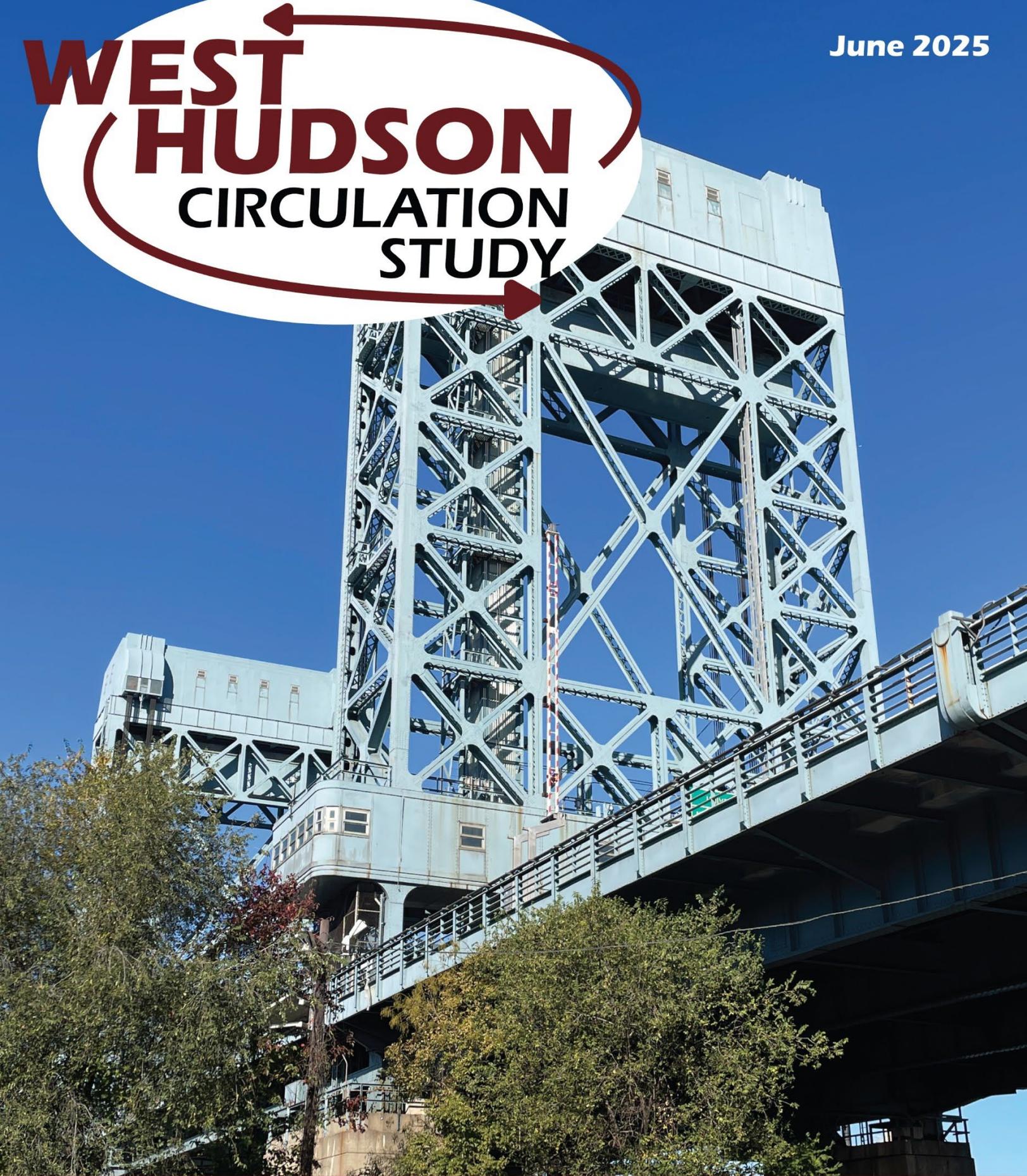


June 2025

WEST HUDSON CIRCULATION STUDY



ABOUT THIS REPORT

This report has been prepared as part of the North Jersey Transportation Planning Authority (NJTPA) Subregional Studies Program with financing by the Federal Transit Administration and the Federal Highway Administration of the U.S. Department of Transportation. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The NJTPA is solely responsible for its contents.

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The NJTPA Board includes 15 local elected officials representing 13 counties—Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren— and the cities of Newark and Jersey City. The Board also includes a Governor’s Representative, the Commissioner of the New Jersey Department of Transportation (NJDOT), the President and CEO of NJ TRANSIT, the Chairman of the Port Authority of New York & New Jersey and a Citizens’ Representative appointed by the Governor.



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EXECUTIVE SUMMARY



West Hudson County, comprising the Borough of East Newark, Town of Harrison, and Town of Kearny, is a peninsular region uniquely defined by the Passaic River to the south and west, the Hackensack River to the east, and the Meadowlands to the north in Bergen County. Its transportation network of major interstates, county routes, neighborhood streets, bridges, and freight and passenger rail lines, is vital to the regional economy, providing access to commercial and service destinations, major employment hubs, and redevelopment sites that are dynamically transforming what was once mainly an industrial center into a vibrant place to live, work, and visit.

Given the rapidly changing character of the West Hudson study area, this plan assesses the current multimodal transportation system and makes strategic recommendations to better serve residents and address evolving travel needs. A distinct challenge for the region is that the transportation network is largely developed due to its central location between Newark to the west and Jersey City and New York City to the east. The area is mostly built out, necessitating creative and targeted solutions to enhance a system that serves residents, commuters, and travelers throughout the study area.

The West Hudson Circulation and Connectivity Study goals are to:



Connect Communities



Improve Safety



Expand Transit Options



Address Flooding Issues



Increase Accessibility

Balancing and addressing these goals and better integrating the West Hudson study area with the eastern portion of the County helps reimagine a future that leverages existing and planned transportation access, provides enhanced transportation choices, and maximizes access for residents and visitors of all ages and abilities.

Related Plans and Studies

Existing documents, plans, and initiatives were reviewed to better understand challenges and opportunities of the West Hudson transportation system and determine existing recommendations and strategies where investment has been or is being directed.

Some of the findings from reviewing related plans and studies include:

- Existing critical infrastructure projects, such as the **Bridge Street Bridge**, the **Clay Street Bridge**, and the **Frank E. Rodgers Boulevard** safety improvement project, are all in engineering phases with preferred design concepts. Recommendations made in the West Hudson Study complement these existing projects, as they represent long-term infrastructure investments.
- The **Harrison Complete Streets Policy and Implementation Plan** evaluated street conditions within the Town of Harrison to develop a municipal Complete Streets Policy and produce a contextual Complete Streets Design Guide to facilitate future project design and delivery on Town streets in the future.
- The **Hudson County Vision Zero Safety Action Plan** identifies a countywide High Injury Network (HIN) with several roadway segments located within the West Hudson study area, emphasizing locations that would benefit from safety improvements.
- NJ TRANSIT's **NewBus Newark** study provides recommendations for service changes to several bus routes operating within the West Hudson study area, including bus routes 1, 5, 30, 40, and 76.
- The NJTPA's **Regional Active Transportation Plan (ATP)** and the **Passaic River Greenway Plan** both establish a framework for regional and local bike networks that traverse the West Hudson study area. These regional plans have informed the West Hudson Study recommendations for an interconnected on- and off-street bike network.
- Hudson County's Draft **Electric Vehicle (EV) Infrastructure Plan** provided guidance on charging station locations within the study area that supported the EV analysis performed for this study.

Demographic Assessment

Based on an assessment of demographics using the U.S. Census American Community Survey (2018-2022), the percentage of households without cars in the West Hudson study area (21.7 percent) is notably higher than that in the NJTPA region (12.1 percent) and the state (11.3 percent), underscoring the need for a balanced transportation system that accommodates not only car trips but also other modes of travel.



**22% of study
area households
don't have a car.**



Other findings from the Demographic Assessment include:

- The West Hudson study area has a higher proportion of foreign-born residents (49.1 percent) than Hudson County (42.7 percent), the NJTPA region (26.5 percent), and the state (23.2 percent).
- The West Hudson study area has a higher proportion of residents without a high school degree (15.1 percent) than Hudson County (12.8%), the NJTPA region (9.3 percent), and the state (10.0 percent).
- The study area has a higher proportion of residents with limited English proficiency (LEP) (30.1 percent) than Hudson County (22.2 percent), the NJTPA region (13.7 percent), and the state (12.3 percent).
- The percentage of low-income residents in the West Hudson study area (29.3 percent) is comparable to Hudson County (29.8 percent) but higher than the NJTPA region (21.3 percent) and the state (21.8 percent).

For more information on this study's Demographic Assessment, refer to Chapter 2.

Data Analyses

Data analyses included an in-depth look at roadway congestion, travel speeds, roadway safety, active transportation access and facilities, transit networks, stormwater management, and electric vehicle (EV) technology. Origin-destination data was also evaluated to understand trip distribution and travel patterns to, from, and within the study area, including circulation and congestion impacts related to events at Sports Illustrated Stadium.

Key takeaways from the analyses include:

- Key destinations including parks, transit facilities, shopping areas, and schools are located in the western part of the study area, with the exception of South Kearny, which is a key employment destination.
- Of trips originating in the study area, 39 percent stay within the study area, with significant travel to Newark and Jersey City, emphasizing the importance of both local and regional connections.
- Congested roadways during both a.m. and p.m. peak periods include Frank E. Rodgers Boulevard (CR 697), Harrison Avenue (CR 508), and Schuyler Avenue (CR 507).
- The greatest bicycle demand and walk trip potential are in the western part of the study area, which has mixed land uses and the highest residential density.
- Opportunities exist in the study area for drainage improvements and green infrastructure, such as bioswales and rain gardens, that could improve stormwater capture and treatment and mitigate flooding.
- 500 charging ports (individual plugs) are needed in the study area by 2029 (5-year horizon) to meet projected EV demand.

For more information on the study's data analysis findings, refer to Chapter 4.

Community Engagement

The West Hudson Public Involvement Plan guided extensive community engagement activities. Participation from public officials, residents, advocacy organizations, and other stakeholders was facilitated through a focus group meeting, an online survey and interactive map, pop-up events, municipal partnership meetings, Technical Advisory Committee (TAC) meetings, and a public meeting.

Ultimately, more than 350 stakeholders participated in the various engagement activities, sharing their concerns, experiences, and insights related to circulation, mobility, and connectivity within West Hudson and beyond. The most frequently noted concerns are shown in the following graphic.

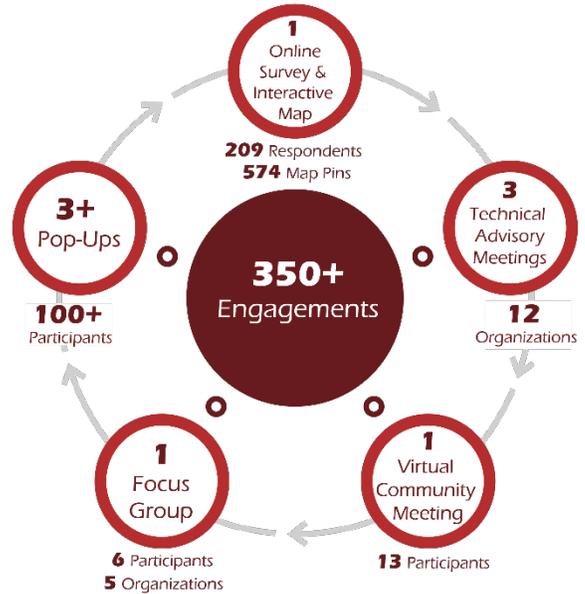
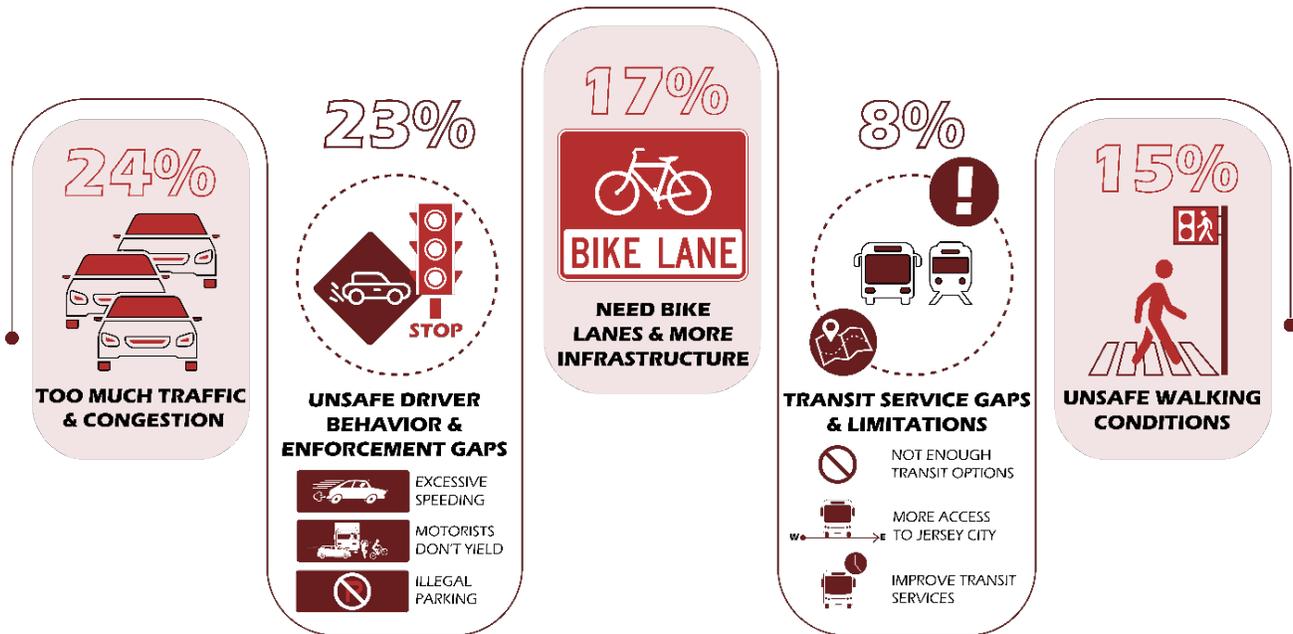


Figure 1. Public Engagement Numbers



For more information on community engagement, refer to Chapter 5.

Recommendations

Informed by outreach and data analysis to address transportation needs in the study area, strategic recommendations were developed and vetted by stakeholders. A recommendations matrix was developed, including associated order of magnitude costs (low/mid/high), implementation timeframes (short/mid/long), and parties responsible for implementation. Revisions to recommendations were made based on comments received from project stakeholders and the public.

More than 60 recommendations were organized into the following categories:

- **Traffic and Operations** – Recommendations focused on enhancing roadway design, operations, and overall performance within the study area’s road network.
- **Safety** – Recommendations that promote safe travel conditions for all, often incorporating FHWA Proven Safety Countermeasures (PSC) to improve pedestrian visibility, slow vehicles, and support safe streets in the study area.
- **Transit** – Recommendations focused on improving public transportation accessibility and connectivity.
- **Active Transportation** – Recommendations related to pedestrian and bicyclist accommodation that can enhance connectivity within the study area, reduce dependence on vehicle travel, and increase mobility options for residents and visitors.
- **Sustainable and Resilient Solutions** – Recommendations in this category are environmentally-focused and include strategies for managing and filtering stormwater, limiting roadway safety impacts due to localized flooding or ponding, sustaining transportation infrastructure, and supporting increased demand for electric vehicles.
- **Public Realm Enhancements** – Recommendations that support transportation and mobility while providing a distinct enhancement to the character of the study area, such as public beautification or wayfinding.

For the full matrix of recommendations, refer to Chapter 6.

Next Steps

Study recommendations should be integrated into local, county, and agency project delivery processes and advanced for implementation and/or further detailed study and design. A Complete Streets Policy can be implemented directly at the municipal level, leveraging the work previously done for the Town of Harrison Complete Streets Policy and Implementation Plan. Recommendations requiring interagency coordination require follow-up and longer-term implementation horizons.

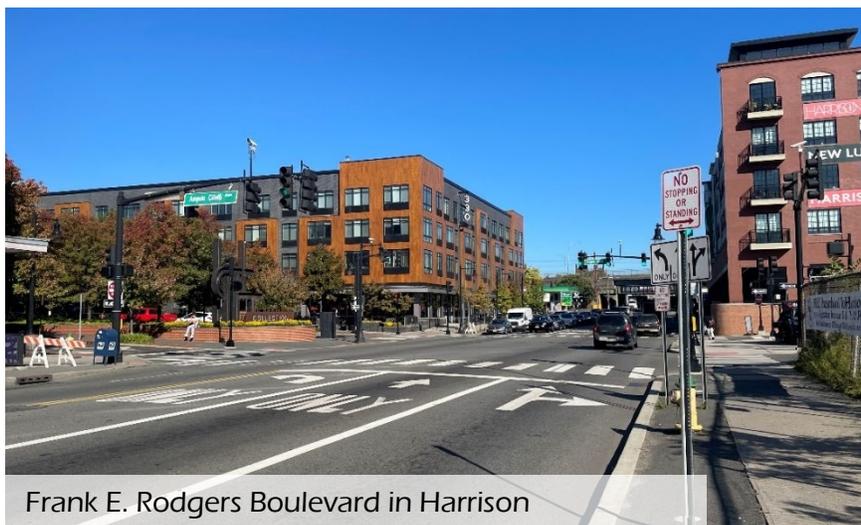
1. INTRODUCTION

West Hudson County – an area made up of East Newark, Harrison, and Kearny – is experiencing change through current and future redevelopment projects as well as transportation investment. The dynamic character of the western region of Hudson County provides an opportunity to examine issues and opportunities related to circulation and connectivity and to strategize ways to improve the transportation system to continue serving residents and visitors in the future.

The study area is bordered on three sides by the Passaic and Hackensack Rivers, making bridge connections essential for regional connectivity while also presenting challenges for transportation modes beyond vehicles. This is further illustrated within the study area itself, with South Kearny being relatively isolated from the rest of the study area by rail infrastructure, roadways, and wetlands. Moreover, the study area is intersected by major roadways such as I-280, I-95, and U.S. Route 1 & 9 that simultaneously provide access to the study area and act as barriers to mobility due to elevated infrastructure, embankments, or other impediments.

In light of these challenges, the West Hudson Circulation and Connectivity Study seeks to develop a “shared vision” for improving mobility within the study area as well as integrating it with eastern Hudson County and surrounding urbanized areas of Bergen and Essex Counties through strategic transportation recommendations. These recommendations complement existing regional and local planning efforts, including the 2024 Harrison Streets For All Complete Streets Design Guide, the Town of Kearny 2021-2030 Comprehensive Master Plan, and the planned and completed work in East Newark along the Passaic River waterfront with the newly opened East Newark Riverfront Park.

Enhancing multimodal connections can provide West Hudson residents and visitors with more transportation options to navigate their communities and surrounding areas safely, while also presenting opportunities for improvements that beautify the environment, manage stormwater to prevent flooding on roadways, and enhance the sustainability and resilience of this growing study area.



Frank E. Rodgers Boulevard in Harrison

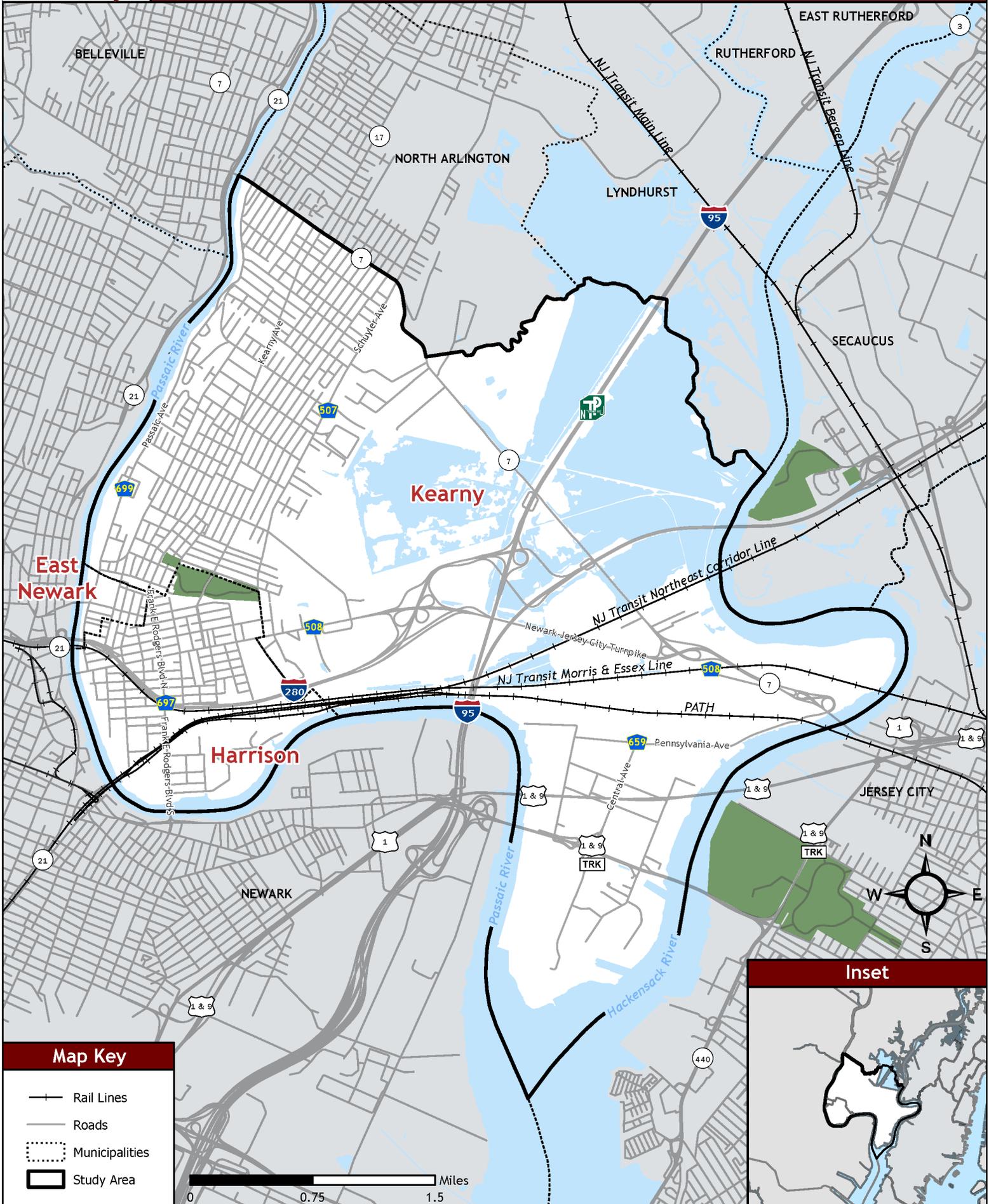


Figure 2. West Hudson study area map

LOCAL CONTEXT

EAST NEWARK

The Borough of East Newark, located on the west side of the study area along the Passaic River, is one of the smallest municipalities in the state, with a land area of 0.1 square miles. The population experienced an 8 percent increase between 2010 and 2020, with a current population of 2,594 residents¹.

