Chapter 23: Response to Comments on the SDEIS[1]

A. INTRODUCTION

This chapter summarizes and responds to all substantive comments on the Supplemental Draft Environmental Impact Statement (SDEIS) published in March 2003 for the Second Avenue Subway. Public review for the SDEIS began on March 2003, with publication and distribution of the document. The Metropolitan Transportation Authority (MTA) held two public hearings to receive comments on the document: on May 12, 2003 in the auditorium of the Alexander Hamilton U.S. Custom House at One Bowling Green (Lower Manhattan); and on May 13, 2003, in the Hecksher Auditorium at El Museo del Barrio, 1230 Fifth Avenue (at 104th Street in East Harlem). The public comment period remained open until June 10, 2003.

The SDEIS was circulated to involved and interested agencies and other parties and posted on the MTA's website, and notice of its availability and the public hearing were published in the *Federal Register* on April 11, 2003. To advertise the public hearing, MTA published notices in the *New York Post, Hoy, Amsterdam News, Chinese World Journal,* and *New York Daily News*. In addition, information on the public hearing was posted on the MTA's website, a notice of public hearing was mailed to all public officials and interested parties in the MTA service area; and a press release announcing the hearing was sent to all media outlets in the area. Bilingual signs announcing the hearing were posted in all MTA New York City Transit (NYCT) subway stations and on some buses. Brochures were handed out in major Manhattan East Side NYCT subway stations.

This chapter of the Final Environmental Impact Statement (FEIS) identifies the organizations and individuals who commented on the SDEIS, and then summarizes and responds to their comments. It considers comments made at the public hearings on May 12 and 13, 2003, and received through August 21, 2003. Comments received after the close of the public comment period on June 10, 2003 were also considered and are reflected in this chapter. Section B, below, lists all individuals and organizations that commented on the SDEIS. Following each commenter's name is a list of the comments made, referenced by comment number. Section C contains a summary of all comments made and a response to each of those comments. These summaries convey the spirit of the comments made, but do not quote the comments verbatim. The full text of the comments received from federal resource agencies—the U.S. Department of the Interior (DOI) and the U.S. Environmental Protection Agency (EPA)—are included at the end of this chapter. The full text of all other public agency comments, written public comments, and hearing transcripts is available for public review upon advance request to MTA Community Affairs.

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

The comments are organized by subject area, as follows:

- SDEIS process and public participation
- Project support and opposition
- Project cost and financing
- Project definition
- Construction issues
- Transportation impacts
- Social and economic conditions
- Displacement and relocation
- Historic and archaeological resources
- Air quality
- Noise and vibration
- Infrastructure and energy
- Contaminated materials
- Natural resources
- Coastal zone consistency
- Health and safety
- Environmental justice
- Indirect and cumulative effects
- Mitigation
- Miscellaneous

Following each comment is a list in parentheses of people or organizations that made the comment. If multiple comments were made on the same subject, they are summarized into a single comment with all commenters listed afterward.

B. LIST OF COMMENTERS

RESOURCE AGENCIES

1. U.S. Department of the Interior, Willie R. Taylor, Director, Office of Environmental Policy and Compliance, letter of July 2003. (Comments 218, 266, and 267)
2. U.S. Environmental Protection Agency, Robert W. Hargrove, Chief, Strategic Planning and Multi-Media Programs Branch, letter of June 10, 2003 (Comments 10, 240, 241,242, 243, 244, 245, 246, and 275)
3. New York State Department of State, Bridget R. Kennedy, Coastal Resource Specialist, letters of April 21, 2003 and June 24, 2003 (Comments 268, 269, 270, 271, and 272)
4. New York Metropolitan Transportation Council, Jan Khan, email of April 3, 2003 (Comment 4)
5. New York City Department of Parks and Recreation (DPR), Joshua Laird, letter of June 10, 2003 (Comments 193, 194, 195, 196, 197, 198, 200, 201, 202, 203, 204, 205, 206, 207, 209, 210, 211, 213, 214, 215, 216, 217, and 276)
6. New York City Department Of Transportation, Jay Jaber, P.E., Assistant Commissioner, letter of May 20, 2003 (Comment 146)

ELECTED OFFICIALS

7. Honorable Jonathan Bing, Member of the New York State Assembly, spoken testimony (presented by Jonathan Federico) May 13, 2003 (Comments 11, 14, 15, 16, 19, 24, 25, 27, 28, 30, and 39)
8. Honorable C. Virginia Fields, Manhattan Borough President, written testimony, May 13, 2003, spoken testimony (presented by Rick Muller) May 12, 2003, spoken testimony May 13, 2003 (Comments 7, 11, 12, 14, 15, 22, 23, 24, 25, 28, 29, 30, 37, 98, 112, 117, 124, 127, 143, and 194)
9. Honorable Betsy Gotbaum, Public Advocate for the City of New York, testimony of May 12, 2003 (Comments 11, 23, and 71)
10. Honorable Liz Kreuger, New York State Senator, spoken testimony (presented by Dan Steinberg) of May 12, 2003 (Comments 7, 11, 14, 15, 24, 26, 30, 39, 124, 153, and 211)
11. Honorable Seymour Lachman, New York State Senator, letter of June 10, 2003 (Comments 51, 98, and 124)
12. Honorable Margarita Lopez, Member of the New York City Council, spoken testimony (presented by Juan Pagan) of May 13, 2003 (Comments 23, 30, 71, 105, 153, 154, 157, and 211)
13. Honorable Carolyn Maloney, U.S. Representative, written testimony, May 12 and 13, 2003; spoken testimony May 12; spoken testimony (presented by Jessica Fox) of May 13, 2003 (Comments 11, 14, 15, 18, 24, 28, 30, 84, 106, 110, 111, 130, 142, and 211)
14. Honorable Marty Markowitz, Brooklyn Borough President, written testimony, May 12, 2003 (Comments 30, 106, 116, 122, and 132)
15. Honorable Steve Sanders, Member of the New York State Assembly, written testimony, May 12, 2003 (Comments 7, 11, 142, 145, 153, 154, 162, 192, and 252)
16. Honorable Sheldon Silver, Speaker of the New York State Assembly, written testimony, May 12, 2003, spoken testimony (presented by Yvonne Morrow), May 12, 2003 (Comments 153, 181, and 194)
17. Honorable Scott Stringer, Member of the New York State Assembly, spoken testimony (presented by Elaine Colon), May 12, 2003 (Comments 7, 10, 11, 15, 22, 24, 28, 30, and 106)
18. Honorable Anthony Weiner, U.S. Representative, spoken testimony of May 12, 2003 (Comments 11, 106, and 153)

COMMUNITY BOARDS

19. Manhattan Community Board 2 (CB2), Resolution dated March 25, 2003 (Comments 11, 17, 23, 30 and 35)
20. Manhattan Community Board 3 (CB3), letter dated June 27, 2003 (Comments 71, 154, 159, and 221)
21. Manhattan Community Board 6 (CB6), Lou Sepersky, spoken and written testimony May 12, 2003 (Comments 7, 11, 143, 154, 158, 211, and 212)

22. Manhattan Community Board 6 Housing and Homeless Services Committee (CB6 HHSC), letter dated August 21, 2003. (Comments 222 and 223)
23. Manhattan Community Board 6 Public Safety and Human Rights Committee (CB6 PSHRC), letter dated August 21, 2003. (Comments 144, 160, 161, 211, 248, 249, 250, 252, 256, 258, 263, and 265)
24. Manhattan Community Board 8 (CB8), Barry Schneider, spoken testimony of May 13, 2003 (Comments 11, 24, 30, 39, and 122)
25. Manhattan Community Board 11 (CB11), David Givens, spoken testimony of May 13, 2003 (Comments 1, 7, 25, 99, and 140)
26. Manhattan Community Board 11 (CB11), Javier Llano, District Manager, spoken testimony of May 13, 2003 (Comments 8, 10, 11, 23, 25, 30, 140, 143, 161, 189, and 208)
27. Staten Island Community Board 3 (SI CB3), Environmental Committee, Gregory Markow, email of May 13, 2003 (Comment 134)

ORGANIZATIONS

28. Bowne Park Civic Association/Queens Civic Congress, John Cornelius, spoken testimony of May 12, 2003 (Comments 122 and 135)
29. Civitas, written testimony, May 12, 2003, T. Gorman Reilly, spoken testimony of May 13, 2003 (Comments 10, 11, 14, 24, 25, 92, 98, and 124)
30. Committee for Better Transit, Meredith Stanton, spoken testimony of May 12, 2003 (Comments 117, 122, 135, and 142)
31. Community Consulting Services, Brian Ketcham, Executive Director, spoken testimony of May 12, 2003 (Comments 14, 23, 63, 69, 132, 164, 165, 176, 190)
32. Community Consulting Services, Carolyn Konheim, email of April 15, 2003, FOIL request June 13, 2003 (Comments 166, 169, 170, 171, 172, 173, 174, and 175)
33. Con Edison, John Miksad, P.E., Vice President, Manhattan Electric Operations, letter of June 9, 2003 (Comments 83, 153, 259, 260, 261, and 262)
34. Dellux Technologies, Eveline Vinet, Business Development, email of April 25, 2003 (Comment 75)
35. Disabled in Action, Dorothy Williams-Pereira, spoken testimony of May 13, 2003 (Comments 71, 106, 122, and 135)
36. East Side Chamber of Commerce, Sidney Baumgarten, Chairman, Board of Directors, letter of May 6, 2003 (Comments 11 and 24)
37. East Sixties Neighborhood Association (ESNA), Judith Schneider, spoken testimony of May 13, 2003 (Comments 11, 24, 139, 153, 155, 156, 163, 186, and 257)
38. General Contractors Association, Francis McArdle, letter of June 11, 2003 (Comments 10, 11, 14, 24, and 140)
39. Institute for Rational Urban Mobility, George Haikalis, spoken testimony of May 12, 2003 (Comments 6, 14, 23, 31, 40, 58, 59, 60, 61, and 126)

40. International Union of Operating Engineers, Thomas Maguire, written testimony of May 12, 2003 (Comments 11, 14, 15, 24, 28, 30, and 153)
41. Metro East, Lou Sepersky, spoken testimony May 13, 2003 and letter of May 13, 2003 (Comments 7, 14, 15, 23, 30, 88, 127, 135, 139, and 145,)
42. Middle Collegiate Church, Rev. Gordon R. Dragt, Senior Minister, and Frank Malensek, emails of May 20, 2003 (Comment 255)
43. New York Eye & Ear Infirmary, Raymond Gearity, Director of Facilities Management, letter of June 6, 2003 (Comment 254)
44. Permanent Citizens Advisory Committee to the MTA /NYC Transit Riders Council (PCAC/NYCTRC), spoken testimony by Katherine Brower, May 13, 2003 (Comments 11, 14, 15, 16, 19, 23, 24, 30, 117, 142, 168, and 247)
45. Permanent Citizens Advisory Committee to the MTA (PCAC/NYCTRC), Ellyn Shannon, emails of May 2, 7, and 8, 2003, and spoken testimony, May 12, 2003 (Comments 11, 14, 15, 16, 20, 23, 24, 30, 117, 167, 168, 177, and 247)
46. Professional Archaeologists of New York City (PANYC), Lynn Rakos, Chair, PANYC Second Avenue Subway Committee, letter of June 5, 2003 (Comments 224, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239)
47. Queens Civic Congress, James Trent, spoken testimony of May 12, 2003 (Comments 39, 76, 93, 122, 129, 135, 139)
48. Regional Plan Association (RPA), Jeff Zupan, spoken and written testimony, May 12, 2003 (Comments 8, 11, 12, 14, 16, 25, 30, 37, 62, 97, 98,113, 123, 140, 141, and 191)
49. Regional Plan Association, Nicholas Ronderos, spoken testimony of May 13, 2003 (Comments 11, 12, 14, 16, 25, 30, 37, 53, 62, 97, 98, 123, 140, and 191)
50. Regional Plan Association, forwarding "East Harlem Community Link Initiative" (RPA/E. Harlem), a report of the East Harlem Community Design Workshop, May 18, 2002 (Comments 8, 25, and 100)
51. St. Philips Episcopal Church, Beatrice Thomlinson, spoken testimony of May 13, 2003 (Comments 88, 225, 2226, and 227)
52. Straphangers Campaign, Neysa Pranger, spoken testimony of May 13, 2003 (Comments 11, 14, 15, 24, 30, and 123)
53. Transport Workers Union Local 100, Ed Watt, written and spoken testimony, May 12, 2003 (Comments 11, 14, 30, 81, and 152)
54. Transportation Alternatives, Kit Hodge, spoken testimony of May 12, 2003 (Comments 11, 30, 37, 62, 113, 123, 140, and 141)
55. Women's City Club of New York, Ellie King, spoken and written statement to support testimony, May 12, 2003 (Comments 11, 14, 15, 19, 22, 24, 30, and 153)

INDIVIDUALS

56. Petition Supporting the Second Avenue Subway, 8 signatures (Comments 14, 16, and 19)
57. Barry Adler, spoken testimony of May 12, 2003 (Comments 33, 54, 132, 133, and 142)

58. Steve Adler, spoken testimony of May 13, 2003 (Comment 66)
59. Craig Allen, email of June 10, 2003 (Comments 42, 54, 97, 113, 125, 126, and 135)
60. Dominique Artur, email of May 16, 2003 and letter of May 16 (Comments 11, 14, 21, 23, 27, and 142)
61. Ron M. Aryel, M.D., M.B.A, letter of April 7, 2003 (Comments 11, 15, 19, 24, 42, 50, 71, 77, 108, 126, 135, 143, and 199)
62. Floyd Bell, letter of June 1, 2003 (Comments 16, 62, 94, and 135)
63. Eric Bernardez, email of April 29, 2003 (Comments 78 and 126)
64. Eric Bolden, email of June 10, 2003 (Comment 133)
65. Mikki Candy, email of May 24, 2003 (Comments 139, 219, 251, 264, and 273)
66. Patrick Michael Centolanzi, letters of April 22 and May 12, 2003, spoken testimony of May 12, 2003 (Comments 42, 122, 122, and 127)
67. Priscilla Chan, letter of May 2003 (Comments 23, 25, 98, and 274)
68. Jefferson Chase, letter and spoken testimony of May 13, 2003 (Comments 1, 36, 55, 56, 57, 92, 94, 95, 106, 110, 111, 112, 122, 126, 135, 139, and 190)
69. George Condoyannis, undated letter (Comments 85, 97, 101, and 129)
70. Florence Craddock, letter of May 9, 2003, spoken testimony May 12, 2003 (Comments 118, 153, 182, 184)
71. Florence Daniels, spoken testimony of May 12, 2003 (Comments 92, 104, 117, 135)
72. Aaron Donovan, email of April 22, 2003 (Comments 11 and 47)
73. elove@executivehealthexams.com, email of May 15, 2003 (Comments 109)
74. Yuki Endo, spoken testimony of May 13, 2003 (Comments 14, 16, 17, 23, 71, 91)
75. Steve Faust, spoken testimony of May 12, 2003 (Comments 10, 14, 22, and 149)
76. Richard Garey, email of May 21, 2003 (Comments 44 and 49)
77. David Paul Gerber, spoken testimony of May 12, 2003 (Comments 11, 126, 135, 139, 153)
78. Gerald Green, letter of April 2003 (Comments 39, 78, 133, and 177)
79. Phil Gong, email of April 9, 2003 (Comments 31, 33, 34, 59, 64, and 183)
80. Thegreatone98@mail.com, email of June 7, 2003 (Comments 42)
81. Richard Gualtieri, spoken testimony of May 12, 2003 (Comments 32, 55, 59, and 132)
82. Francis Hadaway, spoken testimony of May 12, 2003 (Comments 126 and 135)
83. Rick Hadsall, email of May 12, 2003 (Comments 43)
84. Antoinette Harris, spoken testimony of May 13, 2003 (Comments 59 and 90)
85. Mehedi Hassan, spoken testimony of May 13, 2003 (Comments 52, 54, 74, and 137)
86. Lewis Hitch, spoken and written testimony, May 13, 2003 (Comment 139)

87. Kim Johnson, email of May 2, 2003 (Comment unrelated to the Second Avenue Subway)
88. Pat Johnson, spoken and written testimony, May 12, 2003 (Comments 5, 10, 11, 12, 14, 24, 26, 31, 35, 117, 126, 135)
89. Harris Kalish, letter of June 2, 2003 (Comment 220)
90. Robert Koe, spoken testimony of May 12, 2003 (Comments 126 and 127)
91. Patrick Krass, email of April 6, 2003 (Comment 78)
92. David Kupferberg, letter (Comments 11, 51, 52, 120, 131, and 180)
93. Matthew Labunka, emails of April 6, 2003 (Comment 72)
94. Sergio Linietsky, spoken testimony of May 12, 2003 (Comment 70)
95. Dario Marotta, letter of May 14, 2003 (Comments 2, 3, 9, 54, 97, 122, 135, and 138)
96. Trudy Mason, spoken testimony of May 12, 2003 (Comments 35 and 39)
97. Marnie Mitchell, spoken testimony of May 12, 2003 (Comments 11 and 14)
98. Joseph Morciglio, spoken testimony of May 12, 2003, May 13, 2003 (Comments 42, 71, 92, 94, 103,106, 117, 120, 133,134, 135, 151, and 152)
99. Stephanie Olivero, email of April 4, 2003 (Comment 139)
100. Robert A. Olmsted, P.E., F.A.S.C.E, letter of May 23, 2003 (Comments 11, 42, 62, 106, 110, 111, 114, 116, 126, 127, 128, 132, and 139))
101. Robert Plautz, spoken testimony of May 13, 2003 (Comments 55 and 60)
102. purity@att.net, email of May 15, 2003 (Comment 139)
103. Raymond, letter of April 20, 2003 (Comment 126)
104. Khaseem Roberts, spoken testimony of May 12 and May 13 2003 (Comments 14, 89, and 126)
105. Alex Rojas, email of April 8, 2003 (Comments 76)
106. John Rozankowski, spoken testimony, May 12, 2003 (Comments 13, 49, 80, 82, 92, 97, 122, 135, and 138)
107. Fred Sahakian, spoken testimony of May 12, 2003 (Comments 37 and 151)
108. Joseph Saitta, letter, spoken testimony of May 13, 2003 (Comments 33, 67, and 187)
109. John Shachter, spoken testimony of May 12, 2003 (Comments 38, 52, 135, and 212)
110. Francis Sibilla, spoken testimony of May 12, 2003 (Comments 11 and 153)
111. Don Sinisi, email of May 15, 2003 (Comment unrelated to the Second Avenue Subway)
112. Simon Slor, email of May 4 and 8, 2003 (Comments 178)
113. Dorsey Smith, email of May 14, 2003 (Comments 140, 143, 219, and 253)
114. Lawrence Stelter, spoken testimony of May 13, 2003 and letter of June 13, 2003 (Comments 36, 42, 49, 51, 65, 77, 96, 102, 106, 107, 109, 112, 113, 114, 115, 116, 117, 119, 122, 126, 134, 140, 147, 148, and 150)

115. Keron Stewart, spoken testimony of May 13, 2003 (Comments 95, 121, 132, and 179)
116. Eric Strangeways, spoken testimony of May 12, 2003 (Comments 11, 48, 62, 106, and 152)
117. Randal Train, email of April 13, 2002 (Comment 45)
118. Larry Trontz, spoken testimony of May 12, 2003 (Comment unrelated to the Second Avenue Subway)
119. Susan Tsui, email of April 7, 2003 (Comment 71)
120. Alan Umlas, spoken testimony of May 13, 2003 (Comments 73, 79, 86, 87, and 95)
121. Mark Unger, email of April 4, 2003 (Comments 10)
122. Richard Updegrove, spoken testimony of May 12, 2003 (Comments 11, 49, 65, 135)
123. Joseph Wall, letter of May 10, 2003 and spoken testimony of May 12, 2003 (Comments 62, 122, 126, and 130)
124. Rodney Waterman, letter of May 2003 (Comments 39 and 134)
125. Kenneth Weinstein, letter of May 21, 2003 (Comments 46 and 62)
126. Michael Weltz, email of May 12, 2003 (Comments 139 and 142)
127. Leslie Wyche, spoken testimony of May 12, 2003 (Comments 37, 185, and 188)
128. Mr. X, spoken testimony of May 12 and May 13, 2003 (Comments 1,3, 13, 39, 41, 94, 103, 122, 129, and 135)

C. COMMENTS RECEIVED

SDEIS PROCESS AND PUBLIC PARTICIPATION

Comment 1: Commenters expressed pleasure or displeasure over the choice of the meeting locations and the decision to hold two hearings rather than one. (CB11/Givens, X, Chase)

Response: Two hearings were held for receiving public comments on the SDEIS—one in Lower Manhattan and one in East Harlem. In choosing these two locations instead of just one location, the intent was to make the public hearings as accessible as possible to residents, businesses, and other concerned parties throughout the study area. Further, both sites where the public hearings took place had greater capacity than the MTA Boardroom at 347 Madison Avenue, allowing more audience members to attend. Offering hearings on two dates makes it easier for those who might have a scheduling conflict on one date to attend a public hearing. People were welcome to attend both public hearings.

Comment 2: Why were Peter Kalikow and Lawrence Reuter not at the May 12 public hearing? Are they not interested in what the public has to say? (Marotta)

Response: Representatives from the MTA—including Douglas Sussman, Director of Government and Community Relations, and William Wheeler, Director of Special Project Development and Hearing Division, as well as Peter Cafiero, Director of Rail Service Design, Route and System Planning at NYCT—and many others attended both public hearings. Peter Kalikow and Lawrence Reuter are continually informed by their staff members of public comments on the Second Avenue Subway project.

Comment 3: Several people expressed displeasure about the hearing process, including concerns that no options remain and decisions have been made before the hearings are held, and dissatisfaction with the public hearing format, in which questions are not answered at the hearings. (Marotta, X)

Response: Because the Second Avenue Subway project is seeking federal funding, the project must undergo environmental analysis under the National Environmental Policy Act (NEPA). NEPA requires that no decision may be made to undertake or fund a project until the environmental review has been completed. A key step in the environmental review is publication of a Draft Environmental Impact Statement (DEIS) for public comment. Public hearings were therefore held to provide an opportunity for public comment on the Second Avenue Subway's SDEIS.

The SDEIS for the Second Avenue Subway describes many project elements that have not yet been finalized, such as the locations of entrances and ancillary facilities. Public input is an important consideration in the design work for the project. It is also important to consider that development of this project began with the 1999 Major Investment Study (MIS)/DEIS, which presented a wide range of options. Because of the strong public sentiment in favor of a full-length subway expressed during the public comment period on that DEIS, the project's design was revised to incorporate a full-length alignment.

Due to time constraints and the large number of registered speakers, questions from the public were not addressed in the hearing room. However, technical staff was available at the registration desk to answer procedural or substantive questions. In addition, all questions posed at the public hearing, or via email, mail or telephone during the public comment period are addressed in this chapter of the FEIS, "Response to Comments on the SDEIS." Furthermore, the public has been provided with many other opportunities for public input, prior to and subsequent to the public hearings.

Comment 4: The web page for the Second Avenue Subway study says that there are no public meetings scheduled at this time (as of April 3, 2003), but the public hearings have been scheduled for May 12 and 13. (Khan)

Response: Information about the public hearings was added to the MTA web page on April 4, 2003.

Comment 5: Why did there have to be a study of the Lexington Avenue Line conditions and why did we have to do an EIS all over again? Couldn't we have used the one from the 1970s and just pick up where we left off when the city went broke? (P. Johnson)

Response: As a project that is seeking federal funding, the Second Avenue Subway must undergo environmental study as required by the federal law known as the NEPA. An EIS was prepared under NEPA in the 1970s, but conditions in the study area have changed considerably since then, necessitating a new review. Further, the project's construction methodology and design are no longer the same as those to be used for the 1970s alignment, since construction technologies and rapid transit designs have advanced since then. For all these reasons, a new EIS is required by federal law. A supplement to the MIS/DEIS prepared in 1999 was needed because that document did not analyze the environmental impacts of a full-length alignment in detail.

Comment 6: More public participation and coordination of analysis and findings should occur, since the Lower Manhattan study was folded into the Second Avenue study. (Haikalis)

Response: The Second Avenue Subway project and the Lower Manhattan Access Study are two separate projects with different goals and objectives. The Second Avenue Subway project has an extensive public outreach program (described in Chapter 4 of the FEIS). As described in Appendix A, "Planning Context," the Lower Manhattan Access Study explored short- and long-term strategies for improving access to Lower Manhattan, mostly from suburban locations. The Second Avenue Subway was identified in the Lower Manhattan Access Study as the best way to improve access for suburban commuters. Additional work on the Lower Manhattan Access Study would occur independent of the Second Avenue Subway's environmental analyses.

Comment 7: Consultation and early participation by the community will result in the greatest degree of community acceptance of impacts, creation of solutions to problems, and overall minimization of construction impacts. Involving the community in Interagency Task Force meetings and Technical Advisory Committee (TAC) meetings would assist in this effort, as would an active partnering program that includes Community Boards, representatives of community organizations, elected officials, NYCT, MTA, and contractors. (CB6/Sepersky, CB11/Givens, Fields, Kreuger, Metro East, Sanders, Silver, Stringer)

Response: As described in Chapter 4 of the FEIS, the project has included a public outreach program, initiated during the MIS/DEIS phase and continuing through

the SDEIS. This has included dozens of meetings with community boards; the public, local and regional organizations; and interested governmental agencies. The project's Interagency Task Force and Technical Advisory Committee are intended specifically for coordination between public agencies and entities involved in or with jurisdiction over streets, traffic, infrastructure and utilities, etc.

As described in Chapter 4 of the FEIS, throughout construction, NYCT will employ an extensive community outreach program to keep affected neighborhoods informed about construction activities taking place, project design issues, and potential impacts. This program will include meetings, newsletters, and a website. In addition, during construction a project office will be established at one or more locations along the alignment with a 24-hour telephone hotline to enable people to ask questions and register complaints. Through the outreach program during construction, NYCT will work closely with Business Improvement Districts and other related business organizations, as well as other community groups, schools, houses of worship, etc., to broadly communicate information about construction activities. NYCT will also help organize small, area-specific task forces to solicit citizen input on construction effects and mitigation.

Comment 8: The MTA should meet with affected neighborhoods—particularly Community Board 3, the Lower East Side, Chinatown, and East Harlem—to ensure that the project is designed to minimize impacts and maximize economic and other benefits. Public input should be sought with respect to station design (for example, at 125th and 106th Streets). There may be opportunities to encourage other economic development and housing in conjunction with the new subway, for example. (CB11/Llano, RPA/E. Harlem, Silver, RPA/Zupan)

Response: As described in Chapter 4, NYCT has been meeting with each of the Community Boards through which the alignment would pass to discuss potential locations of stations, entrances and ancillary facilities, station design, and disruptions due to construction, and to review the status of other construction projects within the areas that could affect subway planning and design. This public participation process will continue through all phases of the project's design and into construction. Also see the response to the comment above. For more comments on station design at 125th Street, 106th Street, and other stations, see "Stations—Design," below.

Comment 9: Bronx public officials and community leaders must be consulted and listened to before a final design for the Second Avenue Subway is implemented. (Marotta)

Response: The SDEIS/or and notice of its availability were widely distributed, including to the Bronx Borough President, the Department of City Planning's Bronx office, and other elected officials and the two Community Boards representing

neighborhoods in the Bronx where project activities are proposed. The public hearings for the SDEIS were also widely advertised. MTA held two public hearings to receive comments on the document, and also accepted written comments during a 60-day comment period. Numerous elected officials and members of Community Boards attended and/or provided written comments, including the Public Advocate, who holds a Citywide office. As described in Chapter 4, ongoing public coordination with communities that could be affected by the project's construction or operation will occur throughout the ongoing design and construction processes.

PROJECT SUPPORT AND OPPOSITION

GENERAL COMMENTS ON THE FULL-LENGTH SUBWAY AND DEIS

Comment 10: We thank the Federal Transit Administration (FTA) for its evaluation of a full-length Second Avenue Subway. We believe the SDEIS is a fair, balanced, thorough, and comprehensive representation of the impacts and relevant issues. (CB11/Llano, Civitas, EPA, Faust, P. Johnson, McArdle, Stringer, Unger)

Response: Comments noted.

Comment 11: Many commenters at the two public hearings expressed their support for the construction of the full-length Second Avenue Subway and the MTA's response to public input requesting the full-length subway. They noted that a new subway on the East Side of Manhattan is vitally needed and should be a top priority for the MTA and for the U.S. Senate and House of Representatives. (Artur, Aryel, Bing, Brower, CB2, CB6/Spepersky, CB8, CB11/Llano, Civitas, Donovan, East Side Chamber of Commerce, ESNA, Fields, Gerber, Gotbaum, Hodge, Johnson, King, Kreuger, Kupferberg, Maloney, Maguire, McArdle, Mitchell, NYC Transit Riders Council, Olmsted, PCAC, RPA/Ronderos, RPA/Zupan, Sanders, Sibilla, Silver, Strangeways, Straphangers, Stringer, Updegrove, Watt, Weiner)

Response: Comments noted.

Comment 12: The MTA should do a better job of documenting and publicly communicating the project benefits. The importance of this project has not been emphasized enough. (Fields, Johnson, RPA/Ronderos, RPA/Zupan)

Response: The FEIS has been revised to incorporate this comment. Please see Chapter 1, "Purpose and Need"; Chapter 5B, "Subway and Commuter Rail"; Chapter 6, "Social Conditions"; and Appendix A, "Planning Context," in particular.

