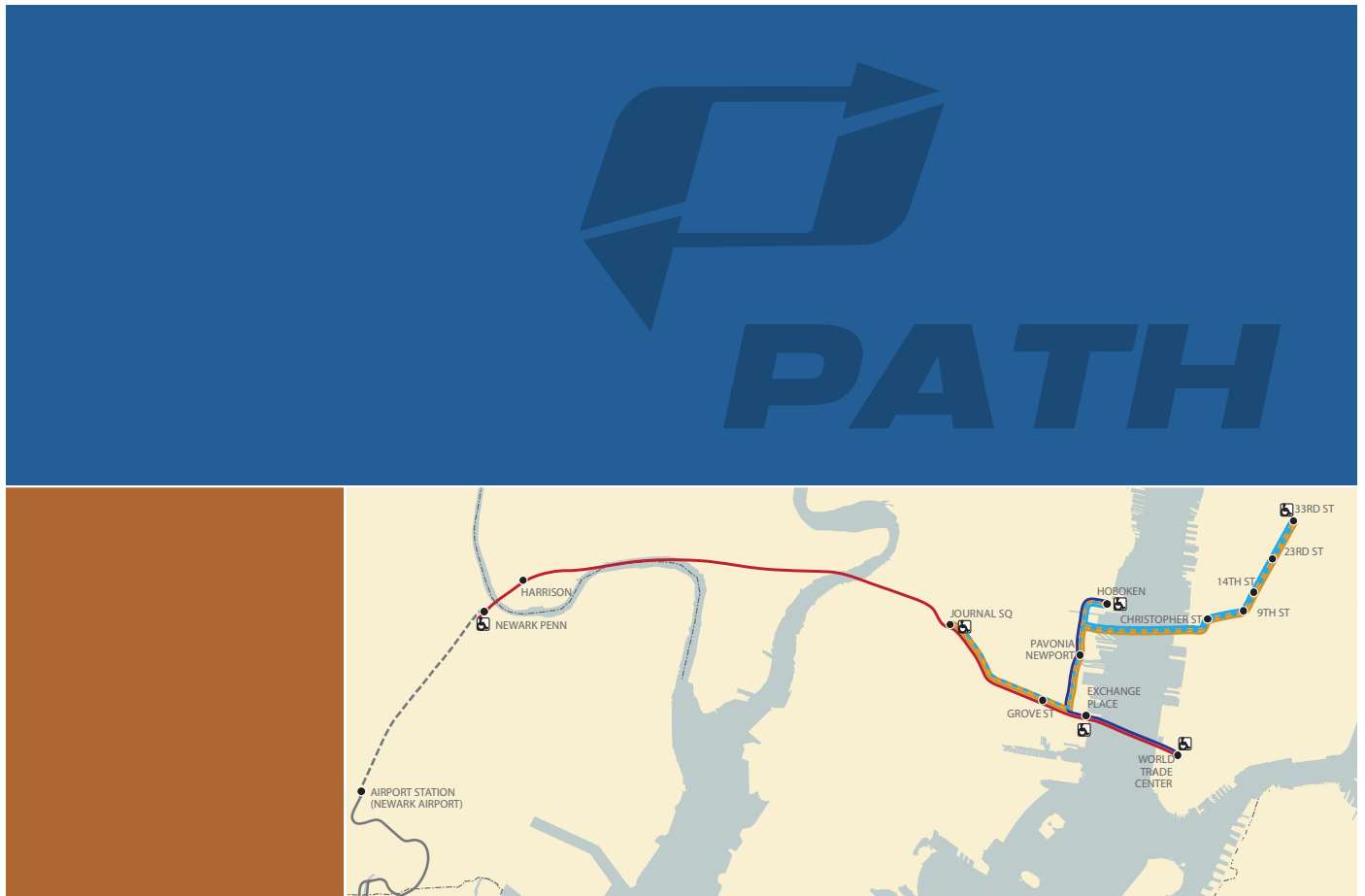


# PATH Extension Project

## Scoping Document



**THE PORT AUTHORITY** OF NY & NJ

NOVEMBER 2017 REV. 1

## TABLE OF CONTENTS

---

<b>Section 1: Introduction .....</b>	<b>1-1</b>
1-1 Project Overview .....	1-1
1-2 Regulatory Framework .....	1-2
1-3 Scoping Meetings and Opportunity for Public Comment .....	1-3
1-4 Organization of this Document.....	1-4
<b>Section 2: Purpose and Need .....</b>	<b>2-1</b>
2-1 Introduction .....	2-1
2-2 Purpose of the Proposed Project.....	2-1
2-3 Overview of the PATH Corridor.....	2-1
2-4 Project Background.....	2-2
2-5 Need for the Project.....	2-5
2-6 Goals and Objectives.....	2-8
<b>Section 3: Project Alternatives.....</b>	<b>3-1</b>
3-1 Introduction .....	3-1
3-2 Alternatives Recommended for Study in the Draft EIS .....	3-1
3-3 Alternatives Considered and Eliminated.....	3-5
<b>Section 4: Environmental Analysis Framework .....</b>	<b>4-1</b>
4-1 Introduction .....	4-1
4-2 Regulatory Requirements.....	4-1
4-3 Organization of the EIS .....	4-2
4-4 Methodology.....	4-3
<b>Section 5: Agency and Public Coordination .....</b>	<b>5-1</b>

- *What is the purpose of the agency and public scoping process and how does it relate to the PATH Extension Project?*
- *Why is the proposed project subject to the National Environmental Policy Act (NEPA) and what are the Act's requirements?*
- *How can interested parties comment on the scope of the proposed project?*

## **1-1 PROJECT OVERVIEW**

The Port Authority of New York and New Jersey (PANYNJ) is preparing an Environmental Assessment (EA) to evaluate the PATH Extension Project ("the proposed project"). The purpose of the proposed project is to improve transit access to Newark, Jersey City, and New York City for New Jersey commuters and increase transit options to Newark Liberty International Airport (EWR) for air travelers and airport employees.

PANYNJ is investigating alternatives to provide new or enhanced transit service to the existing Newark Liberty International Airport (EWR) Rail Link Station (referred to in this document as the Airport Station). The Airport Station currently serves as a transfer point on the Northeast Corridor (NEC) for New Jersey Transit Corporation (NJ TRANSIT), Amtrak, and EWR's AirTrain monorail system (AirTrain Newark). From the Airport Station, Amtrak and NJ TRANSIT provide direct service to Midtown Manhattan (New York Penn Station) and parts of Central and Southern New Jersey (via NJ TRANSIT) and more distant states and cities (via Amtrak). In its current configuration, the Airport Station is not accessible to the surrounding communities, consistent with Federal Aviation Administration (FAA) regulation, and is approximately 2.4 miles from the closest PATH station.

A preliminary alternative has been identified, which will be evaluated as a Build Alternative in the EA. It includes the extension of the Port Authority Trans-Hudson (PATH) Newark-to-World Trade Center (WTC) line from its existing terminus at Newark Penn Station for a distance of 2.4 miles to a new station near the Airport Station. The proposed two-track alignment parallels the NEC on the west side and includes construction of a new multi-modal station, on off-airport property east of Frelinghuysen Avenue near Noble Street, with a center island platform between the two new PATH tracks, a parking facility for commuters, bus and taxi staging areas, pedestrian and bicycle pathways, bike storage facilities, a train storage yard, and a pedestrian connection to the existing Airport Station via a pedestrian overpass. The proposed project would be located entirely within the City of Newark, Essex County, New Jersey, with the new multi-modal station located in the City of Newark's South Ward, near the Dayton neighborhood.

## 1-2 REGULATORY FRAMEWORK

PANYNJ intends to seek federal funding from the FTA to support construction of the proposed project, and other federal regulatory approvals may be required for its implementation. Approvals or actions by federal agencies such as the FTA are subject to environmental review under the National Environmental Policy Act (NEPA). The procedural provisions of NEPA (set forth in 40 CFR §§ 1500-1508) require federal agencies to consider the environmental impacts of their actions, including direct, indirect, and cumulative effects.

FTA's implementing procedures for complying with NEPA are contained in 23 CFR 771. In accordance with 23 CFR § 771.115, NEPA requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. An EA is prepared if it is uncertain whether the action will cause significant impacts. Since the significance of the social, economic, and environmental impacts of the proposed project are not known at this time, an EA will be prepared. An EA is a concise document that briefly provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). If FTA determines that the conclusions of the EA support the issuance of a FONSI, the NEPA process will be complete. The NEPA process is designed to be a heavily public-involved process with multiple opportunities for public review and public input. The steps in the NEPA process for the proposed project will include:

- **Scoping.** Scoping is the first phase of the NEPA process where the public, elected officials, and agency representatives are afforded an opportunity to provide input on a project's purpose and need, goals and objectives, proposed alternatives, environmental analysis framework, and public involvement program. The public can provide written comments by mail or via the project's website during a 37-day scoping comment period or by testifying at public scoping meetings to gain public input into the process before detailed technical analysis begins.
- **EA.** After scoping is complete, the EA will be prepared to assess the environmental consequences of the proposed project consistent with NEPA and other regulations and requirements. FTA will coordinate review of the EA with participating agencies during its preparation. After FTA approves the EA, notices of its availability will be published in local newspapers and on the project's web page to inform the public of the review period and locations where the document can be reviewed.
- **Public Review.** The EA will be made available on-line and at select reviewing locations in conjunction with a minimum 30-day public comment period, during which a public meeting will be held. Comments can be submitted by mail, through the project website, at the public meeting, or verbally at the public hearing.
- **FTA Determination.** FTA will review public and agency comments on the EA and make a determination on whether to issue a FONSI.

Many different federal laws, rules, and regulations govern the environmental review of federally-assisted transportation projects. NEPA establishes an umbrella process for coordinating compliance with these laws through the preparation of a single environmental document (i.e., the EA). Other special purpose statutes and procedures may apply as well, depending on the specific project and its setting (e.g., protective measures for historic properties, wetlands, floodplains, etc.). In accordance



with federal legislation, the NEPA documentation may be adopted or used by any federal agency making an approval associated with proposed project.

### 1-3 SCOPING MEETINGS AND OPPORTUNITY FOR PUBLIC COMMENT

PANYNJ is seeking input and comments related to the scope of the PATH Extension Project, including the following:

- Purpose and Need;
- Alternatives;
- Environmental and community concerns, analyses to be included in the EA, and the study area and methodologies to be used in determining impacts;
- Approach and opportunities for public and agency involvement; and
- Any particular concerns related to the potential impacts of the proposed project.

Project scoping meetings will be held on November 28, 2017 and November 30, 2017 at the locations shown below. Members of the public and agency representatives will have an opportunity to view project materials, attend a brief presentation of the proposed project, make oral comments, or submit written comments.

DATE: November 28, 2017 TIME: 5 PM – 8 PM LOCATION: Weequahic Park Sports Authority Community Center 92 Carmichael Drive Newark, NJ 07114	DATE: November 30, 2017 TIME: 5 PM – 8 PM LOCATION: Hilton Newark Penn Station Garden State Ballroom 1048 Raymond Boulevard Newark, NJ 07102
--	---

Public and agency comments may also be submitted by December 20, 2017 via the:

- Project website comment form found at [www.panynj.gov/PATHextension](http://www.panynj.gov/PATHextension); and
- Email [PATHextension@panynj.gov](mailto:PATHextension@panynj.gov).

After the scoping comment period has ended, a Scoping Summary Report will be prepared, which will note and address comments received from the public, elected officials, and agency representatives. The Scoping Summary Report will identify the comments received and provide responses to substantive comments. It will also include updated project information to reflect public and agency input as well as any new project material that became available after publishing this Scoping Document.

## 1-4 ORGANIZATION OF THIS DOCUMENT

This document provides information to help the public, elected officials, and agency representatives understand the proposed project. The remaining sections include:

- **Section 2–Purpose and Need.** This section describes the transportation and planning issues that the proposed project is intended to address and identifies the goals and objectives of the proposed project.
- **Section 3–Alternatives.** This section describes the No Action and Build Alternatives that are recommended to be examined in the EA, and the rationale for recommending elimination of the alternatives that would not meet the proposed project’s goals and objectives. A comprehensive alternatives analysis will be provided in the EA, which will address public and agency comments on this section, examine right-of-way and facility size and location options for the Build Alternative, and explore additional alternatives as needed.
- **Section 4–Environmental Analysis Framework.** This section describes the methodologies that will be used to determine and document the proposed project’s social, economic, and environmental impacts.
- **Section 5–Public and Agency Involvement.** This section summarizes the public and agency participation program for the proposed project.

## SECTION 2:

## PURPOSE AND NEED

---

- *What is the purpose of the proposed project?*
- *Why is it needed?*
- *What goals and objectives have been defined to guide the development and evaluation of alternatives?*

### 2-1 INTRODUCTION

The Port Authority of New York and New Jersey (PANYNJ) is investigating alternatives to provide new or enhanced transit service to the Newark Liberty International Airport (EWR) Rail Link Station (referred to in this document as the Airport Station). The Airport Station currently serves as a transfer point on the Northeast Corridor for New Jersey Transit Corporation (NJ TRANSIT), Amtrak, and EWR's AirTrain monorail (AirTrain Newark). In its current configuration, the Airport Station is not accessible to the surrounding communities, consistent with Federal Aviation Administration (FAA) regulation, and is approximately 2.4 miles from the closest PATH station (see **Figure 2-1**).

This chapter describes transportation problems in the PATH corridor, which include community access issues, service gaps, and operational limitations of existing transit and establishes the goals and objectives that will guide development of project alternatives to address these needs. The PATH corridor is defined as the service territory of the current PATH system, which includes counties in Northeastern and Central New Jersey, most notably Essex, Union, and Hudson Counties, and New York City.

### 2-2 PURPOSE OF THE PROPOSED PROJECT

The purpose of the proposed project is to improve transit access to Newark, Jersey City, and New York City for New Jersey commuters and increase transit options to EWR for air travelers and airport employees.

