build Alternative tunnels, or the use of dual-power rail vehicles that would allow the service to operate in the proposed Build Alternative tunnels to Manhattan. Therefore, until such time as the proposed line would be extended to the proposed wye cavern connection, or dual-power vehicles would be purchased for use on the Northern Branch, this initiative and the Build Alternative are considered separate independent projects, and no specific analysis of indirect effects of the Northern Branch in the ARC FEIS is warranted.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 56-S:

Several commenters stated although Portal Bridge is a separate project (and some would argue that it should have been included in this project), the cost of the Portal Bridge project should appear here because it's a prerequisite to this project. They asked for confirmation of the status of the project and the schedule for the Portal Bridge ROD. (*KasenetzC2 2E, Lackawanna5 6L, Lackawanna5 7L, Lackawanna10 8L*)

Response:

As described in the response to DEIS Comment 15-D, the Portal Bridge Capacity Enhancement Project has independent utility from the ARC project and is included in the ARC No Build. The costs of this project are included in the Portal Bridge Capacity Enhancement Project DEIS, which was published and circulated on February 15, 2008. The Portal Bridge project will begin construction in 2011 and will be completed earlier in 2017, in advance of the ARC Build Alternative, which is expected to be completed later in 2017.

Comment 57-S:

One commenter stated the Portal Bridge project only extends west through Swift Interlocking, but more capacity will be needed between there and dock (the east end of Newark Penn Station) to accommodate trains from the Raritan Valley and North Jersey Coast Lines, plus possible future through service to Atlantic City. A third (and possibly fourth) track will be needed to fully realize the potential of this project and planning for this work should already have begun. (*Lackawanna5 8L, Lackawanna5 23L, Lackawanna5 28L*)

Response:

NJ TRANSIT is adding two new additional tracks paralleling the NEC as far west as where the M&E lines connect with the NEC in Kearny, NJ, as part of the Portal Bridge Replacement Project. That project is being advanced as a partnership between NJ TRANSIT and Amtrak on a schedule coordinated with the ARC project schedule. The current and future Midtown Direct trains on the Morris & Essex Lines will be able to use these new parallel tracks during peak travel periods to access the new tunnels under the Hudson River and NYPSE. Permitting the Morris & Essex Line trains to use the new parallel tracks will provide space for additional new Raritan Valley Line and North Jersey Coast Line trains on the NEC consistent with the capacity of this line. NJ TRANSIT and Amtrak will be working together as part of the Portal Bridge Replacement Project to provide additional track capacity in this portion of the Northeast Corridor consistent with projected future train volumes.

Comment 58-S:

Multiple commenters stated the SDEIS fails to consider the cumulative impacts of the Portal Bridge Project, even though the ARC Project is dependent on that proposal being implemented. (*C/S2 8E, USEPA 10L*)

Response:

The Portal Bridge Capacity Enhancement project is included in the ARC No Build, and its impacts with respect to ARC are disclosed within the FEIS in Sections 4.18 and 5.18, Indirect and Cumulative Effects.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 59-S:

One commenter asked FTA to reach out to the Federal Railroad Administrator to develop a comprehensive federal picture of the ARC and Portal Bridge Capacity Enhancement Projects. Segmentation of ARC into two separate projects in 2004, whatever its merits, obscured alternatives, total costs, funding requirements and federal understanding of Amtrak impacts. (*NatlAssRailPas 5E*)

Response:

NJ TRANSIT, FTA and FRA are coordinating and will continue to coordinate the project elements and funding options of the ARC and Portal Bridge Projects.

Comment 60-S:

Amtrak has supported advancing improvements to certain key support facilities (e.g., Portal Bridge), including reprioritizing substantial future capital funds at the expense of other projects and dedicating Amtrak professional staff to the ARC Project to enable achievement of its goals in the time frame envisioned by NJ TRANSIT. (*Amtrak2 4L*)

Response:

The comment is acknowledged.

Comment 61-S:

NYCDEP is concerned about the proximity of the proposed station cavern and tail tracks to its critical infrastructure, specifically City Water Tunnel No. 1. Even with those lower tail tracks eliminated, NJ TRANSIT would still coordinate with NYCDEP and other City agencies to avoid impacts to the Water Tunnel. (*NYCDEP 1L*)

Response:

Subsequent to the SDEIS, comments were received from NYC agencies, including NYCDEP and NYC Corporation Counsel, expressing concerns with the proximity of the proposed station cavern and tail tracks to Water Tunnel No. 1. NYCDEP has indicated that prior to the completion of Water Tunnel No. 3 (currently under construction and scheduled to be operational between 2013 and 2018), construction closer than 200 feet from Water Tunnel No. 1 would pose an unacceptable risk. Based on this concern, the station cavern has been shifted so that the eastern edge is 200 feet from Water Tunnel No. 1. The tail tracks, however, would cross 45 feet above the water tunnel to continue eastward and would be constructed prior to the completion of Water Tunnel No. 3. In light of NYC's concerns with regard to the risks associated with the construction of NYPSE tail tracks prior to the opening of Water Tunnel No. 3, the tail tracks have been eliminated from the project. The elimination of the tail tracks would not preclude a future project which could connect NYPSE to service to the East Side of Manhattan. A buffer area would be constructed at the eastern edge of the NYPSE cavern so that, as part of a separate project in the future, a connection could be made to tunnels and tracks which would be constructed from the east. This separate project would be coordinated with NYC to avoid impact to Water Tunnel No. 1 and would need to be constructed subsequent to the opening of Water Tunnel No. 3. NJ TRANSIT will continue to coordinate with NYCDEP to address their concerns with regard to construction of the NYPSE cavern.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 62-S:

One commenter suggested that the station should be built on an upslope eastbound so that all tail tracks could go over the water tunnel. The lower level should be built on a down slope eastbound so that its tail tracks could go under the water tunnel. The lower level could continue on an upslope so it could merge with the tail tracks from the upper level. Commenters also stated since the lower level tail tracks were eliminated to avoid impacts on the water tunnel, it is a minor 'benefit' of little value comes at the cost of much functionality—the tail tracks make it possible for incoming and outgoing trains to be moved through the station without conflict, increasing the station's train throughput. (*Lackawanna5 2L, Lackawanna5 10L, CaravelloV 1E*)

Response:

As described in the response to Comment 61-S, in light of NYC's concerns with regard to the risks associated with the construction of NYPSE tail tracks prior to the opening of Water Tunnel No. 3, the tail tracks have been eliminated from the project. The elimination of the tail tracks would not preclude a future project which could connect NYPSE to service to the East Side of Manhattan.

Comment 63-S:

One commenter noted that the goal is to increase connectivity, yet one result of the new deep-cavern tunnel will be decreased connectivity with other services at PSNY—Amtrak and LIRR—because it will take much longer to travel between the Expansion area and the main station. (*Lackawanna5 5L*)

Response:

The proposed NYPSE design improves connectivity by providing new direct connections to the Sixth Avenue and Broadway NYCT lines and PATH at Herald Square. Additionally, connectivity with Seventh and Eighth Avenue NYCT lines are also provided with direct vertical circulation to expanded NYCT mezzanine areas. While the new station cavern is deep below West 34th Street, the design provides high-speed escalators to connect with PSNY and Amtrak/Long Island Rail Road services.

In addition, travel times for passengers would be improved with the added track and station capacity. Travel time to the surface from the mezzanine level of the new 34th Street Station in the DEIS, as opposed to that proposed for NYPSE in the SDEIS, would be marginally increased. Off setting these increases will be the reduction in overall trip times for NJ TRANSIT passengers through the creation of one-seat-ride opportunities and improved platform egress capacity, as compared to existing PSNY.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 64-S:

Passengers will need more time to get to and from the station platforms because of the increased depth. The elimination of the fourth escalator bank will increase the time required to get to and from the platforms because more people will use the other three. (*Lackawanna5 12L, Lackawanna5 11L*)

Response:

Pedestrian analyses, including detailed computer simulations, have been performed to validate the design of vertical circulation in NYPSE. These analyses included study of transfers to NYCT, subway lines, and potential impacts along sidewalks at the surface. Overall, travel times for passengers would be improved with the added track and station capacity. Travel time to the surface from the mezzanine level of the new 34th Street Station in the DEIS, as opposed to that proposed for NYPSE in the SDEIS, would be marginally increased. Off setting these increases will be the reduction in overall trip times for NJ TRANSIT passengers through the creation of one-seat-ride opportunities and improved platform egress capacity, as compared to existing PSNY. In addition, for passengers transferring to NYCT subway lines the Build Alternative would have better connections to the Seventh Avenue and Eighth Avenue NYCT subway lines and a new underground connection to NYCT and PATH at Sixth Avenue/Broadway.

Comment 65-S:

One commenter stated the new station will be a single cavern with six tracks entirely within the West 34th Street right of way. Previously the station had two caverns with eight tracks (though only six were to be outfitted, leaving two for future expansion). This change eliminates the future potential increases of 33% in train volume. (*CB42 2L*)

Response:

During the DEIS design development stage, the two four-track caverns were designed for constructability reasons, namely that the narrower caverns required less bedrock cover. The north cavern would have been constructed under existing buildings. The lower tracks in the northern cavern were being excavated during mining operations because the marginal cost of creating that space would be relatively minimal if completed during mining of the caverns. In the future, these tracks could be outfitted to create more platform capacity; however, only six tracks are needed to match the operational capacity of the tunnels beneath the Hudson River.

During the Preliminary Engineering phase of design development, detailed geotechnical investigations were undertaken to accurately model underlying bedrock conditions. Through these efforts and detailed engineering design, it was determined that one six-track cavern could be constructed below West 34th Street. The one-cavern design allowed the station cavern to stay within the public right-of-way to would not impede future development along the north side of West 34th Street. Additional operational analyses were also performed to ensure that the six-track terminal could fully support future operations. It was determined that the revised design actually improved operations given that the six-track terminal required less complicated interlockings ahead of the terminal and matched the full operational capacity of the two running tunnels from New Jersey. Opportunities for future additional capacity would be created by expanding tracks east and creating a through-station.

PROJECT ALTERNATIVES (CHAPTER 2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 66-S:

One commenter stated without a connection to PSNY there is no real rationale for choosing West 34th Street as the most appropriate Manhattan location for a new station. (*CB5 5L*)

Response:

The location of NYPSE provides passenger interconnectivity with PSNY. NYPSE would provide underground passageways for passengers to connect to existing PSNY train services, NYCT subway lines at Eighth Avenue, Seventh Avenue and Broadway/Sixth Avenue, as well as PATH service at Sixth Avenue. These pedestrian connections would provide passengers arriving at the new station full access to NYCT, LIRR, Amtrak and NJ TRANSIT services operating out of PSNY.

Comment 67-S:

One commenter stated an entrance to the 34th Street Station is located at the northwest corner of 35th Street and Eighth Avenue; however, the corner has not been studied. Since a large portion of pedestrians arriving at 34th Street is coming from the north, these very narrow corners must be studied and mitigated. (*CHEKPEDS 9L*)

Response:

The entrance on the northeast corner of Eighth Avenue and West 35th Street was dropped from further consideration during Preliminary Engineering. Further analysis showed that this entrance was not needed to carry projected pedestrian loads. The ARC project is not expected to have any measurable impact on NYCT entrances west of Eighth Avenue. To reach NYPSE via NYCT stairs west of Eighth Avenue, passengers would have to pay an NYCT fare to pass through the station mezzanine. Therefore, it is projected that NYPSE passengers going to and from points west of Eighth Avenue would cross Eighth Avenue at grade and use entrance/exits on the east side of the avenue.

Comment 68-S:

One commenter stated the new project includes five station entrances, reduced from the originally proposed six (the entrance at the northeast corner of Eight Avenue and West 34th Street has been eliminated), and three separate American Disability Act (ADA) elevator entrances. In contrast, the number of passenger trips has increased 18%. Three potential future entrances have also been eliminated. (*CB42 5L*)

Response:

Pedestrian analyses, including detailed computerized simulation, have been performed during Preliminary Engineering to ensure that the proposed design fully satisfies station access and emergency egress requirements.

PUBLIC TRANSPORTATION (SECTION 3.1)

DEIS COMMENTS

Comment 69-D:

While the DEIS makes references to lane closures in the vicinity of PSNY, there is no explicit reference to the resulting impact on NYCT bus service. (*MTA 19L*)

Response:

FEIS Section 3.6 has been updated to explain that NYCT bus service would remain on the designated routes (streets) during Build Alternative construction, although some bus stops would need to be temporarily relocated within the same route during off-peak periods. Lane closures would relate more to auto traffic, while bus service, in coordination with NYCT, would be shifted to the adjoining lane during such off-peak temporary closures. This provision will be included in a Maintenance and Protection of Traffic (MPT) plan that would be prepared during final design. There would be no permanent impacts to NYCT bus routes or stop locations. FEIS Section 3.1 shows that three additional buses would be required on the M16/M34 lines to meet future demand. Any modifications to bus services would be the responsibility of NYCT.

Comment 70-D:

One commenter stated the schedules seem somewhat better coordinated but much can be done to achieve integration of bus and rail. NJ TRANSIT bus needs to work even more closely with NJ TRANSIT rail to achieve this integration. (*Transport 9E*)

Response:

NJ TRANSIT rail and bus operations departments work closely to identify opportunities to achieve better integration of bus and rail service and improve responsiveness to customer demand. Bus and rail service integration will continue to be refined as Build Alternative operations begin.

Comment 71-D:

One commenter stated in 2025, only 10 years after completion of the Tunnel, the Lincoln Tunnel will still have 5 percent excess demand above the level of capacity. (*CB4 Pedestrians 2T*)

Response:

As stated in FEIS Section 3.3, peak hour demand for trans-Hudson auto travel is forecast to exceed capacity by 11 percent in the 2030 No Build Alternative scenario and approximately 5 percent in the 2030 Build Alternative scenario. The ARC project would contribute to this reduction through a diversion from auto to commuter rail service. In 2030 with ARC, the Lincoln Tunnel would still be over capacity.

Comment 72-D:

One commenter noted that the second approach track and tunnel was/is capable of reverse operation. Judicious use can add extra capacity. (*Helm 4E*)

Response:

The provision of robust westbound reverse peak service from NYPSE, and the need to efficiently and expeditiously clear platforms for use by following eastbound trains (by running non-revenue westbound trains from that terminal) would preclude the practical use of the second westbound tunnel for any type of reverse operation to support additional capacity into Manhattan.

PUBLIC TRANSPORTATION (SECTION 3.1) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 73-D:

MTA stated the EIS should evaluate whether additional North River tunnel service into PSNY would preclude service expansion via the Empire tunnel, thereby reducing possible expansion of Amtrak service and/or introduction of Metro-North service into PSNY. Any diminishing of Empire Line capacity would impact the MTA. The EIS should evaluate whether and how introduction of additional ARC-NJ TRANSIT trains to PSNY may affect the station capacity and ability of MNR to also introduce its proposed service. (*MTA 9L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River, which made it infeasible to construct the connection from the new ARC tunnels to PSNY to meet NJ TRANSIT operating requirements. The ARC service plan would not increase the number of peak hour NJ TRANSIT trains entering PSNY. Therefore, the project's capacity to accommodate NJ TRANSIT and other rail operators' demands on that facility would not be impacted.

Comment 74-D:

MTA stated the service plan table needs to indicate how many trains will be going to PSNY separate from the number of trains going to the new platform tracks under West 34th Street. (*MTA 10L*)

Response:

FEIS Section 3.1 service plan tables have been updated to show the proposed split of trains between PSNY and NYPSE. Twenty-five peak hour trains would be routed to NYPSE and 23 peak hour trains would be routed to PSNY.

Comment 75-D:

One commenter stated the Build Alternative does not provide an assurance there will be sufficient excess capacity in THE tunnel and at 34th Street Station during peak periods to accommodate additional trains serving as many as six new rail lines, in addition to the nine existing rail lines included in the ARC Project. (*NJ ARP 3T*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, detailed system-wide operational analyses, which took into account the station design and track approaches, showed that the 48 train per hour peak hour service plan can be operated into PSNY and NYPSE.

Comment 76-D:

MTA stated the impact of sidewalk closures on bus riders should be addressed. (*MTA 20L*)

PUBLIC TRANSPORTATION (SECTION 3.1) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

As described in FEIS Section 3.6, NYCT bus services would remain on their designated routes (streets) during Build Alternative construction, although some bus stops and signage would need to be temporarily relocated within the same route during off-peak periods. Lane closures would relate more to auto traffic, while bus service would be shifted to the adjoining lane during such temporary off-peak closures. Sidewalks would be reduced in width at some locations on West 34th Street, but bus access would be maintained. Sidewalk closures would be limited to fan plant locations on 33rd and 35th Streets, Dyer Avenue, and Twelfth Avenue. In areas of sidewalk disruption during construction, temporary surfaces would be placed to allow pedestrians to pass or pedestrians would be temporarily routed to the opposite side of the street. This arrangement will be included in a MPT plan prepared during final design. Any modifications to bus services would be the responsibility of MTA-NYCT, while modifications to bus stops would be the responsibility of NYCDOT.

Comment 77-D:

One commenter stated maybe NJ TRANSIT "should not have built the Secaucus Connection since it is obsolete with ARC". (*Raleigh 3T*)

Response:

Frank R. Lautenberg Station strengthens NJ TRANSIT line connectivity, since it allows passengers to transfer between the Main/Bergen and Pascack Valley lines and the NEC and M&E. Future plans for the station include approximately 4.7 million square feet of office, hotel and conference center space in future adjacent development, strengthening its role as a destination, as well as a transfer station.

Comment 78-D:

One commenter questioned some of the ridership projections. The Amtrak proportion could change drastically, especially if overnight trains ever have a revival. If New Jersey seriously markets its cities and improves intra-New Jersey travel, the trans-Hudson traffic could level off or even drop. Other than possibly reverse commuting, the commenter has serious doubts about whether there will be substantial growth in trans-Hudson traffic and hopes that Amtrak service would grow more than this study projects it to. (*Transport 1E*)

Response:

The 2030 trans-Hudson ridership forecasts documented in FEIS Section 3.1 are based on NYMTC and NJTPA regional population and employment forecasts. These forecasts indicate an 88 percent growth in trans-Hudson rail trips from 2005 to 2030. Amtrak currently operates three trains per hour in the AM peak hour into Manhattan. In the 2030 No Build Alternative, this frequency would not change. In the 2030 Build Alternative, Amtrak would operate one additional peak hour train for a total of four trains per peak hour.

Comment 79-D:

MTA stated new NJ TRANSIT-Metro-North Railroad service plan implications should be included. MTA Metro-North and NJ TRANSIT agreed to a new West-of-Hudson service plan for the Pascack Valley and Port Jervis lines on June 12, 2006. The DEIS should indicate that the new service plan will be reflected in the FEIS and that Ridership forecasts will also be revised to reflect the new service plan. (*MTA 11L*)

PUBLIC TRANSPORTATION (SECTION 3.1) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

FEIS Section 3.1 has been updated to explain that the FEIS operating plan is consistent with NJ TRANSIT-MTA west-of-Hudson ridership forecasts and associated service plan, as expressed in the June 12, 2006 agreement between NJ TRANSIT and MTA.

Comment 80-D:

MTA stated the total Build Alternative incremental number of passengers transferring at PSNY to the subway and buses during the peak period/peak hour should be included in the "Subway Service" and "NYCT Bus Service" sections, respectively. The number of existing and No Build transfers at PSNY from NJ TRANSIT to the subway and NYCT buses should be included to provide a comparison between existing and future transfers to the subway. (*MTA 17L*)

Response:

FEIS Section 3.1 has been updated to include the incremental number of subway and bus passengers predicted to transfer to these modes during the peak hour between the No Build and Build Alternatives. An additional three peak-hour buses would be needed to accommodate the increased bus passenger demand associated with the Build Alternative. Existing subway lines and station facilities would be able to absorb the additional passenger demand generated by the Build Alternative.

Comment 81-D:

One commenter stated the 2025 DEIS Build Alternative shows no new AM peak service will be provided on the Pascack Valley Line and asked whether this is due to the capacity constraints at Woodbine Yard. (Rockland 1L)

Response:

In the FEIS operating plan (Section 3.1), the average number of Pascack Valley Line peak hour trains increases from 4 (to Hoboken) to 5 (2 to NY and 3 to Hoboken) by 2030. Service in New York State is determined in large part by agreements with MTA Metro-North Railroad, which funds Pascack Valley Line service to/from Spring Valley, New York. The ARC FEIS 2030 operating plan takes into account these agreements, and also reflects increases in service by operating "inner zone" service from North Hackensack to Manhattan on the Pascack Valley Line.

Comment 82-D:

MTA stated the source for 2025 line capacity in Table 3.1-18 is the same as for the No Build volume (No. 7 Extension-Hudson Yards). The first source listed should be deleted. (*MTA 18L*)

Response:

The first source in the FEIS table has been deleted.

Comment 83-D:

One commenter stated the DEIS should include the current V/C ratios for subway service at 34th Street along with the total capacity numbers provided in the Chapter 3 Appendix. (*NYC Comptroller 2E*)

PUBLIC TRANSPORTATION (SECTION 3.1) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

FEIS Section 3.1 was updated to include current V/C ratios for subway service at West 34th Street.

Comment 84-D:

One commenter noted concerns about subway capacity issues. In the DEIS, three southbound subway lines will be operating at a V/C ratio of 77 percent to 96 percent under the Build Scenario. Since the V/C ratio is an average for the morning peak hour, it seems likely that these trains will be very congested during the peak 15 to 20 minutes of that hour assuming scheduled train intervals. It would be useful for the EIS to provide additional data on assumptions about employment growth in lower Manhattan and downtown Brooklyn that will add southbound through riders boarding both north and south of 34th Street so it can be understood how crowded these trains will be at 14th Street. The EIS should include existing condition subway line volumes at 34th Street (Table 3.1-18). (*Comptroller NYC 2L*)

Response:

The FEIS 2030 No Build subway volumes applied in the subway line load analysis were provided to NJ TRANSIT by NYCT. This ridership information takes into account NYMTC future population and employment growth in Manhattan, north and south of West 34th Street. Predicted V/C ratios with the Build Alternative show that all but one subway line analyzed would remain below capacity in the AM peak hour with the Build Alternative. The southbound ❷ would operate above capacity in the AM peak hour, at a V/C ratio of 1.05 upon reaching its peak load point south of the station. Contrasting this condition is the southbound ❸ which would operate at a V/C of 0.88. When aggregating the southbound ❷ and the south bound ❸, the V/C for the entire express line would operate at a V/C ratio of 0.97. The implication of these ratios is that ARC patrons would likely seek less crowded lines thereby equalizing ridership along the Seventh Avenue lines.

Comment 85-D:

MTA stated "NYCT Rail Transit Operations" should be replaced with "NYCT" on page 3.6-4 and, "in one direction" should be added after "bypass a station" in the last sentence of the first paragraph on page 3.6-4. (*MTA 27L, MTA 28L*)

Response:

FEIS Section 3.6 has been updated to respond to MTA comments.

Comment 86-D:

One commenter stated Appendix 3.1 (page 64) does not accurately calculate the number of railcars that constitute system capacity. They also stated in Appendix 3.1 it appears to us that the model overestimates travel times to PSNY on the No Build Alternative, while underestimating travel times for the "build" alternative. (*Lackawanna4 7L, Lackawanna4 8L, Lackawanna4 9L*)

Response:

The ARC Ridership Methodology and Results Report (see Appendix 3.1) have been updated to reflect updated schedule, system capacity and travel time information. The peak hour capacity is not a consideration in the calculation of project benefits. Project benefits are calculated based on daily ridership and travel time savings.

PUBLIC TRANSPORTATION (SECTION 3.1) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 87-D:

One commenter stated the assumption that only 23 trains to New York can fit under the No Build scenario is untrue. The assumption is incorrect and requires a complete reworking of the model. (*Lackawanna4 10L*)

Response:

The 23 TPH represents the practical maximum for sustained reliable operation over a 2-hour peak period. The addition of two NJ TRANSIT AM peak hour trains to PSNY in 2007 reflects some flexibility for accommodating pulses of operation above the 23 TPH level, but these pulses are not sustainable over an extended period. NJ TRANSIT was also able to take advantage of some Amtrak schedule changes to its trains for reasons that have nothing to do with NJ TRANSIT. To accommodate the existing pulse, NJ TRANSIT must send many of its trains operating in that time period through PSNY to Sunnyside Yard instead of turning at PSNY for immediate return to the west. The extra travel to and from Sunnyside adds approximately one hour to a train's cycle time compared to a train that turns in PSNY. The peak hour capacity is not a consideration in the calculation of project benefits. Project benefits are calculated based on daily ridership and travel time savings.

Comment 88-D:

One commenter stated the project as proposed will require that riders on the Morris & Essex and Montclair-Boonton Lines to be evicted from PSNY and forced into a far less safe, convenient an desirable facility. This represents a downgrade in the mobility for those riders, which is also inappropriate for a new transit project. (*Lackawanna10 6L*)

Response:

While M&E and Montclair-Boonton trains will be routed to NYPSE after construction, passengers on those trains would benefit from enhanced connectivity to NYCT subways, particularly the Sixth Avenue/ Broadway Lines and PATH.

Comment 89-D:

One commenter questioned the savings in running time and in walking time in Manhattan that are stated in the DEIS. (*Lackawanna4 12L*)

Response:

The additional infrastructure provided by the ARC project would increase train routing flexibility and reduce at-grade conflicts, providing less "resistance" in projected train paths into Manhattan. This condition accounts for the projected savings in running time.

PUBLIC TRANSPORTATION (SECTION 3.1) (CONTINUED)

SDEIS COMMENTS

Comment 90-S:

One commenter stated the addition of 25 gates to the Port Authority to handle additional buses are not factored in the congestion it will create in the tunnel due to reduced capacity dedicated to cars, and is not factored in the volume of additional taxis needed to handle commuter once they arrive in New York or the sidewalk impact many more bus commuters. (*CHEKPEDS 8L*)

Response:

The 2030 trans-Hudson traffic volumes include projected increases in trans-Hudson bus traffic. Lincoln Tunnel buses access the Port Authority Bus Terminal via direct ramp connections. The ARC project would reduce projected trans-Hudson automobile demand by 22,000 vehicles per day. Background traffic volumes, including taxis, were increased by 0.5%/year to 2030 with no credit taken for the reduction in trans-Hudson auto trips, to conservatively project future traffic conditions.

Comment 91-S:

Amtrak stated a major issue for Amtrak is that of slots, i.e., the number of trains that can operate through the NEC tunnels and how the railroads share the available slots. Amtrak believes the SDEIS operational analysis such as Pennsylvania's Keystone Corridor" trains and, in fact effectively precludes expansion of them during the critical morning and afternoon peak hours. (*Amtrak2 3L*)

Response:

As described in FEIS Chapter 2 and Section 3.1, Amtrak operates three trains per hour in the AM peak hour into PSNY. In the 2030 No Build Alternative, this frequency would not change. With the Build Alternative, Amtrak would operate one additional peak hour train, for a total of four peak trains per hour. Beyond this increase in peak hour service, the expanded capacity that would be provided by ARC might allow more slots in PSNY allocated to Amtrak in off-peak hours.

Comment 92-S:

Several commenters stated concern with the SDEIS service decrease on the Main/Bergen County Lines and the level of service to New York on the Port Jervis Lines. (*Wolley2 3T, Wolley2 4T, CHEKPEDS 6L*)

Response:

A system-wide post-DEIS operations analysis conducted, highlighted physical constraints on the Main, Bergen, and Pascack Valley lines, which reduced the number of AM peak hour trains serving Manhattan and Hoboken from 17 in the DEIS Build Alternative to 14. The 2030 ridership analysis, which provided the distribution of ridership to the two terminals, influenced the total number of peak hour trains to the two terminals.

PUBLIC TRANSPORTATION (SECTION 3.1) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 93-S:

One commenter stated the proposed route of the ARC tunnel, currently under public review, has some significant deficiencies. The SDEIS route bypasses Hoboken/Jersey City and will reduce rail service to the Hoboken Terminal, as evidenced by the SDEIS forecast that Hoboken peak hour ridership will fall from 36 percent of New York ridership in 2005 to 13 percent in 2030. If Hoboken remains a stub-end terminal, there will be constant pressure to reduce rail services in the future. (*HC 2L*)

Response:

NJ TRANSIT is committed to maintaining service levels to Hoboken Terminal. As stated in the response to DEIS Comment 2-D, the ARC DEIS, and the previous Major Investment Study, provided opportunities for the public to identify multi-modal alternatives for improving access into midtown Manhattan, consistent with the purpose and need for the project as described in the FEIS Chapter 1. As shown in Appendix 2, the ARC MIS identified 137 multi-modal alternatives for improving access into midtown Manhattan. Among these alternatives, a routing to Midtown via Hoboken and tunnel alignments north of West 34th Street were identified during the MIS but were screened from further consideration.

STATION ACCESS AND PARKING (SECTION 3.2)

DEIS COMMENTS

Comment 94-D:

One commenter stated daily boarding on the Main/Bergen Line under the 2025 DEIS Build Alternative will experience a 55 percent increase in riders. Since NJ TRANSIT owns the station and rail yard in Suffern, NY, they asked what the future plans are for providing additional parking, improving pedestrian safety and ADA access to Suffern Rail Station and downtown Suffern. (*Rockland 7L, Rockland 9L*)

Response:

FEIS Section 3.2 projects parking needs for station segments; however, planning for additional parking related to the ARC project is still in a very early stage. When the ARC project advances and the parking needs at individual stations can be better estimated, the planning necessary for site selection, traffic impact analysis, and analysis for compatibility with surrounding land uses will occur. As the planning for these additional parking needs advances, each potential site will be subject to an environmental review under NEPA (if federally funded), tiering from the ARC FEIS. If state or locally funded these sites would be subject to state and/or local environmental review requirements. Public outreach and any meetings with governmental officials regarding any parking site development and decision-making processes will be planned.

STATION ACCESS AND PARKING (SECTION 3.2) (CONTINUED)

SDEIS COMMENTS

Comment 95-S:

One commenter stated it would be useful to list the parking capacities by station. (*Lackawanna5 25L*)

Response:

The assessment of 2030 Build and No Build New Jersey station parking capacity and demand was prepared for the FEIS by segment to reflect the level of precision appropriate to the forecasting model. That is, the model has been shown to produce more reliable projections on an aggregate level, but less precise projections on a station level. Existing parking capacity and demand data has been aggregated to facilitate comparison with the projected conditions.

Comment 96-S:

One commenter asked what NJ TRANSIT's plan is for commuter parking in New Jersey to accommodate the additional riders. (*CityofSummit 1T*)

Response:

FEIS Section 3.2 projects parking needs for station segments; however, planning for additional parking related to the ARC project is still in a very early stage. When the ARC project advances and the parking needs at individual stations can be better estimated, the planning necessary for site selection, traffic impact analysis, and analysis for compatibility with surrounding land uses will occur. As the planning for these additional parking needs advances, each potential site will be subject to an environmental review under NEPA (if federally funded), tiering from the ARC FEIS. If state or locally funded these sites would be subject to state and/or local environmental review requirements. Public outreach and any meetings with governmental officials regarding any parking site development and decision-making processes will be planned.

Comment 97-S:

One commenter noted on page 3.1-6 it states that there's going to be new parking installed on the Bergen County line at Wesmont Station and asked where that station is located. It is not currently listed on any of the maps for the Bergen County Line. (*Wolley2 1T*)

Response:

Wesmont is a new station proposed on the Bergen County Line in the Lyndhurst area.

Comment 98-S:

One commenter asked where the new parking lots will be located in Rutherford. (*Wolley2 2T*)

Response:

Excess parking spaces exist within Rutherford's parking deck; therefore, no new lots would be required.

STATION ACCESS AND PARKING (SECTION 3.2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 99-S:

One commenter stated there is no planning about consolidating more regional, local bus service to the railroad stations instead of building parking garages. (*Raleigh2 4T*)

Response:

As described in the response to Comment 96-S, FEIS Section 3.2 projects parking needs for station segments; however, planning for additional parking related to the ARC project is still in a very early stage. Mitigation measures that will be considered in the planning for parking sites in New Jersey will include use NJ TRANSIT's Station Access program to evaluate and plan for parking needs such as: Expanding existing parking facilities; Developing new parking facilities; Providing bus and commuter shuttle access; Improving bus/rail coordination; Enhancing pedestrian and bicycle pathways; Improving transit access to stations through feeder or alternate bus service under NJ TRANSIT's Community Shuttle Bus Service program; and Working with communities to design in a manner that encourages alternate transportation opportunities to access stations.

Comment 100-S:

One commenter stated 50 workers will be working at two locations in Manhattan and no parking assumptions are made. (*CHEKPEDS 5L*)

Response:

FEIS Section 3.6 has been updated to clarify assumptions on construction-related automobile trip generation by shaft site and parking.

Project construction activities would generate approximately 50 auto trips during the AM and PM peak traffic hours (inbound during the AM peak hour, and outbound during the PM peak hour). These autos would be destined to Manhattan construction shafts/fan plants as follows: approximately 20 each to the Twelfth Avenue Fan Plant, and approximately 10 each to the Dyer Avenue, 33rd Street and 35th Street Fan Plants. Off-street parking would not be provided for these vehicles, and they are projected to park in public off-street parking facilities in the project area.

Comment 101-S:

Multiple commenters stated a possible Meyers Garage site location for the fan plant would have an adverse effect on the hotel operations and parking. They are also concerned about the loss of parking on West 34th Street. (*KylerL 6T , KylerL3 5L, KylerL3 8L, WilliamL 3T*)

Response:

Subsequent to the release of the SDEIS, the Optional 35th Street Fan Plant site (Meyers Parking Garage) between Eighth and Ninth Avenues was eliminated. An ADA Access/Emergency Personnel Access elevator entrance for employee use only would be constructed within the southwestern corner of the Meyers Parking Garage. The long term impact of this facility is limited to the displacement of approximately 24 off-street parking spaces within the parking study area, with more than 13,300 parking spaces remaining.

ROADWAYS (SECTION 3.3)

DEIS COMMENTS

Comment 102-D:

One commenter stated they didn't understand the construction truck movements from 35th Street to the Lincoln Tunnel and other construction vehicle impacts to PATH, 31st and 44th Streets. Closing 44th Street would be a project drawback. *(CB4 Pedestrians 5T)*

Response:

Construction-related impacts to transportation are documented in FEIS Section 3.6. As seen on Figure 3.6-1, no sidewalk or lane closures would be needed on West 31st or West 44th Streets. No impacts to PATH train service by construction vehicles would occur. Construction vehicle movements along 35th Street would be coordinated with NYC DOT to ensure degradation in traffic conditions would not occur. Results of this coordination will be reflected in an MPT plan prepared during final design for approval by NYCDOT.

Comment 103-D:

One commenter stated taxi stands on the east side of Eighth Avenue and 35th and 34th Streets, would create massive congestion at many of the entrances. The commenter requested that ARC relocate the station farther west. The locations of the taxi stands and entrances are ill advised at best. *(CB4 Pedestrians 3T)*

Response:

The taxi stand on the east side of Eighth Avenue between West 34th and West 35th Streets has been eliminated, and is documented in SDEIS Section 3.3. This taxi stand was no longer necessary as a result of the elimination of the NYPSE entrance at that location. NYPSE entrances would not be relocated westward as they would diminish the ability of passengers to transfer to other transportation options currently located between Sixth Avenue and Eighth Avenue along West 34th Street.

Comment 104-D:

One commenter stated the project calls for the insertion of construction materials for the Hudson River Tunnel at the Hoboken shaft. They were not able to find any environmental or traffic analysis of this in the DEIS beyond the impacts of the construction of the shaft itself. (*Hudson County Engineering 2L*)

Response:

Material excavated from the Hudson River tunnels would be extracted from the proposed Hoboken construction access shaft. FEIS Section 3.6 includes a discussion of the traffic that would be generated by proposed construction activities at this shaft, the travel routes expected to be used by such traffic, and the effects of construction-generated traffic superimposed on No Build traffic operational conditions.

Comment 105-D:

One commenter stated the 14th Street Viaduct in Hoboken will most likely be replaced during the ARC construction period. It is anticipated that it will remain open during construction; however, its capacity may be diminished. (*Hudson County Engineering 5L*)

Response:

Use of the 14th Street Viaduct for Build Alternative construction traffic from the Hoboken construction access shaft would not occur.

ROADWAYS (SECTION 3.3) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 106-D:

One commenter stated debris from both the Palisades and Hudson River Tunnels would be removed via the Tonnelle Avenue Shaft in North Bergen. They asked whether the estimates for truck movements at the Tonnelle Avenue Shaft were updated to account for this (*Hudson County Engineering 6L*)

Response:

The DEIS analysis of construction traffic (truck movements) was based on extraction of excavated materials from both the Palisades and Hudson River tunnels at the proposed Tonnelle Avenue shaft in North Bergen. The construction traffic assessment (truck movements) provided in the FEIS has been revised to reflect use of the Tonnelle Avenue shaft in North Bergen to extract excavated materials from the Palisades tunnels, and use of the Hoboken shaft to extract excavated materials from the Hudson River tunnels.

ROADWAYS (SECTION 3.3) (CONTINUED)

SDEIS COMMENTS

Comment 107-S:

One commenter stated in Section 3.6 (Construction Impacts) page 3.6-8, the traffic intersections that were analyzed for the hauling of excavated materials to the Kearny Yard should be identified in the SDEIS. There are only a very few routes to the proposed Kearny Yard from Tonnelle Avenue in North Bergen and Park Avenue in Hoboken and it appears likely that other intersections or roadway links will be significantly impacted by excavated materials truck traffic. (*HCIA2 5E*)

Response:

FEIS Section 3.6 has been revised to clarify construction impacts. Critical intersections along each haul route are assessed in FEIS Section 3.6.

Comment 108-S:

One commenter stated the 19th Street location is very isolated being located against the Palisade cliff and inside HBLRT tracks and we understand that access is difficult. They asked that although major access routes are identified in SDEIS, it does not explain how construction traffic will get into and out of the construction/mobilization site. They requested information to understand the local impacts of this operation and how the decision to use the Hoboken shaft to extract Hudson River Tunnel spoils intensifies local traffic impacts. (*Hudson County Engineering2 1L*)

Response:

FEIS Section 3.6 has been revised to clarify local access routes to the Hoboken shaft site. Inbound haul trucks would follow JFK Boulevard from the NJ Turnpike to Park Avenue. From there, they would take 15th Street to Clinton Street and then utilize a construction haul route along and crossing the Hudson Bergen Light Rail.

Comment 109-S:

One commenter stated MPT plans will be required for County Road and Secaucus Road where structures are built over Hudson County roadways. (*Hudson County Engineering2 8L*)

Response:

MPT Plans will be prepared during final design in close coordination with municipalities in the county.

Comment 110-S:

One commenter stated the SDEIS noted that 1,000 workers will be employed on the 28th Street construction site, however, only 10 vehicles will be used for commuting. The recently released NYC Partnership report noted that construction workers had among the highest utilization of private vehicles for commuting into New York City. The construction site is across the street from Hudson River Park and we are concerned that the Park will become a de facto parking lot—putting joggers and bikers at risk. On the 34th Street site, the SDEIS does not identify the number of workers, however the number of worker trips at peak hours is also 10 and no parking option is discussed. We recommend that you reevaluate these assumptions and revise the traffic and parking impacts to reflect the proper numbers. Sufficient dedicated parking should be planned for the 80-month construction phase. (*CHEKPEDS 4L*)

ROADWAYS (SECTION 3.3) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

FEIS Section 3.6 has been revised to clarify construction impacts in New York. Manhattan construction staging sites will employ approximately 1,000 workers on 8-hour shifts around the clock. This will result in approximately 250 to 325 workers per shift in Manhattan. Project construction activities would generate approximately 50 auto trips during the AM and PM peak traffic hours (inbound during the AM peak hour, and outbound during the PM peak hour). These autos would be destined to Manhattan construction shafts/fan plants as follows: approximately 20 each to the Twelfth Avenue Fan Plant, and approximately 10 each to the Dyer Avenue, 33rd Street and 35th Street Fan Plants. Off-street parking will not be provided for these vehicles and they are projected to park in public off-street parking facilities in the project area. Construction is no longer required in Hudson River Park, and parking will not be permitted in the park.

Comment 111-S:

One commenter stated a comprehensive mitigation plan from the Port Authority is required to reduce or relocate Lincoln Tunnel queues in order to make space for a tripling of pedestrian traffic. (*CHEKPEDS 1T*)

Response:

The comment is acknowledged.

Comment 112-S:

One commenter stated they cannot support the current implementation plan that will put the safety of thousands of commuters/pedestrians at risk, unless spare capacity is included in the plan and the PANYNJ and NJ TRANSIT redesign the New York Lincoln Tunnel entrances flow and develop a plan to constrain the volume of cars. Such detailed mitigation measures must be formally incorporated in the EIS. (*CHEKPEDS 2T, CHEKPEDS 3T*)

Response:

The ARC project will provide sufficient capacity to accommodate projected demand for trans-Hudson commuter rail crossings in 2030. Provision of spare commuter rail capacity would not reduce trans-Hudson automobile demand beyond the 22,000 vehicles per day reduction projected with ARC. Redesign of the Lincoln Tunnel entrances, and development of plans to constrain the volumes of trans-Hudson automobile traffic, are beyond the scope of this public transportation project. NJ TRANSIT and the Port Authority are committed to working with New York City and State agencies to address transportation issues in the ARC project area.

Comment 113-S:

One commenter stated NJ TRANSIT should work with the Port Authority to reconfigure the accesses to the Lincoln Tunnel entrances in anticipation of new patterns and develop a proper mitigation plan. (*CHEKPEDS 2L, CB42 16L*)

Response:

The ARC project will reduce trans-Hudson traffic demand by 22,000 vehicles per day in 2030. Reconfiguring the approaches to the Lincoln Tunnel is beyond the scope of this public transportation project. NJ TRANSIT and the Port Authority are committed to working with New York City and State agencies to address transportation issues in the ARC project area.

ROADWAYS (SECTION 3.3) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 114-S:

The congestion on Lincoln Tunnel approaches will probably be worse than anticipated. (*CHEKPEDS 7L*)

Response:

The comment is acknowledged.