Comment 13: I oppose the plan for the Second Avenue Subway. (Rozankowski, X)

Response: Comment noted.

PROJECT BENEFITS—TRANSPORTATION

Comment 14: The new subway is urgently needed to add capacity on the East Side and relieve the growing overcrowding on the Lexington Avenue Line. Increasing demand on the Lexington Avenue Line will continue to increase delays and congestion. The number of residents and commuters in the area is projected to grow significantly, and the Lexington Avenue Line will not be able to handle the increased load. This will result in serious overcrowding and life-safety concerns. With the added capacity of the Second Avenue Line, the Lexington Avenue Line will be able to better serve the East Side as well as the Bronx and commuters from the Hudson Valley and Connecticut more reliably. (Artur, Bing, Civitas, Endo, Faust, Fields, Haikalis, P. Johnson, Ketcham, King, Kreuger, Maguire, Maloney, McArdle, Metro East, M. Mitchell, NYC Transit Riders Council, Roberts, RPA/Ronderos, RPA/Zupan, Silver, PCAC, Petition, Straphangers, Watt)

Response: The FEIS describes the crowding predicted for the Lexington Avenue Line in the future if the Second Avenue Subway is not built (the "No Build Alternative") in Chapter 5B, "Subway and Commuter Rail." That chapter also provides an expanded discussion of the benefits to the Lexington Avenue Line that would occur with introduction of the Second Avenue Subway. It also discusses benefits to commuters on regional rail lines that would result with operation of the Second Avenue Subway. See also the response to Comment 93.

Comment 15: The Second Avenue Subway would alleviate sharp increases in commuter traffic on the Lexington Avenue Line that are expected to result when the East Side Access Project brings the Long Island Rail Road (LIRR) to Grand Central Terminal. The East Side Access Project will exacerbate overcrowding on the Lexington Avenue Line and at Grand Central Terminal, making the need for the new subway greater. Further, East Side Access can only increase mobility if its additional riders can be accommodated with the Second Avenue Subway. The projects must be built in tandem. The FEIS should emphasize the overcrowding that would occur because of East Side Access if the Second Avenue Subway is not constructed. (Aryel, Bing, Fields, King, Kreuger, Maguire, Maloney, Metro East, NYC Transit Riders Council, PCAC, Straphangers, Stringer)

Response: Chapter 5B of the FEIS describes the subway crowding that will occur in the future if the Second Avenue Subway is not constructed, but East Side Access is. The No Build Alternative analyzed in the EIS assumes completion of the East Side Access Project (as well as other approved projects and general background growth); the Build Alternative assumes that growth (with East Side Access) and the Second Avenue Subway. For example, the ridership volumes for 2025 in Tables 5B-13 and 5B-14 of the FEIS include East Side Access riders in both the No Build and Build conditions on the southbound Lexington Avenue ❹❺

express and 6 local trains. With the proposed Second Avenue Subway, all Lexington Avenue Line trains would, on average, operate within NYCT Service Guidelines during 2025 AM peak hour conditions. However, even without construction of the Second Avenue Subway, East Side Access will improve mobility on the East Side of Manhattan, as most LIRR customers arriving at Grand Central Terminal will walk to their final destinations. In addition, mitigation measures are being implemented to minimize that project's adverse impacts to the 42nd Street-Lexington Avenue Station and Lexington Line line-haul capacity, as detailed in the East Side Access FEIS.

Comment 16: The Second Avenue Subway will decrease commuting times. Riders from East Harlem and the Upper East Side will have a one-seat ride to Wall Street and to West Midtown, including NJ Transit and PATH. Commuting times will also decrease for M15 bus riders. (Bell, Bing, Endo, NYC Transit Riders Council, PCAC, Petition, RPA/Ronderos, RPA/Zupan)

Response: Comment noted. Chapter 5B of the FEIS describes the improvements to travel time and access brought by the new subway. In addition, Chapter 6, "Social Conditions," discusses the improvements to quality of life that riders from the Upper East Side and East Harlem would experience with the addition of a one-seat ride to Wall Street from those neighborhoods.

Comment 17: The new subway will create a viable alternative for Metro-North commuters, who can transfer at 125th Street to the new line rather than at Grand Central Terminal to the Lexington Line. (CB2, Endo)

Response: Comments noted. Chapter 5B of the FEIS describes the benefits to regional commuters and identifies the changes in ridership that are expected to occur on both Metro-North and the Long Island Rail Road with the Second Avenue Subway.

Comment 18: The FEIS should emphasize the beneficial impacts the subway will have on other forms of transportation, including reducing traffic volumes by 9,750 vehicle trips per day, and reducing ridership on the Lexington Avenue Line by 29 percent, and reducing ridership on the M15 by 50 percent. (Maloney)

Response: Comments noted. The FEIS has been revised to include more information on the project's benefits, including those mentioned above. For example, Chapter 1, "Project Purpose and Need" describes how the project would reduce the number of vehicles on local roads (revised estimates in the FEIS indicate that traffic volumes would be reduced by 8,300 vehicles per day), as well as describing how the project would support the reconstruction of Lower Manhattan, including by the addition of new capacity.

Comment 19: The project will decrease vehicle trips and vehicle miles traveled in the corridor. The new passengers will reduce auto trips, which will decrease traffic congestion, and lower air pollution. It will also improve energy efficiency. (Aryel, Bing, King, NYC Transit Riders Council, Petition, Silver)

Response: Comments noted. As described in Chapter 5 of the FEIS, the project would reduce the vehicle miles traveled in the region by 93,130 vehicle miles on an average weekday. The project's air quality benefits are described in Chapter 11, and Chapter 13 details the project's effects on energy consumption.

Comment 20: The subway will have positive impacts on asthma rates. (PCAC)

Response: Comment noted.

Comment 21: The Second Avenue Subway would allow MTA to perform necessary work on the Lexington Avenue Line during regular hours, saving the cost of overtime work on nights and weekends. When work is needed on the Lexington Avenue Line, people could revert to using the Second Avenue Line for a while. (Artur)

Response: Comment noted. However, with the Second Avenue Subway in place, NYCT does not intend to change its practice of performing necessary repairs at night and on weekends, when possible. This practice reduces unnecessary inconvenience to the majority of the riding public.

Comment 22: The Second Avenue Subway will increase system redundancy, creating an alternative route along the East Side that will be available in case of emergencies. This benefit should appear in the FEIS. (Faust, Fields, King, Stringer)

Response: The discussion of project benefits in the FEIS has been revised to incorporate mention of system redundancy; see Chapter 17 ("Safety").

PROJECT BENEFITS—SOCIAL AND ECONOMIC

Comment 23: The Second Avenue Subway is needed to improve accessibility on the East Side and in Lower Manhattan. The subway will make commutes more convenient and decrease the distance and time that people need to walk. It will improve rapid transit access to those who live east of Second Avenue, bringing service to an area that has been underserved for decades. Accessibility will be increased for the East Village, Lower East Side, and Chinatown. At the same time, it will also serve the West Side, Downtown, and Brooklyn. Subway service on Water Street will increase transportation possibilities for people who live and work in the area as well as tourists. Access to health care and jobs will be improved. (Artur, CB11/Llano, CB2, Chan, Endo, Fields, Gotbaum, Haikalis, Ketcham, Lopez, Metro East, NYC Transit Riders Council, PCAC, Silver)

Response: Comments noted. The benefits of improved access throughout the East Side are described in Chapter 6 of the FEIS.

Comment 24: The Second Avenue Subway is important to for New York City to retain its place as an economic center and to allow the New York metropolitan region to expand. The future of the city's economy depends on new jobs and economic development and growth. The subway will stimulate economic development, creating jobs and bolstering local businesses. This benefit will accrue to the East Side, the city, and the region. The project will also increase property values and the quality of life in Manhattan. Further, the improved transportation access brought by the project is critical in creating and retaining jobs in Manhattan. (Aryel, Bing, CB8, Civitas, East Side Chamber of Commerce, ESNA, Fields, King, Kreuger, Johnson, Maguire, Maloney, McArdle, NYC Transit Riders Council, PCAC, Silver, Straphangers, Stringer)

Response: Comments noted. The social and economic benefits of the new subway, including its benefits to New York City's economic development, are described in the FEIS in Chapters 1 and 6.

Comment 25: Many commenters noted that the transportation improvement brought by the subway will lead to social and economic benefits for specific East Side neighborhoods. In East Harlem, the subway will lead to economic development and redevelopment, increased incomes and property values, improved quality of life, and new employment and business opportunities, including for health service workers. On the Upper East Side, the new subway will improve the quality of life and contribute to economic growth. The subway will open new possibilities for a medical research corridor on the East Side. It will lead to economic development and redevelopment in the East Village, Lower East Side, and Chinatown. (Bing, CB11/Llano, CB11/Givens, Chan, Civitas, Fields, RPA/Ronderos, RPA/Zupan, RPA/E. Harlem, Silver)

Response: Comments noted. The social and economic benefits of the new subway to East Side neighborhoods—including East Harlem, the Upper East Side, and East Village/Lower East Side/Chinatown—are described in the FEIS in Chapter 6.

Comment 26: Future development on the East Side makes the need for the project more critical. Projects like the UN Redevelopment, Con Edison First Avenue properties, and Bellevue expansion will continue East Side growth. (Johnson, Kreuger)

Response: Comment noted. The ridership forecasts for the No Build Alternative and the Second Avenue Subway, as well as the other analyses in the FEIS, include consideration of the proposed new developments along the East Side, including those mentioned in the comment.

Comment 27: The subway's new daily riders would create new revenue for MTA. The benefits of this project will far outweigh the investment over a short period of time. Providing a proper means of transportation will pay for itself with ridership. (Artur, Bing)

Response: Comment noted. See also "Project Cost and Funding," below, for related comments on this subject.

Comment 28: The Second Avenue Subway will provide construction jobs. This in turn will result in economic benefits throughout the city. (Bing, Fields, Maguire, Maloney, Stringer)

Response: Comment noted. The economic benefits associated with construction of the subway are described in Chapter 6 of the FEIS.

Comment 29: More and current information on the socioeconomic benefits of the subway, which were in the MESA EIS, should be incorporated into the EIS. (Fields)

Response: Chapter 6, "Social Conditions," has been expanded to include more information on the project's socioeconomic benefits. Additionally, more information on how the project would help revitalize Lower Manhattan is provided in Chapter 1, "Purpose and Need."

PROJECT BENEFITS—LOWER MANHATTAN IMPROVEMENTS

Comment 30: The Second Avenue Subway, with its improved transportation access and capacity to the area, is critical to rebuilding and revitalizing Lower Manhattan. The FEIS should emphasize the role the subway will play in rebuilding Lower Manhattan. The Second Avenue Subway is the only project other than South Ferry planned for Lower Manhattan that will add capacity. The Lower Manhattan Development Corporation includes the Second Avenue Subway as a key long-term component in rebuilding Downtown and preserving the region's economic competitiveness. (Bing, CB2, CB8, CB11/Llano, Fields, Hodge, King, Kreuger, Lopez, Maguire, Maloney, Markowitz, Metro East, NYC Transit Riders Council, PCAC, RPA/Ronderos, RPA/Zupan, Silver, Straphangers, Stringer, Watt)

The Second Avenue Subway opens the possibility of linking the Downtown area to airports, which is a critical need for the business district and will add capacity for future growth. (Maguire)

The Second Avenue Line complements proposals to connect a rebuilt PATH train from New Jersey and Downtown subways. (Straphangers)

The Second Avenue Subway, together with East Side Access, is New York's best opportunity to get billions in federal transit funds that will boost the economy and revitalize Lower Manhattan. (Maloney)

Response: Comments noted. The FEIS describes the social and economic benefits of the project, including those to Lower Manhattan, in Chapter 6. Additionally, more information on how the project would help revitalize Lower Manhattan is provided in Chapter 1, "Project Purpose and Need" and in Appendix A, "Planning Context."

PROJECT COST AND FUNDING

See also "Construction Sequencing" under "Construction Issues," below, for related comments.

Comment 31: Why does the project cost $16 billion? New York City has never spent as large an amount on a new project. These costs make the project unaffordable. The project could be built for less money if contractors are given an incentive to finish ahead of schedule. (Gong, Haikalis, P. Johnson)

Response: The cost estimate for the subway, which accounts for inflation, was developed based on the project's overall length (8.5 miles), the particular complexities of constructing in Manhattan, the site-specific issues associated with this project's alignment, and the cost of similar work in other cities. As engineering proceeds, continuing efforts to refine and reduce project costs will be undertaken. Incentives and other measures that could accelerate construction and/or reduce construction expenses are currently under consideration by MTA NYCT and its engineers. Please note that the project would be funded by the same sources that have funded MTA's Capital Program in the past, including federal, state, and local funds. See the response to Comment 33 for more details.

Comment 32: You need a No Build Alternative that is fully developed because the project is so expensive and would be hard to do. (Gualtieri)

Response: The No Build Alternative described in Chapter 2, "Project Alternatives," and assessed throughout the FEIS is a fully developed alternative that includes all of the projects that have been approved and will be implemented by 2025, as identified in the shorter-term MTA 2000-2004 Capital Program and as projected in the longer-term 2000-2019 20-Year Needs Assessment. As described in Chapter 2, these include initiatives to bring the system to a state-of-good-repair (e.g., purchase of new rail cars, track improvements, station rehabilitations, etc.), major capital improvements (e.g., Communication-Based Train Control), and planned route and service changes as well as normal replacement and network expansion initiatives. Chapter 5B, "Subway and Commuter Rail," identifies the service changes that would be made whether or not the Second Avenue Subway proceeds.

Comment 33: How will the subway be funded? How much will come from the federal, state, and city governments? Where is the state money for this project? The $1.5

billion they mention is fare-backed bonds that we have to increase fares to pay off. They should create a bonding authority. (B. Adler, Gong, Saitta)

Response: Chapter 20, "Commitment of Resources" provides information on project funding. The specific amount of funds that would come from the various sources has not yet been identified; it is expected that the sources would include federal transportation grants, state and local funds, bonds, and MTA funds, such as investment income, leasing of assets, and developer funds. The MTA has developed a strategy to pay for this project through the same types of funding that has supported the MTA Capital Programs since 1982. The Capital Program and the project have the support of state and local officials. The project is following the normal process to receive Federal New Start funds and is requesting a Federal contribution of 50 percent of the project cost. Having a combination of funds to pay for the capital project is more reliable than having just one dedicated funding source, which could change through the project.

Comment 34: Can the MTA afford to build both the ❼ line extension and the Second Avenue Subway? (Gong)

Response: Unlike the Second Avenue Subway, MTA funds are not being considered to build the proposed ❼ line extension. Rather, that project would be funded by the City of New York, which plans to use an innovative mechanism related to additional property taxes that would be generated by zoning density increases in connection with the subway extension.

Comment 35: This project is a top priority, and obtaining funding from the U.S. Senate and House of Representatives is important. (CB2, NYC Transit Riders Council/ Mason, P. Johnson)

Response: Comment noted. MTA is working with the Congressional delegation and other elected officials to secure the funding needed to build the proposed project.

Comment 36: Commenters suggested specific funding sources, such as revenue from a special tax earmarked for subway construction, property assessments, and Triborough Bridge and Tunnel Authority bonds for segments near the Queens-Midtown Tunnel and Triborough Bridge. (Chase, Stelter)

Response: Comment noted. The MTA continues to work with its funding partners to identify funding sources. The MTA has used and will continue to be a leader in innovative financing tools. Surplus revenue from properties controlled by the MTA such as the bridges and tunnels have been and are currently used to supplement the operating budgets of NYCT, the MTA Long Island Rail Road, and MTA Metro-North Railroad rather than for capital projects.

Comment 37: The project should be planned and financed in a way that ensures a full-length subway will be built, rather than just a segment of the project. (Fields, Hodge, RPA/Ronderos, RPA/Zupan, Sahakian, Wyche, Zupan)

Response: FTA has advised that it would not be possible to secure all of the required funding for a project of this magnitude before construction is initiated. Given historical federal transportation appropriations, the anticipated federal share for the full-length Second Avenue Subway may exceed the annual appropriation for federal transit capital assistance for the entire nation in a single year. In addition, as with other large capital projects occurring along a corridor of many miles, it would not be feasible to construct the entire subway project simultaneously. As described in Chapter 3, "Description of Construction Methods and Activities," a construction sequencing plan has now been identified. It entails constructing the full-length project in four phases, each of which would result in a new and fully functional part of the overall subway project. This phasing plan has been developed to permit multiple phases to be constructed simultaneously. Overall, construction is anticipated to take approximately 16 years, covering several MTA Capital Plans and federal transportation programs.

Comment 38: The MTA said that no money would be diverted from the Second Avenue Line and no MTA money would be spent on the 7 train extension. The MTA is lying since MTA money was spent for five buildings in the area. (Shachter)

Response: MTA has not purchased any property that would be used for the proposed 7 line extension. As noted in the response to Comment 34, MTA funds are not being considered to build the proposed 7 line extension.

PROJECT DEFINITION

SUBWAY ALIGNMENT AND PROJECT ALTERNATIVES

Comment 39: South of 63rd Street there is only one line, whereas north of 63rd Street there would be two lines. This is not a commitment to the full-length line. (Trent)

A partial subway is not acceptable, since it would thwart the potential for future expansion to the outer boroughs. (Bing, CB8, Kreuger, NYC Transit Riders Council/Mason)

The line should be put on Second Avenue, not on Broadway. (X)

Broadway express service should be provided via the Second Avenue Line. (Waterman)

Will the Q join from 63rd Street and Lexington Avenue? (Green)

Response: As described in the FEIS, the proposed project would provide a full-length Second Avenue Subway with two services. One service would be a Second

Avenue route operating between 125th Street in East Harlem and Hanover Square in Lower Manhattan on the East Side. The second service would operate along Second Avenue from 125th Street to 65th Street, where it would join the existing 63rd Street Line to stop at the existing Lexington Avenue/63rd Street Station before joining the existing Broadway Line at the 57th Street/Seventh Avenue Station. Once on the Broadway Line, it would serve express stations along Seventh Avenue and Broadway before crossing the Manhattan Bridge to Brooklyn. The two services provide the best balance of service, linking riders from the Harlem and the Upper East Side to both Lower Manhattan and the fast-growing West Midtown area. Furthermore, this alignment does not preclude a future extension to Brooklyn from Hanover Square.

Comment 40: You should consider less ambitious and cheaper alternatives such as a shorter minimum operating segment from 63rd to 72nd, 86th, or 125th Street. (Haikalis)

Response: As described in Chapter 3, "Description of Construction Methods and Activities," a phasing plan has been identified that would allow the Second Avenue Line to be built and operated incrementally, thereby permitting portions of the project to begin operation prior to completion of the entire line. The first phase would extend from 105th to 62nd Streets, and include new stations at 96th, 86th and 72nd Streets and new entrances at the existing Lexington Avenue/63rd Street Station. South of the 72nd Street Station, the new Second Avenue Subway service would connect to the existing Broadway Line via the 63rd Street connection for service to the West Side and Brooklyn. See response to Comment 37.

Comment 41: The plan should not go beneath 125th Street at Lexington Avenue, since that is an A Division tunnel. (X)

Response: The new Second Avenue Subway would allow passenger transfers between the new station at 125th Street and Lexington Avenue and the existing Lexington Avenue Line station at 125th Street. No track connection for trains is proposed at this station. There is no conflict for passengers connecting between B Division service on the new system and A Division service on the existing system. For related comments on "Transfers and Connections," see below.

Comment 42: You should consider extending the Second Avenue Line west on 125th Street to a terminus at Lenox Avenue, Eighth Avenue, St. Nicholas Avenue, Broadway, or Riverbank State Park. A new station could be provided at Lenox Avenue with transfers to the ❷❸ Lines. Route connections could be made to the Sixth Avenue Subway service, to allow trains to continue to the Bronx. This would provide better connections for Bronx riders and between the East and West Sides, and would alleviate potential crowding at the new Second Avenue

Subway 125th Street Station at Park and Lexington Avenues. (Allen, Aryel, Centolanzi, Morciglio, Olmsted, Stelter, The greatone98@mail.com)

Response: The project proposes a full-length Second Avenue Subway under Second Avenue in Manhattan. While the Second Avenue Subway is being designed so as not to preclude any of these suggestions in the future, such ideas are not part of the current project as they do not address or meet the project's goals and objectives, including relieving severe congestion on the Lexington Avenue ❹❺❻ Line. For related comments on "Transfers and Connections," see below.

Comment 43: Have you considered providing a route across town higher than 63rd Street? It would be really helpful if there were a cross-park subway service between the Upper West Side and Upper East Side, providing an alternative to the crosstown bus. (Hadsall)

Response: The proposed cross-park route would require extensive additional construction and would not meet the purpose and need of the project, which is to alleviate crowding and improve transportation access for Manhattan's East Side.

Comment 44: It would be more beneficial for Manhattan that the Second Avenue Subway line somehow either connect to Manhattan's Far West Side, which lacks subway accessibility. (Garey)

Response: The Second Avenue Subway would provide service to Manhattan's West Side via the Broadway Line. A transfer would be available at Times Square, and is under evaluation at the 42nd Street Station on the Second Avenue Line to the ❼ Line. That line is also separately being studied for a proposed extension to the Far West Side.

Comment 45: Why doesn't the SDEIS include linking the Upper East Side with New Jersey? You are ignoring the untapped potential of the Garden State. (Train)

Response: With new Second Avenue Subway service on the Broadway Line, transfers to the PATH train and New Jersey Transit at the 34th Street-Herald Square Station would be facilitated. Plans to construct new train connections into New Jersey are beyond the scope or goals and objectives of the Second Avenue Subway.

Comment 46: Better access from the Upper East Side and Grand Central area to Wall Street and the World Trade Center Area is needed. A single-seat ride from the Upper East Side to the World Trade Center site can be provided by rethinking the destination of the Second Avenue Subway, such as a westerly loop after Hanover Square stop. (Weinstein)

Response: The Second Avenue Subway provides for a direct, one-seat ride between the Upper East Side to Wall Street at Water Street. The project would also provide for a one-seat ride on the Broadway Line south to Canal Street, with a cross-platform transfer to the Broadway Line local train to destinations south of Canal Street, including the World Trade Center site. For more on continuation of the route past the Hanover Square stop, see the response to Comment 52 below.

Comment 47: Having a one-seat ride from the Financial District to the Upper East Side via the Broadway Line is important to stimulate the health of Lower Manhattan. To make way for the Q local, why not re-route the W train from Astoria to make it express via Broadway and then through to Brooklyn via the Manhattan Bridge? (Donovan)

Response: Such direct service was considered during the 1999 MIS/SDEIS. This service would require crossing the local and express tracks at some point before the split between tracks that continue to Lower Manhattan and those that cross the Manhattan Bridge. Numerous locations for that crossing were analyzed, and the best location identified was at Canal Street. Appendix B of the SDEIS describes the elimination of the "Canal Flip," which is no longer part of the proposed project, since full-length service is now proposed on the Second Avenue route. Second Avenue Subway trains operating on the Broadway Line express tracks would cross the Manhattan Bridge to Brooklyn.

Comment 48: As I understand it there is no plan to go below Houston Street; there should be a connection to another subway to go downtown. (Strangeways)

Response: The Second Avenue Subway would continue south of Houston Street on both its routes. On the Second Avenue route, the project includes four stations south of Houston Street: Grand Street, Chatham Square, Seaport, and Hanover Square at the southern end of Manhattan. On the Broadway route, Second Avenue trains would stop at Prince and Canal Streets, and riders who transfer to local service could continue on to other stops in Lower Manhattan. Additionally, transfers to other subway lines on NYCT's system would also allow for easy connections to other downtown locations.

Comment 49: The project should provide access to the Lower East Side, which lacks subway accessibility. The Lower East Side was promised a branch and extension, but now it is not included. Splitting the project at 63rd Street means that the Lower East Side is not served by the project. (Garey, Rozankowski, Stelter, Updegrove)

Response: The Second Avenue Subway would provide new subway service to the Lower East Side, with new stops at 14th Street, Houston Street, Grand Street, and Chatham Square. An additional spur service on the Lower East Side would reduce mainline Second Avenue Subway service to Lower Manhattan, making

the subway less competitive with the Lexington Avenue Line and therefore less able to reduce crowding on the Lexington Avenue Line. Other service options for the Lower East Side are not included but are also not precluded from being implemented in the future. The project's Broadway service has no affect on its ability to serve the Lower East Side.

Comment 50: I support the Deep Chrystie Option as it has fewer impacts on the community during construction. (Aryel)

Response: Comment noted. As described in the FEIS, a slight modification of the Deep Chrystie Option has been selected for that reason.

Comment 51: A cross-platform transfer at Grand Street (the Shallow Chrystie Option) is essential to making the Second Avenue Subway a more valuable alternative to the Lexington Avenue Line for riders of the Brooklyn BMT lines. The vertical transfer or long horizontal transfers of the other options would not be as valuable. Further, a multi-level station precludes implementation of future through service to Brooklyn. Grand Street Station was originally intended to be four parallel tracks with two island platforms, so this should be considered. Many people believe that this station may already be built as a four-track station, and until it can be proved that it is not, the Shallow Chrystie Option should not be eliminated. The park and businesses in Chinatown can endure a few years of disruption for the good of many. (Lachman, Kupferberg, Stelter)

Response: The Shallow Chrystie Option was originally developed because of the convenient transfer it would provide. However, the Grand Street station is not already constructed as a four-track station, and as described throughout the SDEIS, this option would require extensive cut-and-cover construction that would result in numerous significant impacts during construction—more than either of the other two options considered for the area south of Houston Street. The impacts that would have resulted from the Shallow Chrystie Option are described in Appendix B, "Development of Alternatives," in the section called Water Street Options. Following completion of the analyses conducted for the SDEIS, NYCT eliminated this option from further consideration.

Comment 52: The project's southern terminus should be farther south than Hanover Square. The termination north of Whitehall Street does not allow for service diversions. Why was the Whitehall terminus/station eliminated? (Shachter)

The Second Avenue Line should run through the South Ferry line and have a South Ferry terminal. A provision for Brooklyn service could be made at South Ferry. (Hassan, Kupferberg)

Response: The Hanover Square Station is being designed at a depth that would facilitate a future extension to Brooklyn to be constructed deep in rock. In the interim,

storage tracks are proposed south of the Hanover Square Station, which would allow trains going out of service to layup during the midday and overnight. The train storage would not be feasible if the Second Avenue Line were extended to a terminus at Whitehall Street.

Continuing the service westward past Whitehall Street would be very difficult, because of the presence of numerous other tunnels in this area (which include three subway tunnels that pass under Water Street on their way to Brooklyn, the Brooklyn Battery Tunnel, and the Battery Park underpass).

As described in Appendix B, two alternatives were studied that would provide service as far south as Whitehall Street and allow for transfer passageways to the N R service and to the 1 9 routes at South Ferry. These alternatives were eliminated because they did not attract enough riders, given the Whitehall Street Station's distance to large office buildings, to offset their higher cost in relation to the other options. In addition, they would have resulted in impacts to Battery Park and Peter Minuit Plaza. These alternatives would have required possible vent structures, emergency exits, and/or station entrances into or near one or both of the parks. Minimizing impacts to both open spaces was among the reasons considered in selecting the terminal location.

Comment 53: We support the Water Street alignment rather than the Nassau Street alignment, because it will better address the transportation and economic development needs of Community Boards 1 and 3, and because it will allow for a future extension to Brooklyn. (RPA/Ronderos, Silver)

Response: As described in Chapter 2 of the SDEIS and FEIS, the Water Street alignment has been selected for the Second Avenue Subway, and the Nassau Street alignment is no longer under consideration. Appendix B of both the SDEIS and FEIS describe the Nassau Street alignment and the reasons for selection of the Water Street alignment (see the sections "Nassau Street Alignment" and "Selection of Water Street Alignment as the Preferred Option" in Appendix B).

Comment 54: A connection to the Nassau Street Line should be reconsidered. Although it would not make sense if the Second Avenue Subway has only two tracks, with four tracks, a possible service could be provided from Queens to this line to Brooklyn. (B. Adler, Allen, Hassan, Marotta)

Response: See response to comment above, regarding the alternative alignment via the Nassau Street Line. A connection to the Nassau Street Line as an operational alternative to the selected Water Street alignment would be prohibitively expensive. It would also result in significant construction-related impacts to adjacent properties, as well as to the J M Z subway services. Possible service connections from Queens to Brooklyn are addressed below.

Comment 55: Second Avenue is not the best route for the new subway. No one wants to travel to Second Avenue in Midtown; Second Avenue is not a center of employment. Almost nobody coming from Upper Manhattan, the Bronx, Queens, or Brooklyn going to East Midtown wants to go to Second Avenue. Putting the subway under Third Avenue would serve the business community and bring more people to Midtown. A Third Avenue route would also allow transfers to subway lines that cross that avenue and would create a direct transfer to the Canal Street line, giving service to Brooklyn and Queens, where most office workers come from. First Avenue is also a better place for the subway, because it is closer to heavy employment areas like the UN and hospitals and major residences like Stuyvesant Town and Peter Cooper Village. (Chase, Gualtieri, Plautz)

Response: Subway alignments under Third and First Avenues were evaluated early in the planning process but were eliminated during the MIS/DEIS screening process, as described in Appendix B of this FEIS. Both routes were found to attract fewer riders and to be less effective in relieving crowding on the Lexington Avenue Line less than a Second Avenue alignment. Additionally, a subway route on First Avenue would be difficult to construct near the Queensboro Bridge, the United Nations, and the Queens-Midtown Tunnel. Further, the Second Avenue route takes advantage of tunnel sections built in the 1970s. The Second Avenue Subway is projected to have high ridership at its Midtown stations. This ridership would include customers who work in East Midtown and those who live there and must commute to other neighborhoods for work. In addition, the ridership model indicates that the Second Avenue Subway would achieves the goal of attracting enough riders to relieve congestion on the Lexington Avenue Line.