### 2-3 OVERVIEW OF THE PATH CORRIDOR

PATH is an electrified, heavy-rail rapid transit system operating 24 hours a day, seven days a week along four routes with 13 stations in the cities of Newark, Hoboken, and Jersey City, and the Town of Harrison in northern New Jersey, and Lower and Midtown Manhattan (see **Figure 2-2**). There are two termini in New Jersey (Newark Penn Station and Hoboken) and two termini in Manhattan (33rd Street and the World Trade Center (WTC)). At its Manhattan termini, riders can transfer from the PATH system to many New York City subway lines.



Future PATH Extension - For Illustrative Purpose Only,  
Pending Environmental Review

PATH Stations

PATH

NJ TRANSIT Light Rail

NJ TRANSIT Stations

NJ TRANSIT Commuter Rail

0 4 MILES

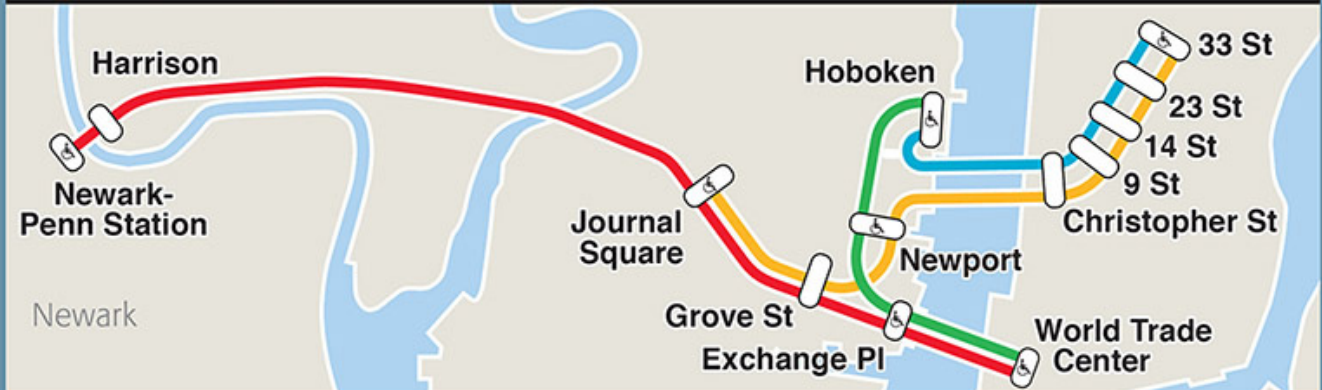
**PATH EXTENSION PROJECT**

Project Location  
**Figure 2-1**

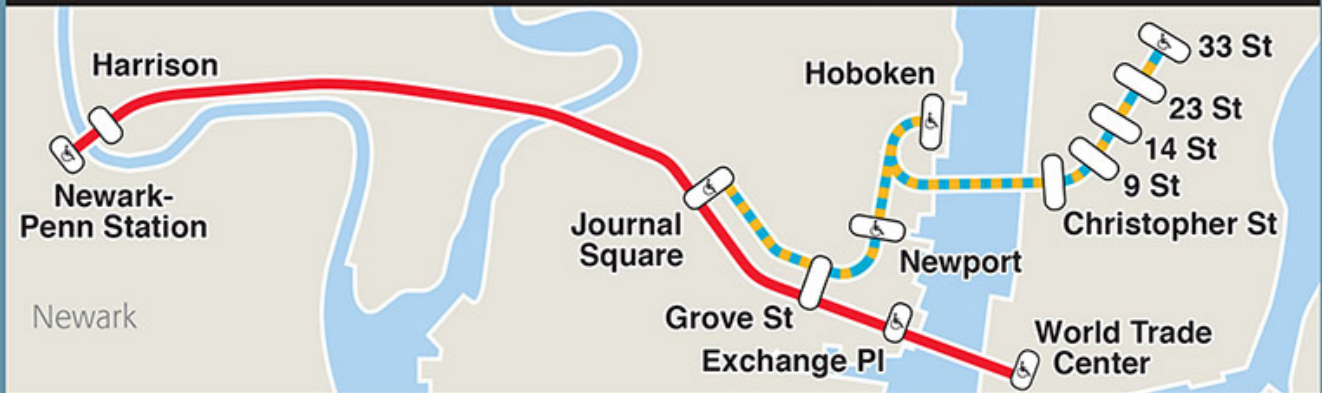


## ***PATH Service Maps***

### ***Monday-Friday 6AM-11PM***



### ***Mon.-Fri. 11PM-6AM and Sat., Sun. & Holidays (All Day)***



PATH serves a dense, growing urban environment in the New York/New Jersey metropolitan area, carrying close to 280,000 passengers on an average weekday<sup>1</sup>. (By contrast, NJ TRANSIT's relatively vast commuter rail network carries about 305,000 passengers on an average weekday<sup>2</sup>). This area includes Essex, Union, and Hudson Counties in New Jersey, with a collective population of about 2 million people,<sup>3</sup> and Midtown and Lower Manhattan, with a residential population of over 600,000 people, and a weekday population exceeding 2 million.<sup>4</sup> The areas immediately surrounding most PATH stations are densely populated, with more than 300,000 people living within one-half mile of PATH system stations. PATH serves the major economic and business centers of Downtown Newark, Jersey City, Hoboken, and Midtown and Lower Manhattan. Within one-half mile of PATH's 13 stations, there are nearly 980,000 jobs.<sup>5</sup>

## 2-4 PROJECT BACKGROUND

### 2-4-1 AIRPORT STATION

The Airport Station is located on the NEC about 2.4 miles southwest of PATH's current terminus at Newark Penn Station (see **Figure 2-3**). It currently serves as a connection point from Amtrak and NJ TRANSIT to EWR terminals via AirTrain Newark. From the Airport Station, Amtrak and NJ TRANSIT provide direct service to Midtown Manhattan (New York Penn Station) as well as most New Jersey counties (via NJ TRANSIT) and more distant states and cities (via Amtrak).

The Airport Station was funded predominately via the Federal Aviation Administration (FAA) Passenger Facility Charge (PFC) Program, which allows the collection of PFC fees for enplaned passenger at commercial airports controlled by public agencies. The fees must be used for capital projects that enhance airport safety, security, or capacity; reduce noise; or increase air carrier competition and are for the exclusive use of airport patrons. Eligibility criteria for the PFC program limit use of the Airport Station to travelers, visitors, and employees to and from EWR. Ground access to the station is provided only for maintenance crews and emergency services from Station Road to the east of the Airport Station. PANYNJ is exploring opportunities to enhance use of the Airport Station by expanding its availability to include non-airport daily commuters in addition to the air travelers and EWR employees that currently use the station. Modifications to the PFC-funded facility and/or changes to its current use restrictions will require FAA review and approval.

---

<sup>1</sup> <http://www.panynj.gov/path/pdf/2017-PATH-Monthly-Ridership-Report.pdf>. Accessed November 14, 2017.

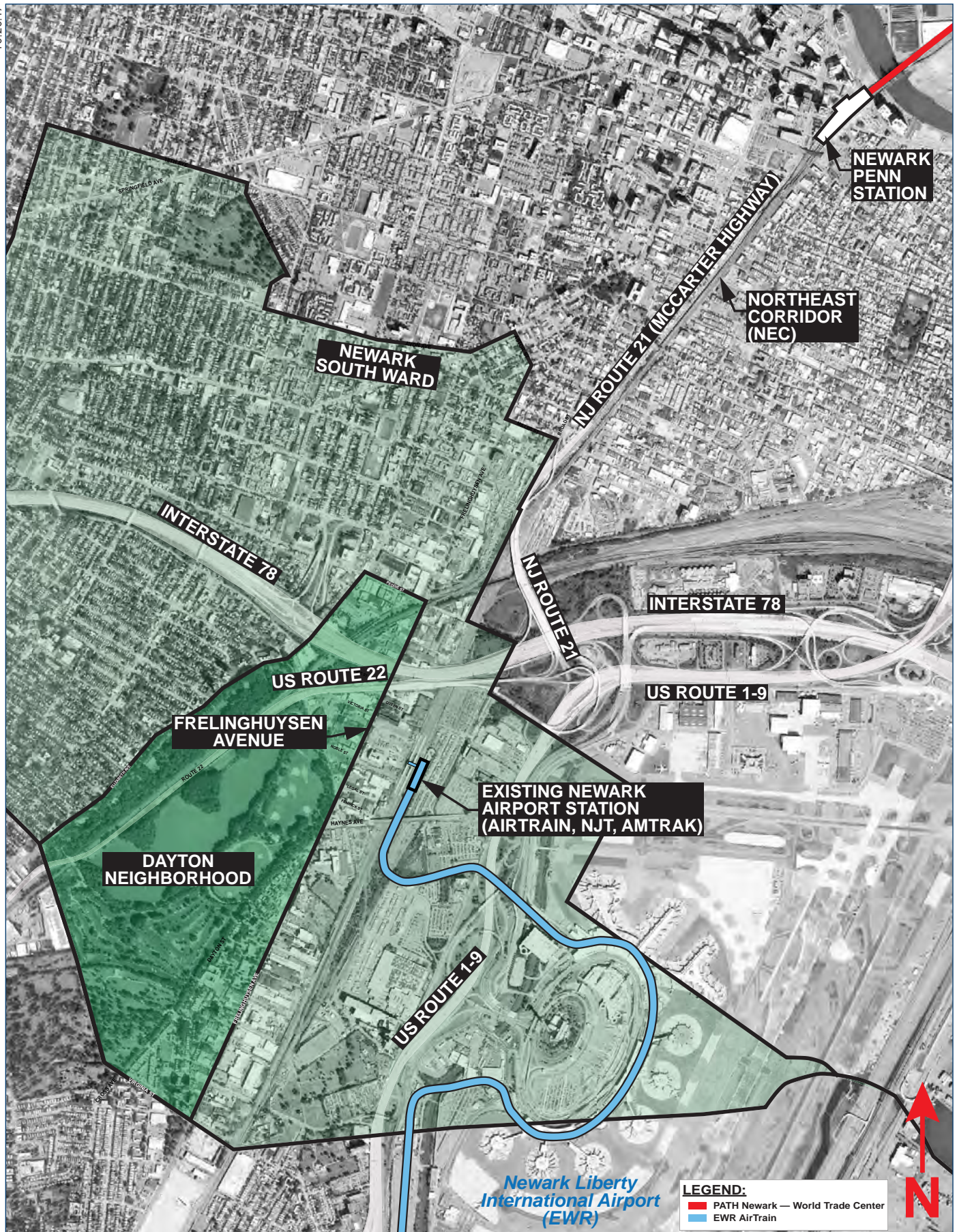
<sup>2</sup> NJ TRANSIT Facts at a Glance, Fiscal Year 2016 (July 1, 2015 through June 30, 2016).

<sup>3</sup> <http://quickfacts.census.gov/>. Accessed January 30, 2017.

<sup>4</sup> <http://maps.nyc.gov/census/>. Accessed October 13, 2015. Population estimates include neighborhoods below 59th Street in Manhattan and are based on 2010 U.S. Census data.

<sup>5</sup> U.S. Census Bureau. 2015. OnTheMap Application. Longitudinal-Employer Household Dynamics Program.







## 2-4-2 IMPROVED AIRPORT ACCESS

The need to invest in world-class transit access to the region's airports is identified in a number of regional planning documents, which support the PATH Extension Project. PANYNJ's 2005 Strategic Plan<sup>6</sup> identifies a reliable, fast, and frequent service from Downtown Manhattan to EWR as a key priority. The Strategic Plan was developed after two years of deliberations that included focus groups of private sector executives, and external outreach to public agencies, civic groups, regional trade associations and academic experts in transportation and economic development.

In 2013, the Regional Plan Association prepared an assessment of the PATH Extension to EWR for the Downtown-Lower Manhattan Association, which concluded that "Connecting PATH to the NEC station and Newark Liberty Airport is a cost effective way to promote connectivity, sustainability and economic development in the tri-state metropolitan region."<sup>7</sup>

In addition, as discussed below in Section 2-4-4, enhancing transit options to the region's airports is a priority of both New York and New Jersey metropolitan planning organizations (MPOs).

## 2-4-3 COMMUNITY NEEDS

The need for improved community access in the Dayton neighborhood is identified in the City of Newark's 2012 Master Plan<sup>8</sup> and a 2014 Newark Housing Authority plan<sup>9</sup>, which support the proposed PATH Extension Project. Recognizing the benefits that improved rail and transit access at EWR would provide, the City of Newark had identified the following strategies in the Master Plan:

- Strategy 1.12: Increase utilization and ridership at the EWR Airport Station by working with NJ TRANSIT, PANYNJ, and the Federal Aviation Administration (FAA) to explore elimination of the Passenger Facility Charge (PFC) restrictions on use of the station by non-airport patrons.
- Strategy 1.18: Extend PATH from Newark Penn Station to EWR Airport Station, with additional Newark stops considered by working with Newark Regional Business Partnership (NRBP), Regional Plan Association (RPA), PANYNJ, and others to advance evaluations, plans, and financing.
- Strategy 1.2: Encourage transit-oriented development (TOD) at all appropriate station locations, with emphasis on Newark Penn, Broad Street, Orange Street, and Newark Liberty International Airport Stations.

---

<sup>6</sup> *The Port Authority Strategic Plan: Transportation for Regional Prosperity*, December 8, 2005, page 8. Available at <http://www.panynj.gov/about/pdf/reg-in-strategic-plan.pdf>.

<sup>7</sup> *Extending PATH to Newark Airport*, An assessment prepared by Regional Plan Association for the Downtown-Lower Manhattan Association, September 2013, page 7, available at <http://library.rpa.org/pdf/RPA-PATH-EWR-Extension.pdf>.

