

1.0 INTRODUCTION

The City of Jersey City is planning for substantial growth along its western waterfront (Hudson County, New Jersey) with a mix of new residential and commercial uses on former industrial sites. Major projects will include the new development of Bayfront, the new West Campus of New Jersey City University, and proposed improvements to Route 440. The success of this new development depends on new or enhanced transit service that creates a convenient connection between the western waterfront of Jersey City and existing transit services, including the Hudson-Bergen Light Rail (HBLR).

The HBLR Route 440 Extension Alternatives Analysis (the “Proposed Project”) is being undertaken by New Jersey Transit Corporation (“NJ TRANSIT”) and is considering alternatives to improve mobility for existing and future residents of the western waterfront by providing convenient connections between the HBLR West Side Avenue Station and development on both sides of Route 440. NJ TRANSIT plans to apply for federal funds administered by the Federal Transit Administration’s (FTA’s) Major Capital Investments Program for a Locally Preferred Alternative (LPA) for this transit improvement. Consistent with FTA requirements for this program, NJ TRANSIT is conducting an alternatives analysis to identify goals and objectives for the transit enhancement, evaluate potential alternatives, and select an LPA.

1.1 OVERVIEW OF HBLR SYSTEM

HBLR is a 17.5-mile light rail system that operates in Hudson County and serves the cities and townships of Jersey City, Hoboken, Bayonne, Weehawken, Union City, and North Bergen. NJ TRANSIT owns the system and contracts its operation to 21st Century Rail Corporation. HBLR has three routes (see **Figure 1-1**): West Side Avenue (Jersey City) to Tonnelles Avenue (North Bergen); 22nd Street (Bayonne) to Hoboken Terminal; and Tonnelles Avenue to Hoboken Terminal.

HBLR operates seven days a week, including holidays. Trains operate between 4 AM and 2:30 AM on weekdays and from 5 AM to 2:30 AM on weekends and holidays. At certain stations, service begins a bit later and ends a bit earlier. The service between Tonnelles Avenue and Hoboken Terminal operates only on weekdays.

HBLR has a total of 23 stations (see **Table 1-1**). At three stations, Hoboken Terminal, Pavonia/Newport, and Exchange Place, HBLR provides connections to Port Authority Trans Hudson (PATH) trains. HBLR provides connections to NJ TRANSIT commuter rail at Hoboken Terminal (which, in turn, connect to Metro-North commuter rail service in Rockland and Orange Counties in New York), and local buses serve many of the HBLR stations. Five stations, Tonnelles Avenue, Liberty State Park, West Side Avenue, 34th Street, and 22nd Street, have customer parking.

Table 1-1
HBLR Weekday Boardings by Station (October 2010)

Station	Location	Line	Boardings
22nd Street	Bayonne	22nd Street-Hoboken	1,999
34th Street	Bayonne	22nd Street-Hoboken	1,562
45th Street	Bayonne	22nd Street-Hoboken	769
Danforth Avenue	Jersey City	22nd Street-Hoboken	769
Richard Street	Jersey City	22nd Street-Hoboken	555
West Side Avenue	Jersey City	West Side Avenue-Tonnelle Avenue	1,686
MLK Drive	Jersey City	West Side Avenue-Tonnelle Avenue	956
Garfield Avenue	Jersey City	West Side Avenue-Tonnelle Avenue	735
Liberty State Park	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	2,900
Jersey Avenue	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	1,022
Marin Boulevard	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	575
Essex Street	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	1,185
Exchange Place	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	4,634
Harborside Financial Center	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	1,459
Harsimus Cove	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	886
Pavonia/Newport	Jersey City	22nd Street-Hoboken West Side Avenue-Tonnelle Avenue	5,451
Hoboken Terminal	Hoboken	22nd Street-Hoboken Tonnelle Avenue-Hoboken	5,477
2nd Street	Hoboken	West Side Avenue-Tonnelle Avenue Tonnelle Avenue-Hoboken	882
9th Street-Congress Street	Hoboken	West Side Avenue-Tonnelle Avenue Tonnelle Avenue-Hoboken	2,611
Lincoln Harbor	Weehawken	West Side Avenue-Tonnelle Avenue Tonnelle Avenue-Hoboken	743
Port Imperial	Weehawken	West Side Avenue-Tonnelle Avenue Tonnelle Avenue-Hoboken	1,002
Bergenline Avenue	Union City	West Side Avenue-Tonnelle Avenue Tonnelle Avenue-Hoboken	2,862
Tonnelle Avenue	North Bergen	West Side Avenue-Tonnelle Avenue Tonnelle Avenue-Hoboken	1,040
Total Weekday Boardings			41,760
Note: The HBLR 8th Street Station opened in January 2011, and therefore, is not listed in this table.			
Source: NJ TRANSIT (October 2010)			