Comment 56: The project should have a segment that branches east at 34th Street and south of First Avenue down Avenue A to Essex Street, continuing on to Brooklyn. (Chase)

Response: The trunk line down Second Avenue, Chrystie Street, the Bowery, and Water Street best meets the goals and objectives of the project. In addition, service to Brooklyn would be provided by the project's Broadway Line. (For more on the Lower East Side, see the response to Comment 49 above.)

Comment 57: The subway should have a two-track local segment from Canal Street down Water Street to the Battery Park area, with possible future extension to Brooklyn. (Chase)

Response: Comment noted. The project does include a two-track local segment from Canal Street down Water Street to Hanover Square with a possible future extension to Brooklyn.

OTHER ALTERNATIVES

Comment 58: As you complete the MIS to qualify for federal funding you must consider the full range of options. (Haikalis)

Response: A full range of options was considered in the 1999 MESA MIS/DEIS. After completion of that study and a public hearing, the results and public input were used to select a preferred alternative, the full-length Second Avenue Subway. That project was comprehensively assessed in the SDEIS and in this FEIS.

Comment 59: Improving existing subway service should be given higher priority. The Lexington Avenue Line should be improved through early action measures. The line should be modernized to provide better access, ventilation, and higher capacity signal systems. (Gong, Gualtieri, Haikalis, Harris)

Response: For the past two decades, NYCT has focused on improvements to its existing system to attain a state-of-good repair. Today, approximately 80 percent of the elevated and subway structures are in a state-of-good repair, and improvements continue on the rest of the system. NYCT is in the process of upgrading its entire system to achieve and maintain a state-of-good repair. Among the changes being implemented are improvements to ventilation and additional escalators and elevators at many stations, as discussed in Chapter 2 ("Project Alternatives") of the FEIS. These improvements to the existing system are part of the No Build Alternative, as they are independent of—and do not meet the goals and objectives of—the Second Avenue Subway project. At the same time, planning, environmental review, and design for long-term improvements such as the Second Avenue Subway must also be undertaken now, because of the long lead time required before these projects can be completed.

Comment 60: You should consider a less expensive alternative, such as a surface light rail system. A surface light rail system would be faster and cheaper to build, offer at grade access, and cheaper to operate, and could be a feeder for a future Second Avenue Subway. Light rail has the additional benefit of being able to add or subtract stations with population shifts. (Haikalis, Plautz)

Response: As part of the early alternatives analysis conducted for the MESA MIS/DEIS (described in Chapter 2 of that document), numerous alternatives were considered with different light rail transit configurations. In response to many comments made in opposition to those alternatives during public review of the MIS/DEIS and in consultation with public officials and the public outreach program, MTA/NYCT has selected a full-length subway as the preferred alternative.

Comment 61: The commuter rail system should be converted into a regional rail system with integrated fares. This could attract passengers from the Bronx to Manhattan and divert them from the Lexington Avenue express. A new service using capacity on the Hell's Gate route would attract riders from Co-op City and Parkchester. A new track connection could allow Metro-North and LIRR passengers to have a one-seat ride to Lower Manhattan, further reducing overcrowding on the Lexington Avenue Line. (Haikalis)

Response: Options like those cited in the comment are outside the scope of the project and do not meet the purpose and need of the Second Avenue Subway, which is intended to meet goals and objectives related to overcrowding and inaccessibility of transit on Manhattan's East Side.

Comment 62: The Second Avenue Subway should be the means to bring suburban commuters directly from Long Island to Lower Manhattan and from the Hudson Valley and Connecticut more quickly to Lower Manhattan and to create a one-seat ride between Kennedy Airport and Lower Manhattan. The project should connect to the Atlantic Terminal, and the LIRR Atlantic Terminal service should be converted to subway service to allow Long Islanders and Queens residents direct access from Jamaica to Lower Manhattan and allow operation of JFK service as a one-seat ride to Lower Manhattan stopping in Brooklyn. In addition, a single-seat ride from LaGuardia Airport to the Fulton Transit Center in the Financial District can be provided in the long term through a submarine tunnel from 125th Street to LaGuardia. (Bell, Hodge, Olmsted, RPA/Ronderos, RPA/Zupan, Strangeways, Wall, Weinstein)

Response: As described in Chapter 2, "Project Alternatives," the Second Avenue Subway would provide for additional connections to the subway system, including to Lower Manhattan, for passengers traveling from the Hudson Valley and Connecticut via the transfer opportunities at the Metro-North Harlem-125th Street Station and at Grand Central. The other suggestions do not meet the purpose and need of the Second Avenue Subway, which is intended to meet goals and objectives related to overcrowding and inaccessibility of transit on Manhattan's East Side. Much of the RPA proposal is beyond the scope of the current study's goals and objectives, which are aimed at improvements on Manhattan's East Side. The full-length Second Avenue Subway would not preclude RPA concepts in the Bronx, Queens, or Brooklyn.

Comment 63: A supplemental study must consider mitigation by the potential link at LIRR to Lower Manhattan. A new tunnel could connect the Ⓐ line in Downtown Brooklyn to the Hanover Square terminus. (Ketcham)

Response: Mitigation measures to eliminate or reduce the number and extent of any significant adverse impacts have been considered and identified in the FEIS. A potential link between LIRR and Lower Manhattan would require additional

construction, and would not eliminate or reduce any of the significant adverse impacts that would be created by the project. For more on the RPA proposal to connect the LIRR to Lower Manhattan, see the response to the previous comment.

Comment 64: Wouldn't the Gowanus Tunnel or a Cross Harbor Freight Tunnel be cheaper ways to improve transit than a Second Avenue Subway? (Gong)

As described in Chapter 1 of the FEIS, the purpose and need of the proposed project is to relieve overcrowding on the Lexington Avenue Line and to improve access and mobility on the East Side of Manhattan. The two transportation projects cited are distinct and separate from the proposed subway project, have their own separate goals and objectives, and would not meet the goals and objectives of the subway project. The Cross Harbor Freight Tunnel is intended to facilitate the movement of goods throughout the region, and the Gowanus Tunnel is one of several alternatives being evaluated to improve traffic congestion on the Gowanus Expressway in Brooklyn.

Comment 65: The LIRR's East Side Access Project should include a new LIRR station at 32nd Street or 33rd Street on the East Side, with a transfer to the Second Avenue Subway and continuing LIRR service to Penn Station. This would reduce crowding at Penn Station and allow customers to decide which terminal they prefer at the last minute. However, this won't work unless the Second Avenue Subway has four tracks. (Stelter, Updegrove)

Response: The East Side Access Project is a separate project from Second Avenue Subway with independent goals and objectives. A Final Environmental Impact Statement was completed in March 2001 and a Record of Decision was issued by the FTA for the project. The approved project includes a new LIRR terminal at Grand Central Terminal, not at 33rd Street near Second Avenue. As described in that project's FEIS (see Chapter 28, "Comments and Responses," Comment 20), the East Side Access Project's Major Investment Study (MIS), dated April 1998, considered two alternatives with new stations on the East Side along the route to Penn Station. These were referred to as Alternatives 5 and 6 in that document. One of those alternatives was eliminated from consideration because it would aggravate congestion at Penn Station; the other was eliminated because of several factors that made it potentially operationally infeasible. These included the additional time added to each train's schedule because of the need to stop at the new station en route to Penn Station, the constraints to reverse peak service through the East River tunnels, and the limits to flexibility because of the short distance between the new station and Penn Station. For comments related to provision of four tracks, see the response to Comment 135 below.

Comment 66: Private jitney service was an option recommended for the MESA Study, but it does not appear in the MESA MIS/DEIS or in the SDEIS. Private jitney service on the FDR Drive or other north-south arteries in Manhattan would create transit at a cheaper cost. The vehicles could be required to have very low pollution, to pay user fees, and to use HOV lanes. Using this alternative would benefit air quality and traffic conditions. This alternative should be modeled and studied before the subway is built. (S. Adler)

Response: Private jitney service was one of the alternatives evaluated in the 1999 MESA MIS/DEIS (see page 2-6 in Chapter 2 of that document). This alternative would not provide enough capacity to relieve transit or on-street congestion, and was therefore eliminated as a stand-alone alternative but retained as a candidate for inclusion in the Transportation Systems Management (TSM) Alternative.

Comment 67: An elevated rail route could be built more cheaply than a subway and with minimal disruption to traffic or utilities. The route could connect to the IRT in the Bronx, down Second Avenue to Lower Manhattan and to the West Side via Canal Street to the World Trade Center and South Ferry. The old elevated train route over the 59th Street Bridge could be easily reconstructed for direct downtown service from Queens. It could also go through the Lower East Side to South Ferry. (Saitta)

Response: As part of the early alternatives analysis conducted for the MESA MIS/DEIS (described in Chapter 2 of that document), numerous alternatives were considered, including an elevated transit option. This alternative would meet the study's transportation goals but would not meet several of the other goals. Its visual impact and community compatibility issues would be potentially significant, and community reaction to this option was negative. This alternative was eliminated from further study.

Comment 68: The bus route extensions and new routes component of the MESA MIS/DEIS's TSM Alternative should be put into effect expeditiously. Residents of or visitors to the Lower East Side should not have to wait until the subway is completed for access to the public transportation that it needs and deserves. (Silver)

Response: The Second Avenue Subway project does not preclude the bus improvements included in the TSM Alternative. NYCT can consider bus improvements separately from the Second Avenue Subway, making decisions on approval or timing based on system transit priorities and funding availability.

Comment 69: An enhanced Ⓖ service should offer transfer opportunities to the Second Avenue Line. (Ketcham)

Response: This project proposes a full-length subway under Second Avenue in Manhattan. No route changes are proposed as part of this project in Brooklyn, as that does

not meet the goals and objectives of this project. However, the proposed project would not preclude changes to Brooklyn service.

Comment 70: Three dams should be built on the East River and the subway constructed in the dry river channel. The land created could be used for the Olympics and could be sold to developers to finance the cost of the project. (Linietsky)

Response: Comment noted.

SUBWAY FEATURES AND TECHNOLOGIES

See also related comments below in "Subway Stations Design" and "Comments on Specific Subway Stations."

Comment 71: Because it will be ADA-compliant, the Second Avenue Subway will increase access for seniors, the disabled, and people with strollers. (Aryel, Endo, Gotbaum, Lopez)

The subway needs to be fully accessible, consistent with the requirements of the Americans with Disabilities Act (ADA). Platforms should be accessible by elevators and escalators, and these should be located at consistent ends of stations. At the 14th Street Station, the elevators for the L and T lines should be located in the same area. All transfer points should be upgraded to be ADA-compliant. (Aryel, CB3, Morciglio, Tsui, Williams-Pereira)

Response: As described in Chapter 2 of the FEIS, all Second Avenue Subway stations would comply with ADA regulations. All station areas would have elevators, and would meet ADA standards for elevations and grades for wheelchair access. In addition, other required safety provisions would be implemented, including ADA-compliant warning strips at platform edges and adequate-size corridors and doorways. Public address systems would incorporate both visual and audio communications to be fully compliant with requirements for hearing and visually impaired passengers or employees. ADA-compliant design would also be incorporated into any employee and tenant spaces within the station complex. Newly constructed transfer points between the Second Avenue Subway and existing train lines would also be ADA-accessible, unless technically infeasible, as defined by ADA. Depending on the cost of certain project elements, it may only be possible to make newly constructed areas ADA-compliant at certain stations where the Second Avenue Subway would connect to existing subway routes.

Comment 72: Will the Second Avenue Subway be fully automated like the one in Washington, D.C.? It should be like the airport subway in Denver International Airport, since it has safe trains that are on time, information about arriving trains, and has cost savings as it needs fewer workers. (Labunka)

Response: The Second Avenue Subway must be compatible with rest of the system, as it would be integrally connected, particularly with Broadway Line service. However, within that constraint, NYCT is exploring available new technologies and modern design standards, and would use them where appropriate.

Comment 73: The trains should have systems that automatically announce—electronically and with voice recordings—upcoming stations. They should have TVs, like on buses. They should have LIRR-type seating with optional seatbelts. (Umlas)

Response: New trains being purchased by NYCT for the subway system include automated information (both audio and visual) about upcoming stations. The Second Avenue trains must be compatible with the rest of the system, as described above. LIRR-type seating would greatly reduce the number of riders who could be accommodated on each train, and is therefore not under consideration.

Comment 74: What type of windows will you use to prevent scratching? (Hassan)

Response: The trains running on the new Second Avenue Subway routes would be part of the overall NYCT system, and would therefore be the same types of vehicles as available on other B Division routes.

Comment 75: For tunnel lighting, you should consider using new Intelligent Tunnel Lighting (ITL) technology, available from Dellux Technologies. This system provides energy savings and requires little maintenance. ITL System can also integrate in its web interface the whole tunnel management system, such as web cam, variable message, sign and lane use signal lights. (Dellux)

Response: The final design for the Second Avenue Subway has not yet been completed. There would be a public bidding and procurement process to select a manufacturer to provide tunnel lighting for the Second Avenue Subway that meets design specifications.

Comment 76: The line should accommodate more than one division of trains for routing flexibility. This can be done by moving platforms or retractable door saddles and running boards on A Division subway cars. This would allow for the ❼ express service to enter the Second Avenue Line at 42nd Street and provide a one-seat ride from Lower Manhattan to Queens. The local would continue to Times Square. (Trent)

Will the Second Avenue Subway use IRT division trains? (Rojas)

Response: As described in the FEIS in Chapter 2, the project is being designed to operate with B Division trains (those regularly found on the former IND and BMT lines, including most of the train routes designated by letters rather than numbers). As noted in the comment, since B Division trains are wider than A Division trains,

the project's platforms would require moving platforms to accommodate both types of vehicles. In addition, the signal systems for A and B division trains are not compatible. Therefore, accommodating A and B Division trains on the Second Avenue Line would increase travel time, raise safety issues, and is cost-prohibitive and unnecessary, particularly since no other service in the NYCT subway system accommodates both types of vehicle. As described in the response to Comment 127 below, the project would include a transfer at 63rd Street between the Second Avenue route and the F, and transfers at 55th Street to the E V and at 42nd Street to the 7 are also under evaluation.

Comment 77: Sufficient crossovers or alternating switch tracks should be provided in several locations to allow trains to select either track. These crossovers can be used in the event of disruptions. (Aryel, Stelter)

Response: The alignment includes crossovers in a number of locations. A diagram of currently proposed crossover locations is provided in Chapter 2, "Project Alternatives."

Comment 78: The Second Avenue Subway should be called the "K" line and should be colored Army green. (Bernardez, Krass)

Response: It is premature to make permanent route designations at this time. The route designation will be finalized shortly before service begins. Currently, the line has a working designation of "T."

Comment 79: The new system should have reduced pricing for off-peak and non-rush hours. This would reduce crowding and improve off-peak security. (Umlas)

Response: The new system would be fully integrated into the existing NYCT subway system, and fares would be the same as those on other lines.

Comment 80: There are too many frills like one-person train control. (Rozankowski)

Response: The Second Avenue Subway is being designed to utilize Communications Based Train Control (CBTC), a modern radio-wave-based signal system. CBTC allows for One Person Train Operation, but the final operating plans for the new line are under evaluation and have not yet been determined.

Comment 81: The skills needed to operate and maintain new technology are skills already held by Local 100 members, or are skills that our members can readily learn. We expect to work with MTA to make sure that union members are ready to run and maintain every aspect of the new line. (Watt)

Response: NYC Transit and TWU, Local 100, agreed in December 2002 to establish a New Technology Committee to keep the Union updated concerning various new

technology issues. All such issues pertaining to new technology are expected to be reviewed through this forum.

SUBWAY STATIONS

Subway Station Design

Comment 82: The proposed 100-foot-deep stations are too deep, which makes them expensive to build, results in the need for escalators, and would lead to low ridership. (Rozankowski)

Response: As described in the FEIS, several factors contribute to the system's depth. A deeper alignment was selected to minimize the need to excavate using cut-and-cover along the entire 8.5-mile route during construction and thereby reduce environmental impacts. In addition, the Second Avenue Subway tunnel must be placed so that it would safely pass over or under other existing utilities, as well as subway, train, and vehicular tunnels. The location and quality of bedrock in which the tunnel would be constructed also affected the alignment decisions. All stations will be designed to include escalators and elevators, which will be carefully designed to ensure their safety.

Comment 83: Where cut-and-cover excavation cannot be avoided, NYCT should redesign stations to reduce support and relocation requirements and provide critical space for relocating facilities. Center island platforms can narrow the width of required excavation. Narrower-width mezzanines allow for subsurface corridors for energy and telecommunication facilities. See also "Infrastructure and Energy," below, for related comments. (Con Ed)

Response: As described in Chapters 2 and 3 of the FEIS, overall, a deeper alignment has been selected precisely to minimize the need for excavation and utility relocation. The Second Avenue project's engineering team has been coordinating with Con Ed and other utility owners to identify design changes that would minimize the need for utility relocation. To the extent possible, mezzanines, tunnels, and station caverns are being constructed in rock from underground, without disturbing utilities. However, given the prevalence of utilities along the alignment, relocation cannot be fully avoided. Center platforms are planned where possible.

Comment 84: The cost of the project can be reduced by reducing the number of station openings to be built down to one or two per station, except at high-volume stations like 42nd Street. (Maloney)

Response: In most locations, multiple station entrances and exits are needed to meet expected passenger demand and safety requirements.

Comment 85: Side platforms rather than center island platforms should be used at stations below 63rd Street to 14th Street and at Grand Street and Chatham Square. This would facilitate adding two tracks if necessary in the future. (Condoyannis)

Response: Stations are being designed with center platforms where possible, because this would result in less expensive and disruptive construction and in more efficient circulation patterns.

Comment 86: The station design should allow for climate control—heating and cooling. Stations should have more comfortable seating and more and brighter overhead lights. New subway stations should have communications systems for emergencies and there should be better acoustics and sound recordings. (Umlas)

Response: Climate control systems would be included as part of the project, as described in Chapter 2 of the FEIS. Design of station furniture has not yet been undertaken and would occur during a later stage of project engineering. The new Second Avenue Subway stations will be designed to include state-of-the-art communications technology.

Comment 87: The stations should have staffed information booths on each platform to improve safety and reduce confusion. Each station should have a tourist information booth and a first aid station staffed with trained personnel. To keep criminals out of the subway system, the new system should use taller, enclosed turnstiles in conjunction with closed-caption TV that "looks for" criminals. (Umlas)

Response: Comment noted. Detailed design of stations' interiors has not yet begun, and staffing decisions have not yet been made. However, given budgetary constraints, it is unlikely that NYCT will be able to staff tourist and first aid stations at each subway station.

Comment 88: Station design should reflect the neighborhoods to be served and actively include community participation in the process. MTA could work to include minority artists in minority neighborhoods on station design. Perhaps this could be done through a TEA-21 art provision. (Metro East, Thomlinson)

Response: NYCT will continue to meet with community boards and other interested parties regarding issues such as station design as design of the subway continues. In addition, all new Second Avenue Subway stations would also be constructed under the MTA's "Arts for Transit" (AFT) program.

Comment 89: You should build stations with steel and tile mosaics, as in the original BMT line. (Roberts)

Response: Comment noted. Detailed design of stations' interiors has not yet begun.

Comment 90: Use strong materials for the new system so it will last. (Harris)

Response: Comment noted.

Comment 91: Free bus service should be provided to the new stations. (Endo)

Response: As in the rest of the NYCT system, free transfers would be provided between buses and subways.

Subway Station Locations

For related comments, see "Transfers and Connections," below.

Comment 92: The stations are too far apart. People will not walk that far, and the long walk to stations will increase passengers' total trip time. (Chase, Daniels, Morciglio, Rozankowski)

The Upper East Side is not well served by the 14- and 15-block gaps between stations. If no additional stations are to be added, the proposed stations should have additional entrances and exits at both platform ends to provide for maximum accessibility. (Civitas)

Response: Station spacing has been developed to achieve a balance between maximum operating speed of the system and convenient access for passengers. Placing the stations closer than 10 blocks apart would mean that the trains would operate at a slow speed—because trains could not reach optimum speeds between stations and because of added time in each station—and customers traveling the length of the route would have a more time-consuming commute. This would mean that many customers would choose to continue to use the faster Lexington Avenue express service. With the proposed station spacing, average passenger trip time is expected to decrease because passengers located east of Third Avenue will no longer need to walk to Lexington Avenue. Travel time will also be expected to improve for passengers remaining on the Lexington Avenue Line because of reduced overcrowding on that line.

As described in Chapters 2 and 8 of the FEIS, all station platforms would be two to three blocks long, and most stations would have multiple entrances. In some locations, those entrances would be on the opposite ends of the station, so that they could be as much as three blocks apart, and therefore on average customers would have at most three or four blocks to walk north or south to reach an entrance. Most riders would walk half that distance. Entrances are being sited in locations where they can best meet estimated demand.

Comment 93: The Second Avenue Subway will be slow, not easily accessible, go nowhere, and therefore be underutilized. Because stations are too far apart and too deep, and there is no express service, and people will stay on the Lexington Line or buses, of which there will be fewer. (Trent)

Response: Please see the response to Comments 82 and 92 for responses about station depth and spacing, and the response to Comment 135 for information about express service. The FEIS analyzes the travel time and predicted ridership on the new Second Avenue Subway as well as the predicted reductions to ridership that would occur on the Lexington Avenue Line. This information is derived from the project's ridership model, which takes into account the specific design of the system, including station spacing, depth of stations, and travel time. As shown in the FEIS (see Chapter 5B), the Second Avenue Subway would be faster than the existing Lexington Avenue Express Line, would attract a substantial number of riders, and would lead to a dramatic reduction in ridership on Lexington Avenue Line trains and improvement at all Lexington Avenue stations. As also described in Chapter 5B, the reduction in riders on the Lexington Avenue Line would in turn reduce travel times on that line. With fewer riders, bus travel could also be faster, as boarding and alighting time would be reduced. Consistent with standard NYCT practice, bus service would be routinely evaluated and adjusted to meet ridership demand. As part of the Second Avenue Subway project, NYCT does not plan to reduce the number of buses serving the East Side.

Comment 94: Several commenters suggested that specific additional stations be added. These included stations at 79th Street, to enable passengers to transfer to the 79th Street bus line; at 66th Street; at 49th to 50th Streets for transfers to buses serving Radio City and north Times Square; at 28th Street for access to Bellevue; and at 8th Street. (Bell, Chase, Morciglio, X)

Response: As described above in response to Comment 92, stations have been spaced to achieve a balance between maximum operating speed of the system and convenient access for passengers. Placing the stations closer than 10 blocks apart would mean that the new system would have longer travel time and therefore would not attract riders from the Lexington Avenue Line, which is one of the primary goals of the project. Locating stations at any of the suggested locations while retaining the other proposed stations would result in stations spaced too closely together for efficient and competitive operations, and, in some cases, for safe operation of the subway.

The 1,000-foot length of each station would preclude the addition of new stations at the locations mentioned. At the same time, in many locations, entrances to the stations would be provided at either end of the two- to three-block long stations, bringing them close to the locations cited in the comment. This would increase accessibility to the system along the corridor.

In addition, because of the project's connection to the 63rd Street Line, placing a station between 69th and 59th Streets (for example at 66th Street) is not feasible. The project would, however, provide new service to the existing Lexington Avenue/63rd Street Station, with a new entrance at Third Avenue.

Comment 95: The stations should be staggered so that they do not coincide with the Lexington Avenue stations, except at important transfers like 59th Street, Grand Central Terminal, and 14th Street. It would be more convenient to have stops halfway between—for example at 91st and 72nd Streets. (Umlas)

Stations should match the locations of Lexington Avenue line stations, to be more effective in reducing crowding on that line. (Stewart)

Stations should be located at major crosstown streets to provide for convenient transfers to crosstown buses and other subway lines. (Chase, Stewart)

Response: Stations are being sited to provide for efficient transfers to other subway lines and buses to the degree possible, in order to relieve congestion on the Lexington Avenue Line and overcrowded M15 bus. Most of the planned Second Avenue Subway stations would be therefore sited at major crosstown streets.

Comment 96: Open a part-time station at the 129th Street storage tracks. (Stelter)

Response: Given the nature of the activities (such as cleaning trains) that would take place at the storage tracks, as well as the tightly packed configuration of the stored trains, it would not be feasible to site an additional entrance at any of the storage track areas, including at 129th Street.

Comment 97: We support the proposal for the 125th Street Station at Lexington Avenue, which will provide many benefits. (RPA/Ronderos, RPA/Zupan)

The 125th Street Station between Lexington and Park Avenues would deprive the Bronx of an additional extension and is a waste of train capacity. (Marotta, Rozankowski)

A station at 125th Street and Second Avenue should be included as part of the proposed project, as this would be necessary for a future extension to the Bronx. This should be a side platform station with level tracks. (Allen, Condoyannis)

Response: As described in Chapter 5B of the FEIS, "Subways and Commuter Rail," the new Second Avenue Subway station at 125th Street would support the project's purpose and need by attracting riders who currently use the Lexington Avenue Line, thereby reducing the number of passengers on the Lexington Avenue Line in Manhattan. The station would also allow Metro-North passengers to transfer easily to the subway system, providing a new benefit to transit riders in Westchester, Connecticut, and northern New York, as well as to reverse commuters.

As described in Chapter 2 of the FEIS, the project is being designed to facilitate a future connection to the Bronx.

Comment 98: We support the addition (since the MESA MIS/DEIS) of a station at 116th Street (Civitas, Fields, CB11/Givens, Lachman, RPA/Ronderos, RPA/Zupan).

We support the Chatham Square Station at the Bowery and Worth Street. (Chan)

Response: Comments noted.

Comment 99: The 116th Street Station should have entrances on all four corners of 116th Street and the northwest and southeast corners of 118th Street and Second Avenue, to support this area as the eastern hub of the 116th Street commercial corridor. The station should have elevators and escalators.

Response: At the 116th Street Station, the entrance or entrances would be located on the east side of Second Avenue, because utilities have already been moved from the east to the west side of the avenue in this vicinity, making it impossible to build on the west side without significant disruption from construction activities. Station entrances are being designed to comply with the current regulations governing emergency egress and will be wider and accommodate more people than a typical entrance to an existing station. Modeling conducted by NYCT, which accounts for projected population growth, has demonstrated that entrances at all four corners at 116th Street are not necessary to meet ridership demand. Providing more entrances than necessary would require the use of additional private property and/or sidewalk or street space. The location proposed for an entrance to the 116th Street Station in the SDEIS was at 116th Street. In response to community requests, an additional entrance is now planned for the north end of the station and would be located at the southeast corner of 118th Street. Escalators and an elevator would be provided at the 116th Street entrance.

Comment 100: At the 106th Street Station, entrances should be located at the northwest, northeast, and southwest corners of 106th Street and at 108th Street and possibly the northwest corner of 105th Street. Entrances should be small airy and distinctive and include elevators and escalators and a live token booth (RPA/E. Harlem).

Response: Entrances to the 106th Street Station are currently proposed at 108th and 106th Streets. In both cases, the entrances would again be located on the east in order to take advantage of the fact that utilities have already been located away from the western side of Second Avenue in this vicinity. Model results indicate that two entrances would be sufficient to serve the anticipated demand at this station. As described in the above response, the number of entrances has been designed to meet estimated demand. Providing additional entrances would require the use of additional private property and/or sidewalk or street space.

Most of the Second Avenue Subway's entrances are being designed to have distinctive and attractive entrances, and to include escalators and at least one

elevator as well as a fare collection area. Providing natural light in the stations is also a design goal and stations will be designed to include such light where feasible. Decisions have not yet been made regarding staffing levels at Second Avenue Subway stations.

Comment 101: The 72nd Street Station design with island platforms and a center track is appropriate, as it allows trains running via Broadway and 63rd Street to use the middle track at 72nd Street as a termination point in hours of minimal service and cross-platform transfers for the full length Second Avenue service. (Condoyannis)

Response: Comment noted.

Comment 102: Build a new station at 63rd Street and First to York Avenues on the 63rd Street Line (Ⓕ train). This may also be an inducement to initiate a Second Avenue to Queens service. (Stelter)

Response: A new station at First Avenue and 63rd Street would involve construction of a station along the existing 63rd Street Line, in a portion of tunnel close to the tunnel's route below the East River, which is therefore at a slope inappropriate for a station. A station at this location would be infeasible because the tracks are transitioning from being parallel, as they are under the river, to being stacked, as they are at the Lexington Avenue/63rd Street Station. Although this station is not feasible, the Second Avenue Subway would include a connection to the 63rd Street Line. In the near term, this connection would be used for non-passenger service diversions and reroutes due to disruptions. If the capacity of the Queens subway network is increased in the future, or if existing service is reconfigured, this connection, along with available track capacity on the planned Second Avenue Line south of 63rd Street, would enable additional subway service between Queens, Midtown, and the Financial District to be provided.

