

A. INTRODUCTION

This chapter examines the potential effects of the project alternatives on economic conditions in the Long Island Transportation Corridor (LITC), which consists of Nassau and Suffolk Counties, Brooklyn, Queens, and Manhattan. It considers the key economic factors that are typically served and supported by the region's transportation system, focusing on employment and related real estate trends that illustrate the health of the economy.

This analysis considers the same study areas as the analysis of land use, zoning, and public policy (in Chapter 3), and of social conditions (in Chapter 4), since economic conditions are closely related to land use and social conditions. As in Chapters 3 and 4, the discussions of existing conditions, changes expected to occur in the future, and probable impacts of the alternatives begins with the Long Island Transportation Corridor, followed by the Manhattan study area, the Long Island City/Sunnyside study area, Long Island (for this EIS, defined to be Nassau and Suffolk Counties), and study areas surrounding new and existing affected yards. The chapter considers the alternatives' effects once operational. Effects on economic conditions during construction are evaluated separately in Chapter 17, "Construction and Construction Impacts."

B. REGIONAL OVERVIEW**POST-WAR TRENDS**

In the course of the 20th century, the economy of the Long Island Transportation Corridor has been transformed from one largely based on manufacturing and agriculture to one fueled by a wide range of services, as well as finance, insurance, and real estate (referred to as FIRE), and the clear distinction that once existed between the economies of New York City and Long Island has gradually disappeared. Prior to World War II, manufacturing was a major employer in Manhattan and New York City as a whole, providing approximately 1 million jobs in 1950.* The city's port and railroads made it one of the world's greatest centers of commerce. In contrast, on Long Island the key industries were farming, fishing, and shipbuilding until World War II. As the region moved out of the post-war era, employment in New York City stabilized, while Long Island began to experience significant growth. Though generally retaining the same level of employment through an increase in office type employment in the FIRE and service sectors, Manhattan lost a significant portion of its manufacturing jobs to suburban communities. In turn, the once primarily farm land of Long Island began to develop into car based suburbs with an increasing share of manufacturing employment. Beginning in the 1980's as national economic trends saw the continued decline of manufacturing and the rise of service sector employment, manufacturing also began to be replaced with service sector jobs on Long Island.

* Source: Moss, Mitchell L., "Technological Trends Affecting the Manufacturing Sector of New York City," *Economic Policy Review*, February 1997.

NEW YORK CITY

Total private sector employment in New York City remained very close to 3 million between 1956 and 1995. Since World War II, however, the composition of these jobs has changed, as manufacturing sector employment has steadily declined. The trends in Manhattan followed the same pattern, with overall private sector employment remaining close to 2 million between 1960 and 1990. As in the city as a whole, employment in manufacturing during that period declined notably, from about 525,000 manufacturing jobs in 1960 to 186,600 in 1990. One of the principal events contributing to the post-war decline in manufacturing in the city was the development of the interstate highway system, which freed manufacturers from their dependence on city rail systems and piers. The shift in manufacturing operations out of New York City was also encouraged by the post-war migration of residents from the city to the suburbs, with employers following in pursuit of the labor pool. With the total number of jobs remaining steady but the number of jobs in the manufacturing sector falling, the composition of employment in New York City has changed significantly since World War II. The lost manufacturing jobs have been replaced by the growing service and FIRE sectors.

Corresponding to the changes in types of employment in Manhattan are shifts in the location of jobs. Today, the white collar workforce of FIRE and service industries is concentrated in Midtown Manhattan and the Financial District, with the remaining manufacturing pushed to the edges of the Central Business District (CBD) in neighborhoods like the Lower East Side, Tribeca, and the Garment Center. The change in the location and type of jobs has spurred development of office towers and the conversion of loft space to offices. At the same time, the shift in workplace location and type from manufacturing to office employment has changed the demands for the region's commuter rail system. Manufacturing and warehouse-related jobs were typically distant from the centralized commuter rail system, in areas that were not densely developed. In contrast, the density and centralization of white collar workers in Manhattan results in intensive use of the regional rail system.

NASSAU AND SUFFOLK COUNTIES

Beginning in the 1950's, as increased automobile ownership facilitated suburban residential development, the economic character of Long Island shifted dramatically from agricultural to manufacturing. New types of industrial activity appeared, most significantly the manufacture of aircraft and related products (including substantial activity related to the defense industry), while farming, long the mainstay of the Long Island economy, virtually disappeared in Nassau County. The suburbs provided sufficient land to adapt assembly line production techniques to manufacturing, as well as an escape from high taxes, inadequate rail infrastructure, union work rules, extensive regulation, increasingly unskilled labor, and crime that seemed to characterize the city.*

Suburban residential development, particularly in Nassau County, was closely followed by development of substantial retail shopping centers and highway commercial strips, transferring a portion of the city's retail sales to Long Island. Through the 1980's, retail and wholesale employment in Long Island increased, as Manhattan's employment in these industries decreased. Retail and wholesale trades are currently the second largest employers in Long Island.

* Source: Moss, Mitchell L., "Technological Trends Affecting the Manufacturing Sector of New York City," *Economic Policy Review*, February 1997.

As a result of this suburban development and expansion of the defense industry, employment on Long Island nearly doubled between 1975 and 1990, from 673,500 to 1,100,800. However, the economic downturn of the early 1990's, particularly the downsizing in the defense industry, took a toll on Long Island's economy. Private sector employment began to decrease in the early 1990's, and did not regain its previous high level until 1997, when the effects of growth in the service sector during the 1990's overcame the losses in defense and manufacturing employment. Today, unemployment in both Nassau and Suffolk Counties is low, at 3.3 and 4.2 percent (July 1999), respectively (compared to 8 percent in New York City and 4.5 percent nationwide). Growth in the service industries has generated an office boom on Long Island with low vacancy rates and construction of office space throughout the late 1990's. Conversions and expansions of facilities by major companies headquartered on Long Island illustrate this trend.

Tourism also plays an important role in the Long Island economy, with an estimated annual impact of \$7 billion. And although industrial development after World War II drastically changed the economic base of Suffolk County, agriculture remains a prominent industry, so that today Suffolk County is New York State's leading agricultural producer, based on the value of its farm products.

NEW YORK'S ROLE AS AN INTERNATIONAL BUSINESS CENTER

As the heart of a geographically large and economically powerful region, Manhattan is the center for finance and investment, the arts and higher education, medical research and health care, fashion design and wholesaling, media and communications, and tourism. Today, Manhattan is home to nearly 50 headquarters of Fortune 500 corporations, including world-renowned FIRE firms, such as Citicorp, Metropolitan Life Insurance, and Morgan Stanley Dean Witter; communications giants, such as AT&T, Bell Atlantic, and Time Warner; entertainment companies, such as Viacom and CBS; consumer products companies, such as Bristol-Myers Squibb, Colgate-Palmolive, and Estee Lauder; publishers, such as McGraw-Hill and The New York Times; and retailers, such as Woolworth (which operates Foot Locker and other retail stores) and Barnes & Noble. In 1997, these and other Fortune 500 corporations in New York City generated revenues of approximately \$685 billion. This agglomeration of corporate headquarters, and consequently key decision makers, is an important asset in New York's struggle to maintain a leadership role in the global economy. In addition, the concentration of corporate headquarters generates increasing demand for a wide range of service industries, as indicated by the rapid expansion of business services in Manhattan.

The surge in the stock market after the recession of the early 1990's strengthened the city's role as a global business center and as a preferred location for FIRE industries. Even with the onslaught of Internet trading, financial markets continue to expand in the city, including the recent construction of the Mercantile Exchange in Battery Park City, as well as the planned expansions of the Nasdaq and the New York Stock Exchange. Other major FIRE employers, including American Express and Merrill Lynch, have made large commitments to remain in the city. Service industries that support FIRE industries have expanded nearby, intensifying employment in the Midtown and downtown areas. For example, as shown in Figure 5-1, FIRE industries continue to be the major employers in the financial district, as well as slightly north in Tribeca, in the East Midtown area between 40th and 49th Streets, and in the West Midtown area between 48th and 59th Streets. Legal and business services that support FIRE industries, such as computer facilities and data processing, are major employers in locations adjacent to these areas. In addition, the vitality of the city's economy has spurred considerable office construction and

renovation activity, particularly in the revitalized Times Square area, the Flatiron District, and the emerging Silicon Alley, as many firms find the city's Central Business District (generally the area south of 60th Street in Manhattan) more attractive.

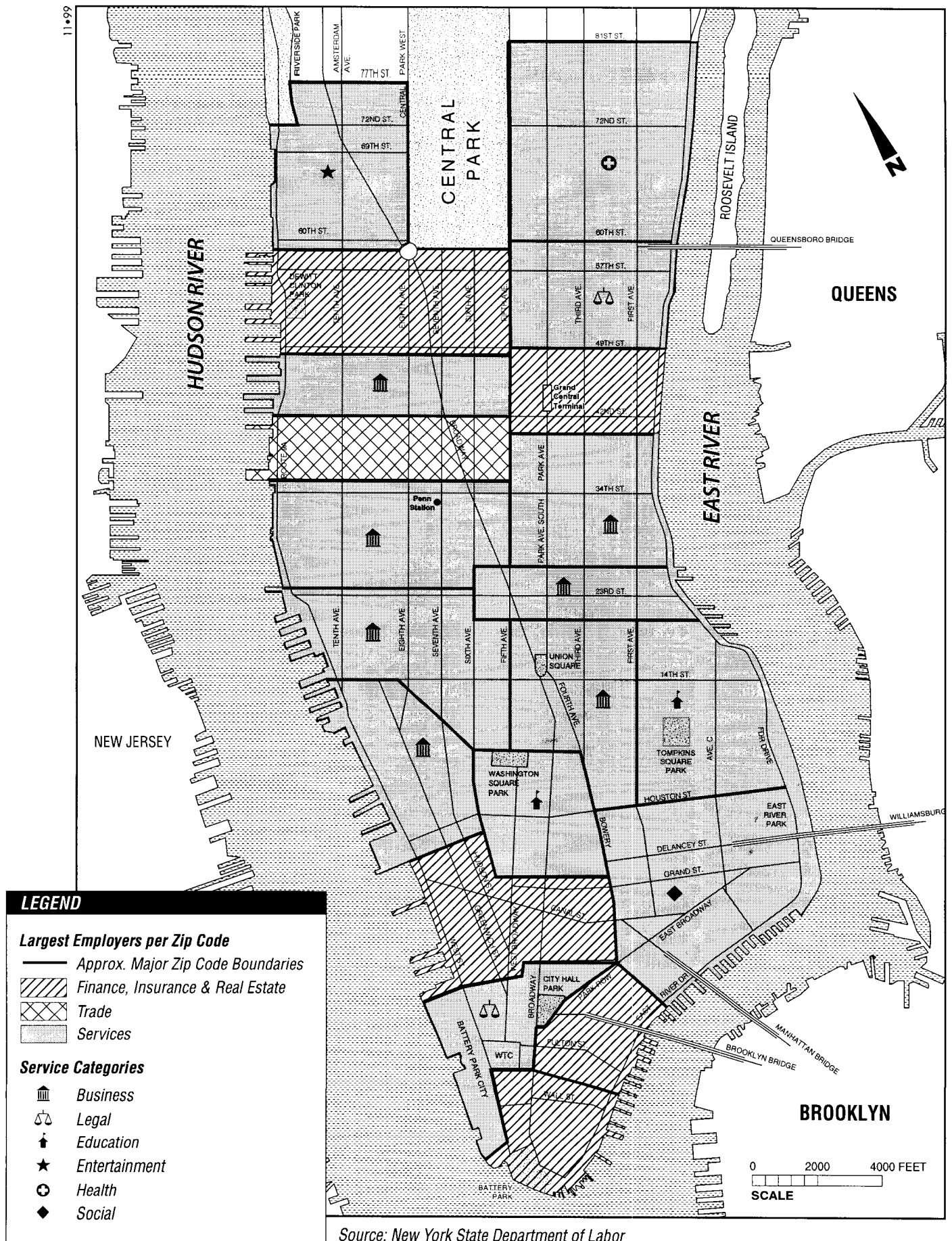
For some firms, the benefits of close proximity to other, related firms outweighs potential cost savings of relocating from the CBD to the suburbs. Firms like Prodigy Computer Service, which has moved its corporate headquarters from White Plains to New York City, place a premium on face-to-face contact and the rapid exchange of new and innovative ideas. In addition, the need for highly educated and skilled labor has become increasingly important to high tech firms. Consequently, a number of firms have relocated their offices to New York City.

On the other hand, the advent of new technology and new methods of communication, such as e-mail and teleconferencing, has made some kinds of office activities less dependent on face-to-face contact (although telecommuters remain a very small percentage of the area's workforce). As this occurs, the relative attractiveness of a CBD location decreases somewhat. In addition, executives and business owners who usually make the decisions about office locations sometimes prefer to bring their offices or industrial plants nearer their homes. Nonetheless, the importance of Manhattan as one of the premier centers of global commerce is not likely to diminish, particularly if contributing factors, including transportation infrastructure, continue to offer the quality of service, mobility, and accessibility that these industries demand.

RELATIONSHIP OF TRANSPORTATION AND ECONOMIC CONDITIONS

Economic conditions are closely related to transportation service. Transportation serves the region's workers in their daily journeys to work. As the New York metropolitan area has grown over the last century, its journey-to-work patterns have changed, so that commuting patterns today are different from those that existed when the public transportation and regional rail systems were established. In Manhattan, the change from a primarily blue collar, manufacturing workforce to a primarily white collar service industry workforce has led to a change in commuters' transportation patterns. The current workforce uses public transportation, particularly commuter rail, more heavily in its commute to centralized, densely developed, business centers. These conditions both support and depend on a functional rail-based transit system. Economic growth is projected for the New York metropolitan region and functional transit service is needed to realize this growth and retain economic activity in the region.