Comment 115-S:

One commenter stated the traffic conditions (and thus the negative traffic impacts) in the area are higher than are indicated in the SDEIS, primarily from the increased traffic from the nearby Lincoln tunnel exits/entrances. (*CB42 10L*)

Response:

The comment is acknowledged.

Comment 116-S:

One commenter stated the SDEIS suggests changing signal timing to alleviate car delays at the tunnel ramp or at most of the impacted intersections in the CB4 where Lincoln Tunnel queues are the cause of the delays in both directions. In such circumstances, changing signal timing is mostly ineffective. (*CB42 13L*)

Response:

The comment is acknowledged.

Comment 117-S:

One commenter stated the ARC Full South Alignment structure along with the service road will impact traffic signals that have been installed on Secaucus Road at both Penhorn Avenue and Henry Street in Secaucus. This was not reflected in the SDEIS. (*Hudson County Engineering2 5L*)

Response:

These signals were installed after collection of survey information at these locations. The final design will need to accommodate their geometry and signal head locations to determine if impacts can be avoided or adjustments are required.

Comment 118-S:

One commenter asked if the Full South alignment have any impact on the ROW of Penhorn Avenue in Secaucus. The roadway is east of the existing NEC embankment. (*Hudson County Engineering2 6L*)

Response:

The Penhorn Avenue ROW will not be impacted.

ROADWAYS (SECTION 3.3) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 119-S:

Multiple commenters stated the West 34th Street and Eight Avenue intersection will now be adversely impacted from both vehicular traffic and pedestrian congestion standpoints. With the proposed implementation of dedicated bus lanes on 34th Street, it is not clear how the increase in traffic and in pedestrians will be accommodated. ARC needs to coordinate pedestrian mitigation measures with the West 34th Street Bus Rapid Transit project. The 34th Street BRT project, which is beginning construction later this month, will substantially change the traffic pattern on West 34th Street and Eighth Avenue and thus pedestrian safety. (*CB42 8L, CB43 3L*)

Response:

The NYCDOT 34th Street BRT project is a newly announced initiative and no information regarding traffic data is available at this time. NJ TRANSIT and the Port Authority are committed to working closely with NYCDOT as information becomes available and develop pedestrian mitigations. NYCDOT has stated that a traffic study will be conducted in the fall 2008 to assess the effects of BRT operations on 34th Street.

Comment 120-S:

Multiple commenters stated the traffic analysis uses the Hudson Yards-No. 7 Line EIS as a base and does not include a cumulative intersection impact analysis. The methodology considered only single intersection impact rather than cumulative intersections impact, therefore failing to recognize the spill over effects of certain levels of services on other intersections. The methodology continues to underestimate these impacts since the subsequent intersections do not reflect the cumulative effects of delays. (*CB42 11L, CHEKPEDS 10L, CHEKPEDS 5T*)

Response:

The ARC FEIS traffic impact analysis utilizes the procedures detailed in the Transportation Research Board's Highway Capacity Manual (HCM). The use of HCM is directed by the 2001 *CEQR Technical Manual* because it is the most appropriate methodology for impact analysis under CEQR. Adherence to this methodology provides a consistent basis for land use and environmental determinations by City agencies. Network simulation models, which address cumulative impacts, are primarily planning tools, intended to optimize traffic flows in a given network. Applied to the ARC project, these models would reflect the diversion of traffic away from congestion and portray less conservative impacts at intersections of concern.

Comment 121-S:

One commenter stated the project would generate in the AM and PM peak hours, respectively – 247 and 211 taxi additional vehicle-trips, and the addition of three New York City Transit (NYCT) buses on the current route M16/M34 line on an over saturated street network. This represents a 10% increase over the DEIS. While this may seem like a relatively minor difference, given the severe existing congestion, even a small incremental increase will have severe negative traffic and pedestrian impacts. These changes cause adverse spill-over effects at five more intersections in Chelsea and Clinton on Lincoln Tunnel access routes, which, according to the DEIS, are already saturated. (*CB42 7L*)

ROADWAYS (SECTION 3.3) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

The traffic impacts associated with increased bus and taxi volumes in the project area are assessed in FEIS Section 3.2. With the exception of the Herald Square and Tenth Avenue at West 33rd Street intersections, all significant traffic impacts could be mitigated through proposed traffic mitigation measures. The growth in taxi trips between the DEIS and SDEIS is due to five more years of growth in the forecast from 2025 in the DEIS to 2030 in the SDEIS.

Comment 122-S:

One commenter stated the impacts of large truck volumes traveling to the proposed Kearny Yard on local roads should be further reviewed. (*PSS LLC 2E*)

Response:

FEIS Section 3.6 has been revised to clarify the traffic impacts associated with haul vehicles serving the proposed Kearny Rail Yard.

Comment 123-S:

One commenter stated in the Executive Summary page ES-20 in Table ES-1 the additional haul routes for tunnel excavation should be identified and assessed in the SDEIS. The movement of two to three million cubic yards of materials to the Kearny Yard for use as embankment is a significant unassessed concern. A figure indicating the potential haul routes from both New Jersey and New York construction locations to the proposed Kearny Yard should also be provided in the Executive Summary. (*HCIA2 2E*)

Response:

FEIS Section 3.6 provides a detailed assessment of the projected traffic impacts associated with ARC haul trucks including Kearny Rail Yard. The FEIS has been revised to include haul route maps in Appendix 3.6.

Comment 124-S:

One commenter stated Section 3.6 appears to be missing a discussion of the potential impacts from the construction of the Wittpenn Bridge on the construction of the proposed Kearny Yard. According to the most current North Jersey TIP, portions of the Wittpenn Bridge Project adjacent to the Kearny Yard could be under construction during period of projected ARC construction at the Kearny Yard. The impacts to the transportation of excavated materials from tunneling due proposed construction of the Wittpenn Bridge should also be assessed in the SDEIS. The TIP also anticipates construction at St Paul's Avenue/ Conrail Bridge (Rt. 1-9 Truck) which may also affect transportation of excavated materials to the proposed Kearny Yard. (*HCIA2 3E*)

Response:

The haul routes proposed and assessed in the FEIS do not cross the Wittpenn Bridge. Haul trucks will enter and exit Route 7 at the ramps west of the Wittpenn Bridge, approaching from, and traveling to, the west. In addition, the proposed haul routes do not travel beneath the Wittpenn Bridge on Fish House Road. FEIS Section 3.6 has been revised to state that traffic diversions associated with Wittpenn Bridge work could indirectly impact traffic operations on ARC haul routes if vehicles are diverted to avoid Wittpenn construction. The New Jersey Haul Routes defined in the SDEIS do not utilize US 1/9-Truck and therefore do not cross the St. Paul's Avenue/Conrail Bridge nor travel anywhere near it.

ROADWAYS (SECTION 3.3) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 125-S:

One commenter stated in Section 3.6 page 3.6-7 it is not apparent if the excavated materials from the Tonnelle Avenue Construction Access Shaft will also be routed to the proposed Kearny Yard. (*HCIA2 4E*)

Response:

A portion of the rock excavated from the Palisades Tunnel at the Tonnelle Avenue shaft would be trucked to the Kearny Rail Yard via the NJ Turnpike. The FEIS contains an analysis of the routing of haul trucks to the New Jersey Turnpike via Route 3 to determine maximum potential impact at intersections serving the Tonnelle Avenue Shaft. Once on the New Jersey Turnpike, the spoils could be delivered to either Kearny Rail Yard or Secaucus for use in the embankment.

Comment 126-S:

One commenter stated Section 5.1 page 5.1-17 indicates that for the New York Tunnel excavation opportunities would be explored for the removal of excavated materials by barge and rail during Preliminary Engineering. Consideration should also be given to the expansion of this approach for all excavated materials from both New York and New Jersey in order to mitigate the traffic impacts of the high volume of excavated materials projected to be trucked to the proposed Kearny Yard. (*HCIA2 17E*)

Response:

The use of barges and rail to transport excavated materials was assessed but proved to be infeasible. Both the rail and barge options would require the double handling of excavated materials which complicates logistics and increases costs. In addition, the barge option would result in negative impacts to Hudson River Park.

Comment 127-S:

One commenter asked how many hourly and daily trucks are involved in the delivery and removal of materials from the Hoboken Shaft site. SDEIS page 2-21 indicates that the SDEIS results in only 6 additional trucks per day. (*Hudson County Engineering2 2L*)

Response:

FEIS Section 3.6 has been revised to clarify construction impacts to local roadways in New Jersey. Excavated material from the Hudson River tunnels would be removed from the Hoboken Construction Access Shaft, and transported to the proposed Kearny Rail Yard site in Kearny, proposed rail embankments along the NEC and the Secaucus Loop tracks, or to an approved disposal site. The project will generate approximately 60 trucks per day from the Hoboken site, or approximately 6 trucks per hour during the AM and PM peak hours.

Comment 128-S:

One commenter stated Boulevard East is identified as one of the haul routes for Hudson River spoils removal via the Hoboken Shaft. We would assume that any trucks would use this to access Rt. 495; however beginning at the Marginal Road immediately north of Rt. 495 there is a 4-ton weight limit on vehicles using Boulevard East and trucks should not be routed beyond that point. (*Hudson County Engineering2 4L*)

Response:

The haul route will not incorporate the weight limited section of Boulevard East north of Marginal Road.

PEDESTRIANS (SECTION 3.4)

DEIS COMMENTS

Comment 129-D:

MTA stated DEIS Table 3.4-15 calls out a number of significantly impacted circulation elements, one of which requires "316 inches" of mitigation. However, there is no treatment of these mitigations in the text. The text should reference these required mitigations. (*MTA 29L*)

Response:

FEIS Section 3.4 text and tables document recommended mitigation measures to address predicted pedestrian impacts with the Build Alternative.

Comment 130-D:

One commenter stated they do not agree with the ARC DEIS 3.4 Pedestrian chapter, Section D., Long Term Impacts of the Build Alternative for New Jersey which states "No long-term impacts to pedestrian circulation or transit services would occur in NJ; therefore, no mitigation is required." (*HCDP 2T*)

Response:

FEIS Section 3.4 has been updated to explain that increased passenger volumes at New Jersey train stations along the NEC and other affected NJ TRANSIT lines would, to some extent, occur with or without ARC. To the extent that ARC would contribute to increases in passenger volumes, they would tend to be distributed among the various stations throughout the NJ TRANSIT commuter rail system, thereby reducing their intensity of impact at individual locations. Therefore, since there are no long-term impacts to pedestrian circulation or transit services in New Jersey, mitigation would not be required.

Comment 131-D:

One commenter stated he supports the DEIS reopening the walkway to Herald Square and never understood why that was closed in the first place. (*Woolley 4T*)

Response:

Reopening of the referenced passage is under study by others, and is referenced in FEIS Chapter 2. This action is not part of the ARC project or directly related to it, except for its physical proximity to NYSPSE.

Comment 132-D:

One commenter stated every safety precaution must be taken to ensure pedestrians are protected from vehicular traffic and construction activity. (*MBP Stringer 6T*)

Response:

Pedestrians would be protected from construction-related and other traffic, and on-site construction activity, through the implementation of a MPT plan (see FEIS Section 3.6) and Construction Protection Plan (see FEIS Section 5.13). The MPT plan would also maintain traffic and pedestrian access to businesses and residences in the vicinity of project construction activities. NJ TRANSIT has initiated discussions with New Jersey and New York City agencies regarding such plans, and will continue to develop and refine these plans in concert with these agencies, relative to sidewalk closures and protection, travel lane closures and traffic rerouting, and allowable hours of on-site construction activity.

PEDESTRIANS (SECTION 3.4) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 133-D:

MTA stated the DEIS Build Condition assigns load to Stairs M11, M9, M28 and M30 at 34th Street/Eighth Avenue; however, it is not clear whether there will be connection to the subway undertrack mezzanine from the ARC upper mezzanine. At present, any connection made to the subway mezzanine would require the relocation of facilities space. (*MTA 21L*)

Response:

Current NYPSE plans include a direct connection between NYPSE and the lower mezzanine level of the Eighth Avenue NYCT subway station. This proposed connection would not affect facilities space.

Comment 134-D:

MTA stated the DEIS Build Condition does not assign any new load to the Seventh Avenue subway line at 34th Street. Instead, all loads are assigned to the crowded 33rd Street/Seventh Avenue mezzanine, resulting in significant impacts at three stairs—ML 13, ML 6, and ML 4. They asked why no load was assigned to 34th Street. (*MTA 22L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the design of NYPSE connections has been revised to direct passengers away from the congested 33rd Street fare control to a new fare control that would access the 34th Street underpassage. ARC transfer passengers would be assigned to that route exclusively.

Comment 135-D:

MTA stated much of the pedestrian flow to PSNY arrives from the north and east. To create a better connection for these passengers to PSNY and to reduce the overall level of crowding at street level, an underground concourse system has been proposed. The concourse would run from PSNY east under Seventh Avenue and then north under 34th Street. This should be incorporated into this system. (*MTA 23L*)

Response:

NJ TRANSIT has signed a coordination and mitigation letter with NYCDOT which addresses the development and implementation of sidewalk, street corner and crosswalk improvements in the vicinity of PSNY. NJ TRANSIT will continue to coordinate with MTA-NYCT and NYC agencies as concepts for pedestrian connections, including underground passages, are progressed.

Comment 136-D:

MTA stated some of the No Build allocations are lower than expected. For example, at Eighth Avenue/West 34th Street, load on the four pedestrian street stairs grows by 58%; however, the adjoining mezzanine stairs (M11, M9, M28 and M30) only grow by 10%. Appendix 3.4 should be explain the assumptions made for the No Build conditions at each of three subway stations analyzed, including each of the significant development projects considered. (*MTA 25L*)

PEDESTRIANS (SECTION 3.4) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

FEIS Appendix 3.4 has been updated to include the following explanation: No Build volumes include existing volumes, a growth factor of 0.5% per year, the incremental volume for each element associated with the Hudson Yards development as derived from analyses for that project, and a (negative) increment for the LIRR East Side Access Project based on the overall ridership change reported for that project in the No. 7 Subway Extension - Hudson Yards Rezoning and Development Program FGEIS. The No Build pedestrian allocations have been updated based on guidance received from NYCT. The Penn Station Redevelopment/Moynihan East project is not considered in the analysis because the project has not yet been sufficiently developed and a preferred alternative has not yet been selected. NJ TRANSIT and PANYNJ will continue to coordinate with NYC DCP with regard to the status of the Moynihan project. The ARC project has been included in the Moynihan project No Build.

Comment 137-D:

MTA stated the pedestrian section of DEIS Table ES-2 (page ES-25) states that the build condition results in a "decline in LOS at selected stairs and escalators within subway stations" without identifying any long term mitigations. Table ES-2 should reference the mitigations presented in Chapter 3.4, Table 3.4-15. Additionally, all references to the ❾ train should be deleted from Table 3.1-18. (*MTA 15L, MTA 16L*)

Response:

The FEIS Executive Summary has been updated to reflect mitigations presented in Chapter 3.4. Mitigation on subway stairs and escalators will be developed in consultation with NYCT. Table 3.1-18 has been updated to delete reference to the ❾ train.

Comment 138-D:

MTA stated the DEIS Appendix 3.4 assumes that all street moves in the vicinity of Eighth Avenue will use the vertical cores on the eastern side of Eighth Avenue. However, a substantial amount of the Hudson Yards office market from ARC will use the subway's 33rd Street passageway to access sites south of West 34th Street and on or west of Eighth Avenue, as the passageway will save them from having to make an at grade crossing of Eighth Avenue. Both the passageway and the two street stairs on the western side of Eighth Avenue will be impacted by this flow and should be analyzed in the DEIS tables. MTA also suggested that the tables in Section 3.4 be updated to reflect any changes in Appendix 3.4. (*MTA 24L, MTA 26L*)

Response:

The configuration and activity in the 33rd Street passageway is predominately affected by the Moynihan redevelopment project and is being studied by that project. There will be an increase in use of this sidewalk entrance on the northwest corner of Eighth Avenue and West 34th Street. However, the number of users attributable to NYPSE is minimal. The tables in Section 3.4 have been updated to match changes in Appendix 3.4.

Comment 139-D:

One commenter stated the pedestrian LOS findings are overly optimistic and the DEIS understates the problem of pedestrian circulation. The DEIS does not entirely spell out the implications of having more pedestrians, more taxis, and more buses all in an already congested street environment. (*Tri-State 2T, Tri-State 4T*)

PEDESTRIANS (SECTION 3.4) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

The pedestrian level of service analysis summarized in the ARC DEIS was conducted in accordance with the *CEQR Technical Manual* released in 2001. The Highway Capacity Manual, released by the Transportation Research Board of the National Academies of Science in 2000, is the basic analytical tool used to analyze pedestrian conditions. The methodologies described in these documents are generally accepted as the standards for the evaluation of pedestrian conditions mid-block, at corners, and in crosswalks.

FEIS Section 3.4 documents the predicted impacts and associated mitigation for pedestrian circulation of the Build Alternative, including updating the No Build condition to 2030 and reflecting Hudson Yards development proposals. FEIS Section 3.4 addresses sidewalks, crosswalks and subway stairs. FEIS Section 3.3 documents the additional taxis and buses on Manhattan streets with the Build Alternative, and include mitigation measures relative to traffic operations.

Comment 140-D:

One commenter stated the critical factor will be how well NJ TRANSIT responds to the challenge in its design and location of new station entrances, station corridors, transfer passageways, subway fare control areas and the vertical access capacity necessary to move customers to and from trains and subways. (*Comptroller NYC 1L*)

Response:

NJ TRANSIT has signed a coordination and mitigation letter with NYCDOT which addresses the development and implementation of sidewalk, street corner and crosswalk improvements in the vicinity of PSNY and NYPSE. NYPSE design will continue to be coordinated with NYCT and New York City agencies to develop the most passenger/pedestrian-friendly, cost-effective design, with respect to station entrances, corridors, vertical access and subway station and fare control area interaction.

Comment 141-D:

One commenter stated the analysis does not consider the possibility of future high-rise development (the "Garden Swap") in the Penn Plaza-Madison Square Garden super-block, which would crowd the pedestrian environment even further. Even though this is outside the scope of the ARC study, a development project like this adds urgency to the need for the city to address pedestrian capacity in the area. (*Tri-State 5T*)

Response:

Proposed development in the Penn Plaza-Madison Square Garden super-block has not advanced to a point at which it could be included in the ARC 2030 No Build scenario. Based on agreement between NJ TRANSIT, the New York City Department of City Planning, and the Port Authority of NY & NJ, this proposed project has been described as part of future West Side developments in the cumulative effects assessment contained in FEIS Section 4.18.

Comment 142-D:

One commenter stated the coverage of the sidewalk analysis should have extended outward by a number of blocks, especially to the north. The impact of PSNY on Midtown sidewalks and crosswalks certainly extends further north than 35th Street. (*Tri-State 3T*)

PEDESTRIANS (SECTION 3.4) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the coverage of the Section 3.4 sidewalk analysis has been extended to address an area bounded by Eighth Avenue on the west, West 34th Street on the south, West 35th Street on the north and Sixth Avenue on the east. These limits correspond to the physical limits of Build Alternative NYPSE station entrances. As a result of consultation with the NYC Department of City Planning, ARC pedestrian movements north and east of 35th Street have been evaluated in FEIS Section 3.4. NJ TRANSIT has signed a coordination and mitigation letter with NYCDOT which addresses the development and implementation of sidewalk, street corner and crosswalk improvements in the vicinity of PSNY and NYPSE.

Comment 143-D:

One commenter stated there is only going to be one entrance connecting the passageway between the new 34th Street Station and PSNY. They asked if there is going to be an entrance between the Farley Post Office and the new 34th Street Station. They suggested there should be more than one to alleviate crowding. (*Wells 2T*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the NYPSE station plan would include two connections between PSNY and NYPSE, one east of Eighth Avenue and one west of Seventh Avenue. NYPSE would be connected underground to the new Farley Moynihan station via the existing PSNY passageway. The ARC project is not expected to have any measurable impact on NYCT entrances west of Eighth Avenue. In order to reach NYPSE via NYCT stairs west of Eighth Avenue, passengers would have to pay an NYCT fare in order to pass through the station mezzanine. Therefore, it is projected that NYPSE passengers going to and from points west of Eighth Avenue are expected to cross Eighth Avenue at grade and use entrance/exits on the east side of the avenue.

Comment 144-D:

One commenter emphasized the importance of NJ TRANSIT working pro-actively with the Town of Clarkstown, Rockland County, and Metro-North to make sure that Lawrence Street pedestrian safety project is completed as rapidly a possible. The town has been awarded federal funding to build a walkway which will parallel the Pascack Valley tracks, and therefore shift pedestrians who currently trespass on the tracks to a safer route. (*Rockland 12L*)

Response:

This comment is acknowledged and has been forwarded to the appropriate NJ TRANSIT staff.

Comment 145-D:

One commenter stated half of the projected commuter time savings of 15 minutes will be negated spending time to reach the deep terminal and ascend from its depths. (*RRWG 2T*)

Response:

The projected commuter time savings takes into account access times to streets and proximity to Broadway and Sixth Avenue subways lines.

PEDESTRIANS (SECTION 3.4) (CONTINUED)

SDEIS COMMENTS

Comment 146-S:

The Manhattan Borough President stated agencies must work together to devise a mitigation plan that puts pedestrians first. He previously proposed the transformation of West 33rd Street, from Broadway to the Hudson River, into a great pedestrian way. He remains committed to this proposal, and is pleased to see that the NYCDOT has recently proposed a similar plan for West 34th Street. (*MBP2 2L*)

Response:

NJ TRANSIT has signed a coordination and mitigation letter with NYCDOT which addresses the development and implementation of sidewalk, street corner and crosswalk improvements in the vicinity of PSNY and NYPSE. NJ TRANSIT will continue to work with New York City agencies to develop and implement an area wide pedestrian plan.

Comment 147-S:

Multiple commenters stated a mitigation plan must be defined and funded in partnership with the community. All agencies involved, including NJ TRANSIT, PANYNJ, MTA, and DOT, should work with area residents and businesses and community boards to create a pedestrian environment that meets that vision during and after construction. Incremental changes in street furniture, entrance placements, and signal timing, while beneficial are not sufficient to address basic pedestrian safety and flow needs and do not reflect the ambition and vision for a major regional transit hub. Additionally, the estimated costs of restoring the upgrade capacity to the east side in the future should be incorporated in the FEIS. (*CB42 1L, CB43 2L, Lackawanna5 26L, RPA3 2T, Tri-State2 3T, Tri-State2 4T*)

Response:

NJ TRANSIT has signed a coordination and mitigation letter with NYCDOT that addresses the development and implementation of sidewalk, street corner and crosswalk improvements in the vicinity of PSNY. NJ TRANSIT and the Port Authority will continue to work with City and State agencies to develop and implement a pedestrian mitigation plan in cooperation with the community. The ARC Build Alternative does not preclude an eventual extension of the ARC tunnels to the east, however no cost estimate has been developed for this potential extension.

Comment 148-S:

One commenter stated the SDEIS does cite several planned mitigation measures including the relocation of street furniture and vendors and the retiming of crosswalk signals. These measures are laudable and we ask they be implemented. Many of sidewalks in the area will require widening and several should incorporate traffic calming measures, such as closing 32nd Street to vehicles during rush hours. (*Tri-State2 2T*)

Response:

The comment is acknowledged. NJ TRANSIT has signed a coordination and mitigation letter with NYCDOT that addresses the development and implementation of sidewalk, street corner and crosswalk improvements in the vicinity of PSNY.

PEDESTRIANS (SECTION 3.4) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 149-S:

One commenter stated the new station design creates significant negative impacts for seven pedestrian areas in the Community Board 4 district, including sidewalks that are already narrow and congested. (*CB42 6L*)

Response:

Subsequent to publication of the SDEIS, the pedestrian analysis was revisited in light of comments raised by NYCDCP, NYCDOT and Community Boards 4 and 5 with regard to pedestrian impacts in the vicinity of NYPSE. In that process, an error was identified in the pedestrian impact analysis of sidewalks, street corners and crosswalks. This error resulted in a significant over prediction of impacts reported in the SDEIS. The error has been corrected and the impacts described herein accurately reflect future conditions under the Build Alternative. Mitigation measures are proposed in the FEIS for projected sidewalk, street corner and crosswalk impacts.

Comment 150-S:

One commenter asked how the deletion of the Eighth Avenue access impacts Macy's. (*Lackawanna5 13L*)

Response:

The NYPSE entrance on the northeast corner of West 34th Street and Eighth Avenue was eliminated during Preliminary Engineering because it was not required to serve projected passenger demands. The proposed NYPSE entrance on the southeast corner of West 34th Street and Eighth Avenue provides sufficient capacity to accommodate projected passenger flows. This design change will not result in greater usage of the Sixth Avenue or Seventh Avenue NYPSE entrances, and will not have effect on Macy's.

Comment 151-S:

One commenter stated it will take less time to go between the platform and the concourse, but that does not get passengers to and from the street or subways. They asked how long the connection will take. (*Lackawanna5 20L*)

Response:

It is estimated that ARC passengers arriving at NYPSE will take from approximately 6 to 7 minutes to travel to street level.

Comment 152-S:

Several commenters stated the new station, since it is in the same place as the existing PSNY, will bring people to already crowded sidewalks and crowded subway transfers. Without an East Side connection, ARC would add significantly to the already congested sidewalks and subway stations on the west side and exacerbate the already dangerous conditions which exist for pedestrians in this area. This area will also see significant increases in pedestrian traffic due to the rezoning of the Hudson Yards and may see even more significant increases due to planned rezoning around Moynihan Station. The new station will not ensure access to the projected far West Side development because it is not anywhere near that growth. (*CB42 12L, CHEKPEDS 1L, CHEKPEDS 3L, CHEKPEDS 4T, Trip 2 Work2 2T, Trip 2 Work2 4T, Trip 2 Work3 3T, Tri-State2 5T*)

PEDESTRIANS (SECTION 3.4) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

NYPSE has been located on West 34th Street to facilitate transfers to and from subway lines on Broadway, Sixth Avenue, Seventh Avenue and Eighth Avenue. Entrances to these subway stations will be improved by the ARC project, and sufficient capacity will be provided to accommodate ARC and NYCT passengers. Sidewalk pedestrian volumes are projected to increase as ARC passengers walk to nearby commercial, retail and recreational destinations. FEIS Section 3.4 has been revised to present a detailed assessment of sidewalk, street corner and crosswalk service levels in 2030 under No Build and Build conditions in an expanded study area. The FEIS proposes a series of mitigations that will be the responsibility of NYCDOT. NJ TRANSIT and the Port Authority will continue to work with City and State agencies to develop and implement necessary pedestrian improvements.

It should be noted that subsequent to publication of the SDEIS, the pedestrian analysis was revisited in light of comments raised by NYCDCP, NYCDOT and Community Boards 4 and 5 with regard to pedestrian impacts in the vicinity of NYPSE. In that process, an error was identified in the pedestrian impact analysis of sidewalks, street corners and crosswalks. This error resulted in a significant over prediction of impacts reported in the SDEIS. The error has been corrected and the impacts described in the FEIS accurately reflect future conditions under the Build Alternative.

Comment 153-S:

One commenter stated since all 25 trains, instead of 23 previously, go to a new station, thus increasing the pedestrian traffic by an estimated 20,400 people per day at the new station, and eliminating potential usage of future underutilized Long Island Rail Road (LIRR) platforms resulting from the LIRR direct connection to Grand Central. (*CB42 4L*)

Response:

MTA has indicated that LIRR, and potentially Metro-North, will use any additional PSNY capacity created by the relocation of some LIRR service to Grand Central under the East Side Access project.

FREIGHT (SECTION 3.5)

DEIS COMMENTS

Comment 154-D:

Multiple commenters stated the document should address the fact that research may have to be conducted to determine who has the freight operating rights on the Amtrak Empire Connection. (*Madden 30L, NYSDOT 30L*)

Response:

FEIS Section 3.5 has been updated to identify that CSX has freight operating rights on Amtrak's Empire Line.

Comment 155-D:

A commenter stated the present 20'-6" vertical clearance below the Amtrak Bridge is the minimum required for present equipment. New NJ TRANSIT construction should allow for a increase in the present vertical clearance to the NJDOT standard of 23 feet. (*Conrail 2E*)

Response:

The two new tracks of the Build Alternative would be aligned on a structure or embankment that would provide a minimum 23'-0" vertical clearance above the NYS&W and Conrail crossings.

Comment 156-D:

Several commenters stated Conrail's Northern Branch tracks are the sole route for CSXT Double Stack Container Traffic to reach the Port of New York and New Jersey. Significant construction delays during the underpinning of the Northern Branch will have severe adverse affects upon the traffic flow on the rail network of New York State. (*Conrail 1E, Madden 6L, Madden 31L, NYSDOT 6L, NYSDOT 31L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the two new tracks would be aligned on a structure or embankment over the NYS&W and Conrail rights-of-way. Therefore, no underpinning of either freight rail line would be required, and minimal service disruption during construction would be anticipated.

Comment 157-D:

Multiple commenters stated they would not support any NJ TRANSIT commuter rail service on the West Shore line (which is owned by CSXT) without NJ TRANSIT funding capacity increases and with NJ TRANSIT agreeing to freight service guarantees. As NJ TRANSIT moves forward with it plans for increases in passenger service on any lines in New York State, we request that NYSDOT be a participant in the planning to ensure that freight service is considered and protected. (*Madden 16L, NYSDOT 16L*)

Response:

Proposed improvement to the West Shore Line is a separate NJ TRANSIT initiative, and is not included in the ARC project or the 2030 No Build condition. The comment is acknowledged and has been forwarded to the appropriate NJ TRANSIT staff.

FREIGHT (SECTION 3.5) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 158-D:

Several commenters stated reprofiling sections of Amtrak's Empire Line within PSNY could cause negative indirect impacts of delay or rerouting to freight rail service beyond the project area. They also asked where the home signal would be located and whether Amtrak Empire Line trains which hold at that signal would have to stop on a grade. Others stated they support the improved access for Empire Line Service to PSNY tracks 9 through 18. (*Madden 2L, Madden 8L, Madden 9L, Madden 32L, MTA 3L, MTA 8L, NYSDOT 2L, NYSDOT 8L, NYSDOT 9L, NYSDOT 32L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River, which made it infeasible to construct the connection from the new ARC tunnels to PSNY to meet NJ TRANSIT operating requirements. This eliminated the need to reprofile Amtrak's Empire Line. In addition, Empire Line service would no longer gain access to tracks 9-18.

Comment 159-D:

One commenter stated the term "Empire Line" is confusing. To avoid confusion, they recommend that the DEIS refer to Amtrak's "Empire Service" when discussing the train service and to Amtrak's "Empire Connection" when referring to the line connecting into PSNY. (*Madden 14L, NYSDOT 14L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River, which made it infeasible to construct the connection from the new ARC tunnels to PSNY to meet NJ TRANSIT operating requirements. As a result, impacts to Amtrak's Empire Line have been eliminated. Remaining references have been updated to state "Empire Service."

Comment 160-D:

Several commenters stated the DEIS incorrectly states that there are no freight rail operations located in the Hudson River portion of the project area. (*Madden 22L, Madden 24L, NYSDOT 22L, NYSDOT 24L*)

Response:

FEIS Section 3.5 includes freight operations in the Hudson River portion of the project area.

Comment 161-D:

Multiple commenters stated there are no references noted in Chapter 15 for the information contained in Section 3.5 Freight Movements and asked where the DEIS information was obtained from. (Madden 33L, NYSDOT 33L)

Response:

The information contained in FEIS Section 3.5 was assembled and documented by Transit Link Consultants, in coordination with NJ TRANSIT. Sources included freight rail carriers and secondary data published by the USDOT, NJDOT, NYMTC, and USACE. Information contained in Section 3.5 tables is attributed to those references cited.

FREIGHT (SECTION 3.5) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 162-D:

Multiple commenters stated the two service types listed in the DEIS, Containerized or "Intermodal" and Carload traffic are not explained accurately and recommends a more descriptive and accurate breakdown to include: Intermodal, Automotive, Bulk Traffic, and Carload Traffic. They stated the text should be revised to group the railroads by function, correctly name the Class I railroads, and explain how a Class I Railroad is defined. They also recommend the description of CSAO be revised to be more accurate. (*Madden 17L, Madden 18L, Madden 19L, Madden 25L, NYSDOT 17L, NYSDOT 18L, NYSDOT 19L, NYSDOT 25L*)

Response:

FEIS Section 3.5 has been updated with additional descriptions of rail freight service types in New Jersey and New York; to include additional information defining Class I railroads; and to clarify the dissolution of Conrail and define Conrail Shared Asset Operations.

Comment 163-D:

Multiple commenters stated Conrail, CSX, Norfolk Southern and Canadian Pacific be removed from the grouping of short-line, terminal and regional railroads. They also stated "New York Cross Harbor Railroad in Greenville Yards" be changed to reflect the new carrier which replaced them, "New York New Jersey Rail, LLC in Greenville Yards" and the South Brooklyn Railway (SBK) be added to the list. They also stated the DEIS should include a table of the lines over which freight service is provided, the names of the railroads providing the service, the type of service (local, line haul, e.g., "intercity" or "through freight"), and the limits of the service, preferably identified by Mile Post. In addition, they stated the statement that New York City is connected to North America by four Class I short-line and regional railroads: Canadian Pacific (CP), CSX, Cross-Harbor Railroad, and New York and Atlantic Railway" is not correct. (*Madden 20L, Madden 21L, Madden 23L, NYSDOT 20L, NYSDOT 21L, NYSDOT 23L*)

Response:

FEIS Section 3.5 has been updated as follows: Conrail, CSX, NS and CP have been removed from the listing of short-line or terminal railroads; clarification of the New York New Jersey Rail LLC has been provided; additional freight railroad listings have been added and the distinction between the physical rail lines and the railroad operators providing freight service in New York City has been added.

Comment 164-D:

One commenter stated the ARC project represents a business opportunity for the NYS&W, but this way of operating may pose reliability issues that you might want to consider. (*Hudson County Engineering 11L*)

Response:

Excavated tunnels material would be removed from the proposed construction access shafts locations by truck, along haul routes identified in FEIS Sections 3.6 and 5.1. The potential use of the NYS&W for removal of excavated tunnels materials from the proposed Tonnelle Avenue construction access shaft has been dismissed because of the inefficiencies associated with the need to move the materials by truck to the rail line. Excavated materials will be removed by truck along the haul routes identified in Section 5.1.

FREIGHT (SECTION 3.5) (CONTINUED)

SDEIS COMMENTS

Comment 165-S:

One commenter stated bridge construction over the NYSW/Conrail Crossing will still adversely impact freight railroad operations when the bridge is actually being erected. (*Lackawanna5 17L*)

Response:

Although there would be some impacts to freight operations, the construction of a bridge over the NYS&W would have less impact on freight operations than the original DEIS plan to tunnel under the tracks. NJ TRANSIT will continue to coordinate with the freight railroads during the design phases of the project.

LAND USE (SECTIONS 4.2 AND 5.2)

DEIS COMMENTS

Comment 166-D:

One commenter stated a large warehouse has been constructed on the McKay's Landfill site and its location may preclude its use by NJ TRANSIT. (*Tierra 5L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the two new tracks of the Build Alternative would be aligned south of the NEC and supported on retained fill through the former McKay's Landfill site. The proposed alignment would be located between the NEC and the existing warehouse, avoiding any direct impacts to this building.

Comment 167-D:

One commenter stated the design and location of fan plants in Manhattan should take into consideration the current and proposed uses of the selected sites. (*MBP Stringer 5T*)

Response:

As described in FEIS Sections 4.2 and 4.5, proposed fan plant structures are being designed to complement and be compatible with the existing architectural style, physical scale and character of their respective settings. This design process considers fan plant height, its location on the property, historical elements, building materials and finishes, and overall physical scale. The proposed fan plants of the Build Alternative have been assessed in this regard relative to NEPA and to NYC CEQR guidelines. NJ TRANSIT will include local municipalities in New Jersey, NJSHPO, NYSHPO, NYCLPC and NYCDCP in the design review process.

An alternatives analysis was undertaken to determine the most feasible and cost-effective location for the fan plants serving the new station under West 34th Street. The key criteria applied in the analysis were:

- Fan plant location relative to the station cavern mechanical equipment rooms to minimize underground duct runs and fan sizes and maximize efficiency;
- Availability of a footprint to accommodate required fan plant equipment and functions;
- Avoidance, minimization and practicable mitigation of environmental impacts associated with land use/displacement, noise and vibration, service vehicle access, and air cooling towers;
- Constructability associated with NYPSE cavern excavation, including removal of excavated materials and delivery of materials for construction of the cavern;
- Availability and cost of real estate that would need to be acquired, to avoid major displacement of commercial, cost-prohibitive high-rise developments; and
- Compatibility of the fan plants with adjacent development, existing land uses and the character of the street/neighborhood. This criteria includes loss of other functional elements on the adjacent "lot line" building side walls, such as operable windows and/or intake and exhaust louvers associated with those building mechanical systems.

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 168-D:

RPA stated care must be taken so that the project does not result in greater sprawl, land and energy consumption, and carbon emissions are minimized. *(RPA 4T)*

Response:

The Build Alternative would include no new stations within or beyond the project area in New Jersey or beyond the project area in New York, but would provide more opportunities, through increased service frequencies, for commuters to travel by transit and reduce the potential of greater developmental sprawl associated with increased auto commutation. Predicted diversion of commuters from autos to rail with the Build Alternative would reduce pollutant emissions and energy consumption in the region as respectively documented in FEIS Sections 4.6 and 4.15. Although NJ TRANSIT cannot control land use and development, NJ TRANSIT works with local communities in New Jersey to develop transit-friendly land use programs.

Comment 169-D:

One commenter stated the project's impact to New York City's plans for the Moynihan complex/Farley building be presented. *(Lackawanna3 1L)*

Response:

The Build Alternative infrastructure would not have an impact on the Moynihan Station project, since the new tunnels, station and ancillary facilities would not be constructed on the superblock occupied by the Farley Complex between Eighth and Ninth Avenues from West 31st to West 33rd Streets. The Moynihan Project would not physically connect to the Build Alternative but would provide new passenger areas for existing PSNY. Through implementation of the proposed Penn Station Capacity Enhancements (assessed separately by NJ TRANSIT in a Categorical Exclusion Document), NJ TRANSIT is working with Empire State Development Corporation to create connections that have benefits to both projects.

Comment 170-D:

One commenter stated the DEIS did not address mega projects which would impact the ARC project area and region. *(Village Hall 2T)*

Response:

Assessment of Build Alternative construction and construction of other nearby projects (such as those on the West Side of Manhattan) expected in the same timeframe, and their cumulative impacts are documented in FEIS Sections 4.18 and 5.18. The effects of mega projects in New Jersey, including major Meadowlands developments and the Portal Bridge Capacity Enhancement Project over the Hackensack River have been evaluated. The analysis of the ability of the existing commuter rail network and bus, ferry, PATH and trans-Hudson auto crossings to accommodate ever-increasing passenger demands from New Jersey and Orange and Rockland Counties, New York is documented in FEIS Chapter 1 and Chapter 3, Sections 3.1 and 3.3.

Comment 171-D:

One commenter stated the temporary or permanent displacement of the community garden on PANYNJ-owned property due to construction of the Dyer Avenue Fan Plant on its optional site on the west side of Dyer Avenue should result in compensation. NJ TRANSIT should work with the community to explore the feasibility of establishing a land trust if the garden would be moved to another site. *(NY for Parks 3L)*

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the optional Dyer Avenue Fan Plant site on the west side of the Dyer Avenue/West 33rd Street intersection has been eliminated. The proposed fan plant site on the east side of the intersection has been retained, and it would not impact the community garden.

Comment 172-D:

Several commenters stated their concerns that the ARC project would impede the proposed development of several West Side properties including the NYC Tow Pound, the "Eastern Yard" overbuild by the MTA and Hudson Yard Development Corporation, the privately developed overbuild on Block 675, and Con Edison's plans for overbuild on Block 674. The DEIS improperly defers the discussion of such measures to address impacts to these proposed development projects. It fails to disclose whether the project would result in any future constraints on development due to its depth, construction techniques, security concerns, or other matters.

The DEIS should have disclosed whether the tunnel would be constructed in such a manner that would allow for future development in accordance with existing and reasonably anticipated zoning controls, or whether additional restrictions would be imposed as a result of the presence of the tunnel structure. Is also should have disclosed the consequences of these restrictions on the development potential of the site, including the potential for impacts on, without limitation, socioeconomic conditions, land use, public policy, and neighborhood character.

Furthermore, it is both essential and beneficial that NJ TRANSIT works cooperatively with land-owners to resolve any conflicts that have arisen or may arise in the design of this project. *(Baykeeper 8L, C/S 13L, C/S 12L, MBP Stringer 3T, MTA 2L, HYDC 1L, RPA 3T, C/S 2L, C/S 7L)*

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the proposed deeper tunnels on the west side of Manhattan would eliminate most of the conflicts and delay related to its cut-and-cover construction. The deeper tunnels also reduce impediments to future development directly above the alignment, such as the Special Hudson Yards District, the Special Chelsea District, the West Side Rail yards, East Side Rail Yard, Hudson River Park, and the High Line. In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (continued):

The Build Alternative design and alignment has been developed in an open environment that has emphasized input and dialogue with agencies, counties, municipalities and stakeholders throughout the project area. Meetings have been held with such stakeholders during the EIS process, and such outreach would continue through the design and construction phases of the project. Included in this outreach have been meetings with affected property owners in New Jersey and New York relative to the need for specific property interests and easements to implement the Build Alternative, and NJ TRANSIT commitment to mitigate such impacts through adherence to federal relocation assistance regulations.

Comment 173-D:

NJDEP stated the requirements for development, maintenance, and management of a section of the Hudson River Waterfront Walkway should be an early design consideration in accordance with the requirements at N.J.A.C. 7:7E-3.48. *(NJDEP3 28L)*

Response:

The top of the Build Alternative tunnels under Hoboken at the western shore of the Hudson River would be 90 feet deep and would not impact New Jersey's Hudson River waterfront, and would not influence or preclude development, maintenance, or management of the Hudson River Waterfront Walkway.