Comment 103: A station should be provided at 59th Street, not 57th Street. That would facilitate access to the ⓌⓃⓇ lines. (Morciglio, X)

Response: The location of the 55th Street Station was selected to optimize the transfer between the Second Avenue Line to the 53rd Street Line (ⒺⓋ) service at Third Avenue. A connection at 59th Street to the ⓌⓃⓇ lines would eliminate the possibility of a 53rd Street transfer, and would require a long passageway extending from Second Avenue to Lexington Avenue. In addition, it would also be difficult to construct a station at the foot of the Queensboro Bridge. Because of the bridge ramps that occupy several blocks in this area, a station at this location would have limited accessibility and would not be located in the area where there would be the highest demand for a station.

Comment 104: You need a station in the Lower East Side. (Daniels)

Response: Stations at 14th Street, Houston Street, Grand Street, and Chatham Square provide direct access to the Lower East Side.

Comment 105: On Grand Street you need careful consideration on where to locate the station. The community should be involved. (Lopez)

Response: As part of the project's ongoing public outreach process, NYCT has been meeting with Community Board 3 regarding this station's location and other project elements within the board's boundaries. This coordination will continue as design of the Second Avenue Subway advances. Please see Chapter 4 for a summary of Community Board 3 participation to date.

TRANSFERS AND CONNECTIONS

For other related comments, see "Connections to Other Boroughs," below and "Subway Station Locations," above.

Comment 106: The SDEIS is too vague regarding transfer points, indicating that they are under evaluation. The evaluation in the document should be related to how rather than whether they will be constructed. The public should know now where the transfers will be and should have a say in the determination. (Olmsted)

As many of the transfers under evaluation as possible should be implemented, connections to other lines and boroughs should be emphasized, and the subway must connect with other lines via passenger transfer facilities, track connections, and ultimately extensions to the Bronx, Brooklyn, and Queens. Cross platform transfers are best. As many connections as possible should be included to east-west trains. The Ⓕ doesn't seem to connect to the new subway. There is no connection for Brooklyn and Queens trains to Lower Manhattan. The more transfer points the subway offers, the more attractive it is for residents of Queens and Brooklyn. (Chase, Olmsted, Maloney, Markowitz, Stelter, Strangeways, Stringer, Williams-Pereira)

The subway will increase connections and/or accessibility to bus and ferry systems. (Silver, Weiner)

You can save money by using walkover transfer points. (Morciglio)

Response: Transfers to as many other subway lines as practicable would be provided as part of the Second Avenue Subway service. The discussion in the SDEIS provided information on the design that was available at the time the document was published, so as to provide as much information as possible to the public about where transfers might be. Construction of the potential transfer points was analyzed in the SDEIS.

Transfers would be provided at locations where an existing line's station, the tunnel alignment, and track profile permit it; where projected ridership warrants it; and where the costs are manageable. Transfers under evaluation are listed in Table 2-1 in Chapter 2 of this FEIS and include connection at 125th Street to the 4 5 6 trains (as well as an easy connection to Metro-North), the E V at 53rd Street, the Lexington Avenue Station on the 7 line at 42nd Street, the L at 14th Street, the F V at Houston Street, and the B D at Grand Street. The project's Broadway Line service would allow connection to the F at 63rd Street-Lexington Avenue and to the Broadway Line local service.

For discussion of track connections and future extensions to other boroughs, see the response to Comment 122 below.

Comment 107: Maximize intermodal transfer possibilities at the 125th Street Station by providing an enclosed bus transfer connection for local and express routes for buses to LaGuardia Airport and New Jersey routes extended from George Washington Bridge. (Stelter)

Response: The 125th Street Station would provide opportunities for intermodal transfers to buses running along 125th Street, including to LaGuardia Airport. As there is not enough space off-street, creating a new enclosed transfer facility would require covering 125th Street's traffic lanes or alternatively would result in significant property impacts. In addition, it would result in impacts to historic resources. Therefore, an enclosed intermodal transfer is not feasible.

Comment 108: Transfer facilities south of 63rd Street should be equipped with moving sidewalks to improve passenger comfort. (Aryel)

Response: Moving sidewalks, are under consideration for the transfer under evaluation at 42nd Street, which, if adopted, would be the longest transfer between an existing subway line and the new Second Avenue Subway service.

Comment 109: How can there be a transfer from the Second Avenue Subway's 57th Street proposed station to the E V lines when those lines stop at Lexington/Third Avenues and 53rd Street? Do you expect people to walk four blocks north and one major avenue crosstown for a transfer? (elove@executive health exams.com)

The transfer at 53rd Street is very long. (Stelter)

Response: As described in the FEIS, the 55th Street Station (formerly referred to as the 57th Street Station) would extend from 53rd to 55th Street. A transfer concourse to the existing 53rd Street Station at Third Avenue is currently under evaluation. This transfer passage would be approximately 340 feet long. This is shorter than

the existing heavily used transfer between the 6 line at 51st Street/Lexington Avenue and the E V lines at 53rd Street.

Comment 110: There is a great need for a transfer to the E V at 53rd Street. (Chase, Maloney, Olmsted)

Response: NYCT recognizes the importance of a transfer between the Second Avenue Line and the 53rd Street Line, and has planned the location and layout of the 55th Street Station to allow this transfer. The project's ridership model shows that this transfer, if included, would be used by nearly 6,800 passengers during the AM peak hour transferring from the E V routes to the Second Avenue Line and nearly 4,000 riders transferring from the Second Avenue Line to the E V routes (see Table 5B-20 in the FEIS). This would reduce the number of people transferring between the 6 route on the Lexington Avenue Line and the E V by an estimated 1,100 during the AM peak hour. However, this transfer would have greater construction cost and disruption to existing subway lines than most of the other new transfers proposed, and for these reasons must still be further evaluated.

Comment 111: A transfer should be provided at 42nd Street. The transfer to the 7 line will enable Second Avenue riders to reach the far West Side if this line is extended and Queens riders to reach the far East Side hospitals. The length and difficulty of construction should not preclude its being built. (Chase, Olmsted)

The FEIS should note that the transfer at 42nd Street would connect the Second Avenue Subway to the 4 5 6 as well as the 7 train. The FEIS should also make it clear that East Side Access passengers will have the option of accessing the Second Avenue Subway if appropriate pedestrian connections are built. (Maloney)

Response: A transfer to Grand Central Terminal and the 7 service is currently under evaluation. This connection would allow passengers to transfer between the Second Avenue Subway's 42nd Street Station and the eastern end of the 7 station at 42nd Street. However, the length of this transfer (which could affect its use by passengers) and its construction costs require further evaluation before a decision to include it as part of the project. The FEIS has been revised to clarify that the possible connection at 42nd Street would allow transfers between Second Avenue Subway and Grand Central Terminal for LIRR riders using the new East Side Access service, as well as Metro-North riders and the Lexington Avenue Line.

Comment 112: The transfer under evaluation at 42nd Street is very long (800 feet); the EIS should mention the length of this transfer. Nobody is going to walk that far to transfer. Evaluation of a people mover or pedestrian concourse between Grand

Central Terminal and the Second Avenue Subway should be included. (Centolanzi, Chase, Fields, Stelter)

Response: Chapters 2 and 3 of the FEIS provide information on the length of this and other transfers. The transfer at 42nd Street to the ❼ line station would be approximately 900 feet long to reach the ❼ train (at approximately Third Avenue); as described in Chapter 2, the potential for use of moving walkways at that transfer is under consideration for part of the transfer. Because of space constraints from the existing ❼ tunnel, moving walkways are only feasible for approximately half of the transfer tunnel length.

Comment 113: Extend the 42nd Street Shuttle or build a new and separate shuttle route under 42nd Street from Second Avenue to Grand Central Terminal. A spur to Grand Central should be considered as part of the project. (Allen, Hodge, RPA/Zupan, Stelter)

Response: As described in response to the comment above, the project is evaluating a pedestrian transfer between Grand Central and the Second Avenue Subway. A rail connection would involve making stations compatible for both A and B Division cars, which have different widths. The problems associated with this are described in the response to Comment 76. A spur to Grand Central Terminal was evaluated in the Lower Manhattan Access Study and was found to attract relatively few riders from the Lexington Avenue Line. For more information, see Appendix B, Section E.

Comment 114: The 34th Street and Wall Street Stations should have at least one escalator-equipped entrance conveniently located for direct access to the ferry terminals at Pier 11 and 34th Street. An enclosed corridor should be provided from the Hanover Square Terminal to the Wall Street ferry terminal at Pier 11. (Olmsted, Stelter)

Response: At the 34th Street Station, an entrance with escalators would be provided on the east side of Second Avenue near 34th Street to facilitate this connection. Escalators would also be provided at the proposed entrance to the Hanover Square Terminal at Wall Street. Providing an enclosed corridor to the Wall Street Ferry terminal would involve additional tunneling, increasing project costs and environmental impacts.

Comment 115: Salvage the existing 700-foot tunnel under the Manhattan Bridge entrance and Confucius Plaza, and build a Grand Street-Chatham Square Shuttle. Chinatown is a big tourist draw and has lacked rapid transit access since 1955. (Stelter)

Response: The new Second Avenue Subway would provide stations at both Grand Street and Chatham Square along its mainline, so there is no need for a shuttle between these two stations. The project would also use the existing length of tunnel

constructed during the 1970s under Confucius Plaza. This tunnel segment would be used for ancillary facilities rather than for a train tunnel.

Comment 116: The project should include a transfer to the J M Z lines. This connection could be created between the J M Z Bowery Station and the Second Avenue Line's Grand Street Station. This transfer would serve northern Brooklyn and is as important as the transfers to the L and F V lines. It would allow the project to serve the area west of Nassau Street, expand coverage of Lower Manhattan, and provide access to the future Fulton Transit Center. (Markowitz, Olmsted, Stelter)

Response: A transfer connecting the J M Z Bowery Station to the existing Grand Street Station would result in significant property impacts in Chinatown and increased project costs and would not serve many additional riders. The area to the west of Nassau Street would already be served by the project through the proposed Broadway Line service. With respect to Brooklyn service, the proposed subway would include service via the Broadway Line across the Manhattan Bridge as well as north-south service along Second Avenue. Brooklyn F riders would be able to transfer at Houston Street (the Second Avenue Station on the F) and Brooklyn B D riders would be able to transfer at Grand Street to the Second Avenue Line. Additionally, a new passenger transfer between the Broadway-Lafayette Street and Bleecker Street Stations is to be constructed independent of the Second Avenue Subway (with a construction contract expected to start in 2004) and would help provide a more direct route to the East Side of Manhattan from Brooklyn.

Comment 117: The Second Avenue Subway should connect to the Fulton Transit Center. Consider using moving sidewalks or a shuttle from the Seaport Station. (Daniels, Fields, P. Johnson, Morciglio, NYC Transit Riders Council, PCAC, Stanton, Stelter)

Response: A transfer to the future Fulton Transit Center was evaluated. Because of its length, the transfer would be expected to have low use, even with the provision of moving sidewalks, and is not recommended for inclusion in the project. The Seaport Station is nevertheless being designed to avoid precluding a transfer in the future, if possible.

Comment 118: The Seaport Station should be placed at John Street where the area is more commercial, as it would accommodate the people most likely to use it. (Craddock)

Response: The Seaport Station would be located between Fulton and Dover Streets with entrances at Fulton Street on either side of Water Street. The station's location was selected in coordination with the Community Board to provide access that

best meets demand of those traveling to this portion of Lower Manhattan: residents of this area, who are concentrated on Water Street at Fulton Street; and employees and tourists who need to access office buildings and commercial uses farther east on Fulton Street in the South Street Seaport.

Comment 119: For the Hanover Square Terminal, build a 2 3 station at Old Slip and a part-time J Z station at Water Street (using the stub tracks south of Broad Street Station). (Stelter)

Response: This comment raises suggestions that are beyond the scope of this project's goals and objectives, which are aimed at improvements on Manhattan's East Side. The full-length Second Avenue Subway would not preclude construction of the suggested elements in the future. As discussed in the response to Comment 102, adding new stations to existing lines as they approach the river has been found to be infeasible.

Comment 120: Add a stop at Broad Street to connect to the J M Z. (Kupferberg, Morciglio)

Response: See the response to Comment 52 for a discussion of the location of the project's southern terminus. A connection to the J M Z at Broad Street would require additional tunneling in Lower Manhattan, which would likely result in adverse impacts to archaeological resources. Further, as described in Appendix B of the FEIS, the four buildings at the intersection of Wall and Nassau Streets—the New York Stock Exchange, the Bankers Trust Building, the J.P. Morgan & Company Building, and Federal Hall National Memorial—are significant historic and visual resources that would be visually, and potentially structurally, affected by construction at the Broad Street Station. Federal Hall National Memorial in particular would require special protection, as it has recently been identified by the National Parks Conservation Association as one of "America's Ten Most Endangered National Parks." Avoiding such significant adverse impacts is one of the project's goals.

Comment 121: How will the Q connect to the 6? The Q should connect to the Bronx-bound 6 train. (Stewart)

Response: The Second Avenue Subway would connect with the 6 line at the 125th Street Station. Passengers could also transfer to the 6 from the Q at 14th Street/Union Square. A transfer between the T and the 6 is under consideration at 42nd Street.

CONNECTIONS TO OTHER BOROUGHS

Comment 122: The project should be extended to serve other boroughs (Bronx, Brooklyn, Queens, and Staten Island). Wherever feasible, links with other lines and other

boroughs should be incorporated. The density and growth of Manhattan would not be possible without the subway system that connects it to the other boroughs. The largest single source of Manhattan employees is Brooklyn, and the second is Queens. The subway should serve the whole city. Citizens of the outer boroughs should also be included in the planning process. (Chase, Cornelius, CB8, Centolanzi, Markowitz, Marotta, Rozankowski, Stanton, Stelter, Trent, Wall, Williams-Pereira, X)

Response: The project's goals and objectives, established with public input at the beginning of the MESA Study, were designed to address transit problems on the East Side of Manhattan. The goals and objectives are detailed in Chapter 1 of the FEIS, and the process used to develop alternatives is described in Appendix B. As a result of that process, the project has been developed to provide improved transit service to the East Side of Manhattan and to relieve overcrowding on the Lexington Avenue Line. The proposed project would provide: service to Brooklyn via the Second Avenue/Broadway Line and a track connection to Queens, which in the near term would be used for non-passenger service diversions and reroutes due to disruptions. The 63rd Street connection to Queens could provide additional service to Queens, Midtown, and the financial district if the capacity of the Queens subway network is increased in the future or if existing service is reconfigured. Moreover, the project would not preclude service to the Bronx or Brooklyn via a future extension to the full-length Second Avenue Subway. In fact, it is being designed specifically to accommodate future extensions into other boroughs. The project is also being designed to accommodate transfers from trains serving other boroughs to the degree feasible, as described above and in Chapter 2. In this way, the project would serve the whole city.

Comment 123: The Second Avenue Subway should serve as the foundation of a line that will serve four boroughs. It can do this for an additional cost far less than the price of building in Manhattan alone. The subway is not a good deal without the other boroughs. A four-borough service network would also provide a viable basis for direct airport and commuter access to Lower Manhattan. (Hodge, RPA/Ronderos, RPA/Zupan, Straphangers)

Response: As described above, the project is being designed to be a foundation for a four-borough service network. Both the vertical and horizontal profiles of the tracks at the northern and southern ends of the alignment are being engineered to allow for a direct continuation of the alignment into the Bronx and Brooklyn. The new subway would also include a connection to the 63rd Street Line from Queens. In the near term, this connection would be used for non-passenger service diversions and reroutes due to disruptions. If the capacity of the Queens subway network is increased in the future, or if existing service is reconfigured, this connection, along with available track capacity on the planned Second Avenue

Line south of 63rd Street, would enable additional subway service between Queens, Midtown, and the Financial District to be provided.

Comment 124: We are glad that the subway will provide opportunities for future expansion to Brooklyn, the Bronx, and the Lower East Side. The provisions described for future tunnel connections to the Bronx and to Brooklyn via the Water Street alignment should be built into the system. (Civitas, Fields, Kreuger, Lachman, Silver)

Response: Comments noted. As described above, future connections to Brooklyn and the Bronx are not being precluded and bellmouths to facilitate future extensions of the line would be established in both locations. Future extensions of other lines to the Lower East Side would not be precluded by the project's configuration either.

Comment 125: While the project will benefit Upper East Side commuters east of Third Avenue, it will not necessarily aid those commuters from the Bronx, Brooklyn, Upper Manhattan, and the Upper East Side west of Lexington Avenue. Riders from neighborhoods such as Riverdale and Washington Heights cannot conveniently get to the Second Avenue without two subway transfers or using buses. (Allen)

Response: As demonstrated in Chapter 5B of the FEIS, the new Second Avenue Subway would attract riders along its entire proposed alignment, including Upper Manhattan (East Harlem and the Upper East Side). The majority of these riders would have origins or destinations east of Third Avenue, because the existing Lexington Avenue Line is closer to those living or working west of Third Avenue. Also, as noted previously, the project's goals and objectives, developed with public input, were designed to address transit problems on the East Side of Manhattan. Commuters would benefit from the flexibility provided by free transfers to other subway lines.

Comment 126: Many commenters expressed an opinion that the Second Avenue Subway Line should be extended into the Bronx, either now or in the future. This would serve the growing population of the Bronx and support the Hub business district and other Bronx communities. Without such a connection, the new subway would not divert many riders from the Lexington Avenue Line. (Aryel, Bernardez, Chase, Gerber, Haikalis, Koe, Olmsted, Raymond, Roberts, Wall)

Many commenters suggested more specific potential options for extending the Second Avenue Subway to various parts of the Bronx and connecting the subway with other services. Specific comments included suggestions that the subway be extended to the Pelham Bay Line to allow use of the Westchester maintenance barn; run to Gun Hill Road and Webster Avenue; follow the Third Avenue or Lafayette Avenue Line; go to Co-op City and follow the route of the old Third Avenue Line; travel to Pelham Bay Park; and connect with the 2 5

line. (Allen, Bernardez, Chase, Hadaway, P. Johnson, Koe, Olmsted, Raymond, Wall)

I support the decision to provide an option for a future extension to the Bronx via a short tunnel stub pointed northward along Second Avenue at 125th Street, as well as placing tail tracks west of the 125th Street Station. (Aryel)

The 129th Street storage tracks should be constructed with a possible connection to a Bronx tunnel. (Stelter)

Response: See the response to Comment 122. The Second Avenue Subway project is focused on a line running from the Financial District to 125th Street in East Harlem, and a connection to the Bronx is not included as part of this project. However, the system is being designed to facilitate connections to the Bronx in the future. The proposed alignment would be constructed with potential future connections to the Bronx either from the 129th Street storage tracks or a bellmouth at 122nd Street if the storage tracks are not constructed. Tail tracks would also be constructed west of the 125th Street Station that could be extended to the Bronx. The Second Avenue Subway would provide a transfer at 125th Street for Bronx passengers on the 4 5 6 lines. In addition, as described earlier (see response to Comment 15 and the more detailed discussion in Chapter 5B of the FEIS), the project would significantly reduce crowding on the Lexington Avenue Line, thus improving service and travel times for Bronx riders on those lines.

Comment 127: The project should include a revenue track connection between Queens and Lower Manhattan using the 63rd Street Tunnel. This would relieve crowding on the Lexington Avenue Line and at the transfer between the Lexington Avenue Line and Queens service at 53rd Street. (Centolanzi, Fields, Koe, Metro East, Olmsted)

Response: The Second Avenue Subway would connect to the 63rd Street Tunnel east of Second Avenue via a curved tunnel at approximately 61st Street and Second Avenue. In the near term, this connection would be used for non-passenger service, diversions and reroutes due to disruptions. The connection between the Second Avenue Subway and the 63rd Street Tunnel would provide flexibility in operations on the Second Avenue Subway, though no additional service beyond that addressed in this FEIS would be provided. Any future service changes pertaining to this connection would be assessed as part of NYCT's standard service change review procedures. If the capacity of the Queens subway network is increased in the future, or if existing service is reconfigured, this connection, along with the available track capacity on the planned Second Avenue Line south of 63rd Street, would enable additional subway service between Queens, Midtown, and the Financial District to be provided.

The project would benefit Queens riders by its potential new transfer between the Second Avenue Line's 55th Street Station to the E V service at the Lexington Avenue-53rd Street, which would also relieve the transfer between the Queens lines and the Lexington Avenue Line. Riders could also transfer between Second Avenue service and the F V lines at Houston Street. A potential transfer to the 7 line is also being evaluated. In addition, the project would substantially increase service at the 63rd Street-Lexington Avenue (F) Station and slightly increase service on the Broadway Line.

Comment 128: The high transferring volumes from Queens to north–south trains described in the SDEIS (Table 5B-20) show a need for direct service from Queens to the Second Avenue Subway. Lacking the funds to add significant capacity in Queens (by constructing the bypass or something else), the only way to run a limited amount of service in Queens is to reconfigure Queens service. The capacity of the Queens Boulevard local tracks is limited by the ability of the Forest Hills terminal to turn trains, rather than line capacity. A limited amount of Second Avenue Queens service can be provided early on by running three services on the Queens Boulevard local tracks, R V and Second Avenue service. Many Queens Boulevard riders would choose the Second Avenue train, and the value of the investment in the 63rd Street Tunnel would be enhanced. (Olmsted)

Response: These recommendations are outside of the scope of the project. As described above, any future service changes pertaining to this connection would be assessed as part of NYCT's standard service change review.

Comment 129: A local service from the 57th Street Station on Second Avenue could provide transfers to and from the F train at Roosevelt Island and Queensbridge Plaza. There is currently no daytime service between F train stations and local Queens stations on the Queens Boulevard lines. A center island platform should be used at 57th Street as an eventual terminal for Queens service. Stub tracks in this area could be used for storage. (Condoyannis)

When you expand service, Queens residents wind up with poorer service. For example, we have worse E F service after rerouting and the 63rd Street connector. (Trent)

Additional service could be provided to Queens via the Queensboro Bridge and on Queens Boulevard and Jamaica Avenue. Queens Boulevard service could also run across Broadway to West End Avenue and along 59th Street. (Condoyannis, X)

Response: The commenters' proposals do not meet the project's goals and objectives. As described in the FEIS, a transfer to and from E V trains is under consideration at 53rd Street. Second Avenue Subway Q service running along the Broadway

Line would connect to the F train at the existing 63rd Street/Lexington Avenue Station, but would not extend to West End Avenue or along 59th Street. A center island platform is planned for the 55th Street Station, but would not be able to accommodate a terminating Queens service. There is limited capacity on Queens Boulevard. The 63rd Street service change benefited many riders by increasing service between Manhattan and Queens. However, some riders were negatively affected due to Queens Boulevard capacity constraints. The F train runs as an express train on the Queens Boulevard Line to provide additional capacity on that heavily traveled route. This change was made possible by completion of the 63rd Street Connector, which allowed the F to be rerouted to the 63rd Street Tunnel. The V train was introduced in its place. There is not enough capacity on the Queens Boulevard Line to run the both the F and V as a local service.

Comment 130: The subway should connect to the N R lines at Chatham Square to bring Downtown commuters into Queens. The MTA can use the excess capacity on those lines immediately, without waiting for the uptown portion to be built. This would provide a one-seat ride from Queens to Wall Street. (Maloney)

Response: A connection to the N R lines at Chatham Square would be very disruptive in terms of construction impacts and subway service impacts, as well as very costly. The connection between the N R line (under Broadway) and the Second Avenue Subway at Chatham Square would involve construction of tunnels stretching more than 3,000 feet. Providing a junction into the existing N R line while maintaining operations would be expensive and complex. The junction with the Second Avenue Subway at Chatham Square would require significant lengths of additional cut-and-cover tunnels under the Bowery, causing significant additional surface disruption during construction. The cost of this proposal would be significantly more than adding the uptown sections for which this option is intended to provide a temporary alternative. In addition, this proposal would not provide significant relief to crowding on the Lexington Avenue Line. As proposed by the project, cross-platform transfers would be available on the Second Avenue-Broadway Q service from points south of 63rd Street-Lexington Avenue on the Broadway Line for passengers traveling to Wall Street from Queens.

Comment 131: The Sunnyside Yard and service to Queens should be considered. The Port Washington Branch should be converted to subway service—the P line. The V service should be shifted to the Second Avenue Subway and the P would operate via Sixth Avenue to Second Avenue Station or Kings Highway/ McDonald Avenue. (Kupferberg)

Response: These recommendations are outside of the scope of the project.

Comment 132: Many commenters stated that the Second Avenue Subway Line should extend into Brooklyn, either now or in the future, to support both its existing and growing residential and business populations. Brooklyn is the third-largest CBD in the region, and substantial growth is planned there. Brooklyn is also closer to Lower Manhattan than Midtown Manhattan. Planning and engineering to determine the optimal configuration for a Brooklyn extension should be conducted now. (B. Adler, Gualtieri, Ketcham, Markowitz, Olmsted)

How will the line connect to the Brooklyn tunnels? (Stewart)

Response: This project proposes a full-length subway under Second Avenue in Manhattan from the Financial District to 125th Street. No work is proposed as part of this project in Brooklyn, as that does not meet the goals and objectives of this project. However, the southern portions of the alignment would be designed so as not to preclude future connections to Brooklyn. With the new Hanover Square Station south of Wall Street at approximately 110 feet below street level, the elevation would be deep enough to allow for the potential extension of Second Avenue Subway service to Brooklyn.

However, Second Avenue Subway Q service on the Broadway Line would travel into Brooklyn via the Broadway Line across the Manhattan Bridge. Passengers could also transfer to Brooklyn-bound L trains at 14th Street, F V trains at Houston Street, or to B D trains at Grand Street.

Comment 133: A number of commenters suggested more specific potential options for extending the Second Avenue Subway to Brooklyn. Suggestions included running service through the Montague Street Tunnel and creating track connections at Chrystie Street between the Second Avenue service and Manhattan Bridge service. (B. Adler, Bolden, G. Green, Morciglio)

Response: See response to Comment 132 above. Please note that as proposed, the project would include service to Brooklyn via the Broadway Line and Manhattan Bridge, so connections at Chrystie Street to that service are unnecessary, and due to the constraints of the existing lines, unfeasible.

Comment 134: Commenters suggested specific potential options for extending the Second Avenue Subway to Staten Island. Suggestions included moving the subway's southern terminal closer to the ferry terminal; providing a free bus or light rail shuttle from Hanover Square to South Ferry; or constructing a new tunnel under the harbor connecting to Station Island Rapid Transit. (SI CB3/Markow, Morciglio, Stelter, Waterman)

Response: For a discussion of the southern terminus, see the response to Comment 52 above. The southernmost entrance to the Hanover Square Station is currently proposed at Coenties Slip, which is three blocks from the Staten Island Ferry. This distance does not warrant provision of a bus or light rail connection. A new

harbor tunnel to Staten Island is not proposed as part of this project, as it would not meet the project's goals and objectives. Moreover, provision of this tunnel would preclude a future connection to Brooklyn, which is much more densely populated.

ADDITIONAL TRACKS AND EXPRESS SERVICE

Comment 135: Many people commented that the Second Avenue Subway should have four rather than two tracks for part or all of its route. Every trunk line in Manhattan has four tracks, and provision of four tracks would allow flexibility in the case of operations and routing problems. The new system should have local and express service, to decrease travel times (via express service) and provide greater access to neighborhoods. A two-track line would not induce riders from the outer boroughs to switch from the Lexington Line express service to the Second Avenue service, because of longer travel times. At a minimum, three tracks should be provided to allow for peak-direction express service. Provision of four tracks would also provide room for expansion in the future and the possibility of connection to other boroughs. Some commented that four tracks should be constructed now, so that there will be no need to add them in the future, while others commented that the project should be designed to anticipate expansion to a four-track system. (Allen, Aryel, Bell, Chase, Cornelius, Daniels, Gerber, Hadaway, P. Johnson, Marotta, Metro East, Morciglio, Rozankowski, Shachter, Stanton, Trent, Updegrove, Williams-Pereira, X)

Response: As described in Chapter 2, except in a few key locations where three or four tracks would be provided to accommodate train storage, diversions, and other routing problems, the Second Avenue Subway would be a two-track system because of several important considerations. Partly in response to this comment, the portion of the route between 21st and 9th Streets would have two additional tracks (for a total of four tracks). These two tracks would be used primarily for storage of trains, but would also provide flexibility and allow diversions in the event of service disruptions. Compared with a four-track line, a two-track system would greatly reduce the disruption associated with its construction as well as the cost of the system. If a four-track line were constructed with all tracks on the same level, the project's stations and tunnels would be wider than the streetbed, and therefore would extend beneath buildings on both side of Second Avenue. Construction of such a system would significantly increase the amount of construction disturbance as well as the construction cost. If the tunnels were constructed on two levels (i.e., with express tracks beneath the local tracks), this would still require substantially more tunneling, which would greatly increase the cost and time required to construct the new system. Further, a bi-level system would need multiple locations where tracks could cross between the two levels, again requiring wide tunnels and substantial construction disruption. It would also need significantly larger ventilation

facilities and additional emergency exits, which could require additional property acquisition.

With a two-track system, stations would be placed approximately 10 blocks apart, providing a balance between service speed and proximity for customer access (for more on the number of stations provided, see the response to Comment 92 above). A two-track system would meet projected demand while reducing crowding on the Lexington Avenue Line and significantly minimizing costs. See the response to Comment 93 above regarding travel time and the number of riders attracted from the Lexington Avenue Line.

Comment 136: We support the two-line subway service. (Civitas)

Response: Comment noted.