New York City's status as one of the world's principal business centers is in large part supported and made possible by its mass transportation network. Current transportation and economic literature clearly indicates that the quality of transportation infrastructure is one of the most pertinent criteria for companies when seeking a location. Regional mobility is a critical factor in companies' decisions about where to locate, primarily because of the accessibility and convenience it gives employees in their daily journeys to work. Accessibility plays an important role in defining the labor pool from which a company may draw and thus affects the company's ability of the company to hire workers. Moreover, individuals in upper management responsible for decisions about a company's location are more likely to select locations with commutes convenient to them. Thus, the region's transportation system is a critical factor in its business retention and growth, and consequently in its overall economic health. Although some municipalities in neighboring counties and states entice corporations to leave New York with financial incentives, mass transportation and the ability to move large numbers of workers to and from their jobs efficiently, comfortably, and economically remains one of the city's key advantages. The Long Island Rail Road (LIRR) plays an essential role in the city's ability to retain and attract



businesses by linking the skilled and highly educated labor force living on Long Island with jobs in Manhattan.

C. EXISTING CONDITIONS

LONG ISLAND TRANSPORTATION CORRIDOR

The Long Island Transportation Corridor constitutes a large part of the New York metropolitan area, including Manhattan, Queens, Brooklyn, and Long Island (Nassau and Suffolk Counties). It contains the region's CBD, generally defined as Manhattan south of 60th Street, including Midtown Manhattan and Wall Street; Queens, the city's most populous borough, which contains commercial downtown centers and major industrial areas; and Nassau and Suffolk Counties, which originally developed as major suburbs of Manhattan.

EMPLOYMENT TRENDS

Employment in the LITC has remained stable, at slightly less than 4 million employees, over the past decade. A temporary decline in employment in the mid-1990's coincided with and can be largely attributed to the national and regional economic recession. The LITC has followed national trends by experiencing an increase in the share of service and FIRE sector employment in the economy.

Most of the employment in the LITC is concentrated in Manhattan, the region's economic center. As shown in Table 5-1, employment in Manhattan (1.9 million jobs) constituted nearly half of the LITC's total employment of 4.1 million jobs in 1995. Brooklyn had the second-highest share, with 674,000 jobs, or 16 percent of the LITC's total employment. Queens, Nassau, and Suffolk Counties each had roughly 12 to 13 percent of the total employment.

Table 5-1
LITC Employment: 1995

	Employment	Percent of Total LITC Employment
Nassau	550,772	13.23%
Suffolk	513,562	12.34
Nassau & Suffolk	1,064,334	25.57%
Manhattan	1,873,319	45.00
Queens	550,727	13.23
Brooklyn	674,363	16.20
Total LITC	4,162,743	100.00%
Source: Urbanomics (9/20/95), as reported in LIRR East Side Access Ridership Forecasting Results Report (7/13/99).		

As shown in Table 5-2, of all types of private-sector jobs in the LITC, service jobs are the most common (at 38.7 percent). While total private sector employment has remained relatively unchanged—at approximately 3.7 million jobs—over the past 8 years, service industries, already the major employer in the region, grew by approximately 145,000 jobs or about 11 percent during the decade. While employment in all the major service industries increased during the decade, the largest increase occurred in health services, adding nearly 67,000 jobs, or about a 23 percent increase. Today health services employ slightly less than 10 percent of all private sector

Table 5-2

Recent Selected Private Sector Employment Trends: LITC

Type of Employment	1990		1995		1998	
	Employment	Percent of Total	Employment	Percent of Total	Employment	Percent of Total
Manufacturing	464,248	12.34%	367,804	10.39%	355,941	9.47%
Transportation and Utilities	256,329	6.81	232,486	6.57	242,447	6.45
Wholesale and Retail Trade	781,324	20.77	759,432	21.45	794,187	21.13
Finance, Insurance, Real Estate	576,490	15.33	531,584	15.02	540,697	14.39
Services	1,309,012	34.80	1,338,853	37.82	1,454,204	38.70
Business	302,602	8.05	276,626	7.81	336,266	8.95
Health	296,789	7.89	347,158	9.81	364,739	9.71
Educational	99,574	2.65	100,249	2.83	115,419	3.07
Engineering and Management	128,419	3.41	118,015	3.33	127,884	3.40
Total Private Sector	3,761,275	100.00%	3,540,347	100.00%	3,757,696	100.00%
Note: Total includes employment types not shown here.						
Source: New York State Department of Labor, Division of Research and Statistics, annual average employees covered by unemployment insurance.						

employees in the region. In the FIRE sector, employment is currently about 6 percent lower than it was in 1990, although all of the decline occurred between 1990 and 1995. Since 1995, the FIRE sector has experienced an increase of approximately 9,000 jobs or about 2 percent in 3 years, and the industry now accounts for slightly less than 15 percent of total private sector employment. As described above, employment in manufacturing throughout the LITC continues to decline. In this decade, more than 108,000 manufacturing jobs were lost, representing about a 23 percent decline. Manufacturing now provides less than one-tenth of total private sector employment in the region.

REAL ESTATE TRENDS

To support all its jobs, the LITC includes a significant supply of real estate. This supply is part of the attraction of the LITC, and particularly Manhattan, as a place to locate a business. Trends in the real estate market related to labor markets are a key indicator of the health of the region's economy—i.e., low vacancy rates demonstrate a robust economy, while high vacancy rates indicate shrinking jobs. Real estate trends also illustrate the type of jobs and their locations in the LITC.

Positive trends in the LITC real estate market since the mid 1990's are a reflection of a region experiencing a robust economy since the mid 1990's. Office and industrial market vacancy rates are low in all areas of the LITC and have triggered new construction, particularly in the Manhattan and Long Island markets. There is a strong preponderance of office space in the Manhattan CBD. In areas outside Manhattan's CBD in Queens, Brooklyn, and Nassau and Suffolk Counties, manufacturing space constitutes a larger portion of total real estate. Due to the increase in the importance of the FIRE and service sectors in the region, smaller nodes of office development or secondary business districts have developed outside of Manhattan since the mid 1980's. These include downtown Brooklyn, Long Island City in Queens, Mineola, and Hempstead in Nassau County, and the Huntington Route 110 Corridor in Suffolk County.

MANHATTAN STUDY AREA

Manhattan south of 60th Street is one of the largest and the most densely developed employment centers in the world and the regional CBD of the LITC. It is home to the majority of jobs in the LITC.

EMPLOYMENT TRENDS

The recession of the late 1980's and early 1990's that affected the region and the nation as a whole had a very tangible effect on private sector employment in Manhattan. As shown in Table 5-3, private sector employers in Manhattan eliminated approximately 172,000 jobs between 1990 and 1995, with total private sector employment falling from about 1.9 million to 1.7 million, a loss of more than 9 percent in 5 years. Employment in wholesale and retail trade and FIRE sectors experienced slightly higher losses of 10.6 and 10.9 percent, respectively. In the FIRE industries the loss amounted to nearly 50,000 jobs. Service industries fared slightly better during this period, with a loss of approximately 32,000 jobs or about 4 percent decline. At the same time, however, employment in health services in Manhattan soared, with the addition of nearly 17,000 jobs and a significant 16.7 percent increase. Manufacturing employment continued its decline in Manhattan, losing nearly 34,000 jobs between 1990 and 1995, resulting in a substantial 18 percent drop in the 5-year period.

Table 5-3
Recent Selected Private Sector Employment Trends: Manhattan

Type of Employment	1990		1995		1998	
	Employment	Percent of Total	Employment	Percent of Total	Employment	Percent of Total
Manufacturing	186,575	10.04%	152,870	9.07%	145,360	6.42%
Transportation and Utilities	109,078	5.87	94,111	5.58	93,973	4.15
Wholesale and Retail Trade	335,254	18.05	299,800	17.79	320,657	14.17
Finance, Insurance, Real Estate	449,837	24.21	400,656	23.77	411,124	18.17
Services	736,010	39.62	703,959	41.76	774,765	34.23
Business	206,944	11.14	178,269	10.58	226,376	10.00
Health	100,482	5.41	117,089	6.95	125,314	5.54
Educational	57,524	3.10	57,202	3.39	67,401	2.98
Engineering and Management	92,096	4.96	80,047	4.75	86,158	3.81
Total Private Sector	1,857,702	100.00%	1,685,655	100.00%	2,263,161	100.00%
Note: Total includes employment types not shown here						
Source: New York State Department of Labor, Division of Research and Statistics, annual average employees covered by unemployment insurance.						

Beginning in the mid-1990's, economic conditions improved for most industries, and overall, the increase in private sector employment in the 3 years between 1995 and 1998 nearly eliminated the losses of the recession. Approximately 131,500 jobs were added by private sector employers in Manhattan, or about an 8 percent gain. Wholesale and retail trade recaptured about 21,000 of the 35,000 jobs it lost earlier in the decade. FIRE industries were less successful, recapturing only about 10,500 of the nearly 50,000 jobs lost earlier in the decade. Service industries, however, experienced huge gains in employment, adding nearly 71,000 jobs between 1995 and 1998. Among these were an additional 8,200 health service jobs. Despite the increases in jobs overall,

however, manufacturing jobs continued to decline, losing about 7,500 jobs between 1995 and 1998, or another 5 percent drop.

As shown in Table 5-4, business activity is concentrated in three areas—Lower Manhattan, East Midtown, and Midtown. In fact, the two areas with the highest employment, Lower Manhattan and East Midtown, alone contained about 778,000 employees and accounted for about 47 percent of the total employment in the study area in 1995. When the Midtown subarea is added, these three areas contained about 988,000 employees and accounted for about 59 percent of the 1995 total study area employment. Employment is considerably less concentrated in other portions of the Manhattan study area. The different subareas that make up the Manhattan study area are discussed below and shown in Figure 5-1.

Table 5-4
Manhattan Study Area Employment: 1995

Area	Employment	Percent of Study Area Employment
Lower Manhattan	397,774	23.93%
Village/Lower East Side	159,399	9.59
Chelsea	25,592	1.54
Lower Fifth	84,849	5.10
Midtown South	137,442	8.27
Garment Center	86,333	5.19
Clinton	38,271	2.30
Midtown	209,453	12.60
East Midtown	380,350	22.88
Lincoln Square	31,884	1.92
Upper East Side	110,936	6.67
Manhattan Study Area	1,662,283	100.00%
Other Manhattan	211,036	—
Total Manhattan	1,873,319	—
Source: Urbanomics (9/20/95), as reported in LIRR East Side Access Ridership Forecasting Results Report (7/13/99).		

Lower Manhattan

With nearly 400,000 employees representing nearly 24 percent of study area employment, Lower Manhattan is the subarea with the highest employment. FIRE sector employment, particularly securities and related business services, dominates in the Lower Manhattan area (see Figure 5-1). FIRE sectors have substantially recovered from the loss of jobs in early 1990's, and combined with the influx of Internet and high technology jobs, demand for office space, both new and renovated, is high.

Village

The Village area, which includes the Lower East Side, is a center for retail employment. Service industries and design-related firms have begun to replace a dwindling number of manufacturing operations, particularly garment manufacturing, which are located in loft buildings in the Lower East Side portion of the subarea.

Chelsea

Chelsea has the lowest level of employment in the study area. With little over 25,000 employees this subarea accounts for less than 2 percent of the study area employees.

Lower Fifth Avenue

Service industries, particularly business services, are the principal employer in the Lower Fifth subarea. The Lower Fifth subarea is also a retail center with retail concentrations along the Avenue of the Americas and Seventh Avenue.

Midtown South

Midtown South has strong service sector employment, as a result of demand for smaller blocks of office space close to Midtown.

Garment Center

The Garment Center area, which includes the south side of 42nd Street, has grown as a major business, tourism, and retail center. Ongoing redevelopment of 42nd Street and the Times Square area with major new office buildings and conversion of manufacturing and wholesaling space in the traditional Garment Center south of 42nd Street, has combined with convenience to key transportation facilities, including the Port Authority Bus Terminal, Grand Central Terminal, Penn Station, and the Hudson River ferries, to increase the attraction of this area in recent years.

Clinton

The Clinton subarea is primarily a residential district. No major office or industrial development is located in this subarea.

Midtown

Midtown is the third largest subarea employer as well as a major employment center in the Manhattan CBD. Revitalizing the area throughout the 1990's, the 42nd Street Development Project has provided opportunities for the recent healthy office, entertainment, retail, and hotel development. With a high market demand for office space, Midtown is an area that has experienced sizable growth, and was home to some 13 percent of Manhattan employment in 1995.

East Midtown

With some 23 percent of the jobs in the Manhattan study area, East Midtown has the second highest concentration of jobs of the subareas. East Midtown is home to many corporate headquarters, particularly in the banking and finance industry.

Lincoln Square

The Lincoln Square subarea is a predominantly a residential district with a few large communications, institutional, and cultural employers. Both the Capital Cities/ABC and CBS studios and related offices are major employers, as are Lincoln Center for the Performing Arts and nearby institutions of higher education, such as Fordham University and John Jay College. Overall, this subarea has the lowest number of employees within the Manhattan study area, about 32,000 in 1995.

Upper East Side

The Upper East Side is one of the principal residential concentrations in the Manhattan study area. Hospitals and local retail and commercial establishments are the subarea's major employers.

REAL ESTATE TRENDS

As shown in Table 5-5, there are nearly 400 million square feet of office building space in Manhattan today, making it the world's largest commercial real estate market. This magnitude of space not only supports Manhattan's employment, it is also a key factor in the attractiveness of the LITC, and particularly Manhattan, as a place to locate a business. By mid-year 1999, the overall vacancy rate in the Manhattan study area was a very low 8.0 percent of total inventory, according to Cushman & Wakefield's *1999 Mid-Year Report*. The average annual rental rates for Class A space in the table illustrate the relative strength of the market and attractiveness of each area for office development. As shown in the table, Midtown Manhattan (which in the table includes the East Midtown and Midtown subareas) is the area most attractive to prospective tenants, and can therefore support higher rental rates.