The Borough, like the surrounding study area, has a significant industrial past with the Clark Thread Company, a former sewing thread manufacturing site situated in the northwest section of East Newark. It is currently being redeveloped into residential units as well as retail and commercial space.

Today, East Newark is a mix of residential, commercial, and industrial uses, bordering the Passaic River. Through the Clay Street Bridge, East Newark residents have direct vehicular and pedestrian access to the City of Newark. However, East Newark is just outside walking distance to the Harrison PATH station. Improving connections to regional transit hubs can improve mobility and access for East Newark residents.

HARRISON

The Town of Harrison is also a relatively small municipality, with an area of only 1.2 square miles and a population of 19,450 residents.² In recent years, Harrison has undergone significant redevelopment with new mixed-use (commercial and residential) buildings. This redevelopment includes the renovation and expansion of the Harrison PATH station, which includes upgraded amenities such as public plazas with seating and bicycle and vehicle parking. The Raymond J. McDonough Riverside Park is also currently under construction and will offer recreational space along Cape May Street and the Passaic River.

Compared to the other municipalities in the study area, Harrison has a more robust transit network, mainly due to the Harrison PATH station and the regional connections it provides. Harrison also has access to the City of Newark via the Bridge Street Bridge and the Jackson Street Bridge, as well as access to I-280. However, the Town of Harrison is divided by rail and road infrastructure, with limited direct north-south access routes. Pedestrians and bicyclists must navigate narrow sidewalks and poorly lit underpasses when walking from one side of town to the other. The Town also experiences congestion and cut-through traffic for drivers who wish to access the I-280 on-ramps, which are centrally located in Harrison.

¹ U.S. Census Bureau. "TOTAL POPULATION." *Decennial Census, DEC Demographic and Housing Characteristics, Table P1, 2020*, <https://data.census.gov/table/DECENNIALDHC2020.P1?q=east+newark>. Accessed on May 30, 2025.

² U.S. Census Bureau. "TOTAL POPULATION." *Decennial Census, DEC Demographic and Housing Characteristics, Table P1, 2020*, <https://data.census.gov/table/DECENNIALDHC2020.P1?q=Harrison+town,+New+Jersey>. Accessed on June 2, 2025.

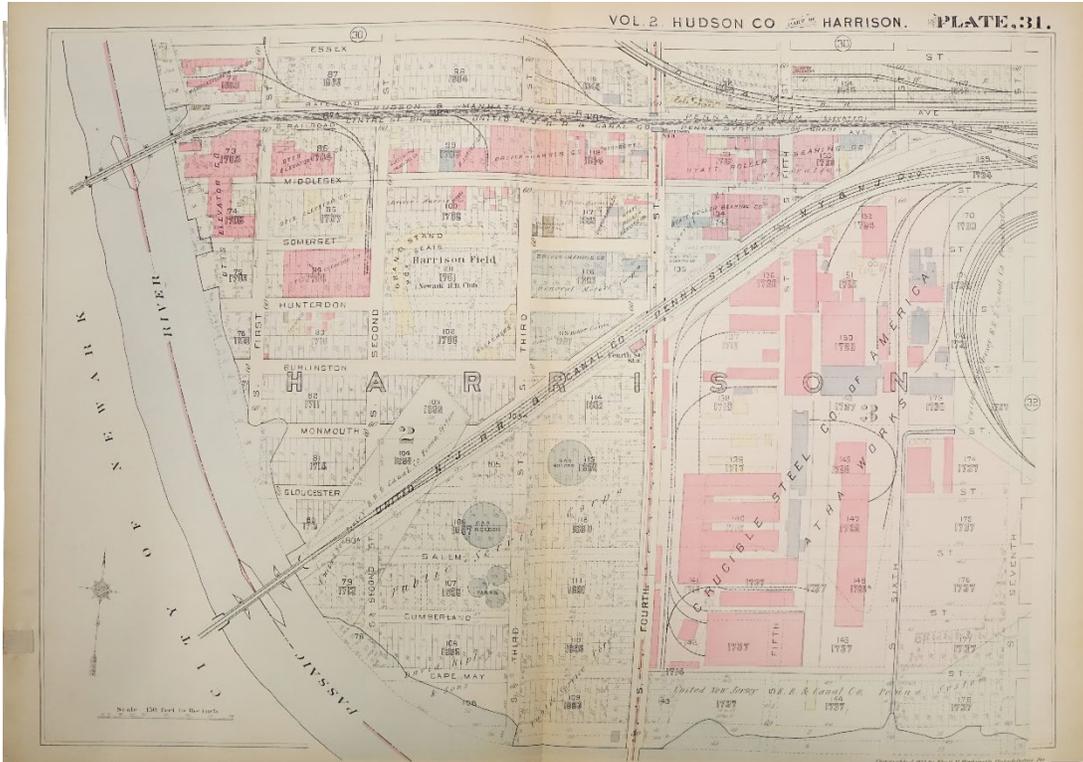


Figure 4. 1923 map of Harrison. Courtesy of the Kearny Museum



Figure 3. 1923 map of East Newark, Harrison, and Kearny. Courtesy of the Kearny Museum

KEARNY

The Town of Kearny is the largest municipality within the study area, spanning from the Passaic River to the Hackensack River, with land uses and environmental character that create three distinct regions—a commercial and residential core to the west, containing the business district and City Hall; an industrial area in South Kearny; and environmentally sensitive lands including wetlands and inland water in the central and northeast portion of the study area.

Enhancing connections within Kearny to unite these separated areas, as well as improving links from Kearny to regional transportation hubs like the Harrison PATH station and Journal Square, will enhance access for residents in the central and northwest sections who lack a robust transit network and rely more on automobiles than residents in other parts of the study area.

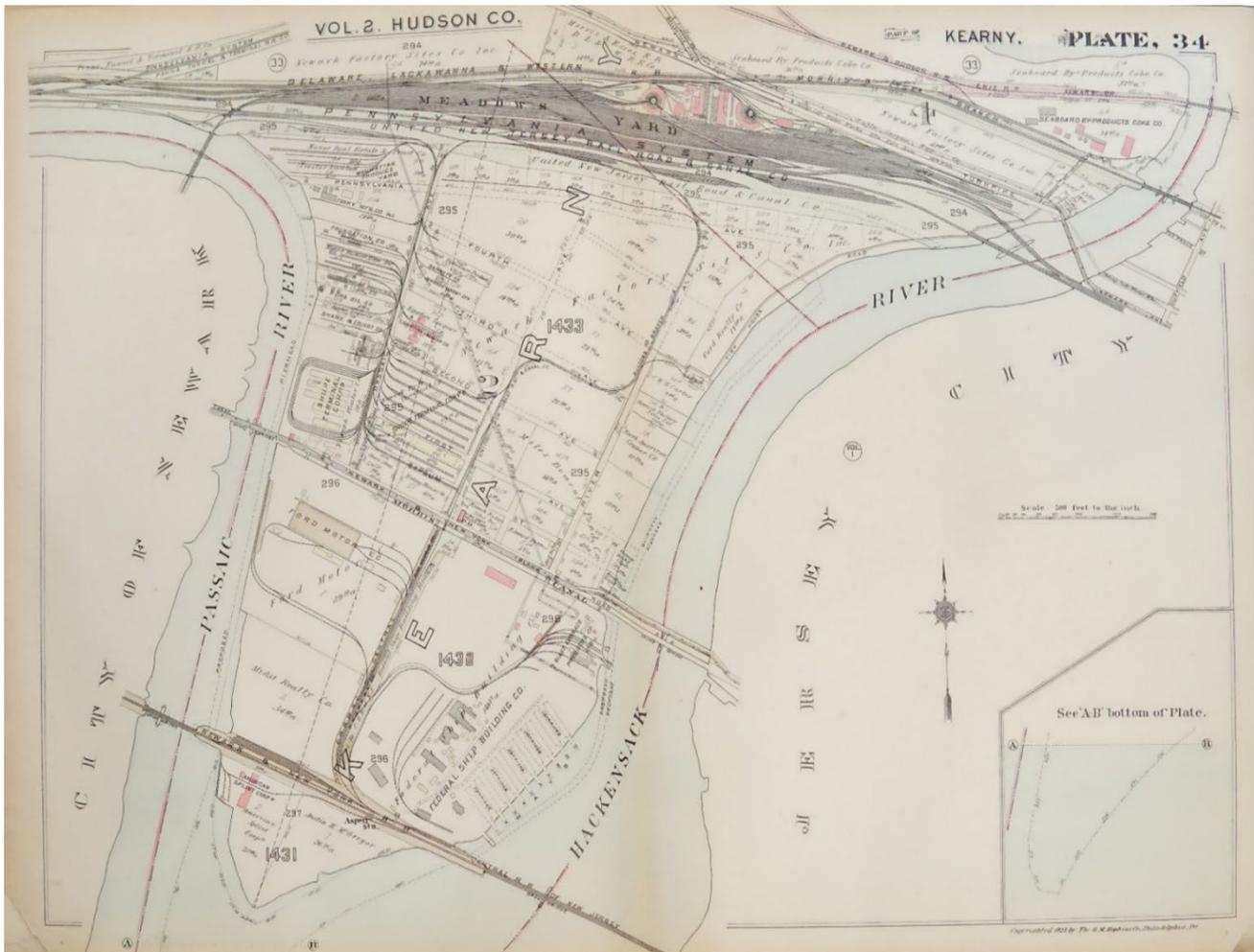


Figure 5. 1923 map of South Kearny. Courtesy of the Kearny Museum

STUDY GOALS



Connect Communities

Due to the study area's unique geography, bordered by the Hackensack and Passaic Rivers, a primary goal of the study is to provide enhanced connections within the study area, to eastern Hudson County, and the wider northern New Jersey region. Transportation connections help to literally and metaphorically bridge gaps in communities, enhancing quality of life, increasing opportunity, and providing access to employment and other destinations.



Improve Safety

Safety underpins the utility and reliability of the transportation network. As a result, another key goal of this study is enhancing roadway safety for area residents and visitors so that people of all ages and abilities can travel safely, whether they choose to drive, bike, walk, or take transit.



Expand Transit Options

Public transportation, especially bus transit, is important to East Newark, Harrison, and Kearny residents, particularly those traveling within the study area. Enhancing transit conditions with improved access, bus stops, stations, bus service, and information will support riders, encourage use, and potentially limit auto trips by increasing the viability of transit.



Address Flooding Issues

Climate change is causing more frequent and intense storms, which contribute to flooding. This has been a particular issue in the West Hudson area given its proximity to rivers and wetlands. Therefore, another goal of the study is to develop recommendations to mitigate flooding and ponding at/near low spots or vulnerable roadways to manage stormwater and keep the transportation system operational.



Increase Accessibility

The final goal is to improve access to various modes of transportation, promoting transportation equity and choice. The study will suggest ways to improve access to safe, affordable, sustainable, and equitable transportation modes.

2. DEMOGRAPHIC ASSESSMENT

A demographic assessment helped to define the character of the communities within the West Hudson study area, which facilitated a targeted public engagement program that considered local community needs, such as language translation requirements or different public engagement formats, including in-person events and digital platforms. A multi-faceted outreach approach garnered responses from a cross-section of the population, providing an understanding of the study area’s challenges and opportunities.

Beyond outreach facilitation, the demographic assessment helped to assess study area needs, inform the development of recommendations that benefit the entire community, and make transportation more accessible, specifically to residents with accessibility and mobility challenges.

See Chapter 5 for more information on public engagement and Chapter 6 for study recommendations.

ANALYSIS

Table 1 includes 11 demographic factors with data for the West Hudson study area, Hudson County, the NJTPA region, and New Jersey for comparison purposes. For the study area, percentages that are above the County average are **bolded**, percentages above the NJTPA region average are *italicized*, and percentages above the state average have a gray background. Percentages that are above two of the comparative regions are highlighted in light yellow, while percentages above all three comparative regions are highlighted in darker yellow. When compared to the other regions, the West Hudson study area is above average for foreign-born residents, limited English proficiency, and no high school degree.



Table 1. Demographics of the West Hudson Study Area, 2022

Demographic Factors	West Hudson Study Area	Hudson County	NJTPA Region	Statewide
Minority	70.5%	72.3%	49.0%	47.0%
Foreign-Born	49.1%	42.7%	26.5%	23.2%
Low Income	29.3%	29.8%	21.3%	21.8%
Limited English Proficiency	30.1%	22.2%	13.7%	12.3%
Age: People Over 65 Years	12.4%	12.2%	16.4%	16.6%
Age: Youth 5 to 17 Years (School-age Population)	13.9%	13.6%	16.1%	16.1%
Age: Children Under 5 Years	6.3%	6.6%	5.8%	5.7%
Disability	7.9%	8.6%	9.8%	10.6%
Female	48.0%	49.9%	50.7%	50.7%
Zero Vehicle Households	21.7%	32.5%	12.1%	11.3%
No High School Degree	15.1%	12.8%	9.3%	10.0%
Bold – Percentages above the County Average <i>Italicized</i> – Percentages above NJTPA region average Gray – Percentages above the statewide average		Light Yellow – Percentages above two of the comparative regions Dark Yellow – Percentages above all three comparative regions		

TAKEAWAYS

The recommendations in the plan balance this wide array of needs and circumstances, particularly in a study area with lower rates of car ownership (Figure 6) and higher numbers of low-income households (Figure 7).

Based on the demographic analysis, public engagement for the West Hudson Circulation and Connectivity Study included the following:

- Translated meeting materials to meet the specific language needs of residents with limited English proficiency. Further analysis showed that the most commonly spoken non-English languages in the West Hudson study area are Spanish, Portuguese, and Chinese.
- A virtual public meeting to allow greater participation since participants did not have to travel to a designated in-person venue.
- A mix of virtual and in-person public engagement formats, along with interactive tools that allowed for online and handwritten comments.

West Hudson Zero Vehicle Households

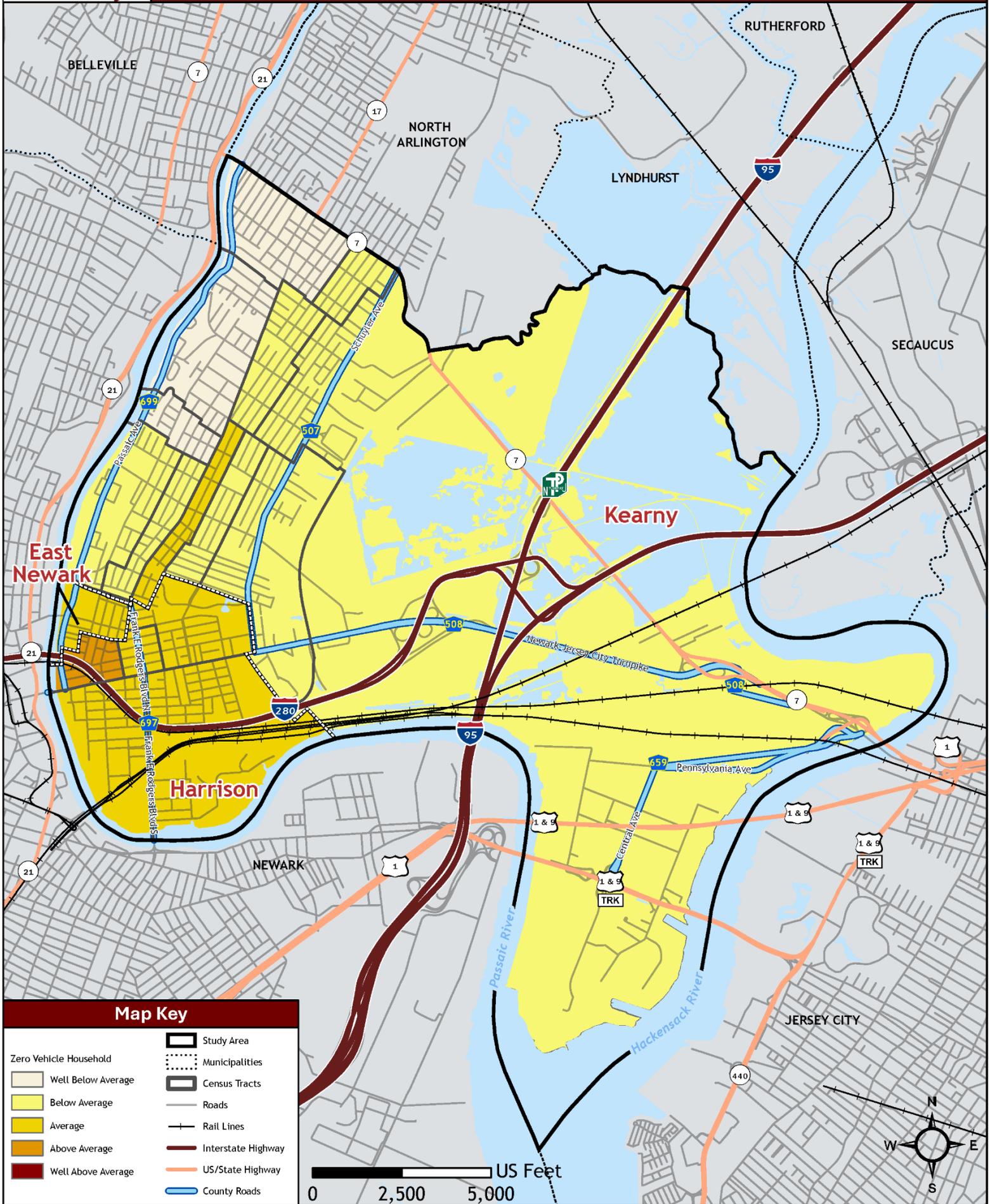


Figure 6. Zero vehicle households, 2022

West Hudson Low Income Households

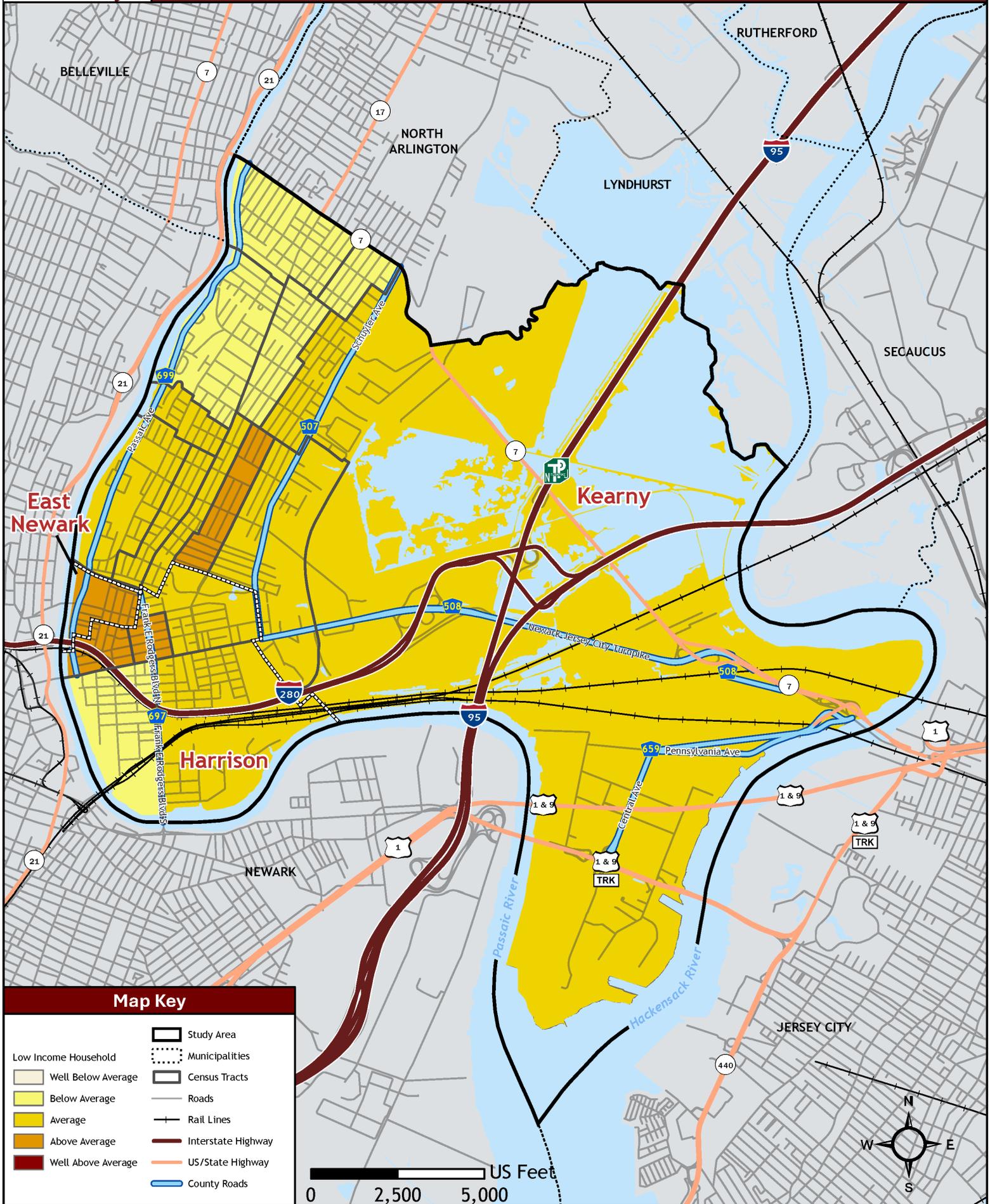


Figure 7. Low-income households, 2022

3. RELATED PLANS AND STUDIES

LITERATURE REVIEW

A review of existing plans and studies was conducted to understand current conditions and future projects within the study area. An inventory of relevant past and ongoing work in the study area informed recommendations that support existing planning initiatives and avoid suggestions that contradict or duplicate efforts that have been undertaken.