<sup>8</sup> *Newark's Master Plan: Our City Our Future*, Volume 1, September 24, 2012, pages 107-109.

<sup>9</sup> *Dayton Street Neighborhood Transformation Plan: The Foundation for a Brighter Future*, Newark Housing Authority, Draft April 2014, page 53, available at:

[http://www.newarkha.org/cni/CNIDOCs/CNI%20TRANSFORMATION%20PLAN/Draft\\_Dayton\\_Street\\_TP\\_-\\_Narrative\\_Only\\_04-09-14\[1\].pdf](http://www.newarkha.org/cni/CNIDOCs/CNI%20TRANSFORMATION%20PLAN/Draft_Dayton_Street_TP_-_Narrative_Only_04-09-14[1].pdf)



In 2014, the Newark Housing Authority published the draft *Dayton Street Transformation Plan*, which recognizes that the proposed PATH Extension holds the promise of improved access to jobs at the airport and other destinations on the PATH line for Dayton residents. Newark Housing Authority's planning for the Dayton neighborhood brought together a diverse group of stakeholders to discuss and plan for the future of the neighborhood. Community feedback consistently supported the need for a complete transformation of the neighborhood to improve the quality of life, safety, accessibility, and economic conditions for existing residents, and create a neighborhood of choice and opportunity to encourage new families to move to the neighborhood.

In addition, in 2015, the PANYNJ conducted several stakeholder meetings in cooperation with the Regional Plan Association to understand the needs of the Dayton community and the challenges and opportunities for development in the neighborhood that would be facilitated by an extension of PATH service. The stakeholders invited to participate in these meetings included local elected officials, neighborhood groups, and local business organizations. These meetings confirmed the need for improved public transportation options in Dayton. While Coach USA provides bus service along Frelinghuysen Avenue and NJ TRANSIT also provides infrequent bus service in the northern portion of the neighborhood, buses are often overcrowded, subject to roadway congestion and the trip to Downtown Newark requires a transfer. These issues are compounded by low vehicle ownership rates and a high poverty rate in the Dayton neighborhood.<sup>10</sup>

## **2-4-4 METROPOLITAN PLANNING**

The PATH Extension Project directly supports several goals established by the North Jersey Transportation Planning Authority (NJTPA) and the New York Metropolitan Transportation Council (NYMTC). Enhancing transit options to the region's airports is a perennial priority on the transportation planning agenda for the bi-state metropolitan region. In addition, both MPOs most recent Regional Transportation Plans (RTPs) approved this year elevate the importance of strengthening the trans-Hudson transportation system, bolstering transportation network resiliency, and supporting transit-oriented development and improved system connectivity.

More specifically, NJTPA's new RTP references the PATH Extension Project as part of the PANYNJ's ten-year capital program, and lists PATH extension project planning on the list of Essex County projects and formal planning efforts. NYMTC's RTP includes planning for multi-modal access improvements to the region's airports and port facilities as part of its strategic framework, and specifically includes planning for the PATH Extension under its goal "To Provide Convenient, Flexible Transportation Access within the Region."

The PATH Extension Project also is included in the current Unified Planning Work Program (UPWP) for both the NJTPA and NYMTC. PANYNJ staff are working with both NJTPA and NYMTC staffs to submit current project information for incorporation as appropriate in forthcoming air quality conformity analyses.

---

<sup>10</sup> According to the U.S. Census Bureau (American Community Survey 2015 5-year estimates), about 54 percent of the population in Dayton live below the poverty rate and about 62 percent of households do not own a vehicle.

This and the other regional transportation system enhancements in PANYNJ's ten-year capital program are conceived to support and advance the shared goals included in the respective NJTPA and NYMTC planning documents. Through these MPOs, PANYNJ also participates in the broader regional Metropolitan Area Planning (MAP) Forum, which extends the regional planning dialog to metropolitan planning organizations in the Hudson Valley and southwestern Connecticut.

## **2-5 NEED FOR THE PROJECT**

### **2-5-1 THE NEED TO SUPPORT THE GROWING CENTRAL BUSINESS DISTRICTS IN NEWARK, JERSEY CITY, AND LOWER MANHATTAN**

The Newark PATH station is located within Newark Penn Station, a major regional transportation hub in downtown Newark in Essex County. North and west of the PATH station are high-rise office buildings, including the headquarters for Prudential and PSE&G, and government buildings. New Jersey Performing Arts Center is located along the Passaic River waterfront to the north of the PATH station and Prudential Center is located to the south. These projects have been part of an ongoing economic development trend which is revitalizing Newark, drawing businesses, tourists and suburban residents to downtown attractions. Newark Penn Station currently serves about 29,000 daily PATH commuters. Current plans for the area around Newark Penn Station in Downtown Newark include development of a 22-acre site into a public park and commercial hub that will connect to the station and contain more than 300,000 square feet of new office/retail space.

The areas surrounding PATH stations in Jersey City have been undergoing redevelopment for decades supporting commercial buildings that provide supplemental office space for companies headquartered in the Wall Street financial district. These "back-office" uses require fast and frequent access to Lower Manhattan to be effective. Since 2000, development in Hudson County has concentrated at PATH stations at an increasing rate. Between 2000 and 2015, more than 18,000 housing units were built within roughly ½-mile of a PATH station, representing 41% of all housing units built in the county over that period (on only about 7 percent of the county's land area). Since 2015, more than 12,000 units have been approved for construction. The Jersey City PATH Stations (Journal Square, Grove Street, and Exchange Place) currently serve about 63,000 daily PATH commuters. Current plan approvals for the areas within about a ½-mile radius of the stations include more than 550,000 square feet of new office/retail space.

PATH service to Lower Manhattan serves office towers, local and destination retail outlets, a 9/11 memorial public space and accompanying memorial museum, and public open plazas<sup>11</sup>. It also serves the Wall Street Financial District to the east and Brookfield Place and Battery Park City to the west. The WTC Transportation Hub directly connects PATH service to the E train (Eighth Avenue Line) and the N, Q, R and W trains (Cortlandt Street Broadway Line), and will connect directly to the No. 1 train (Cortlandt Street Seventh Avenue Line) once its reconstruction is complete in 2018. The Dey Street concourse seamlessly connects the new WTC Transportation Hub to New York City Transit's (NYCT's)

---

<sup>11</sup> Two office towers (WTC#2 and WTC#5) and a performing arts center are also planned to be constructed on the site.

Fulton Center with connections to the No. 2, 3, 4, 5, A, C, J, and Z trains for service to the west and east sides of Manhattan and beyond. The WTC Transportation Hub currently serves about 57,000 daily PATH commuters. Current plans for the WTC site include about 12 million<sup>12</sup> square feet of new office/retail space, approximately 55 percent of which has been leased, while construction continues.

The areas within ½-mile of PATH stations in Lower Manhattan, Jersey City, and Newark support more than 400,000 jobs (see **Figure 2-4**) and population and employment forecasts for each of the counties in the PATH Corridor are robust (see **Table 2-1**). Currently, there is no direct commuter rail access to either Jersey City or Lower Manhattan for New Jersey commuters. Amtrak and NJ TRANSIT passengers destined for jobs in Jersey City and Lower Manhattan must transfer to PATH at Newark Penn Station, which is overcrowded (see below). Improving transit service to these business districts and alleviating congestion in Newark Penn Station will help to sustainably capture the region's growth.

**Table 2-1**  
**Population and Employment 2010-2040**

PATH Corridor	Population			Employment		
	2010	2040	% Change	2010	2040	% Change
<b>New Jersey Counties<sup>1</sup> – Total</b>	<b>1,954,800</b>	<b>2,371,800</b>	<b>21%</b>	<b>842,700</b>	<b>1,083,800</b>	<b>29%</b>
<i>Union County</i>	<i>536,500</i>	<i>638,500</i>	<i>19%</i>	<i>237,100</i>	<i>299,100</i>	<i>26%</i>
<i>Essex County</i>	<i>784,000</i>	<i>916,000</i>	<i>17%</i>	<i>366,700</i>	<i>434,400</i>	<i>18%</i>
<i>Hudson County</i>	<i>634,300</i>	<i>817,300</i>	<i>29%</i>	<i>238,900</i>	<i>350,300</i>	<i>47%</i>
<b>New York Counties<sup>2</sup> – Total</b>	<b>6,321,300</b>	<b>7,293,200</b>	<b>15%</b>	<b>4,125,300</b>	<b>5,256,400</b>	<b>27%</b>

**Sources:** <sup>1</sup> North Jersey Transportation Planning Authority (NJTPA). (Note that numbers are rounded to the nearest 100)  
<sup>2</sup> 2040 Socioeconomic and Demographic Forecasts. New York Metropolitan Transportation Council (NYMTC). <https://www.nymtc.org>. Accessed June 21, 2017 for New York, Kings and Queens counties.

## 2-5-2 THE NEED TO IMPROVE TRANSIT ACCESSIBILITY FOR THE LOCAL COMMUNITY

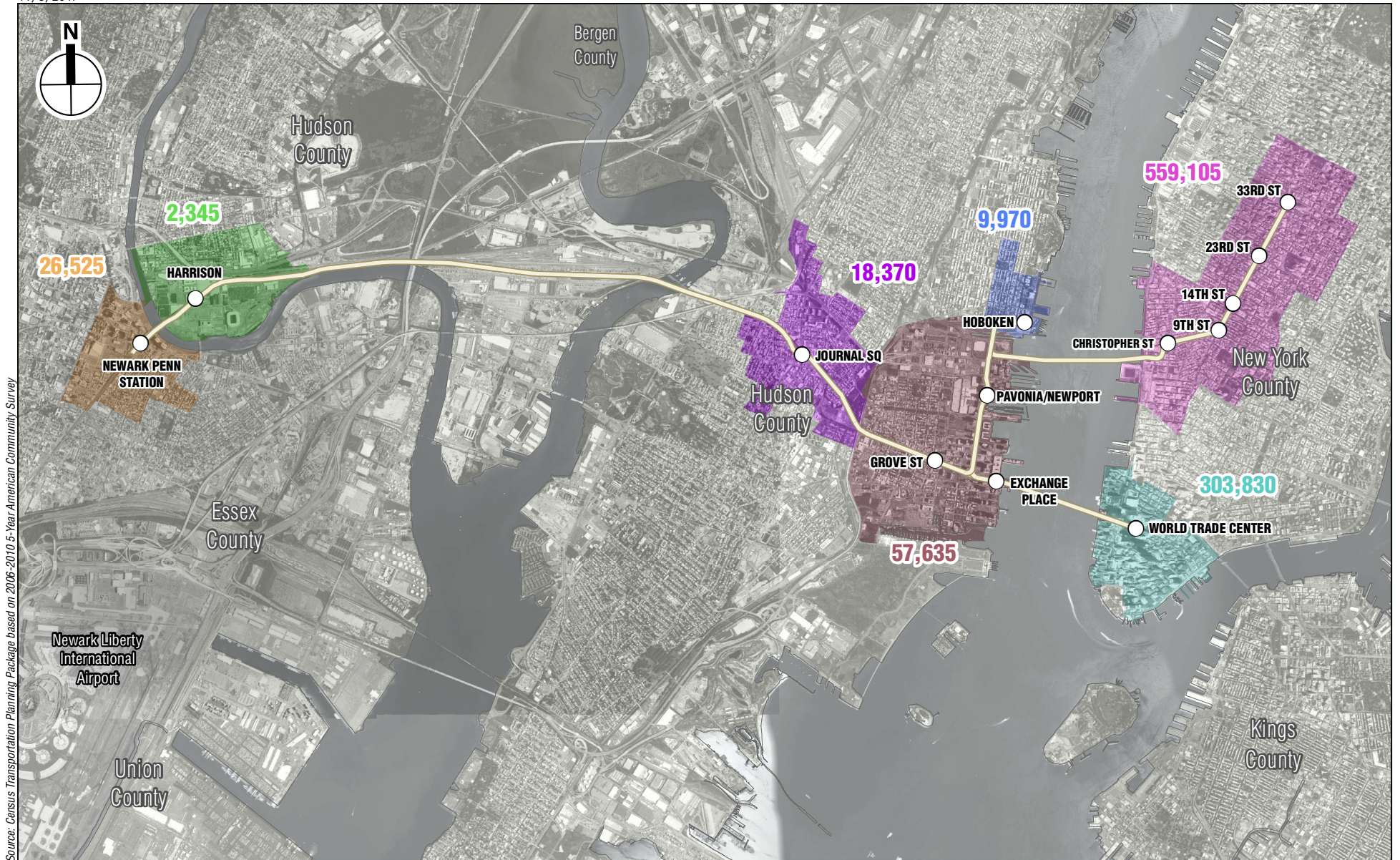
Newark Penn Station is New Jersey's busiest train station. Currently, about 9,300 PATH customers transfer to NJ TRANSIT or Amtrak at Newark Penn Station each weekday<sup>13</sup>. The connection between PATH and NJ TRANSIT at Newark Penn Station for those traveling in the outbound direction, involves transferring to another platform via stairs, elevators, or escalators. This transfer is inconvenient and platforms, corridors and vertical circulation elements are often crowded during peak periods. Pedestrian modeling shows that by 2030 all vertical circulation elements in Newark Penn Station will be congested, in some cases severely congested, without significant infrastructure investment<sup>14</sup>.

<sup>12</sup> Square footage does not include WTC #5, which is currently in the planning phase.

<sup>13</sup> 2015 PATH System-Wide Passenger Survey, VHB, March 2017.

<sup>14</sup> Newark Penn Station Pedestrian Circulation Phase 1 Report & Action Plan, prepared by Systra for NJ TRANSIT and Amtrak, in consultation with the PANYNJ, May 2013.