Table 5-5
1999 Manhattan Office Market Statistics

Market	Number of Buildings	Square Feet Inventory	Overall Mid-Year Vacancy Rate	Average Class A Rental Rate (annual rate per square foot)
Midtown	782	222,468,391	7.5%	\$48.11
Midtown South	385	60,747,594	7.1	\$34.48
Lower Manhattan	229	107,691,746	9.6	\$39.02
Total	1,396	390,907,731	8.0%	NA
Note: As defined here, Midtown is the area generally south of 70th Street to 30th Street on the West Side and 32nd Street on the East Side, Midtown South is the area generally south of Midtown to Canal Street, and Lower Manhattan is generally the area south of Canal Street. Source: Cushman & Wakefield Research Services, Market Report, New York New York, Mid-Year 1999.				

Since the 1960's there has been a significant expansion in the amount of office space located in Lower Manhattan and Midtown, triggered by the development of the World Trade Center in Lower Manhattan and the Avenue of the Americas corridor in Midtown. Subsequent large-scale office development included replacement of older office buildings in Lower Manhattan with modern office complexes like Chase Manhattan Plaza and other skyscrapers. A new generation of office buildings also came to the emerging Midtown South area with the construction of the Penn Plaza complex on the site of the former Penn Station. In Midtown, Park and Third Avenues experienced substantial growth in the late 1960's and early 1970's, led by Citicorp Center, the D + D Building, and numerous publishing houses in the same vicinity. The economic recovery of the 1980's generated new large-scale office developments, such as the World Financial Center in Battery Park City and Worldwide Plaza in West Midtown. Continuing development of the Midtown area includes recent additions to the office inventory along 42nd Street as part of the revitalization of Times Square, as well as the current construction of 383 Madison Avenue near Grand Central Terminal.

The real estate market continues to be very dynamic throughout the Manhattan study area, with a combination of new firms entering the market and other firms relocating or renegotiating leases. In Lower Manhattan, with approximately 107 million square feet of office space, the FIRE sector dominates, as evidenced by a recent report that estimated that nearly half of the 10 million square feet of office space leased in Lower Manhattan in 1998 was leased by FIRE industry firms. In addition, the new “Silicon Alley” area on Broadway in Lower Manhattan has combined buildings prewired for high-speed Internet access and corporate tax incentives to attract many new high technology firms. The government sector, also a significant employer in Lower Manhattan, absorbed about 2.6 million square feet of space or about one-fourth of all leasing activity in Lower Manhattan in 1998. These trends have had a dramatic effect on Lower Manhattan vacancy rates: while vacancy rates had been more than 20 percent for most of the decade, they have recently declined to 9.6 percent of total inventory in the subarea.*

In the Midtown South area, where the office space inventory totaled over 60 million square feet, more than 5 million square feet of space was leased in 1998. Of these new leases approximately 2 million square feet was absorbed by advertising, publishing, and other communication companies. By mid-year 1999, the real estate market was extremely tight, with the vacancy rate down to 7.1 percent of the total inventory in the subarea. In the Midtown, East Midtown, and Garment Center subareas nearly 21 million square feet of space was leased in 1998, with about 5.6 million or 27 percent absorbed by FIRE industries. Other big players in the Midtown real estate market in 1998 were publishing, legal, and garment center firms. By mid-1999, the vacancy rate had dropped to 7.5 percent of the total inventory.

LONG ISLAND CITY/SUNNYSIDE STUDY AREA

As described in Chapter 3, “Land Use, Zoning, and Public Policy,” the Long Island City/Sunnyside study area extends about ½ mile from the site of the proposed Sunnyside station, and includes Yard A/Arch Street Yard, Sunnyside Yard, and parts of the Long Island City and Sunnyside neighborhoods. The study area is home to a diverse employment base, including manufacturing, office, and entertainment companies. Real estate market conditions in Queens as a whole are generally very active, with new tenants reducing the available supply of industrial space and increasing rents.

EMPLOYMENT TRENDS

As shown in Table 5-6, manufacturing employment in the Long Island City/Sunnyside study area declined between 1990 and 1998, following the overall trend in the LITC. In this 8-year period, manufacturing jobs in the study area decreased by 13.5 percent, to about 17,200. However, despite the losses, manufacturing continues to provide approximately one-third of all private sector jobs in the study area; the combination of manufacturing and wholesale and retail trade provides more than 56 percent of the Long Island City/Sunnyside study area’s total private sector employment. Service industries in the study area added nearly 1,600 jobs between 1990 and 1998, and currently provide about 17 percent of total private sector employment. Business services, such as computer facilities and data processing, are particularly important job generators in the study area, providing nearly 40 percent of all service industry jobs. Along with the increase in business service employment, the study area has developed a business and professional core in the vicinity of Court House Square, including the Citibank building. FIRE, business, and

* Source: Cushman & Wakefield Research Services, Market Report, New York, New York Mid-Year 1999.

Table 5-6

**Recent Selected Private Sector Employment Trends:
Long Island City/Sunnyside**

Type of Employment	1990		1995		1998	
	Employment	Percent of Total	Employment	Percent of Total	Employment	Percent of Total
Manufacturing	19,899	39.45%	16,436	37.48%	17,208	34.36%
Transportation and Utilities	2,308	4.58	2,480	5.66	3,017	6.02
Wholesale and Retail Trade	11,943	23.68	10,651	24.29	10,970	21.90
Finance, Insurance, Real Estate	615	1.22	659	1.50	594	1.19
Services	6,769	13.42	6,659	15.19	8,355	16.68
Business	1,647	3.27	2,366	5.40	3,266	6.52
Health	1,148	2.28	1,425	3.25	1,559	3.11
Educational	NA	0.00	75	0.17	120	0.24
Engineering and Management	313	0.62	577	1.32	738	1.47
Total Private Sector	50,442	100.00%	43,848	100.00%	50,087	100.00%
Notes: N/A = Numbers too small to be reportable. Total includes employment types not shown here. The numbers presented in this table are for an area that is larger than the Long Island City/Sunnyside study area. The area covered here includes all of zip code 11101, which extends from the East River to 39th Street between Broadway and Newtown Creek. Source: New York State Department of Labor, Division of Research and Statistics, annual average employees covered by unemployment insurance.						

management services combine to employ nearly 10 percent of all private sector employment in the study area.

REAL ESTATE TRENDS

Queens County overall had a relatively low vacancy rate for industrial space at the end of the second quarter of 1999, at 8.7 percent. Real Estate Weekly reported that demand for industrial space within Long Island City was higher than in other parts of the borough, so the vacancy rate in Long Island City is likely to be lower than the borough wide rate. The study area has been successful in retaining many traditional industrial and manufacturing employers, such as Eagle Electric Manufacturing and Graybar Electric Inc. The area is also home to newer warehousing and manufacturing uses, including those that have relocated from the Manhattan market in recent years. For example, Rex Envelope recently moved from Chelsea in Manhattan to a more industrial location in the southern portion of study area, because rents were more attractive and transportation more convenient for its employees.

The Long Island City economy has undergone notable diversification during the past several decades, particularly as entertainment and design-related industries have moved to the study area. The trend toward increasing office space in Long Island City is typified by the Citicorp building and several industrial buildings recently converted to office space in the vicinity of Court House Square. The prime example of entertainment industry development in the study area is the Silvercup Studios, which converted a famous local bakery to studio space in 1983, and has plans to expand in the southern portion of the study area by converting a manufacturing building to studio use. In addition, P.S. 1, a former school, was converted to a contemporary art

museum and several small galleries and art fabrication workshops are also located in the southwestern section of the study area.

LONG ISLAND

Long Island is primarily suburban in character and supports an economy typical of other suburban areas in the New York metropolitan area with a mix of residential, retail, manufacturing and office type development. Commercial development has expanded on Long Island in the 1990's, with many service related operations and, most visibly, several headquarters of bio-tech and information technology firms requiring an educated workforce but not requiring a Manhattan location.

EMPLOYMENT TRENDS

Conditions in manufacturing industries in Long Island resemble the general declining trend observed in other parts of the LITC. The number of manufacturing jobs dropped sharply to 113,275 from 149,851, or from 13.6 percent to slightly over 10 percent of total private employment in Nassau and Suffolk Counties between 1990 and 1998 (see Table 5-7). At the same time, a major increase occurred in service industry employment, adding more than 54,000 jobs in 8 years. During the 1990's, service industries have increased their share of total private sector employment to 31.5 percent from 27.1 percent. Within the service sector, health services have made the most significant gains in employment, adding nearly 21,000 jobs in 8 years. As a result, health services now employ more than 114,000 workers in Long Island, representing nearly one-third of all service jobs, and providing more jobs than any other employment category, except wholesale and retail trade. While the fastest rate of job growth occurred in health services, business services were not far behind, adding about 10,000 jobs for a 15 percent increase in employment between 1990 and 1998. In all other areas—including wholesale and retail trade, FIRE, and transportation and utilities—employment has regained losses experienced during the regional recession in the early part of the decade and continued to rise. These trends have pushed the unemployment rate to a historic low of 2.7 percent in November 1998. The unemployment rate in Long Island continues to be one of the lowest in the State of New York.

REAL ESTATE TRENDS

While small in comparison to Manhattan's nearly 400 million square feet of office space, Long Island is one of the region's principal real estate submarkets, with a total of 26 million square feet of office space. A strong local economy, supported by substantial increases in service industries, has generated positive trends in the Long Island real estate market. The office market, as well as the industrial market, is experiencing shortages of large blocks of space due to high occupancy levels and lack of new construction, particularly in Class A office space.

The high demand for office space and record low vacancy rate is leading some developers to construct speculative office buildings for the first time since the late 1980's, while others are renovating and converting older buildings to office use. Much of the service sector job growth on Long Island is occurring in biotechnology, high-tech manufacturing, and software development. For example, Computer Associates International headquartered in Islandia is expanding by 360,000 square feet, and Symbol Technologies is adding 125,000 square feet to its facility in Holtsville. As shown in Table 5-8, the vacancy rate for Class A office space in Long Island has declined dramatically since 1990, from 18.3 percent to 9.5 percent at the end of 1998, the lowest level reached in Long Island in decades.

Table 5-7

**Recent Selected Private Sector Employment Trends:
Nassau and Suffolk Counties**

Type of Employment	1990		1995		1998	
	Employment	Percent of Total	Employment	Percent of Total	Employment	Percent of Total
Manufacturing	149,851	13.60%	113,291	10.60%	113,275	10.10%
Transportation and Utilities	49,950	4.50	48,939	4.60	52,120	4.70
Wholesale and Retail Trade	283,398	25.70	277,771	26.00	284,460	25.50
Finance, Insurance, Real Estate	80,260	7.30	78,564	7.40	78,581	7.00
Services	297,885	27.10	325,584	30.50	352,024	31.50
Business	61,748	5.60	63,10	5.90	71,589	6.40
Health	93,451	8.50	110,097	10.30	114,293	10.20
Educational	19,808	1.80	20,369	1.90	22,548	2.00
Engineering and Management	29,194	2.70	29,093	2.70	32,300	2.90
Total Private Employment	1,100,756	100.00%	1,067,520	100.00%	1,117,202	100.00%
Note: Total includes employment types not shown here.						
Source: New York State Department of Labor, Division of Research and Statistics, annual average employees covered by unemployment insurance.						

Table 5-8

Long Island Office Market Trends

	1990	1995	1998	Percent Change 1990-1998
Inventory (Square Feet)	26,470,393	26,039,938	26,099,799	-1.4%
New Construction (Square Feet)	1,338,895	0	60,000	-95.5
Overall Vacancy Rate	18.7%	15.9%	9.5%	-49.2
Class A Vacancy Rate	20.4	16.4	6.7	-67.2
Class B Vacancy Rate	15.5%	15.4%	12.0%	-22.6%
Source: Cushman & Wakefield Research Services, MarketBeat Series, Long Island New York, Year-End 1998.				

Long Island office development is not evenly distributed across the Island. Office space in Nassau County tends to be older and more plentiful than in Suffolk County. Since Nassau County's office space market is more mature, there is less space for new office development to take place. Recent office space development in Suffolk County has taken advantage of the large blocks of space that are still available in this considerably less developed county.

As shown in Table 5-9, nearly two-thirds of Long Island's office space is located in Nassau County and vacancy rates are very low. By the end of 1998, the county had an inventory of 17.5 million square feet of office space with an incredibly low overall vacancy rate of 7.6 percent. All submarkets within the county had vacancy rates much lower than 10 percent in the fourth quarter of 1998. Suffolk County accounts for about 33 percent of the office space inventory on

Table 5-9

**Long Island Year-End 1998 Office Market
and Submarket Statistics**

Market	Number of Buildings	Square Feet Inventory	Overall Vacancy Rate Fourth Quarter 1998	Overall Vacancy Rate Fourth Quarter 1997	Direct Weighted Average Rental Rate (annual rate per square foot)
Nassau County	148	17,465,078	7.6%	10.4%	\$26.11
Western Nassau County	45	4,469,501	6.6	15.0	\$26.47
Central Nassau County	59	7,995,294	8.3	8.9	\$7.08
Eastern Nassau County	44	4,991,283	7.2	8.7	\$24.20
Suffolk County	105	8,643,721	13.3%	11.0%	\$24.05
Western Suffolk County	44	5,609,882	15.2	9.7	\$24.86
Central Suffolk County	61	3,033,839	9.9	13.4	\$21.58
Total Long Island	253	26,099,799	9.5%	10.6%	\$25.19
Source: Cushman & Wakefield Research Services, MarketBeat Series, Long Island New York, Year-End 1998.					

Long Island, with 8.6 million square feet of office space. The majority of inventory, i.e., 5.6 million square feet of space, is located in the western Suffolk submarket. Although the vacancy rate in this area increased from 9.7 percent to 15.2 percent between year-end 1997 and year-end 1998, much of the vacant space was created by the addition of 369,000 square feet of Class B office space in Melville by Fleet Bank. The overall vacancy rate of 13.3 percent for Suffolk County still reflects a strong office market based on a strong economy.