STORAGE TRACKS

Comment 137: Where will you put the Second Avenue yard? (Hassan)

Response: As described in the FEIS (see Chapter 2), several potential storage options are under consideration, including storage tracks beneath Second Avenue north of 125th Street, west of the 125th Street Station, adjacent to the alignment between approximately 21st and 9th Streets, south of the Hanover Square Station, and in the existing 36th-38th Street Yard in Brooklyn. Train storage space would be required at most but not all of those locations. Final decisions will be made once additional engineering studies are completed.

Comment 138: The storage tracks in North Harlem are expensive and would be superfluous if there is going to be a Bronx extension. (Rozankowski)

Tunneling under the Harlem River to the Bronx would access currently underused freight yards that could be used by the Second Avenue project. An expensive and inadequate yard under Second Avenue north of 125th Street would not be needed. (Marotta)

Response: As described in Chapter 2 of the FEIS, a combination of storage locations would be selected to handle the project's storage needs, based on cost, constructability, effects on subway system operations, and environmental impacts. If selected, the 129th Street storage tracks would be designed to accommodate a future connection to the Bronx, after which storage for trains would be provided instead in the Bronx. Use of the Harlem River Yard for storage of Second Avenue trains would require construction of a tunnel beneath the Harlem River at this time. This would add substantially to the cost of the project for no additional benefit, and adversely affect other uses of the yard.

CONSTRUCTION ISSUES

CONSTRUCTION SCHEDULE AND SEQUENCING

See also "Project Cost and Financing," above, for related comments.

Comment 139: Several commenters asked about the length of construction and the expected start date of subway operations. Some requested a more aggressive construction schedule, urging that the first tunnel contract be awarded by the end of 2004 or that two-year completion dates be required in every contract. (Candy, Chase, ESNA, Gerber, Hitch, Metro East, Olivero, Olmsted, purity@att.net, Trent, Weltz)

Response: Engineering is on schedule to allow the first contract to be awarded in 2004 assuming successful completion of the NEPA process and issuance of a Record of Decision and other approvals by the FTA. Various forms of contract incentives are under consideration as a means of expediting the construction schedule.

As described in Chapter 3, construction is expected to take approximately 16 years to complete. As described in Chapter 3, "Description of Construction Methods and Activities," the project has been planned to allow it to be phased in a manner that would permit portions of the new subway line to become operational before the entire line is complete. Each operating segment would result in a new and fully functional portion of the overall subway project and would be independent of funding and construction decisions in other phases. The proposed phasing plan is extremely flexible, in that it would permit multiple phases to be constructed simultaneously if sufficient funding is available.

Phase 1 would provide service from East Harlem to West Midtown and Brooklyn via the existing 63rd Street and Broadway Lines. Phase 1 includes three entirely new subway stations—96th Street, 86th Street, and 72nd Street—plus new subway entrances at the existing subway station at 63rd Street and Lexington Avenue. It also includes tunnels and tracks connecting the area from 105th Street to 62nd Street, as well as a third track at the 72nd Street Station to be used for train storage or to accommodate train diversions if necessary. The second phase of operations would link the rest of the East Harlem neighborhood to the new subway service. It would entail building three new subway stations—at 125th Street, 116th Street, and 106th Street. Tracks would extend along 125th Street from approximately 525 feet west of Fifth Avenue to Second Avenue, and then continue onto Second Avenue, ultimately stopping at 105th Street. At 105th Street, a link to Phase 1 would be provided. In Phase 2, the bellmouth to permit a future connection to the Bronx would also be built, as well as the 129th Street Storage Tracks and the 125th Street Storage Tracks. In Phase 3, tunnels would be constructed from 62nd Street to Houston Street, and stations would be opened at 55th Street, 42nd Street, 34th Street, 23rd Street, 14th Street, and

Houston Street. Underground storage tracks between 21st and 9th Streets would also be built. Phase 4 would extend from Houston Street to south of the Hanover Square Station and would include new stations at Grand Street, Chatham Square, Seaport, and Hanover Square, as well as a fully reconstructed Grand Street Station on the existing Ⓑ Ⓓ service at Grand Street. Storage tracks south of Hanover Square would also be built. More information on the phasing plan currently under consideration is presented in Chapter 3. (See also the response to Comment 37.)

Comment 140: The project should be phased, and the phasing should be a matter of public review and debate. The SDEIS does not fully address issues of construction sequence options. The FEIS must lay out fully the issues surrounding a full-length construction program, including the constructible segments, so that impacts can be fully understood. (Hodge, McArdle, RPA/Ronderos, RPA/Zupan)

Will you be starting at the north, south, or both ends of the line simultaneously? (Smith 1) Construction must begin on both ends simultaneously. At the north end, construction should begin on 125th Street. (CB11/Llano)

The construction should begin at 125th Street since half of the tunnel is in East Harlem. It will be cheaper and more efficient to start here. (CB11/Givens)

Determine the construction schedule now; concentrate on linking already built structures (110th to 120th Street, 99th to 105th Streets and Canal to Pell Street). (Stelter)

Construction could be done as one contract from the Upper East Side past 63rd Street and into Lower Manhattan, using soft soil boring technology to allow for continuous drilling. (RPA/Ronderos)

Response: As described in the response to Comment 139, above, the FEIS presents the proposed phasing plan for the project, including the impacts associated with constructing the various project components in each phase. Chapter 3 of the FEIS also identifies the four other options considered before the current plan was identified. No new or different significant adverse impacts would result from the refined phasing plan presented in the FEIS.

Comment 141: The subway should start on the Bronx side of the Harlem River to get a head start on the Bronx extension and reduce negative impacts of construction in East Harlem and the Upper East Side. (Hodge, RPA/Zupan)

Response: Starting subway construction in the Bronx would require that an additional tunnel be constructed under the Harlem River. The rock in this part of Harlem is very deep, so construction of this river tunnel could be complex. In any case, launching a TBM from the Bronx would require a deeper alignment through East Harlem. This would not take advantage of the existing tunnel segments,

which represent a substantial previous investment of public funds. Using the existing tunnel segments would also reduce construction time and cost. Piles from previous tunnel construction would obstruct a TBM in this area and would be costly and disruptive to remove. Furthermore, it is important to note that little of the Second Avenue route in East Harlem requires construction of a tunnel in any case; most of the route consists of either existing tunnel or locations where stations are proposed and therefore cut-and-cover work is required in any event.

Comment 142: Several commenters suggested that the cost of the project could be reduced by designating a segment to be built and operated first, while construction continues on other portions of the alignment. This would demonstrate MTA's commitment, secure political support, and allow some recouping of costs while construction is under way. Some commenters suggested building the portion of the route north of 63rd Street first, and others suggested completing downtown sections first to take advantage of funding available for projects in Lower Manhattan and to contribute to that revitalization effort. (B. Adler, Artur, Aryel, Maloney, NYC Transit Riders Council, Stanton, Weltz)

Response: The options for phasing the construction of the project are described in Chapter 3, "Description of Construction Methods and Activities," and summarized in the response to Comment 139, above. As noted there, a phasing option that allows operation of an interim operating segment is preferable, for the reasons cited in the comment. The proposed phasing plan presented in the FEIS would permit portions of the new subway line to become operational before the entire line is complete. Each operating segment would result in a new and fully functional portion of the overall subway project. This option would involve first boring the tunnels between 105th Street and 62nd Street with a rock TBM and constructing the 96th, 86th, and 72nd Street Stations, and new subway entrances at the existing subway station at 63rd Street and Lexington Avenue in Phase 1. This phase could commence operations upon its completion while another phase (or phases) begins construction. Commencing the project in Lower Manhattan would present greater difficulties than the identified option, because construction would have to be completed as far north as 63rd Street before operations could begin (the 63rd Street connection is the project's link to the existing subway system, and therefore the only practicable way to bring trains onto the Second Avenue Line). This option would be more costly than the identified option and the initial section would take longer to be operational.

CONSTRUCTION METHODS

See also comments under "Infrastructure and Energy," below.

Comment 143: Will subway construction necessitate opening up all of Second Avenue or will some of the work be done underground only? Work at stations should be done by mining from the subway tunnel upward. Cut-and-cover should be a last resort

and held to the shortest time to minimize construction impacts and be consistent with minimum dislocation in residential area. This would reduce noise and dust, and lessen the inconvenience to pedestrians and minimize traffic obstructions. (CB6/Sepersky, Sanders, Smith)

I am concerned about the plan to use cut-and-cover construction exclusively on 125th Street. I encourage the MTA to continue to evaluate the possibility of alternative construction techniques in order to minimize the disruption of this major commercial and transportation artery of Northern Manhattan. (CB11/Llano, Fields)

Response: NYCT shares the goal of minimizing the amount of surface construction required to build the project. As a result of ongoing engineering, the number of locations where cut-and-cover construction would be required has been substantially reduced from that assumed in the SDEIS. Most stations in rock would now be mined from the subway tunnels upward. The amount of cut-and-cover construction anticipated in East Harlem will be reduced from what was described in the SDEIS, including on 125th Street. The project now proposes to use TBMs between approximately 122nd and 125th Streets on Second Avenue, on 125th Street between Second and Third Avenues, and on 125th Street from west of Park Avenue to 525 feet west of Fifth Avenue. However, soil and rock would still need to be removed from the tunnels at various points along the alignment, and all stations—even mined stations—would require some disruptive surface construction ("cut-and-cover construction"). Please see Chapter 3 for a description of the proposed construction methods by location.

Comment 144: Where cut-and-cover construction would be used, a comprehensive plan with community input should be devised to minimize impacts. A work plan should be developed with community input to maximize public safety and accessibility. (CB6 PSHRC)

Response: As described in Chapter 6 of the FEIS, throughout construction, NYCT will employ an extensive community outreach program to keep the affected neighborhoods informed about construction activities taking place. NYCT will also help organize community task forces to provide citizen input on construction effects and how they could be mitigated. See also the response to Comment 7 above.

Comment 145: Construction methods should be to the best standards of engineering practices. The methods should have an open review. An independent panel of experts should reexamine the tunnel construction methods in order to select the most appropriate methodology and minimize construction impacts. (Metro East, Sanders)

Response: Construction methods are described in Chapter 3 of the SDEIS, affording the public the opportunity to comment on such methods. NYCT will continue to update the Community Boards as design progresses. Many factors are considered in the selection of construction methods in a particular area, including minimization of impacts, as well as cost and effects on project schedule. Reviews of construction methods will be conducted by experienced professionals, who are not directly associated with the project, perhaps including NYCT employees. These reviews will be coordinated joint evaluations by senior staff and/or technical specialists working on the project. The results of the reviews will be documented, and action items will be tracked.

Comment 146: We strongly object to the use of the area at 129th Street and the Harlem River for staging and storage. NYCDOT has a series of three major bridge reconstruction projects in the vicinity, with completion of the third bridge scheduled for October 2009. These projects will require this parcel and the adjoining waterfront area for our construction staging and storage as well as access to the job site for these projects. We regretfully cannot accommodate your request to occupy the property NYCDOT requires for our three bridge projects. (NYCDOT)

Response: Because of this conflict, the 129th Street barge site is no longer under consideration and has been removed from the FEIS.

Comment 147: In Midtown, construct the subway slightly to the east of Second Avenue, under the tunnel access roads and Kips Bay service road, for ease of construction, especially less movement of utilities. (Stelter)

Response: Shifting the alignment further to the east would necessitate shifting portions of the 34th Street and 23rd Street Stations beneath buildings, which would involve even more disruptive construction than the required utility relocations mentioned in the comment.

Comment 148: All utilities had been moved on Second Avenue between 2nd and 9th Streets in 1975. Construction might resume where work will be easiest. (Stelter)

Response: Comment noted. Many utilities, such as telecom and CATV have been installed since 1975. The project's engineers will explore the location of utilities in this area as engineering continues. Some cut-and-cover construction would be required in the area between 4th Street and Houston Street under any circumstance to build the Houston Street Station.

Comment 149: The decking for cut-and-cover needs to happen without gaps, so people do not catch their heels and it is safe for bikes. (Faust)

Response: Comment noted. Modern decking does not have gaps.

CONSTRUCTION MANAGEMENT

Comment 150: Construction manager-type contracts would avoid bidding disputes and facilitate design changes. Look into bonus/penalty contracts. (Stelter)

Response: NYCT intends to use a combination of internal staff and external construction managers consultants to oversee the Second Avenue Subway's construction. Bonus and penalty contracts are under consideration as a means to expedite construction work.

Comment 151: We are concerned about MTA's ability to manage this construction project, considering how they manage the existing system and their history of going over budget. (Gerber, Morciglio, Sahakian)

Response: Comment noted. Two recent major construction projects, the reconstruction of the 1 9 in Lower Manhattan and the construction of the 63rd Street Connection in Queens were completed on time and in budget.

Comment 152: It is easier to contain costs when work is kept in-house rather than farmed out to contractors or subcontractors. Local 100 endorses cost-saving proposal to use the MTA's in-house engineers from Local 375 of D.C. 37, which rebuilt the 1 line in record time and under budget. Union engineers, unlike consultants, won't be available in the long term. NYCT should define more precisely the role Local 375 engineers will play and when their involvement will begin and advise us how to expand that role. (Morciglio, Strangeways, Watt)

Response: NYCT elected to bid this project to a consultant team because its staff is fully engaged with other Capital Program work. Additionally, NYCT sought to identify a design consultant with worldwide expertise in performing underground work in the most cost-efficient and safe manner, using state-of-the art technologies. However, NYCT's own employees are performing all design management services for the project. For example, engineers from NYCT's union helped in the preparation of the scope of work, and continue to be involved in monitoring design activities, making technical decisions on behalf of MTA NYCT, and reviewing drawings and specifications.

IMPACTS FROM CONSTRUCTION

See also related comments under specific technical areas following this section.

Comment 153: We realize that the construction process will be long, inconvenient and unpleasant. We will need to minimize impacts—including noise, dust, traffic, and the presence of construction equipment—to the greatest extent possible, even if it will require additional funds. You should work closely with neighborhood and civic groups to minimize construction impacts. Mitigation

measures should be state-of-the art; if mitigation measures are not successful new methods must be developed and instituted to the satisfaction of all interested parties. Communities should also be consulted about shaft site locations. A Community Advisory Group should be part of the process. The EIS should stipulate such a construction coordinating committee. (Con Ed, Craddock, ESNA, Givens, Kreuger, King, Lopez, Maguire, Sanders, Sibilla, Silver, Weiner)

Response: The FEIS provides a full discussion of construction impacts, as noted by many of the commenters at the public hearings on the SDEIS. A variety of mitigation measures are proposed or being evaluated for the project's significant impacts. All project commitments and requirements related to construction would be organized into a Construction Environmental Protection Program (CEPP). NYCT will incorporate relevant portions of the CEPP into construction contracts and contractors will be obligated to follow these provisions. Mitigation measures are listed briefly in the FEIS by subject area and are summarized in the Executive Summary.

As described in Chapter 4, NYCT has already undertaken and extensive public outreach effort including multiple meetings with the local community boards that would be affected. Once the FEIS is published and FTA issues its Record of Decision (ROD), NYCT will continue to meet with the public to discuss any refinements to the mitigation measures identified in the FEIS and ROD. Prior to and throughout construction of the project, NYCT and its contractors will also present information concerning construction activities specifically relevant for each Community Board at each meeting.

As described in Chapter 4, NYCT will employ an extensive community outreach program throughout construction to keep the affected neighborhoods informed about construction activities taking place. This program will include meetings, newsletters, and a web site. In addition, a project office will be established at one or more locations along the alignment with a 24-hour telephone hotline, to allow people to ask questions and register complaints. NYCT will use the outreach program to work closely with Business Improvement Districts and other related business organizations, as well as other community groups, schools, houses of worship, etc., to spread information about construction activities. NYCT will also help organize community task forces to provide citizen input on construction effects and how they could be mitigated further.

NYCT will coordinate with businesses to address access/delivery issues; and provide special loading and unloading areas on nearby side streets to locations where access would be curtailed in front of buildings during construction. In those designated side street areas, parking could be prohibited to allow more reliable deliveries and pick-ups.

Comment 154: Shaft sites should be located at the top and bottom of the line where there is direct access to barging and the surrounding area is mostly commercial and industrial. Consider alternatives to where the spoils will be taken out. (CB3, Lopez)

Spoils removal would cause less disruption if done at a single location, such as where the TBM begins its work, rather than at multiple locations. (Sanders)

The MTA should work with private property owners to identify space for vertical shafts in East Midtown. (CB6/Sepersky)

Response: Chapter 3 describes the extensive process that was undertaken to identify potential shaft sites along the entire alignment. As described in Chapter 3, the locations of the various shaft sites are dictated predominantly by geological conditions. Because of Manhattan's overall density, finding sites that would not create any environmental impacts or neighborhood disturbance proved to be impossible, despite extensive research. The sites that have been identified to date represent the locations where the necessary construction operations could occur with the fewest adverse impacts to properties, parks, and residents. A single shaft site or shaft sites located at the northern and southern ends of the alignment is not being considered because this arrangement would add substantially to the construction's duration and create unfair burdens on the communities in which those shafts would be located. NYCT will continue to work with property owners to try to identify sites that would be best suited for the construction operations and provide the least amount of disruption to the surrounding communities.

Comment 155: Where will trucks load and unload and how many will there be and at what hours? (ESNA)

Response: Chapter 3 identifies the number of trucks that would arrive and depart from the various construction sites over the course of the construction period. The number of trucks would change according to the particular construction activity being undertaken. Trucks would load and unload at all 16 stations on Second Avenue, at the Lexington Avenue-63rd Street Station on the Broadway Line, and at the shaft sites identified in Chapter 3. As described in that chapter, as a result of information gained through ongoing engineering, the estimate of the amount of spoils to be removed over the course of the construction period has increased since publication of the SDEIS, and consequently, the total number of trucks that would arrive and depart at each spoils removal site has increased. Certain construction operations could occur for up to 24 hours per day, while some of the noisiest activities would not occur between 10 PM and 7 AM, except for under extraordinary circumstances. Chapter 12, "Noise and Vibration," includes more information on the timing of the various construction activities.

Comment 156: We are concerned with spoils removal at 66th Street. What will be the hours of construction for the shaft site? Will the use of the site be permanent or temporary? (ESNA)

Response: The 66th Street spoils removal activity would not be a permanent activity. That shaft site could be functional 24 hours per day for up to 4 years. A shaft site in this vicinity is needed to mine the 63rd Street connector tunnels, and 66th Street was identified as most suitable because of its extra width, and because no displacement would be required if this site could be used. Construction in this area could occur for up to 24 hours per day, while some of the noisiest activities, such as vertical blasting, would not occur between 10 PM and 7 AM.

Comment 157: I oppose the Houston/4th Street shaft site. Removing extra spoils in this residential neighborhood, closing five blocks, will be distressing with truck trips up to 10 years. (Lopez)

Response: As described in Chapter 3, some lane closures and spoils removal must occur at all stations. The Houston Street Station would be constructed in soil, and therefore involves excavation of the area between the end of the shallow rock (at 4th Street) and the southern terminus of the station (at Houston Street). Spoils from this excavation must be removed from this location. Temporary road closures must occur to allow this excavation for a period of approximately 4 years. A shaft may also be necessary near Houston Street to either insert or remove the TBM, because this location is the transition between rock and soil. As described in Chapter 3, locations to remove spoils from tunneling operation are needed along the alignment. The Houston Street shaft site is being considered as a location for the removal of some tunnel spoils, as a shaft site is already needed at this location and a spoils removal operation would maximize its use and because of its location at the end of the TBM run at the rock/soil interface.

Comment 158: Using the tunnel (Queens-Midtown Tunnel) to carry spoils to the tunnel mouth would simplify disposition and minimize local surface disruption. (CB6/Sepersky)

Response: Comment noted. The project intends to do so, as described in the FEIS.

Comment 159: Ancillary structures at stations should be combined wherever possible to minimize impacts. (CB3)

Response: Wherever practicable ancillary facilities have been consolidated to minimize impacts on the surrounding neighborhood.

Comment 160: How will the 3-minute idling rule for trucks and other construction vehicles be enforced? (CB6 PSHRC)

Response: NYCDEP regulation 24-163 describes the requirement for shutting off idling vehicles as related to clean air enforcement. NYCDEP and other appropriate agencies will cite offending vehicle operators. In addition, the requirement to follow the 3-minute rule will be included in the construction contracts.

TRANSPORTATION IMPACTS

CONSTRUCTION IMPACTS

See also the discussion above related to construction impacts.

Comment 161: We are concerned about the construction's impact to traffic. We want to minimize impacts on everyday life in Community Board 11. The increase in traffic on Second Avenue and parallel southbound avenues (Lexington and Park Avenues) during construction could be bad. (CB11/Llano)

A plan should be developed with public input to divert traffic volumes to reduce resulting air quality impacts during the construction period. (CB6 PSHRC)

Response: NYCT seeks to minimize the impacts to traffic, and is considering such issues in its ongoing construction planning process. To the degree possible, shaft sites and staging areas have been selected with such considerations in mind. For example, using the Queens-Midtown Tunnel to carry spoils from the tunnel would simplify disposition and minimize local surface disruption. As described in the FEIS, as many activities as possible would occur below ground to minimize the extent of street-level disturbances. Further, as described in Chapter 5D of the FEIS, a comprehensive areawide traffic management and mitigation plan will be developed by NYCT and reviewed by an Interagency Traffic Task Force comprised of affected and responsible agencies (e.g., MTA/NYCT, NYCDOT, NYSDOT, MTA Bridges and Tunnels), which will consult with local Community Boards. This plan will incorporate specific traffic management plans for affected areas, to organize traffic flows through the construction area and minimize delays to the extent possible. An important component of this plan will be a comprehensive traffic monitoring program, which will continually evaluate traffic conditions and ensure that traffic detours and mitigation measures respond effectively to traffic patterns as they change.

Most of the significant impacts predicted in the EIS can be mitigated through the use of standard traffic engineering improvements (e.g., low-cost and readily implementable measures such as adjusting signal phasing and green time, re-striping lanes and/or installing pavement lane markings, prohibiting curb parking, and enforcing prevailing traffic and parking prohibitions). At the most severely impacted intersections, such as 34th Street, these measures and a more aggressive diversion plan will be developed to further minimize adverse effects on traffic conditions.

Comment 162: Any work that would worsen traffic congestion on Second Avenue, especially in the morning rush hours, should be scheduled at times when street traffic is less heavy. Truck deliveries should be encouraged during the early morning or nighttime hours or First Avenue could have two-way traffic, to help alleviate traffic problems. (Civitas, Sanders)

Response: Comment noted. These are among the considerations that will be reviewed and discussed with the Interagency Traffic Task Force for each neighborhood where construction would occur (see response to the previous comment).

Comment 163: How will the shaft site on 66th Street affect traffic on Second Avenue? The 60s will back up even farther near the bridge. The contractor should put traffic control agents on Second Avenue while the shaft is present on 66th Street. This should be in the contract. (ESNA)

Response: The project's traffic impacts, including those that would occur as a result of the 66th Street shaft site, are identified in Chapter 5D of the FEIS. As noted in that chapter, significant adverse impacts would result on Second Avenue because of lane closures associated with the shaft site on 66th Street. An aggressive traffic management plan would be implemented in this area to help reduce delays. Traffic control agents are one possible measure that could be used to minimize adverse effects on traffic, although it is not certain that they would be used (see response to Comment 161).

TRANSPORTATION MODELING AND OPERATIONAL IMPACTS

See also the comments at the beginning of this chapter under "Project Benefits—Transportation."

Comment 164: The SDEIS is flawed because it fails to take a hard look at impacts, which is the legal test of meeting the fundamental criteria of an adequate and accurate assessment of the impacts of the project. The analysis is incomplete as it only gives the perspective of southbound Manhattan riders during the peak morning hours. (Ketcham)

Response: NYCT's ridership model was developed to provide ridership forecasts during the weekday AM peak hour—the highest volume hour on the transit system. In the FEIS, total ridership on a line is presented for both the north- and southbound directions. Subway train crowding is presented for the southbound direction, because this is the peak flow direction on the East Side of Manhattan. On the NYCT system, the PM peak hour has historically had lower ridership volumes than the AM peak hour. Therefore, since the impacts assessment is based on the higher volume numbers for which impacts would be expected to be more severe, it is not necessary to present PM peak hour data.

Comment 165: The SDEIS does not have the equivalent of a modeling appendix. The more detailed travel demand report should be released to demonstrate that systemwide impacts were considered. The EIS should have an accounting of the benefits and costs to riders on other lines, as the MESA DEIS did. This documentation is needed for public comment or a supplemental EIS must be prepared that links the project to other MTA studies. (Ketcham)

Response: The MESA MIS/DEIS was a precursor to the SDEIS, and provided analyses relevant to the MIS assessment and to the selection of a preferred alternative, including an accounting of the costs and benefits to riders of different lines under the various alternatives analyzed. Based on those analyses, the preferred alternative—the full-length Second Avenue Subway—was selected. The SDEIS and FEIS provide information relevant to the analysis of a full-length, Second Avenue Subway.

Comment 166: In the MESA DEIS, the number of benefiting passengers/year is 205 million; what is the number assumed in the SDEIS? Please provide any revision of the benefit-to-cost analysis to that described in the Manhattan East Side Access Alternatives MIS/DEIS in regard to the number of benefiting passengers, the benefit per benefiting passenger and the cost per benefiting passenger. (Konheim)

Response: Cost benefit information was provided in the MIS/DEIS to allow comparison of the cost and benefit of various alternatives as part of the selection of a preferred alternative. The SDEIS is a NEPA document and does not require this type of information. However, the Section 5309 New Starts update, filed each year with the Federal Transit Administration to support the project's request for federal funding, requires submission of a measure that compares cost to hours of user benefits. Over the past few years, FTA has been phasing out its cost-per-new-rider index in favor of this new measure. User benefits are calculated utilizing FTA-issued software, which measures benefits based on travel time savings and congestion relief. The latest New Starts submission (for Fiscal Year 2005) for the project reports this measure at $21.52 dollars per hour of user benefits.

Comment 167: The *FTA Annual Report on New Starts 2003* states that the Second Avenue Subway project has an incremental cost per incremental trip value of $210. Please tell me where to find these numbers in the SDEIS, or what figures were used to arrive at the $210 figure, including the years that the data used is from. (PCAC)

Response: As noted in the previous response, FTA is phasing out this measure largely because it does not adequately represent the benefits of projects in markets with large numbers of existing transit riders. The incremental cost per new rider compares the annualized cost of the project by the number of new riders. The project's Section 5309 New Starts Update for Fiscal Year 2005 reports the

incremental cost per new rider as $277.81. This reflects cost escalated to 2003 dollars to account for inflation and new riders based on population and employment forecasts for 2025.

Comment 168: Will the FEIS incorporate the findings in the Transportation section of the MESA study, with the information identified in the SDEIS? The FEIS should update the ridership figures from the MESA Study and include the 2002 figures for entries along the Lexington Avenue Line and 2000 census data. (NYC Transit Riders Council, PCAC)

Response: Chapter 5B of the FEIS has been revised to include some of the relevant information from the Transportation section of the MESA DEIS/MIS. This information has been updated to reflect more recent transit survey data. The ridership models used to conduct the analyses in Chapter 5B reflect current ridership information to the extent it is available. Forecasts prepared for the FEIS have used 2000 census data to the degree that it is available. However, Journey-to-Work data from the 2000 census have not yet been published. Please see Appendix D for a description of the process used to create the model employed for the various projections. Chapter 6 also provides information from the 2000 census. Since 2000 is the approved base year for the project, there was no update to 2002.

Comment 169: Please provide an explanation of the reported annual increase in ridership in the SDEIS under the No Build condition—is the increase of 30,000 to 60,000 increase systemwide or just on the Lexington Avenue Line, are these one-way or two-way trips, and is the midpoint forecast in the SDEIS—of 35,000 trips with 40 percent, or 14,000, in the peak period—on one line in one direction? (Konheim)

Response: The 30,000 to 60,000 increase is the systemwide average weekday ridership growth per year. This represents turnstile registrations and therefore two way trips. The midpoint between 30,000 and 60,000 is 45,000, not 35,000. The growth between 2000 and 2020 is also shown in the SDEIS on a line and direction basis (e.g., southbound Lexington Avenue Line ridership in the AM peak hour is shown growing between 2000 and 2020 by 14,300 riders under the No Build scenario). These riders include transferring riders. Please note that the FEIS provides information for 2025 rather than 2020.

Comment 170: What is the location by travel analysis zone for projected job growth in Manhattan by 2020 assumed in Appendix D.1? (Konheim)

Response: Projected job growth was predicted by census tract for all of Manhattan, based on known development trends. This growth was based on a county-level forecast for Manhattan adopted by the New York Metropolitan Transportation Council (NYMTC), and that countywide growth was allocated to specific

census tracts in the county. The traffic analysis zones in the model are census tracts or split census tracts. Chapter 6 provides more information on the growth expected to occur in each neighborhood of the study area.

Comment 171: What are the assumptions in commercial and residential space in the travel analysis zone for Downtown Brooklyn used in the borough-to-borough journey-to-work projection for 2020 assumed in Appendix D.1? Does it account for the build-out of 6 million square feet in Downtown Brooklyn? (Konheim)

Response: The Downtown Brooklyn Rezoning plan was not identified by the City of New York until after the analyses for the SDEIS had been prepared. In any case, the forecasts used in the ridership model for each borough were based on NYMTC's county-level forecasts for the 31 counties in the New York metropolitan region. Between 2000 and 2020, the NYMTC forecasts for Brooklyn indicated growth of 14 percent for employed labor force and 10 percent for employment. NYCT must use NYMTC's forecasts for its analyses pursuant to federal guidelines.

