A. INTRODUCTION AND METHODOLOGY

The alternatives being considered are designed to improve transit throughout Manhattan’s East Side. For land use, issues associated with the project include the potential for the project alternatives to alter local land uses, influence neighborhood land use patterns, or support or contradict land use plans and policies. This chapter analyzes existing land use, zoning, and public policy throughout the MESA study area and secondary study area, projects future background conditions common to all alternatives in 2020, and assesses the probable impacts of project alternatives.

This chapter assesses the potential impacts that may result during operation of each project alternative. Impacts related to land use, zoning, and public policy during construction are documented in Chapter 15, “Construction and Construction Impacts.”

The analysis was conducted using published sources, including the 1990 Land Use map published by the New York City Department of City Planning, the Sanborn Manhattan Land Book (1996-1997) published by TRW Redi Property Data, maps of Manhattan published by the Identity Map Company, and the Zoning Resolution of the City of New York. This information was supplemented by field surveys conducted in 1996 and 1997, and through discussions with the Department of City Planning and Department of Housing Preservation and Development.

The analysis considers the entire MESA study area as well as the secondary study area. The primary study area includes all areas with the potential to be affected by the project alternatives. Because it would involve only very limited construction activities and would not introduce new transit in locations where none currently exists, the portion of the proposed subway that is south of 63rd Street has less potential to affect land use and therefore is considered in less detail as part of the project’s secondary study area.

As shown in Figure 3-1, the project’s primary study area encompasses all of the East Side of Manhattan, from the Battery to the Harlem River. Within that study area are five distinct zones, differentiated by land use and socioeconomic patterns, as follows:

1. Lower Manhattan, extending as far north as Canal Street. This zone includes three different neighborhoods—the financial district (the area roughly south of Fulton and Vesey Streets), Battery Park City, and the Civic Center and Tribeca (between Fulton and Vesey Streets on the south and Chambers and Canal Streets on the north).

2. Lower East Side, between Chambers and Canal Streets and 14th Street, east of Broadway and Fifth Avenue. This zone includes two neighborhoods divided by Houston street—the Lower East Side/Chinatown to the south and East Village to the north.

3. East Midtown, between 14th and 59th Streets, east of Fifth Avenue. East Midtown can be subdivided into five neighborhoods. These are Lower Fifth Avenue (between 14th Street
Upper East Side, between 59th and 96th Streets, east of Fifth Avenue. This zone includes two neighborhoods, divided by 77th Street (west of Third Avenue) and 79th Street (east of Third Avenue). These are Upper East Side/Medical to the south and Carnegie Hill/Yorkville to the north.

East Harlem, between 96th Street and the Harlem River, east of Fifth Avenue. This zone includes two neighborhoods, divided by 112th/115th Streets: Southern East Harlem and Northern East Harlem.

Within the primary study area, particular focus is given to the portions of the study area that could be affected the most—the areas immediately adjacent to the proposed routes of the alternatives, referred to throughout this chapter as the “project corridor.” As shown in Figure 3-1, the project’s secondary study area, referred to as West Midtown, includes a large area west of Fifth Avenue and south of 59th Street, extending as far south as Chambers Street. As described above, this area is less likely to experience impacts because of the project and is therefore analyzed in less detail.

**B. BACKGROUND**

Land use in the study area reflects Manhattan’s development history since the beginning of the 19th century, when the basic street grid of Manhattan Island was laid out as far north as 155th Street. Generally, both commercial and residential development began in the southern portion of the island and proceeded northward as the city expanded, following available means of transportation. Residential neighborhoods, typically located north of the commercial center, always remained within reasonable commuting distance. The development of rapid transit made more distant locations accessible, allowing residential expansion to accelerate, fill the rest of Manhattan, and move into the Bronx, Queens, and Brooklyn.

With some minor variations, these development patterns continue today. The East Side of Manhattan is largely residential, with the densest concentration of residential use found on the Upper East Side. Most residents commute south to work in Manhattan’s two Central Business Districts (CBDs): Lower Manhattan and Midtown.

The development history of the study area is summarized briefly below.

**17TH, 18TH, AND 19TH CENTURIES**

Development of Manhattan began in New Amsterdam, founded in 1626 south of Wall Street as a commercial center and trading post. As the city expanded northward, streets and blocks were laid out haphazardly, as former farms were filled in. By the end of the 18th century, the city’s waterfront in Lower Manhattan had been fully developed, with new land created on fill east of the original shoreline. The city’s riverfronts were its important trade and business areas, and residential areas were located in the center of the island, far from the industrial waterfront.
Farther north were farms, and still farther north, small farming villages at Yorkville and Harlem. As the city grew, its commercial core expanded continuously northward, encroaching on what had been residential districts, and those residential areas in turn moved farther north as well. Natural barriers—ponds, streams, hills, and valleys—were overcome to accommodate the growing city.

Several factors contributed to the rapid expansion of both commercial and residential development in Manhattan in the 19th century: establishment in 1811 of the Commissioners’ Plan, laying out Manhattan’s basic street grid south of 155th Street; the city’s ascension to a position of primacy in both domestic and foreign trade, spurred by the opening of the Erie Canal in 1825; the influx of immigrants beginning in the 1840’s, which resulted in a great demand for housing; and the development of new modes of transportation that encouraged residential development at increasingly greater distances from the commercial cores.

At the start of the 19th century, commercial areas remained clustered at the edges of Manhattan. Fashionable residential neighborhoods for wealthy residents were located in the center of the island, as far as possible from the industries and associated slums along the riverfront and distant from the business district centered in Lower Manhattan. By the middle of the 19th century, the great numbers of immigrants coming to the city were settling on the Lower East Side. The area was densely developed with tenements to house these new immigrants, and quickly developed into a slum. Farther north, industrial uses near the East River and associated slums developed in Midtown as well, and the area along the East River north of 14th Street was known as the “Gashouse District” because of the large gas holders built near the river north of 14th Street. In addition to the gas works, the area housed slaughter houses, coal yards, and other heavy industry. Amid and inland of these industries were tenements to house working people and their families.

By making neighborhoods to the north more accessible, affordable rapid transit accelerated the city’s growth northward. Beginning in the 1830’s, Manhattan was served by horse-drawn street cars operating on rails in the streets. By the 1850’s, routes ran along Second and Third Avenues on the East Side. However, streetcars were small and slow. Development of the New York and Harlem Railroad served to open up northern Manhattan, bringing the Upper East Side and East Harlem within commuting distance to the city to the south. When first constructed in the 1830’s, the railroad’s steam-powered trains went by track from the terminal at 26th Street and Madison Avenue up Fourth Avenue to Harlem, with service south of the terminal by streetcar. In 1871, the railroads’ terminal was moved to the new Grand Central Station at 42nd Street and Fourth Avenue, still considerably north of the rapidly expanding city. The route south of the new terminal was then converted to streetcars, first horse-drawn and then electric. Trains to north were at-grade up Fourth Avenue. With development of this major transportation hub, midtown Manhattan began to emerge as an office district as well.

The city’s first true rapid transit, the elevated railroad lines (known as “els”), were constructed in the 1870’s, extending affordable rapid transit to the Upper East Side and Harlem as well as East Midtown. On the city’s East Side, the Third Avenue el opened in 1878, extending from South Ferry to 129th Street. By 1880 another el was constructed along Second Avenue from Chatham Square to 129th Street. Soon thereafter, through-service to the Bronx was provided and connections were made between the different el lines, Grand Central Station and the ferry terminal for the Long Island Rail Road at the East River (at 34th Street). In addition to the els,
other public transit was provided by streetcars that opened in the 1890’s along Third and
Lexington Avenue. Following the introduction of rapid transit, developers filled the Manhattan
street grid with speculative housing, building tenements closest to the els and nicer houses
farther away. On the Upper East Side, development followed the pattern established to the
south: industries were located along the river, tenements occupied by workers were farther
inland, and a wealthy residential neighborhood was established in the center, closest to the new
Central Park. East Harlem developed as a largely working-class residential neighborhood.

20TH CENTURY

At the turn of the century (1900-1905), the elevated railroad was electrified, and the city’s first
subway line, the Interborough Rapid Transit (IRT), was built on the East Side. Under the “Dual
Contracts” agreement, the IRT and Brooklyn Rapid Transit (renamed Brooklyn Manhattan
Transit or BMT in 1923) companies in 1913 began to equip and operate new rapid transit lines
built by the city and to rebuild many of the old lines to increase service and reduce running times.
The els along Second and Third Avenues were equipped with center express tracks and stations
serving both express and local lines. During the Depression and in later years, major urban re-
newal projects drastically changed the character of many East Side neighborhoods. In the
1930’s, the city’s Housing Authority was formed to develop public housing, in an attempt to
eliminate slums. The city’s first public housing projects, First Houses (1935) and Vladeck
Houses (1940), were completed on the Lower East Side. Another one of the city’s earliest
public housing complexes (and the first to be constructed without clearing existing housing) was
East River Houses, which opened in 1941 in East Harlem. From the 1940’s through the 1960’s,
government-sponsored urban renewal slum clearance projects demolished entire blocks of
houses and businesses, replacing them with additional public housing projects to meet the
overwhelming demand for housing. Most of these housing complexes were constructed along
the rivers and in formerly industrial areas, particularly on the Lower East Side and in East
Harlem. In a similar effort to provide affordable housing and clear slums, the Metropolitan Life
Insurance Company built the middle-income Stuyvesant Town and Peter Cooper Village in the
late 1940’s in what had been the Gashouse District.

In addition to housing, other large-scale projects also contributed to the transformation of the
East Side’s waterfront from industrial use. These included construction of the East River Drive
and the Queens-Midtown Tunnel in the 1940’s, creation of numerous hospitals east of First
Avenue in East Midtown and the southern portion of the Upper East Side in the first decades of
the 20th century, and construction of the United Nations following the Second World War.

Changes in the city’s rapid transit systems continued to shape development of neighborhoods on
the East Side in the 20th century. Changing railroad technology greatly affected the character
of Park Avenue. Once the railroad running up the avenue was covered and electrified, mid-rise
apartment buildings were constructed along the avenue (between 1890 and 1920). Later, fol-
lowing the Second World War, innovations in engineering allowed construction of taller buildings
above the below-grade railroad tracks. A complex of new office buildings and hotels were con-
structed along the avenue in East Midtown, contributing to the rapid expansion of the Midtown
CBD. Farther north, apartments houses were built along the avenues on the Upper East Side in
what had become Manhattan’s most affluent residential area. Another significant change in
rapid transit was termination of Manhattan’s elevated railways, which had been partly replaced
by the new subway system and had become unpopular because of the character they gave the streets below. Service on the Second Avenue el terminated north of 57th Street in 1940 and south of 57th Street by 1942, with the intention that the el would be replaced by a new Second Avenue Subway. After the Third Avenue el was razed in 1956, the character of Third Avenue changed quickly, as apartment buildings and office buildings replaced the older tenement buildings along the route.