Table 2 lists the documents that were reviewed as part of the West Hudson Circulation and Connectivity Study.

Table 2. Documents included in the literature review

Year	Plan	Geography	Lead Agency
2008	New Jersey's Long-Range Transportation Plan	State	NJDOT
2011	New Jersey Out and About: A Guide to Sustainable Local Circulation Planning	State	NJ OPA
2019	Hackensack Meadowlands District Master Plan Update 2020	Regional	NJSEA
2021	Plan 2050: People, Transportation, Opportunity	Regional	NJTPA
2021	NJ TRANSIT NewBus Newark	Regional	NJ TRANSIT
2023	North Jersey Regional Active Transportation Plan	Regional	NJTPA
Ongoing	NJ TRANSIT NewBus Hudson	Regional	NJ TRANSIT
2012	Hudson County Complete Streets Policy	County	Hudson County
2016	Hudson County Master Plan Re-Examination Report	County	Hudson County
2020	Hudson County Comprehensive Economic Development Strategy 2020-2024	County	Hudson County
2023	Hudson County Truck Routes Assessment	County	Hudson County, NJTPA
2023	Essex County Transportation Plan	County	Essex County
2023	Passaic River Greenway Plan	County (multiple municipalities)	Hudson County
Ongoing	Hudson County's Electric Vehicle Infrastructure Plan	County	Hudson County
Ongoing	Hudson County Vision Zero Action Plan	County	Hudson County
2019	Newark Downtown Circulation Improvement Study	Adjacent Neighborhood	NJTPA

Year	Plan	Geography	Lead Agency
2020	Town of Harrison 2020 Master Plan Reexamination Report	Municipal	Harrison
2021	Borough of East Newark Master Plan Reexamination Report	Municipal	East Newark
2022	Kearny Master Plan Update: Volume 1	Municipal	Kearny
2022	Newark360 Master Plan	Municipal	Newark
2024	Harrison Complete Streets Design and Implementation Guide	Municipal	NJTPA
2024	Bridge Street Bridge – Local Preliminary Engineering (PE) Phase	Roadway	Essex/Hudson Counties
Ongoing	Frank E. Rodgers Boulevard Safety Improvements	Roadway	Hudson County
Ongoing	Clay Street Bridge Replacement over the Passaic River – Local Preliminary Engineering (PE) Phase	Roadway	Essex/Hudson Counties

TAKEAWAYS

The review of related plans and studies in the West Hudson study area revealed several projects, programs, and initiatives, informing this study’s recommendations specifically in the areas of critical infrastructure, safety, transit, active transportation, and electric vehicles. By considering, leveraging, and building upon the work and recommendations of previous efforts, circulation, connectivity, and mobility within the study area can be improved in a holistic manner.

Critical Infrastructure



The Bridge Street Bridge, the Clay Street Bridge, and a safety improvements project on Frank E. Rodgers Boulevard are in their Preliminary Engineering (PE) phase. Since these projects already have established concepts, the West Hudson Circulation Study evaluated these existing projects to develop recommendations that would enhance and support them.

Bridge Street Bridge: Local Preliminary Engineering (PE) Phase

The Preliminary Preferred Alternative (PPA) for the Bridge Street Bridge connecting Newark and Harrison is to replace the bridge along the existing alignment with a movable, wider bridge. The bridge is anticipated to contain two 12’ travel lanes and two 8’ shoulders in each direction. Additionally, the bridge will contain 6’ sidewalks in both directions. The Passaic Avenue and Bridge Street intersection will provide ADA-compliant curb ramps with detectable warning surfaces, pedestrian signal pushbuttons and countdown timers, and crosswalks.

Clay Street Bridge: Local Preliminary Engineering (PE) Phase

The PPA is to replace the bridge connecting Newark and East Newark with a new bridge to address structural deficiencies. The bridge currently has one 20’ travel lane in each direction.

The PPA provides one 12' westbound travel lane and two 12' eastbound travel lanes, along with 8' shoulders in both directions. The PPA proposes sidewalks on both sides.

Frank E. Rodgers Boulevard Safety Improvements

This project addresses safety improvements along a 0.9-mile portion of Frank E. Rodgers Boulevard (County Route 697) in Harrison between Harrison Avenue and Cape May Street. Corridor improvements will include curb extensions, high-visibility crosswalks, sidewalk and lighting improvements, new/upgraded traffic signals, drainage improvements, and roadway resurfacing. Final Design is anticipated to begin in 2025, with construction taking place in 2028/2029.

Safety



[Hudson County's Vision Zero Plan](#) identifies several roadway segments in the West Hudson study area as part of the [County's high-injury network \(HIN\)](#). Recommendations to improve safety along these segments were considered as part of the West Hudson Circulation and Connectivity Study recommendations.

Portions of the following West Hudson roadways were identified in the plan's HIN:

- Belleville Turnpike (NJ 7) – Kearny
- Bergen Avenue – Kearny
- Frank E. Rodgers Boulevard (CR 697) – Harrison
- Harrison Avenue (CR 508) – Kearny
- Passaic Avenue (CR 699) – East Newark, Kearny
- Schuyler Avenue (CR 507) – Kearny



NJ TRANSIT's local bus service in Newark and its surrounding vicinity has recently undergone a reassessment through the [NewBus Newark study](#). The West Hudson Circulation and Connectivity Study builds upon that work by recommending ways to improve transit stop accessibility and fill service gaps through complementary shuttle systems. Table 3 shows the NewBus Newark study findings and recommendations for routes that affect the West Hudson study area.

Table 3. Findings and Recommendations from NJ TRANSIT's NewBus Newark study for routes that travel within the West Hudson study area

Route 1	Existing	The highest ridership route in the Newark area takes several patterns. In Kearny, the route travels along US Route 1& 9 Truck.
	Recommended	Route 1 will be split into Routes 1, 3, and 4. Routes 3 and 4 will operate from Newark Penn Station through Kearny to Jersey City. Route 1 will no longer serve Kearny.
Route 5	Existing	The Route operates exclusively in Newark.
	Recommended	The Route will serve Harrison Avenue in Harrison and Kearny, including the Kearny Walmart, the most requested destination for new transit service, according to the NewBus Newark Route Recommendations.
Route 30	Existing	The Route serves Kearny Avenue in Kearny and Harrison, continuing to Newark Penn Station.
	Recommended	The Route will travel along Belgrove Avenue in Kearny instead of Kearny Avenue. Kearny Avenue will continue to be served by Route 76.
Route 40	Existing	The Route enters Harrison on Frank E. Rodgers Boulevard and continues north into Kearny via Davis Avenue and Elm Street to North Arlington. The Route continues south into Newark, serving the Port area.
	Recommended	The route in Harrison and Kearny will not change. However, in Newark, the route will change by no longer serving the Port. It will bypass the airport terminals on the west side via Brewster Road and still terminate at IKEA and The Mills at Jersey Gardens.
Route 76	Existing	The Route serves Kearny and East Newark along Kearny Avenue, Belgrove Drive, and Passaic Avenue, continuing south into Newark and north into Bergen County.
	Recommended	Route 76 will operate on Kearny Avenue using the same alignment as the existing Route 30, while Route 76's existing alignment along Kearny Avenue will be served by Route 30. Service north of Kearny will be streamlined to improve travel times to Hackensack Terminal.

Active Transportation



The NJTPA's Regional Active Transportation Plan (ATP) and the Passaic River Greenway Plan, conducted by Hudson County, recommend active transportation connections within the West Hudson study area to enhance mobility, fill active transportation network gaps, and provide recreational opportunities along with healthier travel options. These existing recommendations, coupled with active and ongoing projects like the Greenway (formerly called the Essex-Hudson Greenway), have laid the groundwork for a bike network that features one significant east-west regional connector, the Greenway, and one north-south spine with the Passaic River Greenway. The West Hudson study explored ways to create additional active transportation connections within the study area for shorter trips while linking to these larger regional paths to improve access to surrounding areas.

NJTPA's Regional Active Transportation Plan (ATP)

Within the study area, the ATP recommends an east-west route on or near Harrison Avenue and a north-south route on or near Frank E. Rodgers Boulevard and Kearny Avenue (Figure 8). The overlap between the Regional Active Transportation Network and NJ TRANSIT rail lines (commuter and light rail) provides a strong opportunity to improve first- and last-mile active transportation connections between transit stations and population centers within Hudson County. In this context, first- and last-mile connections refer to modes of transportation that provide a safe and convenient connection between transit and final destinations.

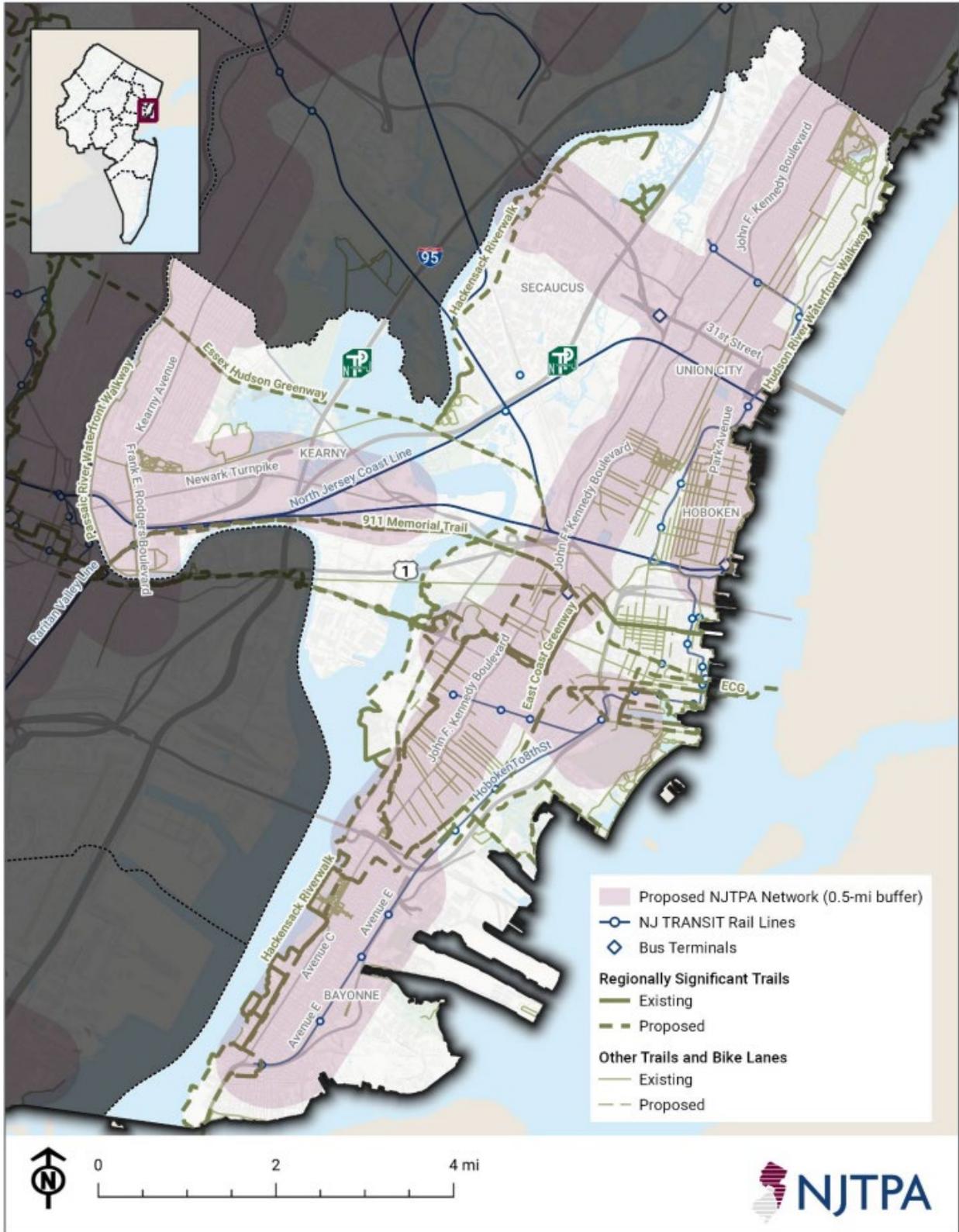


Figure 8. Hudson County's Regional Active Transportation network. Source: North Jersey Regional Active Transportation Plan

Passaic River Greenway Plan

[The Passaic River Greenway Plan](#) lays out a framework for a waterfront path to provide a critical north-south active transportation link. Figure 9 shows the full Greenway, beginning in South Harrison and continuing northward along the Passaic River to Northern Kearny. Different sections of the Greenway are at various stages of completion.

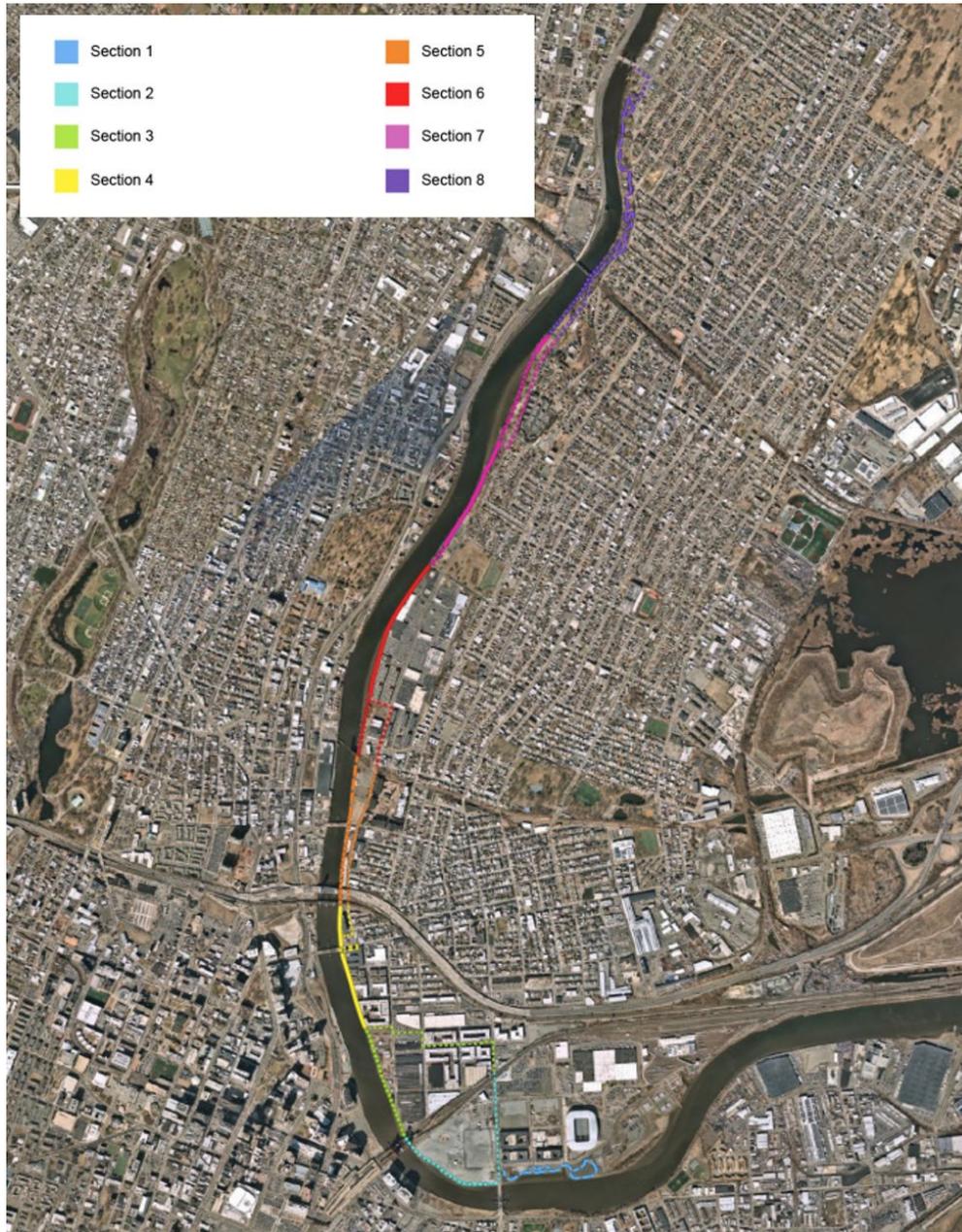


Figure 9. The Passaic River Greenway map. Source: Passaic River Greenway Plan

Electric Vehicles



The Electric Vehicle Charging Station Suitability Analysis from the County’s 2023 Draft Electric Vehicle Infrastructure Plan helped inform EV and parking recommendations when considering EV charging stations for personal vehicles and trucks.

Draft Hudson County Electric Vehicle Infrastructure Plan

The plan prioritizes locations for installing electric vehicle charging stations and outlines initial planning for the widespread adoption of electric vehicles. It supports various state initiatives and targets aimed at reducing emissions in the transportation sector.

A heatmap analysis of roadways was conducted to assess the suitability of charging stations (see Figure 10). Variables included population density and distance to existing charging stations. The West Hudson study area generally scored less suitable than the more densely populated parts of eastern Hudson County, although West Hudson’s commercial areas around Harrison Avenue and Kearny Avenue scored higher than other parts of the West Hudson study area.

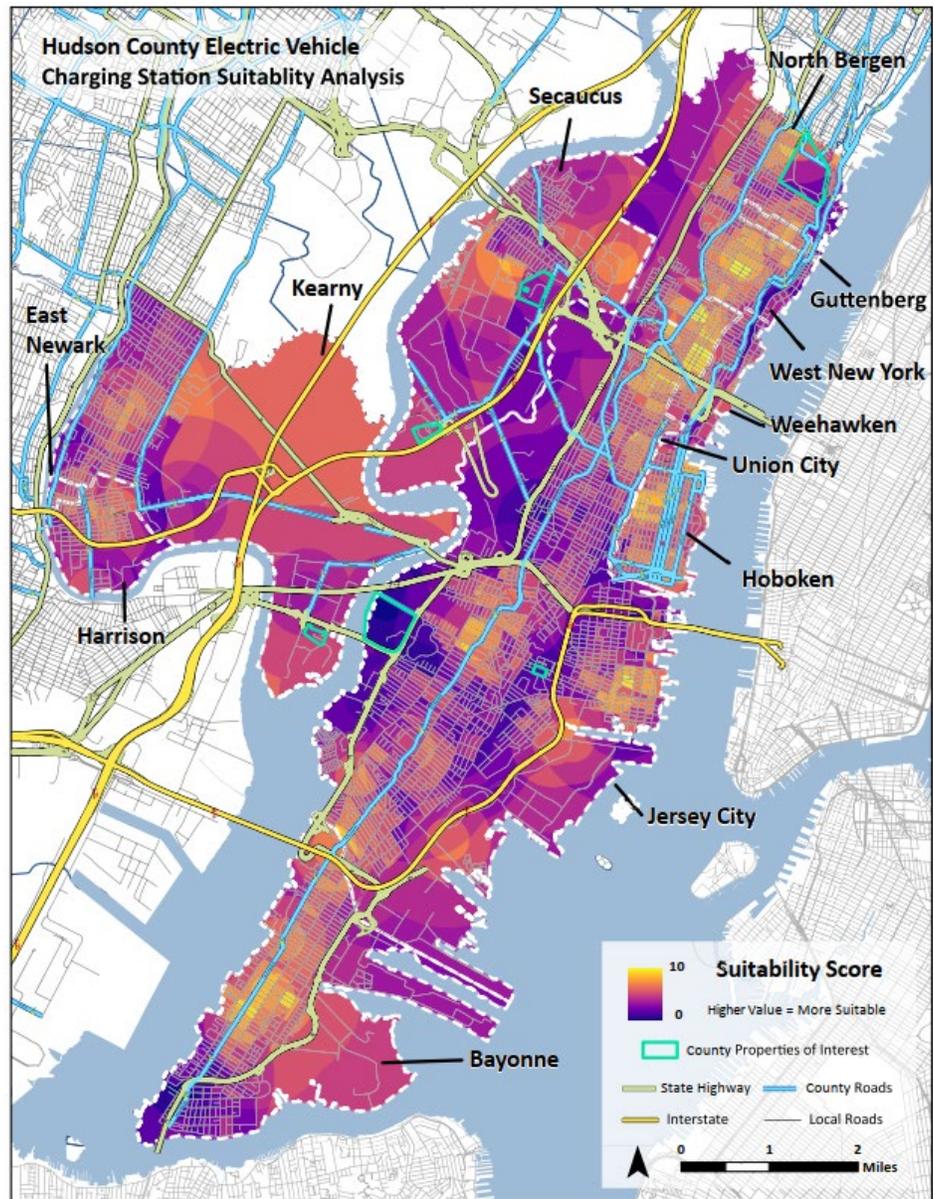


Figure 10. Hudson County Electric Vehicle Charging Station Suitability Analysis. Source: Hudson County’s Electric Vehicle Infrastructure Plan (Draft 2023)

CASE STUDIES

Case studies were included in the data analysis process to identify a mix of best practices related to first- and last-mile solutions and public realm enhancement techniques. Project stakeholders noted these themes as issues that should be addressed through this study. The case studies were selected from places with urban contexts similar to West Hudson.