Manufacturing, warehousing and the industrial real estate market continue to be important factors in the Long Island economy. The strong Long Island industrial market contains more than 200 million square feet of space and currently has low vacancy rates. At year-end 1997, the estimated availability rate for the industrial market stood at 12 percent. In Nassau County, availability is estimated to be 15 percent, while in Suffolk County the market is markedly tighter with the vacancy rate estimated at 10 percent. A strong market has reduced available industrial space to approximately 17 million square feet and spurred new construction.

Like the office market, the currently strong industrial market and the lack of available blocks of space have prompted new construction by developers. A 106,000-square-foot facility in Bohemia is the first major speculative industrial building constructed on Long Island in a decade. The demand for industrial space on Long Island is expected to continue to be strong, and, like the Bohemia project, will likely be used for warehouse/distribution rather than for manufacturing.

REPLACEMENT YARD STUDY AREAS

BLISSVILLE YARD

The Blissville study area is occupied by industrial uses involved in the warehousing and transportation of goods, including a Getty Oil storage facility located adjacent to the rail line.

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MASPETH YARD

The Maspeth study area is located in a highly industrial section of Queens. Many of the businesses located in the study area, such as United Parcel Service, rely heavily on truck transport of products.

FRESH POND YARD

Industrial and warehouse uses are located adjacent to the rail line in the Fresh Pond study area. Retail businesses in the study area are located on major streets away from and are generally unassociated with the rail yard.

HIGHBRIDGE YARD

The Highbridge Yard study area contains predominantly residential uses, although they are effectively separated from the Highbridge Yard by the Major Deegan Expressway and a substantial change in elevation. Commercial activity is concentrated in local convenience stores and small grocery stores in the ground floor of residential buildings, with little or no connection to the project site. The Harlem River and the Harlem River Drive provide substantial physical barriers and a wide separation between the Highbridge Yard and northern Manhattan to the west.

LONG ISLAND YARD STUDY AREAS

With the exception of Babylon and Yaphank East and West, the nighttime storage yard *sites analyzed in this FEIS* are currently vacant and do not generate economic activity. In these yard study areas, economic activities in the surrounding areas are not related to the sites under consideration. The exceptions to this pattern are described below.

- Babylon Site: The Babylon Yard site is currently occupied by six active businesses and three residential structures (containing five households) on the north side of Union Boulevard, west of Higbie Lane.
- Yaphank East Site: The Yaphank East site is partially occupied by facilities of the Suffolk County Department of Public Works and by a privately owned tree farm.
- Yaphank West Site: The Yaphank West site is used for agriculture by Suffolk County.
- Riverhead Site: The Riverhead site may be in agricultural use.

D. FUTURE CONDITIONS COMMON TO ALL ALTERNATIVES

OVERVIEW OF THE LONG ISLAND TRANSPORTATION CORRIDOR

Future economic conditions were projected in the study area as part of the East Side Access's forecast to 2010 and 2020 of changes in socioeconomic conditions, prepared for use in the ridership model. These projections were based on recent projections by the New York Metropolitan Transportation Council (NYMTC) for the 31-county metropolitan region, and are the same projections being used by MTA's other Long-Range Planning Framework projects (MTA's Long-Range Planning Framework projects are described in Chapter 1). These projections are based on national and regional economic and demographic trends. They assume that the basic infrastructure serving the region—including its transportation systems—remains adequate.

The projections indicate that LITC is expected to experience continued economic growth between 1995 and 2020. Overall, an increase of approximately 900,000 jobs is projected for the regional economy by 2020, resulting in a substantial 21.6 percent increase in employment. Slightly more than half of the growth is predicted to occur by 2010—approximately 552,000 jobs. Employment growth between 2010 and 2020 will continue, with about 347,000 jobs added to the regional economy (see Table 5-10).

Table 5-10
LITC Employment Trends: 1995 to 2020

	1995		2010		2020		Percent Change		
	Employment	Percent of Total	Employment	Percent of Total	Employment	Percent of Total	1995-2010	2010-2020	Total 1995-2020
Nassau	550,772	13.23%	617,986	13.11%	651,485	12.87%	12.2%	5.4%	18.3%
Suffolk	513,562	12.34	607,483	12.89	722,724	14.28	18.3	19.0	40.7
Nassau & Suffolk	1,064,334	25.57%	1,225,469	25.99%	1,374,209	27.15%	15.1%	12.1%	29.1%
Manhattan	1,873,319	45.00	2,185,114	46.35	2,261,887	44.69	16.6	3.5	20.7
Queens	550,727	13.23	612,948	13.00	683,411	13.50	11.3	11.5	24.1
Brooklyn	674,363	16.20	690,952	14.66	741,733	14.66	2.5	7.3	10.0
LITC	4,162,743	100.00%	4,714,483	100.00%	5,061,240	100.00%	13.3%	7.4%	21.6%
Source: Urbanomics (9/20/95) from LIRR East Side Access Ridership Forecasting Results Report (7/13/99).									

Manhattan is projected to lead the way in the number of jobs added to the regional economy, adding about 312,000 jobs by 2010 and an additional 77,000 by 2020. The increase in employment in Manhattan will account for slightly more than 50 percent of the total projected growth in the LITC region between 1995 and 2010, and slightly more than 20 percent between 1995 and 2020. Approximately 312,000 new jobs are projected to be created in Manhattan by 2010, representing a healthy growth of 16.6 percent in total employment. The rate of increase in Manhattan is expected to slow between 2010 and 2020 to about 3.5 percent.

While Manhattan will continue to be the major employment center, with almost 45 percent of employment in 2020, the greatest growth is projected to occur in Suffolk County. By 2010, Suffolk County is expected to add 94,000 jobs, resulting in an 18 percent increase. The boom in employment in the county is projected to continue to 2020, with an additional 115,000 jobs created, representing a growth of 19 percent over 2010, and nearly a 41 percent gain since 1995. While these gains are dramatic, Suffolk County will continue to represent a relatively minor portion of the total employment in the LITC, growing from 12.3 percent in 1995 to slightly more than 14 percent in 2020. Nassau County is expected to experience a significant rate of increase in employment, though the number of jobs created will be substantially smaller than in Manhattan and Suffolk County. By 2020, Nassau is projected to add 101,000 jobs, a gain of 18 percent. About two-thirds of the increase in employment in Nassau County will occur by 2010. Combined, Nassau and Suffolk County growth will increase Long Island's share of employment from 25.5 percent in 1995 to slightly more than 27 percent in 2020.

Queens will experience a steady increase in employment of about 11 percent by 2010 and again by 2020. Brooklyn will see only minor gains in employment, i.e., a total increase of about 67,000 jobs by 2020, resulting in a 10 percent growth in employment. About four-fifths of the employment growth in Brooklyn will occur between 2010 and 2020.

MANHATTAN STUDY AREA

The Manhattan study area will continue to be one of the largest business and employment centers in the world. Overall, employment in the study area is projected to grow to over 2 million by 2010, creating about 300,000 new jobs, or a 16.6 percent increase from 1995 (see Table 5-11). The rate of growth is projected to continue more slowly between 2010 and 2020, with nearly 77,000 new jobs, representing less than a 4 percent increase.

Table 5-11
Manhattan Employment Trends: 1995 to 2020

Area	Employment			Percent Change		
	1995	2010	2020	1995-2010	2010-2020	Total 1995-2020
Lower Manhattan	397,774	455,226	467,831	14.4%	2.8%	17.6%
Village/Lower East Side	159,399	178,022	183,738	11.7	3.2	15.3
Chelsea	25,592	41,331	51,853	61.5	25.5	102.6
Lower Fifth	84,849	103,333	107,907	21.8	4.4	27.2
Midtown South	137,442	153,706	156,221	11.8	1.6	13.7
Garment Center	86,333	112,907	119,449	30.8	5.8	38.4
Clinton	38,271	42,783	46,666	11.8	9.1	21.9
Midtown	209,453	268,398	284,269	28.1	5.9	35.7
East Midtown	380,350	441,535	446,222	16.1	1.1	17.3
Lincoln Square	31,884	39,754	43,045	24.7	8.3	35.0
Upper East Side	110,936	124,680	129,423	12.4	3.8	16.7
Manhattan Study Area	1,662,283	1,961,675	2,036,624	18.0%	3.8%	22.5%
Other Manhattan	211,036	223,439	225,263	5.9	0.8	6.7
Total Manhattan	1,873,319	2,185,114	2,261,887	16.6%	3.5%	20.7%
Source: Urbanomics (9/20/95) from LIRR East Side Access EIS <i>Ridership Forecasting Results Report</i> (7/13/99).						

In 2020, Lower Manhattan, East Midtown, and Midtown will continue have a high concentration of business activity. Lower Manhattan and East Midtown combined will grow at about 17 percent and continue to constitute the bulk of employment in Manhattan, with nearly 45 percent of employment in 2020. These three subareas combined will hold the bulk of the region's business activity, with employment at approximately 1.2 million and containing 58 percent of Manhattan's employment.

Lower Manhattan will continue to be the study area neighborhood with the highest employment through 2010 and 2020. Employment in the subarea is projected to increase to about 455,000 jobs by 2010, about a 14 percent, then stabilize, growing only about 3 percent between 2010 and 2020.

Midtown is expected to continue its role as the core of the Manhattan CBD. Employment in the Midtown subarea is projected to increase by nearly 59,000 jobs between 1995 and 2010, a 28 percent increase. Between 1995 and 2020, growth of 75,000 jobs (35 percent) is projected, for a total of 284,000 jobs in this portion of the study area. East Midtown is expected to see

significant growth over the next two decades, growing by 17 percent by 2020. A total of 61,000 new jobs are projected between 1995 and 2010, and another 4,700 jobs by 2020.

Other subareas are also expected to see increases in employment, as shown in the table. Some of this growth is attributable to increasing demand from already strong service and FIRE sectors, while in other subareas, particularly growth in Chelsea, the Garment Center, and Midtown South, increases in the number of jobs would result from shifts in types of employment, i.e., from less intensive manufacturing, warehousing, and distribution to services and FIRE categories.

LONG ISLAND CITY/SUNNYSIDE STUDY AREA

As described in Chapter 3, “Land Use, Zoning, and Public Policy,” the rezoning proposed for Long Island City just north of Sunnyside Yard is expected to make it a more densely developed commercial area. This new development is anticipated to bring approximately 42,500 new jobs to the area by 2020, predominantly in service industries and the FIRE sector. Some 29,500 new jobs are projected for 2010 (growth of nearly 57 percent over 1995), and an additional 13,000 jobs are expected by 2020 (resulting in total growth of 82 percent over 1995).

LONG ISLAND

The Long Island study area economy is expected to continue to grow. The overall vacancy rate, which is an indicator of economic health, is expected to remain stable. As commercial rental rates rise, development of additional new construction projects and retrofits of existing buildings will continue as demand for space outpaces supply. Suffolk County will experience a large portion of the new economic activity. As shown in Table 5-10, the employment growth of Nassau and Suffolk Counties is projected at 30 percent between 1995 and 2020. Nassau County is expected to gain 101,000 jobs, a greater than 18 percent increase, and Suffolk County is expected to gain 209,000 new jobs, an approximately 41 percent gain over the same period.

REPLACEMENT YARD STUDY AREAS

No significant changes in overall economic conditions or employment are anticipated in the study areas for the Blissville, Maspeth, Fresh Pond, and Highbridge Yards.

LONG ISLAND YARD STUDY AREAS

Economic activity within the most of the Long Island study areas is unlikely to change in the future. As noted in Chapter 3, the Town of Oyster Bay is currently reviewing a proposal to develop the Cerro Wire site with a large regional shopping mall. That proposal, which would *be in direct conflict with* use of the Cerro site for a rail yard, would bring substantial new economic activity to the site. *Similarly, the Riverhead site is also being considered for new development (of residential uses) that would be in direct conflict with use of the site for a rail yard.*

The development of all or a portion of the Pilgrim Hospital campus for retail, office, or entertainment use would add significant economic activity to the Pilgrim Hospital study area. In addition, a proposed expansion of the Heartland Business Center to the west of the study area would also add to industrial business activity just outside the study area.

E. PROBABLE IMPACTS OF THE PROJECT ALTERNATIVES

NO ACTION ALTERNATIVE

The No Action Alternative would result in a very small increase in capacity on the LIRR, as a result of the addition of bi-level coaches and five trains in the peak hour to Penn Station. The overall convenience to riders serviced by diesel trains would improve slightly as the result of the addition of dual-mode locomotives that would allow for a one-seat ride to Penn Station, among other scheduled improvements. There would be no addition of service to Grand Central Terminal and the existing disconnect between job location and terminal location would remain. As noted in the description of recent employment trends above, nearly 400,000 employees in the Manhattan study area (23 percent of the study area's employment) work in East Midtown, which is not convenient to Penn Station. The majority of the employees in East Midtown work in the finance, insurance and real estate sectors or in business or legal services—white collar workers who are traditionally heavy users of commuter rail service. Employment in East Midtown is projected to grow by 16 percent by 2010 and by a total of 17 percent by 2020.

The maintenance of the status quo in rail service would directly affect commuter travel patterns, and have wide ranging impacts on the regional economy as well. The most immediate impact would be on daily commuters. Without substantial improvement to the existing system, conditions on the LIRR are likely to worsen for riders, exacerbating overcrowding and delays in service. Ridership statistics help explain how future conditions might deteriorate. Between 1995 and 2010, arrivals at Penn Station in the AM peak hour are projected to increase by approximately 18,600 riders, or 22 percent, and by nearly 24,000 riders (28 percent) between 1995 and 2020. During the peak 15 minutes of the AM peak hour, trains arriving at Penn Station would be operating at 127 percent of capacity. With passenger comfort and delays in service already problematic for many commuters, the projected increase in demand would likely lead to a further decline in the quality of service.

Since the projections of population and employment for the LITC assume no deterioration in transportation service, under the No Action Alternative—with its decline in service—these predicted growth levels may not be achieved. On Long Island, this could mean fewer new residents and possibly lower employment with a concomitant effect on the future local tax base and economic activity. In addition, commuters might adjust their travel patterns to compensate for deteriorating service on the LIRR, with economic impacts on the broader community. As three out of four Long Island residents who commute to the city use the LIRR, a shift from train to auto, the most likely adjustment, would likely exacerbate already congested conditions on major roads leading from Long Island to Manhattan.