Since the 1950’s, much of the East Side—and particularly the Upper East Side and, to a lesser extent, East Midtown—has seen intensive development with tall apartment buildings along the avenues. The western portion of East Midtown has grown into the largest CBD in the city and the nation, outpacing Lower Manhattan as the home to major national and international corporations. Lower Manhattan has remained largely a commercial center, but is now undergoing a transformation into a mixed residential and business community. The Lower East Side and East Harlem have seen less development, and have larger areas of vacant land and industrial uses.

C. EXISTING CONDITIONS

The activities occurring in an area are its land uses. These can include residential, commercial (including office buildings as well as retail stores), industrial, institutional (including government and hospital uses), and parks, among others. Land uses are affected by an area’s history as well as ongoing development trends, and are directly related to its social conditions, neighborhood character, and trip generation patterns.

Public land use policies also play a part in defining the existing land use and development potential in an area. In the study area, land uses are set largely by zoning. The city’s Zoning Resolution controls the use, density, and bulk of development within the entire city. In addition, in some of the study area zones, major public policy measures have been enacted that have helped to initiate or shape various forms of land uses in a given area. These include special zoning districts established to achieve specific planning and urban design objectives and urban renewal areas designated to revitalize blighted areas. These public policies can help define the existing and future context of the land use of an area.

The existing land uses and development trends in the study area, as well as the zoning and other public policies that affect land use, are described below.

LOWER MANHATTAN

LAND USE

The Lower Manhattan zone, including the southern tip of the island to as far north as Canal Street (see Figure 3-2), consists of several distinct neighborhoods. These include the financial district, Battery Park City, the Civic Center, and Tribeca. Despite the financial district’s irregular street grid and narrow streets (both dating to the original Dutch city of New Amsterdam), Lower Manhattan is a major traffic and transportation hub, served by numerous stations for many of Manhattan’s subway routes as well as ferry and PATH service from New Jersey, the ferries from Staten Island, and the Brooklyn-Battery Tunnel, Brooklyn Bridge, and the elevated Franklin Delano Roosevelt (FDR) Drive on the east shoreline and Route 9A on or close to the west.
Financial District

Probably the most well-recognized and largest of the neighborhoods in Lower Manhattan areas, the financial district forms the core of one of the country’s largest Central Business Districts. The area is characterized by a dense office center focused on financial services and symbolized by such famous landmarks as Wall Street and the New York Stock Exchange. In part, the area’s density is due to its irregular street pattern and narrow, curving streets. The center of the financial district is composed predominantly of tall commercial office buildings, with older, smaller commercial buildings at scattered locations between them. However, due to recent public policy measures affecting Lower Manhattan (discussed below under “Zoning and Public Policy”) some 25 commercial office buildings in the financial district are now being converted to residential use. In addition, institutional uses are located throughout Lower Manhattan. A few of the more prominent ones include Trinity Church and St. Paul’s Chapel along Broadway, the U.S. Custom House on Whitehall Street, and the Federal Reserve Bank of New York on Maiden Lane.

Anchoring the western portion of the financial district is the World Trade Center complex, consisting of some 12 million square feet of office space as well as lower-level retail stores and restaurants in twin office towers as well as lower buildings constructed on massive superblocks.

Just east of the financial district along the East River is the South Street Seaport, a complex of historic buildings, some of which have been restored for retail, restaurant, and limited residential use. East of the older Seaport (on the other side of the elevated FDR Drive) are a new retail building on a pier, a historic ship museum, and the Fulton Fish Market, an active wholesale fish market. The Seaport complex is a popular tourist attraction. To the north and east, north of Fulton Street, is Southbridge Towers, a complex of moderate-income residential buildings on a superblock between Gold and Pearl Streets and Frankfort and Fulton Streets.

Battery Park City

West of the financial district and the World Trade Center is Battery Park City (BPC), a 92-acre mixed-use development begun in the 1970’s on land created from fill, including material excavated during construction of the World Trade Center. In the center of the BPC is the World Financial Center, an office complex with retail use at the base. The northern and southern ends of BPC are occupied by residential communities with shopping and restaurants, public open spaces, a waterfront esplanade and marina, and Stuyvesant High School at the complex’s northeast corner. Development of BPC is still under way, and future buildings are to be constructed on currently vacant sites until the planned development is completed.

Tribeca/Civic Center

Just north of the financial district and Seaport area is the Civic Center, a hub of governmental offices and courthouses centered around City Hall Park and Foley Square at the base of the Brooklyn Bridge. This area includes state and federal courthouses, the Manhattan House of Detention for Men (commonly known as “The Tombs”), Police Headquarters, Pace University, and many of the city’s municipal government offices.

North of the financial district and west of the civic center, the second major residential mixed-use area in Lower Manhattan is Tribeca. Tribeca, an acronym for “triangle below Canal Street,” is characterized by a mixed and varied land use pattern containing residences, light industrial/
warehouse space, commercial space, and ground-floor retail. Many of the mid-rise industrial and warehouse buildings in the area have been converted to residential lofts, commercial uses, or a combination of living-work spaces for artists. In general, the western portion of Tribeca is more residential than the eastern portion, and residential conversions continue to be a strong trend.

**Project Corridor**

In Lower Manhattan, the project corridor is the area along the proposed light rail route proposed as part of Build Alternative 2. Consistent with the corridor’s location in the southeast portion of the financial district, surrounding land uses along the southern end of the project corridor area are dominated by high-rise commercial office buildings. Along the southern half of Water Street, from Whitehall to Fulton Street, both sides of Water Street are lined with tall office towers on large lots. This pattern is interrupted on the east side of the street by the Vietnam Veterans Memorial Plaza between two commercial office buildings at Coenties Slip, and by the two-story former First Precinct Police Station at Gouverneur Slip. North of Fulton Street, the project corridor passes the South Street Seaport on the east and Southbridge Towers on the west, both described earlier. As it bends along Frankfort Street, the project corridor passes between Southbridge Towers and the Brooklyn Bridge. (Figures G-13 and G-14 in Appendix G provide photographs of the Frankfort Street area.)

**ZONING AND PUBLIC POLICY**

As shown in Figure 3-3 (see also Table 3-1), almost all of Lower Manhattan is zoned for medium- and high-density commercial office development. High-density office districts typically contain corporate headquarters, large hotels, entertainment facilities, and some residential development, with ground-floor retail uses in some buildings. In addition to this basic zoning, five special zoning districts are mapped in the Lower Manhattan zone, as follows: (1) the Special Greenwich Street Development District (shown in Figure 3-3 and Table 3-1 as “G”), focused along Greenwich Street near the World Trade Center, intended to promote the orderly expansion of commercial development of this area, with an integrated plan for improved pedestrian and vehicular circulation and development of retail and services for the local worker population; (2) the Special Manhattan Landing Development District (mapped as “MLD”), mapped to guide off-shore development in the water and pier area along the East River shoreline from the Battery to the Manhattan Bridge; (3) the South Street Seaport Special District (“S”, designed to preserve and restore the seaport’s historic buildings in accordance with an approved development plan; (4) the Special Battery Park City District (“BPC”), created to oversee development of this community through the use of special design controls consistent with BPC’s master plan; and (5) the Special Lower Manhattan Mixed Use District (“LMM”)—most of which is outside the MESA study area, but a portion of which is in the Tribeca neighborhood—established to permit limited residential development in an otherwise industrial area through conversions of manufacturing space into loft dwellings and joint living-work quarters for artists, and through new contextual residential development.

In addition to zoning, other public policies have played a large role in the recent changes in land use patterns in Lower Manhattan. Specifically, in an effort to stem the area’s ever-increasing building vacancy rate, the city government recently implemented various policy changes to encourage revitalization of the financial district. These included zoning text changes made in 1995 and 1996 to facilitate the conversion of nonresidential buildings to dwelling units, and various tax
Table 3-1
Zoning Designations in the Study Area

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Permitted Uses/Bulk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential Districts:</strong></td>
<td>(Commercial and manufacturing use prohibited; community facility permitted.)</td>
</tr>
<tr>
<td>R7, R7-1, R7-2, R7-3</td>
<td>Medium-density residential and community facility,</td>
</tr>
<tr>
<td>R8</td>
<td>Medium-density residential and community facility.</td>
</tr>
<tr>
<td>R9, R9-1</td>
<td>High-density residential and community facility.</td>
</tr>
<tr>
<td>R10</td>
<td>Highest-density residential and community facility.</td>
</tr>
<tr>
<td><strong>Commercial Districts:</strong></td>
<td>(Residential and community facility use permitted). Commercial districts can be mapped as zoning districts or as overlays in residential districts. Commercial overlays permit low-density development of commercial uses.</td>
</tr>
<tr>
<td>C1-2, C1-6</td>
<td>Low-density neighborhood shopping. Low- to medium-density residential and community facility.</td>
</tr>
<tr>
<td>C1-7, C1-8</td>
<td>Low-density neighborhood shopping. Medium- to high-density residential and community facility.</td>
</tr>
<tr>
<td>C1-9</td>
<td>Low-density neighborhood shopping. High-density residential and community facility use.</td>
</tr>
<tr>
<td>C1-5, C2-2, C2-5</td>
<td>Low-density neighborhood shopping/services. Residential and community facility use based on surrounding residential district.</td>
</tr>
<tr>
<td>C2-7, C2-8</td>
<td>Low-density neighborhood shopping/services. Medium- to high-density residential and community facility use.</td>
</tr>
<tr>
<td>C4-4, C4-5, C4-6</td>
<td>Medium-density general commercial (such as department stores, theaters). Low- to medium-density residential and community facility.</td>
</tr>
<tr>
<td>C4-6</td>
<td>Medium-density general commercial. High-density residential and community facility.</td>
</tr>
<tr>
<td>C4-7</td>
<td>High-density general commercial, residential, and community facility.</td>
</tr>
<tr>
<td>C5-1</td>
<td>Medium-density restricted central commercial (for retail and offices). High-density residential and community facility.</td>
</tr>
<tr>
<td>C5-2, C5-2.5, C5-3</td>
<td>High density restricted central commercial district intended for retail and large offices. High-density residential, community facility.</td>
</tr>
<tr>
<td>C6-1, C6-2, C6-3</td>
<td>Medium-density general central commercial outside CBD. Low- to medium-density residential and community facility.</td>
</tr>
<tr>
<td>C6-4, C6-6, C6-9</td>
<td>High-density general central commercial intended for CBD, allowing medium- to high-bulk offices. High-density residential, community facility.</td>
</tr>
<tr>
<td>C8-3, C8-4</td>
<td>Low-density general service/warehouse, medium-density community facility. No residential use permitted.</td>
</tr>
<tr>
<td><strong>Manufacturing Districts:</strong></td>
<td>(Residential use prohibited.)</td>
</tr>
<tr>
<td>M1-1, M1-2, M1-4</td>
<td>Low-density light industrial uses (high performance) and certain community facilities.</td>
</tr>
<tr>
<td>M1-3, M1-5</td>
<td>Medium-density light industrial uses (high performance) and certain community facilities. (Conversion of nonresidential to residential permitted in M1-5M.)</td>
</tr>
<tr>
<td>M2-1, M2-3</td>
<td>Low-density general industrial uses (medium performance), most commercial uses.</td>
</tr>
<tr>
<td>M2-2</td>
<td>Medium-density general industrial uses (medium performance), most commercial uses.</td>
</tr>
<tr>
<td>M3-1, M3-2</td>
<td>Low density heavy industrial (low performance).</td>
</tr>
</tbody>
</table>
Table 3-1 (Continued)