TAKEAWAYS

First-/Last-Mile Connections

First- and last-mile solutions are transportation services and infrastructure that enhance connections to and from fixed-route transit: the ‘first mile’ from a trip origin to transit and/or the ‘last mile’ from transit to the trip destination. First and last-mile connections include both fixed service and demand response services and can be free or require a fare.

Microtransit can serve as both a First and Last-mile (FLM) solution and operate independently of other public transit systems. The American Public Transportation Association (APTA) defines "microtransit" as “small-scale, on-demand public transit services that can provide fixed routes and schedules, as well as flexible routes and on-demand scheduling.” Several microtransit services provide insights for the West Hudson study area.



The City of Trenton recently initiated GoTrenton! service that provides low-cost electric vehicle on-demand ridesharing/shuttle service. The service was established to fill a gap in affordable and reliable transportation options in areas not served by traditional transit models. Currently, GoTrenton! serves most of the City of Trenton and part of Hamilton Township. Most trips on GoTrenton! are free for riders. GoTrenton! plans on expanding with a workforce van program and public electric vehicle charging stations. This service offers relevant insights for the West Hudson study area as it improves transportation access to an underserved and urbanized area.

THE HOP

The City of Hoboken provides intracity shuttle service through The Hop. These shuttles will stop at any intersection along predetermined routes. There is no fare required for passengers. The routes and service can be tracked via an app. Four routes operate each weekday: two from 8:00 AM to 8:00 PM and one from 10:00 AM to 6:00 PM. In addition, a Senior Shuttle operates from 8:00 AM to 4:00 PM. This service offers an alternative to larger-scale transit options and may be replicated in the study area to bridge existing transportation gaps, particularly in the areas of East Newark and Kearny that are outside of a walkable distance to the Harrison PATH station.

Public Realm Enhancements

This broad category is about filling active transportation gaps, improving spaces at/under elevated roadways like I-280 that pass through neighborhoods, and managing vehicular travel speeds.

Public realm enhancements are beneficial to West Hudson due to the volume of pedestrians and bicyclists in the study area. They activate community spaces through improvements to safety and aesthetics to foster public places that people choose to visit.

Elevated Transportation Structures

The New York City Department of Transportation’s (NYC DOT’s) El-Space program investigates how to improve rail underpasses for pedestrians and cyclists. In coordination with the Design Trust for Public Space, NYC DOT developed an El-Space Toolkit, which features 11 case studies across North America that cover the lifecycle of developing and implementing El-Space projects, highlighting lessons learned and how to improve El-Space conditions. This resource can be useful for planning improvements at the I-280, Pulaski Skyway, and/or Northeast Corridor overpasses within the West Hudson study area.

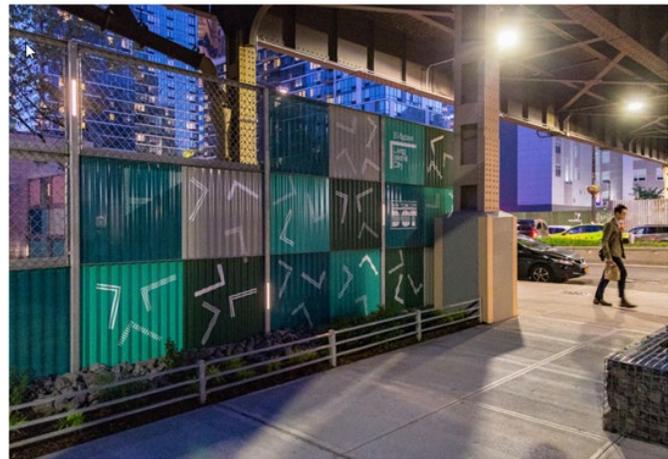


Figure 11. Underpass activation projection in Long Island City, Queens. Source: New York City Department of Transportation

Traffic Calming

Major regional roadways such as I-280 or NJ7 carry regional traffic that can spill into residential areas as cut-through traffic. Drivers passing through neighborhoods to access these regional roadways often travel at higher speeds to reduce trip times, which can impact safety for all modes at/near key access points. To reduce travel speeds and mitigate aggressive driving behavior on local streets, the City of Jersey City, in conjunction with the NJTPA, released the [Jersey City Traffic Calming Toolkit](#) in June 2024. This document provides a comprehensive review and guidelines for enhancing traffic safety through strategies meant to reduce travel speeds. The final toolkit offers a matrix of available traffic calming measures, including desired geometry, speed limits, and volumes for each, as well as a selection matrix with benefits and costs for each measure.

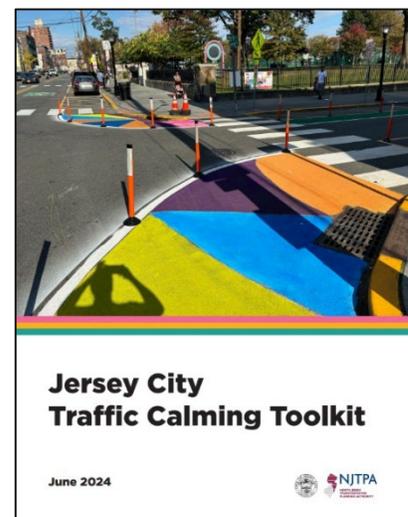


Figure 12. Jersey City Traffic Calming Toolkit

4. EXISTING CONDITIONS & FINDINGS

Extensive data collection and analyses informed the existing conditions assessment and provided a measurable understanding of travel patterns, traffic conditions, transit, active transportation demand, safety, and overall conditions in the West Hudson study area. Field visits supported and corroborated findings and offered a local perspective on issues that are not easily captured by data alone. This chapter will discuss key data analysis takeaways for the West Hudson study area.

FIELD VISITS

Field visits took place on two separate dates with participants from the County and the consultant team for the Harrison field visit, and the County, consultant team, and East Newark staff for the East Newark and Kearny visit.

Table 4. Field Visit Details

	Field Visit 1	Field Visit 2
Location	Harrison	East Newark, Kearny
Date	October 11, 2024	October 25, 2024
Time	9:00 a.m. – 12:00 p.m.	9:00 a.m. – 12:00 p.m.

HARRISON FIELD VISIT

Harrison field visit participants met on the northbound side of Frank E. Rodgers Boulevard at the PATH Station on Friday, October 11, 2024. The field visit was entirely on foot with a walking route that included Guyon Drive, Pete Higgins Boulevard, South 5th Street, Cape May Street, Frank E. Rodgers Boulevard, Bergen Street, Harrison Avenue, and Supor Boulevard. The field visit included stops at key Harrison destinations, such as:

- Sports Illustrated Stadium
- Raymond J. McDonough Riverside Park (under construction)
- Harrison PATH Station
- Harrison Plaza Shopping Center
- Industrial areas in northeast Harrison

EAST NEWARK AND KEARNY FIELD VISIT

The East Newark and Kearny field visit consisted of a mix of walking routes and driving routes to maximize the coverage of a larger geographic area in one visit, which took place on Friday, October 25, 2024. Participants met at the parking lot of the ShopRite of Kearny Square. The East Newark and Kearny field visit itinerary consisted of four walking routes with a Hudson County shuttle bus available to transport participants between each route. The first walking route covered most of East Newark, including Passaic Avenue, Reynolds Avenue, Grant Avenue, Central Avenue, and Sherman Avenue.



A County shuttle then brought participants to Passaic Avenue and Bergen Avenue to walk a portion of the Kearny Riverwalk. Once back on the shuttle, participants were able to see the remainder of Passaic Avenue northbound, Belleville Turnpike between Passaic Avenue and Kearny Avenue, and Kearny Avenue between Belleville Turnpike and Midland Avenue. A second stop was made where participants walked to Arlington Depot Park to observe the future at-grade alignment of the future Greenway and the former Arlington Station site.

Finally, the shuttle traveled south to South Kearny for the last walking route along Hackensack Avenue, where a shared-use path with green infrastructure was recently constructed (shown below).



Key stops in East Newark and Kearny included:

- Kearny Plaza Shopping Center
- East Newark Town Center and East Newark Riverfront Park (both under construction)
- Central Avenue and Passaic Avenue intersection
- William A. Stickel Memorial Bridge
- Norfolk Southern rail ROW at the border between East Newark and Kearny
- Walking path by Kearny Commons
- Arlington Station and Arlington Depot Park (located along the future Greenway)
- Hackensack Avenue in South Kearny

TAKEAWAYS

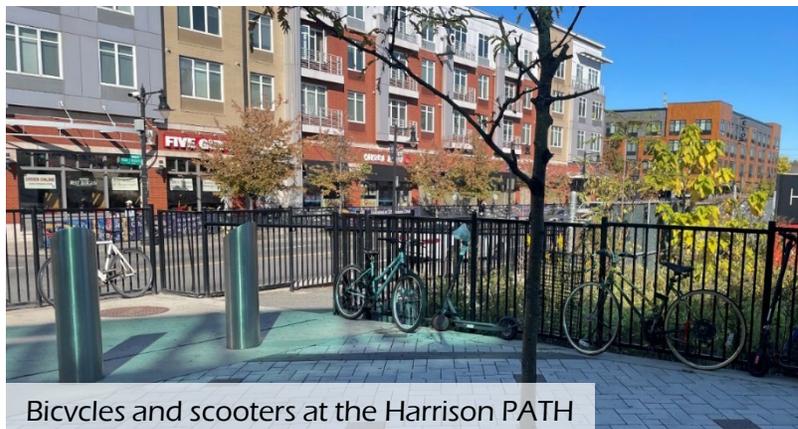
The following is a summary of field visit observations and insights from field visit participants.

East Newark

- Traffic moving to/from the Clay Street Bridge can cause congestion on Passaic Avenue in both directions.
- There are frequent conflicts with left-turning vehicles from side streets onto Passaic Avenue.
- Drivers traveling northbound on Passaic Avenue often use the striped center median as an extended left-turn lane to access the Clay Street Bridge at the Central Avenue intersection.
- The property beneath the William A. Stickel Memorial Bridge is currently used for municipal parking. There may be potential for other uses related to improving connectivity within West Hudson, such as incorporation into the future Passaic River Greenway.
- Grant Avenue southbound between Belgrove Drive and Hamilton Street serves as a cut-through for drivers heading to the I-280 access ramps in Harrison.
- Central Avenue has one 15-minute parking spot per block designated for deliveries and drop-offs, which supports existing curbside management.
- Residents use the Norfolk Southern rail ROW on the northern border of East Newark as a walking path and for parking. High school students use a route to travel to/from Harrison High School. (East Newark students attend Harrison High School.)

Harrison

- Participants noted vehicles stopping on Frank E. Rodgers Boulevard, southbound, to drop off passengers at the PATH Station, blocking an active travel lane.
- Many riders park bicycles and scooters outside the PATH station, indicating that these modes are frequently utilized by commuters as a connection to transit.
- Frequent freight traffic (particularly dump trucks) was observed traveling westbound on Harrison Avenue.



Bicycles and scooters at the Harrison PATH

Kearny

- Queuing on Belleville Turnpike along the westbound side can extend as far as Kearny Avenue.
- At Roosevelt Elementary School, Stewart Avenue is closed to traffic west of Kearny Avenue during school hours.
- There is a large waterfront park area in Kearny along the Passaic River, with no continuous north-south connections within the park.
- Arlington Depot Park, adjacent to the former Arlington Station (now a vacant parcel), could serve as a hub for recreational activities and gathering due to its presence along the future Greenway (formerly referred to as the Essex-Hudson Greenway).
- The shared-use path on Hackensack Avenue in South Kearny provides area employees with a place to walk or bike. However, its utility is currently limited due to a lack of connections for bicyclists and pedestrians to other destinations or bike facilities beyond Hackensack Avenue. Extending the path to transit stops would improve connections for the South Kearny workforce.



Arlington Depot Park in Kearny

DATA ANALYSIS

Data analysis for the West Hudson Circulation Study revealed key findings related to travel patterns, traffic conditions, active transportation, safety, and critical infrastructure. These findings highlighted gaps in the existing transportation network and areas that could benefit from improvements based on where West Hudson residents and visitors are traveling and the current conditions affecting their journeys, including congestion or limited transportation services to key destinations within the study area and the surrounding region.

TAKEAWAYS

This section summarizes key takeaways from the Data Analysis phase of the study.

Travel Patterns

Key Trip Generators

Most trip generators in the West Hudson study area are in the western part of the study area (Figure 13), specifically those related to urban neighborhoods containing dense residential, commercial, educational, and recreational uses. Key trip generators include several schools, parks, libraries, shopping centers, the Harrison PATH station, and Sports Illustrated Stadium. South Kearny is a key employment destination due to an active industrial cluster within the study area, but South Kearny lacks direct transportation access from the remainder of Kearny.

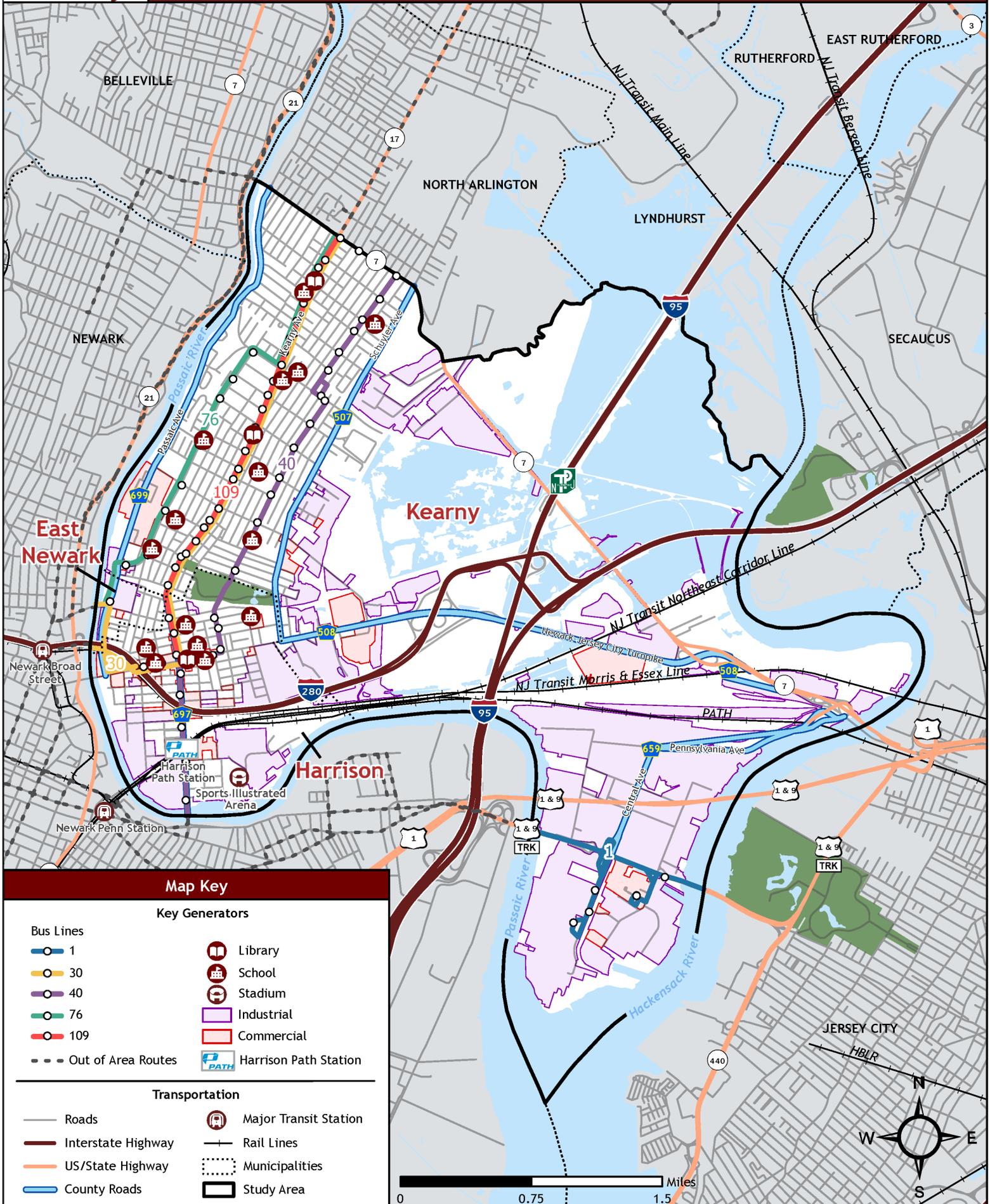


Figure 13. Key Trip Generators in West Hudson

Origins and Destinations

Thirty-nine percent of trips originating in the study area concluded in the study area. Twenty-two percent concluded in Essex County. Smaller trip distributions were identified in Hudson, Bergen, and Union Counties, along with a small number of trips traveling further east into New York. Results of the analysis are mapped in Figure 14 and Figure 15 and detailed further in the Data Collection & Analysis Technical Memorandum.

Trip Distribution & Routing

Typical travel patterns were determined by analyzing seven key roadways that are primary access points between the study area and adjacent areas:

- Central Avenue (CR 659)
- Frank E. Rodgers Boulevard (CR 697)
- Kearny Avenue (CR 697)
- Passaic Avenue (CR 699)
- Harrison Avenue (CR 508)
- Schuyler Avenue (CR 507)
- NJ Route 7

The analysis found that Central Avenue (CR 659), Frank E. Rodgers Boulevard (CR 697), Kearny Avenue (CR 697), and Passaic Avenue (CR 699) mainly serve local traffic, while Harrison Avenue (CR 508) and Route 7 serve more regional traffic.

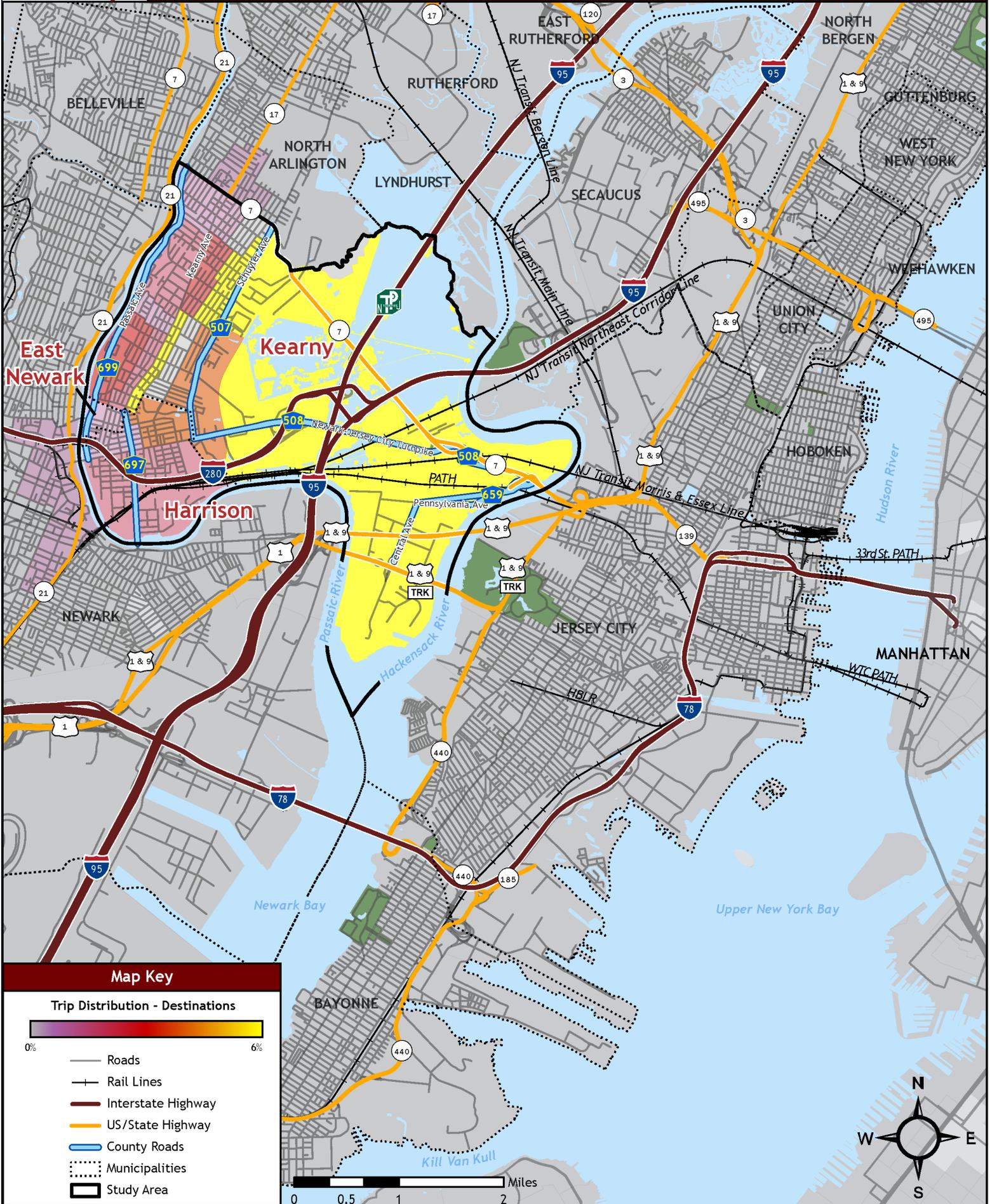


Figure 15. West Hudson Trip Distribution – Destinations



Traffic Conditions

Annual Average Daily Traffic

The New Jersey Turnpike/Interstate 95 and Interstate 280 carry substantial vehicular traffic through the study area. These two highways also carry the highest truck volumes in West Hudson. Additionally, Harrison Avenue/Newark-Jersey City Turnpike (CR 508), Passaic Avenue (CR 699), Frank E. Rodgers Boulevard (CR 697), and Schuyler Avenue (CR 507) are important inter- and intra-county roadways with high traffic volumes, which highlight their importance to the economic activity of West Hudson.