As shown in **Table 1-1**, HBLR served about 42,000 weekday boardings (84,000 total riders) in October 2010. Pavonia/Newport and Hoboken Terminal are its busiest stations, each with approximately 5,500 weekday boardings. Richard Street and Marin Boulevard are its most lightly used stations, each with fewer than 600 weekday boardings.

NJ TRANSIT recently completed an extension of the HBLR from 22nd Street to 8th Street in Bayonne. This approximately ¾-mile extension includes a new station at 8th Street, which opened in January 2011.

1.2 PROJECT LOCATION

The western waterfront of Jersey City includes several neighborhoods. This Alternatives Analysis focuses on a study area that consists of the portion of the western waterfront bounded by Lincoln Park/Communipaw Avenue to the north, Bergen Avenue to the east, the Bayonne city line/West 63rd Street to the south, and the Hackensack River to the west (see **Figure 1-2**).

1.2.1 EXISTING TRANSIT SERVICES

HBLR serves the study area with the West Side Avenue–Tonnel Avenue Branch. The West Side Avenue Station is located on the east side of West Side Avenue between Claremont Avenue and Kearney Avenue. The station includes a pedestrian bridge across West Side Avenue to its parking lot on the west side of the street.

Several bus routes operate along West Side Avenue near the West Side Avenue Station (see **Figure 1-3**). NJ TRANSIT's No. 80 Bus route begins in downtown Jersey City at Exchange Place and serves the Journal Square Transportation Center before traveling along West Side Avenue to terminate at Gates Avenue and Old Bergen Road. The A&C Bus Company operates four routes through the study area via West Side Avenue as follows:

- A&C Exchange Place, which operates between Danforth Avenue and West Side Avenue and downtown Jersey City near the Exchange Place PATH Station;
- A&C Newport Centre Mall, which operates between Danforth Avenue and West Side Avenue and the Newport Centre Mall, which is near the Pavonia–Newport PATH Station;
- A&C Society Hill, which operates between Society Hill and the Journal Square Transportation Center; and
- A&C Route 440 Shopper, which operates between Hudson Mall and the Pathmark Shopping Center and the Journal Square Transportation Center.

NY Commuter provides a private shuttle van service between Society Hill and the Grove Street and Exchange Place PATH Stations in downtown Jersey City as well as the intersection of Canal and Hudson Streets in New York City.

1.2.2 FUTURE DEVELOPMENT PLANS

The City of Jersey City has adopted two large-scale land use plans that will replace vacant and underused industrial sites in and near the western waterfront with active residential and commercial uses.

- The Bayfront development will occupy the large waterfront parcel between Culver Avenue and Kellogg Street on the west side of Route 440 that today consists of the City of Jersey City Department of Public Works property, the vacant Honeywell site, and small commercial and industrial properties. The site is being remediated of contaminated materials. Once these efforts are completed and the site has been fully cleared, the Bayfront development will be implemented in phases. Once completed, Bayfront will

include a new street grid; commercial, residential, and institutional uses; and parks, plazas, and a riverfront greenway. The approved plan allows for up to 8,100 residential units and 1.8 million square feet of commercial space (office and retail). The plan also identifies a location for an HBLR station. The amount of development permitted at Bayfront depends on whether or not an HBLR station is provided; if there is no HBLR station, less development will be permitted.

- New Jersey City University (NJCU) West Campus will substantially enlarge NJCU, which today is located along John F. Kennedy Boulevard between Carbon Place and Audubon Avenue. The new campus will be developed on a large site south of Carbon Place between Route 440 and West Side Avenue. The NJCU West Campus will establish a street grid through the now-vacant, industrial site and develop approximately 400,000 square feet of academic uses, more than 300 residential units, nearly 250,000 square feet of retail space, and 100,000 square feet of office space.

