The Hudson-Bergen Light Rail (HBLR) Route 440 Extension (referred to throughout this document as the "Proposed Project" or "Preferred Alternative") is being undertaken by NJ TRANSIT to improve transit service for existing and future residents of the western waterfront area of Jersey City, Hudson County, New Jersey (see **Figure S-1**). The Proposed Project would consist of a new, two-track, approximately 3,700-foot extension of the HBLR from West Side Avenue Station to a new Bayfront Station, which would be located west of Route 440 at the northern boundary of the new Bayfront development (see **Figure S-2**).

NJ TRANSIT is conducting the HBLR Route 440 Extension Project in accordance with the Federal Transit Administration's (FTA) procedures for new transit projects. As part of those procedures, FTA must make a determination about the Proposed Project's environmental impacts in accordance with the National Environmental Policy Act of 1969 (NEPA) before it can approve development of the Proposed Project. The analysis in the Environmental Assessment (EA) concludes that the Proposed Project would not result in significant impacts on the built and natural environment.

PROJECT PURPOSE AND NEED

The purpose of the Proposed Project is to improve mobility for existing and future residents of the western waterfront by providing direct transit access for the new neighborhood planned on the west side of Route 440. The project is needed to support the long-term development of Jersey City's western waterfront by improving transit access, particularly to the waterfront area west of Route 440.

Based on these needs, as well as its own operational requirements, NJ TRANSIT has developed goals and objectives for the Proposed Project (listed in **Table S-1**). The Proposed Project has three goals: 1) improve transit service and access to support existing and future development on the western waterfront; 2) provide transit improvements that minimize adverse effects on HBLR operations; and 3) minimize adverse impacts on the built and natural environment.

Table S-1
Goals and Objectives

Goal	Objective
Support existing and future development on the western waterfront	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 adverse 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 system-wide HBLR capital improvements
	Avoid property acquisition to the maximum extent feasible
Minimize adverse impacts on the built and natural environment	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

PROJECT ALTERNATIVES

As described in *Hudson-Bergen Light Rail Route 440 Extension Final Alternatives Analysis Report* (February 2011)¹ NJ TRANSIT initially identified 10 "long list" alternatives for an extension of HBLR service from West Side Avenue Station. This long list of alternatives was screened against the project's goals and objectives and four alternatives were advanced to be considered in more detail as a "short list" of alternatives. A consideration of the potential benefits and impacts of the short list of alternatives on the environment, preliminary design information, preliminary cost estimates, and potential ridership information were used to recommend a Preferred Alternative which is the subject of this EA.

PREFERRED ALTERNATIVE

The Preferred Alternative consists of a two-track, approximately 3,700-foot extension of the HBLR from West Side Avenue Station to a new Bayfront Station, which would be located west of Route 440 at the northern boundary of the new Bayfront development (see **Figure S-2**).

The Preferred Alternative would include the following components:

¹ The Hudson-Bergen Light Rail Route 440 Extension Final Alternatives Analysis Report is available on the project website at http://hblr440.com/document-library-2/final-alternatives-analysis/

- A new viaduct extending from the West Side Avenue Station platform across West Side Avenue, through the existing station parking lot, across Mallory Avenue, through the next block, and across Route 440 to the Bayfront site;
- Modifications to the existing West Side Avenue Station and its parking lot to accommodate the new viaduct; and
- A new terminal station, the Bayfront Station, which would be integrated into the new Bayfront development being planned west of Route 440.

PROPERTY INTERESTS

An interest in three properties will be required for the proposed new right-of-way of the Preferred Alternative.

- An area extending southwesterly through the Fry's Metals/Cookson Electronics/Alpha Metals property east of Route 440 (referred to throughout this EA as the Cookson Electronics site), located in a portion of the study area bounded by Mallory Avenue, Culver Avenue, Route 440, and Claremont Avenue. This property is privately owned.
- A small area within the southeast corner of parking lot of Hudson Nissan, west of Route 440. This property is privately owned.
- An area extending westerly across the northern boundary of the Bayfront development. This property is currently owned partly by the City of Jersey City and partly by Honeywell Inc., but is all designated for redevelopment as part of the Bayfront project.

The right-of-way would also extend across the West Side Avenue Station parking lot, which is already owned by NJ TRANSIT, and over public streets.