Zoning Designations in the Study Area

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Permitted Uses/Bulk</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPC Special Battery Park City District</td>
<td></td>
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<tr>
<td>G Special Greenwich Street Development District</td>
<td></td>
</tr>
<tr>
<td>LI Special Little Italy District</td>
<td></td>
</tr>
<tr>
<td>LMM Special Lower Manhattan Mixed-Use District</td>
<td></td>
</tr>
<tr>
<td>MiD Special Midtown District</td>
<td></td>
</tr>
<tr>
<td>MLD Special Manhattan Landing District</td>
<td></td>
</tr>
<tr>
<td>MP Special Madison Avenue Preservation District</td>
<td></td>
</tr>
<tr>
<td>PI Special Park Improvement District</td>
<td></td>
</tr>
<tr>
<td>S Special South Street Seaport Development District</td>
<td></td>
</tr>
<tr>
<td>TA Special Transit Land Use District</td>
<td></td>
</tr>
<tr>
<td>U Special United Nations Development District</td>
<td></td>
</tr>
<tr>
<td>US Special Union Square District</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- “A” denotes contextual zone with specific bulk requirements.
- “B” denotes lower density midblock contextual zone with specific bulk requirements.
- “CR” denotes mixed commercial and residential zone.
- “LH” denotes limited height district.
- “X” denotes contextual zone.

Source: Zoning Resolution of the City of New York.

Incentives and benefits approved in 1995 to attract and retain companies and developers to the area. The goals of these policies are to lower the area’s commercial vacancy rates; convert targeted commercial office buildings into residential space, helping build a 24-hour, mixed-use neighborhood; invest in and upgrade Class B office space; and attract new retailers to the area. As recently as October 1997, amendments to the Lower Manhattan Plan were approved that offer even greater benefits to attract new businesses and residents to the area.

LOWER EAST SIDE

LAND USE

The Lower East Side zone is roughly bounded by the Brooklyn Bridge, the Bowery, and Canal Street to the south, Broadway and then Fifth Avenue to the west, and 14th Street to the north (see Figure 3-4). Within this area are the Lower East Side/Chinatown and the East Village, roughly separated by Houston Street. Within these neighborhoods, Houston and Delancey Streets are major two-way cross streets. Major transportation uses include the Manhattan and Williamsburg Bridges, accessible from Canal Street and Delancey Street, respectively. The at-grade FDR Drive traverses the eastern edge of this zone.

Lower East Side/Chinatown

To the south of Houston Street are the Lower East Side and Chinatown. The central core of these neighborhoods consists of the low-rise, small-scale walk-up tenement structures constructed in the 19th century to house the area’s growing population, while the southern and
eastern edges contain wide superblocks of mid- and high-rise housing complexes formed by massive urban renewal efforts in the middle of the 20th century.

The southern portion of the neighborhood, focused on Canal Street, is Manhattan’s Chinatown neighborhood, a densely populated area of residential and commercial uses with ground-floor retail common on most streets. Canal Street is the main commercial street in Chinatown. Many of Chinatown’s low-rise buildings, particularly along Canal Street, contain commercial or light industrial use. Both Chinatown and Little Italy, to its north, are popular tourist destinations.

Traditionally, Little Italy is the portion of the Lower East Side/Chinatown neighborhood west of the Bowery. Although now smaller in size than Chinatown, Little Italy is another similarly concentrated area containing a mix of residential and commercial (primarily restaurants and small retail stores). Just west of Little Italy is the eastern edge of the trendy SoHo (short for “south of Houston Street”) neighborhood, which begins close to Broadway and continues west of the study area. The few blocks of the neighborhood within SoHo are occupied by light industrial lofts, many of which have been converted to residential use, with ground-floor retail, restaurants, and art galleries.

To the north and east of Chinatown is the traditional Lower East Side neighborhood centered around Delancey and Allen Streets. Orchard Street is this area’s traditional retail street, still lined with ground-floor retail uses famous for their bargains and discounts. In the central blocks of this neighborhood are small residential structures, institutional uses supporting those residences (predominantly schools and churches), small businesses, and many vacant lots. Within this pattern are a number of blocks with a mix of residential and light industrial or warehouse space as well. At the western edge of this neighborhood is the 7.8-acre Sara Delano Roosevelt Park, a one-block-wide park that extends from Canal to Houston Street.

Along the southern and eastern boundaries of the Lower East Side/Chinatown, decades of urban renewal efforts cleared blocks once occupied by dense housing, replacing them with public housing projects. Today, these large superblocks, most of which are south of Madison Street and east of Avenue C, are occupied by numerous large low- and moderate-income housing projects including the Rutgers, LaGuardia, Vladeck, Seward Park, Knickerbocker, and Alfred E. Smith Houses. These complexes are characterized by moderate-rise apartment buildings set within landscaped lawns. Many of the complexes also include public primary and intermediate schools and their playgrounds. East of these projects is the FDR Drive, and east of that, the linear waterfront East River Park.

East Village

North of Houston Street on the Lower East Side is the primarily residential neighborhood of the East Village, as well as the western edge of the neighborhood known as NoHo. The regular street grid that continues north through the rest of Manhattan begins at Houston Street. The land use patterns in the East Village are similar to those to the south on the Lower East Side: the western portion of the neighborhood is occupied largely by low-rise walk-up residential buildings, while the eastern portion contains large-scale public housing projects.

Most of the East Village, extending from roughly Second Avenue as far east as Avenue D, consists of a regular street grid with a mix of low-density residential, small businesses, and scattered vacant lots. The blocks east of Avenue B, in particular, contain large vacant areas. Much of the
vacant land is owned by the City of New York and is not in use, although on some blocks, local residents have created community gardens. In recent years, a slow trend of rehabilitation of existing buildings and construction of new mid-rise residential buildings in this area has begun, and the neighborhood centered around Avenue A has begun to develop restaurants, bars, and retail stores popular with young professionals. Like the area to the south, the eastern portion of the East Village is occupied by large housing complexes, including Corlears Hook Housing, Masaryk Towers, and Baruch, Lillian Wald, and Jacob Riis Houses. In the center of the East Village is Tompkins Square Park, a 16-acre public park occupying the blocks from 7th to 10th Street and Avenue A to Avenue B. Both Cooper Union and New York University, two major higher education institutions, are located in the western portion of this neighborhood. The schools bring to the area numerous academic buildings, residential dormitories, and other related facilities.

West of the East Village is the western portion of the area near Cooper Square known as NoHo (for “north of Houston Street”), east of the Bowery. Like SoHo to its south, NoHo is generally characterized by industrial loft buildings, many of which have been converted for residential use, with a mix of commercial and ground-floor retail space. This portion of the East Village neighborhood also includes numerous mid-rise commercial buildings as well as apartment buildings near and along Broadway. Along Broadway and Lafayette Street are some large-scale retail uses such as a Barnes & Noble bookstore, Tower Records, and KMart.

**Project Corridor**

In the Lower East Side zone, two project alternatives—the TSM Alternative and Build Alternative 2—have different routes. General land use along these separate project corridors is discussed below.

**TSM Corridor.** Between Houston and 14th Streets, First and Second Avenues pass through a largely residential area of low- and mid-rise buildings with ground-floor retail and restaurants. Between 2nd and 6th Streets, blocks on the east side of First Avenue are occupied by a complex of mid-rise apartment buildings.

**Build Alternative 2 Corridor (Light Rail Transit).** South of Delancey Street, the project corridor along the proposed light rail transit route is lined with low-rise commercial buildings with ground-floor retail along Canal Street west of the Bowery. On Canal Street east of the Bowery and along East Broadway, uses along the route are low-rise residential buildings with ground-floor retail uses. East of Rutgers Street, uses on the north side of East Broadway also include mid-rise apartment complexes (Seward Park Houses and the Hillman Cooperative Houses). Various institutional buildings along Canal Street and East Broadway provide community services, including churches, synagogues, the Henry Street Settlement, and the Bialystoker Nursing Home. Selected photographs of portions of the LRT route are provided in Appendix G (see Figures G-15 through G-20).

North of Delancey Street, the project corridor is lined on the east side of the street to 13th Street by the large superblocks of public housing projects. The west side of the street includes similar uses as far north as Houston Street. Beyond Houston Street, the west side of the project corridor contains a mix of low-rise tenements, vacant lots, light-industrial uses, and some institutional uses (public schools and libraries). Between 13th and 14th Street, both sides of the corridor are occupied by a Consolidated Edison power generating station.
West of the Consolidated Edison facility, the south side of 14th Street to Third Avenue is occupied predominantly by low-rise walk-up residential buildings with ground-floor retail uses. One major exception is the New York Eye and Ear Infirmary at Second Avenue, part of a complex of medical buildings just north of 14th Street in the East Midtown zone. West of Third Avenue and closer to Union Square, uses along the south side of 14th Street are mid-rise apartment buildings and commercial uses. East of Third Avenue, several large-scale construction projects are currently under way or anticipated, including a mixed-use retail and residential building and several new dormitories for New York University (see discussion of “Future Conditions Common to All Alternatives,” below). Immediately south of the park are mid-rise commercial buildings, including a Bradlees department store.

In addition to the proposed light rail transit route, the project corridor on the Lower East Side also includes the proposed site of a light rail transit maintenance and storage yard on Delancey Street. The proposed site is currently largely vacant, fenced, and in use by the Lower East Side Business Improvement District as a free parking lot for local shoppers and visitors. The western portion of the site contains the vacant Essex Street market. North of this parcel, Delancey Street is lined with busy retail stores and restaurants. Immediately south of the site is a small vacant manufacturing building and vacant land. Just east and west of the site are residential buildings and, to the west, retail uses on Essex Street. Figures G-18 through G-20 in Appendix G illustrate the uses around the potential yard site.

ZONING AND PUBLIC POLICY

Public policy on the Lower East Side is dictated both by zoning, including Special Zoning Districts, and by urban renewal areas established by the city to remove slums and blighted areas.

Zoning

Zoning on the Lower East Side is almost entirely residential, particularly in the eastern half of the zone (see Figure 3-5 and Table 3-1, above). Zoning in this area allows for medium-density apartment houses as well as taller buildings with low lot coverage set back from the street. The mid-sections of the zone, especially along Delancey Street, Second Avenue, and sections of Houston Street, are smaller areas of general commercial districts permitting a wide range of high-bulk commercial uses. Several small areas west of the Bowery are zoned for light industrial use.