Traffic Speeds

Most major roadways in the West Hudson study area experience congestion during the AM peak period (6:00 – 9:00), shown in Figure 16, and PM peak period (3:00 – 7:00), shown in Figure 17, resulting in average traffic speeds falling below posted speed limits. County routes experiencing significant congestion in both AM and PM peak periods include the entirety of Frank E. Rodgers Boulevard (CR 697), Kearny Avenue (CR 697), Passaic Avenue (CR 699), Schuyler Avenue (CR 507), and Harrison Avenue (CR 508). State and toll highways with significant congestion include NJ Route 7, New Jersey Turnpike, Interstate 280 (particularly the westbound direction), and US 1&9 Truck.

Forecasted Traffic Conditions

Future travel patterns were assessed by comparing 2024 data to projected data in 2050 using the North Jersey Regional Transportation Model – Enhanced (NJRTM-E). This is a regional travel demand model developed by the NJTPA.

The base year (2024) shows higher congestion in the PM peak period than the AM peak period. The 2050 PM peak period forecasting analysis continues to show more West Hudson corridor segments with higher congestion than the AM peak period.

Per the NJRTM-E, daily traffic volume throughout West Hudson is expected to increase 12.9 percent from 2024 to 2050, along with an 8.1 percent decrease in speeds (a sign of increased congestion). Additionally, the study area should anticipate a 6.4 percent increase in vehicle hours of travel and a 2.2 percent decrease in vehicle miles traveled (VMT).

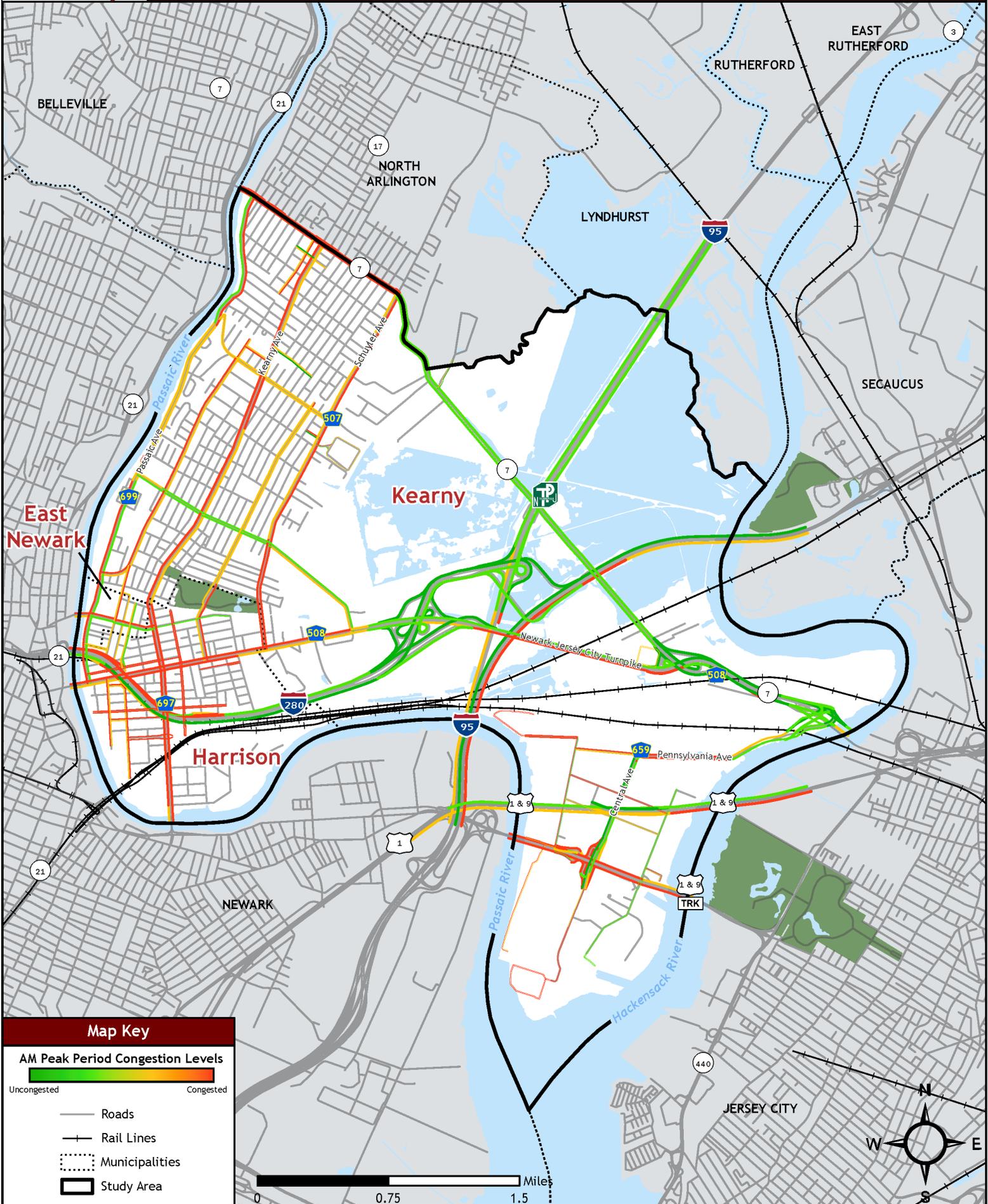


Figure 16. AM Peak Period Congestion

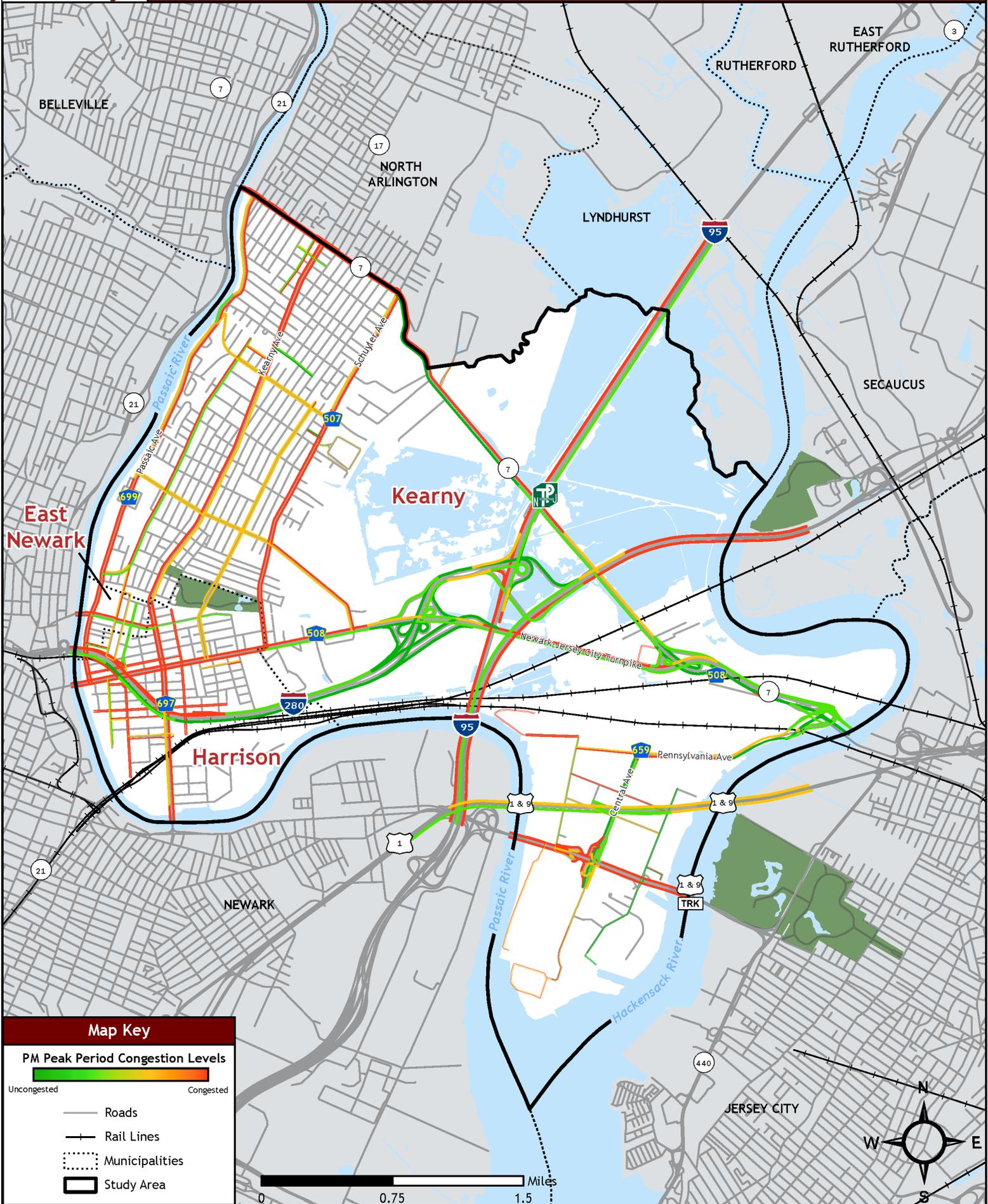


Figure 17. PM Peak Period Congestion

Events

On event days, significant roadway congestion occurs near Sports Illustrated Stadium one hour before weekday games (Figure 18) and up to two-and-a-half hours before weekend games (Figure 19). Within the study area, Frank E. Rodgers Boulevard (CR 697), Harrison Avenue (CR 508), and I-280 are heavily impacted by event circulation. At the conclusion of events, travel speeds are more impacted on weekends than on weekdays. This may be due to the fact that most weekday events are scheduled in the evening, and traffic volumes are generally lower at the conclusion of a stadium event.



Weekday Event Day Congestion

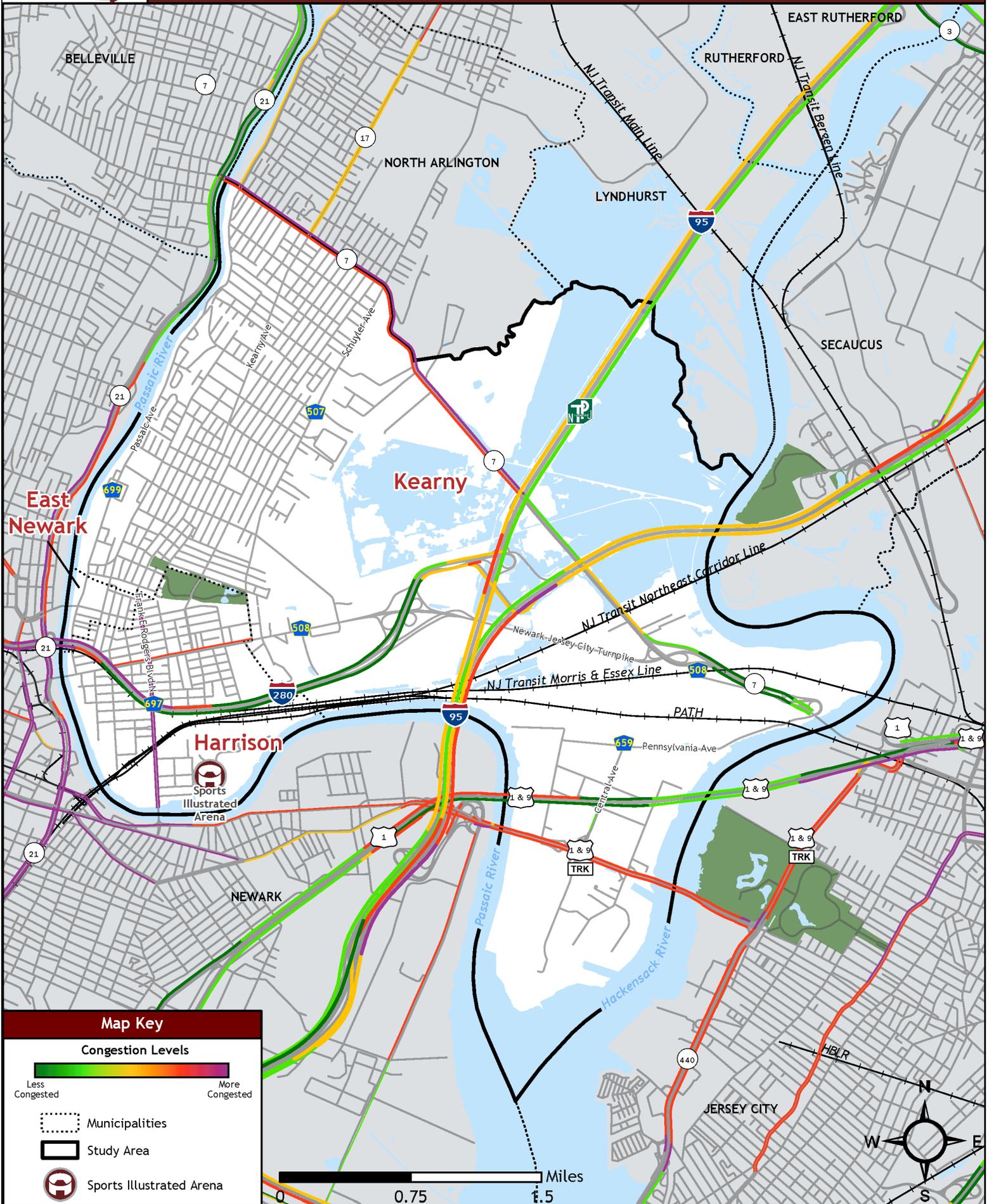


Figure 18. Weekday Event Congestion Levels

Weekend Event Day Congestion

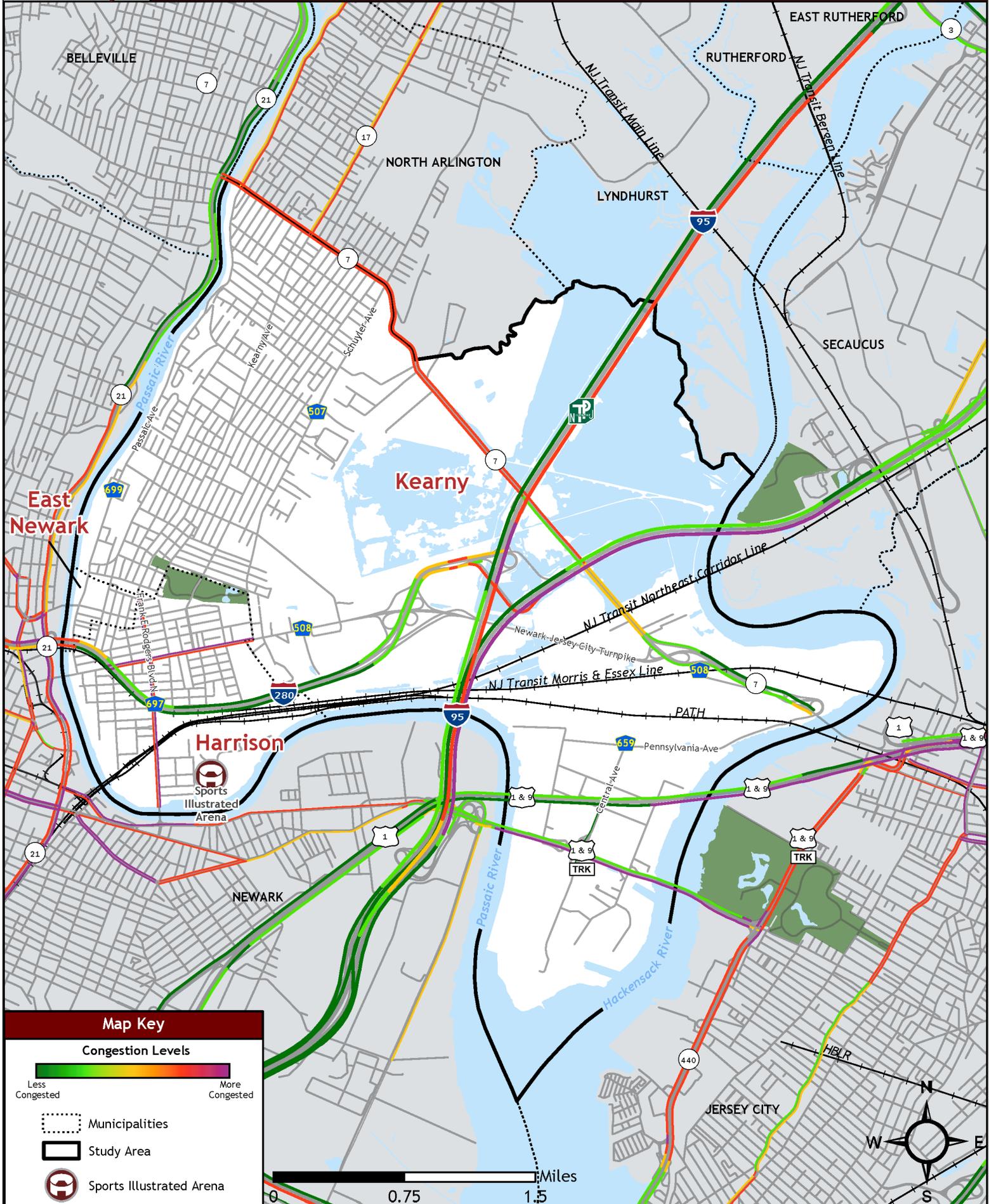


Figure 19. Weekend Event Congestion Levels

Transit

Bus Ridership

The western portion of the West Hudson study area experiences higher NJ TRANSIT bus ridership than the rest of the study area. The bus stop with the highest number of boardings/alightings (passengers disembarking) is on Frank E. Rodgers Boulevard (CR 697) at Cleveland Avenue in Harrison (NJ TRANSIT Routes 30 and 109). The bus stop with the second highest number of boardings/alightings is on US 1&9 Truck at Hackensack Avenue in South Kearny.

Table 5. NJ TRANSIT Bus Stops by Ridership (Week of January 13, 2024)

Municipality	Roadway	Cross Street	Weekly Riders	Routes
Harrison	Frank E. Rodgers Boulevard (CR 697)	Cleveland Avenue	621	30, 109
Kearny	U.S. 1&9 Truck	Hackensack Avenue	523	1
Kearny	Kearny Avenue (CR 697)	Bergen Avenue	517	30, 109
Kearny	Belgrove Drive	Woodland Avenue	493	76
Kearny	Kearny Avenue (CR 697)	Midland Avenue	422	30, 76, 109
Kearny	Belgrove Drive	Bergen Avenue	407	76
Harrison	Davis Avenue	Harrison Avenue (CR 508)	347	40
Kearny	Kearny Avenue (CR 697)	Johnston Avenue	312	30, 109
Harrison	Frank E. Rodgers Boulevard (CR 697)	Angelo Cifelli Drive	249	40
Kearny	Davis Avenue	Bergen Avenue	235	40



NJ TRANSIT bus in Kearny

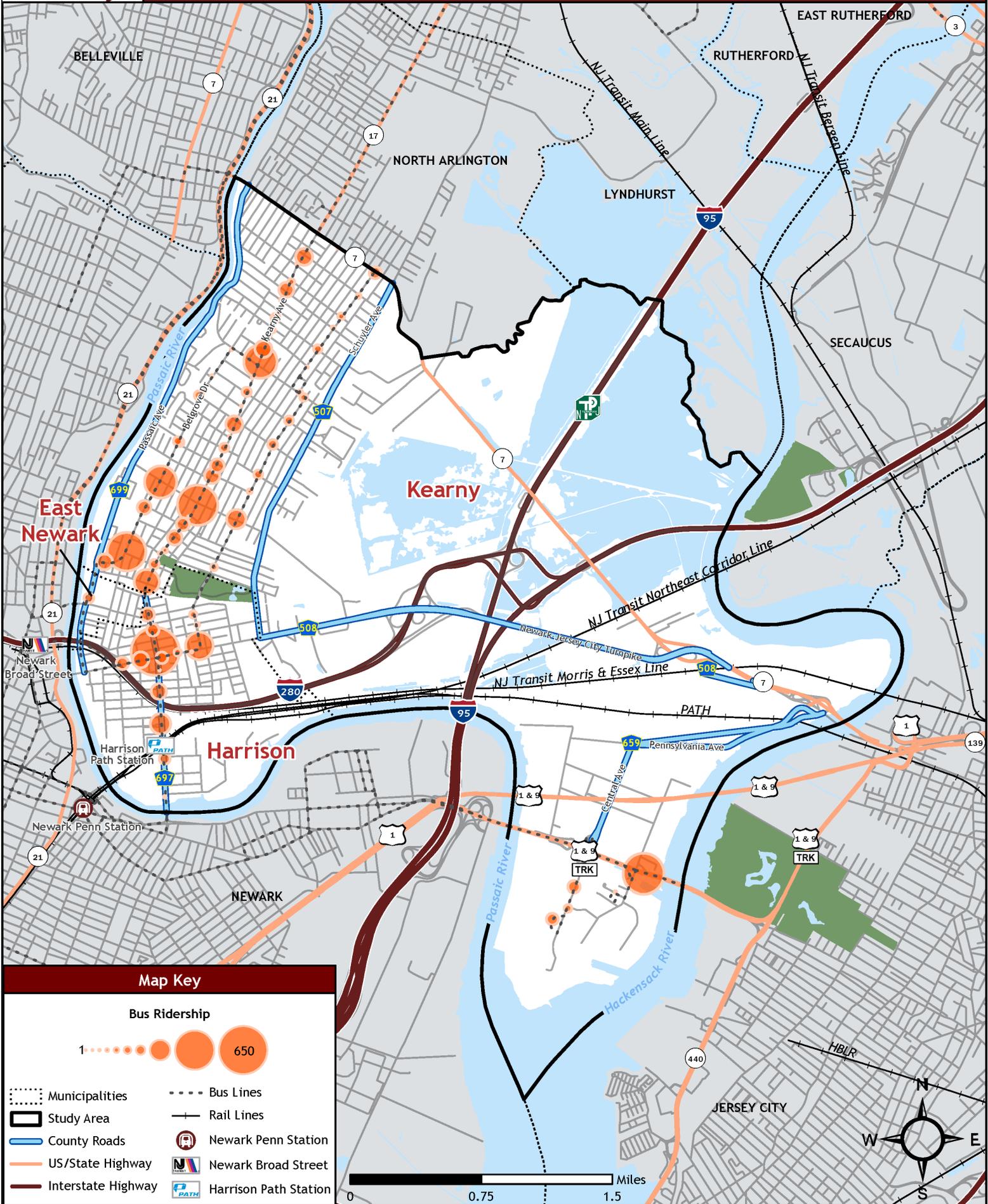


Figure 20. Bus ridership by bus stop

Rail

The Harrison Port Authority Trans-Hudson (PATH) station serves as the predominant regional transit connection in the West Hudson study area. Annual ridership at the Harrison PATH station reached 1.7 million in 2023. Monthly ridership peaked in October at approximately 163,000 and hit a low of approximately 112,000 in February (Figure 21).