OPERATIONS

With the Preferred Alternative, all HBLR West Side Avenue branch service would operate to the new terminus at Bayfront Station. Trains would turn around at Bayfront Station, rather than at West Side Avenue Station. No changes to the schedule or other operations of the HBLR West Side Avenue Branch are proposed as part of the Preferred Alternative, other than small changes to peak-hour headways to accommodate the longer route.

COST

Based on the conceptual design completed to date, the estimated cost to construct the Preferred Alternative, including final design, capital costs, property interests, environmental remediation, and contingencies, is \$213.9 million in 2017 dollars (the estimated mid-point year of construction). The estimated annual operating and maintenance cost of the extension is \$1.8 to \$2.0 million in 2019 dollars (the estimated opening year).

COMPLETION YEAR

The completion of the Preferred Alternative's alignment and the new Bayfront station would be timed to coincide with the opening of the third phase of the Bayfront development, currently anticipated to be 2019, although this is subject to change.

NO ACTION ALTERNATIVE

Under the No Action Alternative the HBLR Route 440 Extension would not be constructed. Any planned and/or funded improvements, repairs, or maintenance on the existing HBLR system would still take place under the No Action Alternative.

ENVIRONMENTAL CONSIDERATIONS

The EA evaluated the potential social, economic, and environmental consequences of the Preferred Alternative consistent with the requirements of NEPA, FTA rules, regulations, and guidance documents, and other related federal rules and regulations. The year 2035 was used to evaluate future conditions in the study area for consistency with the North Jersey Transportation Planning Authority (NJTPA) planning horizon. As required by NEPA, the No Action Alternative served as a benchmark against which to compare the effects of the Preferred Alternative. The analysis in this EA concludes that the Preferred Alternative would not result in adverse impacts on the built and natural environment. **Table S-2** below summarizes the results of the EA by technical area.

SECTION 106 COORDINATION

The Proposed Project is subject to Section 106 of the National Historic Preservation Act (NHPA; 36 CFR Part 800), which requires federal agencies to take into account the effects of their undertakings on historic properties that are listed in or meet the eligibility criteria for listing in the National Register of Historic Places and afford the Advisory Council on Historic Preservation (ACHP) and the New Jersey Historic Preservation Office (HPO) a reasonable opportunity to comment. Section 106 also requires that agency officials work with the HPO to identify parties to participate in the Section 106 process ("Consulting Parties"). Consulting Parties may include local governments, federally recognized Native American tribes and individuals and organizations with a demonstrated interest in a project.

FTA, as lead federal agency for the Proposed Project, extended invitations to local preservation groups, local planning agencies, property owners, and Native American tribes to participate as Section 106 Consulting Parties. To date, no Consulting Parties have expressed a specific interest in participating in the Section 106 Consultation process for the Proposed Project. As discussed in this EA, a Programmatic Agreement (PA) has been executed, which commits NJ TRANSIT, in coordination with FTA, to carry out measures to mitigate adverse effects on historic properties and to consult with the HPO during the construction of the Proposed Project.

ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994), requires federal agencies to involve the public on project issues related to human health and the environment. The U.S. Department of Transportation's guidance indicates that project sponsors should elicit public involvement opportunities, including soliciting input from affected minority and low-income populations in considering project alternatives. As described in Chapter 4, "Environmental Justice," the entire study area can be considered an environmental justice community.

Building on the public outreach efforts already conducted for the Proposed Project, FTA and NJ TRANSIT have engaged and will continue to engage residents of the study area through the

project website and e-mail communications. NJ TRANSIT will also continue to issue public notices in Spanish and provide translation services for these communities, as necessary, to engage their participation in public involvement activities.

CONTACT INFORMATION

For further information regarding this study, please visit the project website at www.hblr440.com or you may contact:

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Table S-2 Summary of Environmental Considerations