Both Bayfront and NJCU West Campus are products of a larger study of West Side, known as Bayside. Bayside was a collaborative and comprehensive planning study that identified substantial redevelopment opportunities both east and west of Route 440. It envisioned a new mixed-use community in the industrial areas of the neighborhood with density supportive of transit-oriented, urban living. As exemplified by the adoption of the Bayfront and NJCU West Campus plans, the City of Jersey City is eager to realize the vision of Bayside, and HBLR service is crucial to the realization of this long-term plan.

In addition to these redevelopment plans, the City of Jersey City is conducting the Route 440/Routes 1&9T Multi-use Urban Boulevard and Through Truck Diversion Concept Development Study (hereafter referred to as the “Route 440 Study”) to identify options for reconstruction of Route 440 as an “urban boulevard.” Although the final design has not yet been selected, preliminary concepts call for the expansion of Route 440 to as many as 10 vehicular lanes, with medians and traffic calming measures intended to create a pedestrian-friendly environment. Some of the new roadway lanes would be dedicated for use as bus lanes (potentially including bus rapid transit), local traffic lanes, and dedicated bicycle lanes. Overall, the preliminary plan calls for a 232-foot-wide right-of-way for Route 440.

1.2.3 TRAVEL MARKET

According to 2000 U.S. Census data, more than 15,200 people live in the study area, and more than 9,400 employees work in the area. As shown in **Table 1-2**, the Census showed that residents of the study area predominantly used private vehicles to reach their jobs, but over 26 percent traveled by transit. For employees traveling to jobs in the study area, auto was also the predominant mode of travel with transit comprising only 13 percent of trips.¹

The majority (53 percent) of housing units in the study area are renter-occupied. The 2000 census data indicated that 15 percent of renters in the study area do not own a vehicle and likely rely on transit for their daily travel. Residents of owner-occupied units in the study area

¹ U.S. Bureau of the Census, Census Transportation Planning Package, 2000.

predominantly owned one or even multiple vehicles, and, therefore, are less likely to depend on transit as their only means of transportation.¹

**Table 1-2
Journey to Work and Reverse Journey to Work Data for the Study Area**

Mode of Travel to Work	Residents of the Study Area		Workers within the Study Area	
	Number	Percent	Number	Percent
Auto	10,265	67.2%	7,164	76.5%
Taxi	158	1.0%	55	0.6%
Transit	4,043	26.5%	1,233	13.2%
Walk	813	5.3%	909	9.7%
Total	15,279	100.0%	9361	100.0%

Source: U.S. Bureau of the Census, *2000 Census Transportation Planning Package Parts 1 and 2*.

It should be noted that the 2000 census data predates the opening of HBLR’s West Side Avenue Station, which occurred in April 2000. In 2005, NJ TRANSIT conducted surveys at the West Side Avenue Station. Twenty-three (23) percent of the customers surveyed made trips by automobile prior to the opening of the West Side Avenue Station, but at the time of the survey, these residents and workers of the study area used transit for their commute.

Personal interviews undertaken in 2008 for the Jersey City 2050 Mobility Survey also support the conclusion that transit ridership is likely higher in the study area than was predicted by the 2000 Census. The survey found that, for specific market segments, the transit share is as follows:

- People who work in Jersey City and live elsewhere: 62 percent transit; 38 percent non-transit;
- People who live in Jersey City and work elsewhere or do not work at all: 76 percent transit and 24 percent non-transit;
- People who live and work in Jersey City: 35 percent transit and 65 percent non-transit; and
- Overall: 58 percent transit; 42 percent non-transit.²

Therefore, it is expected that the overall percentage of auto commuters in the study area is now lower than shown in **Table 1-2**.

1.2.4 ENVIRONMENTAL SETTING

1.2.4.1 LAND USE

The study area is mostly comprised of a grid pattern of streets. John F. Kennedy Boulevard/Bergen Avenue, West Side Avenue, and Route 440 are the primary north-south routes, and Communipaw Avenue, Culver Avenue, and Danforth Avenue are the primary east-west streets. The street grid is bisected by the former right-of-way for the Central Railroad of

¹ Ibid.