Such a shift would affect more than just the rail commuters. It would increase congestion on the roads, increasing the time required for the journey to work by non-transit users, as well as slowing the delivery of goods and services over roads throughout the region. Increasing travel time required for the journey to work and for the delivery of goods and services would increase the cost of doing business, ultimately making the LITC a less desirable location for business. A large body of transportation and economic research and literature indicates that among the most important criteria for selecting a business location are the quality of the transportation infrastructure in an area, the availability and quality of the work force, the sophistication of the information and communications systems, and local taxes and other costs of doing business. While commuter rail transportation makes up only one part of the overall transportation infrastructure

of an area, it can affect the quality and delivery of other forms of transportation, as well as the availability of the work force, as described above. Thus, the No Action Alternative could affect the attractiveness of the LITC, and particularly Manhattan, as a business location, undermining the projected employment growth for the region and the economic demand that would be generated by future employees.

As an example, between 1995 and 2020, the Manhattan study area is expected to add about 375,000 employees, for an overall increase of 22.5 percent. This would add approximately \$26 billion in annual earnings to the region by 2020, in today's dollars. These earnings would also contribute substantial secondary impacts in terms of spending and taxes on earnings and spending that supports certain public infrastructure and services throughout the region, and New York State as whole. If this employment growth is diminished under the No Action Alternative, even by a relatively small percentage, it will have strong economic repercussions.

TRANSPORTATION SYSTEMS MANAGEMENT (TSM) ALTERNATIVE

The TSM Alternative would provide some improvement in commuter rail service between Long Island and Penn Station. Peak hour capacity would increase by approximately 5,800 riders with the addition of 2 to 4 cars per train, including bi-level passenger cars. Other major improvements that would be provided under the TSM Alternative are increased availability of one-seat rides to Penn Station, increased service to the Hunterspoint Avenue and Long Island City stations, and extension of peak hour contra-flow bus lanes on the Long Island Expressway, among others.

These modifications would improve the journey to work for some LIRR commuters, and secondarily improve the movement of goods and services through the region, as described above in the No Action Alternative. However, the improvements would not be sufficient to avoid the overcrowding and delays that are likely to occur with the projected 22 percent increase in system ridership between 1995 and 2010 and 28 percent by 2020. The existing disconnect between the location of jobs and the location of terminals would not be substantially improved by the implementation of the TSM Alternative.

For many of these employees, the journey to work involves an additional transit trip to their destination, either by subway or bus, and for some it requires a long walk. In most cases, at least 15 minutes to 30 minutes are added to the daily journey to work. The improvements provided under the TSM Alternative, particularly the increased service to Hunterspoint Avenue and Long Island City, would not eliminate, or substantially improve the existing disconnect between the location of jobs and the location of terminals. While the increased capacity in the LIRR system may have some beneficial systemwide effects by reducing current overcrowding, encouraging higher utilization of the western terminals would not resolve the existing disconnect, and is not likely to reduce the overall time required for the journey to work. As noted in Chapter 1, "Project Purpose and Need," there are real and perceived impediments to using the western terminals, including the continuing disincentives of a two-seat ride (be it subway, bus, or ferry), the added cost of the second ride, overcrowding on many of the connecting transit modes, and the psychological resistance to changing modes, among others.

Thus, the TSM Alternative would not significantly improve existing conditions for most LIRR commuters, compared to the level and quality of service that exists today. In the long run, as noted above, improving the quality of service, including reducing overcrowding and delays, as well as remedying the current disconnect between jobs and terminals, is likely to affect the

attractiveness of the LITC as a business location. Since the key factors in the selection of business location include the quality of an area's transportation infrastructure, the availability of the work force, and the cost of doing business, the TSM Alternative would make only a minor contribution to the attraction of the region as a business location. It is not likely to provide the level of infrastructure improvement required to support the region's continued ability to retain and attract businesses, which would subsequently dampen projected economic growth, particularly in terms of the projected number of jobs and the economic multiplier effects they would produce. Although the TSM Alternative would likely improve the transportation infrastructure enough to maintain current levels of employment, and probably some growth, the full growth predicted for 2010 and 2020 would be achieved only with difficulty.

PREFERRED ALTERNATIVE

The Preferred Alternative would create two major improvements in the LIRR infrastructure that would have significant beneficial impacts on the region's economy. The first is the provision of new LIRR service to a new LIRR terminal at Grand Central Terminal (GCT), which would also allow a significant increase in the number of peak period trains traveling to Manhattan, from 42 to 61. The second is the creation of a new LIRR station in Sunnyside, Queens. Other proposed changes under the Preferred Alternative that would have less significant impacts include the relocation of Metro-North maintenance and storage facilities to the existing Highbridge Yard in the Bronx, the relocation of New York & Atlantic Railway (NYAR) railcar storage from Yard A in Sunnyside to either Blissville Yard or Maspeth Yard, and relocation of NYAR railcar maintenance shop to Fresh Pond Yard. In addition, construction of the new tunnels and access to GCT would require acquisition of private property and displacement of several businesses in Manhattan, Queens, and Long Island. These impacts are addressed in a detailed displacement analysis below. Other improvements proposed under the Preferred Alternative, such as ventilation facilities, would have negligible impact on current economic conditions, and are not specifically analyzed.

LITC AND MANHATTAN STUDY AREAS

The most immediate impact generated by the Preferred Alternative for many LIRR users would be the elimination of the existing disconnect between the location of jobs and location of terminals, as well as substantial improvement in the currently overcrowded conditions on many LIRR peak hour trains, and considerable reduction in the time required for the journey to work. These improvements would not only help to accommodate projected LIRR ridership by 2010 and 2020, but would generate an increase in ridership. Additionally non-users of the system would also benefit from improvements created by the Preferred Alternative, as current ridership would be retained and increased by both 2010 and 2020, leading to a reduction in congestion on the major Long Island roadways leading to Manhattan.

There are various methods for the determining economic impacts of transportation improvements, including measuring rates of return on the infrastructure investment, and a more broadly based measurement of how infrastructure investment affects economic growth. As described above for other alternatives, investment in transportation infrastructure is one of the principal factors in retaining and attracting businesses to an area. More specifically, research indicates

that infrastructure investment promotes economic growth and productivity.* A recent MTA study (*Lasting Economic Benefits of Public Transit Investment*, Phase 2 final report, prepared by Cambridge Systematics, Inc. for MTA, August 6, 1997) concluded that investments in the region's transportation system beyond the basic amount required to keep the system in a state of good repair would yield an economic return of \$2.03 for every dollar invested. Based on the current condition of the infrastructure and quality of service, the reverse is also true for the LITC, i.e., the lack of investment can reduce productivity in the region. With the Preferred Alternative there would not be deterioration in rail transit service acting as a deterrent to regional growth, so compared with the No Action Alternative the Preferred Alternative would have a clear positive impact on productivity within the LITC, and particularly in Manhattan. Elimination of the disconnect between jobs and terminals for many LIRR riders is expected to save between 15 and 30 minutes in the journey to work, or as much as an hour for the daily commute. The time savings would likely translate into increased productivity not only in the workplace but also in the daily lives of commuters, improving the overall quality of life in the region.

Eliminating the disconnect, improving transportation service, reducing travel time, and improving the quality of life would ultimately manifest itself in the ability of the region, particularly Manhattan, to meet its projected growth of 312,000 new employees by 2010 and 375,000 new employees by 2020. Research suggests a strong correlation between infrastructure investment and more openings of new businesses, as well as expansions of existing businesses. Following the trend of the past decade, it is likely that about $\frac{2}{3}$ of the projected 2 million employees in the Manhattan study area in 2010 and 2020 would be working in the FIRE and service sectors, traditionally more intense users of commuter rail than the manufacturing sector. As existing and new FIRE and service firms consider business locations, the investment proposed under the Preferred Alternative would count heavily to support the LITC and Manhattan, in particular, as a viable location for business growth. As noted above, achieving the employment projections for Manhattan would generate about \$26 billion in new annual earnings (wages and salaries) by 2020 in today's dollars, as well as considerable secondary spending and employment impacts throughout the state.

An estimated 62,000 LIRR passengers are projected to commute to GCT during the morning peak period (6 AM to 10 AM) in 2010, and some 76,000 passengers would arrive at GCT daily in 2010. By 2020, 66,000 passengers would ride LIRR to GCT during the morning peak period, and 81,000 would use the new service into GCT daily. These new passengers in GCT would very likely generate additional spending by commuters for retail businesses and services in and around the GCT area, as commuters purchase fast food and convenience items, use services such as beauty salons and travel agents, and utilize restaurants for business and personal engagements. At the same time, once the new service to Grand Central Terminal is available, fewer LIRR commuters would arrive at or depart from Penn Station. In 2010, there would be 46,000 fewer commuters arriving at Penn Station in the AM peak period compared to the No Action condition (or 29,000 fewer compared to 1995 conditions); in 2020, some 48,000 fewer LIRR

* For example, Jeffrey Madrick, *Economic Returns from Transportation Investment*, forum proceedings, Eno Transportation Foundation, Inc., 1996; New York Citizens Budget Commission, *Transportation Infrastructure and New York's Competitiveness*, June 29, 1999; Julie Hoover, *Making the Case for Public Transportation: A Corporate Perspective*, paper presented at the New York Public Transit Association Winter Conference, Albany, NY, February 23, 1998; Cambridge Systematics, Inc. for MTA, *Lasting Economic Benefits of Public Transit Investment*, Phase 2 final report, August 6, 1997.

passengers would arrive at Penn Station in the AM peak period compared to the No Action condition (or 24,000 compared to 1995). The reduction in passengers at Penn Station would decrease annual spending in and around Penn Station at local retailers. The decrease in spending would not constitute a significant adverse impact.

According to information prepared by the Access to the Region's Core (ARC) project, Penn Station is the busiest commuter terminal in the nation, with as many as 500,000 commuters each day. As reported in the Environmental Assessment for the Pennsylvania Station Redevelopment Project (August 1999), roughly 84,300 of these passengers travel on Amtrak and NJ Transit. An additional 231,000 passengers travel on LIRR, and the remaining commuters (approximately 185,000 people) use the New York City subway system. The East Side Access Project would shift passengers from Penn Station to Grand Central Terminal, so that in 2010 the number of LIRR passengers at Penn Station daily is expected to be approximately 151,000, compared with 217,000 in 1995 and 231,000 in 1999. (Detailed ridership numbers for both 2010 and 2020 are presented in Appendix C.) However, as noted in the Environmental Assessment prepared for the Pennsylvania Station Redevelopment Project, the number of Amtrak and NJ Transit riders at Penn Station is expected to grow by some 43,300 passengers per day as a result of a number of improvements proposed (including the Kearny Connection and Secaucus Transfer projects in New Jersey) and introduction of high-speed Amtrak service. The number of subway passengers and other pedestrians who pass through Penn Station can also be expected to increase as a result of general background growth. Further, the number of people who pass through Penn Station is also expected to increase as a result of the proposed improvements associated with the Farley project.

In addition to Penn Station itself, the neighborhood is also home to a number of high-density office buildings. The combination of commuters who travel through Penn Station and other people who work in the neighborhood together support the local retail businesses both inside and near Penn Station. The reduction in daily LIRR riders at Penn Station would be a small decrease relative to the substantially larger number of other commuters and workers in the area, and therefore the East Side Access Project would not result in significant adverse impacts to the retail spaces in or near Penn Station.

LONG ISLAND CITY/SUNNYSIDE

As described earlier, in the future Long Island City is expected to become an important business district. Employment in Long Island City is projected to grow from 52,000 to about 81,000 by 2010 and 95,000 by 2020, an increase of about 57 percent by 2010 or 82 percent by 2020. Although the area is currently well served by subways, the location of a new LIRR station under the Queens Boulevard overpass in Sunnyside would increase accessibility to the area for the Long Island work force. Expanding direct links to the work force in a wider region would make Long Island City a more attractive location for the growing service industries in the area, particularly business services, since a larger labor pool with a broader range of skills would be more readily accessible. In the long run, the Preferred Alternative would enhance opportunities for future development in Long Island City, where nearly 4 million square feet of office space are currently planned.

In addition, the combination of midday railcar storage and the proposed new station would very likely increase employment, and thus consumer expenditures by railroad employees (and commuters) in the vicinity of Yard A.

LONG ISLAND

While the principal economic impacts of the Preferred Alternative would be felt in the Manhattan study area, Long Island would also benefit from the infrastructure improvements in several ways. The attraction of an area as a business location is not only based on the transportation infrastructure, but also on the availability of the work force. Improving the quality of rail service, reducing overcrowding, reducing travel time, and connecting more directly with centers of employment would improve the daily commute of over 100,000 riders daily who use LIRR to reach Penn Station during the AM peak. Since transportation on Long Island is problematic in every mode, investing in LIRR infrastructure is likely to improve the quality of life on Long Island for users and non-users of the system alike, i.e., improved rail service would also reduce traffic congestion, both of which would support the attraction of Long Island as a desirable residential location. Population growth (and thus, growth in the work force) projected for Long Island would be more readily achievable under the Preferred Alternative.

For the same reasons, Long Island's projected employment growth of 160,000 by 2010 and 310,000 by 2020 would be more easily attainable with the improvements of the Preferred Alternative, which would indirectly reduce congestion on major roads by increasing ridership and preventing existing riders from shifting transportation mode from rail to auto.

REPLACEMENT YARD STUDY AREAS

There would be only minor impacts on economic conditions in and around the replacement rail yards involved in the Preferred Alternative. Primarily, the Preferred Alternative would shift employment to Highbridge Yard, Fresh Pond Yard, and Blissville or Maspeth Yard, probably resulting in a small increase in spending by railroad employees at local retailers and service businesses.