Comment 172: How many of the 16,000 trips in the northbound direction originate in Brooklyn? Please provide the origin by travel analysis zone of the reported 16,000 northbound trips in the Build condition during the AM peak hour. (Konheim)

Response: The northbound AM peak hour Second Avenue line ridership is 22,700, not 16,000. This consists of 4,500 riders using the extended Broadway Line service from 57th Street-Seventh Avenue to 125th Street and 18,200 riders using the full-length Second Avenue service from Hanover Square to 125th Street.

Of the 22,700 AM peak hour trips in the northbound direction, approximately 15,000 would originate in Brooklyn. This includes riders transferring to the T train, as well as riders beginning their trips in Brooklyn on The Q train. Similarly, approximately 14,000 Second Avenue Subway riders would originate in Queens and 12,000 would originate in the Bronx.

Comment 173: Why has the number of arriving/departing trains on the 4 5 gone from 29 at express stops in the MESA Study to 26 in the SDEIS? What is the effect of this reduction on scheduled northbound trains from Brooklyn? (Konheim)

Response: Table 5B-8 of the FEIS updates the number of departing southbound trains on the Lexington Avenue Line during the AM peak hour during existing, No Build and Build conditions. In the northbound direction, a total of 26 4 5 trains are scheduled during the AM peak hour in both the No Build and Build conditions. See Table 5B-6 in the FEIS. Northbound service on the Lexington Avenue Line is constrained by the junction at Nostrand Avenue in Brooklyn.

Comment 174: What is the projected number of scheduled trains under the Build condition on the 4 5 lines northbound in Brooklyn in the AM peak hour during the times there are 26 arriving/leaving trains on the 4 5 southbound at 86th Street? (Konheim)

Response: The projected number of scheduled trains under the Build condition on the 4 5 lines northbound in Brooklyn in the AM peak hour is 14 trains per hour, and 12 trains per hour, respectively.

Comment 175: What is the number of northbound trains by hour in the peak period at Nevins Street on the 4 5, at DeKalb Avenue for the B D Q, and at Court Street for the N R? (Konheim)

Response: At Nevins Street there are 14 trains per peak hour on the 4 and 12 trains per peak hour on the 5. At Dekalb Avenue, there are projected to be 12 trains per hour on the B and Q routes, while at Pacific Street there are projected to be 11 trains per hour on the D route (the D route will skip Dekalb Avenue). At the Court Street Station, the R route will have 10 trains per hour.

Comment 176: Travel demand from new development on the East Side will increase crowding on the 4 5 lines. (Ketcham)

Response: It is assumed that the projected growth in development would occur with or without the subway line, as described in Chapter 6. No growth is forecast specifically because of the new subway. Chapter 5B of the FEIS supports the fact that without a new Second Avenue Subway, crowding on the 4 5 lines would be exacerbated by predicted growth. This is described in the No Build section of Chapter 5B.

Comment 177: Please provide ridership numbers for the 4 5 6 subway line from 1990 through 2002—specifically, the station entry numbers for the Lexington Avenue Line from 125th Street south to Bowling Green. (PCAC)

Response: NYCT can provide entry volumes by station by year (see Table 5B-3 in Chapter 5B of the FEIS), but not by the specific train route.

Comment 178: What is the projected ridership for each station? In other words, what are the 16 numbers that add up to the total estimated ridership of 591,000 in 2020? Table 5B-19 in the SDEIS shows only the AM peak hour, and it doesn't include transfers. The SDEIS does not include this information, which would allow one to see where the ridership is located along the line. (Slor)

Response: The NYCT ridership model used for the FEIS has been updated to use updated population and employment forecasts for 2025 and to reflect more detailed information on the subway alignment and on station entrances. Based on the

updated model, 78,000 riders are projected to ride the Second Avenue Subway in the AM peak hour. Using MetroCard data, NYCT has developed a series of peak hour factors to translate peak hour riders, which the NYCT model projects, into average weekday riders. The Second Avenue Subway is projected to carry almost 560,000 riders on the average weekday. Table 5B-10 lists station boardings for the Second Avenue Subway, including riders transferring from other lines.

Comment 179: How will the new subway affect the Bronx? Will the 6 be more crowded? (Stewart)

Response: The 6 is projected to be less crowded south of 125th Street as a result of the Second Avenue Subway, as shown in Chapter 5B. North of 125th Street, where the 6 exits and enters the Bronx, ridership would increase slightly in the AM peak hour but would be well within loading guidelines.

Comment 180: You are low-balling ridership projections. Congestion on the Lexington Avenue Express Line will not be eliminated. (Kupferberg)

Response: The ridership model projections have been calibrated to actual transit survey counts and accurately predict the results of the model prepared to assess the Second Avenue Subway's impacts and benefits.

Comment 181: The Lower East Side is one of the areas most underserved by public transportation in the city, and reduction in bus service creates major problems. The expected M15 delays during construction will only compound the problem. I strongly urge you to find ways to resolve this situation. One or more of the four remaining lanes on Second Avenue should be reserved for bus use. (Civitas, Silver)

Response: A comprehensive areawide traffic management and mitigation plan would be developed by NYCT and reviewed by an Interagency Traffic Task Force comprised of affected and responsible agencies (e.g., MTA/NYCT, NYCDOT, NYSDOT, MTA Bridges and Tunnels), which would consult with local Community Boards. An important component of this plan would be a comprehensive traffic monitoring program, which would continually evaluate traffic conditions and ensure that traffic detours and mitigation measures responded effectively to traffic patterns as they change. Ensuring that impacts to bus service are minimized to the degree practicable would be an important priority of this Task Force.

Comment 182: We do not want to lose the bus stop at Fulton and Pearl Streets, as it is very convenient for people in wheelchairs. (Craddock)

Response: Comment noted. NYCT does not plan to eliminate the bus stop at Fulton and Pearl Streets, although bus stops may have to shift temporarily along the alignment at various points during construction.

SOCIAL AND ECONOMIC CONDITIONS

CONSTRUCTION IMPACTS

Comment 183: Won't shop owners and residents along Second Avenue be constantly disturbed by the construction (mining, tunneling, and cut-and-cover process)? (Gong)

Response: Construction on the subway would be disruptive; even though, as described throughout the FEIS and summarized in the Executive Summary, a number of mitigation techniques would be implemented to help reduce the effects and scope of significant adverse impacts. These include the project's extensive community outreach program during construction, which will provide information to residents and businesses about construction activities (see response to Comment 153 above).

Comment 184: Fulton Street is a busy street, particularly in the summertime when it is crowded with Seaport visitors. There is a residence for seniors and disabled persons at the corner of Fulton and Pearl Streets as well as Southbridge Towers, which houses many seniors and disabled persons. The increased number of people using the Fulton Street Station would jeopardize the way of life for these nearby residents and their safety. (Craddock)

Response: The Seaport Station is proposed at Fulton Street to serve the residents, visitors, workers, and businesses in the immediate area. Chapter 5F of the FEIS ("Transportation—Pedestrians") analyzes the potential for overcrowding near subway stations and concludes that the Seaport Station would not result in such crowding. Chapter 6 of the FEIS ("Social Conditions") describes the changes that would occur to the character of the area around new stations because of the increase in pedestrian activities.

Comment 185: In the 1970s, businesses in East Harlem were adversely affected by construction of the first portion of the Second Avenue Subway. You must consider economic development programs to enhance the community during construction. This might include economic support or a loan program to support small businesses, which are the lifeblood of the community. (Wyche)

Response: As described above in the response to Comment 153, NYCT will employ an extensive community outreach program throughout construction to keep the affected neighborhoods and businesses informed about construction activities taking place. NYCT will use the outreach program to work closely with Business Improvement Districts and other related business organizations

throughout the construction process to address concerns to the degree practicable. In addition, a description of laws and procedures to assist any businesses that are directly dislocated as a result of construction activities is provided in Chapter 8. NYCT will work with the appropriate state and city agencies to determine whether special aid programs might be needed and made available.

Comment 186: Will the shaft site on 66th Street affect businesses on Second Avenue? Will the public have access to all businesses, including outdoor cafes? The peace and tranquility of the area seems threatened by a construction shaft site on East 66th Street. (ESNA)

Response: Chapter 6 of the SDEIS describes impacts to neighborhood character that would result from subway construction and identifies reasonably available measures to minimize those impacts. As described there, access to street-level businesses in construction areas would be maintained; however, pedestrian and vehicular access would be modified or restricted by the construction of sidewalk sheds, removal of awnings and some signage, and removal of parking and travel lanes. Customers could be discouraged from visiting certain kinds of businesses as a result of the changes in pedestrian and vehicular patterns, reduced store visibility and accessibility, and raised levels of noise, vibrations, and dust. Retail establishments with outdoor activities on the sidewalk are most likely to be adversely affected by construction of the project. These types of businesses would have to remove their sidewalk facilities when their side of the street is under construction. Though temporary, this effect could result in lower sales, and could last for a relatively long duration. It would also make them less visible and attractive to customers.

Chapter 6 also describes the mitigation measures that would be implemented to reduce negative effects of construction activities on the surrounding community. These would include working with the community to ameliorate impacts, as described in the response to Comment 153.

Comment 187: Significant tax revenue will be lost during the subway construction. (Saitta)

Response: As described in Chapter 6, "Social Conditions," while some tax revenue might be lost during construction, the project would generate more jobs and therefore provide substantial benefits to the economy during both the construction and operation periods.

Comment 188: You need to look at minority business development issue. You should make an effort to include minority and woman-owned businesses to play a real role in the project. (Wyche)

Response: The MTA and its agencies provide disadvantaged-, minority-, and women-owned businesses with equal access to contracting opportunities. The MTA

Office of Civil Rights, Division of Business Programs administers two programs that encourage and assist such firms wishing to do business with the MTA. The Disadvantaged Business Enterprise (DBE) Program applies federal guidelines for providing eligible firms with these opportunities, and the Minority- and Women-Owned Business Enterprise (M/WBE) Program applies New York State guidelines.

OPERATIONAL IMPACTS

Comment 189: The EIS should put greater emphasis on social and economic impacts, especially benefits in East Harlem and Lower Manhattan. The EIS needs to include more information on impacts on local housing market. (CB11/Llano)

Response: The FEIS includes additional information on the economic benefits of subway construction in East Harlem and Lower Manhattan. It provides information on how the construction and operation of the subway would affect both residential and business uses in each area through which the project would be located. Please see Chapters 1 and 6 for more information.

Comment 190: The MTA plan is to generate new development on the East Side, not to reduce Lexington Avenue overcrowding. They estimate 21 million square feet of office space. The SDEIS describes the new development that will result on the East Side of Manhattan but is inadequate because it ignores the economic impact for people who won't have the projected new jobs. (Chase, Ketcham)

Response: The purpose of the Second Avenue Subway project is to reduce overcrowding and increase accessibility of transit on Manhattan's East Side. The discussion in Chapter 6 of the FEIS related to predicted new development describes the development that is expected to occur in the future independent of the Second Avenue Subway, not development that would occur because of the subway. As described in Chapter 6, a new subway is critical to meeting the demand generated by the growing population and workforce predicted for the future, with or without the project.

Comment 191: The MTA needs to work closely with the community to ensure economic benefits. This should include collaboration on station design—including entrances, construction mitigation, and community development plans, such as 197-a plans to maximize the benefits of subway service. We have provided a report prepared by the East Harlem Community Link Initiative, which envisions East Harlem with the Second Avenue Subway Line, by identifying potential improvements and creating visual images. The report suggests land use visions and public policy initiatives to bring them to fruition. (RPA/Ronderos, RPA/Zupan)

Response: Throughout design and construction, NYCT will continue to consult with local communities on issues related to station design, including endeavoring to site station entrances in locations where they would enhance business corridors like 125th, 116th, and 106th Streets in East Harlem. NYCT has met with and will continue to meet with the East Harlem Second Avenue Corridor Working Group. NYCT also has received the report prepared by the East Harlem Community Link Initiative. Where possible, suggestions presented by community groups, including the East Harlem Community Link Initiative, will be incorporated into the project design. However, because of the length of the line, the complexity of construction, and the number of communities affected, it will not be possible to incorporate all suggestions. NYCT's efforts to involve the community in ongoing station planning are described in detail in Chapter 4.

PUBLIC OPEN SPACE AND SECTION 4(F) RESOURCES

General Comments

Comment 192: It should be a priority to avoid intrusion into park space along the Second Avenue corridor. The communities along the way are among the least well-served in New York City in terms of open space. The use of parkland for storage must be avoided. (Sanders)

Response: Avoidance of sensitive uses, including parkland, was a priority in locating construction areas and subway facilities. As part of the public approvals process, a Section 4(f) Evaluation must be completed, which must demonstrate that no prudent and feasible alternative is available to any proposed use of open spaces. The Section 4(f) Evaluation and Section 6(f) Evaluation included in the FEIS describes the proposed uses of parks by the Second Avenue Subway project, and describes why alternatives to that use were not practicable.

Comment 193: Parkland that is taken for construction purposes temporarily may require alienation legislation if the duration of taking greater than three years. The SDEIS addresses alienation only in regard to permanent structures built on parkland. The FEIS should note that temporary takings of up to 10 years may require state alienation legislation. (NYCDPR)

Response: The FEIS has been revised to describe that alienation may be needed for the temporary long-term use of parkland along the alignment, including Playground 96, St. Vartan Park, and Sara D. Roosevelt Park. Please note that as a result of the proposed phasing plan, temporary takings at Playground 96 and St. Vartan Park would now last for a maximum of 8 years, as opposed to the 10 years identified in the FEIS.

Comment 194: Although the SDEIS states that parks used directly during construction will have replacement sites identified, it may not be feasible or advisable in some areas to

convert nearby spaces to temporary replacement facilities. Further, building temporary replacement facilities may not be the most advisable mitigation at Crack is Wack Playground, Playground 96, or Sara D. Roosevelt Park. NYCDPR may decide that it is better to upgrade nearby recreation facilities or increase their programming to help absorb the displaced users. The FEIS should state that NYCDPR will work with NYCT to identify the mitigation plan that is most compatible with the neighborhoods' parks and open spaces. (NYCDPR)

Any replacement park space must be located in the community from which the parkland has been removed. (Fields, Silver)

Response: The discussion of mitigation in Chapter 7 of the FEIS has been revised to describe that mitigation plans for the temporary loss of open space would be formulated in coordination with NYCDPR and could include, among other solutions, replacement parkland in the same neighborhood as the lost space. Please note that construction is no longer proposed for a portion of Crack is Wack Playground (see the response to Comment 206 below).

Comment 195: The SDEIS lists five parks that will experience significant adverse impacts because of their proximity to construction—St. James Triangle, Pearl Street Playground, Fulton Street Plaza, Coenties Slip, and Vietnam Veterans Plaza. These parks have the potential to be rendered unusable by noise, dust, and vibration from the adjacent construction. The lost use at these properties will negatively impact park users. Horticultural care at the parks will be important as they will be subjected to large amounts of dust and vibration. The FEIS should state that the sites will be kept free of construction debris and excessive dust by NYCT thorough its contractors. (NYCDPR)

Response: The FEIS describes the significant adverse impacts that would occur to park users as a result of adjacent construction activities (see Chapter 7). Chapter 7 also describes the process to be followed by NYCT through its contractors to keep recreational facilities adjacent to surface construction free of debris and excessive dust during construction.

Comment 196: The SDEIS concludes that Wagner Pool, Wagner Houses Playground, Stuyvesant Square, and Fishbridge Garden are set back far enough from construction that they will not be impaired by noise and dust. However, there is always a chance that unforeseen noise and dust disturbances will arise once construction has begun. The FEIS should state that if noise and dust do become a problem at these parks, noise barriers will be erected. (NYCDPR)

Response: The FEIS describes that NYCT, through its contractors, will monitor noise and dust at parks adjacent to construction and that if unforeseen noise and dust disturbances arise during construction, mitigation measures, such as specially

quieted construction equipment and/or Jersey barriers topped with screens, will be employed at parks adjacent to the construction.

Comment 197: The FEIS should state that all construction fences and noise barriers in and around parks will have security lighting, as well as any other security measures NYCDPR and NYCT deem necessary. (NYCDPR)

Response: Chapter 7 of the FEIS has been revised to state that NYCT will work with NYCDPR to design appropriate security measures, such as lighting, to ensure safety surrounding any noise and construction fences.

Comment 198: The FEIS should state that all construction vehicles will be parked within designated staging areas and not anywhere else within parks, as this would constitute an adverse impact. (NYCDPR)

Response: The FEIS has been revised to state that all construction equipment, including construction vehicles, would be contained within the designated staging area to avoid affecting the remaining portion of parks not affected by construction to the degree practicable.

Comment 199: The MTA should commit to fully restoring green spaces at the completion of construction affecting each space. This includes replacing trees, grass, shrubbery, and playground equipment. (Aryel)

Response: As described in the FEIS (see Chapter 7), open spaces used during construction would be fully reconstructed after construction in consultation with NYCDPR and/or other relevant agencies.

Comment 200: The SDEIS references several parks that may be considered locations for subway entrances and ancillary facilities, but does not elaborate on any of the specifics regarding these potential entrances. These parks include Playground 96, Sara D. Roosevelt Park, Kimlau Square, Fulton Street Plaza, and Coenties Slip. The Section 4(f) Statement should provide specific information about where exactly NYCT proposes to put these subway entrances, whether ancillary structures such as vents would accompany them, and what alternatives exist. (NYCDPR)

Response: Chapter 7 of the FEIS describes that entrances to the subway could be located within Pearl Street Playground, Fulton Street Plaza, and Coenties Slip. Entrance design is still in the preliminary stages. The exact location within each of the parks is not known yet and is subject to further engineering, and discussions with the community and NYCDPR before a final proposal can be developed. The chapter describes the reasons for selection of these entrance locations, including the impracticability of alternative locations. As described in the Section 4(f) Evaluation, new Section 4(f) evaluations, including alternatives

analyses, will be conducted for the entrances proposed at Pearl Street Playground, Fulton Street Plaza, and Coenties Slip if final decisions are made to site entrances in these locations, and FTA will issue separate Findings for the use of those 4(f) resources.

Comment 201: NYCDPR will not permit any station entrances to be constructed within parks, and any ancillary structures within parks would be highly undesirable. The one exception is the potential Grand Street entrance at Sara D. Roosevelt Park. Entrances adjacent to parks may be acceptable to NYCDPR, but their impacts would have to be carefully reviewed. (NYCDPR)

Response: Comment noted. Chapter 7 of the FEIS describes that the location of an entrance or ancillary facilities within a park would not be compatible with the area's underlying use as parkland and would constitute a significant permanent adverse impact. The chapter further describes that NYCT will implement a range of mitigation measures to minimize this impact, to be developed in coordination with NYCDPR. NYCT will also work with NYCDPR and the surrounding community to design the entrance/ancillary facility so that it is compatible with the surrounding park.

Comment 202: Greenstreets are more than mere visual amenities. The SDEIS states that three Greenstreets would be demolished for construction and then replaced when the project is complete. The FEIS should specify the length of time for which the Greenstreets will be removed. It should also specify that if the duration is longer than three years, NYCDPR will work with NYCT and NYCDOT to identify replacement Greenstreet sites nearby to be planted at the start of construction. Placing entrances in Greenstreets would result in the permanent loss of important neighborhood green space. NYCDPR would work with NYCT and NYCDOT to identify nearby sites for replacement Greenstreets. (NYCDPR)

Response: As described in Chapter 7, NYCT will replace any trees removed from a Greenstreet during construction. For any Greenstreets that would be removed for more than 3 years (such as at 66th Street), NYCT would work with NYCDPR and NYCDOT to identify replacement Greenstreet sites nearby to be planted prior to the start of construction at the existing Greenstreet.

Comment 203: The FEIS should state that NYCT will develop a forestry plan covering all affected parks, which will be subject to NYCDPR review and approval. The plan must follow NYCDPR specifications for tree protection and replacement according to the Basal Area Replacement Formula. In cases of removal of trees larger than 4 inches in diameter at breast height (dbh), NYCDPR will require that NYCT, through its contractors, plant multiple smaller trees, the basal areas of which must add up to the basal area of the original tree. A number of replacement trees should be planted in the vicinity of the park prior to

construction to allow them to better perform the functions lost when the existing mature trees are removed. (NYCDPR)

The FEIS should delineate the drip line of all trees in the vicinity of construction in order to determine whether they are at risk for root or limb damage. Depending on the severity of construction impacts within the drip line, these trees may have to be considered removed, in which case NYCDPR will require appropriate mitigation. (NYCDPR)

Trees and plantings adjacent to construction may experience stresses as a result of the project. Dust from construction may settle on leaves and soil, potentially impairing photosynthetic function and affecting soil chemistry. Heavy vibration may cause soil to settle, filling interstices and affecting drainage and aerations, which would in turn impair root function. The FEIS should look into these potential impacts and should state that the health of all trees and plantings at risk for indirect construction impacts will be monitored and maintained by NYCT through its contractors. (NYCDPR)

Response: Chapter 7 of the FEIS describes the project's potential for impacts to trees and indicates that NYCT will develop a forestry plan for all affected parks that will be subject to NYCDPR review and approval. In accordance with the plan, trees will be replaced according to NYCDPR specifications for tree protection and replacement. The FEIS also describes that some of the replacement trees to be planted in accordance with the plan will be planted prior to construction in the vicinity of the trees to be removed.

The FEIS has been revised to state that trees in both active and passive recreational spaces adjacent to construction may experience stress from dust or soil settlement resulting from underground construction. As described in the FEIS, extensive efforts would be made to ensure that park trees in the vicinity of construction are protected from damage during construction. Protection plans would entail delineating all trees, marking the trees in the field, and building a barricade around each tree that requires protection. The health of all trees in parks adjacent to construction will be monitored and maintained by NYCT through its contractors, and ongoing coordination with NYCDPR will continue throughout the construction phase. Any trees that die as a result of adjacent construction would be replaced after construction in accordance with a tree replacement plan developed in coordination with NYCDPR.

Specific Public Open Spaces and Section 4(f) and Section 6(f) Resources

Comment 204: The SDEIS is incorrect in its statement that the agency that owns the Harlem River waterfront at 129th Street has not formally designated the area for park purposes. NYCDPR and the New York City Department of Transportation (NYCDOT) have a letter of agreement with the city's Department of Citywide Administrative Services that states that the site will be turned over to NYCDPR

upon completion of NYCDOT's work. It will then become part of Harlem River Park. The property is anticipated to be transferred to NYCDPR in approximately 2012 or 2013, after completion of the Third and Willis Avenue Bridge reconstruction projects. The FEIS should re-examine the significance of this site, because there would be public outcry if the site were tied up for several more years for subway construction after completion of NYCDOT's projects. (NYCDPR)

Response: As described in Chapter 3 of the FEIS, the 129th Street barge site is no longer under consideration for the Second Avenue Subway, as the site would not be available for use by the subway project.

Comment 205: The FEIS should specify the square footage of Triboro Plaza that will be directly affected by construction. (NYCDPR)

Response: To immunize construction impacts in East Harlem, the project has been modified to reduce the amount of cut-and-cover construction required in the area. There would be no surface construction at Triboro Plaza. However, as described in Chapter 7 of the FEIS, tunneling could occur deep below the park, which could result in minor settlement.

Comment 206: The FEIS should state that NYCT will develop a full protection and monitoring plan for the Keith Haring mural in Crack is Wack Park, subject to NYCDPR review and approval. (NYCDPR)

Response: The project design has been modified to reduce the amount of cut-and-cover excavation potentially required near Crack is Wack Playground. Project activities are no longer proposed in that park.

Comment 207: Several road rebuilding projects will be executed in the vicinity of Crack is Wack Playground. NYCT should coordinate with NYCDOT regarding the location and timing of these construction projects and their park impacts. (NYCDPR)

Response: As described in Chapter 19 of the FEIS ("Indirect and Cumulative Effects"), NYCT would work through the proposed Interagency Traffic Task Force to monitor traffic in areas where cumulative impacts could occur and to develop mitigation to the degree practicable. NYCT has met and will continue to meet with NYCDOT regarding coordinating construction and minimizing impacts to traffic, such as in the area near Crack is Wack Playground.

Comment 208: Please reconsider the use of Playground 96. There are few playgrounds in the community. (CB11/Llano)

Response: As described in the Section 4(f) and Section 6(f) Evaluation, the use of Playground 96 for construction staging is proposed because there is no feasible alternative to the use of this space. As a result of ongoing engineering the amount of time this park would be used has been reduced from the 10 years described in the SDEIS to up to 8 years. Additional details on the alternatives considered are available in the Section 4(f) Evaluation. NYCDPR indicated in their comments on the SDEIS that temporary replacement parkland may not be the most advisable mitigation for the loss of the open space. NYCT will work with NYCDPR to identify the mitigation plan that is most compatible with the parks and open spaces in the 96th Street vicinity as mitigation for the temporary loss of this open space.

Comment 209: Construction on the west side of Playground 96 may impact the underground utilities in the vicinity of the comfort station. These utilities service the comfort station and the lighting for the entire park. The FEIS should address this potential impact and discuss mitigation measures. (NYCDPR)

Response: If a temporary substation is installed in Playground 96 during construction, power cables would have to be installed from the park to the TBM launch site at 92nd Street. This work would be done in the same way as excavation in the street; utilities would be relocated where necessary. NYCT would work with NYCDPR prior to construction to ensure that construction activities within the park are designed to identify the locations of all park utilities and avoid any known utilities, including the water line serving the school.

Comment 210: The SDEIS specifies that noise barriers will be erected to protect portions of Playground 96 and St. Vartan Park. The SDEIS does not specify noise barriers for Harlem River Drive Park, seemingly because it is located in an already noisy area. Nevertheless, Harlem River Drive Park users will experience increased dust and noise levels from construction and will need to be shielded from these impacts. The FEIS should state that noise barriers will be erected in Harlem River Drive Park. (NYCDPR)

Response: Construction is no longer proposed within Crack is Wack Playground (which is part of Harlem River Drive Park). NYCT, through its contractors, will monitor the noise and dust impacts at parks adjacent to construction. If unforeseen noise and dust disturbances arise during construction, mitigation measures, such as specially quieted construction equipment and/or Jersey barriers topped with screens, will be employed at parks adjacent to construction, including Harlem River Drive Park.

Comment 211: Community Board 6 is next to last among the city's 59 Community Boards in terms of per capita parks and open space, and there are proposals to take two other parks in the area out of commission. The community is extremely

concerned that all or a portion of St. Vartan Park would be used as a staging area for the Second Avenue Subway and hopes that the park will be dropped from the final proposal. There are few alternative parks in the area to absorb displaced park users. If the park must be used, the FEIS should identify a replacement for the park in the immediate vicinity and this park must be in place before construction begins in the vicinity. (CB6 PSHRC, CB6/Sepersky, Kreuger, Lopez, Maloney)

Replacement parkland would be the best mitigation at St. Vartan Park, although existing open space available for park development is quite limited. The FEIS should state that the best mitigation may be the construction of a deck over the mouth of the Queens Midtown tunnel for active recreation facilities. (NYCDPR)

Response: As described in the Section 4(f) Evaluation and Section 6(f) Evaluation, the use of St. Vartan Park for construction staging is proposed because there is no feasible alternative for the use of this space. Additional details on the alternatives considered are available in the Section 4(f) Evaluation and Section 6(f) Evaluation. The FEIS describes that the MTA will create a replacement park space prior to the use of the western portion of St. Vartan Park for construction, in compliance with Section 6(f). It also indicates that the temporary replacement park could potentially be provided on MTA property adjacent to the Queens-Midtown Tunnel on First Avenue, one block north of St. Vartan Park. This potential temporary replacement park, or another replacement facility that could be identified prior to the start of construction in the park, would contain active recreational facilities and would serve the same community as the existing facility.

Comment 212: Any intrusion into other parks along Second Avenue in this Community Board (e.g., St. Gaudens or Stuyvesant Square Park) would be opposed. The Stuyvesant Park Association is concerned about subway vents in the park. (CB6/Sepersky, Shachter)

You should work with the Borough President to get money to fix the fence on the east side of Stuyvesant Park. A meeting with NYCT and the Stuyvesant Park Association was supposed to occur last year but never did. (Shachter)

Response: No intrusions into St. Gaudens Park or Stuyvesant Square are proposed. No entrances, vents, or other ancillary facilities would be located within Stuyvesant Square. NYCT will work with NYCDPR to identify measures to mitigate impacts that occur to parks that must be temporarily or permanently used by the project.

Comment 213: The Section 4(f) Statement states that in Sara D. Roosevelt Park, only edge impacts would extend all the way from Houston to Canal Streets. The FEIS should elaborate on this statement, stating specifically what the edge impacts

would be and how they would be mitigated. The FEIS should specify the duration of the taking at Sara D. Roosevelt Park. (NYCDPR)

Response: Chapter 7 of the FEIS and the Final Section 4(f) Evaluation and Section 6(f) Evaluation included in the FEIS provide specific information about the impacts to Sara D. Roosevelt Park, now that the Deep Chrystie Option has been selected for the project alignment south of Houston Street. As described there, construction in Sara D. Roosevelt Park is expected to last 4 to 5 years. Figures 7 and 8 of the Section 4(f) Evaluation shows the area of the park that would be affected by construction. Approximately 75 trees along the western edge of the park and along Grand Street would be removed during construction required to widen the existing Grand Street Station. However, construction would affect more than just the edge of the park, as interior sections of the park would be closed to public access, while excavation is occurring along the adjacent park edge. Additional excavation would occur within the community garden at Rivingston Street, in order to remove subsurface obstructions, requiring the removal of up to 13 trees. Mitigation measures are also described in the FEIS.