² City of Jersey City, Jersey City Master Plan: Circulation Element, July 2009.

New Jersey (CNJ), which extends in an east-westerly direction through the study area to the Hackensack River. The HBLR West Side Branch uses the former CNJ right-of-way between West Side Avenue and Liberty State Park, which is located east of the study area.

Much of the study area is residential, with single- and multi-family dwellings occupying many of the blocks east of West Side Avenue as well as some of the blocks west of West Side Avenue, particularly north of Clarke Avenue. The NJCU campus occupies several blocks in the western waterfront neighborhood, including the large block bounded by Culver Avenue, John F. Kennedy Boulevard, Audubon Avenue, and College Street; and the College Towers Apartments, a 320-unit cooperative apartment complex, occupies the blocks between the NJCU campus and West Side Avenue. South of Clarke Avenue and west of West Side Avenue, transportation, commercial, and industrial uses occupy large parcels, including used car lots, truck storage, parking lots, and warehouses. Residential development and campus buildings for NJCU have recently been constructed in this area. Communipaw Avenue and West Side Avenue are local commercial corridors within the study area.

Route 440 is a wide (four to six lanes with a center median) and heavily travelled roadway that is a major north-south arterial through the study area. Route 440 is lined with automotive uses, active and vacant industrial and municipal uses, and big-box retail establishments, such as Home Depot in the southern part of the study area and Hudson Mall in the northern part. At the south end of the study area, west of Route 440, is the gated residential complex of Society Hill and Droyers Point along the Hackensack River. Farther south and to the east of Route 440 is the Country Village residential development.

1.2.4.2 SOCIAL CONDITIONS

The study area and surrounding area is generally characterized by low-income and minority populations (based on data available in the 2000 U.S. Census of Population and Housing). The U.S. Council on Environmental Quality (CEQ) and the U.S. Department of Transportation (USDOT) provide guidance to determine the presence or absence of “environmental justice” communities in areas where federal actions are being studied. The guidance defines minority and low-income communities (collectively, environmental justice communities) as follows:

- **Minority communities:** The USDOT’s Final Order on Environmental Justice, April 1997 (Federal Register Vol. 62, No. 72, page 18377), defines minorities to include American Indians or Alaskan Natives, Asian and Pacific Islanders, African Americans or Black persons, and Hispanic persons. This environmental justice analysis also considers minority populations to include persons who identified themselves as being either “some other race” or “two or more races” in Census 2000. The USDOT does not identify a threshold for determining whether an area’s population is considered minority. CEQ guidance (Environmental Justice Guidance under the National Environmental Policy Act, December 1997) defines minorities the same way, and indicates that minority populations should be identified where either: the minority population of the affected area exceeds 50 percent; or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. For this analysis, Jersey City was used as the project’s primary statistical reference area. Minorities represent 76.4 percent of the City’s population. As this

exceeds the CEQ's minimum threshold, the lower 50 percent number was used to define environmental justice communities in the study area.

- Low-income communities: The USDOT guidance defines low-income population to be people whose median household income is at or below the Department of Health and Human Services poverty guidelines. No threshold is set for use in identifying low-income areas. CEQ guidance calls for identification of low-income populations using the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty. For this study, the percent of individuals in households with incomes below poverty level in each census block group was used to identify low-income communities. To determine whether a block group is a low-income area, the percentage of its population below the poverty level was compared to the average for Jersey City as a whole. The average low-income population for block groups in Jersey City is 18.6 percent. Therefore, any block group in the study area with 18.6 percent or more of its residents living below poverty level was considered a low-income area for this analysis.

As shown in **Table 1-3** and **Figure 1-4**, the study area contains 21 Census block groups. Of these 21 block groups:

- 17 block groups are considered minority communities as their minority population is greater than 50 percent of the total;
- 2 block groups are considered minority and low-income communities, with greater than 50 percent minority population and with low-income population at or greater than 18.6 percent of their total; and
- 2 block groups are neither low-income nor minority communities.