- PATH Station
- Study Area
- World Trade Center
- Harrison
- Hoboken
- Journal Square
- Newark
- Grove St/Exchange Pl/Newport
- West Village/Midtown

0 5,000 FEET

Although most of New Jersey's rail lines and busiest bus routes run through Downtown Newark, only 20 percent of people who work in Downtown Newark use transit to travel to work<sup>15</sup>. The bus network connects Newark's neighborhoods, businesses, and cultural destinations and provides access to surrounding municipalities including Midtown Manhattan. A total of 28 NJ TRANSIT bus routes and two private bus routes stop at Newark Penn Station. However, buses are subject to severe congestion during morning and evening peak periods on area roadways, such as: I-78, I-280, NJ 21 (McCarter Highway in both directions through nearly the entire City of Newark), Broad Street, Market Street, Raymond Boulevard, segments of Springfield Avenue, South Orange Avenue, as well as every Passaic River bridge to Newark.

Adjacent to the Airport Station, Newark's Dayton neighborhood in the South Ward is served by limited bus routes that stop on Frelinghuysen Avenue: NJ TRANSIT's No. 37 (Irvington-EWR Airport) and No. 107 (South Orange-Port Authority Bus Terminal); and one private carrier (No. 24 Elizabeth-Orange loop). However, these bus routes do not serve Jersey City or Lower Manhattan and Dayton remains largely disconnected from the region's key employment centers in Jersey City, Lower Manhattan, and at the airport. Because there is no public access to the Airport Station, there is limited opportunity for connecting local bus to rail service to key employment centers.

Of the working age population in Dayton, fewer than 30 percent are currently employed<sup>16</sup>. Low rates of vehicle ownership, compounded by limited public transportation options, have resulted in extensive commute times for resident workers. The trip by bus to Downtown Newark from the northeastern section of the Dayton neighborhood requires a transfer and takes over an hour. Travel times between the neighborhood of Dayton and Jersey City are estimated at more than 80 minutes; and the trip to the World Trade Center is over an hour and a half long.

The Dayton neighborhood contains over a hundred acres of vacant or underutilized industrial properties adjacent to its residential core. The Newark 2012 Master Plan noted that improved transit accessibility at the Airport Station could create transit-oriented development opportunities, such as office space for airport logistics, and hospitality uses (hotels and hotel support businesses), as well as residential development, which could serve a broad market, including airport workers and crew members who would benefit from proximity to the airport. Strategies identified in the Newark 2012 Master Plan to support new transit-oriented development and provide better transit access in Newark include: extending PATH service to the Airport Station; providing a new multi-modal station that is accessible to the community; and construction of a commuter parking facility.

### **2-5-3 THE NEED TO INCREASE TRANSIT OPTIONS TO NEWARK LIBERTY INTERNATIONAL AIRPORT**

EWR is one of the busiest airports in the U.S., and the fastest-growing facility among the regional airports, serving approximately 40.3 million passengers in 2016<sup>17</sup>, yet it cannot be easily reached on transit from Hoboken, Jersey City, and Lower Manhattan. While the airport has rail and bus access

---

<sup>15</sup> Mobility Element, Newark Master Plan, June 2012, page 12.

<sup>16</sup> U.S. Census Bureau, American Community Survey 2015 5-year estimates.

<sup>17</sup> Port Authority of New York and New Jersey December 2016 Traffic Report.



from Newark and Midtown Manhattan<sup>18</sup>, there is no direct rail or bus service between Lower Manhattan and EWR. Between Jersey City and EWR, limited bus service is the only public transportation option<sup>19</sup>. Customers traveling to the airport by rail from Hoboken, Jersey City, or Lower Manhattan face a three- or four-seat ride to reach the airport, and the connections between modes are rarely synchronized and often inconvenient. As indicated above, the connection between PATH and NJ TRANSIT at Newark Penn Station and the Airport Station involves transferring to another platform via stairs, elevators, or escalators. These transfers are difficult when traveling with luggage. Since schedules are not synchronized between the rail services, unplanned waits on platforms can be a concern for those for whom the airport trip is infrequent (vacation travel, family visits, etc.), and their ultimate arrival time at the terminal uncertain.

Thus, the need for the proposed project is due to the limited availability of rail transit service to EWR, particularly from Hoboken, Jersey City and Lower Manhattan, which have no direct access to the NJ TRANSIT and Amtrak service at the Airport Station.

## **2-6 GOALS AND OBJECTIVES**

The development of alternatives for the PATH Extension Project is guided by five goals with objectives that address the need for the proposed project. The following goals and supporting objectives have been established:

- Enhance travel to Newark, Jersey City, and Lower Manhattan employment centers for New Jersey commuters:
  - Provide transit service that attracts new commuters;
  - Provide services that optimize the use of regional transit assets;
  - Support frequent, reliable, and convenient transit service;
  - Reduce congestion in and around Newark Penn Station;
- Expand rail and transit access to communities near the Airport Station:
  - Increase rail and transit options for nearby residential communities;
  - Complement the City of Newark's transportation strategies and transit-oriented development plans.
- Increase transit service to EWR for travelers and employees:
  - Improve the frequency of transit service at the Airport Station;

---

<sup>18</sup> NJ TRANSIT bus route #62 is the primary Newark to EWR route operating at 15 minute headways on weekdays for an 18 minute trip to Terminal A. There is no direct NJ TRANSIT service between the Port Authority Bus Terminal and EWR (one transfer is required), however, the Newark Airporter operated by Coach USA provides direct service from three locations in Midtown Manhattan including the Port Authority Bus Terminal.

<sup>19</sup> NJ TRANSIT bus route #67 makes limited trips between Journal Square, Newark and EWR and is the only direct bus service between Jersey City and EWR.

- Improve service to the markets currently underserved by transit access to EWR (Lower Manhattan, Hoboken, and Jersey City);
  - Provide seamless connections between transit services and AirTrain Newark;
  - Expand affordable transit options for airport employees and air passengers;
  - Implement new services in a reasonable timeframe and at a reasonable cost.
- Implement new transit service that complements and minimizes impacts to existing road and rail operations in the area:
  - Maximize use of existing transportation rights-of-way and leverage the region's existing transportation infrastructure to the extent practicable;
  - Provide transit service that is compatible with AirTrain Newark service;
  - Minimize long-term impacts on existing and future rail operations by NJ TRANSIT, Amtrak, Conrail, and others;
  - Complement transportation plans for the NEC and other rail, bus, and road routes through the area;
  - Avoid impacts on transit operations and pedestrian circulation at Newark Penn Station;
  - Minimize impacts on existing PATH operations and support PATH's long-term needs;
  - Encourage a shift from automobiles to transit in the PATH corridor;
  - Minimize operations and maintenance costs for new transit service; and
  - Minimize capital costs for new transit service to the extent practicable.
- Minimize adverse impacts on the built and natural environment:
  - Avoid, minimize, or mitigate adverse impacts on historic resources;
  - Avoid impacts on parklands, open space, natural and manmade features;
  - Minimize property acquisition to the maximum extent feasible;
  - Maintain access to nearby residences and businesses during construction;
  - Minimize construction impacts to the extent feasible.

## SECTION 3:

## PROJECT ALTERNATIVES

---

- *What alternatives are being advanced for detailed evaluation in the EA?*
- *How were project alternatives developed and evaluated?*
- *What alternatives were considered and eliminated from consideration?*

### 3-1 INTRODUCTION

The identification and evaluation of reasonable alternatives are central to project development under the National Environmental Policy Act (NEPA). This section of the Draft Scoping Document presents the various alternatives that have been considered for the PATH Extension Project (“the proposed project”). A preliminary alternative has been identified for detailed evaluation in the EA. The preliminary alternative is presented as the “Build Alternative” in this document.

Alternatives that do not meet the proposed project’s purpose and need are not considered reasonable alternatives, and have been eliminated from consideration via a screening process. Alternatives that meet the purpose and need but are not technically feasible or those that could cause more adverse impacts without any additional benefit when compared with the preliminary alternative were also eliminated from further consideration.

Build and No Action alternatives for the PATH Extension will be evaluated in an EA. The No Action Alternative serves as a basis for comparison against which the Build Alternative(s) will be assessed. This section first describes the alternatives that have been retained for further analysis -- the No Action Alternative is described first, followed by a description of the Build Alternative (i.e., the preliminary alternative) and its options. The remaining sections summarize the alternatives considered, screening criteria/methodology, screening results, and why the preliminary alternative was recommended for study in the EA. Additional alternatives recommended during this scoping process will also be considered in the NEPA document.

### 3-2 ALTERNATIVES RECOMMENDED FOR STUDY IN THE EA

#### 3-2-1 NO ACTION ALTERNATIVE

NEPA requires examination of a No Action Alternative. The No Action Alternative serves as the benchmark against which to evaluate the benefits and impacts of a proposed action. The No Action Alternative includes transportation improvements that will be implemented by 2035 (the analysis year for the EA analyses) regardless whether the Build Alternative is constructed. This includes the projects identified in the Port Authority of New York and New Jersey (PANYNJ) 2017-2026 Capital Plan, and any other transportation projects by PANYNJ, Amtrak, New Jersey Department of Transportation (NJDOT), and NJ TRANSIT that are likely to be built and operational by 2035.



### *ANTICIPATED PANYNJ PROJECTS*

The No Action Alternative includes the following projects, which are included in the PANYNJ 2017-2026 Capital Plan:

- **PATH Signal System Replacement.** The existing signal control system is being replaced with newly designed state-of-the-art signal equipment;
- **PATH Railcar Fleet Expansion.** New railcars will be purchased to increase train frequency and systemwide capacity;
- **AirTrain Newark Interim Repairs.** This program includes priority repairs and sub-system overhauls, plus refurbishment and replacement of multiple system elements, including the running surface and guideway heating system, guideway structure, mainline switches, gearboxes, power distribution, and communications, train controls, and fixed facilities; and
- **Terminal A Redevelopment at EWR.**

Under the No Action Alternative, the Airport Station would continue to provide airport access limited to NJ TRANSIT and Amtrak customers only. Maintenance and emergency access to the Airport Station would continue to be provided from Station Road; the Airport Station would remain closed to the general public from local streets, to the adjacent residential neighborhood of Dayton, and to other nearby neighborhoods to the west of the Airport Station.

### *ANTICIPATED NEC PROJECTS*

The Federal Railroad Administration (FRA) released its "NEC Future, A Rail Investment for the Northeast Corridor, Tier 1 Final Environmental Impact Statement" ("NEC Future Tier 1 FEIS") in December 2016. NEC Future is a program to define, evaluate, and establish priorities for future NEC investments between Washington, D.C. and Boston, with the goal of upgrading aging infrastructure and improving the reliability, capacity, connectivity, performance, and resilience of future passenger rail services on the NEC. FRA selected a Preferred Alternative in the FEIS that provides for both state-of-good repair in the NEC and increased capacity through the addition of new track, new corridor segments and the elimination of key congestion choke points.

In the area of the proposed PATH extension, the NEC Future Preferred Alternative includes the addition of two new tracks on the NEC between North Brunswick, NJ and Secaucus, NJ. In addition, the Preferred Alternative includes elimination of the current at-grade crossing of the NJ TRANSIT Raritan Valley Line with the NEC with a new flyover (known as the "Hunter Flyover"). The Preferred Alternative also includes enhancements at Newark Penn Station.

In addition, the NEC Future Preferred Alternative includes all components of Amtrak's Gateway Program including replacement of Portal Bridge over the Hackensack River, added track capacity under the Hudson River, and added station capacity to relieve constraints at Penn Station New York.

The timing of the implementation of the NEC Future Preferred Alternative, including the Gateway Project elements, is not known. The year 2040 was the future analysis year for the NEC Future project. Of the Gateway project components, the No Action Alternative only assumes that the implementation of the Portal Bridge and the new, two track tunnels under the Hudson River will be implemented by 2035.

### ANTICIPATED NJDOT PROJECTS

NJDOT completed a “NJ Route 21 Newark Needs Analysis” to determine operations and safety improvements for the north-south artery, NJ Route 21 (McCarter Highway), which is the major link among I-78, I-280, NJ Routes 1 & 9, US Route 22, EWR and Newark’s central business district. Working with the local community, NJDOT is balancing the need to widen the roadway with the physical and environmental constraints that exist in the corridor between Murray Street and Edison Place. NJDOT has decided to advance a travel demand management approach to corridor improvement, which is focused on geometric improvements, striping, traffic signal modifications, and ADA improvements. The project’s imperative is to stay within the existing roadway right-of-way, except for ADA and traffic signal improvements.