	Summary of Environmental Considerations
Technical Discipline	Potential Impacts/Mitigation Commitments
Social Conditions	
Land Use	No adverse impacts . The Preferred Alternative would be consistent with and supportive of the study area's current and anticipated land use, which includes development of a large, mixed-use residential and commercial development known as Bayfront.
Zoning	No adverse impacts. The Preferred Alternative would be consistent with and supportive of the study area's redevelopment plans.
Public Policy	No adverse impacts. The Preferred Alternative would be consistent with the study area's relevant public policies.
Displacement and Relocation	No adverse impacts. The Preferred Alternative would require a full or partial interest in three private properties; however no active businesses would be displaced. A portion of the Project's alignment would also extend across two publicly owned properties; however, no relocations would be required.
Community Facilities and Services	No adverse impacts. The Preferred Alternative would not displace any community facilities or alter access to them. Since the Preferred Alternative would not directly introduce a new population to the study area, it would also not overburden the provision of community services.
Parklands and Open Space	No adverse impacts. The Preferred Alternative would improve access to new recreational resources planned as part of the Bayfront development.
Visual Resources	No adverse impacts. The new HBLR viaduct would be similar in appearance to the HBLR structures throughout other neighborhoods of Jersey City as well as neighboring Bayonne. With its relatively low profile and the setback from the nearest residential uses, the new structure would not block notable views from existing residences or block important views from public places, or any landmark structures or distinct buildings.
Population and Employment	No adverse impacts. The Preferred Alternative would not displace any residents or businesses and would not result in a loss of employment in the study area. The Preferred Alternative would support Jersey City's residential, commercial, and institutional development goals by improving transit access for the residents and employees of the study area.
Historic Resources	
Archaeological Resources	No adverse impacts, with conditions. The Phase 1A archaeological resources assessment conducted for the Preferred Alternative concluded that the project alignment has a moderate to high likelihood to contain buried prehistoric archaeological resources and a high likelihood to contain buried historic archaeological resources. If these buried resources are present within the project alignment, the construction of the project would disturb and adversely affect those resources. A Programmatic Agreement has been executed among the HPO, FTA, and NJTRANSIT setting forth the measures to be taken to address archaeological issues, which will include evaluation of borings, potential subsurface investigations, and monitoring during construction.
Architectural Resources	No adverse impacts, with conditions. The eastern terminus of the project alignment (at West Side Avenue HBLR station) is adjacent to the former Candy Factory Building, which is eligible for listing on the National Register of Historic Places. Preliminary design of the project elements that would be located adjacent to the Candy Factory indicates that the project would not diminish the historic property's architectural significance or character-defining qualities. The HPO will be consulted during final design, in accordance with the terms of the Programmatic Agreement.
Transportation	
Traffic	No adverse impacts. The Preferred Alternative would reduce the number of vehicle trips to the West Side Avenue Station park-and-ride lot in comparison to the No Action condition, since many passengers would instead use the new Bayfront Station. The new Bayfront Station would serve local passengers and would not generate a notable number of vehicle trips. In addition, the pier placement and vertical clearance design of the project's viaduct would ensure that the viaduct would not change traffic operations in the area.

Table S-2 (Cont'd)
Summary of Environmental Considerations

Technical Discipline	Potential Impacts
Parking	No adverse impacts. The Preferred Alternative would require a reconfiguration of the existing HBLR West Side Avenue Station parking lot. The reconfiguration would decrease the number of spaces available in the lot; however, because the lot is currently underutilized and is expected to remain so in the future, no adverse impacts on the availability of parking are expected.
HBLR Operations	No adverse impacts. Existing peak hour headways would be revised to accommodate the extension of service to Bayfront Station. A capacity analysis conducted for the project indicated that the Preferred Alternative would have a peak hour load factor of less than one, indicating that additional capacity would be available and the Preferred Alternative would not adversely affect crowding on HBLR trains.
Pedestrian Circulation and Accessibility	No adverse impacts. The Preferred Alternative would not affect pedestrian circulation in the study area since the Preferred Alternative would be constructed on a viaduct throughout the alignment, with pedestrian access provided underneath the viaduct where appropriate.
Air Quality, Energy, GHG	No adverse impacts. The Preferred Alternative would not result in localized significant adverse impacts on air quality, and instead would result in an overall regional air quality benefit.
Noise and Vibration	No adverse impacts. The Preferred Alternative would not result in noise or vibration impacts at nearby residences.
Infrastructure	No adverse impacts. Sections of existing utilities in the area, identified through record review and existing engineering design efforts, may have to be relocated to accommodate the Preferred Alternative's alignment.
Hazardous Materials	No adverse impacts. The analysis identified 10 sites with potential for contamination that will be further investigated during final design. The additional investigation will consist of collection and analysis of environmental soil and groundwater samples to determine the type and extent of contamination within the construction area. Mitigation measures will be developed and implemented where appropriate.
Natural Resources	
Geology, Topography, Soils	No adverse impacts. Construction depths for the Preferred Alternative's alignment would be limited in depth and extent.
Water Quality	No adverse impacts. The Preferred Alternative would not involve in-water construction activities nor would it result in a net increase in impervious surfaces in the study area that could increase stormwater runoff to the Hackensack River. Stormwater runoff during construction would be controlled through the implementation of an erosion and sediment control plan.
Floodplains	No adverse impacts. The construction of the Preferred Alternative's viaduct would not result in an increase in impervious surfaces in the 100-year or 500-year flood zones and therefore would not increase the potential for flooding in the area. The project alignment would be constructed on a viaduct, at a height above the 100-year and 500-year flood elevations, and therefore would not be subject to flooding.
Wetlands	No adverse impacts. The Preferred Alternative's alignment is outside of any wetlands boundaries and therefore would not result in any significant impacts to wetlands in the study area.
Coastal Zone Consistency	No adverse impacts. The Preferred Alternative's alignment is located outside the coastal zone boundary and therefore a determination of consistency with the Coastal Zone Program is not required.
Vegetation and Wildlife Habitat	No adverse impacts. The Preferred Alternative alignment is located in a fully developed urban area and does not contain any significant natural features.