1.2.4.3 NATURAL RESOURCES

The study area contains limited natural features. The Hackensack River and a small area of its shoreline are mapped wetlands, and because of its close proximity to the river, portions of the study area fall within the 100-year and 500-year flood elevation. This portion of the study area also falls within the jurisdiction of the New Jersey Department of Environmental Protection's coastal zone program. However, there are no designated Critical Environmental Areas, and field reconnaissance identified no significant habitats. The ecological characteristics of the study area are typical of an urban environment.

1.3 PROBLEM IDENTIFICATION

Plans by the City of Jersey City, NJCU, and other public and private entities will transform the western waterfront in the future. These development projects will complement the residential character of the area by transforming underused or vacant sites to active residential, commercial, and institutional uses. However, the success and pace of this development is dependent on new or enhanced transit service that establishes a convenient connection between the Hackensack River waterfront and the transit service available on the HBLR system in the interior of the study area.

**Table 1-3
Study Area Population Characteristics**

Census Tract / Block Group	2000 Total Population	Race and Ethnicity (2000)*										Total Minority (%)	Individuals Below Poverty Level (2000) (%)**
		White	%	Black	%	Asian	%	Other	%	Hispanic	%		
CT 40 BG 2	2,931	543	18.5	494	16.9	1,014	34.6	233	7.9	647	22.1	81.5	15.0
CT 40 BG 3	725	206	28.4	73	10.1	292	40.3	39	5.4	115	15.9	71.6	9.1
CT 40 BG 4	959	211	22.0	143	14.9	314	32.7	93	9.7	198	20.6	78.0	13.9
CT 42 BG 1	2,591	311	12.0	902	34.8	402	15.5	192	7.4	784	30.3	88.0	18.0
CT 48 BG 1	1,254	355	28.3	193	15.4	441	35.2	82	6.5	183	14.6	71.7	10.6
CT 48 BG 2	2,094	499	23.8	381	18.2	624	29.8	129	6.2	461	22.0	76.2	10.8
CT 48 BG 3	278	54	19.4	147	52.9	8	2.9	18	6.5	51	18.3	80.6	15.7
CT 49 BG 1	1,033	203	19.7	221	21.4	250	24.2	104	10.1	255	24.7	80.3	23.0
CT 49 BG 2	763	33	4.3	514	67.4	39	5.1	32	4.2	145	19.0	95.7	9.7
CT 49 BG 4	766	85	11.1	331	43.2	151	19.7	54	7.0	145	18.9	88.9	12.8
CT 52 BG 2	1,133	649	57.3	132	11.7	218	19.2	23	2.0	111	9.8	42.7	6.7
CT 54 BG 1	2,171	704	32.4	603	27.8	463	21.3	73	3.4	328	15.1	67.6	3.3
CT 54 BG 2	2,473	479	19.4	464	18.8	1,026	41.5	128	5.2	376	15.2	80.6	2.2
CT 56 BG 2	1,142	227	19.9	215	18.8	306	26.8	82	7.2	312	27.3	80.1	10.8
CT 56 BG 3	1,383	338	24.4	237	17.1	434	31.4	105	7.6	269	19.5	75.6	15.2
CT 59 BG 1	1,181	380	32.2	187	15.8	202	17.1	94	8.0	318	26.9	67.8	8.0
CT 59 BG 2	1,631	558	34.2	179	11.0	536	32.9	99	6.1	259	15.9	65.8	4.8
CT 59 BG 3	1,707	621	36.4	234	13.7	408	23.9	166	9.7	278	16.3	63.6	8.3
CT 59 BG 4	2,239	745	33.3	194	8.7	837	37.4	120	5.4	343	15.3	66.7	6.0
CT 61 BG 4	1,564	549	35.1	163	10.4	485	31.0	62	4.0	305	19.5	64.9	18.6
CT 61 BG 5	1,799	966	53.7	50	2.8	540	30.0	43	2.4	200	11.1	46.3	1.9
Study Area	31,817	8,716	27.4	6,057	19.0	8,990	28.3	1,971	6.2	6,083	19.1	72.6	10.3
Jersey City	240,055	56,736	23.6	64,389	26.8	38,623	16.1	12,355	5.1	67,952	28.3	76.4	18.6
Hudson County	608,975	215,216	35.3	74,040	12.2	56,370	9.3	21,226	3.5	242,123	39.8	64.7	15.5