LONG ISLAND YARD STUDY AREAS

Construction of nighttime storage yards at any of the *seven* sites on Long Island *analyzed in this FEIS* would have minor impacts on economic conditions in and around each yard site. Due to the increase in employment at formerly vacant sites or sites in disuse, the increase in spending by railroad employees may be slightly higher than that of the No Action Alternative's yard construction.

DIRECT DISPLACEMENT ASSOCIATED WITH THE PREFERRED ALTERNATIVE

In the Preferred Alternative, the new tunnel and additional entrances to Grand Central Terminal and improvements at Harold Interlocking in Queens would require either full or partial acquisitions of property in both Manhattan and Queens. Some property acquisitions would result in the direct displacement of businesses. At some of the sites being considered, this would result in the displacement of businesses. At one site, residents might also be displaced (discussed in Chapter 4, "Social Conditions").

As described below, the potential property acquisitions would occur during construction of the project, and most would be permanent. The required acquisitions would differ in Manhattan depending on which engineering option is selected. For all potential acquisitions, surveys were conducted in fall 1999 to identify businesses that would be affected (based on current designs). The total estimated employment in businesses that currently occupy properties *that could be*

affected by Option 2 of the Preferred Alternative in Manhattan and Queens is approximately 160.

In addition, MTA LIRR would have to acquire any of the seven illustrative Long Island storage yard sites analyzed in this FEIS. At some of the sites assessed in this FEIS, this would result in the displacement of businesses. At one site, residents might also be displaced (discussed in Chapter 4, "Social Conditions"). The site evaluation and selection process to be conducted by MTA LIRR for future storage yard sites will include detailed inventories of the current uses on candidate sites.

Potentially Affected Properties in Manhattan

The two engineering options for the Preferred Alternative would require different property acquisitions in Manhattan. Option 1 (new tracks and platforms in GCT's existing lower level) would require permanent acquisition of private property for a ventilation facility and new entrances, and temporary acquisition to construct a new portion of tunnel west of Park Avenue. Option 2 (new tracks and platforms below GCT's existing lower level) would require permanent acquisition of private property for the ventilation facility and new entrances (not all in the same locations as for Option 1), but no acquisitions for the new tunnel section, as described below and illustrated in Figure 5-2 and Table 5-12. The discussion below describes the existing businesses and activities that would be displaced by the Preferred Alternative. It should be noted that the analysis considers the uses in the potential locations of new entrances currently contemplated, based on the latest project designs. As designs progress, those entrances may be shifted to different locations near those currently analyzed. Overall, the effects of the new entrances would be similar to those described below.

Properties Affected Under Option 1.

47 East 44th Street. The Preferred Alternative would require the acquisition of the entire building at 47 East 44th Street and its subsequent demolition to provide space for a ventilation structure. Located at midblock (see Figure 5-2), 47 East 44th Street is a 5-story building containing Dishes, a restaurant of about 2,500 square feet; and 10,000 square feet of Class B office space. There are three office tenants occupying the top three floors. The second floor is vacant.

Current office tenants are mostly small businesses, occupying approximately 2,500 square feet of space each. The estimated number of employees in the building is 39.

347 Madison Avenue. The Preferred Alternative would require the use of all, or a significant portion of, three ground-floor storefronts at 347 Madison Avenue for the installation of a pedestrian entrance to the new LIRR platforms (see Figure 5-2). Constructed in 1960 at the southeast corner of 45th Street and Madison Avenue, 347 Madison Avenue is a 20-story brick and stone building owned by MTA with approximately 230,000 square feet of office space with ground-floor retail space. Currently one retail storefront is vacant and two are occupied by an optical shop and a clothing/sporting goods store, respectively. Located at the southeast corner of Madison Avenue and 45th Street, Grand Central Optical occupies approximately 1,500 square feet and is estimated to employ five workers. Orvis, a retail clothing and sporting goods store, is located in the midblock on the south side of 45th Street. It occupies approximately 1,500 square feet and is estimated to employ approximately five people.

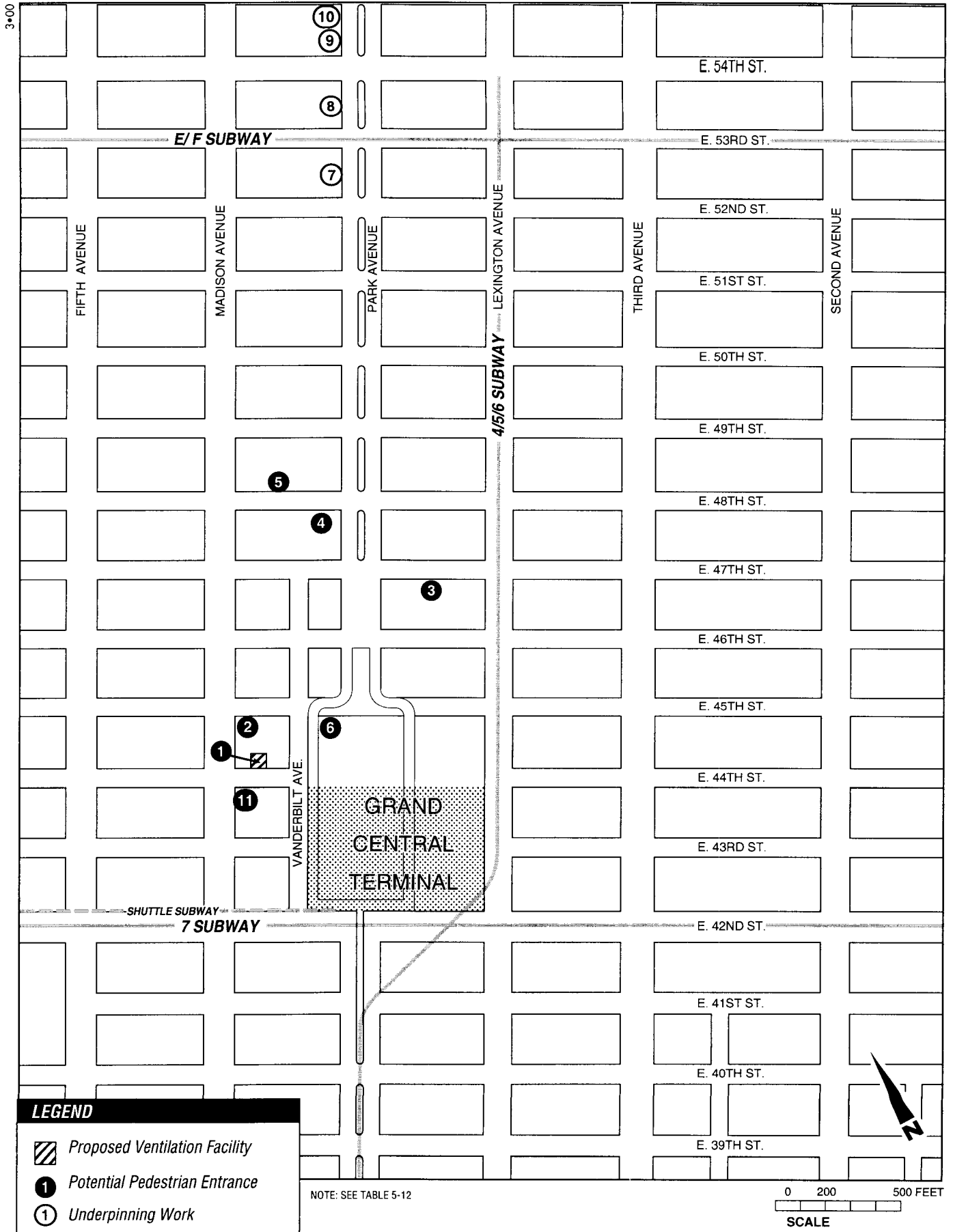


Table 5-12
Potential Property Acquisitions Required
and Potentially Displaced Businesses:
Manhattan

Map Reference No.	Option 1 or 2	Address/Description of Affected Property	Permanent or Temporary Acquisition?	Business Type	Estimated Occupied Sq. Ft. of Affected Business	Estimated Number of Employees*
1	1 or 2	47 East 44th Street 5-story office building with ground-floor retail	Permanent	Restaurant	2,500	9
				Office	7,500	30
2	1 or 2	347 Madison Avenue Ground-floor space in 20-story office building	Permanent	Optical	1,500	5
				Retail	1,500	5
				Retail (vacant)	1,500	0
3	1 or 2	245 Park Avenue Sidewalk space near 45-story office building	Permanent	NA	NA	0
4	1 or 2	270 Park Avenue Sidewalk space near 52-story office building	Permanent	NA	NA	0
5	1 or 2	280 Park Avenue Ground-floor space in 28-story office building	Permanent	Restaurant	5,000	17
6	1	200 Park Avenue Sidewalk space used for outdoor cafe seating adjacent to 59-story office building	Permanent	Restaurant	7,000	24
7	1	370 Park Avenue Basement space in Racquet & Tennis Club	Temporary	Space used by commercial tenant	3,000	NA
				Locker room	4,200	NA
				Space used by commercial tenant	1,600	NA
8	1	390 Park Avenue Basement space in Lever House, a 21-story office building	Temporary	Parking garage (200 spaces)	NA	10
				Unknown use	1,600	NA
9	1	400 Park Avenue Basement space in 21-story office building	Temporary	Storage space for retail store	5,000	NA
10	1	410 Park Avenue Basement space in 21-story office building	Temporary	Elevator machine room	2,000	NA
11	2	335 Madison Avenue Retail space in 26-story office building Portion of underground garage	Permanent	Retail	10,000	34
			Permanent	Garage	5,000	0
Total Affected Employment:						
Option 1						100
Option 2						100
Notes:						
* Employment estimates by AKRF, Inc., in full-time equivalents.						
NA Not applicable. (No businesses and/or employees affected.)						
Sources: Field survey by AKRF, Inc., Fall 1999; Sanborn Maps; New York City Department of Finance; and Claritas, Inc.						

200 Park Avenue, Met Life Building. Constructed in 1963, 200 Park Avenue (the Met Life Building, formerly known as the Pan Am Building) is a 59-story office tower that spans Park Avenue just north of Grand Central Terminal. The Preferred Alternative would require use of a portion of the sidewalk at the southeast corner of Vanderbilt Avenue and 45th Street (see Figure 5-2), which is currently occupied by outdoor seating for Cafe Centro. Approximately half of the restaurant's outdoor seating would be required for the installation of a pedestrian entrance to the LIRR, located west of the restaurant's main entrance. However, Cafe Centro's principal seating area is an interior dining room of about 5,000 square feet. Due to the small portion of the restaurant's outdoor seating that would be acquired and its seasonal nature, together with all of the interior seating capacity that would remain intact, the cafe would not be substantially affected and would likely be able to remain in its current location.

245 Park Avenue. The Preferred Alternative would require use of part of the sidewalk adjacent to the building at 245 Park Avenue for the installation of a pedestrian entrance. This portion of the sidewalk is currently private property. No businesses would be displaced.

270 Park Avenue. The Preferred Alternative would require use of part of the sidewalk adjacent to the building at 270 Park Avenue for the installation of a pedestrian entrance. This portion of the sidewalk is currently private property. No businesses would be displaced.

280 Park Avenue. Constructed in 1962, 280 Park Avenue is a 28-story office tower that occupies the west side of Park Avenue between 48th and 49th Streets. One possible location for an additional LIRR pedestrian entrance associated with the Preferred Alternative would require acquisition of a portion of the ground floor in 280 Park Avenue. The area that might require acquisition is currently occupied by the Shinbashi Restaurant, and the acquisition would likely result in permanent displacement of the restaurant.

370, 390, 400, and 410 Park Avenue. Option 1 would require use of basement spaces at 370, 390, 400, and 410 Park Avenue during construction of the new LIRR tunnel approach to the GCT. After construction is complete, this space would be returned to the property owners. Specifically, effects on those buildings would be as follows:

- *Racquet & Tennis Club (370 Park Avenue):* In this building, Option 1's construction activities would require use of a lunchroom, storage space, and a bathroom currently used by a tenant, American Express; a locker room used by Racquet & Tennis Club members; and a third space currently used by a tenant, Bank of New York. These locations are currently used as support-type space only. It is assumed that these uses are nonessential to business operations, may be absorbed within the facility, and that the space will be reoccupied after construction is complete. Thus, the impacts of a construction period are not significant. Construction should take approximately two years to complete. After construction is complete, the basement space would be returned to the property owner.
- *Lever House (390 Park Avenue):* Construction activities associated with Option 1 would require use of the 200-space parking garage in the basement of that building and a 40-foot by 40-foot space. It is assumed that this location is currently used as support-type space only, the use is nonessential to business operations, may be absorbed within the facility, and that the space will be reoccupied after construction is complete. Thus, the impacts of a construction period are not significant. The garage is currently operated by Kinney Parking, provides approximately 200 parking spaces and employs about 10 people. Business operation would be infeasible during the construction period. Construction should take approximately two

years to complete. After construction is complete, the basement space would be returned to the property owner.

- *400 Park Avenue:* Option 1 would require the use of a 5,000-square-foot basement storage space used by a tenant, Syms clothing store. This area is currently used as support-type space only. It is assumed that this use is nonessential to business operations, may be absorbed within the facility, and that the space will be reoccupied after construction is complete. Thus, the impacts of a construction period are not significant. Construction should take approximately one year to complete. After construction is complete, the basement space would be returned to the property owner.
- *410 Park Avenue:* In 410 Park Avenue, a space currently used as an elevator machine room in a sub-basement would be used. Construction should take approximately one year to complete. After construction is complete, the basement space would be returned to the property owner.

Properties Affected Under Option 2. Option 2 would require acquisitions of different private properties than those discussed above for Option 1. Because this option's tunnels would be deeper as they approach GCT, the properties on the west side of Park Avenue between 52nd and 55th Streets would not be affected during construction. Option 2 would not affect the basements of 370, 390, 400, and 410 Park Avenue. Private properties that would be affected would be as follows.

47 East 44th Street. This property would be acquired under either Option 1 or Option 2. It is discussed above.

347 Madison Avenue. Option 2 would require use of the same space as Option 1 for a pedestrian entrance, discussed above. This would affect the same three retail spaces in this building.