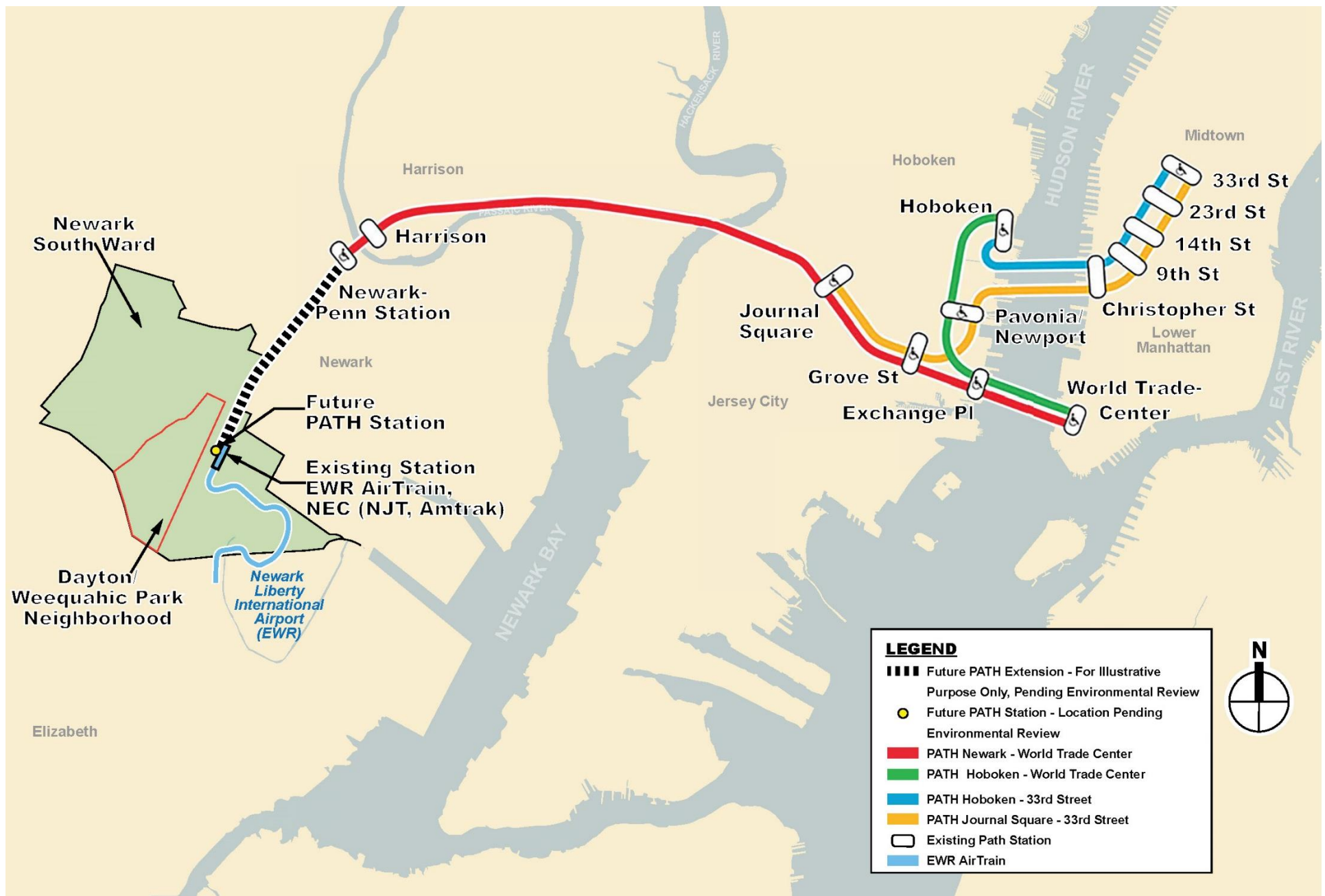
### 3-2-2 BUILD ALTERNATIVE

The Build Alternative includes the extension of PATH service on the Newark to WTC Line from its existing terminus at Newark Penn Station to a new station on off-airport property near Noble Street adjacent to, and connecting with, the existing Airport Station, which is on the NEC (see **Figure 3-1**). Newark Penn Station is a regional transit facility with numerous connecting transit services and is the existing terminus of PATH’s heavy-rail rapid transit service. Since Newark Penn Station provides excellent mobility options eastward, it was determined to be the appropriate eastern terminus for the proposed project. The Airport Station is an existing station with connecting service to the airport via the AirTrain Newark, and local and regional connections via NJ TRANSIT and Amtrak services on the NEC. It also provides opportunities for adjacent development for railroad infrastructure and potential transit-oriented mixed-use development. Therefore, Airport Station was considered the appropriate western terminus for the proposed project.

The proposed alignment would parallel the NEC on the west side to the Airport Station, where a multi-modal station and associated railroad infrastructure would be built, as described below. The improvements would be located entirely within the City of Newark, Essex County, New Jersey adjacent to the Dayton neighborhood in the South Ward (see **Figures 3-2 and 3-3**).

### MULTI-MODAL STATION

A multi-modal station would be constructed between Frelinghuysen Avenue and the NEC adjacent to the Airport Station at 442-470 Frelinghuysen Avenue, on the easternmost edge of a former waste transfer facility. A center-island platform would serve east- and westbound PATH tracks constructed on the west side of the NEC. The new platform would be seamlessly connected to the existing Airport Station infrastructure via an extension of the existing, elevated walkway that currently spans the NEC tracks and enables NJ TRANSIT and Amtrak customers using the Airport Station to access the Newark AirTrain. The new PATH station area would include bus and taxi staging areas, pick-up and drop-off lanes, and roadway and sidewalk connections to Frelinghuysen Avenue. Ticketing machines and PATH administrative, maintenance, and security spaces would be located within the station facility. The new PATH station will be designed to allow for the construction of commuter parking, thereby providing the potential for expanded trans-Hudson transit access for commuters. The size of the parking facility analyzed in the EA will be identified based on potential demand and cost effectiveness criteria, and its design will be developed during a station area planning effort, which will solicit input from key stakeholders. Different parking facility options may be analyzed in the EA to capture the effects of



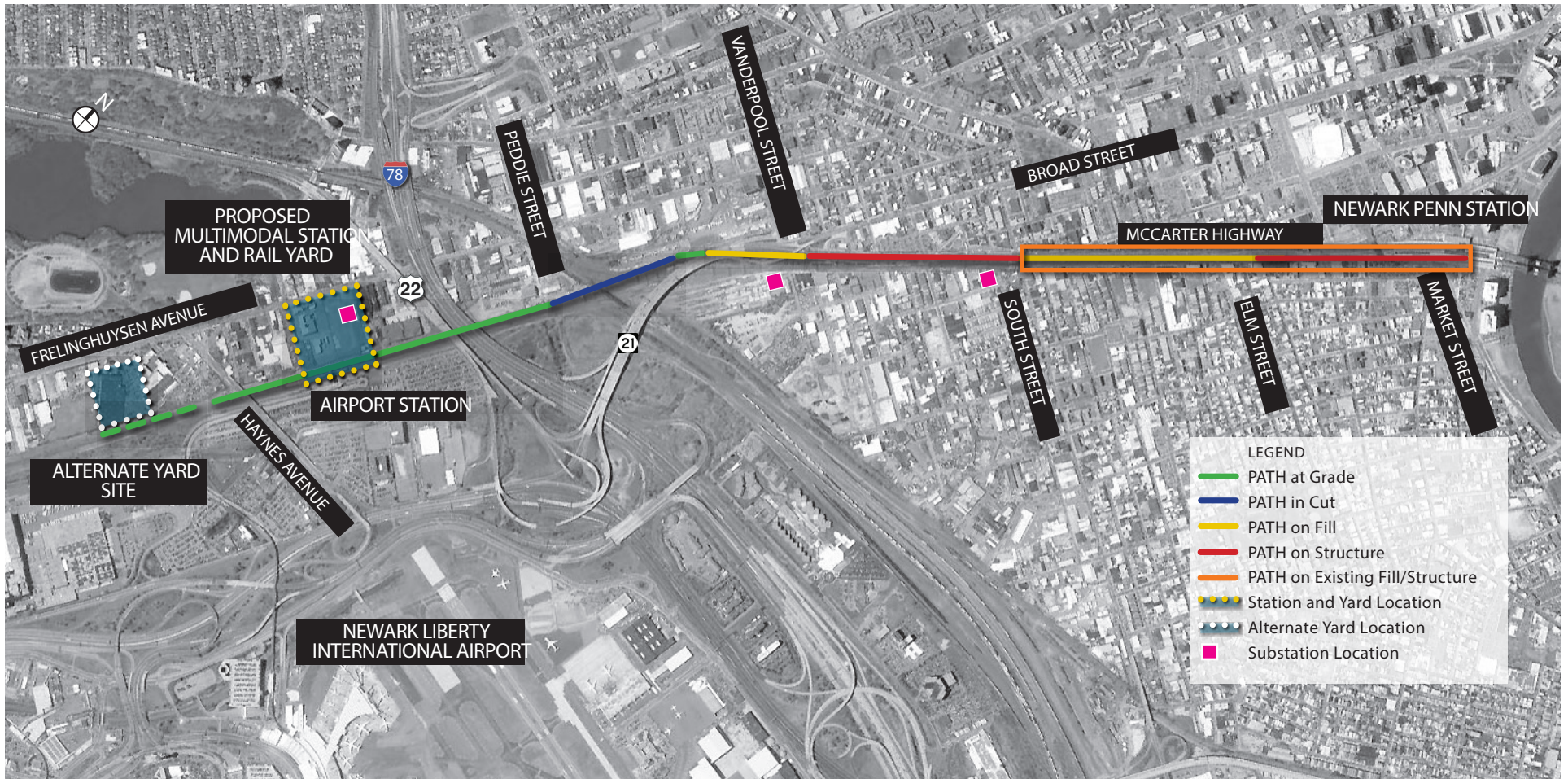
PATH EXTENSION PROJECT

Figure 3-1









plausible scenarios. The parking facilities analyzed will likely include a surface lot and/or a parking garage for daily commuters.

### **TRACKWORK**

The new track work includes the upgrade (to passenger service standards) of the existing PATH flyover and yard tracks south of Newark Penn Station and the construction of two new PATH tracks to extend the Newark to WTC PATH service approximately 2.4 miles to the Airport Station. Tail tracks would extend to just south of the Airport Station and Haynes Avenue. The two existing PATH tracks in South Street Yard – Tracks G and H – between Newark Penn Station and South Street would be converted to main line tracks, resulting in 0.8 miles of upgraded track. The proposed track alignment and profile would be similar to the existing condition, staying within the limits of the existing right-of-way.

Between South Street and Vanderpool Street, a distance of approximately 0.5 miles, two new PATH tracks would be constructed on a bridge over South Street and an elevated viaduct structure located between NJ Route 21 (McCarter Highway) and the retaining wall that supports the elevated NEC. The proposed tracks would transition from the new viaduct structure to a retained fill at approximately Vanderpool Street.

South of Vanderpool Street, the two PATH tracks would continue at grade and would cross beneath the Broad Street ramp and the NJ Route 21 viaduct.

South of the NJ Route 21 viaduct, the PATH Extension alignment would descend to pass beneath the elevated, two-track NJ TRANSIT Raritan Valley Line and the Conrail Lehigh Valley Rail Line Bridge and then ascend to grade just north of the Peddie Street Sewer.

The remaining distance from Peddie Street to the new multi-modal station is approximately 0.55 miles. The two new PATH tracks would pass over the Peddie Street Sewer and continue at-grade beneath the I-78 and US 22 bridges. Further south, the two PATH tracks would separate to accommodate the planned PATH platform at the new multi-modal station.

### **RAIL STORAGE YARD AND TAIL TRACKS**

A new PATH train storage yard would be required due to the need to convert the existing South Street storage yard to revenue service tracks. The function of the new PATH yard would be storage, exterior visual train inspection, and train trash removal only. No light or heavy maintenance functions would be performed and thus no special tracks, equipment, parts storage, or other support functions would be incorporated into the yard layout. Space for crew functions would be provided. Train washing and major maintenance activities would continue to be conducted at existing PATH facilities.

The new rail storage yard would be built with 12 tracks, each able to store a 10-car train so as not to preclude the operation of longer trains in the future. Two locations are under consideration. Option 1 would locate the yard at 442-470 Frelinghuysen Avenue, the site of a former Waste Transfer Site. Option 2 would locate the yard at 660 Frelinghuysen Avenue, the former site of the White Chemical Company.

PATH trains currently stored at the existing PATH South Street Yard would be stored at the new yard, which would be able to accommodate the increased fleet associated with the proposed project.



Three tail tracks would extend south of the station to just beyond the Haynes Avenue bridge in Option 1 but not Option 2. The tail tracks are required for train operations and would also improve operating conditions. The tail tracks would also be used for train storage.

### **SUBSTATIONS AND SIGNAL EQUIPMENT**

To power the electric PATH trains along the proposed extension, three substations would be built as part of the project. Each substation would be housed and protected in a masonry block building at locations along the alignment and in the rail storage yard. Signal equipment will also be installed within the proposed right-of-way. Two structures would be required for the signal equipment, each about 10 feet wide by 50 feet long, with maintenance road access to the locations and security fencing. Other equipment would be located on the railroad right-of-way and consist of small enclosures mounted on poles.

### **OPERATIONAL ASPECTS OF THE BUILD ALTERNATIVE**

PATH service at the new multi-modal station would operate on three-minute headways during peak periods, and an average of 13-minute headways during off-peak periods. There would be no changes to NJ TRANSIT rail or Amtrak service at the existing Airport Station.

Currently it is assumed that new bus service to the new multi-modal station would be provided via four local bus routes: a new stop on the NJ TRANSIT Route 37 and Route 107 and Coach USA Route 24 bus routes (these routes currently operate on Frelinghuysen Avenue past the site of the proposed multi-modal station); and the NJ TRANSIT Route 59 buses would be rerouted from Elizabeth Avenue to serve a new stop at the proposed multi-modal station. Additional bus routes serving the new multi-modal station may be identified and analyzed in the EA.

## **3-3 ALTERNATIVES CONSIDERED AND ELIMINATED**

### **3-3-1 ALTERNATIVES DEVELOPMENT PROCESS**

Following the opening of the Airport Station in 2001, which provides a transfer point between Amtrak and NJ TRANSIT rail services and the AirTrain Newark, PANYNJ has considered ways to further enhance transit service to EWR. The alternatives analysis presented below includes the identification of preliminary concepts, considering both different alignments and alternative travel modes. Screening criteria was developed based upon the project goals and objectives and the alternatives were evaluated against those criteria. The screening process separates alternatives that were found to be unreasonable from those that make sense to carry forward for more detailed study. An alternative that does not meet the project's purpose and need is, by definition, unreasonable, and is eliminated from further consideration. An alternative that does meet the project's purpose and need can still be rejected as unreasonable based on other factors, including environmental impacts, engineering considerations, and cost. If two alternatives both meet the project's purpose and need to a similar degree, but one of them has greater impacts or is more costly, those factors can be cited as a basis for rejecting the higher-impact or higher-cost alternative from further study.

The screening process for the proposed project was performed in two steps:

- Tier 1 screening – An initial screening of alternative modes against the proposed project's two primary purposes: 1) improve transit access to Newark, Jersey City, and New York City for New

Jersey commuters, and 2) increase transit options to EWR for air travelers and airport employees. An alternative must satisfy both purposes to be considered reasonable.