Comment 174-D:

One commenter stated that there is a warehouse that appears to store and process coffee and this warehouse has two internal loading bays that are immediately parallel to the HBLRT ROW. This property was not found on the properties list to be impacted by the project. (*Hudson County Engineering 4L*)

Response:

Temporary property interests would be required for the Hoboken construction access shaft site access road. The access road and temporary grade crossing of the HBLRT ROW would be aligned to avoid impacts to existing warehouse operations on the south side of the HBLRT. Proposed property interests are listed in FEIS Appendix 4.2.

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

SDEIS COMMENTS

Comment 175-S:

One commenter stated it is both essential and beneficial that the ARC project, which will cross through the Hudson Yards area, is being advanced in coordination with HYDC and the Hudson Yards redevelopment program. (*HYDC2 1L*)

Response:

FEIS Section 4.2 states that the Build Alternative would not preclude future opportunities for West Side redevelopment, including the Hudson Yards redevelopment program. NJ TRANSIT and PANYNJ would work with MTA, New York City agencies, developers, land owners and the community as to the timing of Build Alternative construction and the location and physical/operational characteristics of the West Side development proposals.

Comment 176-S:

Several commenters stated there is an element of unfair competition with New York City in the ARC project. The west side of Manhattan is the prime competitor of the Hudson River waterfront office market to the detriment of Jersey City/Hoboken waterfront. Rail service is one of the key factors considered by developers in deciding where to undertake development. The redirection of rail traffic will jeopardize the Jersey City and Hoboken waterfront's development potential. In addition, ARC will enhance the area around the Secaucus station. (*NewportAssDecCo 4L, HC2 4L, HC 3L*)

Response:

The ARC DEIS, and the previous Major Investment Study, provided opportunities for the public to identify multi-modal alternatives for improving access into midtown Manhattan, consistent with the purpose and need for the project as described in FEIS Chapter 1. Among these alternatives, a routing to Midtown via Hoboken was identified during the MIS but was screened from further consideration. Improved access strictly to Jersey City or Hoboken is not consistent with goals and objectives of the ARC project. In addition, FEIS Section 4.3 states that the Build Alternative would improve access to the PSNY area, but the changes that are likely to occur on the far West Side of Manhattan would be totally attributable to the Hudson Yards Rezoning, possible Javits Center Expansion, and No. 7 Line infrastructure investments.

Comment 177-S:

One commenter stated the SDEIS does not consider the effects of the project and a proposed fan plant on the planned development of the property on Block 675 and New York City land use, zoning and public policy for the West Side of Manhattan. (*C/S2 6E, C/S2 9E, C/S2 13E C/S2 14E*)

Response:

The DEIS contemplated use of Block 675 for construction staging (Figures 2.6, 5.1-4, 5.1-5). The DEIS analyzed impacts of the shaft construction in the immediate location of the site, and concluded that no significant unmitigated impacts would result from such construction staging. As a result of the determination of no unmitigated impacts of such shaft construction and the associated staging, consideration of alternate alignments that would avoid use of this site would not be required. However, as explained in Appendix 2, analysis was completed on alternative alignments that would avoid use of these sites. These alternatives were eliminated for the reasons discussed in Appendix 2. The DEIS and SDEIS did disclose a potentially significant adverse air quality impact as a result of construction in the vicinity of Twelfth Avenue. This impact no longer exists as a result of further refined analysis, as disclosed in the FEIS.

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response (continued):

Design refinements developed subsequent to the SDEIS also included shifting of the proposed Twelfth Avenue Fan Plant/Construction Access Shaft by 70 feet to the westernmost part of the block bound by West 28th and West 29th Streets and Eleventh and Twelfth Avenues (Block 674), the site of the Con Edison "Workout" facility. On this same site, the fan plant location has also been shifted west. The shift of the vent shaft and realignment of the fan plant would reduce the project's footprint at the Con Edison facility while allowing the existing Con Edison flush pit to remain, and without interfering with the vehicular circulation on the eastern two-thirds of the site. Changes to the layout of the proposed construction access shaft and the fan plant itself on this site responded to consultation with Con Edison and their concerns with impacts to certain features of their property, for example, the existing flush pit, which would be difficult to relocate during construction. These refinements to construction staging could be accommodated without negatively impacting the project cost or schedule and address many of Con Edison's concerns. The western portion of Block 675 (Lots 1 and 12) located one block north of Block 674 and bounded by West 29th and West 30th Streets and Eleventh and Twelfth Avenues would be temporarily utilized for Con Edison's relocated functions (cable yard, associated truck parking and storage) displaced from the Con Edison site. As a result of reducing the project's footprint at the Con Edison site, the remainder of Block 675 would not be needed to accommodate the construction staging necessary for the vent shaft construction and related activities. NJ TRANSIT and the PANYNJ have met representatives of Block 675 to discuss these adjustments.

Comment 178-S:

Several commenters asked about the nature of the project's interest in 323 West 34th Street (Meyers Parking Garage). Meyers Parking Garage was not notified of the DEIS. This parking garage supplies a critically necessary service to the successful operation of the surrounding businesses. Other commenters said that the Manhattan Center, the Holy Spirit Association for the Unification of World Christianity (HSA) and the New Yorker Hotel Management Company (NYHMC) were not properly notified. (*Grifa 1L, Grifa 2L, Grifa 3L, Grifa 4L, Grifa2 3T, Grifa2 4T, Grifa2 5T, Grifa2 7T Grifa2 8T Grifa2 9T, Grifa4 1E, Grifa4 2E, Grifa4 3E, Grifa4 7E, KasenetzC 1E, KylerL3 3L, KylerL3 4L, WilliamL3 1L*)

Response:

In addition to correctly identifying the site, the SDEIS contained a typographical error, identifying 313 West 34th Street (instead of 323 West 34th Street) as an alternative location for a fan plant along 35th Street and an ADA accessible elevator core. FEIS Executive Summary, Chapters 2, 6 and 8, Sections 4.2 and 4.5, Appendix 4.2, and the Programmatic Agreement reflect the correct address. Although the SDEIS misidentifies this property, it correctly identifies the property in SDEIS Appendix 4.2. The SDEIS does contain the full analysis of the impacts of this use at this property, incorrectly listed in reference to 313 West 34th Street. The nature of the permanent property interest sought at 323 West 34th Street is yet to be determined.

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response (continued):

The DEIS and SDEIS were properly noticed according to NEPA requirements. Subsequent to the SDEIS, additional outreach was conducted with all property owners with surface and subsurface interests. The DEIS, SDEIS, and FEIS include extensive transportation analysis as dictated by NEPA standards. The ARC Project will provide significant additional transportation access to New York City including to the West 34th Street environs. The DEIS and SDEIS disclose that the siting of fan plants will displace current uses on such fan plant sites. Subsequent to the SDEIS, the Optional 35th Street Fan Plant location at 323 West 34th Street was eliminated from further consideration. An ADA Access/Emergency Personnel Access elevator entrance for employee use only would be constructed within the southwestern corner of the Meyers Parking Garage at the 323 West 34th Street site. The FEIS discloses the loss of parking as a result of the use of this site as an ADA Access/Emergency Personnel Access elevator entrance with two emergency access/egress stairways and one ADA elevator.

Comment 179-S:

Several commenters stated that the Meyers Parking Garage site is inappropriate for the proposed construction of a fan plant because of its proximity to a historic and important cultural site (Hammerstein Ballroom). To the extent that there is any risk of damage or disruption to such an important institution, an alternative site of the fan plant should be considered. The SDEIS does not adequately address or evaluate the noise and vibration, air quality, safety and security, and community impacts on the Manhattan Center/Hammerstein Ballroom. (*Grifa3 1T, KylerL 5T, KylerL3 1L, KylerL3 6L, KylerL3 7L, KylerL3 9L, KylerL3 10L, KylerL3 11L, KylerL3 12L, KylerL3 13L, KylerL3 14L, KylerL3 15L, KylerL3 16L, KylerL3 17L, KylerL3 18L, KylerL3 19L, WilliamL2 1L, WilliamL3 2L, WilliamL3 3L, WilliamL3 4L, WilliamL3 5L, WilliamL3 6L, WilliamL3 7L, WilliamL3 8L)*

Response:

Subsequent to the SDEIS, the Optional 35th Street Fan Plant location at 323 West 34th Street was eliminated from further consideration. Compared to the 35th Street Fan Plant site at 218-222 West 35th Street, this site would result in additional environmental, cost and schedule impacts. The site would require the construction of ventilation plenum underneath the Hammerstein Ballroom and the New Yorker Hotel, both of which are historic-eligible structures. The construction of the fan plant and the ventilation plenums would also result in noise and vibration impacts to the adjacent historic-eligible Hammerstein Ballroom/Manhattan Center Studios. The Manhattan Center Studios house recording studios, entertainment venues, and other noise and vibration-sensitive activities. The Optional 35th Street Fan Plant at this site was eliminated from further consideration because of the potential impacts to the noise-sensitive activity within the Manhattan Center Studios, and the potential impacts on the historic-eligible Hammerstein Ballroom and New Yorker Hotel. Two emergency access/egress stairways and one ADA elevator would be constructed within the 323 West 34th Street site, but would be located on the western edge of the property along West 34th Street, sufficiently far away from the Hammerstein Ballroom to minimize noise and vibration impacts. This work would involve construction by the raise bore technique (including drilling and blasting, see Section 5.1), and the use of jackhammers and air compressors, and materials removal. This work would be completed mainly within the interior of the garage. The construction of this entrance would occur during the three-to-four-year construction period of the Dyer Avenue Fan Plant. Predicted noise levels from this construction would range from 90 to 95 dBA at 50 feet and 84 to 90 dBA at 100 feet. NYC and FTA daytime noise limits for commercial receptors are 65 and 85 dBA, respectively.

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response (continued):

FEIS Section 3.4 analyzes the sidewalk during peak commuting conditions when pedestrian volumes are at their highest. A 14-foot-wide sidewalk will be maintained during construction of the ADA entrance. The construction area is located west of the Manhattan Center and will not impede access to local subway stations or PSNY to the east.

Comment 180-S:

Several commenters asked about the nature of the project's interest in 313 West 34th Street (Manhattan Center/Hammerstein Ballroom). They asked that NJ TRANSIT visit the site to better understand how construction activities could impact the facilities and operations. The site next to the Manhattan Center and the New Yorker Hotel is not suitable for a fan plant. (*KylerL 2T, KylerL 3T, KylerL 4T, KylerL2 3L, KasenetzC 1E, KasenetzC2 1E, WilliamL 1T, WilliamL 2T, WilliamL2 2L*)

Response:

In addition to correctly identifying the site, the SDEIS contained a typographical error, identifying 313 West 34th Street (instead of 323 West 34th Street) as an alternative location for a fan plant along 35th Street and an ADA accessible elevator core. FEIS Executive Summary, Chapters 2, 6 and 8, Sections 4.2 and 4.5, Appendix 4.2, and the Programmatic Agreement reflect the correct address. Although the SDEIS misidentifies this property, it correctly identifies the property in SDEIS Appendix 4.2. The fan plant is not proposed at 313 West 34th Street and there is no plan for condemnation of this property. The only property interest planned for the Manhattan Center is a subsurface easement. Between the publication of the SDEIS and the FEIS, NJ TRANSIT and the PANYNJ toured the Hammerstein Ballroom and New Yorker Hotel and as a result of this tour, the FEIS Section 5.7 contains additional information about operations at this site.

Comment 181-S:

Several commenters asked about location and impacts of a fan plant at 137 West 33rd Street (Blarney Rock). They suggested that instead of taking a family-owned business, the fan plant should be located at the sex shop at 155 West 33rd Street. Another commenter asked about the nature of the project's interest in 139 West 33rd Street. (*BlarneyRockPub 1T, DwyerT 1E, DwyerT 2E, REBNY 2T, REBNY 3T, HofherrB 1E, HofherrB 2E*)

Response:

The SDEIS and the FEIS fully disclose the impact of siting fan plants at these sites. With respect to siting the fan plant at this address, the determining factors are discussed in FEIS Appendix 2. The two lots that comprise 155 West 33rd Street do not provide the same footprint that is available on the preferred site of 137-139 West 33rd Street (Lots 16 and 17). The fan plant design requires a horizontal depth of 100 feet for both lots. However, one lot at 155 West 33rd Street is 80 feet in horizontal depth. Therefore using this site for the fan plant is not feasible due to a lack of physical space to accommodate its footprint and all required functions.

LAND USE (SECTIONS 4.2 AND 5.2) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response (continued):

To meet ventilation requirements in Manhattan, six fan plants were proposed with the DEIS Build Alternative. Two fan plants would serve the tunnels west of NYPSE, and four fan plants would serve the new station. During Preliminary Engineering each of the proposed fan plant locations were reevaluated. An alternatives analysis was undertaken to determine the most feasible and cost-effective location for the fan plants serving the new station under West 34th Street. The key criteria applied in the analysis were:

- Fan plant location relative to the station cavern mechanical equipment rooms to minimize underground duct runs and fan sizes and maximize efficiency;
- Availability of a footprint to accommodate required fan plant equipment and functions;
- Avoidance, minimization and practicable mitigation of environmental impacts associated with land use/displacement, noise and vibration, service vehicle access, and air cooling towers;
- Constructability associated with NYPSE cavern excavation, including removal of excavated materials and delivery of materials for construction of the cavern;
- Availability and cost of real estate that would need to be acquired, to avoid major displacement of commercial, cost-prohibitive high-rise developments; and
- Compatibility of the fan plants with adjacent development, existing land uses and the character of the street/neighborhood. This criteria includes loss of other functional elements on the adjacent "lot line" building side walls, such as operable windows and/or intake and exhaust louvers associated with those building mechanical systems.

Comment 182-S:

One commenter stated NJ TRANSIT should ensure the continued viable operation of properties adjacent to fan plants during construction and thereafter. We reiterate the concerns on the location of fan plants in Community Board 4, especially on West 33rd Street adjacent to a school. We recently learned of the possible impacts of a second fan plant on West 35th Street abutting the Manhattan Concert Hall and sound recording studio located in a historically significant building. (*CB43 4L*)

Response:

The FEIS Sections on Roadways (3.3 and 3.6), Land Use (4.2 and 5.2), and Noise & Vibration (4.7 and 5.7) discuss the impacts to properties with the construction of the Dyer Avenue (West 33rd) and West 35th Street Fan Plants. This analysis has been updated to reflect input from the property owners and tenants, including the elimination of the optional West 35th Street site abutting the Hammerstein Ballroom/Manhattan Center. The FEIS commits to a program of mitigation with regard to traffic and noise and vibration impacts, which includes monitoring. As described in Section 5.3, mitigation measures to enable surrounding businesses to remain accessible and open during construction will include the implementation of MPT plans, signage for businesses obscured by construction, and advance public notification of partial sidewalk or street closures.

COMMUNITY AND ENVIRONMENTAL JUSTICE (SECTIONS 4.3 AND 5.3 AND 4.4 AND 5.4)

DEIS COMMENTS

Comment 183-D:

Multiple commenters stated an additional station stop in Union City, or a station that would allow transfers to the Hudson Bergen Light Rail (HBLR) to the Northeast Corridor, should be considered. Both existing and proposed tunnels pass beneath Union City. However, Union City residents do not currently have the benefit of station access to these tunnels. (*Darlington 1E, Hale 3L*)

Response:

ARC Project goals include improving rail access and improving travel time to midtown Manhattan for NJ TRANSIT passengers. Adding a new rail station would create a new stop on the NEC, and would increase travel times, thus, not support the project goals and objectives. Further, station stops, whether or not they provide for "pass-through" express train capability, reduce line capacity in proportion to the number of trains that stop. To provide the necessary volume of trains into Manhattan with ARC, the number of stopping trains must be minimized. An additional station stop in the existing or new tunnels would reduce capacity into Manhattan.

Comment 184-D:

Multiple commenters stated the project's new infrastructure will be constructed through communities that will not directly benefit from the expansion in service. The only train station within the New Jersey project area at Secaucus has no parking and poor bus service. Poor and minority Hudson County residents will receive little or no additional benefit from the ARC project. Hudson County's poor and minority residents may have fewer park and recreational opportunities without completion of the Hackensack River Greenway. NJ TRANSIT should provide these communities with public amenities such as greenway corridors as part of the environmental mitigation component of this project. (*Greenway 3T, HCDP 8T*)

Response:

Based on ridership forecasts and time travel savings, minority and low-income residents living within and beyond the project area would benefit from the increased rail accessibility provided by the Build Alternative. This accessibility would be enhanced by any improvements to feeder bus service to stations along affected rail lines, particularly for those individuals in Hudson County that would not have access to an automobile. During construction of Build Alternative improvements at or near Frank R. Lautenberg Station, an existing busway would be relocated temporarily to enable the construction and maintain bus access to the station. Construction of new tracks in New Jersey with the Build Alternative would not preclude the completion of the Hackensack River Greenway or discontinue access to existing parklands in the vicinity of the NEC and the proposed Kearny Rail Yard. Therefore, poor and minority residents in the project area would not have fewer park and recreational opportunities as a result of the Build Alternative. FEIS Section 4.4 has been updated to clarify these conclusions.

Comment 185-D:

One commenter stated FTA and NJ TRANSIT should remain in close communication with affected business owners and community facility managers to proceed with a design and construction plan that minimizes negative economic impacts as much as possible. (*MBP Stringer 7T*)

COMMUNITY AND ENVIRONMENTAL JUSTICE (SECTIONS 4.3 AND 5.3 AND 4.4 AND 5.4) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

The Build Alternative design and alignment have been developed in an open environment that has emphasized avoidance, minimization and mitigation of physical, social, economic and environmental impacts. Design and alignment development have included input from and dialogue with agencies, counties, municipalities and stakeholders throughout the project area. Hundreds of meetings have been held during the EIS and design process to date, and such outreach will continue through the design and construction phases of the project. Specific meetings with property owners and community facility managers have been and continue to be conducted in New Jersey and New York. The purposes of these meetings are to describe proposed improvements, the need for property interests, and mitigation/ commitments based on applicable federal, state and local relocation guidelines.

Comment 186-D:

One commenter stated there is nothing discussed about the social economic implications to low-income populations (i.e., gentrification) that would result from the proposed project. *(Feiner 1T)*

Response:

The ARC project is based on forecasts for growth and development that have been developed by the North Jersey Transportation Planning Authority (NJTPA) for the northern New Jersey region. The project itself does not consider induced demand or the change in property values within the study area, since many other factors such as local redevelopment plans would also influence these changes. Long-term and construction impacts to low-income populations in the project study area are addressed in Sections 4.4 and 5.4, respectively. Changes in land use associated with the project area also discussed in Sections 4.2 and 5.2. Impacts beyond the project area with regard to land use and demographic, including low-income and minority populations, are discussed in Sections 4.18 and 5.18, Indirect and Cumulative Impacts.

COMMUNITY AND ENVIRONMENTAL JUSTICE (SECTIONS 4.3 AND 5.3 AND 4.4 AND 5.4) (CONTINUED)

SDEIS COMMENTS

Comment 187-S:

Multiple commenters suggested that ARC should include an additional station stop between Frank R. Lautenberg station and the Hudson River. (*Ludasi 5E, OBA 1E*)

Response:

As described in the response to DEIS Comment 183-D, the addition of a west-of-Hudson station stop would reduce capacity into Manhattan.

Comment 188-S:

Several commenters stated the future economic growth of the New Jersey Hudson River waterfront is not considered. The ARC project as presently conceived would not only spend a huge portion of available transportation dollars on a project that would not serve the Jersey City waterfront market at all, but also would serve to damage the mass transit network that made possible its growth in the first place by diverting resources away from NJ TRANSIT's Hoboken Terminal which serves the waterfront. The SDEIS route bypasses Hoboken/Jersey City and will reduce rail service to the Hoboken Terminal, as evidenced by the SDEIS forecast that Hoboken peak hour ridership will fall from 36 percent of New York ridership in 2005 to 13 percent in 2030. If Hoboken remains a stub-end terminal, there will be constant pressure to reduce rail services in the future. (*NewportAssDecCo 2L, NewportAssDecCo 3L, HC2 3L*)

Response:

The goals and objectives of the ARC project, as stated in FEIS Chapter 1, are to provide additional and enhanced trans-Hudson commutation to midtown Manhattan, the Region's Core. As shown in Table 2-4 in Chapter 2, by affording additional train service powered by new dual-power locomotives, the Build Alternative would accommodate 48 trains in the AM peak hour routed to existing PSNY and NYPSE, more than doubling the 23 trains currently entering midtown.

Existing NJ TRANSIT AM peak hour service to Hoboken amounts to 24 trains, with 25 trains predicted for the 2030 No Build Alternative. The Build Alternative would still route 23 trains in the AM peak hour to Hoboken, as shown in Table 2-4. This slight (8 percent) reduction in AM peak hour service to Hoboken with the Build Alternative would still maintain major passenger access to the Hudson waterfront for connection to Jersey City and its waterfront via PATH and the HBLRT, while the Build Alternative would also achieve the required trans-Hudson commutation capacity to keep pace with ever-increasing demands through 2030.

NJ TRANSIT is making significant investments in projects that benefit the Hudson River waterfront, including adding service to the HBLRT, building HBLRT extensions, and strengthening bus services to the waterfront and other parts of Hudson County.

COMMUNITY AND ENVIRONMENTAL JUSTICE (SECTIONS 4.3 AND 5.3 AND 4.4 AND 5.4) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 189-S:

The Access to the Region's Core Project will have an overall positive impact on the State of New Jersey and the region. However, the project area is within one of the most diverse, urbanized and densely populated counties in the country. In fact, Hudson County is the least affluent county in the State of New Jersey. The Access to the Region's Core Project does not directly benefit or serve Hudson County residents. Moreover, the project would take park, open space and recreational opportunities away from Hudson County's communities and residents. The Federal Railroad Administration and NJ TRANSIT should implement Executive Order 12898 to mitigate all Environmental Justice impacts to Minority Populations and Low-Income Populations. (*HCDP2 6L*)

Response:

The Build Alternative would provide additional train service passing through Frank R. Lautenberg Station from NJ TRANSIT lines to the west and north. As such, greater rail accessibility would be afforded for Hudson County residents (including minority and low-income) to employment and park/recreational opportunities in New Jersey and in New York. This increased accessibility for minority or low-income residents, who perhaps do not own an automobile (see FEIS Section 4.4), would be supported by NJ TRANSIT bus service to and from Lautenberg Station. Such connecting bus service is continually being reviewed and upgraded by NJ TRANSIT in view of any increased demand, such as would be created by the additional train frequency and passenger-carrying capacity of the Build Alternative.

In addition, as described in FEIS Section 4.10, the Build Alternative would not preclude opportunities for park, open space and recreational use, with designs allowing for future introduction of linear facilities, such as the East Coast Greenway or Hudson County initiatives near the Build Alternative alignments in New Jersey. Moreover, the Build Alternative would not preclude access to existing parklands or open space in the project area, through judicious alignment and facility design.

Therefore, minority and low-income populations would not be impacted disproportionately with the Build Alternative. Conversely, the Build Alternative would benefit these populations by increasing rail access and avoiding impacts to existing and proposed park, open space and recreational resources.

VISUAL AND AESTHETIC RESOURCES (SECTIONS 4.5 AND 5.5)

DEIS COMMENTS

Comment 190-D:

Hudson River Park Trust stated the DEIS does not adequately assess the visual effects of construction on the waterside and landside portions of the Hudson River Park. *(HRPT 6L, HRPT 7L)*

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the tunnels would be between 50 and 70 feet below the Hudson River bottom and about 125 feet below the Hudson River Bulkhead and landside portion of Hudson River Park between the shore and Twelfth Avenue. Alignment of the tunnels at this depth would avoid any visual and aesthetic impacts to the waterside and landside portions of the Park. Therefore, no mitigation or restoration would be required.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 191-D:

Hudson County Division of Planning stated the ARC DEIS Visual and Aesthetic Conditions chapter does not adequately address the scenic vistas of the Hackensack River and Penhorn Creek from and through the area (page 4.5-4). The Hudson County Master Plan and Hudson County Open Space and Recreation Plan highlight and value the scenic overlooks and vistas of the Hackensack River corridor (photographs submitted as evidence). *(HCDP 4T)*

Response:

FEIS Section 4.5 has been updated to include photographs that depict the scenic vistas of the Meadowlands, including the Hackensack River and Penhorn Creek.

Comment 192-D:

Hudson County Division of Planning took exception to the Hackensack River not being listed as a protected wild and scenic river under Section 7:7E-3.46 of New Jersey's Coastal Zone Management policies contained in Appendix 11 of the DEIS. (*HCDP 16T)*

Response:

The Hackensack River is not a protected wild and scenic river; therefore, Section 7:7E-3.46 of New Jersey's Coastal Zone Management Policy is not applicable.

VISUAL AND AESTHETIC RESOURCES (SECTIONS 4.5 AND 5.5) (CONTINUED)

SDEIS COMMENTS

Comment 193-S:

One commenter noted that in the rendering in Photograph 8.7 there is a shading of the parking facility. The photograph does not indicate that the fan plant will be 100 feet high and have a footprint of 82 by 109 feet. None of this is disclosed in the artistic rendering that is in the document. (*Grifa2 6T*)

Response:

FEIS Section 4.5 has been updated to include a rendering of the proposed fan plant in New York that depicts its mass and scale.

AIR QUALITY (SECTIONS 4.6 AND 5.6)

DEIS COMMENTS

Comment 194-D:

New Jersey Department of Environmental Protection stated the revised or future documents regarding the ARC project should acknowledge that as of December 17, 2006, the annual PM_{10} NAAQS was revoked, and the 24-hour $PM_{2.5}$ NAAQS was revised from 65 to 35 $\mu g/m^3$. *(NJDEP3 8L)*

Response:

FEIS Sections 4.6 and 5.6 text and tables have been updated to reflect the latest National Ambient Air Quality Standards for PM_{10} and $PM_{2.5}$.

Comment 195-D:

United States Environmental Protection Agency recommends placing all of the conformity documentation in one section of the document (it is currently split between Sections 4.6 and 5.0), possibly as a stand alone appendix. Information regarding compliance with the project-level conformity requirements could then be separated from any additional air quality analyses done for NEPA or to satisfy state or local requirements. *(EPA 6L)*

Response:

Project-related conformity documentation is contained in one place in the separate *Air Quality Technical Report*, available from NJ TRANSIT upon request. Conformity information in the FEIS remains separated by long-term and construction conditions in Sections 4.6 and 5.6, for consistency of format with the rest of the document. Descriptions of proposed Build Alternative concentrations relative to Federal (NEPA), State and local air quality standards and regulations are separated by jurisdiction in these sections for clarity.

Comment 196-D:

United States Environmental Protection Agency states that MOBILE6.2 is currently not an approved model for use in quantitative $PM_{2.5}$ or PM_{10} hot-spot analyses for transportation conformity. As such, a discussion regarding the appropriateness of using the MOBILE6.2 is necessary. *(EPA 7L)*

Response:

Potential $PM_{2.5}$ impacts of the Build Alternative relative to demonstrating conformity compliance have been estimated using EPA's "Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Non-Attainment and Maintenance Areas (EPA420-B-06-902)". As described in FEIS Section 4.6, this methodology, which does not use MOBILE 6.2, was applied to demonstrate that the Build Alternative would not: (1) cause or contribute to any new localized $PM_{2.5}$ violations; (2) increase the frequency or severity of any existing violations; or (3) delay timely attainment of the $PM_{2.5}$ NAAQS. MOBILE6.2 $PM_{2.5}$ emission factors have been applied, where appropriate, to estimate project-level impacts for comparison to NYSDEC and NYCDEP significant threshold values (STVs).

Comment 197-D:

United States Environmental Protection Agency states that any $PM_{2.5}$ conformity analyses need to be completed for both the 65 micrograms per cubic meter ($\mu g/m^3$) 24-hour standard and the annual $PM_{2.5}$ standard. The DEIS only considers the 24-hour $PM_{2.5}$ standard. In particular, Tables 4.6-3, 4.6-8, 4.6-11, 4.6-7, 4.6-10, and 4.6-15 should include annual $PM_{2.5}$ concentrations. *(EPA 8L)*

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

FEIS Section 4.6 has been updated to indicate that the Build Alternative has been analyzed relative to both the current (65 $\mu g/m^3$) and recently revised (35 $\mu g/m^3$) $PM_{2.5}$ 24-hour standards. Compliance with the annual standard was demonstrated using EPA's qualitative hot-spot analysis methodology in FEIS Section 4.6 and associated tables. The annual $PM_{2.5}$ standard is included, where appropriate, for comparison of predicted Build Alternative concentrations to NYSDEC and NYCDEP significant threshold values (STVs).

Comment 198-D:

United States Environmental Protection Agency states that the DEIS does not explain why only the Bay Head and Suffern Rail Yards are analyzed. *(EPA 9L)*

Response:

FEIS Section 4.6 has been updated to explain that the Bay Head, New Jersey, and Suffern, New York rail yards were selected as realistic worst-case air quality impact analysis sites because of the existing and predicted numbers of locomotives that would idle and operate in diesel mode in these yards, which are located at the end of NJ TRANSIT rail lines affected by the Build Alternative.

Comment 199-D:

United States Environmental Protection Agency stated the DEIS identifies Tier 2 engines for construction equipment as a possible mitigation measure for $PM_{2.5}$. However, Tier 3 and Tier 4 (beginning in 2011) engines would be coming into the market during the project's construction period. As a mitigation strategy, NJ TRANSIT should consider requiring the use of these cleaner, higher-tier engines as soon as they are available. NJ TRANSIT should also use this strategy to preserve air quality and protect public health at all construction sites, not only in Manhattan. (*EPA 10L*)

Response:

As described in FEIS Section 5.6, a robust package of measures to mitigate air quality impacts during the Build Alternative construction phase will be incorporated into each of the project's construction contracts.

The following equipment-related measures have been reviewed and approved by USEPA and state and local agencies in New Jersey and New York, and have been applied successfully on other major construction projects in the region: 1) Ultra-Low Sulfur Diesel fuel for vehicles and equipment; 2) Engines for non-road construction equipment with a horsepower (HP) rating of 50 HP and above compliant with USEPA's Tier 2 or better emission standards; 3) TBM equipment, compressors, welders, and pumps powered by electricity exclusively; and 4) Construction equipment with engines of 50 HP and above retrofitted with Best Available Technology, as defined in the NYCDEP Rule implementing the requirements of NYC Local Law 77.

All Build Alternative construction equipment with engines of 50 HP and above will be equipped with diesel particulate filters. In addition, a combination of Tier 2 compliance engines (or better) and retrofit technology will be applied to reduce PM_{10} and $PM_{2.5}$ emissions. For NO_x, anticipated emission reductions from Tier 2 compliance engines would also be expected. However, most of the NO_2 emission reductions would result from use of electric compressors and pumps, instead of diesel-powered equipment.

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (continued):

A comprehensive dust control program consisting of measures, such as the use of soil stabilizers, dust screens, and tire and truck washes, will also be incorporated into each construction contract to control excessive nuisance dust both on- and off-site, to maintain low PM levels. Implementation of certain dust control measures could reduce ambient PM increments between 45 and 95 percent (e.g., dirt-handling activities of large-scale construction projects). A list of the dust control measures proposed to be included in the dust control program is contained in the separate *Air Quality Technical Report* available upon request from NJ TRANSIT.

Comment 200-D:

United States Environmental Protection Agency stated additional modifications to the project-level conformity analysis that occur as a result of discussions between EPA and U.S. DOT should be reflected in the FEIS. *(EPA 11L)*

Response:

A robust package of measures to mitigate air quality impacts during the Build Alternative construction phase would be incorporated into each of the project's construction contracts. These measures have been reviewed and approved by USEPA and state and local agencies in New Jersey and New York, and have been applied successfully on other major construction projects in the region. FEIS Section 5.6 has been updated to describe the inclusion of these measures in the analysis and documentation relative to meeting federal, state and local air quality standards and significant threshold values and supporting the project's conformity compliance determination.

Comment 201-D:

United States Environmental Protection Agency stated information in the FEIS should reflect the fact that the annual PM_{10} standard has been revoked. *(EPA 14L)*

Response:

Text and tables have been updated to include the latest PM_{10} and other air quality standards in FEIS Sections 4.6 and 5.6. The reference to the annual PM_{10} standard has been deleted in FEIS Sections 4.6 and 5.6.

Comment 202-D:

United States Environmental Protection Agency stated they will "designate" and "re-designate" nonattainment areas for the 2006 24-hour $PM_{2.5}$ standard. *(EPA 15L)*

Response:

FEIS Section 4.6 has been updated to reflect the fact the USEPA will "designate" and "re-designate" nonattainment areas for the 2006 24-hour $PM_{2.5}$ standard.

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 203-D:

United States Environmental Protection Agency stated on DEIS page 4.6-4, first paragraph: The discussion of the 1-year conformity grace period is unclear. They recommend deleting the sentence that begins "Since the USEPA…" and replacing it with the following language:

Clean Air Act section 176(c) (6) and the transportation conformity rule (40 CFR 93.102(d)) provide a one-year grace period before conformity is required in areas that are designated nonattainment for a given air quality standard for the first time. Therefore, transportation conformity requirements for transportation plans, transportation improvement programs, and projects began to apply in $PM_{2.5}$ nonattainment areas on April 5, 2006. *(EPA 16L)*

Response:

FEIS Sections 4.6 and 5.6 have been updated with currently applicable language.

Comment 204-D:

United States Environmental Protection Agency asked for a description of how the peak time period shown in DEIS Table 4.6-6, Table 4.6-9 and Table 4.6-13 was determined. (*EPA 17L*)

Response:

FEIS Section 4.6 has been updated to indicate that peak time periods shown in applicable tables were determined from review of 24-hour traffic counts in the project area. The counts were obtained from the sponsors and preparers of the FGEIS for the No. 7 Subway Line Extension.

Comment 205-D:

United States Environmental Protection Agency noted that in DEIS Section 4.6, the word "beyond" should be "within" in the third line of the first paragraph in the discussion of localized impacts in the NJ. *(EPA 18L)*

Response:

FEIS Sections 4.6 and 5.6 have been updated with the suggested language.

Comment 206-D:

United States Environmental Protection Agency requested that in DEIS Section 4.6 (Page 4.6-17, first paragraph) the transportation conformity rule requirement for projects that require a qualitative $PM_{2.5}$ and/or PM_{10} hot-spot analysis (40 CFR 93.123(b)) be cited. They also request that clarification within the text that the project does not result in a significant increase in diesel vehicle trips and therefore, no $PM_{2.5}$ or PM_{10} hot-spot analysis is required. *(EPA 19L)*

Response:

FEIS Section 4.6 has been updated to cite 40 CFR 93.123 (b) as the transportation conformity rule. The FEIS has also been updated to include a qualitative $PM_{2.5}/PM_{10}$ analysis following EPA qualitative hot-spot analysis guidelines. The text indicates that as a result of this evaluation, the Build Alternative would not result in a significant increase in diesel vehicle trips, and would not be considered a "project of air quality concern."

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 207-D:

United States Environmental Protection Agency noted that the last sentence in the first paragraph on Page 4.6-22 is inconsistent with the statement in the first paragraph of the NY Mobile Source Analysis section on DEIS Page 4.6-17, which states that existing violations are not made worse because there is no significant increase in diesel vehicle trips. *(EPA 20L)*

Response:

Mobile source PM_{10} and $PM_{2.5}$ impact text has been updated in FEIS Section 4.6. Conformity compliance has been demonstrated by applying USEPA's qualitative hot-spot methodology, and project-generated increments have been compared with NYSDEC and NYCDEP significant impact thresholds (STVs).

Comment 208-D:

United States Environmental Protection Agency noted that the Table on page 1 of Appendix 4.6 should include entries for background air quality data and meteorological data. (*EPA 21L*)

Response:

The background air quality data used in the air quality analysis is documented in FEIS Section 4.6 and referenced in Appendix 4.6.

Comment 209-D:

United States Environmental Protection Agency noted that the third bullet on page 3 of Appendix 4.6 describes how the CO screening analysis will be done. They recommend that it would be more appropriate immediately following the last bullet on page 2 of Appendix 4.6, which describes the criteria for selecting locations for the CO screening analysis. *(EPA 22L)*

Response:

FEIS Appendix 4.6 has been revised by placing the step of completing the CO analysis after the step of describing the site selection criteria.

Comment 210-D:

United States Environmental Protection Agency noted that the seventh bullet on page 7 of Appendix 4.6 be changed to indicate that the transportation conformity rule requires that analysis year(s) be the year with the highest combination of emissions from the project and background air quality. It is not necessarily the design year for the project (40 CFR 93.116(a) and 69 FR 40056-8). (*EPA 23L*)

Response:

The Air Quality Methodology Report in FEIS Appendix 4.6 has been revised to reflect that both 2017, the first year of Build Alternative operation, and 2030, the design year for the project, have been analyzed for long-term air quality impacts, as appropriate. These years were selected for analysis in accordance with USEPA critical year analysis requirements.

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 211-D:

United States Environmental Protection Agency suggested that on Page 4 and 5 of Appendix 4.6, the step of gathering background air quality data be added under Estimate Construction Impacts. (*EPA 24L*)

Response:

The Air Quality Methodology Report in FEIS Appendix 4.6 has been revised to include a step for gathering background data.

Comment 212-D:

United States Environmental Protection Agency noted that on DEIS pages 5.6-33 and 5.6-34 the reason for the discrepancy between construction years (2009-2016) and analysis years (2007-2014) is unclear, as is the statement regarding the use of 2008 for the cumulative impacts analysis even though the peak year was identified as 2010. *(EPA 25L)*

Response:

FEIS Section 5.6 has been updated to reflect the current Build Alternative construction schedule and the proposed deployment of construction equipment over time for each analysis site in New Jersey and New York. Peak emissions years for each analysis site have been identified and input to the modeling of pollutant concentrations.

Comment 213-D:

United States Environmental Protection Agency noted that on DEIS Page 5.6-39, Table 5.6-4 and Table 5.6-9, it is not clear that the entries marked as "NA" are actually "not applicable." They suggest that it would be more appropriate to include the calculated impact; otherwise an explanation of what is meant by not applicable needs to be included in the text. *(EPA 26L)*

Response:

"NA" (not applicable) citations in FEIS Section 5.6 tables appear under total concentrations for annual $PM_{2.5}$. (Quantitative $PM_{2.5}$ annual analyses were conducted solely for comparing Build Alternative impacts with state and local significant threshold values [STVs]). Total concentrations for comparison with the NAAQS were predicted, following USEPA's qualitative hot-spot analysis approach. A footnote has been added to the appropriate tables to explain this condition.

Comment 214-D:

United States Environmental Protection Agency noted that for transportation conformity purposes, only the increase caused by the project needs to be mitigated, not the overall violation of the NAAQS. Based on the results of the analysis presented on DEIS pages 5.6-42 and 5.6-43, mitigation would be needed to reduce the predicted concentration back down to 16.8 $\mu g/m^3$ rather than 15.0 $\mu g/m^3$ is necessary. *(EPA 27L)*

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

The robust list of mitigation measures described in FEIS Section 5.6 were evaluated relative to reducing predicted construction-related concentrations of PM2.5 only to the level of the existing violation of the NAAQS (16.8 $\mu g/m^3$). Based on such application, concentrations predicted at the Twelfth Avenue Fan Plant/Construction Access Shaft in Manhattan would exceed the existing violation by 0.16 $\mu g/m^3$, and concentrations predicted at the four other analysis sites in Manhattan would exceed the existing violation by less than 0.1 $\mu g/m^3$, considered to be equal to the existing 16.8 $\mu g/m^3$ background concentration.

Comment 215-D:

One commenter stated the DEIS does not detail emergency generator or ventilation and in case of a failure, these systems are critical with impacts to air quality emissions and locations. *(Gassman 1E)*

Response:

The fan plants for tunnels ventilation would operate during emergency situations or to remove train-generated heat under congested, slow-moving operation. Fans would also be operated during routine maintenance and testing, approximately once a month. The station-related fan plants would operate continuously, at a relatively low velocity. To ensure availability during an emergency, each fan plant would be served by a dual-electrical distribution system derived from services supplied by PSE&G in New Jersey and Con Edison in New York. A diesel generator would also be provided to furnish power during an emergency loss of electrical power. This diesel generator would only be operated during these emergency situations.

Failure of the proposed ventilation systems (fan plants) would affect temperature and humidity within NYPSE and the proposed tunnels, but not ambient (outdoor) air emissions or air pollutant levels. This condition would occur because the trains operating within the proposed ARC tunnels and NYPSE would be electric-powered exclusively, with no pollutant emissions generated by the trains within these spaces, and no emissions to vent. During any ventilation system failures, backup diesel-powered generators would be engaged to remove heat and humidity from the tunnels and NYPSE. These diesel-powered devices would themselves generate air pollutant emissions, but only temporarily during the rare occurrence of ventilation system failure. Emergency conditions, and associated diesel emissions, are not subject to NEPA, SEQRA or CEQR evaluation. Moreover, the key factor during these emergency conditions would be removed of heat and humidity or smoke, rather than emissions from the diesel-powered generators that would be addressing the emergency condition.

Comment 216-D:

One commenter asked if the emergency power impact the air permitting. *(Gassman 7E)*

Response:

Construction and operating permits would be required from NYCDEP for the diesel-powered generators that would be engaged only during proposed tunnels and NYPSE ventilation systems failure. Because of the temporary need for these generators during the rare occurrence of system failure, obtaining these ministerial-type permits would not require detailed air quality impact assessments based on Federal, State or local regulations.

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 217-D:

New York City Department of Environmental Protection (NYCDEP) stated they would prefer that a new $PM_{2.5}$ standard of 35 $\mu g/m^3$ be addressed in the EIS. *(NYCDEP 1E)*

Response:

The recently revised $PM_{2.5}$ standard of 35 $\mu g/m^3$ has been described and documented in updated FEIS Sections 4.6 and 5.6. Continued use of the 65 $\mu g/m^3$ standard relative to USEPA transportation conformity compliance is also described and documented, and predicted construction-related and long-term concentrations have been assessed relative to both standards.