Just outside of the study area, Newark Penn Station and Broad Street Station provide local and regional transit connections for commuter rail, light rail, subway, intercity rail (Amtrak), and local and regional buses.

There is substantial planned investment in rail transit within the study area, encompassing both infrastructure and operational enhancements as part of the Gateway and PATH Forward programs. However, program improvements are mainly focused on regional travel.

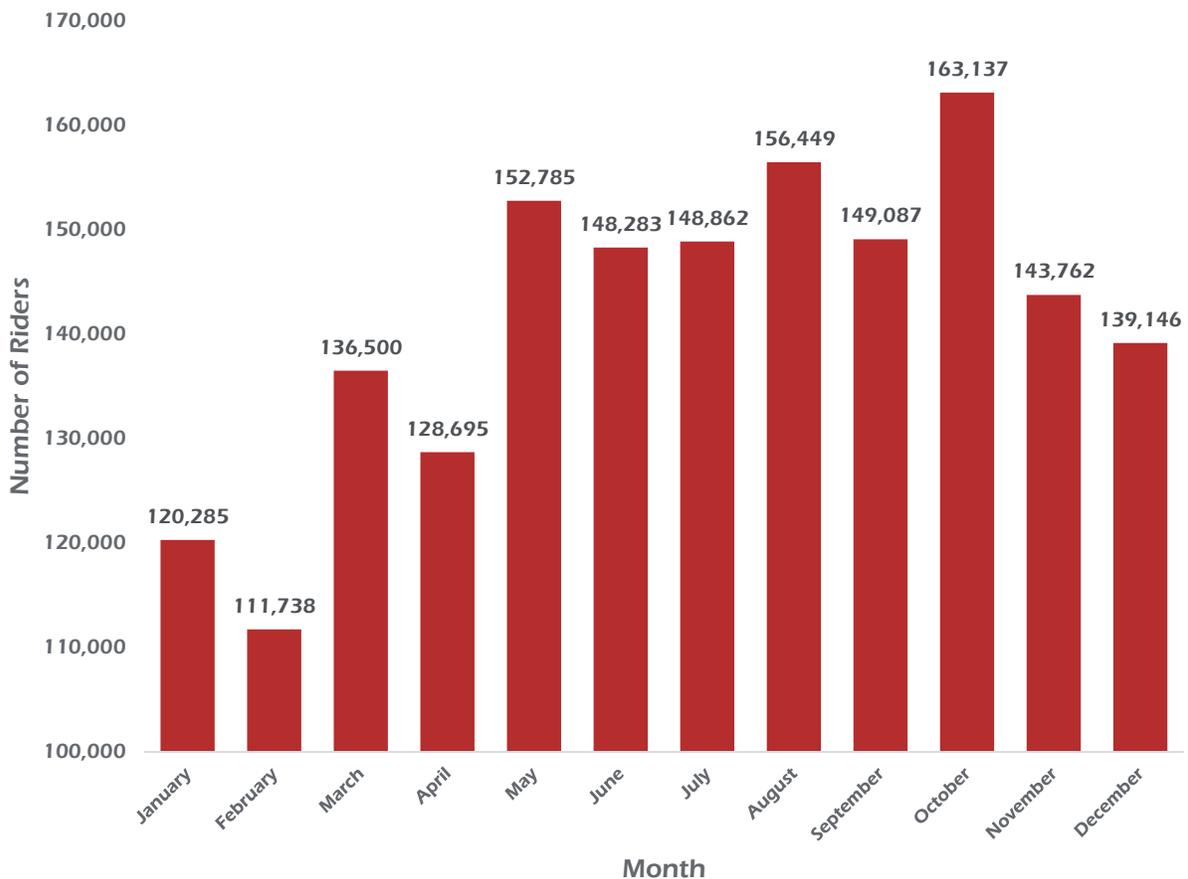


Figure 21. PATH Ridership, Monthly Totals (2023)

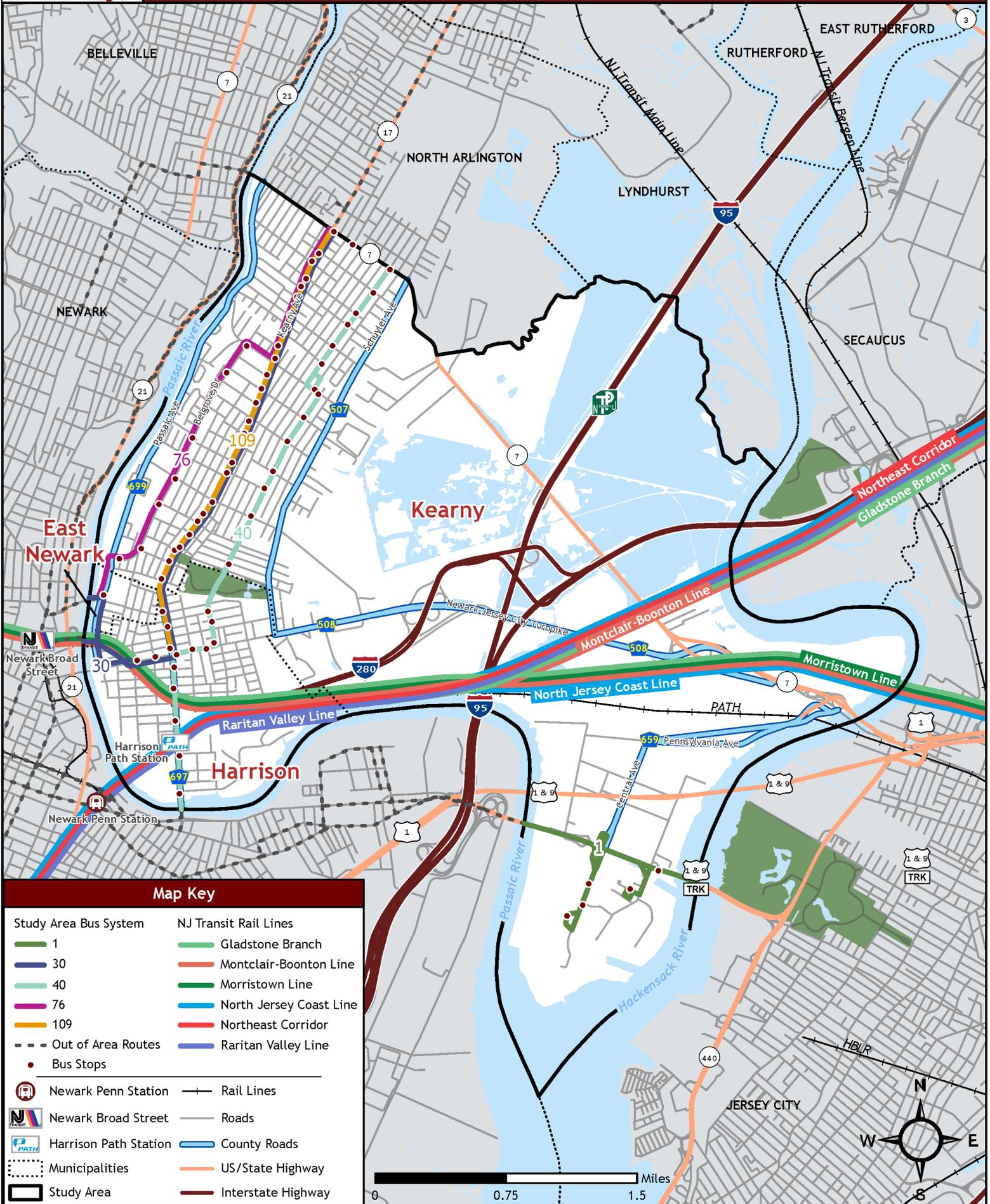


Figure 22. West Hudson Transit Network

Regional Connections

Gateway Program

The Gateway Program comprises a series of major infrastructure projects between Newark Penn Station and Penn Station in New York City, intended to replace and modernize rail infrastructure and improve capacity along the Northeast Corridor, the busiest passenger rail corridor in the United States. Together, components of the Gateway Program will improve rail service reliability and capacity, while enhancing the region's competitiveness. Across the West Hudson study area, there are four critical components described below (and mapped in Figure 23) that will improve rail transit between the study area, Newark, and New York City.

- **Sawtooth Bridges Replacement:** This project seeks to replace the deteriorating, two-track Sawtooth Bridges, built in 1907, with structures carrying four Northeast Corridor through tracks (two NEC tracks over the NJ TRANSIT Morris and Essex Line, Conrail Center Street Branch, and the PATH tracks).³ The bridges are located on the south side of Kearny, near the border with Harrison. The project website lists estimated construction completion as 2032.
- **Harrison Fourth Track:** This project's objective was to relocate a PATH track and signaling equipment further north to accommodate a fourth Northeast Corridor track.⁴ It is located east of the Harrison PATH station, and its design included the construction of approximately 2,000 feet of additional track along the NEC corridor. This project was completed in June 2024.
- **Dock Bridge Rehabilitation Project:** Located on the western side of the West Hudson area, the Dock Bridge crosses the Passaic River between Newark and Harrison.⁵ The project will replace an almost 90-year-old movable bridge with a fixed bridge to reduce delays on PATH, NJ TRANSIT, and Amtrak trains. It would also repair steel and concrete, as well as remediate and repaint the bridge. As of 2024, the project is in Final Design and construction is expected to be completed in 2029.
- **Portal Bridges:** Located on the east side of the study area in Kearny, the Portal North and South Bridges over the Hackensack River will increase the capacity of the Northeast Corridor from two to four tracks over two spans. As of December 2024, the project is under construction and is expected to be completed in 2027.

³ <https://amtraknewera.com/sawtooth/>

⁴ <https://www.eclimited.com/market/rail/amtrak-gateway-harrison-fourth-track/>

⁵ <https://www.amtrak.com/about-amtrak/new-era/infrastructure-projects/dock-bridge-rehabilitation.html>

PATH Forward

The PATH Forward program is a two-year initiative that will upgrade the 117-year-old PATH system, which will include track repair and replacement, modernization of bridges and other critical infrastructure, and the rehabilitation of four major stations. For instance, the Port Authority of New York and New Jersey (PANYNJ) is replacing 6,000 feet of track between Journal Square and Harrison and installing an additional interlocking system, which will allow trains to bypass disabled trains west of Journal Square on the Newark-World Trade Center Line. A seawall will also be completed along the Passaic River to protect against future flooding.

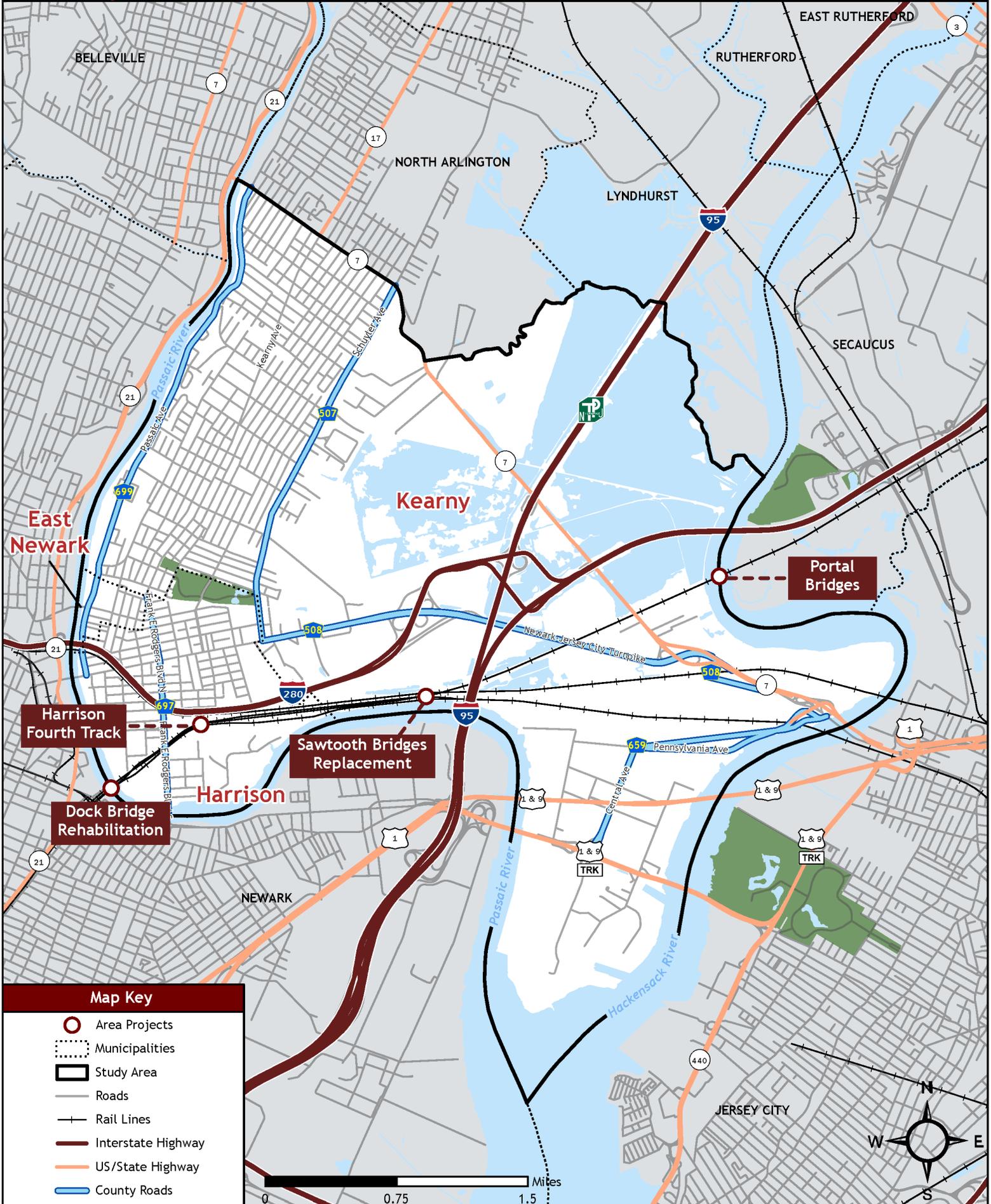


Figure 23. Gateway Program Study Area Projects

Active Transportation

Walkshed Analysis

The study area's historic street grid creates a highly interconnected network of local streets and walking routes that provide accessibility to/from many key destinations, including transit, parks, schools, and community facilities. This street grid supports walking and trip distribution over multiple routes.

A series of “walkshed” analyses were conducted to understand walking distances to/from key destinations within the study area. A walkshed is an area that represents how far a person can walk from a specific location within a given time or distance.

- The **Harrison PATH Station** is accessible within a 15-minute walk from many parts of Harrison (Figure 24). However, the northern parts of the study area, north of Bergen Avenue in Kearny, are more than a 30-minute walk from the only rail station in the study area.
- Many residential areas in the West Hudson study area are located within a 15-minute walk of **parks**, with three major parks—West Hudson Park in Harrison, Kearny Riverbank Park along the Passaic River, and Gunnel Oval in Kearny—providing access to most neighborhoods and the riverfront. The development of the new Raymond J. McDonough Riverside Park will significantly enhance park accessibility for neighborhoods in south Harrison.
- **Schools** are the most accessible facilities in the area, given their number and geographic distribution throughout the study area. Most neighborhoods in the study area are within a 10-minute walk of a school.
- **Civic facilities** such as town halls, libraries, and community centers are available in each municipality and are generally accessible within a 15-minute walk for the majority of the study area, with the exception of certain neighborhoods in north and south Kearny, as well as south Harrison.

Regional Connections

Existing active transportation facilities within the study area are largely fragmented and include:

- A trail network for pedestrians and bicyclists, largely contained within Kearny Riverbank Park
- A shared-use path located along a portion of Hackensack Avenue in South Kearny

Planned or developing active transportation facilities in the West Hudson study area, listed below, present an opportunity to enhance the existing network and further support active mobility in and around the study area. These enhancements aim to support walking and bicycling as viable

modes of travel, reduce car dependency and parking demand, and improve the overall accessibility to key destinations within the study area.

- **9/11 Memorial Trail:** The 9/11 National Memorial Trail is a 1,500-mile system of trails and roadways linking the World Trade Center, Pentagon, and Flight 93 Memorial. It offers a safe, scenic path for walkers, runners, and cyclists to access and explore historic sites associated with the events of September 11, 2001.
- **The Greenway:** The Greenway is a nine-mile former rail line through Essex and Hudson Counties, spanning eight municipalities. NJDEP is working on converting it into a linear park with recreation and transportation amenities. The alignment crosses northern Kearny, improving biking and walking access to the West Hudson study area and East Hudson.
- **East Coast Greenway:** The East Coast Greenway is a 3,000-mile walking and biking route between Maine and Florida, connecting 15 states and 450 communities.



Future Greenway route, north of Arlington Depot Park in Kearny

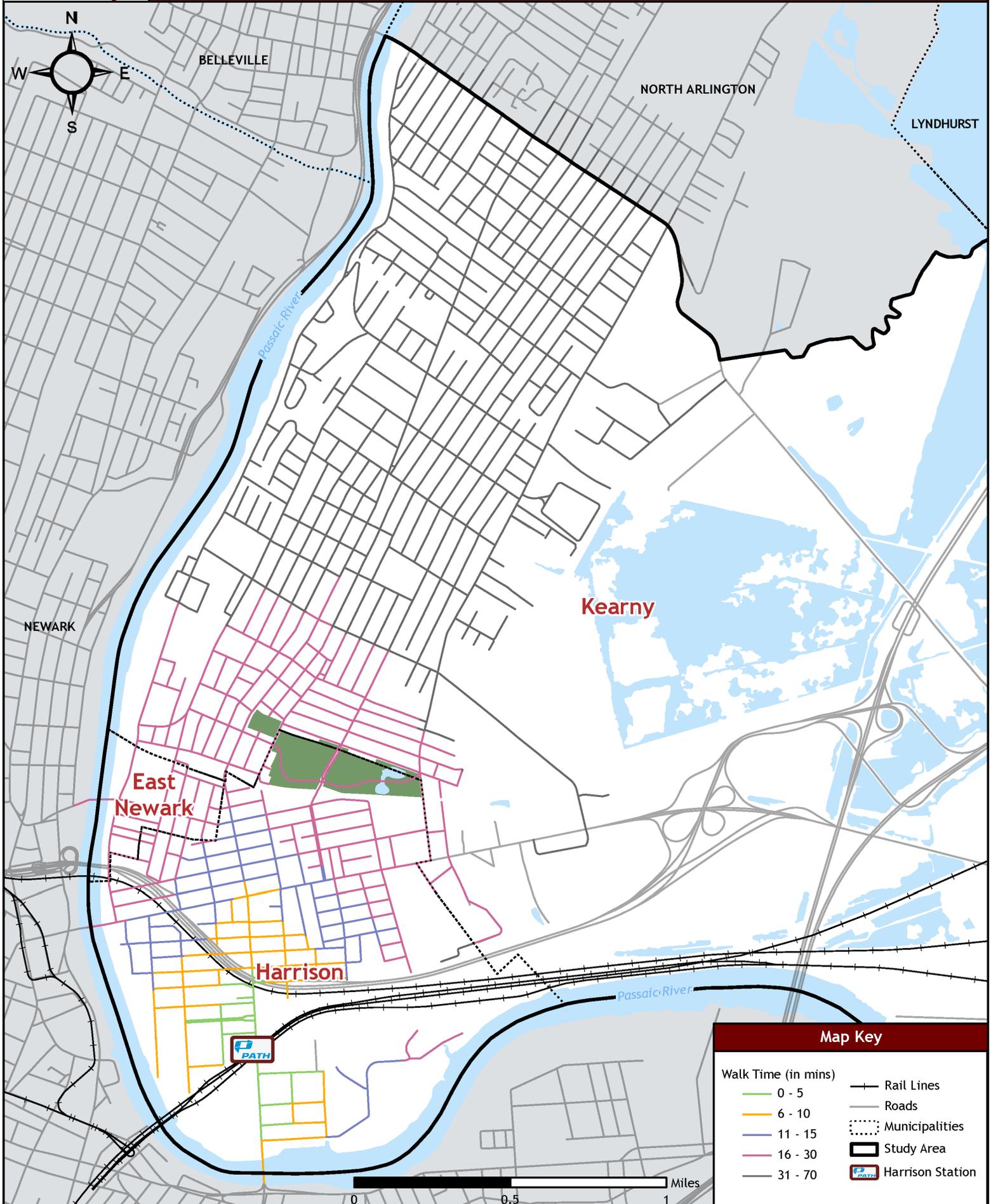


Figure 24. Walkshed centered on the Harrison PATH Station

Walk Trip Potential

A “walk trip potential” analysis was conducted using population, employment, roadway intersection density (number of intersections within ¼ mile), poverty, vehicle access, transit stops, and land uses as inputs. Higher intersection concentrations typically indicate better connectivity for pedestrians, as this often results in more potential crossing locations. The analysis revealed that the highest walk trip potential is in the western part of the study area, associated with residential neighborhoods and mixed land uses.