- Tier 2 screening – Evaluation of alignment alternatives for the PATH Extension based on evaluation criteria that would provide meaningful comparisons among the alternatives in terms of potential impacts to existing and planned transportation services and land uses, and construction costs, which includes consideration of constructability and relative risk.

The preliminary concepts identified to address the project's purpose and need and the Tier 1 screening criteria used to evaluate the concepts are described below, followed by the results of the evaluation. The description and results of the Tier 2 screening follow the Tier 1 Screening.

### **3-3-2 TIER 1 SCREENING**

The preliminary concepts that could potentially satisfy the project's purpose and need include:

- Provide NJ TRANSIT commuter access to the Airport Station;
- Improved bus, commuter rail, light rail and/or ferry services between Newark Penn Station and EWR within the PATH Corridor and/or at the Airport Station (includes consideration of the Newark-Elizabeth Light Rail ("NERL") extension to EWR);
- Extension of the EWR AirTrain to Newark Penn Station; and
- Extension of PATH Service.

These concepts were evaluated with respect to the following five questions, which relate to the proposed project's goals and objectives:

- Would the concept improve transit access to the growing central business districts in Newark, Jersey City, and Lower Manhattan for New Jersey commuters?
- Would the alternative expand transit access to communities near the Airport Station?
- Would the alternative support local plans and encourage the growth of walkable, sustainable communities?
- Would the concept improve airport access for air travelers and airport employees in the PATH Corridor, including the business communities and residents in Hoboken, Newark, Jersey City, and Lower Manhattan?
- Would the alternative complement and minimize impacts to existing road and rail operations in the area?

#### ***PROVIDE NJ TRANSIT COMMUTER ACCESS TO THE AIRPORT STATION***

This alternative would permit NJ TRANSIT customers to access the Airport Station via new roadway and sidewalk connections to the Airport Station from Frelinghuysen Avenue; and improved access to Station Road. Feeder bus service and a parking facility would be provided to enhance access to the existing NJ TRANSIT commuter rail service at the Airport Station. Existing service at the Airport Station includes NEC and North Jersey Coast Line (NJCL) trains with departures varying throughout the peak period from approximately 10 minutes to every 35 minutes, and with service to Midtown Manhattan



in just under 30 minutes<sup>1</sup>. While this alternative would expand transit access to communities near the Airport Station, NJ TRANSIT commuters who live further away in Central New Jersey already have access to NJ TRANSIT commuter rail service via walk, automobile and bus at other stations in the system. More importantly, this alternative would not improve the commute to the growing central business districts in Jersey City or Lower Manhattan since NJ TRANSIT trains are bound for New York Penn Station in Midtown Manhattan (and to a limited extent Hoboken Terminal). Commuters bound for Jersey City and Lower Manhattan would still need to transfer from NJ TRANSIT rail services at Newark Penn Station to PATH or at New York Penn Station to New York City subways or PATH (at 33rd Street). Except for the local community within walking distance of the Airport Station, this alternative would not improve airport access for air travelers and airport employees that begin their trip in Hoboken, Newark, Jersey City, or Lower Manhattan.

The frequency and convenience of the current commuter rail service at the Airport Station would not compare favorably to that of PATH's heavy rail rapid transit for commuters destined to employment centers in Newark, Jersey City and Lower Manhattan. PATH service at the new multi-modal station would operate on three minute headways during peak periods and offer a one-seat ride to these destinations. Such a service would be expected to divert a significant number of existing PATH and NJ TRANSIT customers who start their trip at Newark Penn Station to PATH's new terminal station, thereby alleviating overcrowded conditions in and around Newark Penn Station.

For these reasons, providing NJ TRANSIT commuter access to the Airport Station is not viewed as meeting the proposed project's purpose and need and this alternative has been eliminated from further consideration.

#### *IMPROVED BUS, COMMUTER RAIL, LIGHT RAIL OR FERRY SERVICE*

The vast public transportation network in the PATH Corridor includes public and private bus service, NJ TRANSIT light rail and commuter rail, Amtrak intercity rail, PATH (heavy rail), and Newark and New York City subways. None of these services currently provide fast and reliable direct access between EWR/Dayton and the central business districts in Jersey City and Lower Manhattan without a transfer between modes.

- **Bus Service.** NJ TRANSIT operates a robust bus service in the PATH Corridor, with service to locations in New Jersey and the Port Authority Bus Terminal in Midtown Manhattan, where commuters must transfer to NYC subways or city buses for transit access to Lower Manhattan. Several private carriers operate directly to Lower Manhattan; however, these buses are subject to frequent delays as a result of congestion at the approaches to the Holland Tunnel on both sides of the Hudson River, as well as on local streets in Jersey City and Lower Manhattan. While the Lincoln Tunnel has a 2.5-mile contra-flow bus lane, which allows for a more reliable trip, Holland Tunnel buses operate in mixed traffic. Because of the traffic congestion and lack of physical and operational capacity for any kind of bus-only routings, additional bus service in the PATH corridor would not improve connectivity between Northeastern and Central New Jersey communities and

---

<sup>1</sup> While Amtrak's intercity service also stops at the Airport Station, service is infrequent and more expensive than NJ TRANSIT commuter rail service. As a result, daily commuters would use NJ TRANSIT service.

Jersey City and Lower Manhattan employment centers or improve access for the local Newark community or access to EWR compared to current conditions. Moreover, as regional population, employment, and traffic grow over time and, with both a lack of opportunities to construct more roadway capacity and the need to continually close parts of local roads for maintenance as the system continues to age, buses in the future are expected to face increasing congestion on the region's roadways. NJ TRANSIT and NJDOT have explored options for dedicated bus routings and found that the provision of dedicated bus lanes for Bus Rapid Transit (BRT) in the PATH corridor would diminish roadway capacity and worsen congestion to unacceptable levels for other road users. Furthermore, the capacity of such a service would not favorably compare to that of PATH's heavy rail rapid transit. Bus service would not support the City of Newark's Master Plan objectives to build transit-oriented development to the same degree as a permanent rail link, since development of real estate relies on fixed transportation infrastructure to minimize long-term investment risks. While providing new bus service to the Airport Station would improve airport access for some EWR employees, air travelers and intra-New Jersey commuters, it would not improve travel convenience for those beginning or ending their trip in Hoboken, Newark, Jersey City, or Lower Manhattan, as existing bus routes already serve these origins. For these reasons, bus service improvements are not viewed as meeting the proposed project's purpose and need, and this alternative has been eliminated from further consideration.

- **Commuter Rail.** This alternative would increase the frequency of NJ TRANSIT commuter rail service at the Airport Station in addition to building roadways and sidewalks for access (as described above). As indicated above, the frequency and convenience of the current NEC commuter rail service would not compare favorably to that of PATH's heavy rail rapid transit for commuters destined to employment centers in Jersey City and Lower Manhattan. PATH service at the new multi-modal station would operate on three minute headways during peak periods and offer a one-seat ride between the new multi-modal station and employment centers in Newark, Jersey City and Lower Manhattan. The NEC is the most heavily patronized line in NJ TRANSIT's rail system, operating through one of the most densely populated areas in the United States. Trains on the NEC operate at high speeds and in significant volumes. Since the NEC currently operates at capacity between the Airport Station and New York Penn Station, improving commuter rail service frequencies by adding additional trains would not be feasible unless additional rail tunnel capacity under the Hudson River and a capacity expansion at New York Penn Station can both be provided. Even if the NEC Future program and Gateway projects result in enough added capacity to allow the Airport Station more robust service, such service would not result in direct access to Jersey City or Lower Manhattan or substantially improve the commuter and airport markets in accordance with the goals and objectives of the proposed project. Since improved commuter rail service at the Airport Station is not a feasible alternative, it has been eliminated from further consideration.
- **Light Rail.** The Newark-Elizabeth Rail Link (NERL) was initially planned to connect the downtown areas of Newark and Elizabeth with EWR. Only the first segment was constructed, which connects Newark's Broad Street and Penn stations through downtown Newark's central business district.

There are no known plans by NJ TRANSIT to complete the remaining segments<sup>2</sup>. Light rail (or street cars) cannot compete with heavy rail rapid transit in terms of capacity or fast and reliable service, as light-rail vehicles operating in mixed traffic are generally smaller and subject to much of the same congestion that afflicts trucks, automobiles and local bus services. Allowing light rail vehicles to operate in dedicated roadway lanes would result in similar traffic impacts to those studied for BRT projects in the study area.

- **Ferry Service.** There is robust ferry service between New Jersey and New York and several ferry terminals in Hoboken and Jersey City (Newport, Paulus Hook, Liberty Harbor, and Port Liberte) that provide ferry service to Lower and Midtown Manhattan. Enhanced ferry service has no potential to improve the commute to Jersey City for New Jersey commuters or improve transit connectivity to EWR. As a result, enhanced Ferry Service is not a reasonable alternative. Ferry service complements the public transportation in the PATH corridor and requires feeder transit (buses, light rail, commuter rail) to bring passengers to and from their origin and/or destination. Enhanced ferry service in combination with improved feeder transit is also not a reasonable alternative. The frequency and convenience of the combined service would not compare favorably to that of heavy rail for commuters destined for employment centers in Jersey City and Lower Manhattan. PATH service at the new multi-modal station would operate on three minute headways during peak periods and offer a one-seat ride between the new multi-modal station and employment centers in Newark, Jersey City and Lower Manhattan.

These alternative modes – operating between downtown Newark and the Airport Station – would primarily serve local, rather than regional trips, and therefore would only marginally improve connectivity and access between Newark, Jersey City, Hoboken, Lower Manhattan, and EWR. As a result, these modes were eliminated from further consideration.

#### EXTENSION OF AIRTRAIN TO NEWARK PENN STATION

PANYNJ considered extending the AirTrain Newark from the Airport Station to Newark Penn Station. This alternative would provide access to the Airport Station from the local roadway network so that commuters could board the AirTrain for service to Newark Penn Station. Customers bound for Jersey City or Lower Manhattan would transfer to PATH at Newark Penn Station.

Newark Penn Station, a historic train station, would need significant remodeling and retrofitting to accommodate an AirTrain system, likely resulting in loss of original historic features and some historic integrity. An elevated alignment would also conflict with the proposed Mulberry Commons development, which extends between Prudential Center and Newark Penn Station and includes a pedestrian bridge connection spanning the PATH and NEC tracks to Peter Francisco Park in the Ironbound District. The extension of the AirTrain to Newark would have fewer commuter benefits than would a PATH extension, since it would require riders entering at the Airport Station to transfer at Newark Penn Station for access to Jersey City, Hoboken, and Lower Manhattan, and one of the four goals of the project – expanding transit access to the residential communities near the Airport Station — would therefore not be met as effectively as with the PATH extension. Finally, AirTrain Newark can only offer a fraction of the capacity of heavy rail, suggesting long waits and insufficient service quality

---

<sup>2</sup> The remaining two segments would connect Newark Penn Station to EWR and downtown Elizabeth to EWR.

during peak commuting hours as large volumes of commuters attempt to use the service over a short time. The heavy rail extension would provide greater benefits to the region's transit service and make better use of the existing infrastructure.

#### ***EXTENSION OF PATH SERVICE TO THE AIRPORT STATION***

After evaluating and eliminating new modes and having explored existing modes in this corridor, heavy rail rapid transit was considered the most reasonable option for the proposed project. A heavy rail service provides the right capacity and service characteristics to meet peak period demand, while maximizing the use of existing transit infrastructure. It upgrades the existing South Street storage yard tracks and constructs new tracks in an established rail corridor, increasing the utility of the existing rail infrastructure. It minimizes impacts – historic and construction-related – to existing transportation infrastructure by requiring relatively minimal changes at historic Newark Penn Station. It would also relieve traffic congestion in Downtown Newark and alleviate crowding on NJ TRANSIT and PATH platforms in Newark Penn Station as the extension would divert some existing PATH commuters from Newark to the new station. The PATH Extension would enhance commuting options to regional employment centers for communities near the Airport Station, and would provide fast and reliable service for the key markets identified in the project's purpose and need via a one-seat ride to reach them and convenient underground corridor transfers at the WTC to New York City subways serving the West Side and East Side of Manhattan. The new multi-modal station would be accessible by walk or short bus ride or drive from the Dayton community and other nearby communities, and the extension of the PATH heavy rail would have the greatest potential to support transit-oriented development in this area, further strengthening the community and increasing jobs access for more people. The PATH Extension would enhance the resilience of the regional transportation system by serving more commuters on a redundant trans-Hudson route.

### **3-3-3 TIER 2 SCREENING**

Alternative alignments for the PATH Extension were developed that considered: different vertical and horizontal profiles of the new tracks both along the east and west side of the NEC; construction of a South Street station just south of the existing PATH storage yard; and extension of PATH service directly to the airport terminals in place of the AirTrain Newark.

Other options were considered but found to be fundamentally flawed and therefore deemed infeasible and eliminated from further consideration. These included sharing tracks or comingling service with Amtrak and NJ TRANSIT, which would not be feasible due to capacity constraints on the NEC and difficulties developing scheduling and operating protocols due to differing FRA requirements for heavy and commuter rail. Extensive and unacceptable service disruptions to Amtrak and NJ TRANSIT service on the NEC would be required during construction to retrofit the NEC overhead catenary electric propulsion system to support PATH trains requiring third rail electric power delivery. Splitting the eastbound and westbound PATH tracks on either side of the NEC would also be infeasible due to operational complications, limited storage yard options, and design difficulties to create a PATH station near the Airport Station.

The screening process for the feasible alternative alignments, which is described below, used the following Tier 2 screening criteria:

- Does the alignment minimize impacts to existing transportation infrastructure and would it accommodate planned future projects?
- Does the alignment minimize impacts to existing and planned land use?
- Would the construction costs, including consideration of constructability and risk, be reasonable?