Comment 218-D:

NYCDEP stated the EIS should disclose the fact that, although NYC's current significant threshold value (STV) for 24-hour $PM_{2.5}$ is 5 $\mu g/m^3$, this STV may be lowered in response to the new NAAQS 24-hour $PM_{2.5}$ threshold. *(NYCDEP 2E)*

Response:

NYCDEP's current STVs are included in updated FEIS Sections 4.6 and 5.6. They have been applied to assess the impact of the Build Alternative on PM 2.5 concentrations in New York City.

Comment 219-D:

NYCDEP stated NJ TRANSIT should work with NYCDEP and NYSDEC regarding the exceedances of $PM_{2.5}$ standards during the construction period. *(NYCDEP 3E)*

Response:

Measures to reduce exceedances of Build Alternative construction-related air quality impacts related to $PM_{2.5}$ standards during the construction period, would continue to be identified, agreed to and implemented, based on continuing coordination between FTA, NJ TRANSIT, USEPA, NYCDEP, NYSDEC and NJDEP.

Comment 220-D:

Rockland County questioned if further activities/technologies would be undertaken through ARC to reduce diesel emissions in Woodbine Yard. *(Rockland 4L)*

Response:

The Woodbine Yard would not be affected by increased Build Alternative rail service; therefore, no activities/technologies would be undertaken through ARC to reduce diesel emissions in the Woodbine Yard.

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 221-D:

Rockland County noted that the increase in the 2025 Build Alternative will mean five new AM peak trains (7:30 AM–8:30 AM) with seven trains going to PSNY and six trains going to Hoboken, New Jersey. This will require additional storage of trains at the Suffern Rail yard. Rockland County is in non-attainment for particulate matter ($PM_{2.5}$). Therefore, we will require NJ TRANSIT to continue to use technology that eliminates idling diesel locomotives for both passenger trains and Norfolk Southern locomotives that use the Suffern Rail Yard. *(Rockland 6L)*

Response:

The extent of overnight diesel idling in rail yards in winter months has been reduced by NJ TRANSIT's implementation of a new policy, effective January 1, 2008, that requires overnight idling only when the temperature is below zero degrees Fahrenheit. In support of this policy, more than 100 NJ TRANSIT diesel locomotives have been retrofitted with new starters, block heaters, and batteries, and new external—or "wayside"—power stations have been installed in the Raritan, Port Morris, Bay Head, Port Jervis, Spring Valley, and Suffern Rail Yards to enable maintenance to take place with locomotive engines turned off.

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

SDEIS COMMENTS

Comment 222-S:

One commenter stated the SDEIS Completely Disregards the Impacts of Climate Change on the Project and the Project's Emissions of Greenhouse Gases. (*C/S2 15E*)

Response:

FEIS Section 4.6 has been updated to include a discussion of the issues of greenhouse gases and climate change, and the effect that the Build Alternative would have on regional greenhouse gas emissions, which are equivalent to carbon dioxide emissions. The result of the greenhouse gas analysis, which is based on FTA's New Starts procedures, is that the Build Alternative would reduce regional greenhouse gas emissions (carbon dioxide) by 65,794 tons per year.

Comment 223-S:

One commenter stated in Section 4.6 (Air Quality) on Page 4.6-1, the air quality impacts of the transportation of excavated materials to the Kearny Yard are not assessed and should be assessed in the SDEIS. (*HCIA2 6E*)

Response:

EIS Section 5.6 has been updated to describe the air quality analysis related to truck hauling of excavated tunnels material from the six access shafts in New Jersey and New York to the proposed Kearny Rail Yard site. Based on estimated hourly truck trips from the shaft sites to the entrance to the Koppers Coke site on Route 7 in Kearny, combined with other traffic, mobile source air quality analyses indicate that localized concentrations would not exceed NAAQS.

Comment 224-S:

USEPA stated Section J of Chapter 5.6 notes that the $PM_{2.5}$ background concentration at the Twelfth Avenue construction site may be lower during the project's construction period than the currently monitored background concentration of 15.6 $\mu g/m^3$, which is in violation of the annual $PM_{2.5}$ standard. To demonstrate that construction activities will not cause or contribute to a violation of the standard at the Twelfth Avenue site, NJ TRANSIT will need to confirm that the future projected $PM_{2.5}$ background concentration, modeled by the NYS Department of Environmental Conservation for its $PM_{2.5}$ state implementation plan, is sufficiently below the standard of 15.0 $\mu g/m^3$. It may also be appropriate to discuss the limitations of the chosen dispersion model and any uncertainties associated with the predicted annual $PM_{2.5}$ increment. (*EPA2 8L*)

AIR QUALITY (SECTIONS 4.6 AND 5.6) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

Based on the findings of the Draft Revision to the NYS Implementation Plan for $PM_{2.5}$: Metropolitan Area (SIP), dated April 28, 2008, and the results of construction-phase analysis of the Build Alternative (with the implementation of an extensive package of mitigation measures documented in FEIS Section 5.6), construction-phase emissions increases would not cause or exacerbate a violation of the NAAQS, because:

1. The maximum estimated construction-phase emissions of the Build Alternative that would occur near the intersection of West 29th Street and Twelfth Avenue is 0.16 $\mu g/m^3$.
2. The SIP-modeled concentration of 15.3 $\mu g/m^3$ at the worst-case monitor in Manhattan (P.S. 59 at East 57th Street) is 0.8 $\mu g/m^3$ greater than the level predicted at any other monitor in the NYC Metropolitan Area (i.e., the second highest modeled value is 14.5 $\mu g/m^3$).
3. With implementation of weight of evidence (WOE) measures included in the SIP, the worst-case modeled concentration listed in 2, above at P.S. 59 would be reduced from 15.3 $\mu g/m^3$ to 15 $\mu g/m^3$. Therefore, projected values at the other monitors in Manhattan would be less than the second-highest modeled value of 14.5 $\mu g/m^3$.
4. Maximum 2010 pollutant levels at the West 29th Street and Twelfth Avenue Build Alternative construction site should be closer to the 14.5 $\mu g/m^3$ concentration collected at the second highest NYC monitor than the concentration of 15.3 $\mu g/m^3$ at the P.S. 59 monitor, because:
   - The P.S. 59 monitor is surrounded by tall buildings that restrict atmospheric dispersion that facilitates the build-up of elevated pollutant levels. The West 29th Street/Twelfth Avenue construction site is not surrounded by tall buildings, and wind blowing from the west across the Hudson River and Hudson River Park is not impeded by any physical structures.
   - The traffic levels of service and congestion are much worse on East 57th Street near the P.S. 59 monitor than along Twelfth Avenue. The eastbound lanes along East 57th Street lead to an entrance ramp of the Queensboro Bridge, and traffic is often queued along East 57th Street during the PM peak period.
5. The addition of a 0.16 $\mu g/m^3$ maximum project increment to a 2010 background concentration that would be less than or equal to approximately 14.5 $\mu g/m^3$ would result in a total concentration below the NAAQS of 15 $\mu g/m^3$.

As such, the Build Alternative would be in compliance with EPA's Conformity Rule.

NOISE AND VIBRATION (SECTIONS 4.7 AND 5.7)

DEIS COMMENTS

Comment 225-D:

New Jersey Department of Environmental Protection noted that the DEIS mentions an increase in the number of idling locomotives at the Bay Head Yard and mentioned that they recently submitted amendments to the State Noise Code N.J.A.C. 7:29 which includes removing the railroad exemption for idling and coupling diesel locomotives. *(NJDEP3 9L)*

Response:

Effective July 3, 2007, a new amendment was added under Section 7:29-1.3 Railroad Noise – Idling Locomotives: Incorporated by Reference – 40 CFR – Noise Emission Standards for Transportation Equipment; and 49 CFR 210 – Railroad Noise Emission Compliance Regulations. This referenced CFR regulation establishes a Noise Emission Compliance Level of 70 dBA for a stationary idling locomotive at a distance of 30 meters. This amendment has been applied for the assessment of noise from overnight idling of diesel locomotives at the Bay Head Rail Yard with the Build Alternative that is contained in updated FEIS Section 4.7.

Comment 226-D:

New Jersey Department of Environmental Protection states that locomotives idling outside of the rail yard (Bay Head) in close proximity to residential areas could be subject to enforcement by a local municipality that adopts an approved "Model Railroad Noise Ordinance." Any local enforcement would be based on citing the federal regulations for measuring rail noise. *(NJDEP3 10L)*

Response:

The noise ordinances reviewed (for municipalities within and beyond the project area) do not specifically include reference to locomotive idling outside of a rail yard. Therefore, the assessment of overnight locomotive idling has reflected comparison to FTA guidelines and NJDEP impact criteria. In most instances, commuter rail operations outside of rail yards are exempt from state and local noise ordinances. Beginning in January 2008, NJ TRANSIT initiated a new policy that significantly reduces the requirement for diesel locomotive idling at the rail yards. The new policy requires locomotive idling only when temperatures would be below 0°F. NJ TRANSIT has retrofitted its locomotives with new starters, block heaters and batteries, and new external power stations at the rail yards to allow maintenance work to continue even with the locomotive engines turned off. The benefits of the new procedures would be especially noticeable in the overnight hours when the locomotives lay over in the rail yard. Although the number of days per year when the temperatures would be below 0°F are relatively few (less than 30), on those days when the locomotives would be required to idle overnight at the rail yard, the noise levels (as described above) would exceed both the FTA guidelines and NJDEP noise impact criteria. Noise mitigation for sensitive receptors adjacent to the Bay Head Rail Yard will include building treatments.

NOISE AND VIBRATION (SECTIONS 4.7 AND 5.7) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 227-D:

New Jersey Department of Environmental Protection stated train vibrations and vibrations during tunnel construction could be a concern at night when people are lying in bed. *(NJDEP3 12L)*

Response:

Estimates of ground-borne noise and vibration levels from TBM operations have been calculated inside buildings at various distances from the tunneling operations, applying the methodology contained in the FTA Guidance Manual.

That methodology considers the coupling loss between the ground and the building structure and floor-to-floor attenuation inside the buildings. For ground-borne noise and vibration, the typical peak frequency range is 30 to 60 Hertz. Construction-related analysis indicates that the dwelling units on Paterson Plank Road in North Bergen, located approximately 100 feet above the proposed tracks, would be impacted temporarily by vibration and ground-borne noise from TBM operations. Vibration levels from the TBM operating in rock would be 0.020 inch/second at a distance of 100 feet. Although these vibration levels would be below the building damage criterion of 2.0 inches/second, vibration would be perceptible inside the dwelling units for approximately four to six weeks, until the TBM would advance east of the dwelling units. As a result, vibration monitoring and pre-construction inspections would be conducted to avoid minor structural PART 2 damage during construction. Based on the depth of TBM operations east of Paterson Plank Road (from 100 to 300 feet), no other dwelling units in New Jersey would be impacted by these operations. Controlled blasting techniques would be used to maintain the vibration levels below the building damage criterion. Once the tunneling construction would advance to the east and move deeper into the Palisades (approximately 500 feet east of the proposed Tonnelle Avenue access shaft), the vibration levels would be imperceptible at these dwelling units.

Comment 228-D:

New Jersey Department of Environmental Protection stated construction hours should be curfewed and local residents notified ahead of time when blasting, pile driving and jack hammering activities are planned. *(NJDEP3 13L)*

Response:

The noisiest construction activities, such as blasting, pile driving, and jack hammering, would occur mainly during daytime hours, in accordance with New Jersey State noise ordinances. In addition, since vibration levels from blasting and pile driving could be perceptible inside dwelling units at some locations (e.g., the dwelling units on Paterson Plank Road in North Bergen, New Jersey), residents would be contacted beforehand, and given a schedule of construction activity.

NOISE AND VIBRATION (SECTIONS 4.7 AND 5.7) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 229-D:

New Jersey Department of Environmental Protection stated an increase in construction-related truck traffic is a concern, in particular the loading and unloading of excavated rock into truck beds. They suggest truck traffic be restricted to major roadways and excluded from residential neighborhoods. *(NJDEP3 14L)*

Response:

Truck haul routes in New Jersey have been selected with sensitivity to residential and other receptors. Tonnelle Avenue would be the major access route from the Tonnelle Avenue construction access shaft to Route 3. For the proposed Hoboken construction access shaft, the haul trucks would be routed on a temporary road that would be constructed north of and parallel to and crossing the Hudson-Bergen Light Rail Transit line in Hoboken at Clinton Street at least 250 feet from the nearest residential uses in Weehawken. NJ TRANSIT expects that materials excavated from New Jersey sites would be routed on major roadways to the exclusion of residential neighborhoods.

Comment 230-D:

New Jersey Department of Environmental Protection stated sound barriers and home sound insulation should be considered where tracks are being added or expanded in closer proximity to existing residential housing. *(NJDEP3 15L)*

Response:

FEIS Section 4.7 indicates that three residential receptors located on Secaucus Road and Henry Street in Secaucus, New Jersey would be severely impacted from the placement of two new Build Alternative tracks south of the NEC. Based on input from Secaucus representatives, the benefits of building enhancements that include sound insulation, double-glazed windows, or air conditioning, were considered preferable noise mitigation compared to sound barriers. Discussions with Secaucus representatives and the affected residents would continue, to identify the most acceptable mitigation.

Comment 231-D:

The National Marine Fisheries Service stated the potential impacts to aquatic resources from noise and vibration generated by tunnel boring machines under the Hudson River has not been adequately addressed in the DEIS and Essential Fish Habitat (EFH) assessment. *(NMFS 3L, NMFS 4L, NMFS 16L)*

Response:

FEIS Section 5.8 and the EFH Assessment (Appendix 4.8), have been updated to explain that TBM-generated noise and vibration levels would be well below the auditory thresholds of high, moderate, and low sensitivity fish species at the river bottom and within the water column of the Hudson River.

NOISE AND VIBRATION (SECTIONS 4.7 AND 5.7) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 232-D:

New Jersey Department of Environmental Protection states that they use daytime and nighttime noise level standards, which were established based on sleep interference and normal conversation. They note that the noise studies in the DEIS were based on Leqs, which is an averaging of noise. The noise studies in the DEIS have shown exceedances in the State noise standards, which could impact the quality of life for nearby residents. *(NJDEP3 11L)*

Response:

FEIS Sections 4.7 and 5.7 have been prepared in accordance with the *Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Guidance Manual (FTA-VA-90-1003-06; revised May 2006)*. The FTA Guidance Manual requires that the 24-hour Ldn noise metric be applied to assess the potential for noise impacts at residential receptors. The Ldn, or day-night noise level, is a 24-hour noise metric with a 10-dBA penalty applied to noise-producing events that occur during nighttime hours (10:00 PM to 7:00 AM) to account for a person's sensitivity to noise during these hours. The Leq noise level was used in the DEIS, SDEIS and FEIS assessment to evaluate construction noise and operational noise from proposed fan plants, in accordance with State and local noise limits that are based on the Leq noise metric.

Predicted construction noise levels at the dwelling units on Paterson Plank Road located 250 feet east and 70 feet above the proposed Tonnelle Avenue Construction Access Shaft site would not be in compliance with the NJDEP noise criteria. As a result, a 20-foot-high noise barrier along the edge of Paterson Plank Road at the same elevation as the dwelling units would mitigate the construction noise for the lower dwelling unit floors for compliance with the NJDEP noise criteria. The upper dwelling unit floors would receive no mitigation. Predicted construction noise levels at residential receptors along West 18th Street in Weehawken north of the Hoboken Construction Access Shaft site would also not be in compliance with the NJDEP noise criteria. As a result, a 25-foot-high noise barrier would mitigate construction noise for these residences for compliance with the NJDEP noise criteria. Receptors on Manhattan Avenue in Union City west of and above the Hoboken construction site would also be impacted by construction activities. Because of the difference in elevation between these receptors and the construction site, mitigation for these receptors would not be practicable.

Silencers would be installed at both the Tonnelle Avenue and Hoboken Fan Plants to reduce long-term noise from the tunnel ventilation fans to achieve compliance with the NJDEP noise criteria at nearest receptors.

ECOLOGY (SECTIONS 4.8 AND 5.8)

DEIS COMMENTS

Comment 233-D:

The National Marine Fisheries Service stated the DEIS should describe more clearly the project impacts in either the executive summary or the within the discussion of the project alternatives. The document should have a clear description of all of the construction activities planned, the acres affected and the timing all in one location. Also, temporary and permanent impacts to waters of the United States should be stated clearly as part of the project description. (*NMFS 1L*)

Response:

The FEIS contains a comprehensive and expanded Executive Summary that describes the Build Alternative, including its physical and operational characteristics, construction activities and environmental impacts/mitigation in one place. The Environmental Impacts section of the Executive Summary discusses ecological issues, including wetlands and open waters impacts' related to both construction and long-term time frames.

Comment 234-D:

NMFS stated the Essential Fish Habitat (EFH) assessment was not adequate with regard to evaluating the potential impact on EFH and federally managed species or life stages of fish. Skate, forage, and prey species are lacking from the assessment. Additionally, the assessment does not evaluate the tidal wetlands of the Hackensack River. Without a full and complete EFH assessment, EFH conservation recommendations pursuant to Section 305(b)(4)(A) of the MSA cannot be provided. *(NMFS 15L, NMFS 18L, NMFS 19L, NMFS 21L)*

Response:

A revised and expanded EFH assessment has been prepared and submitted to NMFS for review. The EFH includes additional species, and concludes that construction of the Build Alternative would not impact EFH and those federally managed species (including skates, forage and prey species) identified. This reviewed and expanded version includes assessment of tunnels boring-related noise and vibration on bottom dwelling and fish species in the Hudson River. The revised EFH also includes an assessment of the Hackensack River. FEIS Sections 4.8 and 5.8 have been updated to reflect the findings of the updated EFH.

Comment 235-D:

NMFS stated the DEIS mentions the potential for liquefaction to occur during the tunnel boring, but the likelihood of this occurring and the potential impacts to EFH and other aquatic resources was not discussed. *(NMFS 20L)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the potential for liquefaction during Build Alternative tunnels boring has been analyzed, and the likelihood of this process occurring during this activity or caused by it has been dismissed as a result of this analysis.

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 236-D:

NJDEP stated its Division of Land Use Regulation anticipates working with cooperating Federal agencies in review of forthcoming information and data required in accordance with 16 U.S.C. Section 930.58 of the CAM Act to ensure that the IPA complies with the requirement to cause minimal feasible interferences with the natural functioning of plant, animal, fish, and human life processes at the site and within the surrounding region while taking into consideration the complex interests as required at N.J.A.C. 7:7E-1.5. *(NJDEP3 35L)*

Response:

Coordination with federal, state and local resource agencies, including USEPA, USACE, USFWS, NMFS, NJDEP, and NJMC would continue through the EIS, design and construction phases of the Build Alternative. Design and alignment of the Build Alternative have evolved in relation to this coordination, to avoid, minimize or mitigate any interference and impacts to plant, animal, fish and human life in the project area and region.

Comment 237-D:

Several commenters stated impacts on Hudson River aquatic and marine life should be minimized, including those that inhabit Hudson River Park. Specifically, potential impacts on alewife (Alosa pseudoharengus) and blueblack herring (Alosa aestivalis), collectively called river herring should be addressed. Additionally, it is recommended that the lead Federal agency initiate informal consultation on the effects of this project on shortnose sturgeon, which would lead to a consultation under Section 7 of the Endangered Species Act (ESA). Finally, as a candidate species, Atlantic sturgeon receive no substantive protection under the ESA; however, it is recommended that measures be implemented to reduce effects on this species. *(NY for Parks 5L, Friends of HRP 5E, NMFS 14L, NMFS 22L, NMFS 23L)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE resulted in a deeper station under West 34th Street, and deeper tunnels under the west side of Manhattan and the Hudson River, which made it infeasible to construct the connection from the new ARC tunnels to PSNY to meet NJ TRANSIT operating requirements. This would result in tunnels that would be between 50 and 70 feet deep within the navigable channel, eliminating the need for cofferdams and any other in-water work. This condition would minimize impacts to aquatic and marine life that inhabit the River bottom and the water column above. FEIS Section 4.8 has been updated to identify that potential impacts on alewife, blueback herring and other species were assessed, and no adverse effect to these species was identified. No adverse effects to Atlantic sturgeon would occur. Shortnose sturgeon has been assumed to be present within the project area in the Hudson River. Potential impacts on this species were assessed, and no adverse effects were identified on a construction and long-term basis. Section 7 consultation, including a request for concurrence of these findings, has been initiated with NMFS, Endangered Species Coordinator, and would be continued as the design and permitting process advances only if project plans change or additional information becomes available. Coordination with the Hudson River Park Trust, USACE, and NYSDEC would continue through the environmental, design and construction phases of the project.

Comment 238-D:

NJDEP stated impacts to threatened and endangered species and other species protected under the Federal Migratory Bird Treaty Act must be determined before any mitigation design is finalized. *(NJDEP3 30L)*

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

Impacts to wetlands and aquatic resources that would affect foraging habitat available to threatened and endangered and other species protected under the Federal Migratory Bird Treaty Act and associated mitigation is documented in FEIS Sections 4.8 and 5.8. FEIS Sections 4.8 and 5.8 identify specific mitigation measures for the impacts to an active osprey nest located in the vicinity of the PSE&G Hudson Generating Station due to the Secaucus Connection.

Comment 239-D:

Several commenters stated the compensatory mitigation process for wetlands impacted during construction and on a long-term basis must begin prior or be concurrent with construction of the ARC project and occur as close to the impact as possible. It was recommended that NJ TRANSIT begin searching for land within the Hackensack Meadowlands District (HMD) where wetlands establishment, rehabilitation or restoration can be accomplished to satisfy the expected compensatory mitigation needs. Alternative mitigation options should be pursued in the event that bank credits would not be available. More specifically, depending upon their location relative to the spring high water line, wetland and State open water impacts within the HMD may be regulated by NJDEP as intertidal and/or subtidal shallows and require compensatory mitigation at a ratio of 1:1 for disturbances in accordance with the CAM rule N.J.A.C. 7:7E-3.15. With respect to construction-related impacts in the HMD, a restoration plan would be required. With respect to mitigation for the 2.2 acres of impacts to vegetation communities along the Hudson River, riparian habitat impact mitigation might be required depending upon the nature and location of the communities. Finally, an increase in wetland impacts might occur depending on the extent of any required utility relocations. *(FHWA NJ 6L, NMFS 6L, NJDEP3 29L, NJDEP3 34L, NMFS 9L, Baykeeper 1L)*

Response:

The compensatory mitigation process for wetlands impacts on a construction-related and long-term basis is documented in FEIS Sections 4.8 and 5.8. Several viable options for providing compensatory mitigation are currently under consideration and could include: the purchase of credits from a Federal and State approved wetland mitigation bank; the development of an independent wetland mitigation site that could include wetland establishment/creation, enhancement, and/or preservation at ratios acceptable to MIMAC in the same watershed as the proposed impacts; securing credits from an approved in-lieu fee program; or a combination thereof. Following advancement of the mitigation approach, a preliminary compensatory wetland mitigation plan will be prepared for review and comment by MIMAC, which includes NJDEP and USACE, during the review phase of NJDEP and USACE permit applications. Following MIMAC review and comment, a final mitigation plan will be developed for submittal and approval by NJDEP and USACE. Wetland mitigation will be conducted as approved and as conditioned within the issued permits. Continued coordination will take place with NJDEP and USACE to ensure compensatory mitigation compliance.

NJ TRANSIT continues to coordinate with the Meadowlands Conservation Trust on the potential development of a wetland mitigation bank on the Richard P. Kane Tract, including the projected credit availability timeline, as the primary mitigation option. NJ TRANSIT is also investigating the feasibility and acceptability of completing project-specific mitigation at Oritani Marsh or at the Kane Tract as the secondary mitigation option. Acceptable mitigation ratios for project-specific mitigation sites are generally about 2:1 for establishment/restoration; 3:1 for enhancement; and 27:1 for preservation. Finally, NJ TRANSIT continues to coordinate with the MCT, NJMC, and MIMAC on the potential development of an in-lieu fee grogram, as a mitigation option.

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (con't):

FEIS Sections 4.8 and 5.8 state that approved wetland mitigation would be constructed prior to or concurrent with project-related wetland-impacting construction. Construction impacts would also be restored in accordance with an approved restoration plan. The Build Alternative would not directly impact wetland/open waters of the Hudson River; therefore, no mitigation would be required in New York. Preliminary engineering construction limits and associated wetland impacts within those limits and required mitigation have considered required utility relocations. FEIS Section 4.8 has been updated to state that the potential for wetland impacts outside these construction limits resulting from utility relocations required to facilitate Build Alternative construction will be assessed as the project design advances.

Comment 240-D:

NJDEP stated a title search should be conducted on properties to be used as mitigation sites in order to ensure that they are not deed restricted. (*NJDEP3 32L*)

Response:

FEIS Section 4.8 has been updated to state that in the event project-specific mitigation is undertaken, NJ TRANSIT would complete title searches on the subject parcels to ensure that these potential mitigation measures are feasible and are not deed restricted.

Comment 241-D:

EPA stated the wetlands presently on the Koppers Coke site be evaluated and included as part of the impacted wetlands total, rather than assessed as part of the site's future remediated state. (*EPA 3L*)

Response:

Plans for remediation of the Koppers Coke site by Beazer East in conjunction with the Hudson County Improvement Authority (HCIA) has been approved by NJDEP. Included in that approved plan is filling in (capping) existing site wetlands and mitigation, including establishing upland grasslands. This remediation would be completed and approved prior to NJ TRANSIT filling the proposed yard site with excavated tunnels material. Therefore, for EIS purposes, Kearny Rail Yard impacts have been correctly assessed using the Beazer East/HCIA remediated Koppers Coke site, which would be devoid of wetlands. This approach has been confirmed in correspondence from USACE (see Appendix 4.8). Upland impacts related to the proposed rail yard are documented in FEIS Sections 4.8 and 5.8.

Comment 242-D:

Multiple commenters stated the possibility of providing wetlands mitigation for both the ARC and Portal Bridge Capacity Enhancement projects together be explored, as a larger mitigation site will be more ecologically meaningful than two smaller mitigation sites. NJ TRANSIT should continue working with the Meadowlands Interagency Mitigation Advisory Committee (MIMAC) to discuss available mitigation sites. (*EPA 4L, NMFS 7L*)

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

Compensatory wetlands mitigation would continue to be coordinated and negotiated with MIMAC and federal, state and local resource agencies. FEIS Sections 4.8 states that and FEIS Section 4.18 has been updated to state that mitigation for wetland impacts could include collectively providing wetland mitigation for multiple planned projects within the HMD, including the Portal Bridge Capacity Enhancement project. NJ TRANSIT is responding to comments received from agencies within MIMAC to investigate preparing a Wetland Mitigation Plan and approach for both the Build Alternative and the Portal Bridge Capacity Enhancement Project to mitigate for impacts within the HMD.

Comment 243-D:

U.S. DOI stated with the exception of an occasional transient bald eagle (Haliaeetus leucocephalus), no other federally listed or proposed endangered or threatened flora or fauna under FWS jurisdiction are known to occur within vicinity of the ARC project area. Therefore, no further consultation pursuant to Section 7 of the ESA is required by the FWS at this time. If additional information on federally listed species becomes available, or project plans change, this determination may be reconsidered. (*DOI 1L*)

Response:

NJ TRANSIT acknowledges that as per US Department of the Interior correspondence dated April 16, 2007, no further consultation pursuant to Section 7 of the Endangered Species Act is required. NJ TRANSIT will consult with USFWS if project plans change or if additional information becomes available.

Comment 244-D:

U.S. DOI stated further consultation between the FTA and the National Marine Fisheries Service (NMFS) is necessary regarding marine species. (*DOI 2L*)

Response:

Consultation with the NMFS regarding marine species is on-going. A revised Essential Fish Habitat Assessment report was submitted to NMFS for review in May 2008.

Comment 245-D:

U.S. DOI stated the DEIS indicates that viaducts will be used to construct much of the new rail infrastructure where wetland crossings are unavoidable. (*DOI 14L*)

Response:

The project's approach with respect to the selection process of embankment versus viaduct considered existing land uses, environmental impacts and construction costs. Where constrained by one or more of these factors, the alternatives were weighed against each other to arrive at the most balanced overall project impacts. For example, a viaduct structure was selected where relocation of open waters was impractical because of proximity to adjacent land uses. In other cases, embankments were selected in areas that were less constrained by existing land uses and/or where the wetland impact areas would be comparatively small with respect to the areas remaining. Coordination with the appropriate State agencies continues relative to proposed use of viaducts and embankments, and to protect State-listed plant and wildlife species. This coordination would continue as the project advances. FEIS Sections 4.8 and 5.8 contain an update regarding this continued dialogue and Build Alternative wetland impacts.

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 246-D:

U.S. DOI recommended that the final EIS discuss the outcome of coordination with the State agencies, including any requirements for continued consultation. (*DOI 15L*)

Response:

The overall project and the wetland mitigation approach has been discussed with MIMAC (which includes USACE, USEPA, USFWS, NMFS, NJDEP, and NJMC) on multiple occasions, including March 16, 2005, November 16, 2005, with other regulatory agencies on April 7, 2005, and again with MIMAC on May 23, 2007, November 14, 2007, June 18, 2008, and July 16, 2008. Although discussion of the compensatory wetland mitigation approach with MIMAC does not constitute agreement or MIMAC approval, these meetings represent an on-going dialogue regarding mitigation efforts. FEIS Section 4.8 and 5.8 present a detailed discussion of the potential mitigation approaches that have evolved from this coordination.

The wetland mitigation approach will continue to be coordinated with MIMAC. NJ TRANSIT continues to coordinate with the Meadowlands Conservation Trust on the potential development of a wetland mitigation bank on the Richard P. Kane Tract, including the projected credit availability timeline, as the primary mitigation option. NJ TRANSIT also continues to investigate the feasibility and acceptability of completing project-specific mitigation at Oritani Marsh or at the Kane Tract as the secondary mitigation option. Thirdly, NJ TRANSIT continues to coordinate with the MCT, NJMC, and MIMAC on the potential development of an in-lieu fee program, as a mitigation option. Following advancement of the wetlands mitigation approach, a preliminary compensatory wetland mitigation plan will be prepared for review and comment by MIMAC during the review phase of NJDEP and USACE permit applications. Following MIMAC review and comment, a final mitigation plan will be developed for submittal and approval by NJDEP and USACE. Wetland mitigation will be conducted as approved and as conditioned within the issued permits. Continued coordination will take place with NJDEP and USACE to ensure compensatory mitigation compliance.

Comment 247-D:

U.S. DOI recommended that the FEIS clarify how much of the remaining impacts are due to shading versus fill, and the addition of maps showing locations of wetland impacts labeled with the acreage and type of each impact. (*DOI 16L*)

Response:

FEIS Chapter 2 describes the project changes since the DEIS to meet project goals, and wetland impacts reported in FEIS Sections 4.8 and 5.8 reflect the current Build Alternative alignment. Impacts due to shading versus impacts due to fills are documented in FEIS Section 4.8. Wetland impacts have been identified on the Vegetative Communities Mapping figures provided in FEIS Appendix 4.8. Wetland impact acreage by type is also tabulated in FEIS Sections 4.8 and 5.8.

Comment 248-D:

U.S. DOI recommended that the FEIS should: (1) explain the reasons for the increase; (2) indicate how much of these upland impacts would occur from contaminant remediation of the proposed rail yard site with or without construction of the ARC project; and (3) indicate if any additional impacts are anticipated for remediation within the ARC project area. (*DOI 17L*)

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

Prior to publication of the DEIS, a pre-draft EIS was sent to U.S. DOI for review. The increase of permanent upland impacts from approximately 60 acres in the pre-draft EIS to approximately 102 acres in the DEIS is a result of the Kearny Rail Yard site being assessed differently in these documents. For DEIS purposes, it was determined that the Kearny Rail Yard site would be assessed in the "post-capping scenario", i.e., once this site would be capped for remediation purposes with or without the proposed rail yard. In the DEIS, SDEIS, and FEIS, only those areas that would be developed into the rail yard have been considered as impacted, and those impacts are considered to be to an early successional upland herbaceous community. This community type would result after the capping by others would be completed, as evidenced by the vegetative community that re-established on the eastern side of the Koppers Coke site after that area was successfully capped. It is reasonable to assume a similar vegetative community would re-establish after the remainder of the Koppers Coke site would be capped. An increase in forested upland impact was realized from the pre-draft EIS to the DEIS, and a total of 111.5 acres of upland impact within the project area is reported in FEIS Section 4.8.

Correspondence from USACE (see Appendix 4.8) confirms the validity of the Kearny Rail Yard site in the DEIS, SDEIS, and FEIS being assessed in the "post-capping scenario." A total of 82 acres of upland impact associated with the proposed Kearny Rail Yard is reported in FEIS Section 4.8.

Comment 249-D:

U.S. DOI stated wetlands adjacent to the subject rail bridge are targeted for restoration through the Corps' Hackensack Meadowlands Ecosystem Restoration (HMER) Study. They recommend coordination with the Corps and the New Jersey Meadowlands Commission (NJMC) to ensure that the ARC project will not jeopardize the future remediation and/or restoration of there important wetland sites. (*DOI 18L, DOI 19L*)

Response:

The Build Alternative would not impact Kearny Brackish Marsh and the Laurel Hill Park Wetlands, and only 0.16 acre of the 58-acre Riverbend Wetland Preserve would be impacted. Continued coordination with MIMAC, which includes USACE, USEPA, USFWS, NMFS, NJDEP, and NJMC will take place as the project design advances regarding these and other Meadowlands wetlands resources, as documented in FEIS Sections 4.8 and 5.8.

Comment 250-D:

U.S. DOI advised the ARC project proponents to assume that no bank credits will be available and to proceed with development of an independent compensatory mitigation project. (*DOI 20L*)

Response:

NJ TRANSIT recognizes that presently no approved/established mitigation banks exist within the Meadowlands District. If a bank becomes established and credits become available for purchase as compensatory mitigation that meets the necessary timeframe, NJ TRANSIT could purchase these credits as mitigation for impacts resulting from the Build Alternative. As recommended by MIMAC and other agencies, existing information regarding potential wetland restoration areas within the HMD was reviewed to determine whether a site(s) could be advanced as a feasible and acceptable project-specific mitigation site. Based on a review of this information, Oritani Marsh and project-specific mitigation at the Richard P. Kane Tract were determined to be potentially feasible project-specific mitigation sites.

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 251-D:

U.S. DOI recommended that proponents of the ARC and Portal Bridge projects consider combined mitigation, and investigate options for compensatory mitigation at HMER candidate restoration sites. Mitigation plans in the HMD should be coordinated with the MIMAC. The mitigation plan should provide in-kind replacement of aquatic functions and values, located as close as possible to the impact areas. (*DOI 21L*)

Response:

FEIS Sections 4.8 and 5.8 state that NJ TRANSIT is responding to comments received from agencies within MIMAC to investigate preparing a Wetland Mitigation Plan and approach for both the Build Alternative and the Portal Bridge Capacity Enhancement Project to mitigate for impacts within the HMD. NJ TRANSIT is continuing its dialogue with MIMAC members and the MCT in that specific regard. HMER candidate restoration sites and other sites are being considered. A project-specific mitigation site would be developed within the HMD to satisfy wetland mitigation ratios acceptable to the MIMAC, generally about 2:1 for establishment/restoration; 3:1 for enhancement; and 27:1 for preservation. The project-specific mitigation site and the amount of mitigation provided would be determined through coordination with MIMAC on a case-by-case basis and may require the use of an approved functional assessment methodology such as Indicator Value Assessment (IVA) or Hydrogeomorphic (HGM) Functional Assessment Model.

Comment 252-D:

U.S. DOI stated the mitigation plan should also include an upland component: Replant or seed all areas of temporary disturbance; Monitor and manage invasive species on the embankments and other disturbed areas for at least 5 years; Clarify in the final EIS how many acres of the proposed rail yard are "expected to be colonized by a dominance of common reed with various early successional herbaceous species"; Provide an herbaceous or scrub/shrub upland buffer between the rail yard and the Hackensack River if a forested buffer provides incompatible with the final remediation; Include enhancement and/or restoration of existing degraded upland habitats in the compensatory mitigation plan. The upland mitigation ratio should strive to achieve the following overall goal for the ARC project: no net loss of habitat value for migratory birds, while minimizing loss of in-kind habitat value for these species. (*DOI 22L*)

Response:

A forested buffer along the Hackensack River would be considered at the proposed Kearny Rail Yard if it would be compatible with final remediation activities and final yard design. The FEIS has been updated to include further clarification of the acres of the proposed yard site that would be colonized by a dominance of common reed. Further details of the anticipated restoration of the site have been included in FEIS Sections 4.8 and 5.8.

Comment 253-D:

U.S. DOI stated the FEIS should address the following provisions: Migratory Bird Treaty Act, Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds), FWS Mitigation Policy, and New Jersey No Net Loss Reforestation Act (P.L. 1993, c106). (*DOI 23L*)

Response:

The Migratory Bird Treaty Act, FWS Mitigation Policy, and New Jersey No Net Loss Reforestation Act have been addressed, and are referenced in FEIS Section 4.8.

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 254-D:

U.S. DOI recommended in-kind compensatory mitigation within the Hudson River. A mitigation plan should restore and/or enhance currently impaired benthic habitat within the Hudson River or along its shores. (*DOI 24L*)

Response:

The shallow Hudson River tunnels proposed in the DEIS have been replaced by deeper tunnels, as described in Chapter 2 of the FEIS. As a result, no construction-related or permanent impacts to the Hudson River bottom would occur. Therefore, no mitigation within the Hudson River would be required.

SDEIS COMMENTS

Comment 255-S:

One commenter stated in Section 4.8 (Ecology), Figure 4.8-1 is incorrect with regard to the wetland locations on the proposed Kearny Yard site. The figure should reference the jurisdictional determination issued by the USACE and not the NJDEP Land Use Data 1995/1997. The wetland evaluations for the Refined Build Alternative Analysis on page 4.8-9 and Table 4.8-1 should be also similarly revised. (*HCIA2 7E*)

Response:

FEIS Figures 4.8-1 and 4.8-2 present a broad overview of the project area and the NJDEP Land Use Data of 1995/1997. FEIS Figures 4.8-A through 4.8-Y located in Appendix 4.8 present more detailed views of the vegetative communities within the project area, including wetland delineation information, and project impacts to wetlands and open waters, including the Koppers Coke site, i.e., the future site of the Kearny Rail Yard. FEIS Table 4.8-1 has been updated to show wetland impacts at the Kearny Rail Yard site (Koppers Coke) associated only with one new outfall structure and two modified outfall structures to the Hackensack River, since wetland impacts and mitigation on the portion of the Koppers Coke site to be used by NJ TRANSIT for the Kearny Rail Yard have already been addressed by Beazer East and HCIA in the on-going Koppers Coke site remediation.

Comment 256-S:

Multiple commenters referred to the mitigation of the Richard P. Kane Tract. The reference to providing assistance to the Meadowlands Conservation Trust (MCT) at the Richard P. Kane Tract is unspecific and potentially inconsistent with federal and state mitigation regulations. ARC mitigation must be conducted in accordance with state and federal rules and regulations regarding wetland mitigation and banks. Use of the Kane bank, or any wetland bank, based on yet-to-be approved and released credits should not be permitted. The ARC project should be permitted to use wetland banks, but only those bank credits approved and release at the time of ARC permit issuance. The Council on Environmental Quality's NEPA Implementing Regulations state at 40 CFR 1502.16(h) that the NEPA document should include a discussion of the "means to mitigate adverse environmental impacts". Accordingly, mitigation plans for impacts to wetlands and open water should be included in the final EIS. (*EvergreenEnviroLLC 1L, EvergreenEnviroLLC 3L, EvergreenEnviroLLC 5L, EvergreenEnviroLLC 6L, EPA2 2L*)

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

The wetland mitigation approach for ARC continues to be coordinated with the regulatory agencies, including those agencies that comprise the Meadowlands Interagency Mitigation Advisory Committee (MIMAC). FEIS Chapter 4.8 has been updated to reflect the wetland mitigation approach, which could include: the purchase of credits from a Federal and State approved wetland mitigation bank; the development of an independent wetland mitigation site that could include wetland establishment/creation, enhancement, and/or preservation at ratios acceptable to MIMAC in the same watershed as the proposed impacts; securing credits from an approved in-lieu fee program; or a combination thereof.

Presently, the Richard P. Kane Tract is not an approved/established mitigation bank. The Meadowlands Conservation Trust is in the process of selecting a banking entity to establish a wetland mitigation bank on portions of the Richard P. Kane Tract. If it becomes established and credits become available for purchase as compensatory mitigation that meets the necessary timeframe, NJ TRANSIT could purchase these credits as mitigation for impacts resulting from the Build Alternative. Regardless of the final decision regarding mitigation, the ARC project will be consistent with federal and state regulations and processes regarding wetland impacts and mitigation.

Comment 257-S:

One commenter stated the initial Kane Tract bank credits will not be available for use to mitigate the proposed project until 2010, after the ARC anticipated construction initiation scheduled for 2009 (NJ TRANSIT letter to MCT, February 11, 2008). In 2010, only 10 percent of the credits would be available and in this amount is not likely to meet ARC project needs. Evergreen estimates that the bank project will have a suitable quantity of bank credits available by the year 2012; however, this will be after ARC initiation of construction targeted for 2009 and not meet the mitigation goal and regulatory requirement specified in the SDEIS of mitigation conducted "prior to or concurrent with approved (permitted) project-related impacts". (*EvergreenEnviroLLC 2L*)

Response:

NJ TRANSIT is aware and understands that the creation of an approved wetland mitigation bank takes time, and credits from the bank are only released and available for purchase after certain milestones are reached. NJ TRANSIT is also aware that mitigation would be provided prior to or concurrent with approved (permitted) project-related impacts. If the Richard P. Kane Tract becomes established and credits become available for purchase as compensatory mitigation that meets the necessary timeframe, NJ TRANSIT could purchase these credits as mitigation for impacts resulting from the Build Alternative. Other mitigation approaches are proposed including the development of an independent wetland mitigation site or securing credits from an approved in-lieu fee program. Therefore, NJ TRANSIT continues to advance a wetland mitigation approach relative to the proposed construction schedule for the Build Alternative.