Comment 214: Both the Deep Chrystie and Forsyth Street Options would take a huge number of mature trees out of the symmetrical allée, which is one of the defining features of Sara D. Roosevelt Park. NYCT should look into the feasibility of shifting the alignment to the center of the park in order to preserve the allée of trees. Although this would require construction on all of the park's recreational facilities, in reality the temporary loss of these facilities may be less debilitating than the loss of the 60-plus-year-old trees that surround the park. The facilities could be replaced as soon as construction was complete, whereas it would take over half a century to replace the trees. (NYCDPR)

Response: As part of its design and engineering processes, NYCT considered several variations of the alignment between Houston and Canal Streets. Among the criteria for selection of the preferred alignment was minimization of impacts to Sara D. Roosevelt Park and its rows of mature trees. In any of the alternatives considered, construction required to widen platforms to accommodate transferring passengers at the existing Grand Street Station requires that construction occur within the western edge of the park adjacent to the station. The FEIS describes the unavoidable significant adverse impact to the parallel rows of trees along the western edge of the park between Delancey and Hester Streets.

Comment 215: All of the monuments in Kimlau Square are under the jurisdiction of NYCDOT, not NYCDPR. The only portion of the square assigned to NYCDPR is a small oval under the arch. The FEIS should state that NYCT will consult with NYCDOT on monument protection and restoration, and that NYCT will do community outreach, particularly to veterans' groups, before removing any

monuments. The FEIS should also specify the duration of construction at Kimlau Square. (NYCDPR)

Response: The discussion in Chapter 7 of the FEIS has been revised to reflect that coordination regarding the monuments would occur with NYCDOT. Text has also been added to the FEIS to indicate that construction activity within Kimlau Square would last 3 to 5 years.

Comment 216: Pearl Street Playground will have the most significant impacts because it has active recreation equipment that will become effectively unavailable to the public. The FEIS should state that NYCT will work with NYCDPR to identify a temporary replacement site. Because Pearl Street Playground will remain open despite the constructive use, any neighborhood residents who do continue to use the playground may be endangered by construction trucks and equipment driving in and out of the site. The EIS should state that NYCT will ensure that safe crossings to and from the playground will be maintained. (NYCDPR)

Response: The text in Chapter 7 of the FEIS describing impacts to Pearl Street Playground has been revised to clarify the extent of impacts. Construction activities for the adjacent station would last 4 to 5 years. NYCT will work with NYCDPR to identify a temporary replacement site for the playground during construction.

In addition, a permanent subway structure—an entrance—is being considered for a location within the existing boundaries of Pearl Street Playground. As described in Chapter 7 of the FEIS, further engineering along with continued discussions with the local Community Board, property owners, and NYCDPR must occur before final proposals for the use and reconfiguration of this park can be made. In addition, a supplemental environmental review and a separate Section 4(f) analysis would need to be conducted if an entrance were to be formally proposed at this location. NYCT would coordinate with NYCDPR and the Community Board regarding design of any permanent elements in the park and mitigation for the significant adverse impact that would result.

Comment 217: The FEIS should specify the duration of construction adjacent to Coenties Slip and Vietnam Veterans Plaza. (NYCDPR)

Response: Chapter 7 of the FEIS indicates that construction of the Hanover Square station adjacent to Coenties Slip and Vietnam Veterans Plaza would last 4 to 5 years. In addition, the FEIS notes that the project is considering placement of a subway station entrance in Coenties Slip.

Comment 218: The EIS does not mention the status or applicability of Section 6(f) of the Land and Water Conservation Act (LWCA) concerning recreational development grants. The measures to minimize harm for two parks that have received Section

6(f) funds—St. Vartan Park and Crack is Wack Playground—are incomplete. (DOI)

Response: The FEIS now incorporates a discussion of the applicability of Section 6(f) of the LWCA and applicable mitigation measures. See Chapter 7 and the Section 4(f) Evaluation and Section 6(f) Evaluation of the FEIS. As described above, Crack is Wack Playground would no longer be affected directly during project construction and no mitigation measures for direct use are necessary.

DISPLACEMENT AND RELOCATION

Comment 219: Will construction require buildings located on Second Avenue to be vacated for an extended period of time during blasting and/or digging? (Smith)

I currently live on 111th Street and Second Avenue in Manhattan. How will this subway affect how I live? I am concerned the potential for families to be relocated. (Candy)

Response: Throughout most of the alignment, access would be provided to residential and commercial buildings, including retail businesses. However, in limited areas, it would be necessary to restrict access to buildings. Generally, this would only occur for a few hours at a time, but in a few instances, longer disruptions could occur. Chapter 8 of the FEIS ("Displacement and Relocation") provides information on restrictions to access, necessary displacement, and compensation and relocation assistance.

East 111th Street is between the 116th Street and 106th Street Stations, adjacent to an area of existing subway tunnel. As described in Chapter 8, no properties at 111th Street have been identified at this time as locations where displacement would occur.

Comment 220: We oppose the use of our gas station property at 1st Street and Second Avenue as a staging area. Other vacant sites in the vicinity of the gas station site could serve the same purpose. We were already displaced by the MTA from our previous site at Second Avenue and 63rd Street in the 1978. Closing this gas station would also result in a hardship to motorists, given the scarcity of gas stations in the area. Due to the lack of suitable properties and governmental approvals necessary, it is next to impossible to relocate the gas service station within the Lower Manhattan area. (Kalish)

Response: As described in the Chapter 3 of the FEIS, there are only a limited number of suitable staging areas and shaft sites along the highly developed Second Avenue Subway corridor. The approximately 8,600-square-foot site referenced in the comment has been identified for possible construction use to install or disassemble TBMs or as a staging area coupled with a portion of the right-of-way. This would be the best site in the area for use by the Second Avenue

Subway, since the remaining underdeveloped or vacant parcels nearby are all slated for redevelopment in the near future (for more information about future development along the project alignment, see Chapter 6, "Social Conditions"). If development plans at those sites were to change or stall prior to their construction, one of these sites could be a viable construction staging area, and it is possible that use of the gas station site could be avoided. Relocation benefits for displaced owners and occupants are described in Chapter 8 of the FEIS.

Comment 221: Residents and businesses whose buildings are acquired for ancillary structures must be fully compensated and relocated in the same community if they choose. They must also be informed of all consequences, including tax consequences, of buyouts. This includes the future impact on businesses, which are forced to close temporarily. These notifications must be made in a timely manner. (CB3)

Response: Chapter 8 of the FEIS describes the relocation assistance and compensation that would be provided to owners of buildings that must be acquired for the subway project.

Comment 222: Community Board 6 will lose affordable housing units if sites are acquired for the Second Avenue Subway project. The sites selected in the EIS are rent-controlled or rent-stabilized housing. This will drain the economic diversity of the community. (CB6 HHSC)

Response: Where possible, MTA NYCT has attempted to avoid dislocating residences entirely. Where entire properties need to be acquired for ancillary facilities, an effort has been made to select the smallest available properties that are large enough to do serve the required purpose and are appropriately located (e.g., at the south and north ends of each station for tunnel and station ventilation), and where possible to avoid residential properties altogether. If there are no vacant lots, plazas, or commercial structures available of the appropriate size and in the appropriate location, the next most reasonable choice may well be a 3- or 4-story residential building with ground-floor retail. While not always the case, the residences in such buildings along Second Avenue for most of the alignment tend to be subject to New York City's rent stabilization guidelines, and, therefore, have rents that are significantly below market rates for similar apartments nearby.

The federal relocation regulations require the MTA to find comparable replacement dwellings for residents displaced as a direct result of federally supported projects; affordability is a component of the definition of an acceptable replacement dwelling. It may be difficult, if not impossible, to relocate occupants of rent-controlled and rent-stabilized apartments who are displaced by the project to other comparable, rent-controlled and rent-stabilized units because of the relative shortage of such available units in New York City.

Where other suitable rent controlled or rent stabilized apartments cannot be located, MTA/NYCT will provide relocation and rental assistance in accordance with applicable laws and regulations.

Comment 223: We are concerned about adequate and appropriate notice to individuals about proposed acquisitions. We would like to know when the Eminent Domain procedure will begin, when public hearings for acquisitions will be held, what constitutes replacement housing payments, how tenants from rent-controlled and rent-stabilized units will be made whole if no decent, safe, and sanitary units are available; if 90 days' written notice will be given for vacating property; and how newly opened businesses will be compensated if they have not had time to make returns on their investment. (CB6 HHSC)

Response: Public hearings on proposed property acquisitions can be expected to occur at least six months to a year before MTA would seek to acquire needed properties by condemnation. Even though the project would be constructed in phases, property acquisition could occur at any phase, as properties become available on the market. In addition, MTA/NYCT may opt to purchase currently underdeveloped properties prior to construction in a given phase. Affected parties would be given notice by mail approximately 30 days before the public hearing, and notice of the hearing will be published for 5 consecutive days in newspapers between 10 and 30 days prior to the public hearing. Determinations and findings of the MTA Board would be published for 2 days in newspapers within 90 days after the close of the hearing. MTA practice is to mail copies of the determinations and findings to the parties that originally received mailed notice of the hearing. Thereafter, condemnation proceedings would be scheduled for those properties for which negotiated agreements have not been reached, according to when construction projects would require the properties. Condemnees would be served with legal notice of the MTA's application to condemn property or property interests at least 20 days before that application would be in court.

Replacement housing payments would be determined on a case-by-case basis, taking into account existing rent, available comparable dwellings, and market rents. Ninety days notice would be given to both residents and business owners before they would be required to vacate, and relocation assistance would be provided as required under the Uniform Act. Businesses, whether new or old, would be compensated for the appraised depreciated value of their business fixtures and relocation costs. Businesses with new fixtures would therefore typically receive offers for their fixtures which would reflect a higher percentage of the fixtures reproduction value.

HISTORIC AND ARCHAEOLOGICAL RESOURCES

HISTORIC RESOURCES

Comment 224: The SDEIS notes in Chapter 9, "Historic Resources," on page 9-3 that NYCT will seek the advice and counsel of the New York City Landmarks Commission (LPC) when dealing with historic architectural issues. It is not clear throughout the SDEIS if this courtesy will extend to archaeological resources. LPC should be given the opportunity to review documents relating to the archaeological component of the project even if they do not become a "consulting party" to the Programmatic Agreement. Their review would include such documents as Field testing plans, data recovery plans and the reports resulting from archaeological investigations. LPC has local expertise that could facilitate the successful completion of the project while aiding in the protection of New York City's fragile archaeological resources. (PANYC)

Response: LPC will be a consulting party to the Programmatic Agreement. The Final Programmatic Agreement will reflect their consulting status role for historic and archaeological resources.

ARCHAEOLOGICAL RESOURCES

Comment 225: I thank the MTA representatives who came to speak with us regarding possible effects to our church's former burial ground. I have faith that the former burial grounds of our church, St. Philip's Episcopal Church, will be kept safe. I would like the history of our church, St. Philip's Episcopal Church, to be preserved. This is one of the most important African American churches in Harlem, and was the largest Episcopal Church in the country in the 1970s. Our history should be made part of the public record, so it can be preserved. (Thomlinson)

Response: As described in Chapter 10 of the FEIS ("Archaeological Resources"), preliminary meetings have been held with representatives of churches and synagogues that once had burial grounds in an area where subway construction is proposed and coordination with interested parties will continue throughout the design process. In addition, a Programmatic Agreement has been developed (included as part of the FEIS) to describe the various measures and procedures that would govern construction in areas identified as sensitive for potential human burials. With the alignment option selected for the project south of Houston Street (the Deep Chrystie Option), no construction would occur in the area sensitive for potential burials associated with the St. Philips Episcopal Church.

Comment 226: We understand that MTA may have another project in which you might be doing trench digging and digging for artifacts to see what is there. Maybe with

archaeological digging and research you may be able to determine whether all the bodies were moved. (Thomlinson)

Response: Comment noted. The NYCT fan plant for an existing subway line will not be located in the area sensitive for potential burials.

Comment 227: Please consider integrating elements related to the history of the St. Philip's Episcopal Church African into the Grand Street Station, possibly using public art. This could be done jointly with other burial grounds in the area. (Thomlinson)

Response: All new Second Avenue Subway stations would also be constructed under the MTA's "Arts for Transit" (AFT) program, which commissions artists to create site-specific permanent artwork for subway stations. This comment has been passed to them for consideration when more detailed design occurs.

Comment 228: It is not clear if there are buffer zones around areas determined to be archaeologically sensitive. Buffering would allow for cartographic error and interpretation when comparing historic map data with present mapping and topography. It is crucial that locations designated on project maps and plans include latitude for error, as the PA as presently drafted does not allow for unanticipated resources to be evaluated if they are encountered in areas not already designated as sensitive. The potential for error can apply to the vertical location of the potential resource as well as horizontal. (PANYC)

Response: The Areas of Potential Effect (APEs) identified in the FEIS have been identified conservatively, with buffer zones around areas where potential construction activities could occur to account for the issues identified by the commenter. In addition, the Programmatic Agreement for the project establishes procedures in the event that any unanticipated discoveries are made in areas not currently identified as sensitive.

Comment 229: In Table 10-1, the column "Potential Effects from Construction Disturbance" is missing the headings "no," "yes," and "why." (PANYC)

Response: Comment noted. These headings have been added to the table in the FEIS.

Comment 230: The SDEIS is fairly comprehensive in terms of archaeological resources. (PANYC)

Response: Comment noted.

DRAFT PROGRAMMATIC AGREEMENT

Comment 231: In the Draft Programmatic Agreement, we have concerns about the sections on Prioritizing Archaeologically Sensitive Areas for Field Testing and the Field Testing Plan (Section II.A.2.a.i and Exhibit H). We are concerned about prioritization based on the potential research value of the "site" although it remains uncertain that a site is even present. It appears that potentially sensitive areas will be treated as archaeological sites and that the research potential based on documentary research and soil borings, of these so-called "sites" will be compared to each other and then the sites prioritized. The problem is that once testing begins there may be no archaeological site present. Certain areas given lower priority may not be investigated at all and archaeological data may be lost. There is particular concern here as in the Unanticipated Discover Plan such sites would not be addressed. (PANYC)

Response: The described site prioritization is to be based on an appropriate level of documentary research and soil borings. The Programmatic Agreement calls for SHPO to approve this approach, and NYCT has determined that this approach is appropriate and will be effective in identifying the sites most likely to yield archaeological resources.

Comment 232: In the Draft Programmatic Agreement, there is mention of a cultural resources manager in Section II.A.3.b.ii (under treatment of human remains) and in Exhibit J (under unanticipated discoveries). Will this individual provide services only when human remains or unanticipated discoveries are encountered? Please provide more details on the role of the Cultural Resources Manager. (PANYC)

Response: The Cultural Resources Manager has overall responsibility for implementing the Cultural Resources Management Plan on a day-to-day basis and will be involved in every aspect of the plan's implementation.

Comment 233: A staff Cultural Resources Manager who meets at least the Secretary of Interior's Professional Qualification Standards and has experience with urban archaeology would be a great asset to NYCT. This individual can determine appropriate cost and schedules for conducting archaeological investigations, prepare testing and data recovery plans, scopes of work and provide input to the construction plans and specifications. The Manager can also review archaeological reports and may be able to undertake certain required investigations in-house, possibly saving NYCT time and money. The individual can act as a knowledgeable liaison between engineers, contractors, and reviewing agency representatives. (PANYC)

Response: Comment noted.

Comment 234: In the Draft Programmatic Agreement, Section II.C.5, Construction and Archaeological Phasing Plan, is not limited to Unanticipated Discoveries. This plan will be created to avoid there being any unanticipated discoveries. Perhaps it should be included as its own section. (PANYC)

Response: There was a formatting error in the Draft PA. The Construction and Archaeology Phasing Plan was incorrectly included under the II.C regarding the Unanticipated Discovery Plan, instead of as its own plan. The final Programmatic Agreement will have this plan referenced as Section II.D.

Comment 235: In the Draft Programmatic Agreement, it is not clear what happens to the sites once "sites" are prioritized. Will sites be designated as "low" not be investigated? What will happen with those determined to have a "medium" priority? (PANYC)

Response: Prioritization of sites as high, medium, and low is one step in a flexible screening program. With SHPO's approval, decisions will be made as to whether to move down the priority list for investigation, based on earlier findings.

Comment 236: In the Draft Programmatic Agreement, the last sentence of the definition of Unanticipated Discoveries reads, "Sites determined in consultation with the SHPO and LPC to not warrant archaeological testing as a result of soil borings analyses and documentary research will not be considered unanticipated discoveries if encountered during construction." The concern with this definition is that archaeological sites may be encountered in areas that documentary research may have suggested lack archaeological sensitivity. These sites may contain very valuable data simply because they are outside of the bounds of what is expected. The remains may be resources such as a pre-contact site in a unique setting or the remains of an early historic structure that did not appear on historic maps. These kinds of resources would provide crucial information to fill data gaps that exist in the archaeological and historic record of New York City. There should be a provision within Exhibit J (and Section II.A.2) that allows for investigations of significant sites found during construction in areas that were determined not sensitive by the 1A survey and subsequent research. (PANYC)

Response: The Unanticipated Discoveries Plan has been revised to respond to similar concerns raised by both SHPO and LPC.

Comment 237: In the Draft Programmatic Agreement, Section VI ("Human Remains Discoveries"), the document states that if remains are determined to be non-human, construction can proceed. Skeletal remains could be components of a resource such as a unique pre-contact burial, such as a dog burial or of a historic midden or trash deposit. The definition of Unanticipated Discoveries in the

Programmatic Agreement should account for such resources. If found in an area determined not sensitive through documentary research and/or borings, and if found not to be human bone, such finds would not be subject to further investigation and would be destroyed as construction would be allowed to proceed. There should be a provision within Exhibit J that allows for investigations of skeletal material found during construction in areas that were determined not sensitive by the 1A survey and subsequent research and were found to be non-human, yet comprise an archaeological feature or site. (PANYC)

Response: Skeletal remains from a unique pre-contact burial site such as a dog burial would likely be investigated; bones from a historic midden or trash deposit would not necessarily warrant a halt to construction for investigation. The Cultural Resources Manager will make this determination.

Comment 238: Post molds and post holes, indicative of dwellings may be encountered and should be added to the list of Pre-contact features in Exhibit J, Appendix A to the Draft Programmatic Agreement. (PANYC)

Response: Post molds and post holes have been added to the list of pre-contact features.

Comment 239: The first paragraph of Exhibit K, the Data Recovery Plan, in the Draft Programmatic Agreement discusses the process of conducting a data recovery but does not mention the preparation of draft and final reports as a necessary component of such work. Reports are not mentioned until the Secretary of the Interior's standards are cited in the following paragraph. Please include report preparation in the text, as this is a critical component of data recovery. (PANYC)

Response: Comment noted. Draft and final reports are a component of data recovery and have been added to the plan.

AIR QUALITY

Comment 240: The Interagency Consultation Group, of which EPA is a member, raised several issues with the air quality analysis, such as vehicle miles traveled, classifications, speeds, and latest planning assumptions. The final EIS should discuss the mesoscale analysis itself, the results of the analysis, and the resolution of those issues. (EPA)

Response: Chapter 11 of the FEIS, "Air Quality," has been updated to reflect responses to these comments, and the mesoscale analyses have been refined accordingly.

Comment 241: EPA is concerned with construction-related air quality impacts related to CO and particulate matter. The transportation conformity regulation requires that

intersections that are under construction for more than 5 years are required to have a particulate matter (PM) and carbon monoxide (CO) hotspot analysis. It is not clear in the document which intersections will be under construction for more than 5 years. Therefore, EPA cannot determine whether or not the appropriate intersections were modeled. (EPA)

Response: The text in the air quality chapter of the FEIS has been revised to clarify that the only three project locations where construction would exceed 5 years in duration would be in the 96th Street vicinity, the 34th Street vicinity, and at the Lower Manhattan barge site. At both the 96th and 34th Street locations, an analysis of CO and PM analysis was conducted for the worst-case intersections. That analysis concluded that no significant adverse air quality impacts or violations of CO or PM standards would result at those two locations. At the Lower Manhattan barge site, no analysis was conducted for CO, since the activities in this area would not be expected to affect CO emissions: the trucks traveling to the barge site would not be a significant source of CO emissions, and no significant traffic diversions are expected as a result of barging operations. A PM analysis was conducted for this location that concluded that no significant adverse impacts or violations of standards would occur.

Comment 242: On page 11-9 [page 11-8] the SDEIS states that despite traffic impacts, CO levels during construction are predicted to be the same or lower than the No Build at most receptor sites because of lower overall traffic volumes (due to reduced capacity). This analysis does not take into account the effect of reduced speeds of those vehicles that are present and idling emissions due to congestion. (EPA)

Response: The text in the FEIS has been revised to clarify that the air quality analysis conducted took into consideration the volumes of traffic predicted at the intersections modeled, as well as the delays experienced by those vehicles because of the reduced capacity.

Comment 243: Intersections that should be analyzed for increased CO emissions due to construction are omitted. Section IV.2 of the CO Redesignation Request and Maintenance Plan for the New York Metropolitan area requires that all significant projects within ½ mile of an intersection identified in the 1992 SIP attainment demonstration be analyzed for local impacts. The FEIS should provide an analysis of those intersections as well. (EPA)

Response: The text in Chapter 11 of the FEIS has been clarified to describe SIP intersections within ½ mile of the Second Avenue Subway and to indicate that the analyses conducted for the EIS concluded that no significant adverse air quality impacts would occur to any of these locations.

Comment 244: Regarding PM from construction, any analysis of $PM_{2.5}$ from on-road sources should use EPA's latest Mobile Source Emissions Model MOBILE6.2, which is capable of modeling emission factors for this pollutant. Although this model has not been formally released through the Federal Register, it is available for use. (EPA)

Response: Subsequent to this comment letter, MTA/NYCT and the FTA discussed this issue with the EPA and the Interagency Consultation Group (ICG), and it was agreed that because the New York State Department of Environmental Conservation and the New York State Department of Transportation had not published the data and protocols necessary for using MOBILE6 at the time the FEIS was prepared, MOBILE5 would continue to be used.

Comment 245: Page 11-11 of the SDEIS states that mitigation measures that may be used by NYCT may yield reductions of particulate matter by 85 percent; however the analysis should have elaborated on which technology assumption or assumptions were used to arrive at this level of control; e.g. diesel particulate filters, engine replacement, some combination of technologies. The FEIS should provide this information. (EPA)

Response: The measures to be implemented to reduce particulate matter are described on pages 11-10 and 11-11 of the SDEIS. As described there, the analysis assumes the use of ultra-low sulfur diesel fuel, diesel particle filters or other retrofit technology, and a limit to idling time for off-road and on-road equipment. The reduction of 85 percent for these measures is based on results published by Northeast States for Coordinated Air Use Management (NESCAUM) in its analysis of analysis of Ground Zero construction equipment.

Comment 246: EPA is concerned with the effects of the barging that is proposed as an alternative to long-distance trucking activities. The SDEIS claims that barging is expected to result in an improvement to air quality over all trucking options and that barges would reduce regional emissions of $PM_{2.5}$. The reasoning for these statements should be explained in the FEIS along with the analysis results and sources, including estimated emissions from barges associated with material movement. (EPA)

Response: Chapter 11 of the FEIS has been revised to better describe the analysis and reasoning used in the analysis of the use of barges.

Comment 247: The subway will decrease traffic congestion, improve air pollution, and have positive impacts on asthma rates. (NYC Transit Riders Council, PCAC)

Response: Comment noted. The benefits with respect to improvements to traffic congestion and air quality are described in the FEIS.

Comment 248: Why were 23rd and 14th Streets not included in the microscale CO analysis? (CB6 PSHRC)

Response: To determine the most significant CO impacts that might result from construction, five representative receptor sites in the three most congested neighborhood zones—East Harlem, the Upper East Side, and East Midtown—were selected for microscale analysis. Impacts at 23rd Street and 14th Street would be expected to be less than those at the representative locations.

Comment 249: What measures will be taken to protect the public from contaminants while loaded trucks are moving through city streets? The EIS should describe measures to reduce or prevent any possible air quality impacts due to construction operations at each construction site. Since Manhattan is a non-attainment area for $PM_{2.5}$, the FEIS should include measures to avoid increasing impacts to the environment during construction. (CB6 PSHRC)

Response: As described in Chapter 11 of the FEIS, the project's measures to limit air pollutants during construction would be set forth in a Construction Environmental Protection Program (CEPP), and the NYCT would ensure that the relevant portions of the CEPP are incorporated into construction contracts, thereby requiring contractors to follow the provisions. The CEPP and contractual obligations will require that all contractors follow NYCT's directive for capital construction projects to minimize particulate matter (PM) emissions from use of diesel-powered construction equipment. Diesel emission controls for non-road equipment will be required. These controls require that all heavy equipment use only ultra-low sulfur diesel fuel, in combination with diesel particulate reduction and retrofit technology in all heavy non-road equipment. All diesel equipment would not be permitted to idle for more than 3 consecutive minutes, except in certain limited circumstances. The CEPP and contractual obligations would also require use of a dust-suppression program that would include use of dust covers for trucks, spray misting of exposed areas, and using safe chemical dust suppressants to treat and control spoils. In addition, construction sites would be fenced to reduce wind-borne dust. Particulates could be further reduced at construction sites by enclosing areas where spoils from tunnel boring or mining operations would be stored or station locations where spoils removal would take place for some period of time. "Muck" or spoil storage bins could be fully enclosed to prevent airborne dust from reaching the surrounding neighborhood.

Comment 250: Since Manhattan is a non-attainment area for $PM_{2.5}$, the FEIS should also include measures to avoid increasing impacts at the ventilation sites. The FEIS should include a study of potential air quality impacts at each proposed ventilation site. The FEIS should include a steel dust analysis, as steel dust causes respiratory problems. (CB6 PSHRC)

Response: The air generated from the new ventilation structures would be air from the subway's tunnels and stations. Similar to subway vents throughout this city, this air would include some dust generated by train brakes and the interaction between the train wheels and the rails. A study recently conducted by Columbia and Harvard Universities (Chillrud, S. et al, "Elevated Airborne Exposures of Teenagers to Manganese, Chromium, and Iron from Steel Dust and New York City's Subway System," *Environmental Science and Technology*; February 1, 2004; 38(3) pp. 732-737) concluded that the levels of these metals present in the subway system are higher than in the ambient air. The study also noted that there are currently no known health effects at the exposure levels observed in this study. Other studies are currently under way on how these particulate-borne metals vary in the subway environment.

NOISE AND VIBRATION

Comment 251: I currently live on 111th Street and Second Avenue in Manhattan. How will this subway affect how I live? I am concerned about the noise. (Candy)

Response: As described in Chapter 12, because of both the nature of the construction required to excavate subway tunnels and stations through 8.5 miles of Manhattan and Manhattan's overall density, there would be significant airborne noise impacts during the construction period at a number of locations, including near 111th Street. As described below, NYCT would undertake numerous mitigation measures to reduce the extent of these impacts. Nevertheless, it will not be possible to completely mitigate all impacts—chiefly because of the proximity of existing residential and other buildings to the construction activities. However, once the new subway is operational, the system would operate more quietly than the existing subway lines in Manhattan, and any potential airborne and ground-borne impacts would be mitigated using technologies currently employed by NYCT throughout its system.

Comment 252: Noise during the workday is more acceptable than noise at night in residential communities. Arranging work schedules with this basic consideration in mind will help minimize disturbance to most residents. (Sanders)

Efforts should be made to not make noise and vibration between 8 PM and 8AM. The hours of restricted activity described in the SDEIS, 10 PM to 7 AM are not acceptable for residential areas. (CB6 PSHRC)

Response: Chapter 12 of the FEIS, "Noise and Vibration," describes the noisy activities that would take place during construction of the subway and the times of day when these activities would occur. While some very noisy activities would not occur between 10 PM and 7 AM, restricting all construction operations to only daytime hours would greatly increase the length of time and cost needed to build the subway. As described in Chapters 3 and 12, most construction activities

could take place between 15 and 24 hours a day, 6 days per week; significant airborne noise impacts may occur not only during the day, but also during nighttime and weekend periods. However, several of the noisiest activities—such as pile driving and vertical blasting—would not occur late at night.

Comment 253: How will you deal with structures/buildings that are too fragile to withstand blasting and digging in close proximity? (Smith)

Response: As described below in the response to the next comment, NYCT is committed to implementation of a rigorous program of special measures to minimize and mitigate potential impacts to uses (such as hospitals and other medical facilities) and structures (such as historic buildings) that are sensitive to vibration levels. Chapter 12 describes the measures that would be taken to identify and protect such uses during construction of the new subway.