245 Park Avenue. Like Option 1, Option 2 would require use of privately owned sidewalk space in front of this office building for a pedestrian entrance. No businesses would be affected.

270 Park Avenue. Like Option 1, Option 2 would require use of privately owned sidewalk space in front of this office building for a pedestrian entrance. No businesses would be affected.

280 Park Avenue. As in Option 1, one of the possible locations for a new entrance in Option 2 would displace the restaurant space at 280 Park Avenue.

335 Madison Avenue. Option 2 would require use of space in the 26-story office building at 335 Madison Avenue between 43rd and 44th Streets for a pedestrian entrance.. The space affected is at the corner of Madison Avenue and 44th Street and is currently occupied by Daffy's, a regional chain clothing retailer. Daffy's is located on both the ground and basement floors, occupies a total of 10,000 square feet, and is estimated to employ approximately 34 people at this location. Option 2 would also require use of a small portion of an underground garage at 335 Madison Avenue.

Potentially Affected Properties in Queens

In Queens, the Preferred Alternative would require acquisition of property and displacement of uses for the work at Harold Interlocking. The new tunnel work near Northern Boulevard and in Sunnyside Yard would also require some displacement. As described in more detail in Chapter 17, "Construction and Construction Impacts," LIRR is studying alternative methods for the construction work required at Harold Interlocking, to limit the amount of displacement required.

The potential property acquisitions in Queens are detailed below and illustrated in Figure 5-3 and Table 5-13.

Table 5-13
Potential Property Acquisitions Required
and Potentially Displaced Businesses: Queens

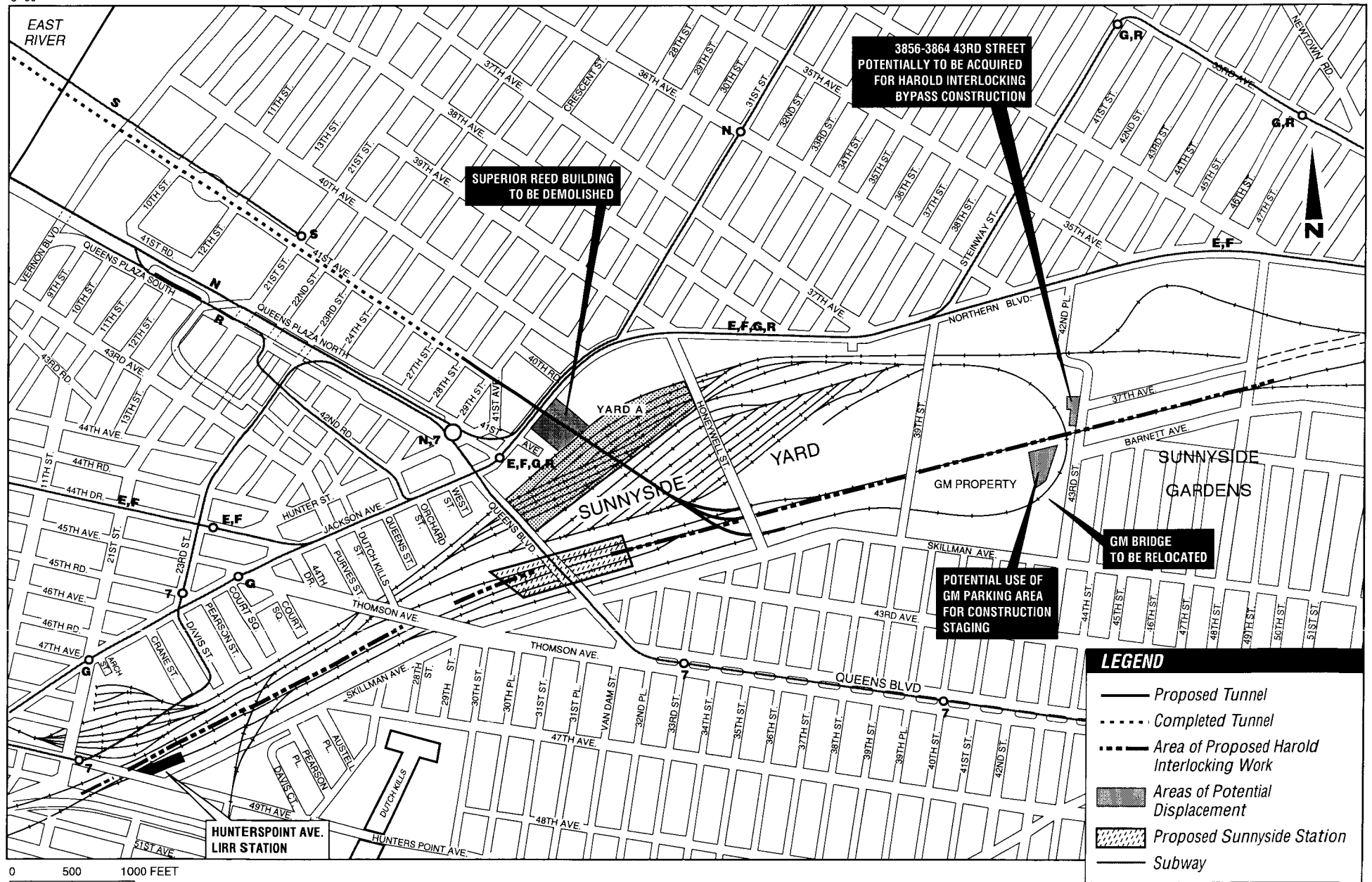
Address/Description of Affected Property	Permanent or Temporary Acquisition?	Business Type	Estimated Occupied Sq. Ft. of Affected Business	Estimated Number of Employees ¹
3856-3864 43rd Street 2-story commercial building	Permanent	Equipment Rental	18,500	60
4001 Skillman Avenue General Motors Facility	Temporary	Portion of parking lot	5,600	0
Total Affected Employment:				60
Note: ¹ Employment estimates by AKRF, Inc., in full-time equivalents. Sources: Field survey by AKRF, Inc. Fall 1999; Sanborn Maps; New York City Department of Finance; and Claritas, Inc.				

3856-3864 43rd Street. Located on the west side of 43rd Street at 37th Avenue, 3856-3864 43rd Street is a 2-story brick building of approximately 18,500 square feet, on a lot of approximately 14,000 square feet (see Figure 5-3). The building, which contains six large loading bays on the first floor and offices on the second floor, is currently occupied by RPL Equipment Co., Inc., a contracting equipment sales, service, and rental company. The Preferred Alternative would need to use some of the space currently occupied by the southern third of this structure, and therefore would require permanent acquisition of either a portion of the building or the entire structure. In addition to this property, RPL Equipment occupies about 9,000 square feet of an adjacent building that it constructed last year at 3650-3652 43rd Street, and employs a total of approximately 60 people. It is possible that if only the southern portion of the structure is acquired, RPL Equipment might be able to remain in its current location. In this case, a small number of employees might be relocated or otherwise affected by the property acquisition. If the entire structure is acquired, RPL Equipment would be displaced from 3856-3864 43rd Street, and would have to find new space. It is assumed that the company might also choose to relocate its operations from the adjacent building at 3650-3652 43rd Street in that case.

Parking Lot at General Motors Property, 4001 Skillman Avenue. As described in Chapter 17, "Construction and Construction Impacts," one of the methods being considered for construction at Harold Interlocking may use land at the General Motors facility between 39th and 43rd Streets as a staging area. A temporary construction easement would be required for this staging area. The affected area is 5,600 square feet and is currently occupied by 28 parking spaces.

Property on Northern Boulevard. The project would permanently acquire a small, vacant property currently owned by New York City adjacent to 2950-2970 Northern Boulevard.

Other Properties Affected in Queens. In addition to these properties, the Preferred Alternative would also require demolition of the structures at 2950-2970 Northern Boulevard near 41st Avenue in Queens. The buildings on Northern Boulevard are currently owned by MTA, so they



would not need to be acquired for the MTA/LIRR East Side Access Project. *In addition, both temporary and permanent (surface and subsurface) easements would be required from Amtrak, a privately held company that receives federal subsidies, to construct the project in Sunnyside Yard. MTA/LIRR currently leases property from Amtrak for use of Penn Station tracks, the East River tunnels to Penn Station, and for LIRR tracks. MTA/LIRR and Amtrak will continue to coordinate in relation to the East Side Access Project and it is anticipated that a specific agreement would be developed for issues related to this project.*

Potentially Affected Properties in the Bronx

In addition to the properties to be acquired in Manhattan and Queens, the Preferred Alternative would also require permanent acquisition of a small parcel at Highbridge Yard to allow relocation of a freight rail line under the control of the New York State Department of Transportation (NYSDOT). While the majority of Highbridge Yard is already owned by MTA, Metro-North Railroad would need to gain control of a 69-square-foot triangular piece of property at the northern edge of Highbridge Yard, adjacent to Exterior Street. This property is currently vacant and owned by the City of New York. The property would be acquired by NYSDOT, which has condemnation power over New York City property. The small parcel was once a “bed of street,” and NYSDOT would follow established procedures for the acquisition of such properties.

Protection Under the Federal Uniform Relocation Act

The rights of owners and tenants of real property acquired to implement the proposed project, including permanent easements, are protected under the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and the Uniform Relocation Act Amendments of 1987 (together, the Uniform Act).^{*} The Uniform Act provides for equitable treatment of persons displaced from their homes, businesses or farms by federal and federally assisted programs. It also establishes uniform and equitable land acquisition procedures. (Owner refers to either the fee owner of the property or the tenant-owner of improvements on it.) As a federally funded project, East Side Access would be required to follow federal acquisition and relocation regulations. Entitlements for property owners under the law include the following:

- Just compensation for property, which may not be less than the acquiring agency's approved appraisal of the fair market value;
- Determination of just compensation by a court of law;
- The opportunity to accompany the appraiser who appraises their property;
- Written statement of, and summary of the basis for the amount established by the acquiring agency as just compensation;
- Payment of the agreed upon purchase price (or a deposit in the court) before being required to surrender possession of the property;
- Reimbursement for certain expenses incidental to transfer of title to the acquiring agency;
- Reimbursement for certain litigation expenses;
- At least 90 days' written notice to vacate occupied property;

^{*} These regulations are published at 49 CFR Part 24, which can be found on the internet at www.fhwa.dot.gov/realestate/act.htm. Detailed information on the rights of displaced persons is provided on the internet at www.fhwa.dot.gov/environment/subject.htm under “Real Estate Services.”

- Relocation services and payments, where applicable; these may involve housing supplements, moving cost, etc. for residential acquisitions, or reestablishment, moving costs, etc. for business, nonprofit, or farm acquisitions; and
- Written statement or brochure advising property owners of their rights and entitlements, and assurance that they receive all of the services and payments to which they are entitled under federal and state law and regulations.

Relocation and Moving Expenses for Businesses. In addition to the rights of owners, the Uniform Act provides entitlements to qualified businesses displaced as part of a federal and federally assisted program, including reimbursement for relocation expenses, including:

- Payment for actual reasonable moving and related expenses for nonresidential moves, including transportation of personal property up to 50 miles, disconnecting, dismantling, removing, packing, crating, reassembling, and reinstalling relocated machinery, equipment, and other personal property, including connection to utilities available nearby; storage of the personal property for a period not to exceed 12 months; insurance for the replacement value of the personal property in connection with the move and necessary storage; any license, permit, or certification required of the displaced business at the replacement location; replacement value of property lost, stolen, or damaged in the process of moving; and professional services necessary for planning, moving and installing the relocated personal property at the replacement location.
- Actual direct loss of tangible personal property incurred as a result of moving or discontinuing the business based on the fair market value of the item for continued use at the displacement site, less the proceeds from its sale.
- Purchase of substitute personal property, if an item of personal property which is used as part of a business or farm operation is not moved but is promptly replaced with a substitute item that performs a comparable function at the replacement site.
- Payment for expenses required to search for a replacement location, not to exceed \$1,000.
- Other moving-related expenses that are not listed as ineligible, as determined to be reasonable and necessary.

Re-establishment of Businesses. In addition to the above mentioned payments, a small business or nonprofit organization is entitled to receive a payment, not to exceed \$10,000, for expenses actually incurred in relocating and reestablishing such small business or nonprofit organization at a replacement site, including:

- Repairs or improvements to the replacement real property as required by federal, state or local law, code or ordinance.
- Modifications to the replacement property to accommodate the business operation or make replacement structures suitable for conducting the business.
- Construction and installation costs, for exterior signing to advertise the business.
- Provision of utilities from right-of-way to improvements on the replacement site.
- Redecoration or replacement of soiled or worn surfaces at the replacement site, such as paint, paneling, or carpeting.
- Licenses, fees, and permits when not paid as part of moving expenses.

- Feasibility surveys, soil testing and marketing studies.
- Professional services in connection with the purchase or lease of a replacement site.

Fixed Payment for Moving Expenses for Businesses. A displaced business may be eligible to choose a fixed payment in lieu of the payments for actual moving and related expenses, and actual reasonable reestablishment expenses as provided. Such fixed payment, except for payment to a nonprofit organization, shall equal the average annual net earnings of the business, as computed in accordance with the average annual net earnings of a business or farm operation as described in this section, but not less than \$1,000 nor more than \$20,000. The displaced business is eligible for the payment if it is determined, among other conditions, that the business cannot be relocated without a substantial loss of its existing patronage (clientele or net earnings). A business is assumed to meet this test unless it is determined that it will not suffer a substantial loss of its existing patronage.