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 258-S:

"Mitigation would be conducted prior to or concurrent with approved (permitted) project-related impacts, and could include collectively providing wetland mitigation for multiple planned projects within the HMD". The later phrase in this statement is vague, but implies that the ARC SDEIS potentially plans to develop mitigation and use that mitigation for multiple planned projects, potentially including future projects not addressed in the SDEIS. Essentially, this statement implies the development of a wetland bank, but does not make the commitment to formally develop an approved mitigation bank. Evergreen supports the development of wetland banks, but believes all banks should be held to the same approval process and performance standards. The use of a mitigation site for multiple unspecified projects requires that the permitted projects and their impacts be identified, the offset mitigation assessed and determined to meet compensatory mitigation requirements, and that the site be developed and recognized as a wetland mitigation site for those specified permitted impacts in accordance with federal and state mitigation guidance and regulations. Please identify the multiple planned projects. Please quantify the ARC wetlands impacted based on a delineation of wetlands and field survey of wetland boundary markers. (*EvergreenEnviroLLC 4L*)

Response:

NJ TRANSIT does not intend to create a mitigation bank, but has been directed by resource agencies to investigate and attempt to develop a coordinated mitigation approach for ARC and the Portal Bridge Capacity Enhancement Project. Wetland and open water impacts associated with the ARC project and presented in the FEIS are based on wetland delineations and field-surveyed wetland boundaries.

Comment 259-S:

One commenter stated Section 5.8 (Ecology), Table 5.8-1 should be revised as it is based upon incorrect wetlands delineation. (*HCIA2 18E*)

Response:

FEIS Table 5.8-1 accurately summarizes construction-related impacts to vegetative communities. Wetland and open water impacts are based on current Jurisdictional Determinations and wetland delineations and field-surveyed boundaries completed for ARC. The wetland impacts associated with the portion of the Koppers Coke site to be used by NJ TRANSIT for the Kearny Rail Yard have already been addressed by Beazer East and HCIA in the on-going Koppers Coke site remediation. A letter of concurrence from USACE on this approach is included in Appendix 4.8.

Comment 260-S:

USEPA stated the SDEIS does not map the acreages of each type of wetland that are proposed to be permanently impacted, temporarily impacted, fragmented or permanently shaded. The value, function, and acreage of wetlands need to be clearly identified in order to discern the potential impacts of the project and determine appropriate mitigation. (*EPA2 1L*)

Response:

FEIS Figures 4.8-A through 4.8-Y located in Appendix 4.8 present detailed views of the vegetative communities within the project area, including wetland delineation information, and depict projected impacts to wetlands and open waters by impact type (temporary versus permanent) and by community type.

ECOLOGY (SECTIONS 4.8 AND 5.8) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 261-S:

USEPA stated the project will cross the Penhorn Creek at the Eastern and Western Arms of the Secaucus Loop; and to the east of Secaucus Road. The final EIS must describe these crossings in detail, and describe any mitigation for impacts to Penhorn Creek or its tributaries. (*EPA2 3L*)

Response:

Details of the proposed crossings of Penhorn Creek with the Build Alternative are shown in the separate Project Definition Report available from NJ TRANSIT upon request. The crossings associated with the Secaucus Connection (Loop) have been designed to enable adequate flow to continue during and following construction. FEIS Section 4.9 has been updated to state that the crossing east of Secaucus Road on embankment would include provision for an in-kind tributary relocation just south of the embankment to maintain stream flow. The replacement would be an open channel with a natural bottom and replanted with indigenous vegetation.

Comment 262-S:

One commenter stated they would prefer that mitigation for the wetlands impact of this project occur at Cedar Marsh in Kearny. This was to be wetlands mitigation site for the Kearny Connection project that was never implemented. Inspections to be carried out last year with the NJMC following a major flooding event suggested that this flooding was enhanced by the structures built as part of the Kearny Connection and the failure of drainage facilities built as part of the project. It is also believed that the improvements called for in the original Kearny Connection Corps of Engineers permit would have more or less resolved drainage issues in this area of Kearny. They included a tide gate, pumping station, lowering of the water level in the marsh, creation of a migratory bird sanctuary, and NJ TRANSIT's acquisition of Cedar Marsh property. (*Hudson County Engineering2 14L*)

Response:

NJ TRANSIT will continue to investigate the feasibility of completing wetland mitigation at sites such as Cedar Creek Marsh and other known tracts in the NJ Meadowlands, as part of the wetland mitigation approach being coordinated with the regulatory agencies, including those agencies that comprise MIMAC.

Comment 263-S:

U.S. DOI stated that the final EIS would be enhanced if it included an analysis and identified supporting scientific literature that indicated whether the proposed mitigation actions for nesting ospreys have been successful elsewhere. The public also would benefit if the final EIS included a discussion of proposed mitigation actions with supporting scientific references for the other threatened and endangered species—both aquatic and terrestrial—that are expected to be impacted from proposed activities. These scientific citations should be included in the references section. (*USDOI2 1L*)

Response:

References have been updated in FEIS Sections 4.8 and 5.8, and Chapter 15 to include the citations of scientific literature to support proposed mitigation measures relative to nesting ospreys and other threatened and endangered species (aquatic and terrestrial) that would be impacted by the Build Alternative. Also cited in FEIS Section 4.8 is the successful osprey nesting program located in northern New Jersey, from the Meadowlands to the Kill Van Kull, sponsored by PSE&G Company.

WATER RESOURCES (SECTIONS 4.9 AND 5.9)

DEIS COMMENTS

Comment 264-D:

Multiple commenters stated cofferdam placement in the Hudson River would require meeting regulatory and agency requirements. It must conform with the Flood Hazard Area Control Act and rules in accordance with N.J.A.C. 7:7E-3.25 of the Coastal Zone Management requirements. Additionally, compensatory mitigation for unavoidable impacts in New York waters must be coordinated with the appropriate personnel from the ACOE, New York State, New York City and the Federal resource agencies whose offices are responsible for those areas, and it was recommended that the search for a mitigation site begin. *(NJDEP3 26L, NMFS 10L, NMFS 8L)*

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the tunnels would be between 50 and 70 feet deep in the navigable channel, eliminating the need for cofferdams and any other in-water work. Therefore, no impacts to the Hudson River bottom would occur, and no compensatory mitigation would be required.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 265-D:

NMFS stated the EFH assessment did not adequately address the potential impacts to water quality (salinity, dissolved oxygen, temperature) that may result from the discharge of water from the tunnels. *(NMFS 17L)*

Response:

The potential impacts to water quality have been updated in the EFH Assessment located in Appendix 4.8. No discharges of water to the Hudson River during either the tunnels construction phase or the operational phase would occur. On the New York side, tunnel pumpout water and construction runoff would be directed to (and under permit from NYCDEP) to a municipal stormwater system. On the New Jersey side, pumpout water and construction runoff would be directed, following agency-specified pretreatment, to a municipal sewer or waterbody, depending on sewer capacity and coordination with affected municipalities. Section 4.9 of the FEIS has been updated to reflect this additional analysis.

WATER RESOURCES (SECTIONS 4.9 AND 5.9) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 266-D:

The NY/NJ Baykeeper stated no new development should have any additional impacts to stormwater runoff. As a means to abate the effects from stormwater, low impact development (LID) should be implemented into the project's stormwater pollution prevention program. This could include creating green roof structures above rail yard or station parking facilities. Additionally, train wash facilities should have oil-water separators that capture and separate wash, to ensure that oil and other pollutants remain out of the runoff. *(Baykeeper 2L, Baykeeper 3L)*

Response:

A green roof was considered for the proposed Kearny Rail Yard employee facility. However, it was not advanced due to the quantity and extent of required rooftop mechanical equipment and the configuration/footprint of the third floor control tower. No new station parking facilities would be part of the ARC project. The integration of a stormwater management system to capture storm runoff and the waste water/water reclamation from HVAC systems for use in toilets/urinals would be considered during final design. Proposed train wash facilities would be designed with manufactured treatment devices to capture oil and other pollutants and ensure that they would not be contained in the site runoff.

Comment 267-D:

NJDEP stated Penhorn Creek and other tributaries of the Hackensack River would require mapping of the drainage areas and a determination of fluvial flood levels compared with tidal levels. *(NJDEP3 25L)*

Response:

A 100-year floodplain review of Penhorn Creek and other tributaries of the Hackensack River has been performed as a part of Preliminary Engineering to establish permit jurisdiction, and a composite jurisdiction plan has been prepared, as referenced in FEIS Section 5.9.

Comment 268-D:

One commenter stated the tunnels portal in North Bergen would be located within wetlands where the water level often has flowed over the nearby NYS&W/Conrail freight tracks that cross under an existing NEC viaduct and require the operation of a pump system. Accordingly, the tunnels should be built to withstand a 500-year flood which has a 40 percent chance of occurring in the next two centuries. A good solution would be to situate all the tunnel entrances on a level, at least, as high as that of the existing tunnels. *(Cafiero 1E, Cafiero 2E, Cafiero 3E)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the tunnels portal would be located east of the NYS&W/Conrail freight tracks and east of Tonnelle Avenue in North Bergen at the base of the Palisades. The proposed two-track alignment leading to the portal would be on an embankment or viaduct following the same approximate profile as the existing NEC. The tracks would cross above the NYS&W/Conrail tracks on a viaduct, and then pass below Tonnelle Avenue, entering the tunnels portal at approximately the same elevation as the existing NEC. Additionally, flood gates would be installed at the Hoboken and Twelfth Avenue Fan Plants at tunnel level to prohibit water intrusion into the proposed tunnels.

WATER RESOURCES (SECTIONS 4.9 AND 5.9) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 269-D:

U.S. DOI recommended on-site restoration of any hydrologic impacts following removal of temporary access roads, and the construction of new tracks on elevated structures (e.g., viaducts) to prevent hydrologic impacts to salt marshes and other aquatic resources. (*DOI 25L*)

Response:

As described in FEIS Section 5.9, any temporary access or staging areas would be restored, and hydrologic impacts would be minimized, by use of pile-supported structures rather than hard fills to the extent practicable. These potential hydrologic impacts would include interruption or discontinuance of stream or other water body flows by the hard fills, while pile-supported structures would enable the flows to continue. With hard fills, relocation of such flows (e.g., Penhorn Creek east of Secaucus Road) to maintain existing conditions once the Build Alternative would be constructed, would be required.

Comment 270-D:

U.S. DOI stated the FEIS should indicate the total expected duration of increased turbidity, clarifying if such impacts would be confined to limited areas within cofferdams at one or both ends of the tunnel, and show cofferdam location(s) on maps. The final EIS should also clarify if dredging may be needed for tunnel construction. (*DOI 25L*)

Response:

The shallow Hudson River tunnels proposed in the DEIS have been replaced by deeper tunnels, as described in Chapter 2 of the FEIS. As a result, there would be no construction-related or placement impacts to the Hudson River bottom and the water column above. No dredging of the Hudson River would be required.

WATER RESOURCES (SECTIONS 4.9 AND 5.9) (CONTINUED)

SDEIS COMMENTS

Comment 271-S:

One commenter stated the SDEIS does not address, either the effects of climate change on the Project (e.g., the effects of sea level rise/flooding on Project facilities and drainage) or the potential overall impacts of the Project on greenhouse gas emissions. (*C/S2 7E*)

Response:

FEIS Sections 4.9 and 5.9 and Appendix 4.9 have been updated to address anticipated sea level rise in the project area.

Comment 272-S:

Multiple commenters stated they were concerned about the use of permanent wick drains for consolidation purposes. These drains will withdraw large volumes of contaminated liquids which will require continuing treatment and/or disposal for times periods after construction in completed. (*PSS LLC 1E, HCIA2 13E*)

Response:

FEIS Section 5.9 has been updated to describe the use of wick drains as part of the development of the Kearny Rail Yard on the Koppers Coke site. In that regard, the process of placing excavated tunnels material at the site of the proposed Kearny Rail Yard would require the collection of free water from this compressible fill and collection of stormwater from its surface. Prior to placing fill at the site, a geocomposite panel (GCL) placed over a geosynthetic membrane would be installed to provide an impermeable cap over the remediated Koppers Coke site. The geocomposite panel would be comprised of two layers of high density polyethylene with a layer of non-woven textile or fabric material between them. The geosynthetic membrane would consist of a single layer of high-density plastic. A layer of select fill placed over the GCL would provide protection during initial placement of excavated tunnels materials.

Vertical wick drains would be installed at various locations through the fill brought to the site. Wick drains are artificial vertical drainage paths consisting of a central perforated plastic core surrounded by a thin geotextile filter jacket that would provide a drainage or collection point for free water within the fill. The wick drains would extend through the GCL/impermeable cap and into a layer of porous fill. A horizontal perforated pipe collection system would collect the wick drain effluent for appropriate treatment prior to final disposal.

To preclude migration of the DNAPL (dense non-aqueous phase liquid—a liquid that is denser than water and does not dissolve or mix easily in water) existing at the northeastern part of the Koppers Coke site, the existing slurry wall segment currently running north-south along the western boundary of the DNAPL area would be extended for a sufficient distance to the east beyond the proposed Kearny Rail Yard fill limits for effective containment. No wick drains would be installed within the slurry wall containment area. The GCL/impermeable cap would extend over this area to prevent infiltration from the stormwater basin that would be constructed above as part of the proposed Kearny Rail Yard development

WATER RESOURCES (SECTIONS 4.9 AND 5.9) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 273-S:

The U.S. Coast Guard stated the elimination of the shallow tunnel construction under the Hudson River greatly reduces our concerns with this project creating any short-term or long-term impacts to navigation. However, they still require that any waterborne work conducted at the Kearny Rail Yard must not interfere with the Hackensack River Federal Channel. (*USCG2 1L*)

Response:

FEIS Section 5.9 has been updated to state that modification of two drainage outfalls and the construction of one new outfall on the shoreline of the Hackensack River, associated with construction of the new Kearny Rail Yard on the Koppers Coke site, would extend no more than 40 feet into the river. Therefore, no work associated with the proposed rail yard would interfere with the Hackensack River Federal Channel. The EFH Report (Appendix 4.8) and FEIS Section 5.8 consider and disclose potential impacts related to outfall construction and refurbishment along the Hackensack River.

Comment 274-S:

One commenter stated Penhorn Creek provides drainage for several roads under Hudson County's jurisdiction and many properties in Secaucus. In some locations it is immediately east of the NEC and possibly within the ARC Full South alignment. The SDEIS is unclear on how this will be handled. They asked if this creek will be relocated or placed in a box culvert and added that Hudson County Engineering would need to discuss the design of this with NJ TRANSIT staff. (*Hudson County Engineering2 11L*)

Response:

FEIS Section 4.9 and 5.9 has been updated to describe the proposed means to maintain surface water flow characteristics and ecological values of the portion of the tributary of Penhorn Creek that would be encroached upon by Build Alternative embankments east of Secaucus Road that would support the two new tracks. The affected creek channel in this area (remaining in an open cross-section with a natural bottom provided) would be relocated just east of the proposed embankments to mitigate impacts associated with embankments construction.

Comment 275-S:

One commenter stated drainage from both the Palisade and Hudson River Tunnels will be directed to municipal sewer systems. It would be prudent for NJ TRANSIT to discuss this with Hoboken, North Bergen and the North Hudson Sewerage Authority. Locally, there have been issues related to the performance of the Hoboken sewer system during rain events that lead to street flooding which could make this a local issue. (*Hudson County Engineering2 12L*)

Response:

FEIS Section 5.9 has been updated to identify that negotiations are in progress between NJ TRANSIT and affected municipalities and sewer authorities regarding the discharge of tunnels pumpout water and any discharge limits and necessary pretreatment. The alternative of discharging this tunnels pumpout water to watercourses and/or wetlands after appropriate pretreatment is also being explored, relative to the capability of existing municipal sewer systems.

PARKLANDS (SECTIONS 4.10 AND 5.10)

DEIS COMMENTS

Comment 276-D:

Several commenters stated they oppose the potential use of conveyors to transport excavated tunnels material from the Twelfth Avenue Construction Access Shaft to barges in the Hudson River. The placement of conveyors and other equipment in Hudson River Park would create visual impacts and affect users of the park. Optionally, the excavated tunnels material could be trucked to existing transfer stations at Gansevoort Street and Pier 99, which was incorrectly identified as Pier 94. However, the mooring of barges along the bulkhead is also questionable. Alternative excavated tunnels material transport should be used to minimize adverse effects on the park consistent with the goals of Section 4(f). *(NYP&R 5L, Friends of HRP 4E, HRPT 12L, HRPT 13L)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the use of conveyors and the mooring of barges have been dismissed as a potential means to transport excavated tunnels material from Manhattan. Further analysis indicated that the double handling of materials required to barge excavated materials from Manhattan would make this option difficult operationally and prohibitively expensive.

Comment 277-D:

Multiple commenters stated the DEIS did not identify and consider several future planned parks in Hudson County: the East Coast Greenway (ECG); the Hackensack RiverWalk/Hackensack River Greenway; and Little Snake Hill, an addition to Laurel Hill County Park. Specifically, future consideration should be given for the linear ECG along the western shore of the Hackensack River through the Standard Chlorine, Diamond Shamrock, and Koppers Coke sites proposed for use by the Kearny Rail Yard. Consideration should be given for the linear Hackensack RiverWalk along the former Boonton Line, which is proposed as part of the Secaucus Connection loop track. (This would also serve as a spur from the ECG to Frank R. Lautenberg Station as part of efforts to ensure that the ECG is accessible by public transit. Finally, Little Snake Hill would be encircled by the Secaucus Connection and appropriate mitigation measures should be taken to facilitate public access to this future park. *(Greenway 1T, Greenway 2T, HCDP 6T, HCDP 5T, HCDP 9T, HCDP 11T, HCDP 14T, HCDP 15T)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, in areas where the Build Alternative alignment would be close to existing or proposed parks, greenways or trails, access to these facilities would be maintained and coordinated as the Build Alternative would advance through the design phases. The Build Alternative would not preclude access to the proposed ECG or deter Hudson County from acquiring lands to effectuate the ECG or the Hackensack RiverWalk. Additionally, with respect to the ECG, the proposed Kearny Rail Yard would be sited only on a portion of the Koppers Coke site. It is anticipated that Hudson County would obtain an access easement from PSE&G for the creation of a path along the east side of the Build Alternative Secaucus Connection that would permit access to Little Snake Hill. A connection between the proposed ECG and Little Snake Hill would allow for the uninterrupted linkage of proposed greenways and related facilities across Hudson County. FEIS Sections 4.2 and 4.10 have been updated to include descriptions of the proposed ECG and Hackensack RiverWalk. These proposed linear parks have also been added to Figure 4.10-1.

PARKLANDS (SECTIONS 4.10 AND 5.10) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 278-D:

Several commenters stated the construction-related and long-term impacts to Hudson River Park and its users, including to Piers 66 and 66a, should be explained in better detail, and mitigation/compensation for such impacts be addressed and discussed in the DEIS and with the Hudson River Park Trust. Specific concerns include: impacts from cofferdam construction in the waterside portion of Hudson River Park; impacts to Pier 66 (which provides boating and other recreational amenities) including a definition of the term "conflicts" as the TBM would pass the westernmost section of the pier; impacts to historic Pier 66a; construction staging and cut-and-cover construction within Hudson River Park north of West 28th Street (a newly-completed section of the Park for passive recreation); and an analysis and discussion of the permanent alienation of portions of the Park, which would require New York State legislation. Effects should be described to include any issues related to park access, park facilities, landscaping, and restoration after construction. In addition, mitigation in the form of a financial payment of not less than $5 million to the Hudson River Park Trust for the use of and incursions onto its property must be provided. *(Friends of HRP 1E, NYP&R 4L, Friends of HRP 3E, HRPT 15L, NYSOPRHP 2L, NY for Parks 4L, Friends of HRP 2E, HRPT 16L, NY for Parks 2L, C/S 5L, NYP&R 7L, NYP&R 10L, NYP&R 2L)*

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, no construction-related or long-term impact to Hudson River Park would occur. The Build Alternative tunnels would be about 50 to 70 feet below the Hudson River bottom in the navigable portion of Hudson River. The tunnels would be about 125 feet below the landside portion of Hudson River Park between the shore and Twelfth Avenue. No cofferdams would be used during construction. Previously, conflicts referred to interference with park activities. The TBM for the southern proposed Build Alternative Hudson River tunnel would pass 17 feet north of and about 95 feet below Pier 66 and would not impact this facility. No impacts to Pier 66a would occur. Construction staging and cut-and-cover construction within Hudson River Park would be eliminated. Overall, no impact to park access, park facilities, or landscaping would occur. Accordingly, no restoration or mitigation/compensation would be necessary. As such, no permanent alienation of parklands would occur, and no New York State legislation would be required. A permit processed through the Hudson River Park Trust would still be required for construction activity under the park.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

PARKLANDS (SECTIONS 4.10 AND 5.10) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 279-D:

HRPT stated the DEIS Section 4.8 erroneously states that there are 40 water acres of Hudson River Park. As correctly noted elsewhere, Hudson River Park Sanctuary includes 400 water acres. *(HRPT 8L)*

Response:

FEIS Section 4.8 has been updated to state that 400 water acres comprise Hudson River Park Sanctuary.

Comment 280-D:

HRPT stated DEIS Section 4.9 incorrectly describes some of the Hudson River Park and Sanctuary features; for example, there is no water taxi planned, and it currently anticipated that the existing heliport at West 30th Street will relocate to the vicinity of Pier 72 following a Request for Proposals process and relevant permitting. (*HRPT 11L*)

Response:

FEIS Sections 4.9 and 4.10 have been updated to reflect current planned improvements to the waterside and landside portions of Hudson River Park.

Comment 281-D:

City of New York Parks and Recreation stated the High Line will not be mapped as parkland, because it needs to retain its status as a rail right-of-way. It will, however, be in active use as public open space at least from Gansevoort Street north to West 30th Street when ARC construction begins. (*NYP&R 8L*)

Response:

FEIS Section 4.10 states that the High Line will not be mapped as a parkland, but rather as an active open space, retaining its status as a rail right-of-way.

Comment 282-D:

City of New York Parks and Recreation stated a construction permit would be required from their agency for the underpinning of a 300-foot section of the High Line in the vicinity of West 30th Street. (*NYP&R 9L*)

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the top of the tunnel would be 140 feet below grade where the tunnels cross blow the High Line at Eleventh Avenue. Cut-and-cover construction in the vicinity of West 30th Street from the Hudson River Shoreline to Tenth Avenue would be eliminated, as well as the need to underpin the High Line during tunnels construction. Therefore, no permit for such action would be required.

PARKLANDS (SECTIONS 4.10 AND 5.10) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (continued):

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 283-D:

The Hudson County Division of Planning stated DEIS Figure 4.2-1 incorrectly shows a portion of Laurel Hill County Park, the Riverbend Wetland Preserve, the former Malanka Landfill and Little Snake Hill as vacant land when they are in fact part of the Penhorn Preserve according to the NJMC Master Plan land use map. (*HCDP 3T*)

Response:

FEIS Figures 4.2-1 has been revised to indicate that the referenced areas previously indicated as vacant land are open space or recreation areas. FEIS Figure 4.10-1 has been revised to correctly identify the Laurel Hill Park Wetland, the Riverbend Wetland Preserve, and Little Snake Hill. These land uses are not part of the Penhorn Preserve according to Hudson County Open Space Recreation Map.

Comment 284-D:

The Hudson County Division of Planning stated DEIS Appendix 4.10 does not mention the Hudson County Strategic Revitalization Plan, the Hudson County Master Plan, the Hudson County Open Space & Recreation Plan, Hudson County's "Green Map," Hudson County's "Hackensack River Greenway Plan," the NJ Meadowlands Master Plan, the NJ Meadowlands "Green Map," or the New Jersey Department of Transportation's East Coast Greenway Northern New Jersey Route Location Study. The appendix does not adequately address the Build Alternative impact on Laurel Hill County Park, Riverbend Wetland Preserve, the former Malanka Landfill, Little Snake Hill, the Penhorn Preserve, and the Hackensack River Greenway. *(HCDP 12T, Hudson County Engineering 13L)*

Response:

FEIS Section 4.10 has been updated to identify the referenced municipal and county parkland and open space initiatives. FEIS Sections 4.10 and 5.10 have been updated to include descriptions of short- and long-term impacts of the Build Alternative to existing and proposed parklands and open space.

PARKLANDS (SECTIONS 4.10 AND 5.10) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 285-D:

NJDEP stated impacts to any Green Acres-associated parklands would need approval from property owners and the NJDEP Green Acres Program. *(NJDEP3 31L)*

Response:

FEIS Section 4.10 has been updated to indicate that any impacts to Green Acres-associated parklands would need approval from property owners, the Commissioner of NJDEP, and the New Jersey State House Commission (NJSHC) (N.J.A.C. 7:36-26.1).

Comment 286-D:

On commenter stated that the sentences on pages 4.10-5 and page 5.10-79 should be rephrased to state: "Before construction within any publicly owned parks could occur, [strikethrough] a determination would need to be rendered regarding the need to secure [strikethrough] approval from the New York State Legislature for such activity would be required and the relationship of such parkland … " (*NYP&R 3L, NYP&R 6L*)

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the tunnels would be about 70 to 120 feet below the Hudson River bottom in the waterside portion of Hudson River Park. They would be about 125 feet below the Hudson River Bulkhead and the landside portion of Hudson River Park between the shore and Twelfth Avenue. Alignment of the tunnels at this depth would avoid any interference with the Park. Therefore, no mitigation or restoration would be required. As such, no alienation of parklands would occur, and no New York State legislation would be required. A permit processed through the Hudson River Park Trust would still be required for construction activity under the park. For reference, the applicable legal and regulatory requirements in FEIS Section 4.10 have been updated to reflect the commenter's correction.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

PARKLANDS (SECTIONS 4.10 AND 5.10) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 287-D:

U.S. DOI recommended rectifying this statement with Figure 4.10-1, which shows the WMA located only north of the NEC. (*DOI 27L*)

Response:

FEIS Section 4.10 text and Figure 4.10-1 have been updated to reflect the location of the Saw Mill Creek Wildlife Management Area north of the NEC.

Comment 288-D:

U.S. DOI recommended changing the extent and labeled names of "Marsh and Preservation Areas" on Figure 4.10-1 to be consistent with the Meadowlands Environmental Site Investigation Compilation(1) report that was prepared through the Corps' HMER Study. (*DOI 28L*)

Response:

FEIS Figure 4.10-1 has been updated to be consistent, relative to the extent and labeled names, with the "Meadowlands Site Investigation Compilation" report prepared through the USACE HMER Study.

Comment 289-D:

Consistent with the FWS Hackensack Meadowlands Initiative: Preliminary Conservation Planning (2), U.S. DOI recommended that project proponents work with the New Jersey Department of Environmental Protection and the NJMC to determine if part of the proposed rail yard site might be appropriate for public riverfront access following completion of remediation and revegetation and native species. (*DOI 29L*)

Response:

FEIS Sections 4.8, 4.9 and 4.10 have been updated to indicate that the design and footprint of the proposed Kearny Rail Yard would not preclude placement of a public walkway or bikeway as part of the East Coast Greenway or Hudson County linear park initiatives.

Comment 290-D:

U.S. DOI cannot provide final comments on the Section 4(f) Evaluation at this time. We do note that the current draft is an important step in that evaluation. However, the studies, evaluations, and project planning processes that more clearly define the significance of the historic resources, how the project will use these resources, whether prudent and feasible alternatives to the use of the resources are available, and what mitigation measures are appropriate in cases where avoidance is not possible, are needed to inform the Section 4(f) Evaluation. We do look forward to reviewing the Section 4(f) evaluations when a more complete evaluation has been made. (*DOI 32L*)

Response:

The Section 4(f) Evaluation in the FEIS has been updated to define the significance of affected historic resources and parklands, describe the use of the resources by the Build Alternative, demonstrate that no prudent or feasible alternatives are available to avoid the use, and describe the mitigation measures proposed to minimize harm to these affected resources.

PARKLANDS (SECTIONS 4.10 AND 5.10) (CONTINUED)

SDEIS COMMENTS

Comment 291-S:

One commenter stated the project should minimize and mitigate takings of parks and open space resources through aggressive replacement of parklands in the State's most urbanized county. (*HCDP2 8L*)

Response:

FEIS Section 4.10 states that no parkland resources in Hudson County (or elsewhere in the project area) would be used for the Build Alternative. A very small (approximately 0.16 acre) portion of the Riverbend Wetland Preserve would be impacted by the Build Alternative. This impact would be accounted for as part of the Build Alternative's compensatory wetland mitigation plan.

Comment 292-S:

The Access to the Region's Core Project should enhance and facilitate local projects and planning efforts including the NJDOT's East Coast Greenway, Hudson County's Hackensack River Greenway and the New Jersey Meadowlands Commission's Secaucus Trail which all converge in the project area. Pedestrian and bicycle access and circulation will enhance safety and security by creating a means of ingress for emergency vehicles and first responders to access the project area and a means of egress for both workers and passengers in case of an emergency. (*HCDP2 9L, HCDP2 10L*)

Response:

FEIS Section 4.10 has been updated to state that construction of the Build Alternative would not preclude Hudson County or others from acquiring lands to effectuate the East Coast Greenway, the Hackensack RiverWalk/Hackensack River Greenway, or the Secaucus Greenway (a segment of the larger Hackensack RiverWalk). These projects' planned pedestrian and bicycle access and circulation within the project area would not be precluded by the Build Alternative.

SOILS AND GEOLOGY (SECTIONS 4.11 AND 5.11)

DEIS COMMENTS

Comment 293-D:

NJDEP stated some stabilization of the upper slope above the tunnels portal west of the Palisades should be implemented. It was suggested that shotcrete or wire mesh may be necessary to anchor jointed or weathered rock to prevent blocks from dislodging during normal weathering. *(NJDEP3 20L)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the Build Alternative tunnels portal would be located just east of Tonnelle Avenue, with cut-and-cover construction proposed under Tonnelle Avenue, leading to the proposed construction access shaft at the base of the Palisades east of Tonnelle Avenue and just west of Paterson Plank Road. FEIS Section 5.11 has been updated to state that stability of rock slopes on either side of the Palisades due to vibrations or portal excavation would be investigated and evaluated for final design, and stabilization or support would be implemented if required.

Comment 294-D:

NJDEP stated the maximum depth to bedrock in the Hackensack Meadowlands District portion of the project area is about 150 feet, in North Bergen (see NJGS OFM 13), not 250 feet in Kearny, as stated on page 4.11-2. *(NJDEP3 18L)*

Response:

FEIS Section 4.11 and Appendix 4.11 have been updated to indicate the maximum depth (150 feet) to bedrock throughout the proposed Build Alternative alignment.

Comment 295-D:

NJDEP stated in Appendix 4.11, page 9, there is no mention or description of the Lockatong Formation, which occurs both to the east and west of the Palisades Diabase. *(NJDEP3 21L)*

Response:

FEIS Section 4.11 has been updated to identify and provide a description of the Lockatong Formation.

Comment 296-D:

For consistency, authors of the Bedrock Geologic Map of New Jersey should be listed in the citation in the text as the authors of the Surficial Geologic Map of New Jersey were, or delete all authors and just refer to the publication. (*NJDEP3 19L*)

Response:

FEIS Section 4.11 has been updated to include reference citations for the Bedrock Geologic Map of New Jersey.

Comment 297-D:

The New Jersey Department of Environmental Protection stated it is essential that all structures, particularly viaducts, bridges, and tunnels, be built to withstand the maximum credible earthquake (here, M6 or so), not just the 50-year PGA as is currently stated in the DEIS. This issue should be addressed before detailed engineering is started. (*NJDEP3 16L*)

SOILS AND GEOLOGY (SECTIONS 4.11 AND 5.11) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

Build Alternative retaining structures, embankments, box structures, bridges/elevated viaducts, and tunnel and shaft structures would be designed to meet the project seismic design criteria. The structures would be designed to withstand two design earthquake hazard levels: The Maximum Design Earthquake (MDE), corresponding to a 2,500-year return period event; and the Operating Design Earthquake (ODE), corresponding to a 500-year return period event. Under the MDE, no collapse and no catastrophic inundation with danger to life would be permitted, and any structural damage would be controlled and limited to elements that would be easily accessible and could be readily repaired. Under the ODE, no interruption in rail service during or after the ODE would be permitted. When subjected to the ODE, the structures would behave in an elastic manner. The structures would remain fully operational immediately after the ODE earthquake. The 50-year event described in the FEIS is provided as a geologic characterization of regional seismicity, as reported by USGS, and is not a project design criterion.

Comment 298-D:

The New Jersey Department of Environmental Protection stated fill material placed atop the salt-marsh and estuarine deposits in the Meadowlands and Hudson waterfront areas likely includes compressible or unstable materials that are susceptible to seismic shaking, heaving, compaction, or subsidence under load. Potential stability problems with existing fills should be addressed before final design. (*NJDEP3 17L*)

Response:

Soil along the Build Alternative alignment, including natural soils, existing fill, and waste materials, have been sampled and tested as part of the ongoing subsurface investigation program of Preliminary Engineering. Stability and other engineering characteristics of these materials are being evaluated, and ongoing designs are reflective of these prevailing soil stability properties.

SDEIS COMMENTS

Comment 299-S:

One commenter stated in Section 5.11 (Soils and Geology), page 5.11-2, the impact of construction on the soils and geology of the proposed site of the Kearny Yard was not assessed and should be assessed. (*HCIA2 19E*)

Response:

FEIS Section 5.11 has been updated to state that proposed track improvements as well as the proposed Kearny Rail Yard would be underlain by artificial fill, organic soils, and glacial lake deposits. Construction on these soils would account for their potential compressible nature. Compression and differential settlement could be expected under the anticipated loads to be applied by structures required for proposed track improvements.

Comment 300-S:

One commenter stated in Section 4.11 (Soils and Geology), page 4.11-2, text should be added to describe the soils and geology of the proposed site of the Kearny Yard based upon the recent geotechnical borings and cone penetrometer studies completed by NJ TRANSIT. (*HCIA2 8E*)

Response:

FEIS Section 4.11 has been updated to identify in more detail the geology and soils in the New Jersey portion of the project area, including at the site of the proposed Kearny Rail Yard.

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12)

DEIS COMMENTS

Comment 301-D:

MTA stated its property located between Tenth and Twelfth Avenues and West 30th and West 33rd Streets was recently investigated relative to contamination in connection with the preparation of the *No. 7 Subway Extension Hudson Yards Rezoning & Redevelopment Program DGEIS* and *FGEIS*. The ARC DEIS should account for the fact that the resultant data is publicly available and, as appropriate, be used to characterize site soil, groundwater, etc. at that property. *(MTA 12L)*

Response:

The hazardous materials section of the *No. 7 Subway Extension Hudson Yards Rezoning & Redevelopment Program FGEIS* was reviewed during preparation of the ARC DEIS, SDEIS and FEIS. FEIS Section 4.12 and the separate Contaminated Materials Technical Report, available upon request from NJ TRANSIT, have been updated to identify information from that document regarding soil and groundwater conditions (and the presence of contaminated materials) for properties that would be impacted by the Build Alternative.

Comment 302-D:

NJDEP stated if excavated tunnels material were reused as foundation fill for buildings, elevated radon levels might be a concern for indoor air. Prior to such use, homogenizing of a bulk sample and testing should be done. *(NJDEP3 22L)*

Response:

FEIS Section 5.12 has been updated to state that a provision of the Engineering and Construction contracts' specifications would include testing for radon in excavated tunnels material if used as foundation fill for buildings.

Comment 303-D:

NJDEP stated with respect to the Hackensack River, all dredge options must be coordinated with either its Land Use Regulation Program or the Office of Dredging and Sedimentology within the Site Remediation and Waste Management Program. *(NJDEP3 5L)*

Response:

FEIS Section 4.12 has been updated to indicate that dredging would not be part of the Build Alternative. If and when necessary coordination regarding tunneling under the Hudson River would occur with the NJDEP Land Use Regulation Program, the NJDEP Site Remediation and Waste Management Program, Office of Dredging and Sedimentology and the Office of Brownfields Reuse and NYSDEC.

Comment 304-D:

NJDEP stated the Phase I Environmental Assessments utilized in the contaminated materials analyses are not recognized by the NJDEP Site Remediation and Waste Management program (SRWM) as the equivalent to a Preliminary Assessment. It is understood that the banking industry still utilizes Phase I Environmental Assessments for financial planning purposes. Phase II Environmental Assessments were also utilized and are similarly not accepted by the SRWM. *(NJDEP3 1L)*

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

FEIS Sections 4.12 and 5.12 have been updated to clarify the assessment process applied during the EIS process. The assessment process includes the performance of a Preliminary Environmental Site Assessment (PESA) along the entire Build Alternative corridor, rather than for particular properties, to determine the likelihood and nature of possible contaminated materials where construction activities would occur. During the design phases of the project, access to individual properties for which property interests would be required, has been requested from prospective property owners to conduct individual site assessments and subsurface investigations. The investigation of sites in New Jersey, including the performance of Preliminary Assessments and Site Investigations, would be conducted in accordance with NJDEP Technical Requirements for Site Remediation, N.J.A.C. 7:26E. In the SDEIS Refined Build Alternative and the FEIS Build Alternative, in addition to the results of the PESA, the results of soil and groundwater sampling conducted in the project area as part of subsurface investigations during Preliminary Engineering have been presented. ASTM E1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" is utilized by the banking industry for financial purposes, but is also used to satisfy the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC § 9601(35)(B). The most recent ASTM standard is compatible with the All Appropriate Inquiries (AAI) rule (40 CFR Part 312) promulgated by USEPA to satisfy the innocent landowner defense under CERCLA.

Comment 305-D:

NJDEP stated the Industrial Site Recovery Act regulations are the only regulations cited as being applicable to contaminated sites. Several other statutes and regulations also apply. Additionally, all of the rules promulgated under those acts could apply, but specifically, the Procedures for Department Oversight of the Remediation of Contaminated Sites and the Technical Regulations for the Remediation of Contaminated Sites. *(NJDEP3 2L)*

Response:

FEIS Section 4.12 has been updated to include additional New Jersey laws and regulations that may apply to contaminated sites. FEIS Section 4.12 and Chapter 11 have been updated to include the Procedures for Department Oversight of the Remediation of Contaminated Sites and the Technical Regulations for the Remediation of Contaminated Sites.

Comment 306-D:

NJDEP stated Category A contaminated sites are characterized as those sites that previously affected soil, soil gas, and groundwater and therefore do not warrant further investigation. This characterization should be better quantified to state that the site must have received a No Further Action (NFA) letter. *(NJDEP3 3L)*

Response:

FEIS Section 4.12 has been updated to state that Category A sites include sites that have received a NFA letter from NJDEP. The description of Category C sites has also been updated to include those sites that received an NFA letter from NJDEP, but have use restrictions that could impact the Build Alternative.

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 307-D:

One commenter stated it is understood that the Portal Bridge will be replaced independently of the ARC project; however, the activities and timing associated with such a replacement need to be addressed in the context of potential implications associated with nearby contaminated sites. *(Tierra 2L)*

Response:

FEIS Sections 4.18 and 5.18 have been updated to indicate that potential disturbances and impacts of contaminated sites by the ARC project would be an indirect and cumulative effect when considered in conjunction with similar impacts attributable to the Portal Bridge Capacity Enhancement Project.

Comment 308-D:

Multiple commenters stated the characterization of the three contaminated sites (Diamond Shamrock, Standard Chlorine, and Koppers Coke sites) proposed for the Kearny Rail Yard required some clarification: these sites are not inactive brownfield properties as stated in the DEIS Executive Summary; the extent of the sites' contamination in the adjacent Hackensack River has not yet been delineated; the March 2004 Interim Response Action Work Plan (IRAW) and October 2004 Pre-Design Investigation Work Plan prepared for both the Diamond Shamrock and Standard Chlorine sites have been superseded; the Standard Chlorine site's Administrative Consent Order (ACO) has not been terminated as stated; and, the DNAPL product recovery system and in-situ lagoon contents solidification process have been erroneously attributed to the Diamond Shamrock Site, when, these features refer to the Standard Chlorine site. *(NJDEP 1L, NJDEP3 6L, NJDEP3 4L, Tierra 6L, Tierra 7L, Tierra 8L)*

Response:

FEIS Section 4.12 has been updated to reflect the current status of the Diamond Shamrock, Standard Chlorine, and Koppers Coke sites relative to the presence of contaminated materials on each site. In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the proposed Kearny Rail Yard would be located exclusively on a portion of the Koppers Coke site. The extent of contamination in the Hackensack River adjacent to the Diamond Shamrock, Standard Chlorine, and Koppers Coke sites has not been delineated. The SDEIS refinements also include a reference to the December 2005 Hackensack River Study Area Remedial Investigation Work Plan, which was prepared by the Peninsula Restoration Group, that further addresses contamination in the River. In the SDEIS Refined Build Alternative and the FEIS Build Alternative, additional documents and proposed remedial actions for the Diamond Shamrock, Standard Chlorine, and Koppers Coke sites, which occurred since publication of the ARC DEIS, have been presented. Additional documents include the June 2006 IRAW, the May 2007 IRAW, which was submitted by the Peninsula Restoration Group in response to NJDEP comments to the June 2006 IRAW, and the December 20, 2007 permit application by Key Environmental, Inc. (for Beazer East) to NJDEP for remediation of the Koppers Coke site. Also included are updated references to the approved Remedial Action Work Plan Addendum for the Koppers Coke site. FEIS Section 4.12 has been updated to indicate that the ACO for the Standard Chlorine site is still in effect, and remediation activities at this site and the Diamond Shamrock and Koppers Coke sites are not completed. FEIS Section 4.12 has been updated to indicate that the DNAPL recovery system and solidification of lagoon contents are applicable to the Standard Chlorine site only.