The Lower East Side has two special zoning districts: the Special Little Italy District and the Special Transit Land Use District. The Special Little Italy District (shown as “LI” in Figure 3-5 and Table 3-1) is mapped south of Delancey Street between Baxter Street and the Bowery. This district was established to preserve and enhance the historic and commercial character of the community through special use regulations protecting the retail area along Mulberry Street. Other regulations encourage residential rehabilitation and new development on a scale consistent with existing buildings, discourage the demolition of noteworthy buildings, and increase the number of street trees in the area. The Special Transit Land Use District (mapped as “TA”), which begins on the Lower East Side and extends to East Harlem, is discussed below.

Special Transit Land Use District

The Special Transit Land Use District was designated in 1974 in anticipation of future development of a subway line beneath Second Avenue and extends from the Lower East Side into East
Harlem. Special Transit Land Use Districts may be mapped in the vicinity of existing or pro-
posed subway stations to provide easements to facilitate pedestrian access and/or improve ac-
cess of light and air to subway mezzanines or stations. On the Lower East Side, this special dis-
trict is mapped at Chatham Square (at the Bowery), Grand Street (at Chrystie Street), and
Houston and 14th Streets (at Second Avenue). Because this special district is particularly rele-
vant for the new subway proposed as part of MESA’s Build Alternatives 1 and 2 on the Upper
East Side, it is discussed in more detail below in the discussion of the Upper East Side’s zoning
and public policy.

Urban Renewal Areas

Much of the Lower East Side was drastically redeveloped in the middle of the 20th century
through urban renewal efforts that led to the creation of the public housing projects located
throughout the zone, particularly along Avenue D and south of Madison Street. Two urban re-
newal areas have not yet been completed on the Lower East Side today: the Seward Park Ex-
tension Urban Renewal Area and the Cooper Square Urban Renewal Area.

The Seward Park Extension Urban Renewal Area is bounded by Delancey Street to the north,
Bialystoker Place (Willet Street) to the east, Grand Street to the south, and Essex Street to the
west, but excludes from the plan several parcels of land within this boundary. The overall pur-
pose of the urban renewal plan is to redevelop the deteriorated area into a mixed-use community
of commercial, residential, as well as public and semi-public uses.

The Cooper Square Urban Renewal Area includes portions of the area bounded by East 5th
Street to the north, Second Avenue/Chrystie Street to the east, Stanton Street to the south, and
the Bowery to the west. The intention of this project is to redevelop the decaying, five-block
area into a vibrant, mixed-use residential and commercial neighborhood.

EAST MIDTOWN

LAND USE

The East Midtown zone, between 14th and 59th Streets east of Fifth Avenue, contains a mix of
neighborhoods with a diverse assortment of land uses ranging from high-density residential to in-
stitutional (hospitals) and tall commercial office buildings (see Figure 3-6). This zone is traversed
by five major two-way crosstown streets: 14th, 23rd, 34th, 42nd, and 59th Streets. Major trans-
portation uses in the area include the Queens-Midtown tunnel, accessible between 34th and 40th
Streets east of Second Avenue, Grand Central Terminal at 42nd Street, and the Queensboro
Bridge just to the north of East Midtown.

Lower Fifth

The southern portion of East Midtown, the Lower Fifth neighborhood is dominated by Stuy-
vesant Town, a middle-income apartment complex between East 14th and East 20th Streets east
of First Avenue; and Peter Cooper Village, another apartment complex directly to the north
between East 20th to 23rd Streets. To the west of First Avenue are Stuyvesant Square,
Gramercy Park, and Union Square. The neighborhoods around Stuyvesant Square and
Gramercy Park contain low- and mid-rise residences, small institutional uses, and larger medical
uses including the complex of Beth Israel Medical Center between First and Second Avenues
and Cabrini Medical Center between Second and Third Avenues.
Farther west is the mixed commercial and residential area close to Union Square, a park that is home to a popular farmers’ market. The area bordering the park contains a mix of commercial and residential uses, many in former warehouse and manufacturing spaces. This portion of the neighborhood is developing with fashionable retail stores and restaurants focused on Broadway and Fifth Avenue as well as lower Park Avenue South. The Union Square area is also becoming more residential, as a trend toward development of new apartment buildings has begun.

**Midtown South/Medical Center**

North of the Stuyvesant Town and Peter Cooper Village, the large-scale development pattern on the eastern edge of East Midtown continues with the hospital complexes of the Veterans Administration Medical Center, Bellevue Medical Center, and New York University Medical Center east of First Avenue. Residential uses in this portion of the neighborhood are also large-scale, including the apartment complexes of Phipps Plaza West and Kips Bay Plaza between First and Second Avenues near the hospitals and Waterside, a complex of four tall residential towers built into the East River east of the FDR Drive. Recently, tall individual apartment buildings have been constructed along Third, Second, and First Avenues in this neighborhood as well.

Farther west, this neighborhood consists largely of a mix of low-, mid-, and high-rise residential uses mixed with institutional uses and, along Park Avenue South, Madison Avenue, and Fifth Avenue, office and light industrial (many of which are garment district-related) uses. Notable institutional uses include numerous buildings occupied by the City University of New York’s Baruch College, most of which are between Third Avenue and Park Avenue South.

**Murray Hill**

The Murray Hill neighborhood is predominantly occupied by low- and mid-rise residential buildings. As in the Midtown South neighborhood to the south, the eastern portion of this neighborhood has large-scale developments. These include Con Edison’s Waterside power generating station along the east side of First Avenue, as well as the entrance ramps and exit ramps for the Queens-Midtown tunnel, which occupy several blocks in this neighborhood. Park Avenue South is lined with mid-rise apartment buildings between 34th and 39th Streets. West of Park Avenue and north of 39th Street, this neighborhood consists largely of office uses connected to the larger office district to the north.

**Grand Central/United Nations**

From roughly 42nd Street north, the most predominant characteristic of the East Midtown zone is its office district. This densely developed commercial area is part of larger Midtown Manhattan, which is the largest central business district (CBD) in the country. Beginning roughly at 34th Street on Fifth and Madison Avenues (see the discussion earlier) and near 39th Street on Park Avenue South and Third Avenue, the area is heavily dominated by tall commercial office buildings, and the trend of construction of such buildings remains strong despite the limited land available for new buildings. The commercial district continues eastward along 42nd Street to the United Nations complex, which spans from 42nd to 48th Street east of First Avenue. The United Nations area is a major tourist attraction and the center of a larger group of associated offices and affiliated organizations as well as nearby residential housing. North of 42nd Street, between the United Nations and most of the office district is a small residential neighborhood, consisting
of Tudor City (between 40th and 44th Streets and First and Second Avenues) and other residential uses east of Third Avenue.

East Midtown

North of the Grand Central/United Nations neighborhood, the same development pattern of predominantly residential areas east of Third Avenue and tall commercial towers to the west continues as far north as 59th Street. The residential portion of East Midtown offers a diverse housing stock, ranging from the large apartment buildings lining the avenues to the brownstones and small apartment buildings located predominately along the side streets. Ground-floor retail lines the avenues, with more concentrated retail uses located along Second and Third Avenues. During recent years, tall new apartment buildings have been constructed along Second and Third Avenues in this neighborhood. At the western boundary of the zone, Fifth Avenue is lined with expensive ground-floor retail shops and is a major tourist attraction.

Project Corridor

In the East Midtown zone, the project corridor consists of the route proposed for the TSM Alternative, along Second and First Avenues. These avenues pass through largely residential neighborhoods dominated by low- and medium-rise housing. Ground-floor retail uses serving this community line both avenues. Major apartment complexes and institutional uses are concentrated east of Second Avenue south of 34th Street (including housing at Stuyvesant Town, Peter Cooper Village, Phipps Plaza West, and Kips Bay Plaza and institutional uses in the hospitals east of First Avenue). North of 34th Street, the Con Edison Waterside generating station and the United Nations both have a major presence along the project corridor. Near the UN, the project corridor meets the eastern portion of the midtown business district along 42nd Street. North of the UN and the business district, uses along the project corridor are again residential, with smaller apartment buildings mixed with newer high-rise structures.

The project corridor includes two major transportation uses: the Queens-Midtown Tunnel and the Queensboro Bridge. Entrance and exit ramps from both these river crossings intersect with Second Avenue.

ZONING AND PUBLIC POLICY

Consistent with the mix of uses in East Midtown, this zone is mapped with a variety of different commercial and residential zoning districts (see Figure 3-7 and Table 3-1, above). In general, the avenues and major cross streets are mapped with commercial zoning districts or overlays, while the midblocks are mapped with high-density residential districts. Large areas of the western portion of East Midtown are mapped entirely for high-bulk commercial use, however. These include the area between Fifth and Lexington Avenues from 23rd to 34th Street, almost all of the area from 36th to approximately 48th Street, and the area between Fifth and Third Avenues from 48th to 59th Street. Along the eastern edge of the study area bordering the East River are several small areas which are zoned for medium to heavy manufacturing uses. Farther north, the eastern portion of the zone is mapped with high-density residential districts.

Four special zoning districts are mapped in the East Midtown zone: the Special Union Square District, the Special United Nations Development District, the Special Midtown District, and the Special Transit Land Use District. The Union Square district (designated as “US” on Figure 3-7
and Table 3-1) was established to revitalize the area around Union Square by encouraging mixed-use development and urban design compatibility with the park. Farther north, the Special United Nations Development District (“U” on Figure 3-7 and Table 3-1) was established to guide the development of the Midtown area adjacent to the United Nations according to a unified design plan that allows increased floor area to promote provision of special public amenities.

The Special Midtown District (designated as “MiD” in Figure 3-7 and Table 3-1) is mapped over most of Midtown from the east side of Third Avenue to about Eighth Avenue and from about 39th Street to 57th Street (and, between Fifth and Lexington Avenues, as far north as 61st Street). This Special District was established to strengthen Manhattan’s business core by stabilizing development and providing incentives to growth in certain areas (such as along the Avenue of the Americas). The district mandates provision of certain public amenities in new developments, and contains specific bulk and design controls for development near Times Square, the Theater District, the Fifth Avenue shopping district, and Grand Central Terminal.

As described earlier in the discussion of the Lower East Side, the Special Transit Land Use District (“TA” on the zoning maps and in Table 3-1) was established in 1974 in anticipation of future development of a subway line beneath Second Avenue and extends from the Lower East Side into East Harlem. In East Midtown, this special district is mapped along Second Avenue at 14th, 23rd, 27th, 34th, and 38th Streets. Two larger areas of this district are mapped farther north along Second Avenue: between 42nd and 48th Streets and between 53rd and 61st Streets. Because this special district is particularly relevant for the new subway proposed as part of MESA’s Build Alternatives 1 and 2 on the Upper East Side, this special district is discussed in more detail below in the discussion of the Upper East Side’s zoning and public policy.