Notes: Bold values reflect areas identified as minority, low-income, or both.
 * The racial and ethnic categories provided are further defined as: White (White alone, not Hispanic or Latino); Black (Black or African American alone, not Hispanic or Latino); Asian (Asian alone, not Hispanic or Latino); Other (American Indian and Alaska Native alone, not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone, not Hispanic or Latino; Some other race alone, not Hispanic or Latino; Two or more races, not Hispanic or Latino); Hispanic (Hispanic or Latino; Persons of Hispanic origin may be of any race).
 ** Percent of individuals with incomes below established poverty level. The U.S. Census Bureau establishes the income threshold that defines poverty level.

Sources: U.S. Census Bureau, Census 2000.

1.3.1 EXISTING TRANSIT SERVICE

A comprehensive Jersey City bus study was prepared in response to community concerns that “portions of the Jersey City local bus network were collapsing as private carriers cut back or eliminated service in its entirety.” The study, which was prepared by NJ TRANSIT’s Bus Service Planning division in coordination with the City of Jersey City, Hudson County, and the North Jersey Transportation Planning Authority, cites several issues with existing bus service in the study area and suggests near-term fixes to alleviate these problems.⁴

- The bus study found that routes operating along West Side Avenue are overcrowded with unreliable headways. Crowding is particularly problematic during peak periods when both NJCU students and commuters use the service. The study suggests that better coordination of headways for the A&C Society Hill route and NJ TRANSIT’s No. 80 route could alleviate conditions in off-peak hours, but crowding will remain a problem during peak periods.
- The bus study found that existing routes will not be adequate to serve planned future development along Route 440 south of Hudson Mall, including Bayfront and the NCJU West Campus. The study suggests that existing bus routes will need to be modified or new service be implemented to serve this development.
- The bus study found that existing service is very limited in the northern portion of the study area in the vicinity of Communipaw Avenue. It suggests that the A&C Route 440 Shopper service be modified to provide alternate weekday service between western Sip Avenue and Broadway to enhance transit access for underserved communities.

The bus study recommendations are intended to enhance service in the study area to meet existing demand, but a comprehensive transit solution is needed to ensure the long-term success of the area’s redevelopment.

1.3.2 MOBILITY

The North Jersey Transportation Planning Authority projects that population in the western waterfront and adjoining neighborhoods will increase by approximately 42 percent by 2035. The areas that will realize the most intensive growth are located west of West Side Avenue, where population is projected to grow by more than 300 percent, or by 20,000 new residents.⁵ However, as stated in the Jersey City Master Plan Circulation Element, the capacity of Route 440, Communipaw Avenue, Routes 1&9 Truck, and local streets will not be sufficient to meet anticipated demand.⁶ The plan calls for roadway improvements, including new streets and enhancements to existing roadways, to alleviate congestion, but notes that a decrease in vehicular volumes is vital to the long-term sustainability and success of the area. In surveys conducted as part of the Jersey City Master Plan, many stakeholders agreed that mass transit in the City had several shortfalls, and that improvements are needed to provide better neighborhood connectivity within Jersey City, and enhanced service to the region.

⁴ NJ TRANSIT, *Jersey City Bus Study*, November 2009.

⁵ North Jersey Transportation Planning Authority 2010-2035 Interim Projections. Data provided to AKRF in December 2009.

⁶ City of Jersey City, *Jersey City Master Plan: Circulation Element*, July 2009.

1.3.3 FUTURE DEVELOPMENT

A key element to successful development of Bayfront is an extension of HBLR to west of Route 440. The Plan notes that “the residential, commercial and retail densities contemplated in this plan are contingent on achieving the light rail extension.”⁷ Across Route 440 from Bayfront, NJCU West Campus will also introduce density and population that could be well supported by transit. The proximity of these developments will create a critical mass that could be served by one or multiple new transit services.

Using the same assumptions about transit ridership as identified in the 2000 Census statistics described above, these projects will result in approximately 5,500 new transit riders in the study area.⁸ However, as noted above, transit ridership is likely now higher than was recorded in the 2000 Census. Moreover, the new development at Bayfront is planned to be transit-oriented, which may result in a greater proportion of transit riders than is currently found in the study area.