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 309-D:

Several commenters stated proper remediation of the Diamond Shamrock, Standard Chlorine, and Koppers Coke sites (including placement back on the EPA National Priority List for the Diamond Shamrock and Standard Chlorine sites) would be an important consideration prior to the construction of the proposed Kearny Rail Yard. Specifically, remediation of these sites would involve removal of highly toxic contamination, especially hexavalent chromium which can migrate into riparian systems such as the Hackensack River. It was suggested that linking the sites' closure plans, particularly the Diamond Shamrock and Standard Chlorine sites, may provide the most effective and economic means of remediation. *(NJDEP 2L, Sierra NJ 2T, Sierra NJ 3T, EPA 2L)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the Diamond Shamrock and Standard Chlorine sites would not be utilized as part of the proposed Kearny Rail Yard. The Build Alternative design of the proposed Kearny Rail Yard would only require use of a portion (82 acres) of the Koppers Coke site. Remediation of the Koppers Coke site is being conducted in accordance with the NJDEP Technical Requirements for Site Remediation, N.J.A.C. 7:26E. Remediation of the Koppers Coke site is being performed by Beazer East in conjunction with the Hudson County Improvement Authority, as documented in a Remedial Action Work Plan Addendum submitted March 1, 2007 and approved August 10, 2007 and the December 20, 2007 permit application by Key Environmental, Inc. (for Beazer East) to NJDEP for remediation of the Koppers Coke site. Also included are updated references to the approved Remedial Action Work Plan Addendum for the Koppers Coke site. This remediation would be completed and approved by NJDEP before any construction of the proposed rail yard by NJ TRANSIT would begin. Specific rail yard construction techniques for the Koppers Coke site would include measures to capture and treat groundwater moving laterally through the site, and double casing and/or grouting of any piles or footings to preclude downward movement of near-surficial contaminated groundwater. Such measures would minimize impacts to the adjacent Hackensack River and the Hackensack riparian system.

Comment 310-D:

U.S. DOI continues to reserve its position on siting the proposed rail yard within the Koppers Coke/ Diamond Shamrock/Standard Chlorine Brownfield area. The site may be appropriate for the proposed rail yard; however, the FWS reserves final comments pending future contaminants assessments and approved final remediation plans. (*DOI 30L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the proposed Kearny Rail Yard would be located exclusively on an 82-acre portion of the Koppers Coke site in the Refined Build Alternative. The Diamond Shamrock site and the Standard Chlorine site would not be used for rail yard purposes. NJ TRANSIT continues to coordinate with NJDEP, Hudson County Improvement Authority and Beazer East as the remediation of the Koppers Coke site advances, which would be completed before any construction of the Kearny Rail Yard would begin.

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 311-D:

"Measures implemented during construction would ensure that contaminated materials present on affected sites would not cause significant adverse impacts once the [preferred alternative] is complete. This objective would be accomplished by permanently remediating contaminated areas within the project area, or by use of engineering (e.g., capping) and institutional controls (e.g., deed notices) for contaminants left in place that exceed applicable guidelines, but do not represent a risk for exposure." U.S DOI recommended reinserting this statement into the final EIS, and reiterated our previous recommendations to ensure that: (1) no rail facilities will be constructed in such a manner or in such locations as to preclude additional future remediation that may be necessary; (2) wildlife exposure to contaminants is minimized during remediation and construction; and (3) final cleanup standards are protective of the Meadowlands' abundant wildlife resources, as well as human health. (*DOI 31L*)

Response:

The exact statement appears FEIS Section 5.12. In addition, a separate sentence has been added to the FEIS to indicate that any proposed remedial actions associated with the Build Alternative would be protective of human health and wildlife resources.

SDEIS COMMENTS

Comment 312-S:

One commenter stated in the Executive Summary on Page ES-2, the text of the Project Area section does not include the proposed Kearny Yard within the Project Area while Figure ES-1 includes the proposed Kearny Yard within the Project Area. This apparent conflict should be resolved. (*HCIA2 1E*)

Response:

The FEIS Executive Summary has been updated to add the Kearny Rail Yard site to the description of the ARC project area.

Comment 313-S:

One commenter stated in Section 4.12(Contaminated Materials) on Page 4.12-5, the sentence in the first full paragraph, "This action would reduce the level of contamination in stormwater runoff attributed to the site," should be revised. The implementation of the Beazer RAWPA will reduce/mitigate many aspects of the existing site contamination. (*HCIA2 10E*)

Response:

FEIS Section 4.12 has been updated to include a statement regarding the reduction and mitigation of contamination associated with the Beazer RAWPA. The RAWPA contains provisions that would reduce the level of contamination in stormwater runoff attributable to the site including capping the site to prevent stormwater contact with contaminated soils, the implementation of soil erosion and sediment control procedures during remediation, and the construction of stormwater management basins. Other provisions of the RAWPA relate to the removal of contaminated sediments in the Hackensack River, capping the site to prevent contact with underlying contaminated soils, installing a groundwater treatment system for dissolved contaminants and upgrading the existing DNAPL recovery system.

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 314-S:

One commenter stated in Section 5.1 (Construction Methods) on Page 5.1-16, the SDEIS indicates that Hudson River Tunnel excavated material would be "a fluid-like slurry" and would be transported in "leak-proof trucks" to the proposed Kearny Yard. The SDEIS further noted that a tailings pond located at the Kearny Yard would be used to remove free water and this water would be discharged after treatment. A contingency plan to mitigate spills of the fluid-like slurry during its transportation to the Kearny Yard should be discussed in the SDEIS. As the site remediation currently in progress by others will not result in a complete cleanup of the site groundwater at proposed Kearny Yard, consideration should be given to the use of an impervious liner beneath the tailings pond to prevent contact with the site groundwater. Additionally, the tailings pond and its resultant discharges should be assessed for its water quality and other impacts in the SDEIS. (*HCIA2 16E*)

Response:

Section 5.12 has been updated to describe three types of material would be excavated from the proposed tunnels:

- Rock that is generally fractured (in place) which is then broken down by the TBM. The spoil would be wet, and water would freely drain. The material would be stockpiled (overnight) in a temporary bin and then hauled away during the day. By this time most of the water would have drained.
- Soil (Hudson River silts/clays) would be the consistency of a slurry, but the water would not freely drain due to the clay content. The TBM, if it is an EPB, would have added soil conditioners to give "body", and certainly any water would not easily drain until the soil conditioners (foams, polymers) degrade with time (a number of hours). The material can be trucked away relatively easily. With care, spillage/leakage would be mitigated. The trucks would be covered and wheel washing would be completed. If the contractor would use a slurry-face TBM, and if they would use slurry as a soil conditioner (bentonite), they would need to process the slurry (with centrifuges, presses), and the remaining "fines" could be taken away in trucks.
- Mixed-Face spoil would have the properties of both soil and rock, but closer to the soil described above. The same handling process as that for soil would apply.

A contingency plan to mitigate spills would be included in the Construction Environmental Control Plan (CECP), and is described in FEIS Section 5.12. Table 5.12-1 has been updated to discuss the tailings pond, measures to prevent contact with groundwater including the installation of an impervious liner beneath the tailings pond, and testing requirements for the discharges.

Comment 315-S:

One commenter stated the SDEIS does not consider ramifications of a reported petroleum spill and a NYSDEC-approved remediation in the present area of the flush facility or the potential for contamination in the location of the excavation shaft, or the consequential delay in construction and its corollary impacts. (*C/S2 5E*)

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

Section 5.12 of the FEIS has been updated with a discussion of the impacts associated with proposed Build Alternative construction and any required associated remediation at the Con Edison site (Block 674). The Con Edison flush facility and the Con Edison fueling facility on Block 674 are located east of the estimated physical limits of the proposed Build Alternative construction access shaft and fan plant; therefore, the two Con Edison facilities would not need to be relocated for such construction. The use of Block 675 for Con Edison vehicle and equipment storage would be consistent with current zoning. Traffic impacts associated with this relocation process would be addressed in MPT plans (see Section 3.6). Also stated is that residual gasoline contamination is present in soil and groundwater from previous underground storage tanks that were replaced at the Con Edison fueling facility, and such contamination could have migrated to the area of Block 674 on which the construction access shaft and fan plant would be located. If encountered during construction, these contaminated materials would be properly handled and disposed of, and would be specifically considered within the schedule of Build Alternative construction activities on the Block 674 site.

Comment 316-S:

USEPA stated as the type and extent of waste materials and related contamination in an around the Malanka Landfill is largely unknown, the final EIS should discuss: the current state of knowledge regarding the landfill, the type and extent of contamination testing that will be performed, the construction methods that will be used in the landfill, and a schedule for obtaining a landfill disruption permit. Any existing or potential impacts to the adjacent wetlands due to contamination should be also discussed. (*EPA2 5L*)

Response:

FEIS Section 5.12 has been updated to include additional landfill closure requirements, including the preparation and approval by NJDEP of a Landfill Closure Plan, additional testing requirements to determine impacts to soil, groundwater and adjacent wetland areas, and implementation of various other remedial measures, including capping, groundwater treatment, venting of landfill gases, and long-term monitoring of both groundwater and landfill gases.

In addition, FEIS Section 4.12 has been updated to include information obtained during the Environmental Site Investigation of the landfill conducted as part of Preliminary Engineering. Analytical results from soil samples indicate that volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, and metals were identified in soils at concentrations above NJDEP soil cleanup criteria (SCC). VOCs, SVOCs, pesticides, and metals were identified in groundwater at concentrations above NJDEP groundwater quality standards (GWQS).

Comment 317-S:

USEPA stated the EIS should include a discussion of the remediation to take place at the Koppers Coke site prior to its use by NJ TRANSIT. This should include information as to any relationship between contamination at the Koppers Coke property and contamination at the Standard Chlorine property to the northwest. (*EPA2 6L*)

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

FEIS Sections 4.12 and Section 5.12 have been updated to include discussions of the remediation to take place on the Koppers Coke site prior to its use by NJ TRANSIT. Remedial actions would include consolidation and placement of contaminated materials under the cap, installation of the cap, completion of the subsurface barrier system along the Hackensack River, and removal of contaminated sediments from the Hackensack River. FEIS Section 4.12 has been updated to include a summary of environmental investigation activities conducted on the Koppers Coke site during Preliminary Engineering. Investigation activities identified contaminants in groundwater along the property boundary with Standard Chlorine. FEIS Section 5.12 has been updated to include potential impacts from Standard Chlorine, including the potential migration of contaminated groundwater and Dense Non-Aqueous Phase Liquid (DNAPL) onto the Koppers Coke site.

Comment 318-S:

USEPA stated the final EIS should also discuss whether the remediation at Koppers Coke will affect or be affected by the large amount of fill to be placed on the site to bring it to grade with the Morris and Essex Line. (*EPA2 7L*)

Response:

FEIS Section 5.12 has been updated to include additional information regarding the consolidation process associated with the placement of fill on the site. During consolidation, a drainage layer would be created for the collection and discharge of water generated during the consolidation process. The process would not affect on-going groundwater remediation activities on the eastern portion of the Koppers Coke site that would not be acquired by NJ TRANSIT for the new rail yard. In addition, the existing sheet pile/ slurry wall prevents potential contaminants from discharging to the Hackensack River.

Comment 319-S:

One commenter stated the Malanka landfill has never been capped or closed out. As we understand this, New Jersey regulations regarding the disturbance of unclosed landfills may create a liability for NJ TRANSIT with regards to this beyond the mitigation that is described in the SDEIS. (*Hudson County Engineering2 13L*)

Response:

FEIS Section 5.12 has been updated to reflect that NJ TRANSIT would acquire the entire northern portion (31 acres) of the landfill, and would perform landfill closure activities as part of construction, including preparation of a Landfill Closure Plan for NJDEP approval and implementation of remedial measures associated with the approved plan, such as capping the entire 31 acres of landfill, groundwater treatment, and venting of landfill gases.

Comment 320-S:

One commenter stated in Section 4.12(Contaminated Materials) on Page 4.12-2, the Technical Requirements for Site Remediation, N.J.A.C. 7:26E should be added to the first full paragraph as applicable guidance. (*HCIA2 9E*)

Response:

FEIS Section 4.12 has been updated to include this specific regulation.

CONTAMINATED MATERIALS (SECTIONS 4.12 AND 5.12) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 321-S:

NJDEP stated that all construction and long-term Koppers Coke activities should be coordinated with Chris Kanakis with NJDEP's Office of Brownfields Reuse. (*NJDEP4 1L*)

Response:

FEIS Section 4.12 has been updated to indicate that Koppers Coke-related activities of NJ TRANSIT will continue to be coordinated with the NJDEP Office of Brownfields Reuse.

Comment 322-S:

NJDEP's Site Remediation Program requires that the project include the Spill Compensation and Control Act, NJSA 58:lO-23.11 et. seq. and the Brownfields and Contaminated Site Remediation Act at NJSA 58:lOb et. seq. as well as the Technical Requirements for the Remediation of Contaminated Sites at NJAC 7:26E. ((*NJDEP4 2L*)

Response:

FEIS Section 4.12 has been updated to include citations for the Spill Compensation and Control Act, the Brownfields and Contaminated Site Remediation Act and the Technical Requirements for the Remediation of Contaminated Sites.

Comment 323-S:

NJDEP stated that all dredge type activities in the Hudson River should be coordinated with the Office of Brownfields Reuse. (*NJDEP4 3L*)

Response:

FEIS Section 4.12 has been updated to indicate that any dredge-type activities will continue to be coordinated with the NJDEP Office of Brownfields Reuse.

Comment 324-S:

NJDEP's Bureau of Landfill and Hazardous Waste Permitting stated that since the property of the Hall Landfill is proposed to be utilized, NJ TRANSIT would have to prepare a disruption/closure plan which will address disruption, closure and post-closure care of the landfill in accordance with the solid waste rules. As part of the redevelopment of the Hall landfill, NJ TRANSIT proposes to perform additional geotechnical and environmental investigations of the site. (*NJDEP4 4L*)

Response:

FEIS Sections 4.12 and 5.12 have been updated to indicate that a disruption plan and a closure plan for the Malanka Landfill will be prepared in accordance with NJDEP regulations, since the 31-acre northern portion of the landfill will be purchased by NJ TRANSIT as part of the Build Alternative. These sections also indicate that NJ TRANSIT has already completed some geotechnical and environmental investigations in the project area, and will be preparing additional geotechnical and environmental investigations related to the landfill and other sites affected by the Build Alternative.

SAFETY AND SECURITY (SECTIONS 4.13 AND 5.13)

DEIS COMMENTS

Comment 325-D:

Several commenters stated the NYPSE station is too deep and that the depth is inflating the cost of the project. "The new station, which is as much as 10 stories down, is a long walk up in a brownout or other emergency situation. The exit time from NYPSE would not be the same as PSNY. The depth of the subterranean annex station will pose significant risks to passengers in this age of security." They stated the reasoning behind a deep cavern station should be discussed. The new station does not bring trains directly to PSNY, where easier and quicker connections could be made to the Long Island Rail Road, Amtrak, and numerous subway lines. (*Helm 6E, Lackawanna2 1L, Lackawanna2 2L, NJARP2 4T, Comptroller NYC 4L, Lackawanna4 1L, Lackawanna4 2L, Lackawanna4 6L, Lackawanna4 11L, RRWG 1T, RRWG 2T*)

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the deeper tunnels under the Hudson River eliminated impacts to the Hudson River bottom; the historic Hudson River Bulkhead; cut-and-cover construction through Hudson River Park, Route 9A, private property; and impacts to the LIRR West Side Yard operations, but preclude a connection from the new ARC tunnels to PSNY.

A Geotechnical Borings Program conducted during Preliminary Engineering, which included 31 additional borings in Manhattan, indicated that the rock profile, particularly in the location of the station caverns on West 34th Street, was lower than anticipated during the DEIS period and was characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue. The Preliminary Engineering borings identified that the rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. Based on these findings, the cavern depth was increased to approximately 90 feet below street level to allow for sufficient rock cover of adequate quality.

As a result of the deeper cavern, the tunnels profile under the Hudson River and west side of Manhattan would also have to be deeper to align with the new station and to avoid impacts to the NYCT No. 7 Line subway extension already under construction. The deeper tunnels under the Hudson River and the west side of Manhattan avoided risks associated with impacts to the river bottom and west side properties. In addition, the connection to existing PSNY was eliminated because the deeper tunnels profile precluded the construction of an operationally-feasible connection. As discussed later in this chapter, extensive analysis was conducted to determine if the alignment could be raised to allow a tunnel connection to existing PSNY, but this was precluded by the lack of space between the NYCT No. 7 Line subway extension and the rock cover needed to cover the proposed NYPSE.

SAFETY AND SECURITY (SECTIONS 4.13 AND 5.13) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (continued):

The new, modern, state-of-the-art, safe and accessible station provides the same ingress and egress capacity as the shallower station presented in the DEIS. The station has been designed to meet all federal, state and local accessibility and safety regulations. Analyses of emergency evacuation from the station indicate that platform clearance meets the criteria of the NFPA 130 standard for transit stations and that adequate capacity is provided for both evacuation of the station mezzanine and emergency access to the station. Emergency access and egress to the station is provided via the three public escalator banks and four emergency stair routes, each having two independent stairways.

Each of the three station levels would contain security/police personnel offices and detention cells. Lighting would be provided consistent with American Public Transportation Association (APTA) standards. Safety and security of rail patrons would be provided through an extensive system of closed-circuit televisions. Public address systems for both general and emergency announcements, as well as visual paging display systems, would be also provided. Emergency phones would be located throughout the complex. Extensive signage and graphics would accompany television monitors for displaying remotely-activated messages associated with both normal and emergency operations.

Exit times from existing PSNY NJ TRANSIT platforms to the Sixth, Seventh and Eighth Avenues along West 34th Street vary from just under four minutes to eight minutes. Entries proposed for NYPSE vary from 5.5 to 6.5 minutes to the same three cross streets.

NYPSE would provide underground passageways for passengers to connect to existing PSNY train services, NYCT subway lines at Eighth Avenue, Seventh Avenue and Broadway/Sixth Avenue, as well as PATH service at Sixth Avenue. These pedestrian connections would provide passengers arriving at the new station full access to NYCT, LIRR, Amtrak and NJ TRANSIT services operating out of PSNY.

Comment 326-D:

One commenter asked if the project would provide emergency power and, if so, how often would those power sources be tested. *(Gassman 6E, Gassman 8E)*

Response:

Four of the six fan plants serving the tunnel sections (Hoboken, Twelfth Avenue, Dyer Avenue, and 33rd Street) would contain an emergency generator to power emergency systems. The 35th Street Fan Plant serving NYPSE will contain two 2000kW generators supporting both tunnel and station facilities. The emergency power system for proposed tunnels and NYSPE would be tested monthly at a minimum. NJ TRANSIT may require a different testing interval once NYPSE and the tunnels have been designed and constructed and a maintenance plan has been developed.

Comment 327-D:

One commenter stated the significant access/egress time of five minutes added to each rider's trip and the potential security concerns in an emergency evacuation of the 34th Street terminal station are daunting. They asked how rescue workers get in during an emergency while 5,000 people are trying to leave. (*Lackawanna2 4L, Lackawanna 1T*)

SAFETY AND SECURITY (SECTIONS 4.13 AND 5.13) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

NYPSE is being designed to be fully responsive to all egress and fire life/safety requirements of NFPA 130 (2007). An operating plan would be developed during the course of final design and well before opening day to identify roles and responsibilities of station personnel, the fire services and the police department having jurisdiction in NYPSE. The station egress plans would provide routes of egress in the event of an incident requiring station evacuation. Escalators and stairs would be predominately used by passengers for excavation. Passengers on the upper or lower station levels would evacuate to the mezzanine level using stairways or escalators. Two "areas of refuge" located on the lower and upper level platforms would be fire-protected (fire-rated with a pressurized air system), consisting of stairways and elevators to the mezzanine level. Passengers would exit the station through the mezzanine level, which would have escalators and stairways leading to street level. Three elevator banks (two elevator cars in each bank) and access stairways would provide a means of egress for elderly and handicapped passengers. The elevator banks would also contain a Fire Department staircase. These design elements would be in addition to fire suppression systems and emergency ventilation systems located throughout NYPSE.

Comment 328-D:

One commenter stated the impact statement does not detail emergency generator or ventilation. These pieces of equipment will be needed to test as well for the ready status. (*Gassman 1E*)

Response:

Each fan plant would contain a double-ended unit substation that would provide service to the fans. Each substation in each fan plant would be served by a dual-electrical distribution system derived from services provided by PSE&G in New Jersey and Con Edison in New York. This dual service would provide the level of redundancy required for this type of facility. Emergency generators would supply code-required emergency loads at NYPSE and the proposed tunnels and would be tested monthly at a minimum.

A Subway Environment Simulation (SES) program and Computational Fluid Dynamics (CFD) will be used to address both ventilations system capacity and operation. The NYPSE platform and mezzanine levels would be outfitted with an emergency smoke exhaust system. Exhaust ducts at both the platform level and mezzanine levels will extend from the center of the mezzanine and platforms to the mechanical equipment rooms located at each end of the station. At these locations, the local ducts (equipped with isolation dampers) would connect to a common exhaust duct that would lead to the station fan plants at street level where the emergency fans would be located. The capacity and operation of the emergency ventilation system would meet the requirements of NFPA 130 (2007). Each tunnel would likewise be equipped with an emergency ventilation system, consisting of a duct extraction system.

Comment 329-D:

One commenter asked where the exhaust from the emergency ventilation system would be vented. (*Gassman 9E*)

Response:

The emergency ventilation system would vent its exhaust above street level from the four fan plants in Manhattan and the two fan plants in New Jersey.

SAFETY AND SECURITY (SECTIONS 4.13 AND 5.13) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 330-D:

One commenter stated their desire to know how these two sets of tunnels, the existing North River Tunnels and the proposed ARC tunnels, are going to work in case there is a problem in either of them. (*Raleigh 6T*)

Response:

In the event of an incident in either the proposed or existing tunnels, NJ TRANSIT trains would have an opportunity to be re-routed to either set of tunnels west of Frank R. Lautenberg Station.

Comment 331-D:

One commenter stated they can't imagine the security nightmares that must be disrupting the sleep of all the affected police departments by doubling the 'underwater' risk. (*Sailfast 2E*)

Response:

Flood gates would be constructed at the Hoboken and Twelfth Avenue construction access shaft sites to prevent flooding of the Manhattan and Palisades Tunnels and the station cavern during construction and on a permanent basis.

SAFETY AND SECURITY (SECTIONS 4.13 AND 5.13) (CONTINUED)

SDEIS COMMENTS

Comment 332-S:

Several commenters oppose the construction of a deep station and ask NJ TRANSIT to reduce the depth. The deep station poses a great inconvenience and potential safety and security risk for passengers. (*CB5 3L, EmpStatePasAssoc 1T, IRUM2 1T, IRUM2 2T, Lackawanna10 10L, Lackawanna5 32L, Lackawanna6 3T, Lackawanna6 6T, Lackawanna8 2T, MukerjiJ 3T, MukerjiJ 6T, NJ ARP4 11T, PCAC2 2T, Raleigh3 5T*)

Response:

As described in the response to DEIS Comment 325-D, the new, modern, state-of-the-art, safe and accessible station has been designed to meet all federal, state and local accessibility and safety regulations.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation.

Comment 333-S:

Several commenters expressed concern about the location of the tunnels and station and its potential for terrorist risk. (*Hale3 2L, Raleigh2 2T, Trip 2 Work2 2L, Trip 2 Work2 5T, Trip 2 Work2 6T, Trip 2 Work3 2T*)

Response:

The Build Alternative would provide rail service redundancy in case of an emergency for NJ TRANSIT passengers as the proposed tunnels would be separate structures from the existing NEC tunnels under the Hudson River. NYPSE likewise would provide five new public entrances to complement the existing entrances to PSNY. The overall location of the project terminus in west midtown Manhattan is dictated by the demand for increased rail capacity to areas of high economic activity and the location of existing rail infrastructure in New Jersey and New York. NJ TRANSIT and PANYNJ are developing security and emergency response plans in coordination with local first responders and law enforcement officials, and implementing design features to improve public safety within project infrastructure.

Comment 334-S:

One commenter stated the new tunnels must provide the ability to provide reasonable service and opportunities for track maintenance. It is essential that New York City's existing PSNY be accessible from the new tunnels. (*NatlAssRailPas 3T*)

Response:

A location east of Frank R. Lautenberg Station is dedicated that would allow future, non-ARC, construction of turnouts for Amtrak trains to access the new station in an emergency. Loop Track 3 and the Portal Bridge Project would allow NJ TRANSIT trains access to PSNY.

UTILITIES, EMF AND ENERGY (SECTIONS 4.15-4.17 AND 5.15-5.17)

DEIS COMMENTS

Comment 335-D:

Several commenters stated the EIS should include an estimate of the number and capability of additional substations required to power the proposed new electrified train service. These commenters ask where the additional power required for the project will originate and what would its effect be on the electrical transmission grid. *(Gassman 4E, Gassman 5E, Madden 12L, Madden 26L, Madden 27L, NYSDOT 12L, NYSDOT 26L, NYSDOT 27L)*

Response:

FEIS Sections 5.1 and 4.15 have been updated to describe the power sources required for project traction and facility power. Two new traction power substations and five existing traction power substation upgrades would be required with the Build Alternative to accommodate project-related power demands. Utility substations would be provided at the proposed Hoboken and Twelfth Avenue Fan Plants to provide redundant facility power to NYPSE caverns. Unit substations would be provided at the east and west ends of NYPSE to power station lighting and communications. Unit substations would be provided at each fan plant for powering emergency ventilation fans. NJ TRANSIT will continue coordination with Amtrak, PSE&G, and Con Edison to ensure their networks will support the project's proposed power supply system.

Comment 336-D:

One commenter stated the construction scheduling does not detail the power needed to operate the TBM. These temporary service needs must be addressed for location size and coordination with the utility. *(Gassman 3E)*

Response:

It is estimated each TBM will require 6 megawatts for temporary construction power. The Palisades and Hudson River Packages are estimated to work 24 hours per day, 5 days per week, while the Manhattan package will work 24 hours per day, 6 days per week. Preliminary discussions with PSE&G Co and Con Edison have indicated there is sufficient capacity for the temporary power service.

Comment 337-D:

Several commenters stated the impacts to Con Edison's facilities and operations on Block 674 would be significant, in general are not acceptable, and require more detailed and practical mitigation plans than what is presented in the DEIS. Some of the more specific concerns presented by the commenters include the hindrance to tractor trailer deliveries, the difficulties of relocating the existing flush pit, the unrealistic DEIS assertion that no disruption or discontinuance of utility services would occur, the unrealistic DEIS assertion that operations could be temporarily relocated to another site in Manhattan, the loss of the distinct mobility advantage of easy access to Twelfth Avenue by Con Edison vehicles, the need to relocate the fuel station at Block 674, the likelihood of having to obtain new permits and prepare an environmental assessment or environmental impact statement for relocated operations and services, the limited future development potential of Block 674, and the failure of the DEIS to disclose the financial impacts of relocating Con Edison operations and services, and the lack of alternatives analyses of shifting the alignment north or south of Block 674. In summary, the ARC project as described in the DEIS would jeopardize the reliability of Manhattan's electric utility infrastructure by bisecting Block 674 with cut-and-cover construction. *(C/S 4L, Con Edison 1L, Con Edison 2L, Con Edison 3L, Con Edison 4L, Con Edison 5L, Con Edison 6L, Con Edison 7L, Con Edison 8L, Con Edison 9L, Con Edison 10L, Con Edison 11L, Con Edison 12L, Con Edison 13L, Con Edison 14L, Con Edison 16L, Con Edison 17L, General Contractors 2E, MBP Stringer 4T, Comptroller NYC 3L, C/S 10L, Con Edison 15L)*

UTILITIES, EMF AND ENERGY (SECTIONS 4.15-4.17 AND 5.15-5.17) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the need for cut-and-cover construction through Con Edison property on Block 674 has been eliminated. In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

The western portion of Block 674 would be used to construct an access shaft and a fan plant for the Build Alternative. Construction operations on the western portion of the block near Twelfth Avenue and West 29th Street would be complete in about nine years. The fan plant would be a permanent use on the southwest corner of the block at Twelfth Avenue and West 28th Street. At present, this portion of the property is used for Con Edison's cable yard, and associated truck parking and storage. These activities would be relocated to Block 675 prior to the start of access shaft and fan plant construction. The Build Alternative tunnels would be about 120 feet under Block 674 and the access shaft would extend from the surface to that depth. The access shaft and tunnels would be designed to accept overbuild on the surface once the extraction of excavated tunnels material through the shaft would be completed. During ARC Preliminary Engineering, shifting the alignment north to Block 675 was found to be infeasible and explained in the Appendix to FEIS Chapter 2. Likewise, shifting the alignment south was dismissed as it would require selective deconstruction and underpinning of significant portions of the NY Terminal Warehouse Company Building structure, a historic resource.

Negotiations with Con Edison regarding the temporary and permanent use of portions of Block 674, and potential impacts to Con Edison operations and means to mitigate these impacts are ongoing.

Comment 338-D:

Multiple commenters stated the use of alternative energy sources, such as solar and geothermal technologies, would minimize environmental impacts and lower operating costs as compared to traditional energy sources. *(Mervilus 3T, Mervilus 1T, Baykeeper 6L)*

Response:

During preliminary engineering a number of alternative sustainable design features including heat recovery/heat rejection were considered. Most of the alternatives investigated were rejected due to the inability to meet the design cooling requirements. Alternate fuels and local energy generation including fuel cells, photovoltaic panels, and harnessing regenerative braking have been identified for study and will be considered as part of final design.

UTILITIES, EMF AND ENERGY (SECTIONS 4.15-4.17 AND 5.15-5.17) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 339-D:

One commenter stated the trains themselves would generate power through regenerative braking. *(Mervilus 2T)*

Response:

The current regenerative braking capability of NJ TRANSIT locomotives is documented in FEIS Section 4.15. This technology would most likely continue to be used on future NJ TRANSIT locomotives, including the proposed dual-power vehicles.

Comment 340-D:

One commenter stated Hudson County owns, operates, and maintains a pump station where the Penhorn Creek meets the Hackensack River. Hudson County uses the utility road to access the pump station for maintenance purposes. *(HCDP 10T)*

Response:

Subsequent to this testimony, the Hudson County Improvement Authority has indicated to NJ TRANSIT that it will take full ownership of relocating the referenced pump station as it is necessary for reasons other than ARC construction. The relocated pump station will be outside of the proposed ARC right-of-way.

Comment 341-D:

Multiple commenters stated there is no mention of the possibility of future use of the new tunnels to contain communication and other utility lines. We recommend that this potential future use be considered in the project planning and design. *(Madden 28L, NYSDOT 28L)*

Response:

During Preliminary Engineering, the tunnels were redesigned to include limited reserved space in the duct banks for third-party conduits.

Comment 342-D:

U.S. DOI stated the document should indicate how much capacity would be available in the new tunnels to accommodate electric and communication cables, and summarize coordination efforts with energy and communication industry and government entities. (*DOI 8L*)

Response:

Three 6-inch-diameter conduits have been included in the two Build Alternative tunnels cross-section to accommodate communication cables. NJ TRANSIT has been and continues to coordinate with PSE&G and Con Edison as well as New York City and New Jersey resource agencies relative to future installation of these cables within the tunnels.

UTILITIES, EMF AND ENERGY (SECTIONS 4.15-4.17 AND 5.15-5.17) (CONTINUED)

SDEIS COMMENTS

Comment 343-S:

Many commenters stated the SDEIS understates the short-term and long-term impacts to Con Edison (Block 674) and does not consider alternatives that would avoid impacts to Blocks 674 and 675. The SDEIS does not consider the timing involved in shifting components and understates the construction period. NJ TRANSIT should mitigate significant adverse impacts to Con Edison. (*C/S2 11E, C/S2 12E, C/S2 1E, C/S2 3E, C/S2 4E, Con Edison2 10L, Con Edison2 10T, Con Edison2 11T, Con Edison2 1T, Con Edison2 2L, Con Edison2 2T, Con Edison2 3L, Con Edison2 3T, Con Edison2 4L, Con Edison2 4T, Con Edison2 5L, Con Edison2 5T, Con Edison2 6L, Con Edison2 6T, Con Edison2 7L, Con Edison2 7T, Con Edison2 8L, Con Edison2 8T, Con Edison2 9L, Con Edison2 9T, MBP2 3L*)

Response:

Appendix 2 has been updated to include a discussion of alternative alignment development, including screening of alignments through West Midtown.

The ARC Major Investment Study (MIS) completed in 2003, assessed 137 alternatives. A summary of the MIS was included in the DEIS. Several alternatives were identified and reviewed with the public in the scoping phase of the DEIS. These alternatives were evaluated, and a Locally Preferred Alternative (LPA) was selected for detailed analysis in the DEIS. Subsequently, NJ TRANSIT reviewed alternative alignments to reach the Penn Station area. This review included a tunnel running parallel to the Amtrak alignment and an alignment under Block 675. Revisions to the LPA as a result of comments on the DEIS, geotechnical discoveries and Preliminary Engineering, were described in the SDEIS. Appendix 2 of the FEIS discusses the alternative alignments for the LPA considered and the alignment selection process. As described below, since no significant unmitigated impacts would occur at this site, consideration of alternate alignments that would avoid use of this site are not required.

NJ TRANSIT and the PANYNJ evaluated several locations for the shaft and fan plant locations. Appendix 2 of the FEIS describes the determining factors for the proposed Build Alternative alignment, fan plants, and station entrances. Alternative alignments through West Midtown were evaluated and the only feasible alignment was found to pass through Block 675, the Con Edison site. The construction access shaft must be located directly above the alignment, and the fan plant at Twelfth Avenue must be located in close proximity to the shaft as explained in Appendix 2. Location of the fan plant within Block 675, and within the adjacent property on Block 674 were studied. Block 674 houses the New York Terminal Warehouse Building, and location of the fan plant on that site would impact historic elements of the building, which is eligible for listing on the state and national registers of historic places. In addition, as described in the SDEIS, this alternative was rejected due to impact on retail and commercial uses at the building and constructability concerns.

The entire Block 674 between Twelfth and Eleventh Avenues and West 28th and West 29th Streets contains the Con Edison workout facility, which services customers within Manhattan. The proposed Twelfth Avenue fan plant and construction access shaft of the Build Alternative and a temporary TBM-related power substation would be constructed and operated on the westernmost portion of Block 674 at Twelfth Avenue between West 28th and West 29th Streets. The portion of Block 674 that would be occupied by the fan plant, temporary substation and construction access shaft is used for Con Edison's cable yard, and associated truck parking and storage. An on-site flush pit, used for disposal of waste extracted from Con Edison manholes, and a fueling facility are located east of the area that would be occupied by the Build Alternative infrastructure, and would not be impacted.

UTILITIES, EMF AND ENERGY (SECTIONS 4.15-4.17 AND 5.15-5.17) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response(continued):

During the nine years that the construction access shaft would be in operation, the aforementioned Con Edison vehicles and equipment would be relocated to a 0.9-acre area (24 percent of the block area) of Block 675 immediately to the north. This portion of Block 675 is currently used for truck and van storage by a private company.

Once extraction of excavated tunnels material from the access shaft, construction and operation of the temporary substation, and construction of the fan plant are completed, the relocated Con Edison vehicles and equipment would return to Block 674 on the area previously occupied, except for the 39 feet by 181 feet footprint of the constructed fan plant at the corner of Twelfth Avenue and West 28th Street.

NJ TRANSIT and Con Edison are working together to develop a plan regarding proposed infrastructure construction and operation, and disposition of affected Con Edison equipment and vehicles on Block 674 and Block 675, as documented in the FEIS.

The DEIS and the SDEIS fully consider both the long-term and construction impacts of the ARC project on all properties affected by this proposal, including the Con Edison site. The SDEIS discloses the anticipated construction schedule (2009-2017) for the project and for the Con Edison property specifically, and states that NJ TRANSIT and the PANYNJ would work with Con Edison to temporarily relocate displaced functions to a nearby site on Block 675 and to return these functions to the site (Block 674) at the conclusion of construction. Both the DEIS and the SDEIS disclosed the necessity for permanent occupation of portions of the Con Edison property both below ground and at the surface, including a fan plant facility that would be approximately 106 feet high by 39 feet wide by 181 feet deep. The permanent facilities on the Con Edison site would be designed not to preclude future development of the site except for the footprint of the permanent fan plant. The SDEIS modified the construction methodology proposed in the DEIS by eliminating cut-and-cover, and replacing it with bored tunnels construction. The impacts resulting from cut-and-cover construction techniques were, therefore, minimized or eliminated.

The DEIS and SDEIS disclose the full range of construction activities for the project, including shaft construction, excavation, staging, and station construction. A detailed description of construction at the Con Edison site is described in FEIS Section 5.1 and 5.17. The DEIS, SDEIS and FEIS also fully disclose all adverse impacts of the project and include requisite mitigation measures for these impacts.

NJ TRANSIT and the PANYNJ understand the vital nature of this facility to Con Edison's operations. In recognition of this understanding, NJ TRANSIT and the PANYNJ have worked diligently in cooperation with Con Edison to adjust the project to mitigate the impacts on the Con Edison site. The FEIS reflects these adjustments. The project would not preclude continuation of any current utility operations in Manhattan. Con Edison currently utilizes the site (Block 674) for a cable yard, flush facility, fueling facility, and associated truck parking and storage. The flush facility and fueling facility, additional truck parking, servicing activities, and onsite circulation patterns would remain intact on the Con Edison site, as described in the FEIS.

UTILITIES, EMF AND ENERGY (SECTIONS 4.15-4.17 AND 5.15-5.17) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response: (continued)

As disclosed in the FEIS, NJ TRANSIT and the PANYNJ commit to all aspects of relocation (cableyard, truck parking and storage) without any disruption to operations and service. Further, no aspect of this relocation would increase emergency response time. In addition, NJ TRANSIT and the PANYNJ commit to working with Con Edison to ensure the permanent fan plant structure does not increase emergency response time.

The ARC project, as described in the FEIS, includes temporary construction at the Con Edison site and relocation of Con Edison's cable yard, truck parking and storage to Block 675, the cost of which would be paid for by NJ TRANSIT and PANYNJ.

Comment 344-S:

One commenter stated in Section 4.17 (Utilities), page 4.17-2, the last bullet is incorrect and should be revised. The liquid asphalt pipeline, identified in the last bullet, is located at the south dock on the former Koppers Coke Site and is not adjacent to Standard Chlorine and Diamond Shamrock. Additionally, this pipeline traverses the southerly boundary of the existing M&E rail line and the existing entrance to the proposed Kearny Yard on the way to its final destination, the Owens Corning Company plant. The list of utilities to be impacted by ARC construction, Appendix 4.17, should also be updated for this Owens Corning pipeline. A discussion of the Owens Corning Company pipeline and the proposed widening of the tunnel into the proposed Kearny Yard should be included in Section 5.17. (*HCIA2 11E, HCIA2 20E*)

Response:

ARC is in the process of obtaining information on this pipeline from the Owens Corning Company. NJ TRANSIT will work with Owens Corning Company to mitigate any impacts to this pipeline once they are known.

Comment 345-S:

One commenter stated traction power substations should be designed as dual voltage, to also handle 25kV/60Hz power, so that if Amtrak ever modernizes its distribution system, they won't need to be replaced. (*Lackawanna5 16L*)

Response:

Traction power substations can not be built for two different voltage classes and frequencies. If Amtrak changes its distribution system, NJ TRANSIT substations would likewise be modified.

Comment 346-S:

During Hudson County Engineering's review of the preliminary ARC Utility Plans they noted that the proposed relocation of PSE&G transmission tower would impact a retention basin that was built as part of the New County Road Grade Separation and a service road to F&G Mechanical. These impacts are not reflected in the SDEIS. (*Hudson County Engineering2 7L*)

Response:

The relocated transmission tower will be located such that is does not impact the retention basin.

UTILITIES, EMF AND ENERGY (SECTIONS 4.15-4.17 AND 5.15-5.17) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 347-S:

One commenter stated the key missing environmental analysis is the additional energy cost and CO emissions required to construct and operate the deep cavern station, which would be made largely redundant by an extension east to East Midtown. (*IRUM3 1L*)

Response:

The increased energy demand for the new station is documented in FEIS Section 4.15. Based on modeling of construction equipment and activity at each construction shaft through which excavated cavern material would be removed, no CO impacts were predicted.

INDIRECT AND CUMULATIVE EFFECTS (SECTIONS 4.18 AND 5.18)

DEIS COMMENTS

Comment 348-D:

National Marine Fisheries Service states that the DEIS does not appear to adequately consider past, present and future impacts on the environment and the ARC project's contribution to the cumulative effects. They also feel that the DEIS also does not appear to discuss how the impacts of the ARC project relate to the impacts of other proposed projects, such as the rehabilitation and expansion of the Tappan Zee Bridge or the construction of the Cross Harbor freight tunnel. *(NMFS 11L, NMFS 12L, NMFS 13L)*

Response:

Cumulative ecological effects and associated mitigation strategies in New Jersey and New York are documented in FEIS Sections 4.18 and 5.18. Several future projects within and beyond the project area are contained in a No Build scenario, upon which the Build Alternative and its predicted effects have been superimposed. These projects have been developed to a sufficient point that a Locally Preferred Alternative and its characteristics have been identified. The Tappan Zee Bridge project is not included in the ARC No Build because it is not far enough along in the project development or environmental review process for its characteristics to be known. Since the ARC Project is better defined, it has been included in the Tappan Zee Bridge project No Build. Similarly, the Cross Harbor Freight Study has not identified a Locally Preferred Alternative and, therefore, insufficient information is available for incorporation into the ARC No Build.

Also considered in the cumulative assessment of the Build Alternative have been effects of past projects, particularly related to loss of wetlands, uplands and other natural features in the NJ Meadowlands. Past losses have also been placed in the perspective of the increased sensitivity to ecological resources embodied in federal, state and local environmental regulations governing activities in the NJ Meadowlands.