WEST MIDTOWN

LAND USE

Extending from roughly Canal Street to 59th Street west of the Lower East Side and East Midtown zones is the project’s secondary study area, West Midtown. This area contains a wide mix of uses, ranging from residential in the south to a core of high-bulk commercial offices to the north.

Although most of the secondary study area is north of 14th Street, it includes small portions of SoHo, a low- and mid-rise area of industrial lofts, joint living-work quarters for artists, studios, art galleries, restaurants, and retail space south of Houston Street; and Greenwich Village, which is predominantly low-rise and residential, but also includes most of the campus of New York University near Washington Square Park. North of 14th Street, West Midtown includes portions of Chelsea, a mixed residential and commercial neighborhood; the Ladies’ Mile area, an area of mid-rise turn-of-the-century department store buildings now occupied by large retailers; and the Flower District, occupied by industrial and commercial buildings as well as flower and plant wholesalers. North of the Flower District are Penn Station, the General Post Office, several hotels and commercial uses, and Macy’s, with industrial and office uses closer to Fifth Avenue. North of 34th Street to about 40th Street, much of the West Midtown area is the Garment District, occupied by mid-rise industrial and office buildings used predominantly for garment- and fashion-related businesses. Between 40th and 42nd Streets are the Port Authority Bus Terminal,
a major transportation hub at Eighth Avenue; and the New York Public Library and Bryant Park between Fifth and Sixth Avenues.

North of 42nd Street, the western edge of the secondary study area is Clinton, a predominantly residential neighborhood. East of Clinton, the secondary study area includes portions of the Theater District, focused on Broadway between 42nd and 49th Streets, numerous hotels, Carnegie Hall, and the remainder of the Midtown CBD not located in the primary study area. Much of the Midtown area north of 42nd Street and west of Fifth Avenue is occupied by tall commercial buildings, including those at Rockefeller Center and other tall buildings along the Avenue of the Americas. Although there are some residential buildings located within the CBD, commercial towers generally line both the avenues and the cross streets in this district. The western side of Fifth Avenue in this part of West Midtown, like the eastern side, is lined by expensive retail stores. The Fifth Avenue district also includes such eminent attractions as the Plaza Hotel and the Museum of Modern Art.

**ZONING AND PUBLIC POLICY**

In general, the central corridor in the West Midtown zone is zoned for light manufacturing south of 42nd Street, and predominantly for high-bulk commercial (office) use with limited residential use to the north. Portions of SoHo and Greenwich Village are zoned for residential use. Commercial overlays are mapped along the major streets and north south avenues throughout West Midtown.

In addition to the base zoning, West Midtown includes several special zoning districts. At the southern end of the district is a Special Limited Commercial District along West Eighth Street, designed to preserve the character of commercial areas within historic districts. Farther north, between 34th and 42nd Street is the Special Garment Center District, created to preserve the city’s garment industry on selected blocks in Midtown by limiting the conversion of manufacturing space to office use. North and west of the Garment Center area is a portion of the Special Clinton District, created to preserve and strengthen the residential and mixed-income character of this neighborhood. Much of the West Midtown area north of 31st and 42nd Streets is part of the Special Midtown District, established to guide all development within the Midtown CBD. This special district is described above in the discussion of East Midtown.

**UPPER EAST SIDE**

**LAND USE**

The Upper East Side zone, extending from 59th to 96th Street, is a largely residential area made up of several smaller neighborhoods: Upper East Side/Medical and Carnegie Hill/Yorkville (see Figure 3-8). Much of the zone’s character is defined by its proximity to Central Park, located just outside the MESA study area and forming the western boundary of this zone. Major two-way cross streets through the zone are 59th, 72nd, 79th, 86th, and 96th Streets. At the southern end of this zone is the Queensboro Bridge. The FDR Drive runs along the eastern edge of the zone.
Upper East Side/Medical

This southern half of the Upper East Side, from 59th Street to 79th Street, includes the northernmost portion of the office district of East Midtown near Fifth Avenue (to about 61st Street), with hotels and office buildings. North of that district, most of the Upper East Side/Medical neighborhood is residential, with small-scale townhouses in the midblocks west of Third Avenue, tenement buildings in the midblocks east of Third Avenue, and larger apartment buildings as well as rows of tenement buildings along the avenues. Ground-floor retail uses line the avenues and major cross streets. During the last 25 years, this area has seen a strong trend toward development of tall new apartment buildings along the avenues east of Lexington Avenue, and, where permitted by zoning, on midblock sites too. A concentration of residential towers has been constructed in the last decade near 72nd Street and York Avenue as well. Complementing the largely residential character of the Upper East Side/Medical neighborhood are numerous schools, houses of worship, and other community facilities, as well as two medium-size parks: St. Catherine’s Park at First Avenue between 68th and 69th Streets and John Jay Park, east of York Avenue between 76th and 78th Streets. (For more information on these uses, see Chapter 4, “Social Conditions.”)

In addition to residences, in the western portion of the neighborhood, fashionable retail uses are concentrated, particularly along 57th Street and Madison Avenue. Other uses include notable institutions, such as consulates and international organizations, on the blocks between Park and Fifth Avenues; the Henry Clay Frick Collection at Fifth Avenue and 71st Street; the Whitney Museum of Modern Art at Madison Avenue and 75th Street; Hunter College at Lexington Avenue and 68th Street; and Lenox Hill Hospital at Lexington Avenue and 77th Street.

The easternmost portion of the neighborhood includes a dense concentration of medical and institutional uses centered on York Avenue. These include Rockefeller University between 61st and 68th Streets, primarily east of York Avenue; New York Hospital-Cornell Medical Center between 68th and 71st Streets, also primarily east of York Avenue; and Memorial Sloan-Kettering Cancer Center, between 67th and 68th Streets west of York Avenue. Other buildings in this part of the neighborhood also contain uses affiliated with these institutions. During recent years, these institutions have undergone expansion programs adding substantial space to their complexes.

In addition to these institutions, the eastern portion of the neighborhood also includes small concentrations of light industrial uses south of 64th Street and east of Second Avenue, as well as east of First Avenue in the 60’s and 70’s. These include Con Edison generating plants, small auto-related uses, and several different television studios.

Carnegie Hill/Yorkville

North of 79th Street, the Upper East Side continues to be largely residential. Fifth, Madison, and Park Avenues and the midblock areas between them are lined with townhouses and luxury apartment buildings. This portion of Fifth Avenue, extending into East Harlem, is known as “Museum Mile,” because it is lined with such famous institutions as the Metropolitan Museum of Art (in Central Park and therefore outside the MESA study area), the Solomon R. Guggenheim Museum, the Cooper-Hewitt Museum, and the Jewish Museum.
East of Lexington Avenue, the neighborhood is occupied largely by tenement buildings on the side streets and a mix of tenements and high-rise apartment buildings along the avenues. Institutional uses supporting this residential neighborhood (e.g., schools and houses of worship) are interspersed among the other uses. One such notable use is the 92nd Street YM-YWHA at 92nd Street and Lexington Avenue. Major residential apartment complexes are concentrated between Second and Third Avenues between 90th and 94th Streets (the location of Ruppert and Yorkville Towers, Ruppert House, and Carnegie Park) and east of York Avenue north of 92nd Street (the location of John Haynes Holmes Towers and Stanley M. Isaacs Houses). Major recreational facilities are located north of 84th Street at the eastern edge of the neighborhood. These include Carl Schurz Park and the recreational facilities at Murphy Center and Asphalt Green. During the last 25 years, the portion of Carnegie Hill/Yorkville east of Lexington Avenue has experienced a strong trend toward development of tall new apartment buildings along the avenues and on midblock sites, too, when permitted by zoning. A concentration of tall residential buildings has been developed near York Avenue and 90th Street as well.

Project Corridor

In the Upper East Side zone, the project corridor follows two different routes: the TSM alternative would follow Second and First Avenues, while Build Alternatives 1 and 2 would follow Second Avenue. Land uses along the project corridor on the Upper East Side are dominated by high-density residential uses, including high-rise apartment buildings and rows of tenement buildings with ground-floor retail use consisting of neighborhood-oriented convenience shops and services. The limited exceptions to this pattern along Second Avenue are selected medical uses, houses of worship, two schools, and a small park at Ruppert Towers. Similarly, the limited exceptions to that pattern along First Avenue are a park, several houses of worship, medical uses, and a school. Figures G-1 through G-5 and G-7 through G-10 in Appendix G illustrate selected views along the project corridor on the Upper East side.

ZONING AND PUBLIC POLICY

As evidenced by existing land uses, most of the Upper East Side is zoned for high-density residential use (see Figure 3-9 and Table 3-1, above). In general, the midblocks on the Upper East Side are zoned for low- or mid-rise residential use and the wide street and avenue frontages are zoned to allow high-density residential uses as well as retail uses consistent with residential areas. Several small areas that permit manufacturing uses remain on the Upper East Side east of York Avenue at 59th Street, 72nd to 76th Streets, and 90th Street.

Three special zoning districts are mapped on the Upper East Side: the Special Madison Avenue Preservation District, the Special Park Improvement District, and the Special Transit Land Use District. These are described below.

Special Madison Avenue Preservation and Park Improvement Districts

The Special Madison Avenue Preservation District (designated as “MP” in Figure 3-9 and Table 3-1) was established to preserve and reinforce the character of Madison Avenue and the surrounding area from 61st to 96th Streets. Bulk and street wall height provisions limit the height of new development to the scale of existing buildings, require a continuous building facade along Madison Avenue, mandate continuous ground-floor development of selected stores, and require the provision of useable recreational space on rooftops. Similarly, the Special Park Improvement
District (‘PI’ in Figure 3-9 and Table 3-1) was created to preserve the character of Fifth and Park Avenues. This district, mapped along both avenues from 60th to 96th Street, limits the heights of new buildings and mandates streetwall continuity.

*Special Transit Land Use District*

As described earlier in the discussion of the Lower East Side, the Special Transit Land Use District was established in 1974 in anticipation of future development of a subway line beneath Second Avenue and extends from the Lower East Side into East Harlem. On the Upper East Side, this special district (designated as “TA” on the zoning maps and Table 3-1) is mapped along Second Avenue, extending 100 to 125 feet to the east and west of the avenue, in five specific locations where entrances to and exits from the subway were planned:

- From midway between 68th and 69th Streets to the south side of 70th Street.
- From the north side of 71st Street to the south side of 73rd Street.
- From midway between 81st and 82nd Street to the south side of 84th Street.
- From the north side of 85th Street to midway between 86th and 87th Streets.
- From the north side of 93rd Street to the south side of 97th Street.

The special district is designed to minimize conflicts between pedestrians on sidewalks and access to underground transit systems, by requiring developments within the district to provide access to underground transit or other subway amenities. In addition, the district encourages provision of adequate underground pedestrian circulation systems, adequate access of light and air to those underground facilities, and coordination of present and future land uses, including weather-protected public access to the underground transit system.