Residential Relocation Assistance for Property Owners. As noted above, the Uniform Act provides relocation payments for displaced residents. These payment include moving expenses and replacement housing payments. The Uniform Act requires that housing resources meet the needs of displaced residents in terms of size, price, rental, location, and timely availability, and payments must be made to displaced residents at the time they are needed to obtain replacement housing. In addition to rights of owners outlined above, additional payment not in excess of \$22,500 shall be made to any displaced person who is displaced from a dwelling actually owned and occupied by such displaced person for at least 180 days prior to initiation of discussions for the acquisition of the property. Such additional payment shall include the following elements:

- The amount, if any, which when added to the acquisition cost of the dwelling acquired by the displacing agency, equals the reasonable cost of a comparable replacement dwelling.
- The amount, if any, which will compensate such displaced person for any increased interest costs and other debt service costs which such person is required to pay for financing the acquisition of any such comparable replacement dwelling. Such amount shall be paid only if the dwelling acquired by the displacing agency was encumbered by a bonafide mortgage which was a valid lien on such dwelling for not less than 180 days immediately prior to the initiation of negotiations for the acquisition of such dwelling.
- Reasonable expenses incurred by such displaced person for evidence of title, recording fees, and other closing costs incident to the purchase of the replacement dwelling, but not including prepaid expenses.

The additional payment authorized by this section shall be made only to a displaced person who purchases and occupied a decent, safe, and sanitary replacement dwelling within one year after the date on which such a person receives final payment from the displacing agency for the acquired dwelling or the date on which the displacing agency's obligation under section 205(c)(3) of the Uniform Act is met, whichever is later, except that the displacing agency may extend such period for good cause. If such period is extended, the payment under this section shall be based on the costs of relocating the person to a comparable replacement dwelling within one year of such date.

Resident Relocation Assistance for Tenants and Certain Others. In addition to rights of owners outlined above, payment shall be made to or for any displaced person displaced from any dwelling not eligible to receive a payment under the above resident relocation section which

dwelling was actually and lawfully occupied by such displaced person for not less than ninety days immediately prior to (1) the initiation on negotiations for acquisition of such dwelling, or (2) in any case in which displacement is not a direct result of acquisition, such other event as the head of lead agency should prescribe. Such payment shall consist of the amount necessary to enable such person to lease or rent for a period not to exceed 42 months, a comparable replacement dwelling, but not to exceed \$5,250. At the discretion of the head of the displacing agency, a payment under this subsection may be made in periodic installments. Computation of a payment under this subsection to a low-income displaced person for a comparable replacement dwelling shall take into account such person's income.

Any person eligible for payment under the previous paragraph may elect to apply such payment to a down payment on, and other incidental expenses pursuant to, the purchase of a decent, safe, and sanitary replacement dwelling.

Probable Impacts of Direct Displacement

As part of the procedure for preparing the acquisition stage relocation plan, all site occupants would be personally interviewed to determine their specific relocation needs, and would be furnished a copy of the state's informational booklet and fully informed of all benefits to which they may be entitled. Owners' properties that would be acquired for the Preferred Alternative, including properties used for Harold Interlocking improvements, a ventilation facility site, and any properties required for easements to allow new station entrances, would be compensated at fair market value and relocation benefits would be provided for displaced businesses. Businesses and tenants that would be displaced as a result of the Preferred Alternative would likely be able to relocate close to their existing locations with minimal disruption to business activity and minimal loss of employment.

Relocation Resources. It is anticipated that most of the displaced businesses would be successful in locating suitable alternative space. In evaluating the limited number of displaced tenants and the amount of space these tenants require, and comparing that with the large inventory of office, retail, warehouse, and industrial space in Manhattan and Queens, it is likely that suitable relocation opportunities would be available, despite the fluctuations of the marketplace and space availability. Though the condition of particular sectors of the real estate market at the time of construction cannot be predicted, market conditions are currently "tight" (i.e., new space is difficult to find), so it is conservatively assumed that this would remain true. If market conditions change, new space will become easier to find.

As noted above, several of the businesses that would require relocation because of the Preferred Alternative's new ventilation facility or entrances near Grand Central Terminal are restaurants. Restaurants are particularly sensitive to the effects of relocation, since their business is, in part, dependent on pedestrian traffic flows, as well as repeat clientele—both of which are highly sensitive to the location of business. A restaurant that relocates near its original location is more likely to retain its existing customer base. On the other hand, a restaurant that relocates far from the existing location enters a new market and must establish a new clientele. Garrick-Aug Associates, a major retail real estate firm in Manhattan, reports that the mid-year 2000 retail vacancy rate for Midtown Manhattan is less than 5 percent, reflecting tight retail market conditions (Source: telephone call, Faith Consolo, vice chairman, Garrick Aug, July 13, 2000). However, suitable retail spaces for relocation of affected tenants do exist in Midtown Manhattan. Garrick-Aug Associates reports that at year-end 1999 there were over 4 million square feet of vacant retail space in Manhattan, and over

1,000 stores available of less than 2,500 square feet (Source: Manhattan Retail Space Report; Year-End 1999 Analysis, January 1, 2000). It is anticipated that restaurants and fast food operations displaced by the Preferred Alternative's ventilation facility and entrances near Grand Central would relocate in the Grand Central Terminal area, close to their original locations, with no loss of employment.

As described throughout the EIS, East Side Access would allow many LIRR commuters bound for Manhattan's East Side to avoid using NYCT subways to complete their journeys to work. As is shown in the ridership forecasting appendix (see Appendix C), with East Side Access in place, a decrease in weekday subway ridership of 12,247 riders would occur in 2010 and 12,955 riders in 2020 compared to the No Action. These riders are not only on subway trains from Penn Station, but also subway trains from Queens, since with the project, LIRR commuters bound for the East Side of Manhattan would no longer choose to transfer in Queens for the subway. Systemwide, these passengers who no longer use the subway would translate into a loss of subway system revenue of \$70,500 daily (in 2000 dollars) in comparison with the No Action condition, or approximately \$15.1 million annually. Relative to the much larger daily ridership on the New York City subway system, these numbers are not significant. It should be noted that these riders are in comparison with the future ridership projected in the No Action condition. In comparison to existing conditions, there would be virtually no revenue lost since it is estimated that growth between now and 2020 (No Action) will generate 12,000 new riders.

Although vacancy rates for office space in Midtown Manhattan are currently very low, about 7.5* percent, it is likely that relocation opportunities would be available for firms located in 47 East 44th Street, because of the vast inventory of office space in Midtown Manhattan. Other relocation resources include downtown office buildings, where the vacancy rate is slightly higher at approximately 9.6* percent. Employers at 47 East 44th Street would likely be able to relocate in the vicinity of the existing location, retaining existing employees and resulting in no loss of employment.

The property displaced by the Preferred Alternative in Queens, RPL Equipment Company, currently occupies approximately 27,500 square feet in their two buildings. One of these would be affected by the project. According to the *Greiner-Maltz 2nd Quarter 1999 Industrial Market Review*, as of June 20, 1999 in industrial units between 20,000 and 29,999 square feet there were slightly more than 1 million square feet of available space, representing 9.3 percent of all inventory in this category. Due to the flexibility of industrial space, this business would be able to locate in a portion of a larger unit or in two smaller units next to each other, similar to its current configuration. RPL Equipment could therefore move to most units of more than 5,000 square feet, of which there were a total of 10.15 million square feet of available space at the end of June 1999, or 8.7 percent of the total inventory more than 122 million square feet.

Alternatively, RPL Equipment Company may require a smaller relocation space for a portion of their business. The vacancy rate for industrial properties ranging from 5,000 and 20,000 square feet, the smallest size units reported in an annual real estate survey by Greiner-Maltz Co. Inc., is 7.6 percent. Although this estimated vacancy rate is low, the number units in the inventory is high. Small size units make up the bulk of industrial properties in Queens, i.e., there are nearly

* Source: Cushman & Wakefield Research Services, Market Report, New York New York, Mid-Year 1999.

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3,000 units between 5,000 and 20,000 square feet. Even with the low vacancy rate, there are currently about 228 properties available in Queens that could serve as a relocation resource for a portion of RPL Equipment Company. It is unlikely that the vacancy rate would decrease substantially by the time project construction begins, and thus, the business displaced by the proposed project would very likely be able to relocate within Queens.

SUBSURFACE ACQUISITIONS REQUIRED

In addition to the property acquisitions described earlier, the Preferred Alternative would also require acquisition of subsurface easements for the route of its tunnels in Manhattan. Specifically, easements would be purchased to allow the new tunnels to travel from the end of the existing 63rd Street Tunnel (at Second Avenue) westward to Park Avenue. Option 1 and Option 2 would have slightly different alignments in this portion of the route, and therefore would require different subsurface easements.

In addition, Option 2 would require acquisition of the below-grade area under GCT in which the new lower level terminal would be created.

POTENTIAL DISPLACEMENT AT LONG ISLAND YARD SITES

None of the seven illustrative Long Island storage yard sites analyzed in this FEIS is owned by MTA LIRR, so each would require permanent acquisition of property if selected for yard development. At the Cerro Wire and Riverhead sites, a new yard would be in direct conflict with other development proposals for the sites. At the Babylon and Yaphank East and West sites, new yards would displace active uses.

Cerro Wire Site

A yard at this site would be in direct conflict with the development proposal currently under consideration by the Town of Oyster Bay for a regional shopping mall at this site.

Babylon Site: North Side of Union Boulevard West of Higbie Lane

To construct a new yard at Babylon, private property containing businesses and residential structures would have to be acquired, and all land uses displaced. These properties begin approximately 250 feet west of Higbie Lane and extend to NYS Route 231, approximately 2,200 feet west of Higbie Lane. These properties include six businesses (201, 215, 217, 235, 263, and 269 Union Boulevard) and three residential structures containing a total of five residences (267, 267A, 273, 275, and 279 Union Boulevard), as well as a few vacant properties in between and at the areas western edge, near Route 231. Properties are as follows (see also Table 5-14 for a list of the occupied commercial properties and numbers of employees affected):

- Three properties on Union Boulevard close to Route 231 are currently vacant and occupied by a boarded up building and overgrown areas.
- 201 Union Boulevard is an approximately 45,000-square-foot fuel tank complex run by Nassau Blue Flame Fuel Oil Dispensing. Behind the large fuel storage tanks is a cellular communications relay tower and building.

Table 5-14

**Potential Property Acquisitions Required and Potentially
Displaced Businesses: Long Island Storage Yards**

Address	Business Type	Estimated Occupied Sq. Ft. of Affected Businesses	Estimated Number of Employees*
Babylon Site			
269 Union Boulevard	Plumbing and heating oil supply services	1,000	1
263 Union Boulevard	G.S. Inc. "Alpha Study Center"	4,000	10
235 Union Boulevard	Karate center	2,500	1
217 Union Boulevard	General automotive repair service	2,500	6
215 Union Boulevard	Reglazing and spraying specialists	1,500	10
201 Union Boulevard	Fuel oil services	45,000	1
Yaphank East Site			
Property on Park Street	Nursery/tree farm	100,000	<20**
Notes:			
* Employment estimates by Claritas, Inc., except where noted otherwise.			
** Employment estimate by AKRF, Inc.			

- 215 Union Boulevard is a small, approximately 1,500-square-foot building housing Porcelain Industries, a reglazing and spraying specialty business with a small accessory office attached. The area behind and beside Porcelain Industries is used for parking and storage of school buses.
- 217 Union Boulevard is occupied by Higbie Service Center, an auto repair shop. This 1-story, two-bay garage is approximately 2,500 square feet and has a small parking area in front.
- 235 Union Boulevard is an approximately 1,800 square foot, 1-story building occupied by L.I. Ninjutsu Hanata Dojo, a karate center.
- 263 Union Boulevard is a 1-story industrial building occupied by G.S. Inc. This building appears to be at least partially vacant.
- 265 Union Boulevard is a small vacant store.
- 267 and 267A Union Boulevard make-up one small, approximately 1,500-square-foot, 1-story residential structure with two dwelling units.
- 269 Union Boulevard is the site of the Sav-Way Fuel Oil, a plumbing and heating oil supply business located in a small, 2-story structure. This site houses Sav-Way's office and fuel oil truck storage area.
- 273 and 275 Union Boulevard are two dwelling units in a 2-story, approximately 2,000-square-foot house.
- 279 Union Boulevard is the site of a 2-story, single-family home of approximately 1,000 square feet.

Yaphank East Site

To construct a new yard at Yaphank East, property would have to be acquired from Suffolk County (currently occupied by salt and sand stockpiles used by the Department of Public Works). Those stockpiles would be relocated elsewhere. The new yard would also require permanent acquisition of part or all of a property containing one business, a privately owned tree farm.

Yaphank West Site

Development of a rail yard on the Yaphank West site would require permanent acquisition of property owned by Suffolk County and used for agriculture.

Riverhead Site

Use of this site for a rail yard would require acquisition of private property that may be in agricultural use (*and for which alternative development plans are proposed*).

F. MITIGATION MEASURES

The project, overall, results in economic benefits. It would, however, require acquisition of private property. The rights of owners and tenants of real property acquired to implement the proposed project, including permanent easements, are protected under the Uniform Act. *Properties required for the Preferred Alternative would be acquired by MTA LIRR, which would follow the requirements of this law.* The Uniform Act provides for equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs. It also establishes uniform and equitable land acquisition procedures. *Once the project's final design is under way, property identification plans would be developed to identify every parcel affected by the project and to define the need for property acquisitions and/or easements. From property identification plans, preliminary title reports would be obtained to ascertain the owners of record and legal descriptions of the parcels. The parcels would then be certified as needed for the project and the acquisition process initiated.*

The MTA Real Estate Department is responsible for acquiring right-of-way and other real estate interests necessary to complete the project. The Real Estate Department would be assisted by the right-of-way coordinator from the East Side Access Project team. The acquisition process would consist of the following six steps: identification of required real estate once final design information is available; appraisal of required property; acquisition, either through negotiation or eminent domain; settlement or litigation of any claims for additional compensation or property damage; relocation of occupants if necessary; and property management, including demolition of improvements. MTA will adhere to the federal regulations of the Uniform Act, which covers the appraisal and acquisition of real property, relocation services, moving payments, replacement housing payments, and other allowable expense payments.

The site selection and evaluation process to be undertaken for new storage yards on Long Island will include a detailed evaluation of properties required and businesses and/or residents affected. Acquisition of any required properties will be conducted in accordance with all applicable laws and regulations. ❖