Comment 349-D:

One commenter stated they are concerned about the potential impacts to fish habitat in the Hudson-Raritan Estuary (HRE). As stated Section 4.8 of the DEIS, "part of the project falls within the category of Essential Fish Habitat (EFH) for one or more species of fish, "including red hake, winter flounder, windowpane flounder, Atlantic sea herring, bluefish, Atlantic butterfish, summer flounder, scup and black sea bass." The DEIS also mentions that the portion of the Hudson River that falls within the project area "may provide EFH for various life stages for various species," such as those listed above. The commenter feels that this potential impact is problematic and therefore, it should be included in the indirect and cumulative impacts analysis. *(Baykeeper 7L)*

Response:

The EFH Assessment included in Appendix 4.8 has been updated, with results documented in FEIS Sections 4.8. Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the tunnels would be between 50 and 70 feet deep below the navigable portion of the Hudson River, eliminating the impact to wetland/open waters of the Hudson River and aquatic and marine species and habitat. In addition, the EFH Assessment has been updated to explain that TBM-generated noise and vibration levels would be well below the auditory thresholds of high, moderate, and low sensitivity fish species at the river bottom and within the water column of the Hudson River.

INDIRECT AND CUMULATIVE EFFECTS (SECTIONS 4.18 AND 5.18) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (continued):

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 350-D:

One commenter stated the indirect and cumulative long-term analysis is inaccurate in regards to water resources. The impacts analysis table states that there will be both a positive indirect and cumulative impact to water resources in New Jersey, the Hudson River and New York due to increased controls and monitoring. This suggests that increased controls and monitoring will address all impacts to water resources from the proposed Build Alternative. The impacts analysis for both New Jersey and New York fails to recognize the indirect and cumulative impacts on water resources from stormwater runoff as a result of the Build Alternative. The Indirect and Cumulative impact analyses must be reexamined and contain the impacts from such runoff. In addition, project proponents cannot rely on "increased controls and monitoring" for addressing the impacts to water resources entirely. This section must be explored more extensively. *(Baykeeper 7L)*

Response:

FEIS Sections 4.9, 5.9, 4.18 and 5.18 have been updated to describe the relationship of increased impervious surfaces of the Build Alternative and other projects in its vicinity to overall stormwater creation and runoff. Through consideration of Low Impact Development strategies to reduce runoff and control flows, and depositing of pretreated stormwater into municipal sewer systems or into water bodies, cumulative stormwater-related effects of the Build Alternative, considered with other development projects, would be minimized.

Comment 351-D:

United States Environmental Protection Agency states that the ARC DEIS must include an evaluation of the impacts from the Portal Bridge project as part of its cumulative impacts. As the Portal Bridge project is necessary to realize the full benefits of the ARC project, many of the construction impacts to air quality and wetlands may occur simultaneously. (*EPA 12L*)

INDIRECT AND CUMULATIVE EFFECTS (SECTIONS 4.18 AND 5.18) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

FEIS Sections 4.18 and 5.18 address impacts of the Portal Bridge Capacity Enhancement Project as part of the cumulative impact assessment. It is probable that construction of the Portal Bridge over the Hackensack River would occur at the same time as construction of the Secaucus Connection of the Build Alternative. These project activities would occur in areas that contain no receptors (i.e., because 24-hour residential activity or pedestrian activity does not exist), and where only short-term (hours) occupation of parklands would occur. These durations are not specifically addressed by applicable $PM_{2.5}$ and PM_{10} NAAQS, which relate to 24-hour and annual conditions. Therefore, aside from documenting these simultaneous construction activities, no quantitative air quality assessment of these activities on a cumulative basis has been completed.

FEIS Sections 4.18 and 5.18 address cumulative wetlands impacts, including ARC, the Portal Bridge Capacity Enhancement project and other projects in the Meadowlands. The total (cumulative) wetlands impacts for these projects would range from 50 to 60 acres. Mitigation of these cumulative impacts (at least for ARC and the Portal Bridge) is being evaluated together, i.e., identifying sites of sufficient size and type within the Meadowlands to offset the predicted loss of wetlands from these two projects at agreed-to ratios.

Comment 352-D:

United States Environmental Protection Agency states that the DEIS should quantify cumulative impacts. For example, air quality impacts from the Hudson Yards development can be quantified through analysis of the No.7 Subway Extension-Hudson Yards Rezoning and Development Program Final Generic Environmental Impact Statement. (*EPA 13L*)

Response:

FEIS Sections 3.6, 5.6, 5.7 and 5.18 have been updated to quantify or assess qualitatively the cumulative effects, including assessment of Build Alternative construction and construction of other nearby projects expected within the same timeframe, relative to air quality, noise and traffic circulation. Findings of this assessment contained in the FEIS reflect current schedules of construction for the Build Alternative and for other proposed projects on the West Side of Manhattan, based on coordination with New York City planning and environmental agencies.

Comment 353-D:

Multiple commenters stated significant issues remain regarding potential impacts of the ARC project on development of the ERY. In particular, the ARC tube runs across the ERY may increase the complexity and cost of developing the ERY. We will be looking to NJ TRANSIT to address these issues. The section of the DEIS that purports to address indirect and cumulative impacts on land use, zoning and public policy mentions the Hudson Yards rezoning (but not the West Chelsea rezoning or the Highline), but does not assess the effects of the decade-long prevention of the development of key areas of this area that would be a Project impact (DEIS at page 4.18-18) *(C/S 8L, Doctoroff 2L, HYDC 21)*

INDIRECT AND CUMULATIVE EFFECTS (SECTIONS 4.18 AND 5.18) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the proposed deep (100 to 145 feet) Build Alternative tunnels alignment on the west side of Manhattan would eliminate most of the conflicts and delay related to its construction and the construction proposed by others for the West Side, such as the Special Hudson Yards District, the Special Chelsea District, the West Side Rail yards, East Side Rail Yard, Hudson River Park, and the High Line. Considering the proposed tunnels alignment in Manhattan from the Hudson River to Fifth Avenue, the only major property on the West Side that would be affected by above-ground construction activities would be the Con Edison site (Block 674), on which a construction access shaft and a permanent fan plant would be developed. Negotiations between NJ TRANSIT and Con Edison regarding the temporary and permanent use of portions of Block 674, potential impacts to Con Edison operations, and means to mitigate these impacts, including relocating Con Edison's cable yard, and associated truck parking and storage to a portion of Block 675 immediately north of Block 674, are ongoing.

INDIRECT AND CUMULATIVE EFFECTS (SECTIONS 4.18 AND 5.18) (CONTINUED)

SDEIS COMMENTS

Comment 354-S:

One commenter asked NJ TRANSIT to examine the cumulative impact of the various rezoning and building projects planned for this area and explore mitigation measures which include cooperative efforts with the Metropolitan Transit Authority and New York City agencies. (*CB5 6L*)

Response:

NJ TRANSIT has met on over 30 occasions during the EIS process with MTA and New York City agencies to agree on a No Build Alternative base condition that takes account of the characteristics and status of rezoning and building projects on Manhattan's West Side. This agreed-to base condition of building and transportation projects is described in FEIS Section 4.2. Applying this agreed-upon base condition, and superimposing Build Alternative-related roadway traffic, pedestrian traffic, air pollutant emissions and noise on it, resulted in predicted future cumulative effects that are documented in FEIS Sections 3.1, 3.3, 3.4, 3.6, 4.6, 4.7, 5.6, 5.7, 4.18, and 5.18. In view of these findings, NJ TRANSIT continues to meet with MTA and New York City agencies to identify feasible mitigation measures that reflect the relative share of the impacts, attributable to the Build Alternative and the other Manhattan West Side projects.

Comment 355-S:

One commenter stated the SDEIS does not adequately consider the cumulative impacts of Project construction and construction associated with other major development and transportation projects that affect Manhattan's West Side. (*C/S2 2E*)

Response:

FEIS Section 4.2 has been updated to describe in detail the proposed major development and transportation projects on Manhattan's West Side, i.e., those projects that have been considered as part of the FEIS No Build Alternative, and those projects that are not as fully defined that have been referenced in the FEIS, but not included in the No Build. Inclusion or exclusion of these projects in the FEIS No Build Alternative (and their respective characteristics) was based on coordination with New York City Department of City Planning representatives. These projects appear in FEIS Tables 4.2-8 and 4.2-9. FEIS construction-related Build Alternative analyses dealing with impacts from Build Alternative-related construction vehicles (Section 3.6), pedestrians (Section 3.6), air quality (Section 5.6), noise and vibration (Section 5.7) and specific cumulative effects (Section 5.18) have included the impacts of these No Build development and transportation projects when calculating cumulative impacts as documented in the FEIS.

Comment 356-S:

One commenter stated in Section 5.18 (Indirect and Cumulative Effects), page 5.18-3, the impacts of the numerous trucks per day that will transport excavated materials from the various tunnel, cavern and fan shaft construction site to the proposed Kearny Yard are not assessed in this section and should be assessed. Mitigation should be reviewed in the SDEIS and should include, but not limited to, the construction of an alternative access road at the westerly end of the proposed Kearny Yard, the use of barging and rail transportation as alternatives to truck transport and the scheduling/staging of any truck deliveries to non-peak hours. (*HCIA2 21E*)

INDIRECT AND CUMULATIVE EFFECTS (SECTIONS 4.18 AND 5.18) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

Construction impacts associated with haul trucks destined to the proposed Kearny Rail Yard are analyzed in FEIS Chapter 3.6, which contains a full assessment of construction impacts and proposed mitigation measures. The use of barges and rail to transport excavated materials was assessed but proved to be infeasible. Both the rail and barge options would require the double handling of excavated materials, which complicates logistics and increases costs. In addition, the barge option would result in negative impacts to Hudson River Park in New York and Hudson River Walkway in Hoboken, due to required elevated conveyance of the excavated tunnels material from the construction access shafts to the barges moored at the river shoreline. This FEIS evaluates the impacts associated with the current Kearny Rail Yard design, which provides a single site entrance. Construction of an additional entrance may be considered during final design. The provision of an additional entrance would further disperse haul truck routes and reduce potential impacts in the vicinity of Kearny Rail Yard. However, a second entrance is not necessary to accommodate projected traffic demands.

Comment 357-S:

USEPA stated a more detailed quantitative discussion of the cumulative effects of ARC and other projects to the wetlands in the New Jersey Meadowlands should be presented in the document. (*EPA2 4L*)

Response:

FEIS Sections 4.18 and 5.18 have been updated to describe the cumulative wetlands effects on a long-term and construction basis of the Build Alternative and other projects in the NJ Meadowlands. These other projects, including the Portal Bridge Capacity Enhancement Project, EnCap Holdings, Xanadu, Allied Junction, and the Secaucus Transit Village, plus the Build Alternative, would impact approximately 50 to 60 acres of wetlands in the NJ Meadowlands. This predicted loss is framed in the FEIS in the context of the roughly 7,700 current wetland acres, past wetland acreages, and the positive effect of recent federal, state and local environmental rules and legislation that have addressed wetlands impacts and have set forth means to avoid, minimize or mitigate these losses. In fact, FEIS Section 4.8 has been updated to indicate that NJ TRANSIT is responding to resource agency requests by investigating one potential wetland mitigation resource to address both the Build Alternative and the Portal Bridge Capacity Enhancement Project impacts within the NJ Meadowlands District. NJ TRANSIT is continuing its dialogue with the NJ Meadowlands Commission, the Meadowlands Trust and the MIMAC in that specific regard.

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5)

DEIS COMMENTS

Comment 358-D:

One commenter stated if the new rail yard would be located as shown on Figure ES-3, substantial building demolition would be required at the SCCC Site, including the former processing buildings. A few remaining buildings at the Diamond Shamrock Site would also need to be demolished. *(Tierra 11L)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the proposed Kearny Rail Yard would be located exclusively on a portion of the Koppers Coke site. No interaction with or disturbance of the Standard Chlorine or Diamond Shamrock sites would be required for the proposed yard.

Comment 359-D:

Hudson River Park Trust stated land-based users and boaters would possibly be affected by construction vibrations, noise, and the possible temporary closures of Piers 66 and 66a and their boat launches. *(HRPT 14L)*

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, cut-and-cover construction-related impacts on the west side of Manhattan, and in particular, to the waterside and landside portions of Hudson River Park were eliminated. With the tunnels at a depth of between 70 and 120 feet below the river bottom and 125 feet below the surface at Twelfth Avenue, no noise or vibration impacts are anticipated on Hudson River Park. Nevertheless, coordination with the Hudson River Park Trust would continue through the environmental, design and construction phases of the Build Alternative.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 360-D:

Multiple commenters stated the construction phase in Manhattan is very long and in some locations 80 months. The community will have difficulty absorbing the cumulative impacts of all the construction projects in the area and therefore requests ARC to ensure that appropriate mitigations are in place for its construction so that negative impacts on other important resources are minimized. *(CB4 Pedestrians 4T, CB4 Pedestrians 6T, MBP Stringer 2T)*

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

The FEIS describes proposed measures to mitigate predicted construction-related and long-term Build Alternative impacts for each of the analysis areas in Chapters 3 through 8. These measures are also summarized as environmental commitments in the Executive Summary. Where extended construction durations would be required, NJ TRANSIT would continue to coordinate with New York City agencies relative to maintenance and protection of traffic, pedestrian safety and circulation, and noise/vibration and air quality mitigation, among other relevant community issues. FEIS Sections 4.18 and 5.18 and other sections within Chapters 3, 4 and 5 address construction projects considered in the No Build Alternative, and measures by which their proposed impacts in combination with the Build Alternative, would be mitigated.

Comment 361-D:

One commenter stated the construction schedule set forth in the DEIS assumes a start date in mid-2009 and completion in 2016. The seven year construction period is not realistic, either in terms of the proposed start date or in terms of the overall construction schedule once construction does commence. The expected impacts of construction should be reconsidered to account for the consequences of a later construction start date and a longer overall construction period. The use of a realistic construction schedule would affect, for example, traffic and related impacts associated with construction thus requiring a reevaluation of land use, zoning, public policy, and indirect and cumulative impacts with other planned and proposed development in the area. (*C/S 1L, C/S 6L*)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the current construction schedule begins in 2009 and extends to 2017. The schedule logic, rationale and duration of construction components were started during conceptual engineering and refined during Preliminary Engineering, considering the various interrelated and simultaneous or consecutive project construction contracts proposed in New Jersey, the Hudson River and New York during the 2009–2017 timeframe. The critical path elements to complete the project within this timeframe are the New York tunnels construction and completion of caverns and other contracts associated with NYPSE.

A reassessment of direct, indirect and cumulative impacts of Build Alternative construction is documented in FEIS Chapter 5. The updated impacts assessment reflects a revised start and completion of construction per specific areas and contracts, as well as the revised Build Alternative construction procedures on the west side of Manhattan that would be deployed due to the deeper bored tunnels construction with TBMs. Traffic, land use, zoning and public policy impacts have been assessed with specific regard to the timing and location of proposed west side developments, including Blocks 675 and 674, and the Hudson Yards rezoning initiatives.

Comment 362-D:

Several commenters stated they support the method of transporting excavated material by rail or barge to its disposal site. This method would decrease road traffic impacts and could also be used to transport construction materials to the project. (*General Contractors 3E, Hudson County Engineering 10L, Baykeeper 4L, NYSDOT 29L, Madden 29L*)

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the proposed Twelfth Avenue Fan Plant/Construction Access Shaft in Manhattan would be located east of Route 9A, which would require movement of excavated tunnels material by elevated conveyor over Route 9A and through Hudson River Park to reach barges that would be moored along the Hudson River shore. A similar conveyance would be required for delivery of construction materials to the construction site. The proposed Hoboken Fan Plant/Construction Access Shaft would be located some 1,400 feet from the Hudson River shoreline, which would also require elevated conveyance of excavated tunnels material or construction material for this distance. Because of these conditions, the use of barges and conveyors would not be practical, would exert adverse impacts to Route 9A, Hudson River Park and Hoboken, and, as such, has been dismissed. Moreover, construction of the Build Alternative in the Hudson River would not require barges for any purpose.

Similarly, the use of NYS&W and Conrail freight lines for excavated tunnels material transportation or construction materials delivery at the Tonnelle Avenue construction site was considered, but dismissed, due to the inefficiencies associated with double handling of materials.

Comment 363-D:

One commenter stated given the proposed Hudson River Tunnel construction technique which requires that the tunnel basically be built in-place as the tunnel boring machine moves forward would require a highly coordinated delivery and staging of construction materials in the vicinity of the Hoboken Shaft. (*Hudson County Engineering 3L*)

Response:

Approximately 1.6 acres of land has been allocated for construction staging at the proposed Hoboken Fan Plant/Construction Access Shaft site. Coordinated activities contained within this protected area would include extraction and loading of excavated tunnels material onto trucks, and storage of construction materials and equipment. The transport of major oversize equipment and supplies would follow accepted protocols for handling oversize loads. Delivery of materials and hauling of the tunnels material by trucks would occur exclusively via a temporary access road from the site. The road would be aligned just north of and parallel to the HBLRT right-of-way, and would cross over the HBLRT tracks near Clinton Street, avoiding interaction of these trucks with local traffic on West 18th Street and other nearby streets, and minimizing noise at nearest residential receptors in Weehawken. This temporary access road would intersect with major streets, such as Park Avenue, Willow Avenue and JFK Boulevard East.

Comment 364-D:

The United States Environmental Protection Agency, Region II stated the final EIS should provide a more detailed description of the impacts of the use of the large cofferdam for the 2% grade tunnel to be used under the Hudson River, and the smaller cofferdam needed at the eastern shore under both the 2% and 3% grade tunnel options. For example, the final EIS should explain whether sediment beneath the cofferdam will need to be dredged, and if so, describe plans for testing and disposal of any contaminated sediments. *(EPA 5L)*

Response:

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the deeper tunnels under the Hudson River eliminated the need for both mid-river and shoreline cofferdams.

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 365-D:

The United States Coast Guard stated any waterborne work on the Kearny Rail Yard must not interfere with the Hackensack River Federal Channel. *(USCG 4L)*

Response:

FEIS Section 5.1 has been updated to identify that the proposed Kearny Rail Yard construction would not interfere with the Hackensack River Federal Channel.

Comment 366-D:

One commenter stated the DEIS does not sufficiently explain the selection of cut-and-cover construction from the Hudson River east to Eleventh Avenue. The DEIS should explain the basis of this conclusion. *(C/S 11L)*

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, cut-and-cover construction between the Hudson River and Eleventh Avenue was eliminated. The deeper tunnels would enable tunnel boring machine (TBM) construction beneath the Hudson River to Eleventh Avenue.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 367-D:

The MTA stated "potential conflicts with NYCT track work for maintenance or capital projects, including the #7 extension" should be added to the New York column under Construction impacts on page ES-21 (Table ES-2). Under Mitigation in the same table, "Construction with NYCT to avoid conflicts with maintenance and capital projects, including the #7 extension" should also be added. *(MTA 14L)*

Response:

The FEIS Executive Summary has been updated to acknowledge the presence of the No. 7 Line Extension and continued coordination with NYCT to avoid conflicts between the Build Alternative and the No. 7 Extension.

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 368-D:

The United States Coast Guard requested that they receive notification when start and completion dates for constructing the 800' x 100' cofferdam are confirmed as well as the hours during which work will be completed i.e., daylight or 24 hours, the name and description of work vessels on scene, the VHF radio channel(s). *(USCG 1L, USCG 2L, USCG 3L, USCG 5L)*

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the tunnels would be between 50 and 70 feet deep below the river bottom within the navigable channel, eliminating the need for cofferdams during construction. Therefore, no in-water work would be required and no work vessels, warning buoys/Private Aids to Navigation, or artificial habitat would need to be deployed within the Hudson River.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 369-D:

One commenter stated he liked the idea that we're putting the locations of the industrial shafts in industrial locations. *(Woolley 7T)*

Response:

The comment is acknowledged.

Comment 370-D:

One commenter asked if there is a specific reason why the DEIS suggests that trucks will move tunnel materials only between 7 AM and 7 PM. If noise is not a problem, nighttime truck movements might work better. (*Hudson County Engineering 7L*)

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

The hours of construction activity described in the FEIS reflect refinements that have occurred during Preliminary Engineering. It is currently assumed that most construction activity and construction truck traffic generation would occur during the 15-hour period between 7:00 AM and 10:00 PM, with the potential for 24-hour operation if warranted. The 15-hour and 24-hour truck operations scenarios would not cause noise impacts in either New Jersey or New York. The New York City and New Jersey State and local noise ordinances generally prohibit construction activity after 6 PM and during nighttime hours. Therefore, a 7:00 AM to 7:00 PM window was documented in the DEIS. Considering findings of Preliminary Engineering since the DEIS was issued, in terms of increased proposed locations of excavated tunnels material extraction and truck hauling, and for adherence to the proposed construction schedule, the window has been expanded to 7:00 AM to 10:00 PM, with possible 24-hour truck hauling if necessary. Considering measured noise levels in the vicinity of construction access shaft sites and haul routes, truck hauling during the expanded 7:00 AM to 10:00 PM window would not cause noise impacts at nearest sensitive receptors.

Comment 371-D:

One commenter requested more information on the removal of excavated materials from NYC via the Lincoln Tunnel. (*Hudson County Engineering 9L*)

Response:

Material excavated and extracted from the ARC tunnels (including New York City) would be used as fill for the Kearny Rail Yard and proposed railroad embankments in Secaucus. To reach the proposed construction sites, 15 to 20 trucks per hour would travel through the Lincoln Tunnel. These truck movements would represent less than one percent of the total traffic through the tunnel in the peak hour. As shown in FEIS Section 3.6, such additional truck traffic would not impact traffic operations through the tunnel.

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

SDEIS COMMENTS

Comment 372-S:

One commenter stated in Section 5.1 (Construction Methods) on page 5.1-14, the SDEIS indicates that the construction of the proposed Kearny Rail Yard will begin in early 2010, with completion in early 2016. It is our understanding from recent discussions with the NJ TRANSIT Project Design Team that construction would begin by the first quarter of 2009. This apparent inconsistency should be addressed. (*HCIA2 14E*)

Response:

The scheduled start date of early 2010 for the Kearny Rail Yard construction is the date the excavated tunnels material would arrive on the site. The proposed site would need to be prepared in advance of this to receive the excavated material. The property would need to be available in early 2009 to provide adequate time for this site preparation work. Site preparation work would include remedial work as well as preparation of the existing soils to receive excavated tunnels material and modifications of the on-site wells to adjust for the higher surface elevations.

Comment 373-S:

One commenter asked what the hours of operation anticipated for work at the Hoboken Shaft site will be and whether there will be nighttime shutdowns, or an effort to avoid AM and PM peak hour traffic. (*Hudson County Engineering2 3L*)

Response:

Construction at all construction shafts will likely be 24 hours per day. Nighttime shutdowns, and reduced AM and PM peak period restrictions are not currently proposed.

Comment 374-S:

One commenter noted that there remain open issues regarding coordination of the ARC project the No. 7 Subway extension and the City's No. 1 Water Tunnel. In particular, because the ARC alignment was lowered in elevation it will come within 11 feet of the lowest elevation of the No. 7 Subway tunnel underneath Eleventh Avenue near West 30th Street. Also, the upper level tail tracks of ARC's proposed 34th Street Station will come within 45 feet of existing Water Tunnel No. 1, even though the station cavern was shifted 125 feet to the east of Water Tunnel No. 1. We strongly encourage NJ TRANSIT to continue discussions with MTA, NYCDEP and HYDC, as appropriate, to address these issues. (*HYDC2 3L*)

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

Subsequent to the SDEIS, comments were received from NYC agencies, including NYCDEP and NYC Corporation Counsel, expressing concerns with the proximity of the proposed station cavern and tail tracks to Water Tunnel No. 1. NYCDEP has indicated that prior to the completion of Water Tunnel No. 3 (currently under construction and scheduled to be operational between 2013 and 2018), construction closer than 200 feet from Water Tunnel No. 1 would pose an unacceptable risk. Based on this concern, the station cavern has been shifted so that the eastern edge is 200 feet from Water Tunnel No. 1. The tail tracks, however, would cross 45 feet above the water tunnel to continue eastward and would be constructed prior to the completion of Water Tunnel No. 3. In light of NYC's concerns with regard to the risks associated with the construction of NYPSE tail tracks prior to the opening of Water Tunnel No. 3, the tail tracks have been eliminated from the project. The elimination of the tail tracks would not preclude a future extension to the east side of Manhattan. A buffer area would be constructed at the eastern edge of the NYPSE cavern so that a future connection could be constructed from the east. NJ TRANSIT will continue to coordinate with NYCDEP to address their concerns with regard to construction of the NYPSE cavern.

Comment 375-S:

One commenter stated the subsequent construction of the fan plant with its 110 foot cooling tower, will likely necessitate the closure of West 35th Street between Eighth and Ninth Avenue for a number of years. This is never acknowledged in the SDEIS. A street closure of this length is critical—by closing the street behind the Ballroom and the Hotel, these buildings will be denied access to their loading docks. The inevitable long-term closure of West 35th Street will also force the closure of the Midtown South police precinct, located on West 35th Street near the corner of Ninth Avenue, as no New York City police precinct can operate without street access. (*Grifa4 5E, Grifa4 6E*)

Response:

Subsequent to the release of the SDEIS, the Optional 35th Street Fan Plant site (Meyers Parking Garage) between Eighth and Ninth Avenues was eliminated. An ADA Access/Emergency Personnel Access elevator entrance for employee use only would be constructed within the southwestern corner of the Meyers Parking Garage. Construction would not require the closure of West 35th Street between Eighth and Ninth Avenues. Construction would require partial closure of the West 34th Street sidewalk in front of the NYPSE entrance site and the adjacent office building to the west. The curb lane of West 34th Street from west of the parking garage entry to the west end of the existing parking garage entry to the west end of the existing office building would be closed during non-peak hours and overnight. Access to the Manhattan Center's truck bays would be maintained.

Comment 376-S:

One commenter stated there are many efforts to reduce construction impacts which may adversely change the finished project. The goal of this project should be to provide the best possible facility for operations, including passenger access, even if it means greater short-term impacts during construction. (*Lackawanna5 29L*)

Response:

The comment is acknowledged.

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 377-S:

One commenter stated Hudson County has a pump station immediately adjacent to the NEC north of Secaucus Road in North Bergen. It would appear to be directly in the alignment for the ARC ROW. They asked what the impact of this facility will be and how will it be mitigated. (*Hudson County Engineering2 9L*)

Response:

The Hudson County pump station adjacent to the NEC north of Secaucus Road is no longer in use. The proposed crossing of Secaucus Road by the Build Alternative would be south of the NEC, and would not physically impact the pump station, and not preclude its eventual resumption of service. Moreover, the Build Alternative would cross Penhorn Creek on a viaduct to maintain the flow of the creek under the existing NEC and proposed tracks. Therefore, the physical and hydraulic characteristics of the creek would not be altered in this location, with particular respect to the Hudson County pump station.

Comment 378-S:

One commenter stated Hudson County owns the St. Paul's pump station on Penhorn Creek in Secaucus near the Hackensack River that will be in the ROW of what ha been called the Secaucus Loop Track. We have agreed to put our project to rehabilitate this pump station on hold after meeting with the ARC engineering staff and has discussed a new site for the pumping station on PSE&G property. At this time we are waiting for NJ TRANSIT to secure funds to for the development of new plans and acquisition of the alternative location. Also, ARC related construction activity will impact a utility road we currently use for alternative access to the pump station during flooding conditions. There is no mention of this facility or mitigation process in the SDEIS is unclear on how this will be handled. They asked if this creek will be relocated or placed in a box culvert. We need to discuss the design of this with NJ TRANSIT staff. (*Hudson County Engineering2 10L*)

Response:

NJDOT has committed funding to support Hudson County in moving the existing St. Paul's pump station further west to avoid conflicts with future relocated freight tracks and the Secaucus Connection of the Build Alternative. NJ TRANSIT has been coordinating with Hudson County on this pump station issue and the relocation concept that will be lead by the County to: 1) advance the relocation project into final design; 2) secure required permits; 3) acquire property interests; and 4) construct a culvert extension and a new relocated pump station.

Comment 379-S:

One commenter stated Section 5.1(Construction Methods) would benefit from the inclusion of a figure that indicates the proposed conceptual layout and construction at the proposed Kearny Rail Yard. (*HCIA2 12E*)

Response:

FEIS Figure 5.1-3 has been updated to show the layout of the proposed Kearny Rail Yard.

CONSTRUCTION METHODS (SECTION 3.6 AND CHAPTER 5) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 380-S:

One commenter stated in Section 5.1(Construction Methods), page 5.1-15, the rock removed from Tunnel Excavation is identified as being deposited at either the proposed Kearny Rail Yard or at the proposed Secaucus Rail Embankments after minor processing to break down large blocks. The location of the rock processing operations should be identified and assessed in the SDEIS. (*HCIA2 15E*)

Response:

FEIS Section 5.1 has been updated to identify the extraction sites of excavated material as the location for minor processing of large rock blocks.

ARCHAEOLOGICAL AND HISTORIC RESOURCES (CHAPTERS 6 AND 7)

DEIS COMMENTS

Comment 381-D:

One commenter stated the DEIS did not identify the historic Baltimore and Ohio Railroad Float Transfer Bridge at Pier 66a and would like to ensure that during construction of the cofferdam in particular (but also during other nearby construction activities), no indirect effects on this resource will occur. (*HRPT 3L*)

Response:

The Baltimore and Ohio Float Transfer Bridge at Pier 66a is located south of Pier 66. Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the two proposed Hudson River tunnels would pass 17 feet north of Pier 66 and 95 feet below the river bottom, thus eliminating construction activity in the vicinity of the Baltimore and Ohio Float Bridge. No cofferdams would be required for tunnels construction. Therefore, no direct or indirect effects to Pier 66a and the transfer bridge would occur.

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 382-D:

One commenter stated the timber piles of the historic Hudson River Bulkhead would be affected by cut and cover operations. (*HRPT 5L*)

Response:

Because of design refinements made in the SDEIS Refined Build Alternative and the FEIS Build Alternative, the top of the proposed Build Alternative tunnels would be 127 feet below grade where they would cross the historic Hudson River Bulkhead, and 31 feet below the timber piles that support the bulkhead structure. Therefore, neither the bulkhead nor the supporting timber piles would be impacted by the Build Alternative.

ARCHAEOLOGICAL AND HISTORIC RESOURCES (CHAPTERS 6 AND 7) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response (continued):

In the SDEIS Refined Build Alternative and the FEIS Build Alternative, the discovery of a lower rock line near NYPSE characterized by two locations of former stream beds or ponds, fault zones (fractured rock), and incompetent rock between Eighth Avenue and Sixth Avenue resulted in the need for a deeper station under West 34th Street. Rock cover over the crown of the proposed station caverns was as little as 21 feet in the area of the stream bed valley between Seventh and Eighth Avenues, and the top 20 to 30 feet of rock was generally of very poor quality. It was determined by the engineering team and underground peer review experts that the geotechnical risk of this minimum rock cover, coupled with the proximity of underground vaults and deep foundations at Macy's and One Penn Plaza only 21 feet above the proposed cavern, which would require extensive cut-and-cover construction along West 34th Street, was judged risky and impractical in that location at that elevation. As a result of the deeper cavern, the tunnels profile under the west side of Manhattan and the Hudson River was also made deeper, which made it infeasible to construct the connection from the new ARC tunnels to PSNY in a manner that would meet NJ TRANSIT operating requirements.

Comment 383-D:

The New York State Office of Parks, Recreation and Historic Preservation stated they would like to be informed on the Advisory Council on Historic Preservation (ACHP) response to the draft Programmatic Agreement and would like the opportunity to review the Construction Protection Plans (CPP) for the New York resources. (*NYSOPRHP 3L, NYSOPRHP 4L*)

Response:

NJ TRANSIT will provide New York State Office of Parks, Recreation and Historic Preservation with the response received from the ACHP that they wish to be a signatory of the Programmatic Agreement. The New York State Office of Parks, Recreation and Historic Preservation will also be provided with the opportunity to review the Construction Protection Plans for New York resources as stipulated in the Programmatic Agreement and associated exhibits included in the FEIS.

Comment 384-D:

Hudson River Park Trust stated more work needs to be done to identify Hudson River Park mitigation measures. In addition, the Programmatic Agreement governing historic properties in Hudson River Park should be used as a guideline for continued construction planning. (*HRPT 17L, HRPT 18L*)

Response:

The Build Alternative, with the deeper tunnels under the Hudson River and the west side of Manhattan, would not result in any construction-related or long-term impacts to Hudson River Park and the historic Hudson River Bulkhead. Therefore, no mitigation would be required. The Hudson River Park Programmatic Agreement has been reviewed and will be used as a reference document during design and construction phases of the Build Alternative.

Comment 385-D:

The New York State Office of Parks, Recreation and Historic Preservation stated since Macy's is a National Historic Landmark, they request the opportunity to review all phases of the underground construction in this area to ensure protection of the resource. (*NYSOPRHP 1L*)

ARCHAEOLOGICAL AND HISTORIC RESOURCES (CHAPTERS 6 AND 7) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

NJ TRANSIT has coordinated with NYSHPO throughout the EIS and Preliminary Engineering process. This coordination would continue through the project design and construction phases, including design and proposed construction in the vicinity of the R.H. Macy & Co. Building. In this regard, NYSHPO has been sent 30% design plans for review and will be sent 60% and 100% design plans for review and comment. Construction Protection Plans will also be sent to NYSHPO to review related to underground construction in the vicinity of Macy's and other historic and archaeological resources in New York that would be affected by the Build Alternative.

ARCHAEOLOGICAL AND HISTORIC RESOURCES (CHAPTERS 6 AND 7) (CONTINUED)

SDEIS COMMENTS

Comment 386-S:

The Seneca Nation Tribal Historic Preservation has no further concerns regarding the project since the project location is outside of our area of focus. (*ThompsonG 1L*)

Response:

The comment is acknowledged.

Comment 387-S:

One commenter stated if the Meyers Parking site is condemned, the SDEIS fails to explore the impact of the demolition on its neighboring structure, the Hammerstein Ballroom, located at 311-313 West 34th Street, a historic resource. The SDEIS fails to discuss or otherwise consider how the construction and operation of the fan plant will impact the fire safety exits of the Ballroom, which are located on west exterior wall of the Ballroom, overlooking the roof of the Meyers facility. In addition to threatening the structural integrity of the building and its restored interiors, such a construction plan will have negative impact on the Ballroom's use and ongoing operations, as well as that of the New Yorker Hotel, located on Eighth Avenue between West 34th and 35th Streets. These significant adverse impacts constitute a constructive use of historic resource, requiring a full Section 4(f) evaluation under the Department of Transportation Act. (*Grifa4 4E, KylerL3 2L*)

Response:

Subsequent to the SDEIS, the Optional 35th Street Fan Plant location at 323 West 34th Street was eliminated from further consideration. Compared to the 35th Street Fan Plant site at 218-222 West 35th Street, this site would result in additional environmental, cost and schedule impacts. The site would require the construction of a ventilation plenum underneath the Hammerstein Ballroom and the New Yorker Hotel, both of which are historic-eligible structures. The construction of the fan plant and the ventilation plenums would also result in noise and vibration impacts to the adjacent historic-eligible Hammerstein Ballroom/Manhattan Center Studios. The Manhattan Center Studios house recording studios, entertainment venues, and other noise and vibration-sensitive activities. The Optional 35th Street Fan Plant at this site was eliminated from further consideration because of the potential impacts to the noise-sensitive activity within the Manhattan Center Studios, and the potential impacts on the historic-eligible Hammerstein Ballroom and New Yorker Hotel. Two emergency access/egress stairways and one ADA elevator would be constructed within the 323 West 34th Street site, but would be located on the western edge of the property along West 34th Street, sufficiently far away from the Hammerstein Ballroom to minimize noise and vibration impacts.

Comment 388-S:

The draft Section 4(f) Assessment in the SDEIS is deficient because it relies on the SDEIS to determine impacts upon Hudson River Park, yet the SDEIS does not propose the actual location of the staging area, the new location for some of Con Edison's facilities, and the permanent fan plant. Accordingly, the Section 4(f) assessment is critically flawed. (*C/S2 16E*)

ARCHAEOLOGICAL AND HISTORIC RESOURCES (CHAPTERS 6 AND 7) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

The Section 4(f) Evaluation, contained in Appendix 8 of the FEIS has been updated to indicate that no construction staging areas are proposed within the landside or waterside portions of Hudson River Park. Attachment B of the Section 4(f) Evaluation, contained in Appendix 8 of the FEIS has been updated to describe the new location for some of Con Edison's facilities, and the permanent fan plant. The block bound by West 28th and West 29th Streets and Eleventh and Twelfth Avenues (Block 674), is the site of the Con Edison "workout facility." The Twelfth Avenue Fan Plant and access shaft would be located on the western edge of Block 674 at the northeast corner of Twelfth Avenue and West 28th Street, avoiding impacts to the existing Con Edison flush pit and fueling facility. The westernmost portion of this block would be used as the work area for receiving the Hudson River tunnels TBMs, launching the Manhattan tunnels TBMs, removing Manhattan excavated materials, and constructing the fan plant. The western portion of the block bounded by West 29th and West 30th Streets and Eleventh and Twelfth Avenues (Block 675, located one block north of Block 674), would be used as a temporary construction staging and laydown area for construction activities. A portion of Con Edison's cable yard, and associated truck parking and storage would be displaced an average of 250 feet from Block 674 and relocated to a 0.9 acre portion of Block 675 during construction. Negotiations are ongoing to mitigate impacts to Con Edison's vital services.

Comment 389-S:

U.S. DOI stated that there are no references in the evaluation to the provisions of the pertinent regulations that exclude Section 4(f) status for archaeological properties that are important for what can be learned from data recovery and have minimal value for preservation in place. (*USDOI2 2L*)

Response:

The Section 4(f) evaluation, located in FEIS Appendix 8, has been updated to adhere to new regulations under 23CFR Part 774 that came into effect April 11, 2008.

Comment 390-S:

U.S. DOI suggested that FTA carefully evaluate the outcomes and research questions answered and not answered by those investigations to determine an appropriate research design for the current project. U.S. DOI recommended that if at all possible, archaeological testing of the areas to be impacted by this project be conducted to determine whether burials are present and the extent of their distribution prior to the start of construction. (*USDOI2 3L*)

Response:

The FEIS Section 4(f) evaluation and Section 106 Programmatic Agreement have been updated to recommend archaeological field testing of the impacted project area be conducted prior to construction.

Comment 391-S:

U.S. DOI requested that the FTA notify the Secretary of Interior of any consultation involving a national historic landmark resultant to this project and invite the Secretary to participate in the consultation where there may be an adverse effect. The Secretary will request that the National Historic Landmarks Program consider participating as a consulting party in accordance with Section 106 on any matters involving this NHL within the area of potential effects of the project. (*USDOI2 4L*)

Response:

The project will not have an adverse effect on the R.H. Macy and Co. building, and Secretary of Interior consultation will not be required regarding this national historic landmark.

FINANCIAL (CHAPTER 10)

DEIS COMMENTS

Comment 392-D:

One commenter asked if the total funding covers environmental improvements on the Main/Bergen Line in Suffern and Pascack Valley Line. (*Rockland 10L*)

Response:

Total funding for the ARC Project does not include environmental improvements beyond the project area, i.e., north or west of the Frank R. Lautenberg Station in Secaucus. Improvements beyond the project area in New Jersey and New York are included in the 2030 No Build. Some of the improvements beyond the project area in New York on the Main/Bergen or Pascack Valley Lines may also be in the 2030 No Build. Funding for the projects identified in the No build is separate from the ARC Project.

Comment 393-D:

FHWA asked where the Port Authority local share financial commitment is defined in the North Jersey Transportation Planning Authority's Regional Transportation Plan, specifically in the financial plan element. (*FHWA NJ 1L*)

Response:

Access to the Region's Core (or THE Tunnel) is included in the NJTPA Regional Transportation Plan, and the financial plan element is included in Appendix I of the Plan.

Comment 394-D:

FHWA asked if NJ TRANSIT and Amtrak have identified and secured funding for the Portal Bridge Project. (*FHWA NJ 3L*)

Response:

NJ TRANSIT has committed $743 million to the project. Other sources of funding are also being investigated.

Comment 395-D:

FHWA asked if the wetlands mitigation be completed through negotiated monetary compensation and whether the mitigation costs would be estimated and adjusted as the project progresses through the permit consultation phase. (*FHWA NJ 4L, FHWA NJ 5L*)

Response:

Wetlands mitigation would be completed through the purchase of credits from a Federal and State approved wetland mitigation bank; the development of an independent wetland mitigation site that could include wetland establishment/creation, enhancement, and/or preservation at ratios acceptable to MIMAC in the same watershed as the proposed impacts; securing credits from an approved in-lieu fee program; or a combination thereof. Sections of the Richard P. Kane Tract have already been set aside for enhancement to mitigate impacts from transportation projects. This resource or other comparable tracts could address cumulative wetlands impacts in the Meadowlands related to ARC, the Portal Bridge Capacity Enhancement Project, Xanadu development, and EnCap Holdings, among others. NJ TRANSIT is working with the NJ Meadowlands Commission, the Meadowlands Conservation Trust and MIMAC to develop suitable mitigation resources. Mitigation requirements and associated costs per mitigation type would be adjusted as the agency permit consultation process advances.

FINANCIAL (CHAPTER 10) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 396-D:

FHWA asked when the project will be included in the New Jersey Statewide Transportation Improvement Program. (*FHWA NJ 2L*)

Response:

Access to the Region's Core (or THE Tunnel) is included in the New Jersey Statewide 2008–2011 Transportation Improvement Program.

Comment 397-D:

One commenter stated New York is projected to gain more in tax revenues than New Jersey. Unless New York State is willing to provide the non-federal match in proportion to its share of the increased tax revenues, both transit improvements are probably more cost effective in terms of increasing tax revenues. (*Transport 8E*)

Response:

New York State funding is not being provided for the ARC project. Tax revenue projections for New Jersey and New York are provided in Sections 4.14 and 5.14 of the FEIS and the project's cost-effectiveness is noted in Chapter 9.

Comment 398-D:

One commenter stated the $6.3 billion estimated cost of the proposal is a low estimate to gain support initially. Most tunneling projects both in history and recently have encountered unknowns causing large overruns. (*Helm 7E*)

Response:

The estimated capital cost of the Build Alternative reported in the FEIS is $7.6 billion in Year of Expenditure dollars. This cost has been derived through advancement of concepts by Preliminary Engineering. Through value engineering and the application of other cost-effectiveness processes, a cost containment strategy has been enacted to maintain this capital cost through subsequent design and construction phases. Also, the Project Management Plan establishes a change control policy that requires an appropriate level of review and authorization when any changes, including cost, occur. During the design phase, incentives are included in the design contracts to establish design-to-budget incentives.