Bicycle Demand

A bicycle demand analysis was conducted using population density, job density, key destinations, and demographic factors as inputs. The analysis revealed that the greatest bicycle demand is experienced in the southwestern residential areas, near where the three municipalities meet. Areas bordering the West Hudson study area, including Newark and Jersey City, also have notable bicycle demand, reinforcing the importance of connections between these two cities.

Bicycle Level of Traffic Stress

The NJTPA analyzed the bicycle compatibility of the roadway network to guide efforts at creating a regional connected bicycle network.⁶ Per the analysis, roadways in the study area are assigned a Level of Bicycle Compatibility (LBC) score ranging from 1 to 5 based on various roadway attributes such as posted speed limit, number of lanes, shoulder presence, roadway width, and functional classification.

- LBC 1: suitable for most people, including children
- LBC 2: suitable for most adult bicyclists
- LBC 3: suitable for confident adult bicyclists
- LBC 4: only suitable for the most experienced bicyclists
- LBC 5: bicyclists prohibited

Most local roadways in the study area have an LBC score of 3. Many wider streets serving industrial land uses have an LBC score of 4. Higher-stress segments are present on Harrison Avenue (CR 508) and Frank E. Rodgers Boulevard (CR 697).

Safety

Roadway Safety

Hudson County completed a Vision Zero Action Plan in late 2024, which identified a High-Injury Network (HIN) of roadways throughout the County with the highest crash history. Within the West Hudson study area, portions of the following roadways appear on the County HIN:

- Passaic Avenue (Priority All Modes HIN)
- Bergen Avenue (Priority Pedestrian HIN)

⁶https://www.njtpa.org/NJTPA/media/Documents/Planning/Regional-Programs/Bicycle-Pedestrian/Bicycle-Level-Compatibility-Analysis_1-25-23.pdf

Given the concurrent Vision Zero effort, the West Hudson Circulation and Connectivity Study did not duplicate safety analyses. However, a high-level summary of crash conditions – including total crashes and vulnerable road user (pedestrian and bicyclist) crashes – appears in the following tables. In general, more total crashes, killed or severely injured (KSI) crashes, and crashes per mile occur in Kearny than in East Newark and Harrison. Harrison experiences the most pedestrian crashes and the most crashes per mile. Kearny experiences the most cyclist crashes overall, and Harrison experiences the most cyclist crashes per mile.

More detailed crash analyses conducted as part of the Hudson County Vision Zero Action Plan can be found here:

<https://www.hcnj.us/visionzero/>

Table 6. Crashes in the West Hudson Study Area (2017-2021)

Municipality	Study Area Roadways				County Roads			
	Crashes	Crashes per Mile	KSI	KSI per mile	Crashes	Crashes per Mile	KSI	KSI per Mile
East Newark	231	95.56	0	0.00	47	101.10	0	0.00
Harrison	1,434	80.39	6	0.34	409	292.51	1	0.72
Kearny	2,581	43.64	27	0.46	612	67.00	9	0.99

Table 7. Pedestrian Crashes in West Hudson Study Area (2017-2021)

Municipality	Study Area Roadways				County Roads			
	Ped Crashes	Ped Crashes per Mile	KSI	KSI per mile	Ped Crashes	Ped Crashes per Mile	KSI	KSI per Mile
East Newark	2	0.83	0	0.00	0	0.00	0	0.00
Harrison	76	4.26	2	0.11	17	12.16	1	0.72
Kearny	64	1.08	8	0.14	6	0.66	1	0.11

Table 8. Cyclist Crashes in West Hudson Study Area (2017-2021)

Municipality	Study Area Roadways				County Roads			
	Cyclist Crashes	Cyclist Crashes per Mile	KSI	KSI per mile	Cyclist Crashes	Cyclist Crashes per Mile	KSI	KSI per Mile
East Newark	3	1.24	0	0.00	1	2.15	0	0.00
Harrison	26	1.46	0	0.00	9	6.44	0	0.00
Kearny	35	0.59	4	0.07	6	0.66	1	0.11

Bridge Infrastructure

Because the study area is surrounded on three sides by the Hackensack and Passaic Rivers, bridges provide a vital connection. Below is a description of the nine study area bridges and summary of current or planned work. These numbers coincide with the bridge number shown on the map in Figure 25.

Table 9. Bridges in West Hudson

#	Bridge	Planned Work Description
1.	Pulaski Skyway: The Pulaski Skyway is an elevated causeway, constructed in the early 20 th century, that carries US Route 1 & 9 over the Hackensack and Passaic Rivers, the New Jersey Turnpike, railroads, and industrial facilities. The Skyway is a 3.5-mile-long steel structure, with two main river-crossing spans of 550 feet in length.	Rehabilitation of the Pulaski Skyway began in 2012 and is expected to be completed in 2027 or 2028. Completed improvements and ongoing work include rehabilitation of the Route 139 Hoboken and Conrail Viaducts, deck replacement, rehabilitation to ramps and piers, steel repairs, roadway improvements, seismic retrofits, substructure repairs, and painting the steel structure.
2.	Clay Street Bridge: This 100+ year old bridge carries Clay Street over the Passaic River between Newark in Essex County and East Newark in Hudson County.	Hudson County and Essex County are conducting a Local Concept Development (LCD) study of the Clay Street Bridge using federal funding through the NJTPA, which needs several repairs and improvements to address structural and functional design limitations.
3.	William A. Stickel Memorial Bridge: This is a vertical-lift bridge that crosses the Passaic River, connecting Newark and Harrison as part of Interstate 280.	NJDOT began a \$33 million reconstruction and rehabilitation of the I-280 Stickel Bridge over the Passaic River between Newark, East Newark, and Harrison in 2006. The deteriorated bridge deck and mechanical and electrical equipment that operate the vertical lift span for marine navigation traffic were replaced. The eastbound and westbound decks were reconstructed, and all structural steel was repainted. Work was completed in 2009.
4.	Bridge Street Bridge: This 100+ year old bridge carries Bridge Street over the Passaic River between Newark in Essex County and Harrison in Hudson County.	Hudson County and Essex County are conducting an LCD Study of the existing Bridge Street Bridge over the Passaic River. The bridge needs improvement to address structural deficiencies and maintain an important transportation connection for residents and commuters in Hudson County to and from the City of Newark, including Newark's downtown business district. The bridge has been temporarily closed in recent years for structural and mechanical repairs. The Counties have recently received federal funding and are working with the municipalities in coordination with NJTPA and NJDOT to determine what improvements are possible.

#	Bridge	Planned Work Description
5.	Jackson Street Bridge: This bridge carries Jackson Street over the Passaic River between the Ironbound neighborhood within the City of Newark (Essex County) and Town of Harrison in Hudson County.	Repairs to the Jackson Street Bridge were recently completed in 2023 as part of Hudson and Essex County’s “Priority Repairs to County Bridges, Joint Bridges: Bridge Street, Clay Street and Jackson Street” Project. The project included electrical, mechanical, and structural repairs to the three movable joint bridges.
6.	Lincoln Highway Passaic River Bridge: This vertical lift bridge carries US Route 1 & 9 Truck and the East Coast Greenway over the Passaic River between the Ironbound neighborhood in the City of Newark in Essex County and Town of Kearny in Hudson County.	There are no recent or upcoming developments.
7.	Lincoln Highway Hackensack River Bridge: This vertical lift bridge carries US Route 1 & 9 Truck and the East Coast Greenway over the Hackensack River between Jersey City and Kearny.	There are no recent or upcoming developments.
8.	Wittpenn Bridge: This 90+ year old vertical-lift bridge carries NJ Route 7 over the Hackensack River in Jersey City and Kearny.	The replacement bridge project was completed in 2022, improving traffic operations and safety and increasing vertical clearance over the Hackensack River in the closed position to reduce vehicular and marine traffic conflicts.
9.	Belleville Turnpike Bridge: This vertical-lift bridge carries Belleville Turnpike over the Passaic River, connecting Belleville in Essex County, Kearny in Hudson County, and North Arlington in Bergen County.	There are no recent or upcoming developments.

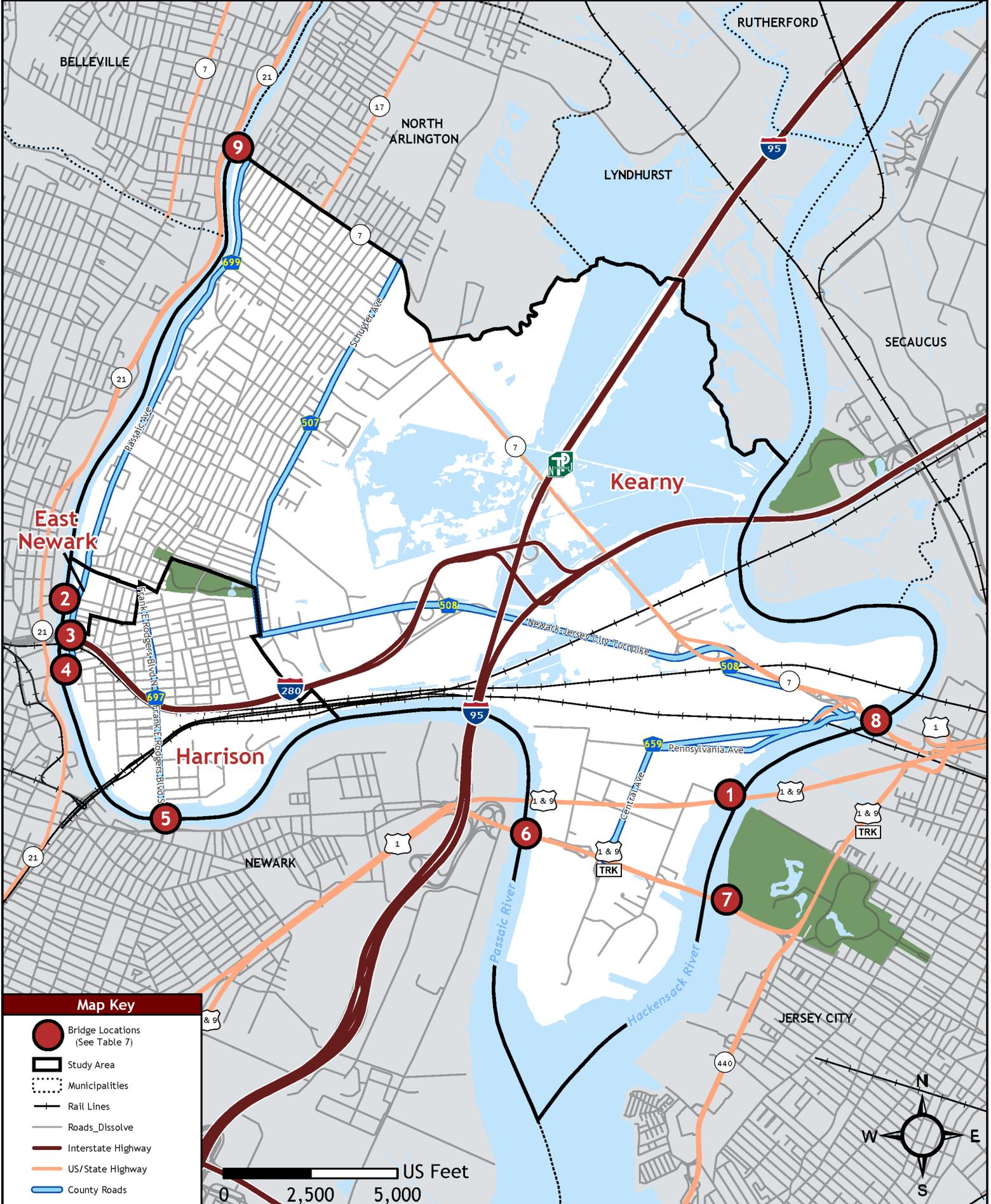


Figure 25. Bridges in the West Hudson study area

Stormwater Management

An analysis of drainage and stormwater management was conducted by gathering environmental and water resources information for the study area, including watershed and Hydrologic Unit Code (HUC) information,⁷ FEMA floodplains, and environmental constraints. Low points in the study area were identified using Light Detection and Ranging (LiDAR)⁸ and then checked on Google Street View to note conditions, including the status of inlets and localized erosion. Stormwater management recommendations were then made based on this information.

Flood Hazard Areas

Most of Kearny is in the 100-year flood hazard area defined as a geographic area that has a 1 percent chance of flooding in any given year.⁹ Areas of Harrison and East Newark bordering the Passaic River are in the 100-year flood zone. Redevelopment areas in the 100-year flood zone include: Kearny Point Redevelopment Area, Kearny Area Redevelopment, Koppers Coke Redevelopment Area, Belleville Turnpike Redevelopment Area, Harrison Waterfront Redevelopment, East Newark Redevelopment, and Passaic Avenue Redevelopment Area.

Environmental Constraints

Most of eastern Kearny has areas that contain the four rankings of Threatened & Endangered Species: Rank 1 – Habitat specific requirements; Rank 2 – Special concern; Rank 3 – State Threatened; and Rank 4 – State Endangered. Lands bordering the Passaic River and Hackensack River are either designated as having Habitat Specific Requirements or being state-threatened or endangered.

All municipalities contain sites of groundwater contamination, except some of the higher-elevation residential areas in Kearny. Groundwater contamination can lead to poor drinking water quality, loss of water supply, degradation of surface water systems, increased cleanup costs, and potential health issues.¹⁰ Roadway flooding, which occurs on roadways

⁷ Hydrology Unit Codes (HUCs) per USGS: “Watersheds are delineated by USGS using a nationwide system based on surface hydrologic features. This system divides the country into 22 regions (2-digit), 245 subregions (4-digit), 405 basins (6-digit), ~2,400 subbasins (8-digit), ~19,000 watersheds (10-digit), and ~105,000 subwatersheds (12-digit). A hierarchical hydrologic unit code (HUC) consisting of 2 additional digits for each level in the hydrologic unit system is used to identify any hydrologic area.” Source: <https://nas.er.usgs.gov/hucs.aspx>

⁸ LiDAR per the USGS: “Light Detection and Ranging (lidar) is a technology used to create high-resolution models of ground elevation with a vertical accuracy of 10 centimeters (4 inches). Lidar equipment, which includes a laser scanner, a Global Positioning System (GPS), and an Inertial Navigation System (INS), is typically mounted on a small aircraft. The laser scanner transmits brief pulses of light to the ground surface. Those pulses are reflected or scattered back, and their travel time is used to calculate the distance between the laser scanner and the ground.” Source: <https://www.usgs.gov/faqs/what-lidar-data-and-where-can-i-download-it>

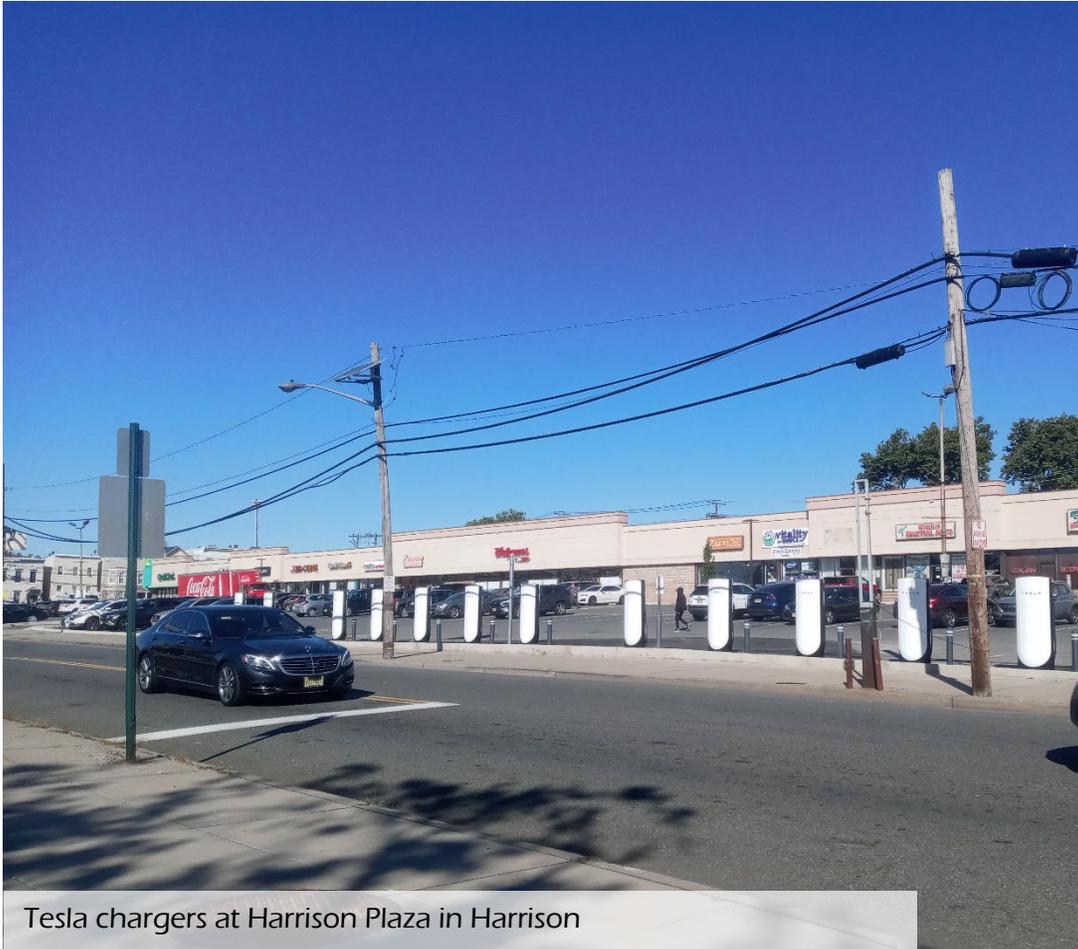
⁹ <https://www.fema.gov/about/glossary>

¹⁰ <https://www.epa.gov/sites/default/files/2015-08/documents/mgwc-gwc1.pdf>

within the West Hudson study area, can contribute to groundwater contamination, underscoring the need for stormwater mitigation.

Electric Vehicles

Within the West Hudson study area, there are currently 36 publicly-accessible chargers¹¹ and 43 publicly-accessible EV charging ports.¹² Based on an analysis of existing and future EV ownership, 439 EV charging ports will need to be constructed in the study area over the next five years to meet demand based on EV adoption.



Tesla chargers at Harrison Plaza in Harrison

¹¹ The term “charger” is defined in accordance with [23 CFR §680.104](#) as “a device with one or more charging ports and connectors for charging EVs.”

¹² The terms “charging port” or “port” are defined in accordance with [23 CFR §680.104](#) as “the system within a charger that charges one EV. A charging port may have multiple connectors, but it can provide power to charge only one EV through one connector at a time.

5. OUTREACH AND ENGAGEMENT

COLLABORATION AND COMMUNICATION

The Public Involvement Plan guided extensive community outreach throughout the study and included a multi-pronged approach to facilitate participation from public officials, residents, advocacy organizations, and other stakeholders through both traditional and non-traditional methods. A mix of qualitative and quantitative input from the community was combined to develop a West Hudson Circulation and Connectivity Study to improve safety, enhance circulation, and strengthen connections between West Hudson and East Hudson along with the surrounding Northern New Jersey region.

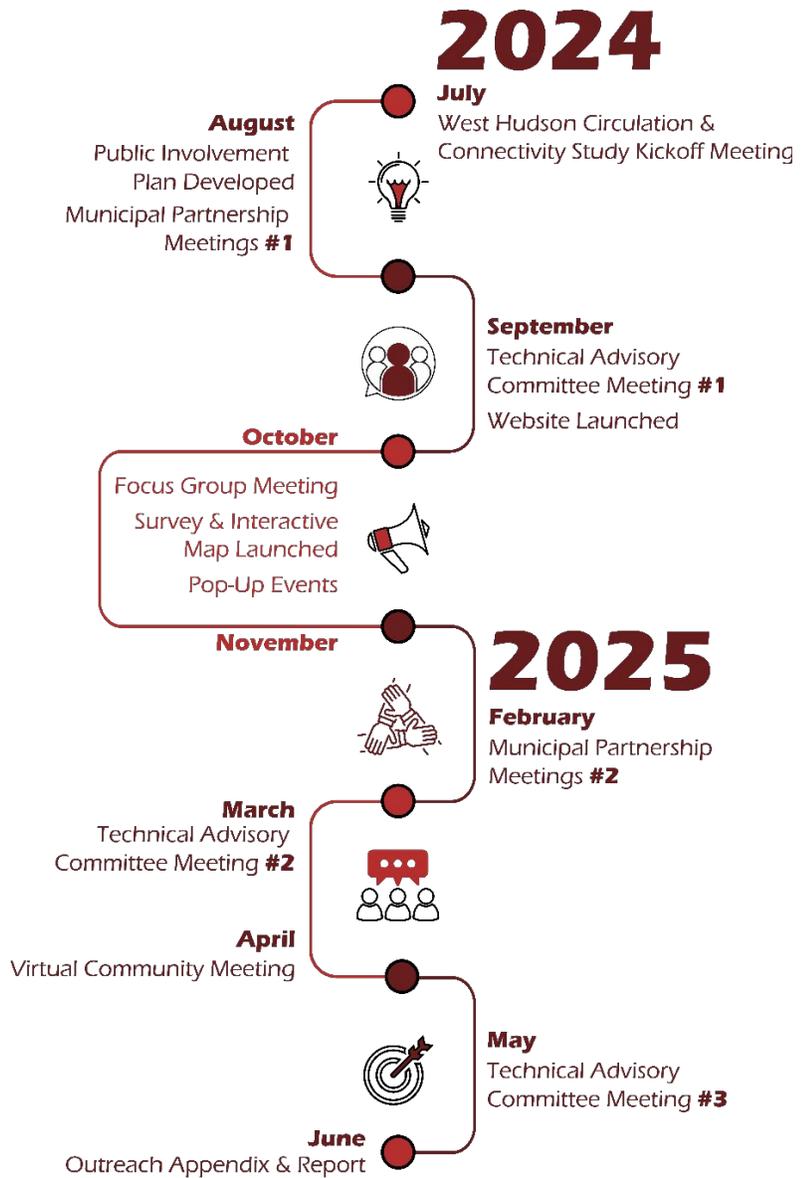


Figure 26. Engagement Timeline

GATHERING FEEDBACK

Ultimately, more than 350 stakeholders provided feedback to help shape the Circulation and Connectivity Study, contributing input through an online survey and interactive map, a focus group discussion, a community/public meeting, and pop-up events held across the three municipalities. Stakeholders also informed the study through municipal partnership and technical advisory committee meetings. These efforts brought together people from diverse backgrounds who shared concerns and ideas to improve safety and circulation throughout the county.