#### *ALIGNMENTS TO THE WEST AND EAST OF THE NEC*

An alignment that includes two new dedicated PATH tracks from Newark Penn Station to a new station near the Airport Station along the west side of the NEC was developed to minimize impacts to existing and future planned transportation infrastructure. The alignment would include conversion and reuse of the existing PATH flyover from Newark Penn Station and the South Street storage yard to revenue service and forms the basis of the proposed project's current Build Alternative. It could be constructed with minimal impact to NEC operations, and would not preclude the future installation of a fifth NEC track by Amtrak<sup>3</sup> or the Hunter Flyover by NJ TRANSIT. NJ Route 21 (McCarter Highway) and its adjacent business strip would provide a buffer between the PATH alignment and the residential properties located further west. NJ Route 21 (McCarter Highway) would also provide a buffer for Tichenor Park/Skulls Field and the Green Street Park located on the west side of the highway. The multi-modal station and rail yard could be built to the west of the NEC with relatively minor property acquisition since adjacent properties are either vacant or underused industrial uses. Construction of the multi-modal station to the west of the Airport Station would satisfy the strategies identified in the City of Newark's Master Plan strategies, since access from Frelinghuysen Avenue would serve the Dayton and other nearby residential neighborhoods. The western alignment would facilitate transit-oriented development in the vacant and underutilized industrial property located within walking distance of the new station.

An alignment that includes a new flyover at Newark Penn Station for two new PATH tracks to cross the NEC and travel along the east side of the NEC was also considered. This alignment would require a two-track viaduct structure above Railroad Avenue in Newark's Ironbound District. The viaduct structure would need to be about 30 feet wide and located at least 20 feet away from the NEC to meet clearance requirements. The 50-foot extension of the railroad corridor, which would be required to accommodate the two PATH tracks, would have significant adverse impacts on Railroad Avenue and its adjacent businesses, residents and community facilities. The eastern alignment would make siting a yard more difficult due to the predominance of active airport support uses east of the Airport Station/NEC. The alignment would impact the development of the "Newark Liberty Airport Business Center," a hotel and conference center adjacent to the Airport Station that has been proposed by Hartz Mountain Industries, Inc. Compared to the western alignment, construction of a new PATH flyover crossing above this congested segment of the NEC would be more costly and would more directly impact NEC operations than would a west-side viaduct alignment. For these reasons, the eastern alignment was eliminated from further consideration.

---

<sup>3</sup> While the NEC Future Program identifies the need for two new NEC tracks, Amtrak is currently planning for a single new track in this area.

### *SOUTH STREET STATION ALIGNMENT*

An option was considered to build a new intermediate station just south of PATH's existing South Street Yard, between Newark Penn Station and the Airport Station. The concept would include a center island platform between two extended PATH tracks at South Street, which would be elevated above street level and situated above the tracks with access via elevators to permit boarding in compliance with ADA requirements. This configuration would require that the platform displace the outer (southbound) PATH track, forcing the relocation of its supporting superstructure to the west where it would occupy the first two (northbound) lanes of traffic in NJ Route 21 (McCarter Highway). This, in turn, would require the addition of at least two new lanes, for a total McCarter Highway cross-section of six lanes, on the west side of NJ Route 21, which would result in significant property acquisition and displacement and relocation of businesses in a 20-block area, between Hamilton Street and approximately Miller Street.<sup>4</sup> The station and required reconstruction of NJ Route 21 (McCarter Highway) would add significantly to the project cost. Maintenance of NEC and PATH operations during construction would require significant schedule reductions and service slow-downs for three years. Construction impacts to a major truck and auto route would significantly diminish worker productivity in the NJ Route 21 corridor by intensifying traffic congestion throughout the construction period. The deceleration, stopping, dwell time, and acceleration at a station so close to two others would impact the speed, travel time and capacity of the line for limited benefit. For these reasons, the South Street station was eliminated from further consideration.

### *PATH EXTENSION TO EWR TERMINAL C*

Consideration was given to extending the PATH service into the airport, in lieu of replacing AirTrain Newark at some point in the future. This alternative was eliminated from further consideration due to its considerable impacts to EWR terminal areas, which would need to be reconfigured to accommodate heavy rail. PATH would not be able to effectively replace the AirTrain Newark as a terminal circulator, and would instead make a single stop in the center area of the terminals, displacing the existing parking deck, and requiring a transfer to a horizontal escalator or people-mover – or a lengthy walk – to reach the three main terminal buildings. In addition, this alternative would require a more complex and costly east-of-NEC alignment, as discussed above.

---

<sup>4</sup> NJDOT has indicated that current plans for Route 21 will require that any modifications result in a 6-lane road to replace the heavily congested 4-lane road there now. This would aggravate significantly the loss of property along the west side of Route 21, and require a penetration of 48 feet rather than just the 24 feet needed to restore the displaced northbound lanes.

## SECTION 4: ENVIRONMENTAL ANALYSIS FRAMEWORK

---

- *In addition to NEPA, what federal regulations will be satisfied by the EA?*
- *What are the project limits and study area for the environmental analysis?*
- *What future years will be studied in the EA?*
- *How will the EA be organized and what topics will be studied?*

### 4-1 INTRODUCTION

This section describes the framework for preparation of the PATH Extension Project Environmental Assessment (EA). It begins with the regulatory requirements and the organization of the EA. It then describes the study areas, analysis year, and topics to be studied in the EA.

### 4-2 REGULATORY REQUIREMENTS

As required by the National Environmental Policy Act (NEPA), the EA will include a concise yet comprehensive evaluation of all potential social, economic, and environmental impacts of the proposed project. The environmental analysis will evaluate all pertinent resource areas required by NEPA. In addition, for NEPA to be successfully completed, requirements of a number of additional federal laws and regulations will be satisfied by the EA. These parallel processes are likely to include:

- **Section 4(f) of the U.S. Department of Transportation (USDOT) Act** (49 USC §303; 23 CFR 771.135), which protects public parklands, historic resources, and wildlife refuges from being “used” by a project unless no prudent and feasible alternative is available. Coordination with the U.S. Department of Interior and the owner of the resource is required.
- **Section 106 of the National Historic Preservation Act** (16 USC §470A; 36 CFR Part 800), which affords special protection to historic and archaeological resources, and requires coordination with the State Historic Preservation Office (SHPO, which in New Jersey is the NJHPO) and any interested consulting parties. The consultation process to comply with Section 106 involves a number of outreach steps to interested parties, including Native American tribes. Section 106 consultations can be conducted in coordination with other public outreach efforts, but it is a separate process.
- Conformity determination under the **Clean Air Act and its Amendments**, which requires the federal agency to make findings regarding the proposed project’s effect with respect to the State Implementation Plan (SIP); this requires coordination with the U.S. Environmental Protection Agency (EPA) and the metropolitan planning organization for the area, the North Jersey Transportation Planning Authority (NJTPA).
- Compliance with **Executive Order 11988, “Floodplains,”** (42 FR 26951, 3 CFR; USDOT Order 5650-2, “Floodplain Management and Protection,” April 23, 1979), which regulates project’s located in a floodplain to avoid any adverse impacts associated with the occupancy and modification of floodplains.



- Compliance with **Executive Order 11990, “Protection of Wetlands,”** and **USDOT Order 5660.1a, “Preservation of the Nation’s Wetlands,”** which prohibit construction in wetlands unless there is no practical alternative and practicable measures are taken to minimize harm.
- Compliance with **Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”** (USDOT’s Environmental Justice Order 5610.2(a) “Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” and FTA C4073.1 “Environmental Justice Policy Guidance for Federal Transit Administration Recipients”), which require specific and focused outreach to low-income and minority communities that may be affected by a project. Executive Order 12898 directs federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.

NEPA can be considered the “umbrella” under which procedures to comply with these federal laws and regulations are conducted by FTA, in coordination with the relevant resource agency. FTA will invite these resource agencies to participate in its NEPA review as Cooperating Agencies.

### 4-3 ORGANIZATION OF THE EA

The EA will present key findings for the proposed project. Sections of the EA will be as follows:

- Executive Summary;
- Purpose and Need;
- Alternatives;
- Process, Agency Coordination, and Public Participation; and
- For each NEPA analysis category (i.e., social conditions; economic conditions; cultural resources; visual quality; transportation; air quality; noise and vibration; greenhouse gas emissions and climate change; contaminated materials, infrastructure, ecology, water resources, construction impacts) the following will be described:
  - Affected Environment: Existing conditions and anticipated future No Action conditions within the general project study area described in Section 4-4-1 below or for a study area defined specifically for the subject area.
  - Environmental Consequences: The potential beneficial and adverse impacts of each build alternative relative to conditions under the No Action Alternative.
  - Mitigation: Where potential adverse impacts are identified, proposed measures that would avoid, minimize, or mitigate these adverse impacts will be discussed.
- Indirect and Cumulative Effects, which will examine impacts that may be “caused by an action and are later in time or farther removed in distance, but are still reasonably foreseeable,” known as indirect effects; and impacts that may result from the incremental consequences of the project when added to other independent, past or reasonably foreseeable future actions, known as cumulative impacts.
- Environmental Justice, which will examine whether the impacts identified in the EA would have any disproportionately high or adverse impacts on minority and low-income communities.
- Section 4(f) Evaluation (if required), and



- Appendices, which will include technical reports that support the EA.

## 4-4 METHODOLOGY

### 4-4-1 PROJECT LIMITS AND STUDY AREA

The preliminary project limits are shown in **Figure 4-1** based on alternatives developed to date. The project limits extend from Newark Penn Station to just southwest of Haynes Avenue along the Northeast Corridor (NEC). The project limits include the potential transit right-of-way and areas that may be used for related purposes (station, yard, parking, substations, etc.).

The EA will include a specific study area for each environmental topic. For certain topics (i.e., contaminated materials or archaeology), the study area may be only where ground disturbance would occur from the proposed project's construction. Other topics will have a study area of ½ mile from the physical improvements since the potential for impacts could occur over a larger area (e.g., traffic, socioeconomic conditions, and air quality). For each topic area, the EA will identify the study area used for the analysis.

### 4-4-2 EA ANALYSIS YEARS

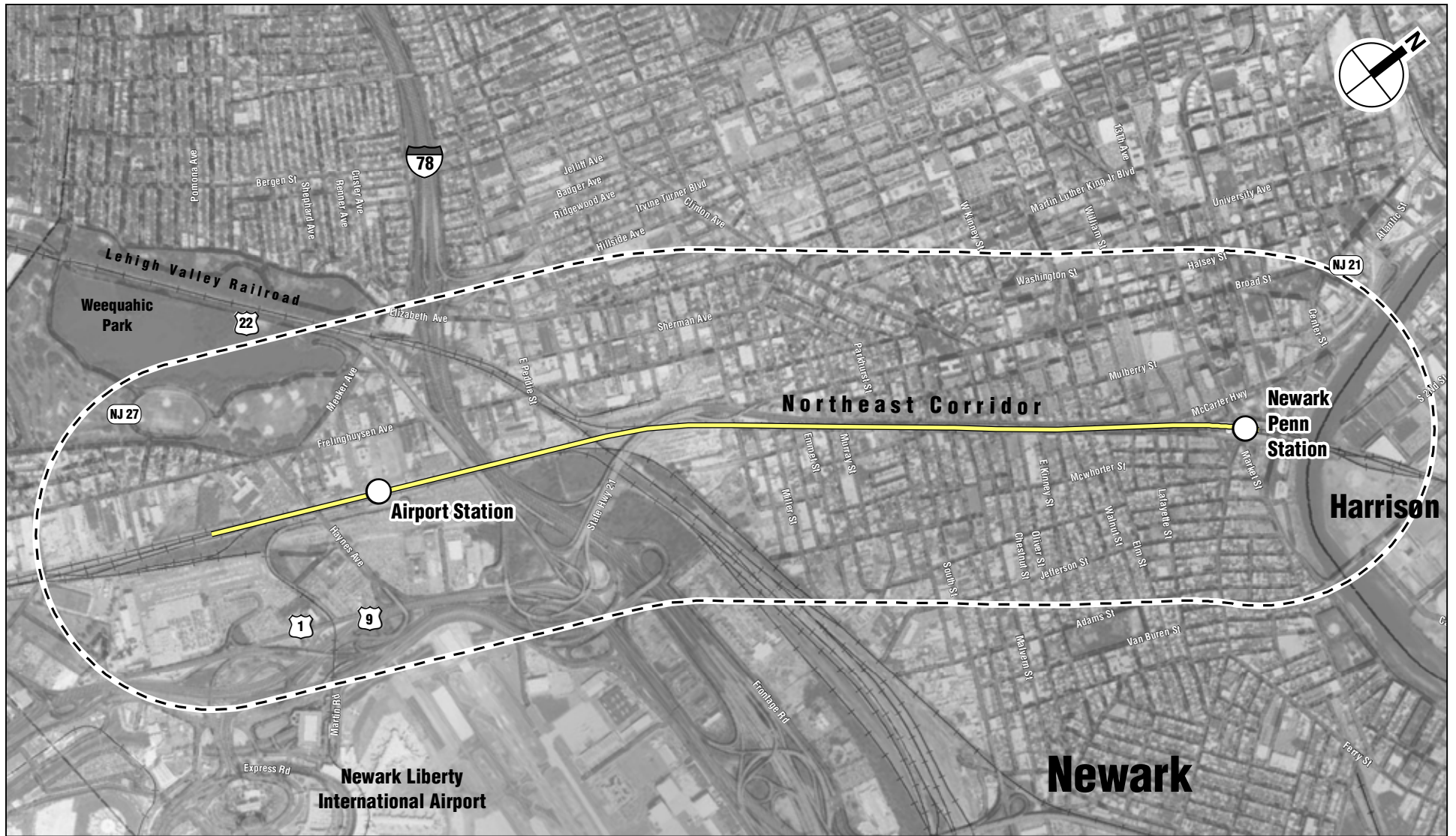
The EA will consider both the short-term (construction) and long-term (operational) impacts of the No Action and Build Alternative(s).