FINANCIAL (CHAPTER 10) (CONTINUED)

SDEIS COMMENTS

Comment 399-S:

One commenter stated NJ TRANSIT budgeted for the additional 187 coaches and 22 dual-mode locomotives and asked whether NJ TRANSIT has considered obtaining more electric multiple-unit cars for existing electrified lines. (*Lackawanna5 18L*)

Response:

As shown in FEIS Chapter 9 and Appendix 10, the cost of the additional 187 coached and 22 dual-power locomotives is included in the capital cost estimate. NJ TRANSIT's rail fleet management plan takes into account vehicle requirements for existing lines and services, separate from the ARC project. With ARC, the existing electrified lines will use electric multiple unit cars and dual-power locomotive hauled coaches.

Comment 400-S:

One commenter stated only twelve trains per hour probably wouldn't make the project economically viable. If it is twenty-four trains, six tracks instead of three, then perhaps we might be on the economic path again to making this project viable for not only New Jersey residents but New York residents as well. (*NJ ARP4 12T*)

Response:

The comment is acknowledged.

Comment 401-S:

One commenter stated the project as currently proposed is excessive, representing a wasteful and inappropriate use of scarce financial and other resources. This is an especially urgent issue, given the financial problems no besetting New Jersey and many other states. (*Lackawanna10 5L*)

Response:

The comment is acknowledged. The ARC project has met FTA New Starts cost-effectiveness measures and has a current overall project rating of "Medium-High".

Comment 402-S:

One commenter stated mitigation measures, particularly in the New York portion of the project, are under-funded. The project has allocated 1% percent of its budget, or $70 million, for both New Jersey and New York mitigation. However, according to the SDEIS, mitigation measures in New Jersey include acres of wetland, new osprey platforms, clean up of 33 contaminated sites, decontamination of 13 acres of landfill, and noise abatement for a number of residential buildings. A specific budget for the mitigation of roadway, subway entrances and pedestrian adverse effects in New York must be more fully developed and committed to in the FEIS. (*CB42 14L*)

Response:

An allowance of 1% of the total construction cost has been allocated to environmental mitigation. This allocation will be re-assessed as the project moves through final engineering. Items such as the reconfiguration of NYCT station entrances are included in the ARC project cost.

FINANCIAL (CHAPTER 10) (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 403-S:

One commenter asked that information about the cost of the dual-mode operation of trains using the ARC tunnel be released, specifically the cost of locomotives and a description of any technical issues involved in meeting NJ TRANSIT's specifications as provided in its RFP. (*May3 2E*)

Response:

In November 2006, NJ TRANSIT released a report that confirmed the feasibility of using dual-power locomotives for the ARC project. That report, called the *Dual Power Feasibility Study*, contains information on the vehicle specifications for the dual-powered equipment being proposed for the ARC Project. The report is available on the ARC study web site.

Comment 404-S:

One commenter asked that NJ TRANSIT release to the public the detailed cost information omitted from the SDEIS which is necessary to compare the capital cost of the ARC DEIS iterations. (*NJ ARP4 7T*)

Response:

Detailed capital cost information is included in the FEIS Appendix 10.0.

PERMITS (CHAPTER 11)

DEIS COMMENTS

Comment 405-D:

NJDEP stated for any construction that would disturb landfills, New Jersey Solid Waste Regulations require landfill Disruption Approvals to be acquired prior to disturbing the landfill caps. *(NJDEP3 7L)*

Response:

FEIS Section 5.12 and Chapter 11 indicate that landfill disturbances associated with the Build Alternative would require landfill disruption permits from NJDEP.

Comment 406-D:

NJDEP stated a Stream Encroachment Permit would be needed relative to proposed construction in regulatory floodplain areas. *(NJDEP3 24L)*

Response:

FEIS Chapter 11 has been updated to identify that a Stream Encroachment Permit would be sought for Build Alternative construction where applicable.

Comment 407-D:

NJDEP stated an application for a Waterfront Development Permit would require evidence that either a tidelands instrument has been previously issued, applied for, or is unnecessary for the project area. *(NJDEP3 27L)*

Response:

FEIS Chapter 11 has been updated to identify that Waterfront Development Permits sought for construction of the Build Alternative would include evidence of Tidelands Ownership and documentation addressing the applicable Coastal Zone Management rules.

Comment 408-D:

The Hudson County Division of Planning stated Coastal Zone Management policies in New Jersey promote public open space and public access to and along its waterfronts and the ARC project should be in compliance with the policies. *(HCDP 13T)*

Response:

The consistency of the Build Alternative to relevant Coastal Zone Management policies in New Jersey, including public open space and public access to waterfronts, is documented in FEIS Section 4.9 and Appendix 11.

Comment 409-D:

NJDEP stated enforceable policies of the Coastal Zone Management rules N.J.A.C. 7:7E, Coastal Permit Program rules N.J.A.C. 7:7, Flood Hazard Area Control Act rules N.J.A.C. 7:13, and Stormwater Management rules N.J.A.C. 7:8, would apply to the ARC project as implemented through the Waterfront Development Law (N.J.S.A. 12:5-3) & (N.J.A.C. 7:7), Flood Hazard Area Control Act (N.J.S.A. 58: 16A-50) & (N.J.S.A.13:aD-1) and the Water Pollution Control Act (N.J.S.A. 58:10A). *(NJDEP3 33L)*

Response:

The referenced rules and laws are documented in FEIS Chapter 11 and Appendix 11. FEIS Chapter 11 and Appendix 11 have been updated to include the referenced Stormwater Management rules.

PERMITS (CHAPTER 11) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 410-D:

One commenter stated no announcements have been made relating to the review of the necessary permits for the ARC project from either USACE or NYSDEC. USACE cannot make a permit decision absent an affirmative decision by NYSDEC issuing a water quality certification for the project under Section 401 of the Clean Water Act. *(C/S 3L)*

Response:

No announcements relating to review of permits have taken place, since no project permit applications have been filed with USACE or NYSDEC. A list of permits identified for the Build Alternative is documented in FEIS Chapter 11 and Appendix 11. These probable permits include those under the jurisdiction of USACE or NYSDEC. As Preliminary Engineering for the Build Alternative advances, continued coordination with these and other agencies relative to permit requirements and application contents would take place.

Comment 411-D:

HRPT stated the in-water construction window for Hudson River Park was incorrectly noted. Permit conditions for construction of Hudson River Park prohibit in-water construction between November 1 and April 30 of every calendar year. *(HRPT 10L)*

Response:

FEIS Section 4.9 has been updated to state that the in-water construction Hudson River Park is prohibited between November 1 and April 30 of every calendar year.

Comment 412-D:

NJDEP stated work within regulatory floodplain areas would require a Flood Hazard Area Permit. *(NJDEP3 23L)*

Response:

A Flood Hazard Area Permit would be sought for Build Alternative construction within regulated floodplain areas and is documented in FEIS Chapter 11 and Appendix 11.

PERMITS (CHAPTER 11) (CONTINUED)

SDEIS COMMENTS

Comment 413-S:

The DEIS does not satisfactorily address a significant portion of the revised rules N.J.A.C. 7:7E, including: 7:7E-3.40 Public open space; 7:7E-3.43 Special urban areas; 7:7E-3.50 Lands and waters subject to public trust rights; 7:7E-3.7.5 Transportation Use rule; and 7:7E-8.11 Public trust rights – The Federal Railroad Administration and NJ TRANSIT should take all necessary precautions to minimize the taking and disturbance of parks, open space and conservation areas within the Project Area, including, the planned East Coast Greenway and Hackensack River Greenway, and facilitate public access to the Hackensack River waterfront. (*HCDP2 1L, HCDP2 2L, HCDP2 3L, HCDP2 4L, HCDP2 5L, HCDP2 7L*)

Response:

FEIS Section 4.9 has been updated to state that the Coastal Zone Consistency Applications will be updated as part of the permitting process to describe that the Build Alternative would preserve existing public access points and proposed access points and pedestrian access to parks, open space and conservation areas, and not preclude opportunities for future public access to proposed facilities, such as the East Coast Greenway and Hackensack River Walk. These provisions have been incorporated in the Build Alternative design, while balancing the public safety and site security aspects of the proposed project. FEIS Section 5.9 has also been updated to identify those municipalities within the project area in Hudson County that receive state aid as an "urban complex".

Comment 414-S:

One commenter stated Chapter 11 makes no reference to local permits and asked whether this was an oversight. (*Hudson County Engineering2 15L*)

Response:

"Local" permits (in this instance from the HEP Soil Conservation District) that would be acquired, such as Soil Erosion and Sediment Control Plan Certification, are listed in FEIS Appendix 11.

PUBLIC PARTICIPATION, CONSULTATION AND COORDINATION (CHAPTERS 12 AND 13)

DEIS COMMENTS

Comment 415-D:

Hudson River Park Trust (HRPT) asked to continue to be invited to meet the project team as well as other governmental agencies as construction and mitigation measure planning continues for park areas that would be affected by ARC. HRPT expects to be considered a consulting party throughout the development of the ARC Programmatic Agreement. They also expect to be considered as an involved agency as planning for the in-water areas of Hudson River Park continues, and wish to ensure that New York State Department of Environmental Conservation (NYSDEC) and other regulatory agencies have a full opportunity to participate in these meetings. Another commenter stated NJ TRANSIT should appoint a community liaison whose role includes the explicit responsibility of coordinating with the HRPT and the public as the project progresses. (*HRPT2L, HRPT4L, HRPT9L, NY for Parks 6L*)

Response:

Coordination with the Hudson River Park Trust, NYSDEC and other regulatory agencies will continue through the project design and construction stages. (Impacts to in-water areas of Hudson River Park have been eliminated with the Refined Build Alternative). The Hudson River Park Trust has been identified as a consulting party throughout the Section 106 and Section 4(f) processes, as well as throughout the development of the Programmatic Agreement to be executed by FTA, ACHP, NJ TRANSIT, and the New Jersey and New York State Historic Preservation Officers. As part of the Preliminary Engineering phase, NJ TRANSIT has dedicated staff to serve as community liaisons with the public and agencies through design and construction.

Comment 416-D:

The Federal Railroad Administration asked if the project had any cooperating agencies and noted that this omission must be corrected in the FEIS. (*FRA1E*)

Response:

The Federal Railroad Administration, U.S. Coast Guard and U.S. Army Corps of Engineers have agreed to be cooperating agencies for the ARC project. The cooperating agencies have been noted on the Signature Page.

Comment 417-D:

One commenter recommended the creation of a construction coordination council. This council, with representatives from the involved government agencies, the contractors and the utilities, would serve as the central point for collecting and providing information about each project's schedule so that the involved contractors can coordinate their construction schedules to avoid conflicts and prevent cascading impacts on the surrounding neighborhood. (*General Contractors 4E*)

Response:

The New York City Department of City Planning and The Hudson Yards Development Corporation have prepared a Master Construction Schedule for West Midtown Manhattan projects. The schedule will be maintained and updated periodically. NJ TRANSIT, through its continuing coordination with these and other New York City agencies, would provide input to the schedule that would be available to agencies, contractors, utilities and other interested parties.

PUBLIC PARTICIPATION, CONSULTATION AND COORDINATION (CHAPTERS 12 AND 13) (CONTINUED)

DEIS COMMENTS (CONTINUED)

Comment 418-D:

One commenter stated although the Tappan Zee Bridge (TZB)/I-287 was not included in the ARC model, they urge NJ TRANSIT to continue to work with the TZB/I-287 study team as the proposed alternative moves forward into the DEIS. (*Rockland 5L*)

Response:

Coordination with the TZB/I-287 study team, Metro-North Railroad and the MTA is on-going and will continue through the project design and construction stages.

Comment 419-D:

Federal Highway Administration asked which resource agency(s) would be responsible for wetlands mitigation coordination. (*FHWA NJ 7L*)

Response:

Federal, state and local resource agencies, including USACE, NYSDEC, NJDEP and the NJ Meadowlands Commission, would continue to be involved in wetlands mitigation coordination and decisions regarding suitable wetlands mitigation resources relative to their quality, location and extent. Mitigation would also be coordinated through MIMAC, comprised of Federal and State agencies, and the Meadowlands Conservation Trust.

Comment 420-D:

One commenter stated Consolidated Edison concerns regarding construction should be resolved upon issuance of the FEIS and that all parties should work together to ensure the project is constructed carefully and minimizes any negative impacts. (*Council Quinn 2T*)

Response:

Negotiations with Con Edison regarding the temporary and permanent use of portions of Block 674, and potential impacts to Con Edison operations and means to mitigate these impacts are ongoing and will continue through the project design and construction stages.

PUBLIC PARTICIPATION, CONSULTATION AND COORDINATION (CHAPTERS 12 AND 13) (CONTINUED)

SDEIS COMMENTS

Comment 421-S:

Multiple commenters asked FTA to conduct an ARC Regional Citizens' Liaison Committee (RCLC) meeting where meaningful "citizens' liaison" occurs, with knowledgeable writers/sources of report(s) available to answer questions from the public. (*NatlAssRailPas 4E, NatlAssRailPas 6E, NJ ARP4 8T*)

Response:

During the preparation of the EIS nine meetings were held with the project's RCLC. Knowledgeable members of the ARC study team attended each of these meetings. Each meeting started with a broad overview of the project's status and an explanation of significant decisions that were being made. The second part of the meeting was an open house session where members of the RCLC could discuss the questions and concerns with individual members of the study team. These meetings, and the comments that were received, are documented in the project record.

Comment 422-S:

PCAC asked that the planners of the ARC project maintain an active dialogue with the public as the design process continues, as the details of project design will in large part determine its usefulness and community acceptance. (*PCAC3 3E*)

Response:

NJ TRANSIT will continue to coordinate with the public and agencies throughout the environmental and design phases of the project.

PROJECT SUPPORT AND OPPOSITION

DEIS COMMENTS

Project Support

Comment 423-D:

Many commenters stated their support for the ARC project and its potential to enhance public transit opportunities and provide additional transit capacity between New York and New Jersey. The project is long overdue and should be expedited to safeguard the continued economic growth of the region. (*34th Partnership2 1T, 34th Partnership3 1T, ABNY 1T, NJ AFL CIO 1T, NJ AFLCIO 1L, ASCE 1L, Amtrak 1E, Bergen Freeholder 1T, Building Trades 1T, Carpenters 1T, CB4 1L, CB4 Pedestrians 1T, Congressman Pallone 1L, Congressman Sires 1T, Council Quinn 1T, Davenel 1T, Doctoroff 1L, DVARP 1L, General Contractors 1E, Getz 1T, Hale 1L, HCDP 1T, HCIA 1T, Hotel NYC 1L, HRPT 1L, Hudson Building 1T, Hudson County Central Labor 1T, Hudson County Engineering 1L, Lalevee 1T, Leiper 1L, Local 825 IVOE 1T, Macy's 1T, MBP Stringer 1T, May 1T, Mayor Bollwage 1L, Mayor Choi 1L, Mayor Elwell 1T, Mayor Sarlo 1L, Mayor Toress 1L, Meadowlands COC 1T, Middlesex Dept of Planning 1L, Middlesex TCC 1L, NJ Alliance 1T, NJDOT 1L, NJLECET 1T, NJLM 1L, NJLM2 1L, NJLWD 1L, NJRCC 1T, NJ Smart Growth 1L, North Jersey Transit 1L, NRBP 1T, NYBC 1T, NYCCLC 1T, NYC Transportation Committee 1T, NY for Parks 1L, NYLCV 1T, NYP&R 1L, NYS AFL CIO 1L, O&M Freeholders 1T, Partnership 1L, Raleigh 1T, Real Estate NY 1T, Reilly 1E, Rockland TAB 1L, RPA 1T, RVRC 1T, Senator Clinton 1T, Senator Duane 1T, Senator Menendez 1T, Senator Lautenberg 1T, Sierra 1E, Sierra NJ 1T, Sierra NJ 4T, Somerset Freeholders 1L, Stanford 1T, Thompson 1E, Tri-State 1T, Tri-State 2 1T, UA Plumbers 14 1T, United Transportation 1T, USHG 1L, US Rep Nadler 1T, Voorhees 1L, Wells 1T, Woolley 1T)*

Response:

The comments are acknowledged.

Comment 424-D:

I am pleased that NJ TRANSIT and the Federal Railroad Administration are conducting a parallel DEIS to remove the bottleneck of the Portal drawbridge over the Hackensack River. This ancillary project will assure that ARC can fulfill its expectations. (*Voorhees 2L*)

Response:

The comment is acknowledged.

Comment 425-D:

It is very important that the underground network be revised and that this particular station [proposed 34th Street Station] be a keystone in doing that. It is a phenomenally valuable byproduct for anyone coming into Manhattan and wants to go from a PSNY train to the 6th Avenue subway, having that new accessibility for value. (*Voorhees 1T*)

Response:

The comment is acknowledged. NJ TRANSIT is committed to working with NYCDCP and NYCDOT to develop a pedestrian plan for the area.

PROJECT SUPPORT AND OPPOSITION (CONTINUED)

DEIS COMMENTS (CONTINUED)

Project Support (continued)

Comment 426-D:

The DEIS extensively examines and describes the proposed project and sufficiently covers meaningful issues. We have found that earlier Federal Railroad Administration (FRA) comments and concerns have been addressed sufficiently in this document. (*FRA 1L*)

Response:

The comment is acknowledged.

Comment 427-D:

For Rockland County the ARC project is far more environmentally friendly, cost effective, and politically feasible than the alternative under study of a new cross-county and Tappan Zee Hudson River rail crossing connecting south on Metro North into Midtown Manhattan. (*Leiper 2L*)

Response:

The comment is acknowledged.

Comment 428-D:

I strongly support construction of the trans-Hudson Express (THE) Tunnel envisioned in the Access to the Region's Core Project. I also endorse the proposal outlined in the DEIS and other project documents to build a railroad station serving the West Side of Manhattan under West 34th Street between Herald Square (Broadway and 6th Avenue/Avenue of the Americas) and Eighth Avenue. (*NJ ARP 1T*)

Response:

The comment is acknowledged.

Comment 429-D:

We believe that the ARC project's environmental benefits are important. The most obvious environmental benefits of the project relate to projected decreases in air pollutants, based on the reduction in automobile trips in our regional area. The proposal for the Kearney Yard site would provide a welcome re-use of the old industrial property. (*NJDEP2 1L*)

Response:

The comment is acknowledged.

Comment 430-D:

The New Jersey General Assembly resolution expresses support for various public transportation projects, namely, the trans-Hudson Express (THE) Tunnel, the Northern Branch Passenger Rail restoration project, and the implementation of new technologies of diesel-multiple-unit vehicles and dual powered locomotion in providing passenger rail service. (*NJ General Assembly 1L*)

Response:

The comment is acknowledged.

PROJECT SUPPORT AND OPPOSITION (CONTINUED)

DEIS COMMENTS (CONTINUED)

Project Support (continued)

Comment 431-D:

I am pleased that the project will remove several sidewalk entrances along West 34th Street that often block pedestrian traffic in that area. By creating new entrances and moving others into storefront locations, this project can greatly improve the pedestrian experience and flow along this highly used corridor. (*Senator Duane 2T*)

Response:

The comment is acknowledged.

Comment 432-D:

I am pleased the project will not only reduce congestion on our roads, but also that the expanded rail station, with its direct underground connections to the subways, will improve pedestrian flow as well. (*Senator Duane 3T*)

Response:

The comment is acknowledged.

Comment 433-D:

We are convinced that building the MOM Rail Line is the answer to relieving congestion. The more time we spend studying the project, the more we are convinced that this is the right project in a region where it is needed most and now is the time. The advancement of THE Tunnel project presents a unique opportunity to make this much needed project a reality. (*O&M Freeholders 2T*)

Response:

The comment is acknowledged.

Comment 434-D:

EPA is supportive of public transportation projects because of their potential to improve air quality, reduce traffic congestion, and provide opportunities for energy conservation. They noted that this particular project would compliment recently completed and proposed improvements to NJ TRANSIT's commuter rail network. (*EPA 1L*)

Response:

The comment is acknowledged.

PROJECT SUPPORT AND OPPOSITION (CONTINUED)

DEIS COMMENTS (CONTINUED)

Project Opposition

Comment 435-D:

One commenter stated a new two-track tunnel is a "spectacular waste." (*Sailfast* 1E)

Response:

The comment is acknowledged.

Comment 436-D:

"Whether by error or intent, NJ TRANSIT has created a document that misleads and/or confuses the reader, and raises a question regarding the degree of faith that can be placed in the document's overall honesty and objectivity." (*May 4T*)

Response:

The comment is acknowledged.

Comment 437-D:

One commenter stated the ARC project would not solve present problems, and in fact creates new ones. (*Trip 2 Work 1T*)

Response:

The comment is acknowledged.

PROJECT SUPPORT AND OPPOSITION (CONTINUED)

SDEIS COMMENTS

Project Support

Comment 438-S:

Many commenters stated their strong support for the ARC project. Expansion of New Jersey's public transportation capacity will have a great impact on the region's environment and economic growth. The ARC project will offer more mobility options and will allow travelers to not be dependent on their automobiles. (*34th Partnership4 1T, ACECNJ 1L, AGCofNJ 1T, AmerCounEngineeNY 1T, AssocforBetterNY 1T, CB5 1L, Con Edison2 1L, DarlingtonP 1E, Davenel2 1L, Davenel2 2L, Davenel2 3L, EssexCounty 1L, General Contractors2 1T, HCBOCF 1T, Hudson County Central Labor2 1T, HunterN 1T, HYDC2 2L, Local14 1T, Macy's2 1T, MBP2 1L McGuireM 1T, MonmouthCountyPlBd 2L, MoynihanStVenture 1T, MoynihanStVenture 2T, MTA2 1L, MTA2 1T, NewarkDD 1L, NJ AFL CIO2 L, NJ Alliance2 1T, NJ LECET2 1T, NJ Society for EED 1T, NJBIA 1T, NJCommerceComm 1T, NJFuture 1T, NJIT 1T, NJMeadowlandsCom 1T, NJRCC 1T, NJRepPallone 1T, NJRepPascrell 1T, NJSEA 1L, NJSEA 1T, NJStateCommerce 1T, NYBC2 1T, NYC Council 1T, NYStateAssem 1T, OCBOCF 1L, PATH 1L, PCAC2 3T, PCAC3 1E, PlanSmartNJ 1T, PriceB 1T, PruCenAEG 1T, RBPTransCouncil 1T, REBNY 1T, RocklandCE 1L, RPA2 1T, RPA3 1T, RVRC 1L, Senator Clinton2 1T, Senator Lautenberg2 1T, Senator Menendez2 1T, Sierra3 1T, SmartGrowth 1L, SomersetPD 1L, SomersetPD2 1T, Tri-State2 1T, Union 1L, USRep 1T, UTCA 1T, Voorhees2 1T, Voorhees3 1L*)

Response:

The comments are acknowledged.

Project Opposition

Comment 439-S:

"This is a project that was bad for the riders, even when there might have been money to pay for it. It is an even worse idea now, as our state is running into hard times." (*Lackawanna5 33L*)

Response:

The comment is acknowledged.

Comment 440-S:

"The SDEIS asserts a variety of conclusions about the supposed lack of any significant environmental impacts that are unsupported by any study or analysis. The SDEIS is based upon conclusory assertions of no project impacts that lack factual submission." (*C/S2 10E*)

Response:

The DEIS, SDEIS, and FEIS disclose the full range environmental impacts and requisite mitigation measures with respect to the ARC project. The analysis contained within such documents has been prepared consistent with NEPA requirements.

Comment 441-S:

EPA has rated the SDEIS as EC-2 indicating environmental concerns and insufficient information. (*EPA2 11L*)

PROJECT SUPPORT AND OPPOSITION (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Project Opposition (continued)

Response:

The EPA rating contained in the April 28, 2008 correspondence related to: wetlands; landfill disruption; Kearny Yard/Koppers Coke: air quality; construction; and cumulative impacts are addressed in the FEIS as follows:

- Wetlands – the acreages of each type of wetland impacted are mapped, and appear in Appendix 4.8. Mitigation plans for impacts to wetlands and open water are included in Sections 4.8 and 5.8. Crossings of Penhorn Creek and their respective impacts and the means to minimize and mitigate them are described in Sections 4.8 and 5.8. Cumulative effects of wetlands for the Build Alternative and other projects are described in Sections 4.18 and 5.18.
- Landfill Disruption – NJ TRANSIT will purchase 31 acres of the Malanka Landfill, and requirements for preparation of a closure plan are included in Sections 4.12 and 5.12. Based on soil borings during PE, the type of contaminants in the landfill are described in Section 5.12. Construction methods to be used in the landfill are described in Section 5.1. Reference to requirements for a Landfill Disruption Permit appears in Section 5.12.
- Kearny Rail Yard/Koppers Coke – the on-going remediation of the Koppers Coke site by Beazer East and HCIA is documented in Section 4.12. This information includes a summary of the most recent proposed remedial activities, as contained in a permit application submitted to NJDEP in December 2007. The relationship of contamination of the Koppers Coke property and the Standard Chlorine property is described in Section 4.12. The effect of soil compression relative to the placement of fill atop the remediated Koppers Coke site during Kearny Rail Yard construction is described in Sections 5.9, 5.11 and 5.12.
- Air Quality – Based on further coordination with NYSDEC and their $PM_{2.5}$ SIP update process, and additional analysis of traffic and atmospheric conditions, FEIS Section 5.6 has been updated to describe the relationship between future conditions at the Twelfth Avenue construction site compared to the location of the air pollutant monitor in Manhattan (East 57th Street) that exhibits the highest $PM_{2.5}$ background level. Based on this information, the predicted 0.16 $\mu g/m^3$ increase at the Twelfth Avenue site would be added to a background level more than 0.16 $\mu g/m^3$ below the 15.0 $\mu g/m^3$ standard; therefore, no worsening of an existing violation, and no impact, would occur.
- Construction – The Northern Branch is a NJ TRANSIT initiative that would introduce passenger rail service (with diesel multiple-unit vehicles [DMU]) in Bergen and Hudson Counties, NJ on an existing freight line. The project is in the DEIS stage and currently includes two optional Build Alternatives, DMU and extension of the Hudson-Bergen LRT. This project has independent utility and logical termini, proposed for running from Tenafly to North Bergen, where it would connect to the Hudson–Bergen LRT for service along the Hudson River Waterfront. The proposed project, as it is being assessed by NJ TRANSIT in a separate FTA-sanctioned EIS process, does not include a proposed connection to the Build Alternative tunnels, or the use of dual-power rail vehicles that would allow the service to operate in the proposed Build Alternative tunnels to Manhattan. Therefore, until such time as the proposed line would be extended to the proposed wye cavern connection, or dual-power vehicles would be purchased for use on the Northern Branch, this initiative and the Build Alternative are considered separate independent projects, and no specific analysis of indirect effects of the Northern Branch in the ARC FEIS is warranted.
- Cumulative Impacts – such impacts of the Build Alternative and the Portal Bridge Capacity Enhancement Project are included in FEIS Sections 4.18 and 5.18, and in specific responses to comments in Chapter 18.

PROJECT SUPPORT AND OPPOSITION (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Project Opposition (continued)

Comment 442-S:

"My other concerns, outside of the change in schedule and costs, are clearly seen in Table 2-2. I believe that after some of the comments, which have not been seen by the public, in the DEIS Review Process and some Preliminary Engineering that Table 2-2 shows that short term environmental and historic concerns, also not documented in the Supplemental, and the simplified operations during construction have resulted in the long-term costly limited capacity for growth. The Supplemental Draft Environmental Impact Statement shows that the earlier impacts are being "eliminated" to avoid short term impacts with serious long term difficulties." (*Raleigh2 2L*)

Response:

The comment is acknowledged.

Comment 443-S:

"We strongly oppose the tunnel project as currently planned." (*NatlAssRailPas 1T*)

Response:

The comment is acknowledged.

Comment 444-S:

"I'm here in opposition to the Supplemental DEIS which was published on March 14th. I'd ask that this record reflect my opposition to this on behalf of my client Meyers Parking Garage. I submit that this report is legally insufficient. It is inadequate in the manner in which it details certain things, particularly with respect to my client's site. This document fails to disclose, with any specificity, the treatment of my client's facility." (*Grifa2 1T, Grifa2 2T*)

Response:

The comments are acknowledged. The DEIS, SDEIS, and FEIS disclose the full range environmental impacts and requisite mitigation measures with respect to the ARC project. The analysis contained within such documents has all been prepared consistent with NEPA environmental requirements and requirements for notification.

Subsequent to the release of the SDEIS, the Optional 35th Street Fan Plant site (Meyers Parking Garage) between Eighth and Ninth Avenues was eliminated. An ADA Access/Emergency Personnel Access elevator entrance for employee use only would be constructed within the southwestern corner of the Meyers Parking Garage. The long-term impact of this facility is limited to the displacement of approximately 24 off-street parking spaces within the parking study area, with more than 13,300 parking spaces remaining.

PROJECT SUPPORT AND OPPOSITION (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Project Opposition (continued)

Comment 445-S:

"I wish to express my extreme disappoint in the direction that Access to the Region's Core (ARC) has taken." (*Hale2 1L*)

Response:

The comment is acknowledged.

Comment 446-S:

"The Lackawanna Coalition and the organizations allied with it unanimously believe that the ARC project as currently proposed should not be built. We believe that the project as currently is so seriously flawed that a thorough redesign is required. Only after such a significant redesign of the project could a new project be formulated in such manner that it would actually improve mobility and access to Midtown Manhattan for rail riders from new Jersey and elsewhere. We note that the political, labor and business leaders of the community have gone on record as favoring increased rail capacity into Manhattan. We agree that his is a worthy goal, but we cannot agree that the proposed project is the appropriate vehicle for delivering additional rail capacity. We urge that the project as presently constituted be rejected, so that an improved project can be negotiated between all interested parties, including the representatives of the rail riders. We are confident that the project can be redesigned and improved, and the benefits of the original ARC project can be restored." (*Lackawanna10 1L, Lackawanna10 11L*)

Response:

The comment is acknowledged.

Comment 447-S:

"The City of Hoboken opposes the routing of the ARC Project described in the SDEIS." (*HC2 1L*)

Response:

As stated in the response to DEIS Comment 2-D, the ARC DEIS, and the previous Major Investment Study, provided opportunities for the public to identify multi-modal alternatives for improving access into midtown Manhattan, consistent with the purpose and need for the project as described in the FEIS Chapter 1. As shown in Appendix 2, the ARC MIS identified 137 multi-modal alternatives for improving access into midtown Manhattan. Among these alternatives, a routing to Midtown via Hoboken and tunnel alignments north of West 34th Street were identified during the MIS but were screened from further consideration.

MISCELLANEOUS

DEIS COMMENTS

Comment 448-D:

One commenter stated the next Executive Director of NJ TRANSIT should turn George Warrington's vision of through service from South Jersey to North Jersey via Philadelphia into reality. (*DVARP 2L*)

Response:

This service improvement is beyond the scope of the ARC project. This comment has been forwarded to the appropriate NJ TRANSIT department.

Comment 449-D:

One commenter stated New York City gains significant revenue resulting from their jobs and activity in NYC for little or no investment or risk of overruns on its part. A better State investment would be to encourage new jobs along the existing rail routes. The increase in single seat availability to commuters in the Northern townships has a significant environmental impact as it directly encourages new home building in an already over impacted watershed area serving the downstate cities. There are many brownspaces in NJ that can be recycled for places of employment and this redistribution of work form over subscribed areas like the "core" can reduce the transportations peak needs to the capacity or just small increased thereto. The extra cost would tend to dissuade buying houses in the outlying areas and may lead to a repopulation along the inner stations which are already electrified. People may also reverse commute or jobs would move from the present core to the areas along the electrified lines. (*Helm 8E*)

Response:

The comment is acknowledged.

Comment 450-D:

One commenter stated a spread out of the core to Newark, Patterson, Hoboken, Phillipsburg et al, would considerably enhance security as none of the targets are attractive as the current core NYC or would be crippling to the whole economy if damaged for a period of time. (*Helm 9E*)

Response:

The comment is acknowledged.

Comment 451-D:

One commenter discussed a new service which was recently negotiated with the PATCO High Speed Line in South Jersey and would like to discuss this safety/ambassador/concierge service with NJ TRANSIT. (*Service Group 1E*)

Response:

This comment has been forwarded to the appropriate NJ TRANSIT department.

Comment 452-D:

One commenter stated the "rides the Montclair-Boonton Line for Lake Hopatcong and the trains are always late, have mechanical problems and are held together by duct tape and bubble gum. The equipment is horrible and there are never enough seats on the 6:32 AM train. Improve the service, give us cleaner trains and employees who are capable of announcing the stops and then raise the fare". (*Rodriguez 1E*)

MISCELLANEOUS (CONTINUED)

DEIS COMMENTS (CONTINUED)

Response:

The comments regarding overall conditions on the line have been forwarded to the appropriate NJ TRANSIT department.

Comment 453-D:

One commenter stated seniors and handicapped riders often do not have access to the handicapped seats on NJ TRANSIT buses because other people are sitting there. The signs that indicate the seats are to be reserved for seniors and handicapped riders are very small and not easily seen. NJ TRANSIT should do something to make transit easier for handicapped and seniors to ride by keeping the seats clear. (*Tigane 1T*)

Response:

The comments have been forwarded to the appropriate NJ TRANSIT department.

Comment 454-D:

One commenter stated the basic peak fares be increased by the presently proposed 9% but also a toll (similar to the PANYNJ toll on bridges and tunnels) on single seat access to PSNY as it is really a premium service. (*Helm 13E*)

Response:

The comments have been forwarded to the appropriate NJ TRANSIT department.

Comment 455-D:

One commenter stated the standard abbreviation in the railroad industry for this location is "NYP", standing for New York, Pennsylvania Station. We recommend the DEIS utilize the standard abbreviation. (*Madden 1L, NYSDOT 1L*)

Response:

The acronym "PSNY" for Penn Station New York has been applied throughout the ARC DEIS, SDEIS and FEIS. It is noted at the beginning of the EIS Chapters and continued in the Glossary (FEIS Chapter 16).

MISCELLANEOUS (CONTINUED)

SDEIS COMMENTS

Comment 456-S:

There is no question that the proposed expansion, revitalization and improvement of New York City's facilities at Pennsylvania Station will be beneficial. Only time will tell if it will be worth the cost. The city was unable to maintain the original station and transportation hub deeded to them in the thirties. They are unable to maintain the current underground structure in a satisfactory manner; therefore hope for future efforts are nil. The solution for increased throughput across the Hudson River is more efficient scheduling and better cooperation between Amtrak, Metro North, and NJ TRANSIT combined with longer trains. The solution for increased throughput across the Hudson River is to ensure the environmental friendliness of the plan by allowing only NYT&LC Medallion Taxis and Limousines to operate in Manhattan between 5AM and 7PM. (*Herbert 1L, Herbert 2L, Herbert 4L*)

Response:

The comment is acknowledged.

Comment 457-S:

One commenter asked about the O-D's of transit users. An example is the heavily used Princeton Jct. station or the proposed future M-O-M line. They asked how many split off and are already forced to transfer to PATH. (*Ludasi 4E*)

Response:

The comment is acknowledged. Available trans-Hudson ridership data is contained in FEIS Section 3.1.

Comment 458-S:

Plans are also envisioned beyond Access to the Regions Core's Tunnel by connecting PSNY to Grand Central. Presently the Long Island Rail Road will be able to access Grand Central too. When the Atlantic Yards tracks in Brooklyn are extended to World Trade Center, then the LIRR will be able to get you to the three Core Stations in NYC. When the ARC extension as mentioned is completed NJ TRANSIT will be able to get you to the three Core Stations in NYC. When the Tappan Zee Bridge is completed Metro North, West of Hudson will be able to get you to the three Core Stations in NYC. Then if a tunnel between Port Chester and Glen Cove Long Island is completed to join up at Jamaica Station, then Connecticut DOT Rail LIRR will be able to get you to the three Core Stations in NYC. Not to mention the four Core NYC Airports. (*VogelK 1E*)

Response:

The comment is acknowledged.

Comment 459-S:

Three proposed alternatives to provide passenger rail services to the Monmouth, Ocean, Middlesex region are currently being studied by NJ TRANSIT in the MOM Rail Project DEIS. A few years ago, the MOM DEIS was expanded to consider the impact that THE Tunnel, and the resultant capacity into New York City, would have on the MOM Rail Project. It was found that THE Tunnel project would enable the MOM Rail Project to use new technology, the Dual Mode Locomotive that would allow for one seat ride to NYC which would attract significantly more riders and would provide a much faster commute. (*MonmouthCountyPlBd 1L*)

Response:

The comment is acknowledged.

MISCELLANEOUS (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Comment 460-S:

The SDEIS uses 2030 estimates, while the DEIS uses 2025 estimates. This makes analyzing the differences in benefits and negative impacts of the two different project designs used for these EISs particularly difficult. The DEIS data should have been converted to the Federal Transit Administration (FTA) required 2030 standard and its costs refined. For comparison purposes, the future costs of upgrading the station capacity by 25% should be illustrated in the SDEIS. (*CB42 9L*)

Response:

The comment is acknowledged.

Comment 461-S:

Before any money is spent on new infrastructure, we need to inter-connect the commuter rail systems and the subway systems. For example, the PATH can be connected to NYCT A Division. (*Ludasi 1E*)

Response:

Providing these types of rail connections are beyond the ARC scope. The comment is acknowledged.

Comment 462-S:

If 97% of the transfer volume is eliminated, NJ TRANSIT should consider closing the transfer station at Secaucus. The Secaucus loop will be a very expensive project that will merely duplicate the existing transfer connection at the Lautenberg Station. (*Lackawanna5 19L, WhiteA 1E*)

Response:

The Frank R. Lautenberg Station is currently used not only by NJ TRANSIT riders transferring for service to Manhattan, but also by riders destined to points west and south. In 2030 with ARC, this reverse commute demand will still exist and the need for the transfer station will remain. This reverse commute demand will expand because there will be more frequent service on all of the lines serving Frank R. Lautenberg Station, so connections will take less time and will be more attractive.

Comment 463-S:

I can identify twelve heavy rail commuter routes operated by NJ TRANSIT. Main and Bergen County Lines, Port Jervis, Pascack Valley, Montclair, Boonton, Morristown, Gladstone, Raritan Valley, Northeast Corridor, North Jersey Coast, and Atlantic City. Two of these (Atlantic City, Raritan Valley) do not pass through Secaucus. It appears that the Atlantic City line wasn't counted at all. (*Lackawanna5 3L*)

Response:

The Atlantic City Line was not included in the discussion since it does not operate within the ARC project area.

Comment 464-S:

The discussion of one-seat ride: there is another very fundamental reason why most of these lines don't go to PSNY—the tracks don't go there, and there is no connection to do so. (*Lackawanna5 4L*)

MISCELLANEOUS (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

It is correct that some lines such as the Main/Bergen County, Pascack Valley, Port Jervis and Raritan Valley lines do not go to PSNY because there is no connection. ARC will provide this connection to allow for direct service to Manhattan. However, there are several lines (NJCL and Montclair-Boonton) that have connections for service to Manhattan; however, since their outer limits are not electrified, diesel service cannot continue through the tunnels to New York. The ARC dual-power locomotives will allow for direct service on these lines.

Comment 465-S:

Multiple commenters requested additional time beyond the April 28, 2008 deadline to submit written comments. (*KylerL 1T, KylerL2 1L, May3 1E*)

Response:

In a letter dated April 25, 2008 sent to Ms. Kyler (McCarter & English) and to Mr. William Lay (Attorney at Law), NJ TRANSIT provided a 15-day extension, with the comment period ending May 13, 2008. The extension was made in consultation with the FTA. All comments received by close of business May 13, 2008 will be included in the public comment record.

Comment 466-S:

Several commenters requested NJ TRANSIT to release any additional information to the public that would help them understand why Alternative G was eliminated and provide the public an opportunity to comment on this information once it is disclosed. (*EmpStatePasAssoc 4T, IRUM2 4T, Lackawanna8 7T, Lackawanna8 8T, NatlAssRailPas 2E, NatlAssRailPas 3E, NatlAssRailPas 4T, NJ ARP4 5T, NJ ARP4 6T, PCAC2 5T*)

Response:

Alternative G was eliminated at the conclusion of the MIS in a joint decision between NJ TRANSIT, the MTA, and PANYNJ. The primary reason for this decision was that Alternative G had less rail capacity into New York City than other alternatives being considered. Alternative G had the capacity for 34 trains per hour into New York City. Alterative P, which was advanced to the EIS, had a capacity of 48 trains per hour. This is explained in the MIS Summary Report, which was released in 2003. More detailed background reports were never completed by the study partners for release to the public.

Comment 467-S:

Multiple commenters requested copies of any studies that have been conducted relating to the impact on the Manhattan Center from the construction of an optional fan plant on the adjacent property (323 West 34th Street – the Meyer Parking property), or in the alternative, the construction of an ADA/employee elevator access on the adjacent property. They also requested copies of any traffic study that have been performed analyzing the impact on the Manhattan Center from trucks or other vehicular traffic during construction of the optional fan plant or elevator access. (*KylerL2 2L*)

MISCELLANEOUS (CONTINUED)

SDEIS COMMENTS (CONTINUED)

Response:

A package of materials was sent to Laura Kyler, McCarter & English, and William Lay, Attorney-at-Law on April 22, 2008 which included a copy of the ARC Noise and Vibration Technical Report, plans and profiles for the proposed ARC project in the vicinity of the Manhattan Center and New Yorker Hotel, and information from SDEIS Section 3.6. Since the detailed traffic model output was too voluminous to send, an invitation was extended to visit the ARC office in Newark to review the output. Subsequent to the release of the SDEIS, and the transmittal of the materials, the Optional 35th Street Fan Plant site (Meyers Parking Garage) between Eighth and Ninth Avenues was eliminated. An ADA Access/ Emergency Personnel Access elevator entrance for employee use only would be constructed within the southwestern corner of the Meyers Parking Garage site.