To implement these goals, the Special Transit Land Use District requires any new development or enlargement involving ground-level construction within the special district to provide an “easement volume” for subway-related use and public access to the subway mezzanine or station, if so required by New York City Transit (NYCT) and the City Planning Commission (CPC). Accordingly, the district requires that prior to filing any applications with the Department of Buildings for development or enlargement on a lot within the special district, the owner of the lot must file an application with NYCT and CPC requesting a certification as to whether or not a transit easement is required on the lot. When NYCT and CPC indicate that such an easement volume is required, the owner must submit a site plan for the easement for joint approval and final certification by NYCT and CPC. For zoning lots within the special district that are substantially vacant, NYCT may request that CPC certify that a portion of the lot is necessary for a transit easement.

Once established, the transit easement shall be used as an entrance/exit for public access to the subway and/or to provide better access of light and air to the subway station mezzanine, and for related uses. Until required by NYCT for subway purposes, however, the easement volume may be temporarily used by the owner of the lot in accordance with the zoning. A minimum notice of six months in writing shall be given by NYCT to the owner of the lot in order to vacate the tenants of such temporary uses. As of early 1998, three properties north of 63rd Street on the Upper East Side have been required to provide easements:

- 306 East 72nd Street, on the southeast corner of Second Avenue and 72nd Street.
- 240 East 86th Street (on the south side of the street west of Second Avenue).
The full block between 95th and 96th Streets on the west side of Second Avenue.

Once the transit easement is in subway-related use, the special district also includes special use regulations that promote the development of retail and related uses at ground level along the boundaries of the easement and in the subway mezzanine that are most appropriate for pedestrians using transit facilities.

EAST HARLEM

LAND USE

Like the Upper East Side to the south, the East Harlem zone, extending from 96th Street to the Harlem River east of Fifth Avenue, is a predominantly residential neighborhood (see Figure 3-10). However, the East Harlem zone is much less densely occupied than any of the other neighborhoods on the East Side of Manhattan. It can be roughly divided into two neighborhoods: Southern East Harlem and Northern East Harlem. Major two-way cross streets in this zone are 96th, 106th, 110th, 116th, and 125th Streets. The FDR Drive continues along the eastern boundary of the zone. Major transportation uses include the Triborough Bridge at 125th Street, the Willis Avenue Bridge at the northern end of First Avenue, and the Third Avenue and Madison Avenue Bridges.

Southern East Harlem

This neighborhood, roughly between 96th Street and 112th Street, is occupied by a mix of different residential, institutional, and industrial uses. A railroad viaduct along Park Avenue (which carries Metro-North Railroad) creates a strong barrier between the western and eastern portions of the neighborhood. West of Park Avenue, the western boundary of this neighborhood is defined by Central Park, and the institutional and residential pattern established south of 96th Street continues along the park. Institutions there include Mount Sinai Medical Center between 98th and 102nd Streets, and the New York Academy of Medicine, Museum of the City of New York, and El Museo del Barrio between 102nd and 105th Streets. East of these institutions are superblocks between Madison and Park Avenues occupied by the large housing complexes of George Washington Carver Houses and Lehman Village. These consist of towers set within landscaped grounds with associated schools on the premises as well.

Beneath the Park Avenue viaduct from 111th to 116th Street is La Marqueta, a retail market where vendors sell clothing, produce, and food. East of Park Avenue are a mix of different land use patterns. Many blocks are occupied by tenement buildings interspersed with vacant lots, community gardens on formerly vacant lots, and such institutional uses as churches, schools, and neighborhood associations and community organizations. Some scattered industrial uses are also present on numerous blocks. Along the avenues and major cross streets, ground-floor retail uses occupy many of the buildings, but vacant lots and buildings are present as well. Other blocks, however, have been merged to form superblocks, which are occupied by large publicly supported housing complexes consisting of residential towers as well as low-rise school buildings set in landscaped yards. These housing complexes include Lexington Houses, George Washington Houses, Metro-North Plaza and Metro-North Consolidation, East River Houses, Woodrow Wilson Houses, Ben Franklin Plaza, Dewitt Clinton Houses, and East River Landing. Almost all of the neighborhood between Second and Third Avenues and east of First Avenue is occupied by such superblocks.
In addition to these uses, other notable uses in Southern East Harlem are the Metropolitan Hospital Center, a large complex between 97th and 99th Streets east of Second Avenue, and the Islamic Cultural Center of New York at 96th Street and Third Avenue. Along the East River on the east side of the FDR Drive is the East River esplanade and the 107th Street Recreation Pier.

**Northern East Harlem**

North of 112th Street, similar land use patterns continue, although fewer blocks are occupied by superblocks of public housing. Continuing from the south, the railroad viaduct on Park Avenue creates a strong barrier between the area to its east and west. A wide band of superblocks cuts across the neighborhood between 112th and 115th Streets, including Senator Robert Alphonso Taft Houses, James Weldon Johnson Houses, and Thomas Jefferson Houses, as well as associated schools, parks, and recreation centers. As described earlier, beneath the Park Avenue viaduct from 111th to 116th Street is La Marqueta, a retail market for vendors selling clothing, produce, and food. North of the housing complexes, the area west of Park Avenue is characterized by large vacant areas between 116th and 120th Streets. Farther north is North General Hospital, at Madison Avenue and 121st Street; Marcus Garvey Park, a 20-acre park west of Madison Avenue between 120th and 124th Streets; and blocks of low-rise residential buildings with schools, churches, and vacant lots. In the northernmost portion of the neighborhood are three other large housing complexes (Lincoln Houses, Riverton, and Riverbend Houses) located north of 132nd Street.

East of Park Avenue, the area is known as El Barrio (Spanish for “the neighborhood”). Most blocks north of 115th Street are occupied by a mix of low-rise residential buildings, vacant lots, community gardens on formerly vacant lots, scattered industrial buildings, and institutional uses such as schools, churches, and neighborhood associations and community organizations. The major exception to this pattern is Wagner Houses, on the superblocks between 120th and 124th Streets east of Second Avenue. Supporting the neighborhood’s residential uses is Thomas Jefferson Park, a 15½-acre park east of First Avenue between 111th and 114th Streets.

Similar to the neighborhood to the south, major cross streets and avenues in Northern East Harlem have ground-floor retail uses. East 116th Street is the main shopping street of this portion of East Harlem. East of Lexington Avenue, 116th Street is also known as Luis Muñoz Marín Boulevard, named for the first elected governor of Puerto Rico. In addition to East 116th Street, 125th Street (also known as Dr. Martin Luther King, Jr. Boulevard) also forms a major shopping street in East Harlem as well as providing vehicular access to the Triborough Bridge. Although retail and commercial use are more substantial along 125th Street west of Fifth Avenue, numerous ground-floor retail uses are present on this street in East Harlem, too. These are supported in part by the transportation hub created by the Metro-North railroad station at Park Avenue and 125th Street and the IRT express and local subway stop at Lexington Avenue. Although this area has experienced recent growth and activity, there are still vacant or unused portions of land along this main corridor.

**Project Corridor**

In East Harlem, the project corridor is the proposed subway route. Uses along Second Avenue are largely residential. In the southern part of the zone, the project corridor passes a park and Metropolitan Hospital Center. Farther north, the corridor passes between large-scale housing complexes and associated parks and schools, and low-rise residential and retail buildings as well
as vacant buildings and vacant lots. As the project corridor bends westward from Second Avenue north of 116th Street, it travels beneath a similar mix of residential and institutional uses as well as vacant lots. This pattern continues along Lexington Avenue as well. At 125th Street, ground-floor retail uses predominate, and the project corridor passes the new Pathmark supermarket. Figures G-5, G-6, G-11 and G-12 in Appendix G provide selected views along the project corridor in East Harlem.

ZONING AND PUBLIC POLICY

Land use patterns in East Harlem are dictated not only by zoning, but also by urban renewal areas and enterprise and empowerment zones. All of these public policies are described below.

Zoning

Almost all of East Harlem is zoned for medium-density residential uses (see Figure 3-11 and Table 3-1, above). Frontage along the wide cross streets and avenues is mapped with commercial overlays that permit local neighborhood retail uses. Medium-density commercial districts are mapped along both sides of 125th Street and along Third Avenue north of 115th Street. A service/warehouse commercial district is mapped on the east side of Park Avenue between 106th and 110th Streets, and small areas are zoned for manufacturing along the east side of Park Avenue between 120th and 124th Streets and north of 125th Street, east of Third Avenue north of 126th Street, and along the East River between 116th and 119th Streets.

East Harlem contains two special zoning districts, both described earlier in the discussion of the Upper East Side—the Special Park Improvement District and the Special Transit Land Use District. The Special Park Improvement District (designated “PI” in Figure 3-11 and Table 3-1), created to preserve the character and architectural quality of Fifth and Park Avenues, extends from 96th to 100th Street along Fifth Avenue in East Harlem. This district regulations limit the heights of new buildings and mandates streetwall continuity. The Special Transit Land Use District is discussed below.

Special Transit Land Use District

As described earlier, the Special Transit Land Use District (“TA” on the zoning maps and Table 3-1) was established in 1974 in anticipation of future development of a subway line beneath Second Avenue and extends from the Lower East Side into East Harlem. In East Harlem, this special district is mapped along Second Avenue, extending 100 to 125 feet to the east and west of the avenue, in three specific locations:

1. From the north side of 93rd Street (on the Upper East Side) to the south side of 97th Street.
2. From the north side of 105th Street to the south side of 110th Street.
3. From the north side of 120th Street to the south side of 126th Street.

As described above in the discussion of the Upper East Side, the special district is designed to minimize conflicts between pedestrians on sidewalks and access to underground transit systems, by requiring developments within the district to provide access to underground transit or other subway amenities. As of early 1998, the following properties in East Harlem have been required to provide easements:

1. 1865 Second Avenue, between 96th and 97th Streets on the west side of Second Avenue.
2357 Second Avenue, on the east side of Second Avenue between 115th and 116th Streets.

Urban Renewal Areas

More than in any other zone in the study area, the development patterns in East Harlem have been largely shaped through urban renewal efforts. Urban renewal plans were used to create the large areas of public housing projects located throughout the zone. Today, two urban renewal areas remain active: the Metro-North I and Milbank Frawley Circle Urban Renewal Areas.

The Metro-North I Urban Renewal Area is located between 99th and 106th Streets, the FDR Drive, and Second and Third Avenues. The purpose of the urban renewal plan is to redevelop the area into a mixed-use community to include commercial, residential, industrial as well as public and semi-public uses. The Metro-North and Riverview Houses along First Avenue between East 100th and 102nd Streets were built as part of this urban renewal area, but portions of the area still remain undeveloped.

The Milbank Frawley Circle Urban Renewal Area, as amended, is the area between 107th and 110th Streets on the south, 125th Street on the north, Park Avenue on the east, and Lenox and St. Nicholas Avenues on the west. Only the easternmost portion of this urban renewal area is in the East Harlem zone. This area was designated to replace the blighted area surrounding Marcus Garvey Park with a mixed-use neighborhood of residential, commercial, public and semi-public uses. Many sites scattered throughout the renewal area have been excluded or conditionally excluded from the plan.