Table S-2 (Cont'd) Summary of Environmental Considerations

Technical Discipline	Potential Impacts		
Threatened and Endangered Species	No adverse impacts. There are no federally listed or proposed threatened or endangered species are known to occur in the vicinity of the Preferred Alternative.		
Construction			
Historic Resources	A Programmatic Agreement, which includes provisions for design review (to avoid adverse effects to architectural resources) and construction monitoring (to avoid adverse effects to archaeological resources during construction), has been executed and signed by FTA, HPO, and NJ TRANSIT.		
Traffic	Construction on-site would generally occur during normal work hours (e.g., 7AM to 4PM) to minimize effects on residents and workers. Safe pedestrian corridors and traffic re-routings would be established during construction activities that may require temporary street closures or short-term interruptions of traffic flow. NJ TRANSIT would identify the need for road closures and develop a Maintenance and Protection of Traffic (MPT) Plan in coordination with the City of Jersey City. For construction over Route-440, NJTRANSIT would maintain two lanes of traffic flow in each direction during peak hours; any temporary nighttime lane closures would be coordinated with the New Jersey Department of Transportation and Jersey City.		
Air Quality	Erosion and dust control procedures would be followed during construction. Localized increases in mobile source emissions would be minimized by using ultra-low-sulfur diesel fuel for all on-site construction equipment. Delivery trucks and other construction equipment engines would not be permitted to remain idling during unloading or at other inactive times.		
Noise and Vibration	Construction activities would generally take place during normal weekday, daytime hours. Construction specifications would require the contractor to adhere to applicable local, state, and federal noise emission standards, and to use only equipment with appropriate noise controls. Contractors would be required to demonstrate that equipment complies with applicable local, state, and federal noise emissions standards. Coordination with the City of Jersey City will be maintained, and Jersey City will be advised when the greatest noise generating construction activities are scheduled to occur		
Infrastructure	All utility relocations would be undertaken in coordination with the respective utility owners and operators, and all efforts would be made to avoid any disturbances to local residents and businesses. Any utility relocations taking place in areas of high archaeological sensitivity would be subject to the aforementioned archaeological monitoring.		
Hazardous Materials	A Materials Management Plan will be prepared to handle any contaminated materials present in soil or groundwater during construction activities. Work will be conducted under the oversight of a Licensed Site Remediation Professional. A Construction Health and Safety Plan (CHASPs), approved by NJDEP, would be developed for the various construction activities associated with the Preferred Alternative to reduce the potential for worker or public contact with wither soil or groundwater contamination.		
Water Quality	The construction of the Preferred Alternative would include appropriate best management practices (BMPs) to control runoff and the quality of water discharged during construction. The BMPs will be selected through an erosion and sediment control plan—required under the NJDEP Construction Activity Stormwater General Permit—which would be filed with the Hudson-Essex and Passaic Soil Conservation District. Chosen BMPs may include measures such as vegetated swales and/or structured stormwater treatment devices, designed to filter a percentage of suspended solids from collected stormwater before release into the nearest waterbody.		

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