- **Construction Period (2020 to 2026).** This analysis will be undertaken for the period when construction would occur. For environmental topics that are quantitatively assessed (e.g., traffic, air quality, noise), the construction analysis will reflect the peak year of construction. For other topics, the EA will qualitatively discuss the potential impacts for the duration of construction.
- **Analysis Year (2035).** The project may be operational in 2026, but the EA will assess conditions in 2035. The year 2035 is being used for the ridership forecasting to account for a potential "ramp up" period when the project opens. The ramp-up period is a time of steadily increasing ridership as potential customers become aware of the new transit service. By 2035, it is expected that most travelers within the region would be aware of the service and ridership changes would level off. An analysis year of 2035 will capture full usage of the new service in the foreseeable future and the potential effects of projected new riders on the region's transit system as well as any impacts to the roadway network and related environmental topics (e.g., air quality and noise). Permanent impacts of the construction of new right-of-way and if mitigation measures are needed, the EA will identify the appropriate timeframe for the implementation of these measures.

### 4-4-3 TECHNICAL STUDIES

The EA will include evaluations of the full range of technical areas needed to comply with NEPA. The following bullets identify the environmental topics that will be studied in the EA.

- **Social Conditions:** This section will assess land use, zoning, community character, demographics, community facilities, and parklands and recreational resources. In addition to providing an understanding of the project's potential impacts on social conditions, information pertinent to the



- Future PATH Extension - For Illustrative Purpose Only, Pending Environmental Review
- Study Area (1/2-mile boundary)

0 1 MILE

baseline conditions for the project limits in the current condition and design year will be provided. For example, low-income and minority populations will be identified to inform the environmental justice analysis discussed further below. It will also identify development and transportation proposals that may be realized locally or regionally that may influence potential ridership projections for the project or may change physical conditions within the project limits.

Changes in land use that may result from the project, either directly or potentially indirectly, will be described and impacts to land uses will be evaluated. Potential impacts related to community facilities, recreational resources, and emergency service operations will be evaluated. In addition, consistency with any applicable local or regional planning documents and initiatives, including the City of Newark and the NJTPA planning goals will be evaluated.

**Economic Conditions:** This section will examine the potential effects of the proposed project on economic conditions in the PATH Corridor and project study area. It will consider key economic factors that are typically used to characterize economic conditions, and are highly dependent on a regional transportation system, including employment, real estate, and business trends that illustrate the health of the economy. A description of existing conditions, changes that are expected to occur in the future independent of the proposed project, and the potential impacts of the proposed project will be presented. Potential economic impacts related to full and partial property acquisitions and easements, changes in access to local businesses and residences (if any), and changes in customer activities due to a potential new station will also be identified. Changes in the City of Newark's tax revenues that would result from property acquisition will be estimated. The section will address requirements related to property acquisitions under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

**Cultural Resources:** This section will document FTA's compliance with Section 106 of the National Historic Preservation Act for the project. An Area of Potential Effect (APE) will be defined and the potential for alternatives to affect historic structures (i.e., those listed or eligible for listing on the New Jersey State and/or National Register of Historic Places) within the APE will be identified. This will include Newark Penn Station, which is already an identified historic structure, as well as other historic resources that may be affected by the project. During field visits, experts will identify historic structures that are potentially eligible for listing on the State and/or National Register of Historic Places based on the published. The EA will document any potential adverse effects on historic structures, including potential resources identified during field visits, and will identify measures to minimize or mitigate these adverse effects.

The EA will also include an evaluation of the proposed project's potential to affect land that may have buried archaeological resources. Previous studies conducted for the project limits identified several areas where archaeological resources may be located, and this work will be summarized in the EA. For areas not previously studied, experts will prepare a Phase 1A documentary study, which will describe the potential for archaeological sensitivity based on research. The EA will document any potential adverse effects on areas of potential archaeological sensitivity and will identify measures to minimize or mitigate these adverse effects.

The Section 106 consultation process will be undertaken concurrent with preparation of the EA and will include coordination among SHPO, consulting parties, and FTA, as described above in Section 4-2. Materials prepared to inform that process, including any agreements to mitigate adverse effects, will be provided in appendix to the EA.

- **Visual Quality:** Based on alternatives developed to date, the area surrounding the preliminary project limits is characterized by industrial and commercial uses with limited sensitive viewsheds. The EA will consider the appearance of any new structures and the potential visual effects of any new structures or infrastructure on or from important views. The visual character in the area of visual effect will be documented by describing natural and manmade features and identifying visual resources, such as the recently completed “Gateway” mural on the NEC retaining wall. The analysis will be prepared in accordance with the *U.S. Department of Transportation Guidelines for the Visual Impact Assessment of Highway Projects* (DOT 2015), which represents current best practices for conducting a thorough evaluation of visual impacts caused by a transportation project. Measures to mitigate adverse effects or visual enhancement measures will be identified.
- **Transportation:** Expansion of public transit services is typically a transportation enhancement, and this section will discuss the beneficial aspects of the project on regional mobility and transportation services. This section will also evaluate potential impacts on the transportation network from changes in transit ridership. Such changes could include increases in stations, changes in vertical circulation at stations, demand for connecting bus services, and traffic associated with commuter parking or passenger drop-off and pick-up. The proposed project’s long-term effects on PATH service, NJ TRANSIT service, and AirTrain Newark will be presented in the EA. The EA will document the results of a traffic analysis performed at key intersections within a ½-mile radius of the new station in accordance with the most recent version of the *Highway Capacity Manual*. Measures to mitigate potential traffic impacts will also be identified.

The project will require coordination with a number of transportation entities due to its adjacency to other rail lines (such as NJ TRANSIT, Amtrak, and Conrail) and local roadways and major highways (such as Interstate 78, NJ Route 21 (McCarter Highway), and US Route 22 (Lincoln Highway)). The EA will identify the potential for the project to impact the existing or projected operation of these transportation facilities as a result of construction activities in and near the NEC.

- **Air Quality, Greenhouse Gases, and Energy:** Typically, enhancements to public transit are beneficial with respect to air quality and energy conservation, as they encourage a reduction in private automobile use. While the proposed project would result in some level of energy use and emissions (i.e., power for heavy rail operations and vehicle trips), this would potentially be offset by the inherent benefits associated with expanding accessibility to transit and an overall reduction in vehicle miles traveled in the region. This section will identify air quality and energy benefits associated with the proposed project, and determine whether any regional or localized adverse impacts would result from potential changes in travel patterns.
- **Noise and Vibration:** Based on alternatives developed to date, the proposed project would result in an increase in heavy rail traffic operations and new rail tracks in closer proximity to existing land uses. Following guidance found in FTA’s *Transit Noise and Vibration Impact Assessment*, May 2006, which is used by both FTA and the Federal Railroad Association (FRA) for evaluating the noise and vibration from rail projects, the EA will identify any sensitive receivers (i.e., sensitive land uses) that could be affected by the proposed project and will assess potential impacts associated with changes in noise or vibration levels resulting from the proposed project.
- **Contaminated Materials:** Due to the existing and past heavy rail use within the proposed rail corridor, as well as the industrial nature of many adjacent properties, the potential for



contaminated materials exists within and adjacent to the project limits. A Phase I environmental site assessment (ESA) will be conducted in accordance with American Society for Testing and Materials (ASTM) standards and will be summarized in the EA. This section will also describe the need for soil and/or groundwater sampling and protocols for managing contaminated materials during construction.

- **Infrastructure:** This section will discuss the potential impacts to utilities and other infrastructure that may be intersected by the proposed alignment. It will also discuss future demands for utility service that result from the proposed project, including power needs for operations.
- **Ecological Resources:** Based on alternatives developed to date, the project limits would largely be in a developed corridor. The removal of some upland and wetland vegetation may be required and potential impacts to wetlands located in drainage ditches may occur. Existing upland and wetland habitat will be confirmed through mapping resources and field investigations. The analysis of ecological resources will include an assessment of potential impacts to state- and federally-listed threatened and endangered species. The presence (or absence) of threatened and endangered species will be confirmed using online resources through the U.S. Fish and Wildlife Service (USFWS) and the New Jersey Department of Environmental Protection (NJDEP) Natural Heritage Program, as well as coordination with appropriate agencies, as needed. The analysis will meet the requirements of the rules, regulations, and guidance cited above in Section 4-2.
- **Water Resources:** Based on alternatives developed to date, the project limits would intercept limited surface waters, but portions of the proposed project would be in a floodplain. The EA will assess potential impacts to surface water and groundwater resources, including an analysis of any floodplains and stormwater management, in accordance with the rules, regulations and guidance cited above in Section 4-2. As necessary, measures will be developed in consultation with the resource agencies to avoid, minimize, or mitigate water quality impacts.
- **Construction Impacts:** Primary concerns related to construction activities for the proposed project will be noise and vibration, emissions from construction equipment, construction traffic on surrounding roads, and the potential to impact Amtrak and NJ TRANSIT operations on the NEC. For the proposed project, additional careful consideration will be needed to address potential impacts on environmental justice communities (described further below).

The construction analysis will be based on a framework developed by the project engineers. This will include a roster of equipment, operating assumptions, and abatement measures used to minimize noise and air quality impacts. Once the construction assumptions have been developed, an analysis of the impacts of construction will be conducted for the full range of environmental issues considered in the EA. For most areas, it is anticipated that the assessment will be largely qualitative and descriptive. However, there may be quantified analysis of general noise impacts, traffic during construction, and possibly other environmental topics.

- **Environmental Justice:** Based on alternatives developed to date and federal guidance for identifying low-income and minority populations, the entire project limits are within an environmental justice community. The EA will evaluate the potential for the proposed project to result in disproportionately high and adverse impacts on environmental justice communities and engage the affected community in the process in accordance with relevant guidance documents. Race, ethnicity, and income data for the census tracts in a ½ mile study area will be compiled and presented in the EA. Census data will also be compiled for the counties or portions of counties



that comprise the PATH corridor (i.e., the PATH service area). Areas where the proposed project would have the potential to cause significant individual or cumulative adverse impacts (on human health, the natural environment, or the community) from construction activities and the long-term operation of the PATH service extension will be described; and the potential for disproportionate high and adverse effects on minority or low-income populations will be identified. A comparison of the race/ethnicity characteristics and socioeconomic status of the population in the PATH corridor who would benefit from the proposed project will be compared to those who would be adversely affected. An assessment of whether the benefits of the proposed project would be equally distributed will be presented. The EA will also describe the public outreach efforts undertaken to inform and involve minority and low-income populations who may be affected by the proposed project.

- **Indirect Impacts and Cumulative Effects:** As noted above, the EA will evaluate the proposed project's indirect (secondary) and cumulative effects. The potential for transit-oriented development to occur in the Dayton neighborhood as a result of the proposed project is considered an indirect or secondary effect. The EA will qualitatively assess the effects of potential future residential and commercial development near the station for each of the NEPA analysis categories. Cumulative impacts will also be assessed and could include consideration of the proposed project in combination with Amtrak or NJ TRANSIT improvements on the NEC, for example.
- **Section 4(f) Evaluation:** As described in **Section 4-2**, certain properties or resources are afforded protection under Section 4(f) of the USDOT Act. While the Section 4(f) evaluation is a standalone process with its own public review requirements, it will be incorporated into the NEPA EA and public review for streamlining purposes. The evaluation will identify any Section 4(f) resources within the project limits, whether the proposed project would or would not use these resources, and provide documentation in accordance with Section 4(f) requirements for any such use.

## SECTION 5: AGENCY AND PUBLIC COORDINATION

---

- *What is the purpose of the agency and public coordination program?*
- *How will the public stay informed throughout the project?*
- *What is the Public and Agency Coordination Plan and where can it be viewed?*

Public involvement is an integral part of the transportation planning and NEPA process. Accordingly, the Federal Transit Administration (FTA) and the Port Authority of New York and New Jersey (PANYNJ) will provide opportunities for open, collaborative, and meaningful public and agency participation throughout the environmental review process for the project. The public and agency participation efforts for this project have been developed in compliance with recent guidance to meet the needs of the following:

- **National Environmental Policy Act of 1969 (NEPA)**, which requires federal agencies to conduct the environmental review process in coordination with the public and with other agencies;
- **Section 106 of the National Historic Preservation Act (NHPA) of 1966**, which requires that federal agencies consider the effects of their undertakings on properties listed on or eligible for listing on the National Register of Historic Places, including consultation with the State Historic Preservation Office, the Advisory Council on Historic Preservation, federally recognized Native American tribes, and agencies, individuals, and organizations with a demonstrated interest in the project and its potential effects on properties of historic interest (i.e., Consulting Parties);
- **Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,”** USDOT’s Environmental Justice Order 5610.2(a) “Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” and FTA C4073.1 “Environmental Justice Policy Guidance for Federal Transit Administration Recipients”, which require targeted outreach to environmental justice communities that may be impacted by a federal undertaking;
- **Title VI of the Civil Rights Act of 1964** prohibiting discrimination based on national origin and **Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency (LEP),”** which states that people with LEP should have meaningful access to federally conducted and federally funded programs and activities;
- **Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970**, which requires public notification of actions that may result in the condemnation and/or acquisition of property, including targeted outreach to affected property owners; and
- **Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966**, which requires coordination with agencies of jurisdiction if a transportation project would result in a use of properties protected under this Act.

An Agency and Public Coordination Plan has been prepared for the proposed project, which conforms to the requirements of the above-mentioned rules and regulations. The Plan describes roles and responsibilities; agency contacts, agency involvement activities and coordination milestones; public

involvement tools and activities; and plans for public meetings. A copy of the Agency and Public Coordination Plan can be viewed on the project website at [www.panynj.gov/PATHextension](http://www.panynj.gov/PATHextension).