Upper Manhattan Empowerment Zone and Enterprise Community Initiative

The Upper Manhattan Empowerment Zone, designated in 1994 with a 10-year life span, is part of a federal initiative designed to revitalize distressed communities by using public funds and tax incentives as catalysts for private investments. The purpose of this empowerment zone designation is to stimulate the revitalization of Central, East, and West Harlem; Inwood; and Washington Heights. Using a total public investment of $300 million, the comprehensive goal of the Empowerment Zone requires investments designed to expand sustainable economic activity; enhance the ability of local residents, businesses, and institutions to benefit from Empowerment Zone opportunities; and improve the quality of life within the community.

Economic Development Zone

First designated by New York State in 1987, East Harlem’s Economic Development Zone now has a lifespan to the year 2004. The Economic Development Zone is the area between 116th and 132nd Streets and First and Madison Avenues. It also includes two discrete parcels between 116th and 119th Streets along the East River and another parcel between 109th and 110th Streets along First and Second Avenues. The purpose of the Economic Development Zone is to offer tax incentives and utility discounts to certain communities where levels of poverty and unemployment are above average, and where a local community is supportive of carrying out a plan to promote the expansion of existing businesses, the development of new businesses, and the development of human resources.
D. FUTURE CONDITIONS COMMON TO ALL ALTERNATIVES

According to recent projections made by the New York Metropolitan Transportation Council (NYMTC), both population and office-related employment are expected to continue to grow in Manhattan over the next 20 years. While Manhattan’s growth in population is not projected to be as strong as the trends of the 1980’s, employment growth is predicted to be stronger over the next 20 years than during that decade. These changes will support a demand for office space and housing throughout the study area. Using NYMTC’s projections, the analysis of potential changes in land use and public policy in the study area included several steps, as summarized below.

METHODOLOGY FOR LAND USE PROJECTIONS

As part of the MESA study, a detailed projection of future land use conditions in Manhattan was undertaken as a means of projecting the future population, employment, and labor force in 2020. This information was used as an input to the study’s transportation model, to determine transit ridership in 2020. The study’s modeling effort is discussed in detail in Chapter 9, “Transportation.” The projections made for MESA were based on projections made for NYMTC.

As part of the development of its Regional Transportation Plan, NYMTC has developed a forecast of the expected growth in population, employment, and labor force between 1995 and 2020 (the Regional Transportation Plan is discussed in more detail in Chapter 1, “Project Purpose and Need”). This forecast was prepared for each of the 31 counties in the region. The forecast indicates that population in New York City will grow by nearly 3 percent, adding some 65,000 new residents. Employment is projected to increase by 18 percent, resulting in some 415,000 additional jobs in Manhattan. (For more information on expected changes in population and employment in the region and Manhattan, see Chapters 4, “Social Conditions,” and 5, “Economic Conditions and Relocation.”) These changes in population and employment in Manhattan would be directly correlated to changes in land use, as new apartments and office buildings are constructed to accommodate the growth.

NYMTC’s projections were prepared for the entire borough of Manhattan, and did not specify the particular neighborhoods within Manhattan where the growth might occur. Therefore, for the MESA study, NYMTC’s countywide projections were used as the basis for more detailed projections for the different neighborhoods in the MESA study area. Because changes in population and employment correspond to changes in land use, an initial step in the forecasting effort was to project land use changes expected in the MESA study area by 2020. This projection of expected development and changes in land use was made in coordination with DCP and the New York City Department of Housing Preservation and Development (HPD).

The work of the MESA study was to allocate the projected county-wide increases in population and employment from 1995 to 2020 to subcounty neighborhoods and zones in the study area. The allocation method depended on the use in question. For office uses, employment increases were first absorbed in vacant space in Class A and B office buildings in East and West Midtown and in Lower Manhattan. Then, the increases were distributed based on proposed commercial development projects. These proposals were not seen as “certainties,” but, rather, as indications that certain locations would be attractive to commercial development over the long term. The remaining employment was allocated to neighborhoods, based on their proximity to known
commercial centers and general land availability. This employment could be translated into additional, but not site-specific, office development in a given neighborhood or zone.

The approach to the allocation of population and residential uses was similar. However, as detailed in the project’s March 17, 1997 technical memorandum, the amount of population increase projected by NYMTC for Manhattan and the study area did not fill all the housing units proposed. Since many of these were under the aegis of HUD and already approved, with funding in place, and others were actually in construction, these areas received the bulk of the population increase and related land use development changes. It is possible that changes in family size and other demographic characteristics may affect population distribution over the next 25 years; however, this is not possible to predict with any assurance or to allocate with any confidence to small areas, such as the study area. The location of planned housing and trends in residential areas served as the best guide for distribution of population and related residential land use changes for the future.

Other uses, such as retail, hotel, entertainment, institutions, and manufacturing were estimated, primarily for purposes of allocating employment, based on known proposals and current trends. In addition, local retail associated with new residential use was added, as appropriate.

PROJECTED FUTURE CONDITIONS

Projected development in the MESA study area and secondary study area from the 1995 base year is shown in Table 3-2. As shown in the table, residential development is expected in all of the study area zones, with the greatest number of units in Lower Manhattan. Consistent with current trends and development patterns, office development will be focused in Lower Manhattan and East and West Midtown. Lower Manhattan, the Lower East Side, and East Harlem are expected to see a substantial increase in retail uses. Since 1995, some of these trends have begun to materialize.

Public land use policy in the study area is set largely by existing zoning. No significant zoning changes are currently under way, but over the next two decades changes to zoning are likely to occur. The land use projections described below assume some changes in zoning to allow conversion or development of residential and office uses.

LOWER MANHATTAN

As described earlier, recent public policy initiatives have spurred development of residential and office space in Lower Manhattan. As a result of these initiatives, Lower Manhattan is expected to continue its recent trend of strong growth, adding some 8,200 residential units, more than 6.8 million square feet of office space, and 253,500 square feet of retail space. Approximately 47 percent of the residential growth predicted for the MESA study area is expected in Lower Manhattan. Much of the new residential space (approximately 6,700 apartments) will be added in Battery Park City, where development of that growing community is expected to continue. Other residential space (some 2,700 units) will be added in the Financial District, both in the form of new apartment buildings and conversion of former office buildings as part of the recent initiatives. As a result, Lower Manhattan will continue to become more strongly residential, strengthening its emerging character as a 24-hour community. New office space will be distributed throughout Lower Manhattan, with more than 2 million square feet of development in each of
the neighborhoods (Financial Center, Battery Park City, and Tribeca/Civic Center). This will re-
inforce the area’s existing character as one of Manhattan’s Central Business Districts.

LOWER EAST SIDE

New residential and retail development are predicted for the Lower East Side. Most of this de-
v elopment (some 2,240 units) is expected in the East Village portion of the zone, with more than
half (1,230 units) focused along the south side of 14th Street between Union Square and Third
Avenue. Accompanying this development will be more than 400,000 square feet of retail de-
velopment, also along the south side of 14th Street. Small infill residential buildings are also ex-
pected throughout the East Village between Avenues A and D. Limited residential development
is predicted in the Lower East Side/Chinatown neighborhood of this zone.

The 2½-block area proposed for MESA’s potential light rail transit yard and maintenance facility
is part of the Seward Park Urban Renewal Area, as described above under “Existing Condi-
tions.” Several proposals for this site have been made during recent years, including a plan for
commercial development and an alternative proposal for low- and moderate-income housing.
Some development may occur on this site by 2020.

EAST MIDTOWN

Existing development trends in East Midtown are expected to continue over the next 20 years.
Residential development will be focused in the Midtown South/Medical Center neighborhood,
which is already strongly residential. Limited residential growth is predicted in other portions
of the East Midtown zone. This zone will also see substantial office growth in the East Midtown
and Grand Central/UN neighborhoods, already part of Manhattan’s Central Business District.

WEST MIDTOWN

Substantial growth is predicted in the secondary study area by 2020, with almost 4,500 new resi-
dences, more than 1 million square feet of retail space, and nearly 15 million square feet of of-

cice space. This includes numerous residential, retail, and office uses expected along Sixth Ave-
nue south of 34th Street as a result of a recent rezoning of this stretch of the avenue, and de-
velopment of substantial office, residential, and theater-related uses near Times Square and
along Eighth Avenue north of Times Square.
### Table 3-2

Projected Development in MESA Study Area and Secondary Study Area, 1995-2020

<table>
<thead>
<tr>
<th>Zone/Neighborhood</th>
<th>Residential (Units)</th>
<th>Office</th>
<th>Retail</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Manhattan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Center</td>
<td>2,719</td>
<td>2,004,000</td>
<td>134,000</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Battery Park City</td>
<td>5,000</td>
<td>2,440,000</td>
<td>119,500</td>
<td>Hotel, movies</td>
</tr>
<tr>
<td>Tribeca/Civic Center</td>
<td>483</td>
<td>2,402,000</td>
<td>0</td>
<td>Hotel</td>
</tr>
<tr>
<td>Total</td>
<td>8,202</td>
<td>6,846,000</td>
<td>253,500</td>
<td></td>
</tr>
<tr>
<td><strong>Lower East Side</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower East Side/Chinatown</td>
<td>402</td>
<td>0</td>
<td>0</td>
<td>Hotel</td>
</tr>
<tr>
<td>East Village</td>
<td>2,240</td>
<td>0</td>
<td>408,655</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>2,642</td>
<td>0</td>
<td>408,655</td>
<td></td>
</tr>
<tr>
<td><strong>East Midtown</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lower Fifth Avenue</td>
<td>209</td>
<td>0</td>
<td>20,316</td>
<td>NA</td>
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<tr>
<td>Midtown South/Medical</td>
<td>1,425</td>
<td>0</td>
<td>0</td>
<td>Institutional</td>
</tr>
<tr>
<td>Murray Hill</td>
<td>246</td>
<td>0</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>Grand Central/UN</td>
<td>0</td>
<td>1,822,250</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>East Midtown</td>
<td>76</td>
<td>823,000</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>1,956</td>
<td>2,645,250</td>
<td>20,316</td>
<td></td>
</tr>
<tr>
<td><strong>Upper East Side</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper East Side/Medical</td>
<td>1,646</td>
<td>15,000</td>
<td>95,000</td>
<td>NA</td>
</tr>
<tr>
<td>Carnegie Hill/Yorkville</td>
<td>740</td>
<td>0</td>
<td>42,200</td>
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<tr>
<td>Total</td>
<td>2,386</td>
<td>15,000</td>
<td>137,200</td>
<td></td>
</tr>
<tr>
<td><strong>East Harlem</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern East Harlem</td>
<td>883</td>
<td>0</td>
<td>110,000</td>
<td>Studio, institutional</td>
</tr>
<tr>
<td>Northern East Harlem</td>
<td>1,166</td>
<td>864,000</td>
<td>360,000</td>
<td>Health care, manufacturing, movies</td>
</tr>
<tr>
<td>Total</td>
<td>2,049</td>
<td>864,000</td>
<td>470,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total: Study Area</strong></td>
<td>17,235</td>
<td>10,370,250</td>
<td>1,289,671</td>
<td>Health care, hotel, manufacturing, movies, institutional, studio</td>
</tr>
<tr>
<td><strong>Total: West Midtown</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Secondary Study Area)</td>
<td>4,499</td>
<td>14,983,000</td>
<td>1,062,000</td>
<td>Hotel, theater</td>
</tr>
</tbody>
</table>

**Note:** All numbers are in square feet unless otherwise noted.
Chapter 3: Land Use, Zoning, and Public Policy

UPPER EAST SIDE

The strong trend of continued residential development on the Upper East Side is expected to continue over the next 20 years, with a total of nearly 2,400 new apartments to be constructed. Most of the new development will likely be in the Upper East Side/Medical Center.