In addition to the existing and future residents and workers of the western waterfront, the study area includes NJCU. The NJCU campus attracts more than 10,000 undergraduate and graduate students to the study area. While the campus provides some residence halls, most university students commute to classes from other parts of Jersey City, Hudson County, and surrounding areas. Transit is a predominant mode of travel for these students.

1.3.4 PEDESTRIAN SAFETY

Route 440 is a major arterial roadway through the study area and serves high volumes of both car and truck traffic. In its current form, Route 440 is not a pedestrian-friendly environment. It is wide (up to six traffic lanes with a center median), and traffic signals are spaced far apart to support high-speed traffic (see **Figure 1-5**). Sidewalks are absent along much of the roadway. Crosswalks are available at some intersections, but traffic signals do not provide ample time for pedestrians to fully cross Route 440. Furthermore, high volumes of vehicles turn onto and off of Route 440, which endangers pedestrians crossing the street.

As a wide, high-volume roadway, Route 440 acts as a physical and psychological barrier between the residential communities to its east and the existing and proposed uses to its west. As new residential and commercial development occurs along the Hackensack River, it will be necessary to provide a safe and convenient connection for new residents and workers to reach the existing transit infrastructure, including HBLR service east of Route 440.

In accordance with the recommendations articulated in the Bayside planning study, Bayfront Redevelopment Plan, and Jersey City Master Plan Circulation Element, the City of Jersey City has begun the Route 440 Study, which is exploring options to calm traffic and improve pedestrian flow along and across Route 440. The purpose of this study is to identify alternatives that allow creation of a multi-use “urban boulevard” that will replace the existing Route 440/Routes 1&9 Truck. The redesigned Route 440 is also intended to integrate transit

⁷ City of Jersey City, *Bayfront I Redevelopment Plan*, February 2008.

⁸ Based on 4 workers per 1,000 square feet of commercial space and the 2000 Census average household size of 2.89 persons per household for the study area.

improvements, such as an extension of the HBLR system from its current terminus at the West Side Avenue Station.

1.4 PURPOSE AND NEED

The transformation of the western waterfront is dependent upon improved transit access for its existing and future residents and employees. The uses and densities that are anticipated will not be fully served by the existing vehicular infrastructure, and the vision for the area anticipates transit options to serve its population. The introduction of HBLR service to West Side Avenue has already resulted in new residential and commercial projects, but the success and pace of continued development requires expanded and enhanced transit options to serve the western waterfront. Therefore, the purpose and need for the project is to provide direct transit access between the western waterfront and the existing HBLR system at West Side Avenue Station.

1.5 GOALS AND OBJECTIVES

Based on the problems identified above, NJ TRANSIT has developed goals and objectives for the Proposed Project. The Proposed Project has three goals: 1) improve transit service and access to support existing and future development in the West Side community; 2) provide transit improvements that minimize adverse effects on HBLR operations; and 3) minimize adverse impacts on the built and natural environment. These goals, and their supporting objectives, are shown in **Table 1-4**.

**Table 1-4
Goals and Objectives**

Goal	Objective
Support existing and proposed development in the West Side community	Improve access to existing destinations in the study area
	Increase ridership on HBLR system
	Support the Bayfront Redevelopment Plan
	Support the New Jersey City University Master Plan
	Support the planned redevelopment of Route 440
Minimize effects on existing and proposed HBLR operations	Provide improved transit access continuing from the existing West Side Avenue terminal
	Avoid substantial compromises to existing HBLR timetables
	Minimize capital and operating and maintenance costs
	Implement within a reasonable timeframe
	Accommodate other planned systemwide HBLR capital improvements
Minimize adverse effects on the built and natural environment	Avoid property acquisition to the maximum extent feasible
	Avoid, minimize, or mitigate adverse impacts on historic resources
	Minimize encroachment on view corridors
	Maintain access to existing and future residences and businesses in the study area
	Reduce vehicular congestion, emissions, and noise
	Avoid impacts to Route 440 operations to the extent feasible
	Minimize construction impacts to the extent feasible
Avoid impacts on parklands, open space, natural features, and coastal waters	