Comment 254: The vibration caused by construction of the subway will severely impact the New York Eye and Ear Infirmary, to the extent of potentially causing the hospital to go out of business. More than 20,000 microsurgical procedures are performed at the Infirmary each year. These procedures require the use of highly sophisticated microscopic equipment, which is extremely sensitive to external vibrations, which may be transmitted through building structures. These types of procedures constitute the majority of services rendered at the Infirmary. The inability to perform them would render the hospital incapable of achieving its mission and threaten its viability to remain in existence as the country's premier eye and ear teaching hospital. The proposed method of tunnel construction in the vicinity of 14th Street will invariably generate a level of vibration, which would undoubtedly disrupt these procedures. The New York Eye and Ear Infirmary strongly opposes the construction of the Second Avenue Subway as presently proposed. (NY Eye and Ear)

Response: As described in Chapter 12, NYCT is committed to implementation of a rigorous program of special measures to minimize potential impacts to uses (such as hospitals and other medical facilities) and structures (such as historic buildings) that are sensitive to vibration levels. As noted in Chapter 4, NYCT has begun implementing a noise and vibration outreach program to institutions and businesses along the alignment that may be particularly sensitive to vibration. As part of this process, NYCT has already sent letters to potentially sensitive users (such as hospitals) along the entire alignment, notifying them of the project and requesting their participation in the planning process. NYCT has met with New York Eye and Ear and is working with them to resolve issues related to noise and vibration. There is vast experience around the country and in New York City of satisfactorily tunneling near sensitive hospital receptors.

Comment 255: The Middle Collegiate Church, located on Second Avenue between 6th and 7th Streets, supports the new subway, but we have concerns about our church building. Our building was built in 1890 and contains 12 Tiffany windows and many stenciled and decorated plaster walls. In the last 10 years, we have totally restored the church. We are concerned about vibration and construction damage to this priceless architecture. (Middle Collegiate Church)

Response: As described in Chapter 12, NYCT is committed to implementation of a rigorous program of special measures to minimize potential impacts to uses (such as hospitals and other medical facilities) and structures (such as historic buildings) that are sensitive to vibration levels. NYCT has developed both a fragile buildings identification strategy and guidelines to limit vibrations for the various types of structures along the alignment. For structures that may be sensitive to vibration levels such as the Middle Collegiate Church, NYCT is committed to implementation of properly managed special measures designed to protect such buildings from any architectural or structural damage that could occur as a result of vibrations and ground-borne noise produced by certain construction operations. These measures are described in Chapters 8 and 12 of the FEIS.

Comment 256: The SDEIS does not go into detail regarding mitigation measures for each construction site. The FEIS should include a detailed list of mitigation measures that would reduce or eliminate ground-borne noise and vibration. A comprehensive work plan should be developed to minimize noise and vibration impacts on neighborhood buildings. (CB6 PSHRC)

Response: Table 12-6 of the FEIS (in Chapter 12, "Noise and Vibration") provides a list of proposed mitigation measures on a site-by-site basis. Potential mitigation measures for construction ground-borne noise and vibrations include development of a project-wide vibration monitoring program to minimize vibration levels and respond to community complaints and concerns as they arise. The monitoring program would be used to ensure that the vibration damage threshold criteria for fragile and extremely fragile buildings are not exceeded. Chapter 12 provides more information on how buildings along the project alignment would be identified and monitored for vibration sensitivity. Multi-delay blasting techniques, careful installation of tracks for spoils removal trains or other site-specific vibration control measures would be employed.

Comment 257: When the shaft is built at 66th Street will there be vents that emit noise? There is a noisy vent facility in the area and the MTA does nothing about it. (ESNA)

Response: Please note that the shaft site at 66th Street would not require vents of the type described in the comment, and no permanent ventilation facility is proposed at the 66th Street shaft site. The new facilities at 63rd Street and Second Avenue would feed into the existing vent structure but would not affect the noise

generated by the existing facilities (which are used for emergency conditions and are usually not in operation). An analysis of the noise from operations of these vent facilities is included in Chapter 12, and concludes that no significant adverse noise impact would result from operation of the new vent facilities.

Comment 258: What measures have been developed to prevent any noise and vibrations from subway trains running that would affect buildings just above the subway? The buildings that are supported on the same rock as the subway would be greatly affected by subway vibrations. (CB6 PSHRC)

Response: Chapter 12 of the FEIS describes the analysis of vibration and ground-borne noise that was conducted to determine whether any significant adverse impacts might occur from operations of the new subway to buildings above. (This information is included in the section entitled, "Permanent Impacts of the Project Alternatives: Vibration And Ground-Borne Noise.") That analysis identified locations where special design features should be included to prevent significant adverse ground-borne noise or vibration impacts from occurring to buildings nearby. Those design features would include various measures to increase the resilience of the trackform, such as resilient rail fasteners and resilient track support structures.

INFRASTRUCTURE AND ENERGY

Comment 259: Con Edison's facilities—including electricity, gas, and steam supply infrastructure—run beneath and intersect the proposed subway alignment and must continue to operate safely and reliably during the construction project. This will require developing and implement engineering solutions that minimize impacts on local communities while maintaining the project schedule and limiting the project's construction costs for this effort. Con Edison must work collaboratively with NYCT throughout the project and in key decision-making during the planning and design phase. (Con Ed)

Response: NYCT and its engineering team are currently coordinating with the utility providers including Con Edison through a Second Avenue Subway Utilities Task Force that has been meeting monthly for more than a year. In addition, more specific meetings are held with affected utilities to review site-specific design plans and discuss ways of minimizing relocation work. In this way, measures to address issues that could affect the utilities in the project alignment are incorporated into the project's design.

Comment 260: The cut-and-cover method planned for 10 of the 16 subway stations imposes the greatest impacts on the energy system infrastructure, as it requires open excavation of a street. This requires that all utilities in the excavation zone be supported in place or relocated. The facilities on three or four cross streets

would also have to be displaced. The use of slurry walls to support excavation rather than soldier piles and lag sheeting will require more displacement of underground facilities and higher relocation costs. Further, the SDEIS is incorrect when it states that utilities would typically be supported in place. The support of energy facilities in place will usually be impractical due to the distances involved, mechanical stresses that jeopardize reliability, concerns about immediate access during emergencies, and or the expensive modifications needed to lower the facilities to the 6- to 10-foot depth of the support zone under the roadway deck. Utility relocations will adversely affect local communities through excavation of the roadway, side streets, and sidewalk, and temporary service outages. Con Edison urges NYCT to use construction methods and facility designs that will reduce NYCT's need to relocate utility infrastructure. NYCT should use mining technology rather than cut-and-cover excavation wherever possible. The relocation of utilities for mining shafts would have less impact on facilities than cut-and-cover excavation. (Con Ed)

Response: NYCT has sought to minimize the need to do cut-and-cover construction where feasible. As a result of ongoing engineering, the number of locations where cut-and-cover construction would be required has been substantially reduced from that assumed in the SDEIS. Tunnel boring machines rather than cut-and-cover excavation would be used for most of the tunnel excavation, and stations would be mined from below where sufficient rock is available. Cut-and-cover construction is proposed only where other methods are not feasible for geotechnical or other physical reasons. Where excavation must occur, the shaft locations are being coordinated wherever possible with station mezzanine excavations, egress locations, or permanent vent shafts.

While NYCT would prefer to support utilities in place where possible, specific plans will be developed with Con Edison regarding which utilities can be supported in place and which must be relocated. Regarding support walls, slurry walls or secant pile wall construction provides an opportunity to maintain greater trench stability and reduces the amount of water that must be removed from the excavation. This significantly reduces the potential for settlement at adjacent buildings and utilities compared with the use of soldier piles and lagging. NYCT will continue work with Con Edison and other utility companies to coordinate its activities (see response to the previous comment).

Comment 261: Utility relocations may adversely affect the project schedule because relocations require that outages must be scheduled very carefully in order to maintain service reliability. Electric transmission and distribution feeders cannot be taken out of service during peak-use periods from June through September and may only selectively be taken out of service for brief periods at other times according to system conditions. Gas and steam facilities have similar constraints during winter peak use months. (Con Ed)

Response: As described in Chapter 3 ("Description of Construction Methods and Activities," and Chapter 13 ("Infrastructure"), NYCT is fully aware of the amount of effort needed to protect utilities during the Second Avenue Subway's construction process. For many reasons—including the desire to minimize environmental impacts due to disruptive surface construction, cost, and schedule and ensure public safety—NYCT seeks to limit any relocations of utilities that would result in service outages and reliability issues whenever feasible. See also the response to the previous comment.

Comment 262: Where cut-and-cover excavation cannot be avoided NYCT should redesign stations to reduce support and relocation requirements and provide critical space for relocating facilities. Center island platforms can narrow the width of required excavation. Narrower width mezzanines allows for subsurface corridors for energy and telecommunication facilities. NYCT must continue to work with Con Edison to develop construction methods and station designs that avoid impacts to utilities and provide adequate space for permanent restoration of infrastructure facilities. (Con Ed)

Response: NYCT and its engineering team are currently coordinating with the utility providers including Con Edison through a Second Avenue Subway Utilities Task Force. In this way, measures to address issues that could affect the utilities in the project alignment are incorporated into the project's design. For example, in some locations, station designs were revised based on utility company requirements for minimum cover below street surfaces, and several station configurations were modified to include greater depth above the roof of the station to better accommodate utilities above. In more than one location, station designs have been changed to avoid conflicts with major utilities. The project would use center island platforms where possible, which reduces the width of stations compared to side platforms.

Comment 263: A comprehensive plan with public input should be developed to minimize disruption to local businesses and residents during utility relocation. (CB6 PSHRC)

Response: Residents and businesses will be contacted regarding utility relocations via the community outreach process described in Chapter 4, "Public Outreach and Review Process." See also the response to Comment 153 above.

CONTAMINATED MATERIALS

Comment 264: I currently live on 111th Street and Second Avenue in Manhattan. How will this subway affect how I live? I am concerned about exposure to asbestos. (Candy)

Response: As described in Chapter 14 of the FEIS ("Contaminated Materials"), steam pipes (and other utility lines) beneath some of the city's streets or in rail yards

may be coated with asbestos or encased in "transite." There are well-defined regulatory programs to manage asbestos during construction work. Second Avenue Subway construction would comply with all applicable rules and regulations related to asbestos removal and disposal.

Comment 265: The SDEIS identifies contaminants that the public could be exposed to but gives no test borings that could give the extent of public risk. The FEIS should include a Phase I and Phase II Site Assessment following *CEQR Technical Manual* guidance. (CB6 PSHRC)

Response: A preliminary borings program has been undertaken. The FEIS includes a summary of the borings that have been taken to date along the Second Avenue corridor, describes the preliminary results, and describes the process for further testing through construction (see Chapter 14). Because the proposed project is not subject to New York City regulations, the project is not bound by the assessment guidance provided in the *CEQR Technical Manual.* However, a comparable process was developed to achieve a similar understanding of site conditions as what could be learned by completing the City's standard Phase I and Phase II procedures. Given the preliminary level of engineering, the 8.5-mile length of the project, and the expected duration of the construction, the first step regarding the investigation of contaminants in the project right-of-way was a Preliminary Environmental Site Assessment (PESA). The PESA is essentially a modified "Phase I" which focused on those aspects of the American Society for Testing Materials (ASTM) Standard E1527-00 that were deemed appropriate for the project at this time. Following this investigatory research phase, physical testing of sites that warrant further investigation will be conducted. This testing phase is akin to the City's Phase II practice. See Chapter 14 for additional information on the procedures performed.

NATURAL RESOURCES

Comment 266: The SDEIS identified wetlands associated with Coney Island Creek that would be impacted, as would the creek itself, if that area were selected as a train storage site. These wetlands should be considered federally regulated tidal wetlands, subject to the Clean Water Act (CWA) Section 404 permit process. EPA is concerned that the document did not discuss these wetlands in that context, nor did it provide an analysis of the amount of acres of wetlands and their functions and values. Should FTA and MTA select the Coney Island Creek site as a train storage area, a CWA 404 permit from the U.S. Army Corps of Engineers would be required. The FEIS should include a more detailed discussion of Coney Island Creek and associated wetlands. A discussion of the Creek site in a CWA 404 permit context, such as what attempts were made to avoid or minimize the impacts to these wetlands through examination of other sites for train storage or site configuration, should also be included. If the site is

selected, the FEIS should include a detailed discussion of the mitigation proposal for the replacement of these wetlands. (EPA)

The Coney Island Site should not be selected for train storage because of its impacts on aquatic resources. (DOI)

Response: The Coney Island Creek site is no longer under consideration as a train storage area, so the discussion of Coney Island Creek and associated wetlands has been removed from the FEIS.

Comment 267: Silt curtains and erosion control measures should be used when working in or near waterways to avoid or minimize impacts to the Harlem and East Rivers, Coney Island Creek and Coney Island wetlands. (DOI)

Response: The project has been modified and construction would no longer occur in or adjacent to the Harlem River, Coney Island Creek or the Coney Island wetlands. As described in Chapter 15 of the FEIS ("Natural Resources") in "Summary of Significant Adverse Impacts and Mitigation Measures," during construction, silt curtains could be used where appropriate to reduce and control turbidity in the water column, to allow suspended solids to settle, to capture floating debris, and minimize local water quality degradation during construction activities. Additionally, standard erosion control measures would be installed during bulkhead replacement activities involving upland areas.

COASTAL ZONE CONSISTENCY

Comment 268: Chapter 16 of the SDEIS states that only very limited portions of the Second Avenue Subway would be within the designated Coastal Zone and assesses only those portions of the project. This is an inadequate assessment and an incorrect interpretation of the federal consistency review requirements. It is not the location of a proposed action that triggers consistency review, but rather whether that activity will affect any use or resource of the coastal zone. All federal financial assistance activities that affect any coastal use or resource are subject to the consistency requirement of the Coastal Zone Management Act. The Department of State must concur with the consistency of the proposed activity with all applicable state and local coastal policies before the federal funding may be granted. The funding in question here applies to the entire Second Avenue Subway proposal, which overall has been determined to have reasonably foreseeable effects in the coastal zone. There the project in its entirety will be reviewed by the New York State Department of State. (DOS)

Response: Comment noted. The FEIS has been revised to reflect this comment.

Comment 269: If the project will need federal approvals such as permits or licenses, the New York State Department of State will again be required to review the proposal for

consistency with the New York State Coastal Management Program. The current review pertains only to funding. (DOS)

Response: Comment noted. As described in Chapter 4, federal permits are anticipated for in-water activities associated with the potential barging activities, and other federal permits or licenses may also be required in the future.

Comment 270: Maintaining and protecting public access is an important aspect of the Coastal Management Program. The SDEIS identifies many areas in which public access to the waterfront will be reduced. The decrease in access at the 129th Street site, while temporary, would be substantial. Mitigation for this loss should be provided as well as at other sites where already limited public access would be reduced. (DOS)

Response: As described in Chapter 2, the 129th Street barge site assessed in the SDEIS has been eliminated from further consideration by the Second Avenue Subway project.

Comment 271: Subway construction could strain existing infrastructure. Policy 1.3B of the NYC WRP states that "Lack of adequate local infrastructure need not preclude development, but it may suggest upgrading or expansion of inadequate or deteriorated local infrastructure." The project will require the development of public service facilities and the increase in those facilities will affect the existing infrastructure and may require upgrading or expansion. Policy 2.3 of the WRP states addresses provision of infrastructure improvements necessary to support working waterfront uses. (DOS)

Response: Comment noted. The Second Avenue Subway FEIS addresses the project's effects on public services and infrastructure in Chapter 13, "Infrastructure and Energy," and concludes that no significant adverse impacts would result.

Comment 272: Spoils removal by barge is of concern because of the potential pollution of surface waters. (DOS)

Response: Barges were identified as a potential means of transporting spoils that would reduce the number of vehicle trips generated by the project. However, it is also true that the barges themselves could create some adverse effects. Chapter 14, "Natural Resources," provides an assessment of the potential effects of the proposed barge operation at Pier 6 on surface waters and habitat. As described in the FEIS, the barge facility formerly proposed in East Harlem is no longer under consideration.

HEALTH AND SAFETY

Comment 273: I currently live on 111th Street and Second Avenue in Manhattan. How will this subway affect how I live? I am concerned about rats. (Candy)

Response: As described in Chapter 3 of the FEIS, construction contracts would include provisions for a rodent (mouse and rat) control program. Before the start of construction, the contractor would survey and bait the appropriate areas and provide for proper site sanitation. During the construction phase, as necessary, the contractor would carry out a maintenance program. Coordination would be maintained with appropriate public agencies. Only rodenticides registered with the EPA and NYSDEC would be permitted, and the contractor would be required to implement rodent control programs in a manner that avoids hazards to people, domestic animals, and other wildlife.

ENVIRONMENTAL JUSTICE

Comment 274: I am pleased that you have addressed environmental justice. The area north and south of the line reach largely minority communities. The health and safety of these communities should be considered through the life of the line from construction to maintenance. (Chan)

Response: Comment noted. As described in the various FEIS analysis chapters, many measures would be undertaken to minimize impacts from construction and to ensure the safety of residents and workers in these and other communities along the proposed alignment.

INDIRECT AND CUMULATIVE EFFECTS

Comment 275: EPA is concerned with the SDEIS's cumulative impacts discussion. The SDEIS lacks a discussion of which specific resources are affected and to what extent, such as air quality, the East River, the Harlem River, and historic properties. The FEIS should expand on the analysis done so far. Additionally, EPA encourages the project sponsors to find opportunities to minimize the cumulative impacts through coordination with other projects that have been identified. … For example, the FEIS should discuss if there are opportunities to jointly utilize the staging area resources at 129th Street and coordinate to minimize effects on the Harlem River and waterfront. Besides examining options to avoid conflict between construction activities, the Final EIS should also examine if, in order to minimize disruptions, overlapping projects can be completed with one construction action. (EPA)

Response: The discussion of cumulative impacts in the FEIS has been refined to discuss the specific resources affected cumulatively by different projects. The text also clarifies that NYCT will work with the sponsors of other projects to coordinate

construction activities wherever possible. At this time, however, it is difficult to predict the specific overlap between some projects, since the phasing and timing of construction for the Second Avenue Subway and many of these other projects have not yet been finalized.

Comment 276: The New York City Department of Environmental Protection (NYCDEP) also has construction plans in the vicinity of St. Vartan Park that will have impacts on parkland. NYCT should coordinate with NYCDEP regarding the location and timing of the two construction projects and their park impacts. (NYCDPR)

Response: As described in Chapters 7 and 19 of the FEIS, Second Avenue Subway construction within St. Vartan Park would occur during Phase 3 of the project. It is possible that NYCDEP construction in this area would be complete prior to commencement of this phase. NYCT is working with NYCDEP and would coordinate construction staging plans, designs, schedules, and traffic plans to minimize the potential for cumulative impacts in the event the projects happen simultaneously. If St. Vartan Park or any other public open spaces would be affected by multiple projects within the same geographic area, NYCT would coordinate with NYCDPR, other agencies, and other projects on developing a coordinated mitigation strategy.

MISCELLANEOUS

A number of commenters provided comments on issues that are not relevant to the Second Avenue Subway project. These include comments on the subway fare increase, suggestions for alternative train routes on other parts of the existing subway and bus system, suggestions regarding marketing ideas for the subway map, and comments about other aspects of the subway system or operations. ✷

Comment Letters
Received from
Federal Resource Agencies

PEP

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

ER-03/0330

JUL 24 2003

Ms. Letitia Thompson
Regional Administrator
Federal Transit Administration, Region 2
One Bowling Green, Room 429
New York, New York 10014-1415

Dear Ms. Thompson:

This responds to a request for the Department of the Interior's (Department) review and comment on the Supplemental Draft Environmental Impact Statement (SDEIS) and Section 4(f) Evaluation for the Second Avenue Subway in Manhattan, New York County, New York.

Draft Section 4(f) Evaluation

The Department concurs that there are no prudent and feasible alternatives to the alignments of this subway project as presented in the Section 4(f) Evaluation; however, we cannot at this time agree to the measures to minimize harm to cultural and recreational resources. We note, with approval, the efforts in Parts IV and V, (pages 4(f)-42 through 50), to continue the appropriate consultations with the State Historic Preservation Officer (SHPO) and to develop the commitments to the preservation of cultural resource values listed or eligible for listing on the National Register of Historic Places (NRHP). There also seems to be good progress made in the completion of a Programmatic Memorandum of Agreement (PMOA), which will provide for stipulations to avoid or mitigate impact to resource values.

It is apparent that a number of public recreational areas will be temporarily impacted over the extensive route of this subway project during its lengthy period of construction. It is also apparent that planning and design have been sensitive to and considerate of the temporary short-term loss of these numerous resources. The measures to minimize harm, including the commitment of complete restoration of such resources by the time the project is completed would seem adequate to satisfy the National Environmental Policy Act (NEPA) and Section 4(f) Evaluation. However, there is no mention of the status or applicability of Section 6(f) of the Land and Water Conservation Act (L&WCA) concerning recreational development funding grants. Should it be determined that the project impacts would cause a change of use for recreation, for which funds were granted, the process of Section 6(f) could add to the mitigation measures mentioned above, thus making them incomplete at this time.

The grant program for this subway project area is administered by the National Park Service (NPS) out of the Northeast Region located in Philadelphia, Pennsylvania, which reports that two (2) out of eleven (11) recreational areas impacted, St. Vartan Park and Crack is Wack Playground, have received recreational development funding grants and are subject to Sections 4(f) and 6(f) proceedings. At this time we consider measures to minimize harm to these park resources incomplete as presented in this Draft Section 4(f) Evaluation. We recommend that a discussion of consideration be given to Section 6(f) to show how the result would enhance committed efforts to minimize harm in the final documentation of Section 4(f) compliance. Ms. Jean Sokolowski is the NPS Grants Coordinator for the area of this subway project and may be contacted on 215-597-1158.

SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STTEMENT

The U.S. Fish and Wildlife Service (FWS) provided comments on this project under the Endangered Species Act in letters dated January 3, 2002, and May 2, 2002. The following comments are provided pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et Seq.).

The proposed project involves the construction of a new 8.5mile subway line between 125th Street and Hanover Square in Manhattan, to alleviate congestion on other existing routes. Project facilities include new tunnels, stations, ancillary facilities, signals, rolling stock, maintenance, and storage facilities. Excavation of the project area is expected to generate large amounts of fill material that will be removed by barge. therefore, dredging may be required to allow barge traffic.

The SDEIS adequately describes the natural resources found in the project area including the Harlem and East Rivers, Coney Island Creek, as well as littoral wetlands near the Coney Island Creek storage yard. While significant impacts to these resources are not expected as a result of the proposed project, we recommend that the project sponsor attempt to avoid and minimize impacts to these resources. Silt curtains and erosion control structures should be used when working in or near waterways. Four sites are being considered for use as a train storage facility; only the Coney Island site contains wetlands. It is recommended that the project sponsor select the alternative resulting in the least impacts to aquatic resources. For further understanding of these wetland protection concerns, please contact Mr. Tim Sullivan of the FWS in Cortland, New York. Telephone 607-753-9334.

We appreciate the opportunity to provide these comments.

Sincerely,

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc:
Mr. Christopher Boylan
Metro Transportation Authority
State of New York
347 Madison Avenue
New York, New York 10017

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JUN 10 2003

Ms. Letitia Thompson
Regional Administrator
Federal Transit Administration
One Bowling Green, Room 429
New York, New York 10004

Rating: Class EC-2

Dear Ms. Thompson:

The Environmental Protection Agency (EPA) has reviewed the supplemental draft environmental impact statement (SDEIS) for the Second Avenue Subway, in Manhattan, New York (CEQ# 030161). This review was conducted in accordance with Section 309 of the Clean Air Act, as amended (42 U.S.C 7609, PL 91-604 12 (a), 84 Stat. 1709), the National Environmental Policy Act and the Council on Environmental Quality's regulations for implementing NEPA (40 CFR Parts 1500-1508).

The purpose of the proposed project is to address the access and mobility problems associated with the currently overburdened transit infrastructure on the east side of Manhattan. The goals are to improve mobility, achieve economic feasibility and cost effectiveness, and maintain or improve environmental conditions. The SDEIS proposes two alternatives; the no build, and the build alternative of constructing the Second Avenue Subway from 125th street to Hanover Square at Water Street. The SDEIS references the three action alternatives that were examined in the 1999 draft EIS. As you know EPA's comment letter on the draft EIS specifically cited that the omission of an evaluation of a full Second Avenue Subway line was a serious deficiency.

Accordingly, we applaud the Federal Transit Administration's (FTA's) evaluation of the full Second Avenue Subway project in the SDEIS; its support for this alternative demonstrates thorough planning and analysis. Although we have some concerns with the information presented in the SDEIS, EPA believes that these issues can be readily addressed within the final EIS.

In October 2002, Congress granted the New York Metropolitan region a waiver from air quality conformity. The current condition of the waiver and the current system in place to address air quality is discussed in the SDEIS. Though this legislation temporarily waives some of the conformity requirements until October 2005, the interagency consultation provisions were not waived. In compliance with the enhanced interagency consultation procedures, MTA conducted a mesoscale air quality analysis to determine the impacts of the project. With that in mind, we direct your attention to the April 29, 2003 memorandum that was produced by the Interagency Consultation Group (ICG) commenting on the mesoscale analysis that was performed. The ICG,

of which EPA is a member, raised several issues with the analysis such as vehicle miles traveled, classifications, speeds and latest planning assumptions that have not been addressed. The final EIS should discuss the mesoscale analysis itself, the results of the analysis, the issues that were laid out in the ICG memo, and the resolution of those issues.

EPA is concerned with the project's construction-related air quality impacts, in particular, carbon monoxide (CO) and particulate matter. The transportation conformity regulation requires that intersections that are under construction for more than 5 years (i.e., not temporary) are required to have a particulate matter and CO hotspot analysis. It is not clear in the document which intersections will be under construction for more than 5 years. Therefore, EPA cannot determine whether or not the appropriate intersections were modeled. On page 11-9, the SDEIS states that despite traffic impacts, CO levels during construction are predicted to be the same or lower than the no build at most receptor sites because of lower overall traffic volumes (due to reduced capacity). However, this analysis does not take into account the effect of reduced speeds of those vehicles that are present and idling emissions due to congestion. Also, intersections that should be analyzed for increased CO emissions due to construction are omitted. Section IV.2 of the CO Redesignation Request and Maintenance Plan for the New York Metropolitan area requires that all significant projects within a one half mile of an intersection identified in the 1992 SIP attainment demonstration be analyzed for local impacts. The final EIS should provide an analysis of those intersections as well.

Regarding the project's particulate matter impacts from construction, EPA suggests that any analysis of PM 2.5 from on-road sources use EPA's latest Mobile Source Emissions Model MOBILE6.2 that is capable of modeling emission factors for this pollutant. Although this model has not been formally released through the Federal Register, it is available for use. Additionally, page 11-11 of the SDEIS states that the mitigation measures that may be used by New York City Transit (NYCT) may yield reductions of particulate matter by 85%; however, the analysis should have elaborated on which technology assumption or assumptions were used to arrive at this level of control, e.g. diesel particulate filters, engine replacement, some combination of technologies. The final EIS should provide this information.

In a related matter, EPA is also concerned with the effects of the barging that is proposed as an alternative to long distance trucking activities. The SDEIS claims that barging is expected to result in an improvement to air quality over all trucking options and that barges would reduce regional emissions of PM 2.5. The reasoning for these statements should be explained in the final EIS along with the analysis results and sources, including estimated emissions from barges associated with material movement.

The SDEIS identifies wetlands associated with Coney Island Creek that would be impacted, as would the Creek itself, if that area were selected as a train storage site. These wetlands would be considered federally regulated tidal wetlands, subject to the Clean Water Act (CWA) Section 404 permit process. EPA is concerned that the document did not discuss these wetlands in that

context nor did it provide an analysis of the amount of acres of wetlands and their functions and values. Should FTA and MTA select the Coney Island Creek site as a train storage area, a CWA 404 permit from the US Army Corps of Engineers would be required. The final EIS should include a more detailed discussion of Coney Island Creek and associated wetlands. A discussion of the Coney Island Creek site in a CWA 404 permit context, such as what attempts were made to avoid or minimize the impacts to these wetlands through examination of other sites for train storage or site configuration, should also be included. In addition, if the Coney Island Creek site is selected, the final EIS should include a detailed discussion of the mitigation proposal for the replacement of these wetlands.

Lastly, EPA is concerned with the document's cumulative impacts discussion. In particular, while the document identifies other projects in the area, it lacks a discussion of which specific resources are affected and to what extent, such as air quality, the East River, the Harlem River, and historic properties. Accordingly, the final EIS should expand upon the analysis that has been done thus far. Additionally, EPA encourages the project sponsors to find opportunities to minimize the cumulative impacts through coordination with the other projects that have been identified. For example, the staging area and construction site for the Third Avenue and Willis Avenue bridges may overlap with the staging area for this project. The final EIS should discuss if there are opportunities to jointly utilize the staging area resources and coordinate to minimize the effects to the Harlem River and waterfront. Similarly, the document discusses improvement projects to existing subway lines that may be occurring in close proximity or within the construction zone of this project. Besides examining options to avoid conflict between construction activities, the final EIS should also examine if, in order to minimize disruptions, overlapping projects can be completed with one construction action.

Based upon our review EPA rates this SDEIS as EC-2, Environmental Concerns, Insufficient Information, (see our enclosed "summary of rating definitions and follow-up actions"), because of concerns regarding the air quality analysis, impacts to waters of the U.S. including wetlands, and cumulative effects.

Thank you for the opportunity to comment on this project. We look forward to working with you on this project. Toward this end, we would like to meet with you in the near future to discuss our concerns. Please contact David Carlson of my staff at (212) 637-3502 to set up a meeting or if you have any questions regarding these comments.

Sincerely yours,

Robert W. Hargrove, Chief
Strategic Planning and Multi-Media Programs Branch

Enclosure