EAST HARLEM

In recent years, new development has begun in East Harlem after decades of inactivity, spurred in part by the area’s inclusion in the Upper Manhattan Empowerment Zone and Economic Development Zone (discussed above under “Existing Conditions”). This trend is expected to continue at the same pace as predicted for the Upper East Side, with new apartment buildings (a total of 2,049 new units) added throughout the zone. Substantial retail development is also predicted between the 1995 base year and 2020, including the new Pathmark supermarket that recently opened at Lexington Avenue and 125th Street, the large retail complex proposed at 116th Street and the FDR Drive on the former Washburn Wire site, and other retail uses supportive of the growing residential population.

E. PROBABLE IMPACTS OF THE PROJECT ALTERNATIVES

The following discussion considers the potential impacts related to land use, zoning, and public policy that may result from operation of the project alternatives. Impacts during construction are documented separately in Chapter 15, “Construction and Construction Impacts.”

Each project alternative would be compatible with land use in the study area because Manhattan, as a densely developed urban area, has exhibited land use patterns that are generally transit-supportive. Most of the study area is zoned for residential, commercial, or office development 4 to 10 times greater than the land area. The portion of Manhattan south of 60th Street contains the city’s Central Business Districts, and the area to the north is predominantly residential. Throughout both areas, the city is pedestrian-oriented, encouraging transit use. Moreover, New York City’s zoning regulations are intended to support development rights (“bonuses”) for developer improvements of transit. Along Second Avenue where the new subway is proposed as part of Build Alternatives 1 and 2, a special zoning district is mapped to allow for creation of easements for transit purposes.

In general, improvements to mass transit can affect land use in several ways: (1) they can make new areas more attractive to development by increasing accessibility, thus influencing future land use trends; (2) they can displace important land uses in an area, also thereby affecting trends in the surrounding area; (3) they can be incompatible with adjacent development, also potentially affecting future trends; or (4) without influencing trends, they can have localized effects on land use, such as at the proposed station locations. These possible effects are examined below. Each alternative’s effects in terms of land use and public policy are addressed below.

NO BUILD ALTERNATIVE

Without new construction or introduction of significant new service in the study area, this alternative would not result in changes to land use patterns or trends in Lower Manhattan, the Lower East Side, East Midtown, the Upper East Side, or East Harlem.
TSM ALTERNATIVE

The TSM Alternative would not require easements on or under private property. It would not require displacement of any uses or acquisition of any private property.

By providing new and improved bus service on north-south avenues where bus service already exists, this alternative would improve accessibility between different zones in the study area for residents, workers, and visitors in the study area. It would not, however, result in any potential for changes in land use or land use trends in the study area. The TSM Alternative would not be likely to attract new development to the study area. It would not represent a significant change in transportation modes available, and therefore would remain compatible with surrounding uses. No localized effects on land use would be expected, either.

BUILD ALTERNATIVE 1

LAND USE

Overall Effects

In the primary and secondary study areas, the new subway would greatly improve the convenience of traveling between East Harlem, the Upper East Side, Midtown and West Midtown, and Lower Manhattan. The presence of the subway beneath Second Avenue would be consistent with future land use conditions in the study area and would not be expected to influence overall development trends on the Upper East Side, where residential development as well as that of other uses already occurs at the same or a greater pace than in the rest of the study area. Much of the Upper East Side has already been developed to the full potential allowed under current zoning, and development continues in all areas of the Upper East Side where space allows.

The presence of the new subway could reinforce the growing development interest in East Harlem, encouraging rebuilding on vacant or underutilized properties in that zone. This would be consistent with the public initiatives recently begun in East Harlem to encourage redevelopment efforts there.

By increasing access to Lower Manhattan and relieving congestion on public transportation to that area, Build Alternative 1 would help to support the initiatives now under way to revitalize Lower Manhattan.

The new subway would have no effect on land use or land use trends in the West Midtown zone (the secondary study area), where it would add express service to an existing subway line rather than provide new service where none exists today.

Localized Effects

The new stations to be constructed as part of the East Side subway extension may be constructed using easements through private property, to allow construction of entrances through existing buildings, where possible. As described earlier under “Existing Conditions,” transit easement areas are mapped along Second Avenue for this purpose. These easements give NYCT the right to use space within buildings constructed after the easement areas were mapped for subway entrances. Some of these easement areas may currently be in other use.
Easements would also be required beneath private property in some locations, but this would not affect the use of the property.

In addition, as detailed in Chapter 15 (“Construction and Construction Impacts”), construction of the subway requires use of property along the alignment for an access shaft and possibly for a staging area. As described in Chapter 15, three sites are under consideration for this use—two on the Upper East Side and one in East Harlem. (Photographs of these sites and their surroundings are provided in Appendix G, Figures G-7 through G-12.) These sites are as follows:

1. On the east side of Second Avenue between 63rd and 62nd Streets (on the Upper East Side). This site is owned by MTA and is currently temporarily occupied by an outdoor garden supply center.

2. On the east side of Second Avenue between 65th and 66th Streets (on the Upper East Side). This privately owned site is now occupied by a one-story bank branch, a movie theater, and a two-story building used by Memorial Sloan-Kettering Cancer Center for offices.

3. On the southwest corner of Second Avenue and 97th Street (in East Harlem). This privately owned site is now occupied by a one-story building supply and lumber store.

The benefits and disadvantages of each of these sites for the construction shaft site and staging area are described in Chapter 15. If the MTA-owned property is selected as the shaft site, the tenant on the site would have to move to another location. If either of the private properties is selected, the commercial uses on those sites would be displaced. As described in Chapter 5, (“Economic Conditions”), those property owners would be compensated for their property. After construction is complete, the properties could be redeveloped with active uses.

In terms of localized effects on land use, the new subway would be consistent with surrounding uses. Local effects could occur at the new station entrances, where additional ground-floor retail uses might locate, or where the character of the retail uses might change to those more appropriate to provide commuter services. (Photographs of new station locations are provided in Appendix G, Figures G-1 through G-6.) Each of the proposed station locations (as well as the potential station site at 116th Street) would be consistent with the other uses on Second Avenue and nearby. Overall, only limited changes in localized land uses would be expected with Build Alternative 1.

**ZONING AND PUBLIC POLICY**

Build Alternative 1 would be consistent with zoning and other public policies. As described above under “Existing Conditions,” the city has designated a Special Transit Land Use District in specific areas of Second Avenue to allow for development of new subway station entrances and exits. Although this district was originally mapped for the Second Avenue subway planned in the 1970’s, the current study has placed its stations in the same locations whenever possible, in part to take advantage of the special zoning district. The new subway under Build Alternative 1 would include new stations with entrances within the Special Transit Land Use District in the following locations:
For the Lenox Hill station (69th-72nd Street): from midway between 68th and 69th Streets to the south side of 70th Street, and from the north side of 71st Street to the south side of 73rd Street.

For the Yorkville station (83rd-86th Street): from midway between 81st and 82nd Streets to the south side of 84th Street, and from the north side of 85th Street to midway between 86th and 87th Streets.

For the 96th Street station (95th-97th Street): from the north side of 93rd Street to the south side of 97th Street.

For the Franklin station (106th-109th Street): from the north side of 105th Street to the south side of 110th Street.

Since these districts were mapped in the 1970's, any new development or enlargement within the districts has been required to file an application with MTA New York City Transit and the New York City Planning Commission to determine whether or not a transit easement is required on the lot. If such an easement volume is required, the owner must submit a site plan for the easement for joint approval and final certification by those agencies. Once established, the easement can be used as an entrance to the new subway. As of early 1998, the following properties north of 63rd Street have been required to provide easements:

- 306 East 72nd Street, on the southeast corner of Second Avenue and 72nd Street.
- 240 East 86th Street (on the south side of the street west of Second Avenue).
- The full block between 95th and 96th Streets on the west side of Second Avenue.
- 1865 Second Avenue, between 96th and 97th Streets on the west side of Second Avenue.
- 2357 Second Avenue, on the east side of Second Avenue between 115th and 116th Streets.

At these locations and at any other properties where New York City Transit arranges to obtain easements, subway entrances can be placed within existing buildings. At all other locations, entrances would be on the sidewalk.

**BUILD ALTERNATIVE 2**

Because it would include the same East Side subway extension, this alternative would have the same effects as Build Alternative 1 related to that subway, described above. Additional effects related to the light rail component of this alternative are discussed below.

As described above for Build Alternative 1, the subway portion of Build Alternative 2 would be consistent with land use, zoning, and public policy.

The LRT component of Build Alternative 2 would bring much greater accessibility to the Lower East Side, shortening travel times between the far eastern portions of this zone and other areas of the city with intermodal transfers at Union Square and City Hall. This could make the Lower East Side more attractive for redevelopment, and therefore would support emerging development trends there. This would be consistent with the City’s policy to redevelop abandoned and underutilized properties on the Lower East Side.

The new LRT service would be consistent with the surrounding land uses and could make the sites along its route more attractive for local retail development (see Chapter 5, “Economic Conditions”). The new below-grade storage and maintenance yard would be constructed in
coordination with future development of the site above, so that no conflict between the below- and above-grade uses would occur. (Photographs of areas around the tunnel portals and yard site are provided in Appendix G, Figures G-13 through G-20.)

This alternative would help to support the City’s policies in Lower Manhattan, by improving accessibility to the Financial District for workers as well as tourists. It would be consistent with the surrounding uses, and would not be likely to result in any new development along the route, which is already nearly fully developed with tall office buildings.

F. MITIGATION

As described above, the new East Side subway extension could require acquisition of private property for use as a construction shaft site and staging area. If a privately owned site is selected, mitigation would be in the form of financial compensation to affected property owners.

Operation of any of the project alternatives would not result in significant adverse impacts in land use, zoning, or public policy and, therefore, no mitigation is required. Potential effects during construction and measures to mitigate any construction-related impacts are discussed in Chapter 15.