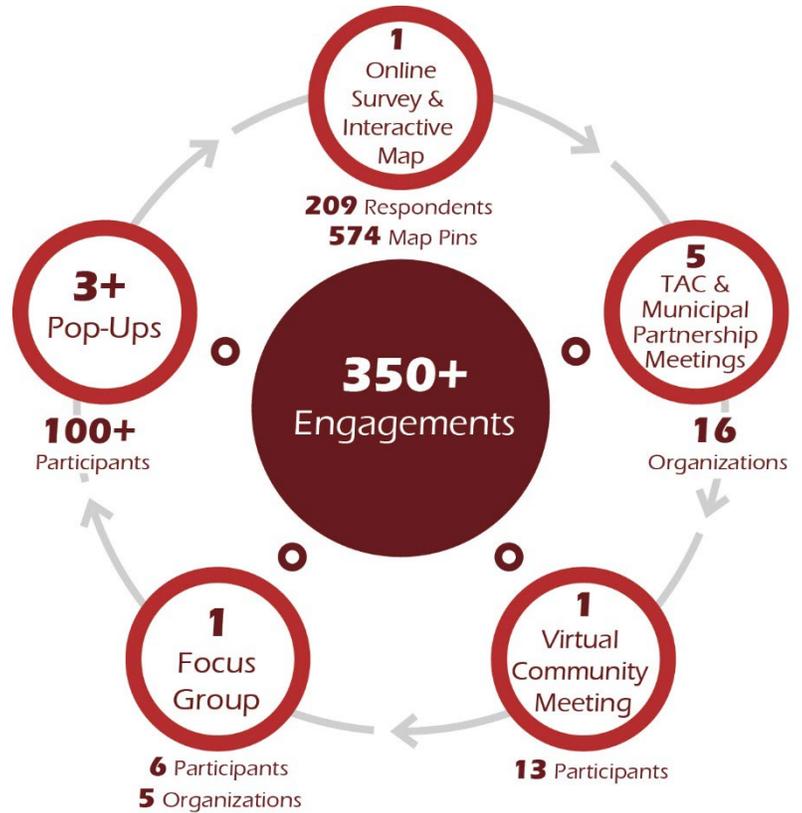


Figure 27. Public Engagement Numbers

MAKING OUTREACH ACCESSIBLE

The Public Involvement Plan deployed a range of outreach methods to provide multiple opportunities for engagement. These included a project website, an online survey and mapping tool, a social media campaign, and strategic partnerships with stakeholders invested in improving transportation and mobility in West Hudson, including East Newark, Harrison, and Kearny.

Special efforts were made to reach all community members, including:

1. Outreach efforts tailored to reflect the areas' diverse contexts, ranging from more urbanized areas like Harrison to more suburban neighborhoods in northern Kearny.
2. Engagement efforts recognized that circulation needs vary across communities, as car ownership rates differ between the more urban areas and the suburban parts of West Hudson.
3. Translation of public outreach materials into Spanish and Portuguese, the two most spoken non-English languages in the study area.
4. Distribution of multi-lingual palm cards, flyers, and other outreach materials by the project team and partners.
5. Bilingual facilitators at community events.

WEBSITE, SOCIAL MEDIA & PROMOTIONAL MATERIALS

The public involvement process began with the development of branding for study materials and the launch of a project website housed on the County’s website, where stakeholders could find information about the study’s purpose, project updates, resources, and ways to get involved.

The West Hudson Circulation and Connectivity Study project team created content for Hudson County’s social media feeds and produced a “Communications Sharekit” with pre-packaged, easy-to-share, social media and email content to help strategic project partners advertise activities through their own communications channels. Additionally, palm cards were handed out to participants and passersby during the pop-up events to broaden the survey’s reach and engagement.

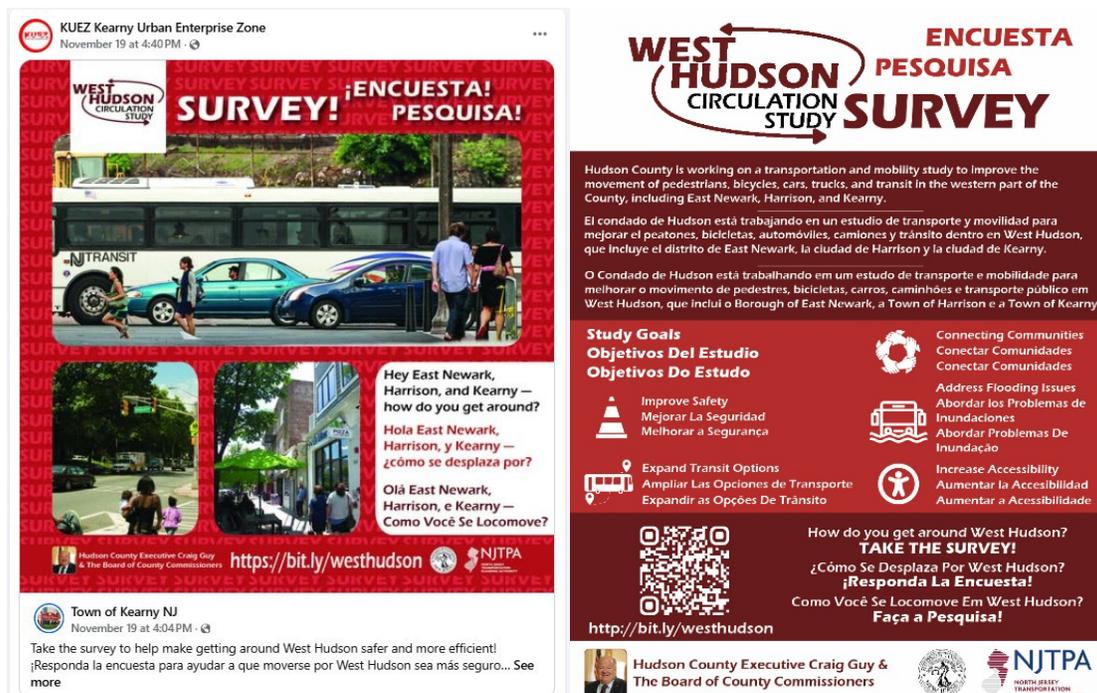


Figure 28. Promotional Materials



MUNICIPAL PARTNERSHIP & TECHNICAL ADVISORY COMMITTEE MEETINGS

The Municipal Partnership and Technical Advisory Committee (TAC) meetings provided qualitative input by collaborating with the project team to develop and implement the Public Involvement Plan and refine a vision for the study. They also served as a technical resource, providing necessary background documentation, insights into on-the-ground conditions and experiences, and feedback on the localized implications of draft strategy recommendations. Each group met two times throughout the course of the study, providing invaluable information and feedback to the project team. Municipal Partnership meeting participants included public officials and key staff from each of the municipalities in West Hudson, while the TAC included key stakeholders from state, regional, county, and municipal governments, as well as advocacy organizations with expertise in transportation.

TAC MEMBERS

- EZ RIDE
- Hudson County Department of Planning & Business Opportunity
- Hudson County Division of Planning
- Hudson County Division of Engineering
- Hudson TMA
- NJ Bike & Walk Coalition
- New Jersey Department of Transportation
- NJ TRANSIT
- North Jersey Transportation Planning Authority
- New Jersey Sports and Exposition Authority
- Port Authority of New York and New Jersey
- River Terminal Development Co. (and KUEZ)
- TRANSCEND
- Municipalities: Borough of East Newark, Town of Harrison, & Town of Kearny

VIRTUAL FOCUS GROUP

The West Hudson Circulation and Connectivity Study project team held one virtual focus group with strategic stakeholders who were either actively involved or had a vested interest in transportation decisions in Hudson County. The purpose of the focus group was to gather feedback on perceptions and experiences faced when using the transportation network, and to identify areas of concern and opportunity. The intentional inclusion of organizations representing many interests brought a broad range of perspectives into the conversation. The focus group explored residents', workers', and visitors' experiences with circulation, discussed mobility challenges, identified key destinations, and assessed areas for accessibility improvements.

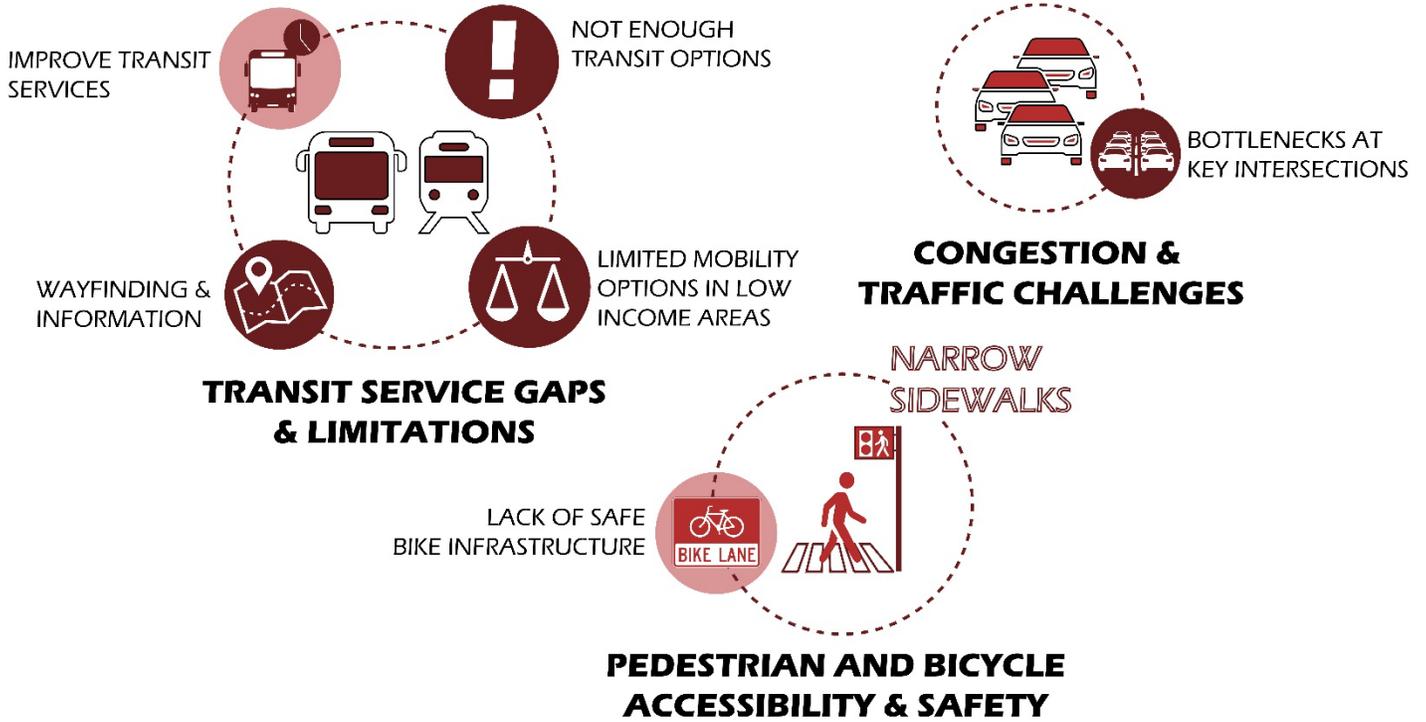


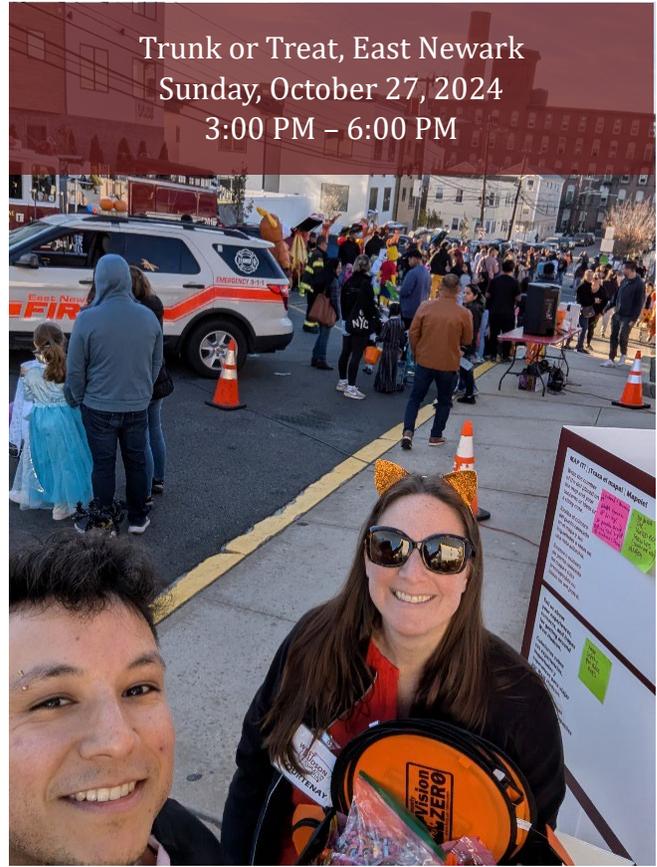
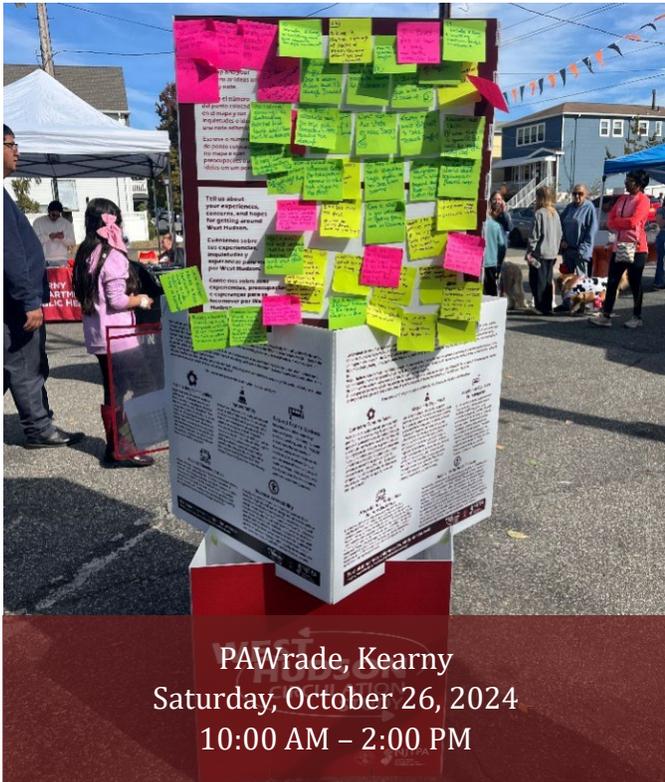
Figure 29. Key Takeaways from the Virtual Focus Group

POP-UP ENGAGEMENT

Pop-up engagement activities facilitated connections between the West Hudson Circulation and Connectivity Study project team and the community. Events were held across the three municipalities, featuring project information and activities that invited passersby to share their travel preferences and experiences. The project team spoke with participants about the study’s goals and benefits, encouraged them to take part in the activities, and gathered feedback on mobility and circulation challenges in the area.



Figure 30. Pop-Up Findings



WEST HUDSON CIRCULATION STUDY

SURVEY! ¡ENCUESTA! PESQUISA!

Hey East Newark, Harrison, and Kearny — how do you get around?
Hola East Newark, Harrison, y Kearny — ¿cómo se desplaza por?
Olá East Newark, Harrison, e Kearny — Como você se locomove?

Hudson TMA @ various locations
November – December 2024

Hudson County & The Board of Transportation | NJTPA



Figure 31. Pop-Up Locations



SURVEY & MAP

The public involvement process featured an online survey with an interactive mapping component to help inform the transportation and circulation vision and collect more information about network deficiencies and opportunities in West Hudson. The survey collected information about participants' current travel habits, preferred modes of travel for the future, perceived ease of travel when using these modes, and conditions that impact their travel within the study area. The interactive mapping component allowed participants to pinpoint location-specific concerns by transportation mode, explore other untapped opportunities, and identify key destinations.

The survey included optional demographics questions and was available in three languages: English, Spanish, and Portuguese. Ultimately, the online survey and map yielded 209 valid responses. Participants placed a total of 574 pins to highlight areas of concern or opportunity within and around the study area. They also identified frequently visited destinations for dining, entertainment, recreation, healthcare, and other services, resulting in 231 additional pins that provide insight into key activity hubs in the region.

COMMUNITY MEETING

Toward the end of the planning process, the West Hudson Circulation and Connectivity Study project team hosted one virtual community/public meeting on April 23, 2025, to present and gather community feedback on draft recommendations to improve circulation and mobility in West Hudson.

WHAT WE HEARD

The feedback and input collected from the various methods of community outreach informed the draft recommendations for the study area.

EASE OF TRAVEL IN THE STUDY AREA USING DIFFERENT TRANSPORTATION MODES

Responses from both online and in-person outreach activities were combined to assess how easily people perceive travel using different modes of transportation. Over half of the participants (55 percent) found biking and scootering to be difficult, followed by public transit, with 46 percent identifying it as a challenging mode. In contrast, walking and driving were considered the easiest ways to get around, with more than 50 percent of respondents selecting walking as the easiest mode of travel.

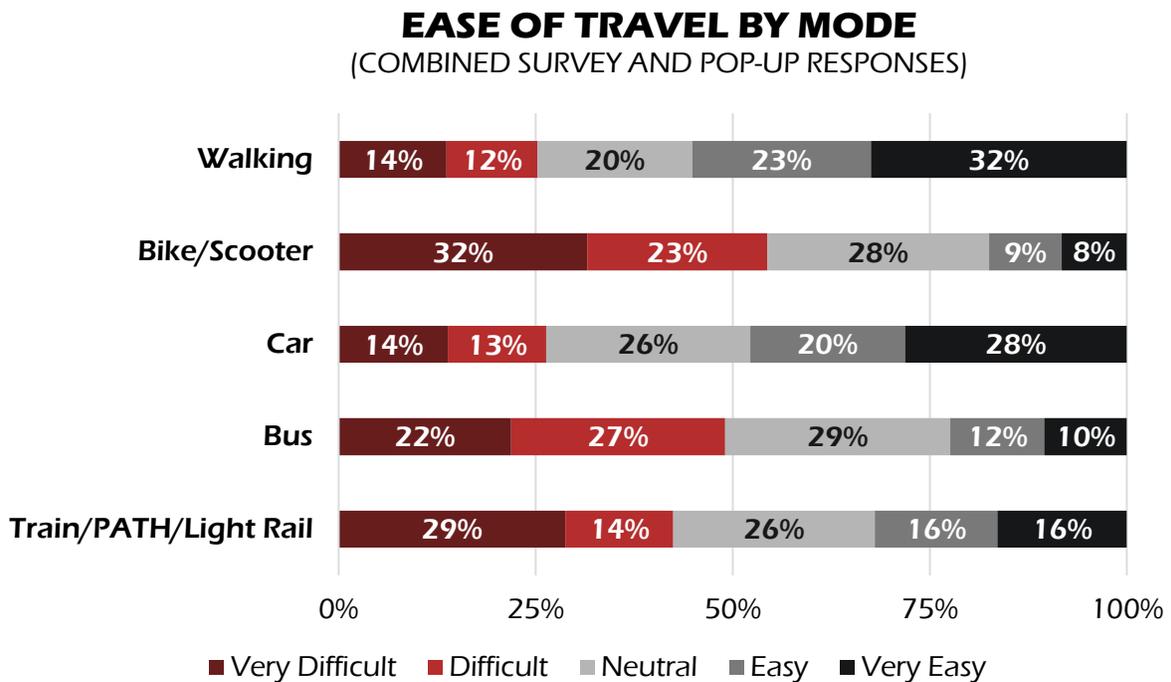


Figure 32. Ease of Travel by Mode Results

MAPPING RESULTS

Through the survey's mapping component, participants identified location-specific concerns and opportunities both within and beyond the study area. Upon aggregating all map pin responses, 52 percent of all responses were related to **street design and infrastructure**, including the need for bike lanes and a more cohesive bicycle network, improvements to pedestrian crossings and accessibility, enhanced walking conditions, and stronger transit connections. Another 33 percent of responses focused on **behavior and enforcement**, with top concerns being drivers failing to yield to pedestrians and cyclists and excessive speeding.

Most of these pins were concentrated along key County roads, including Frank E. Rodgers Boulevard, Kearny Avenue, Harrison Avenue, Passaic Avenue, and Bergen Avenue (Figure 33).

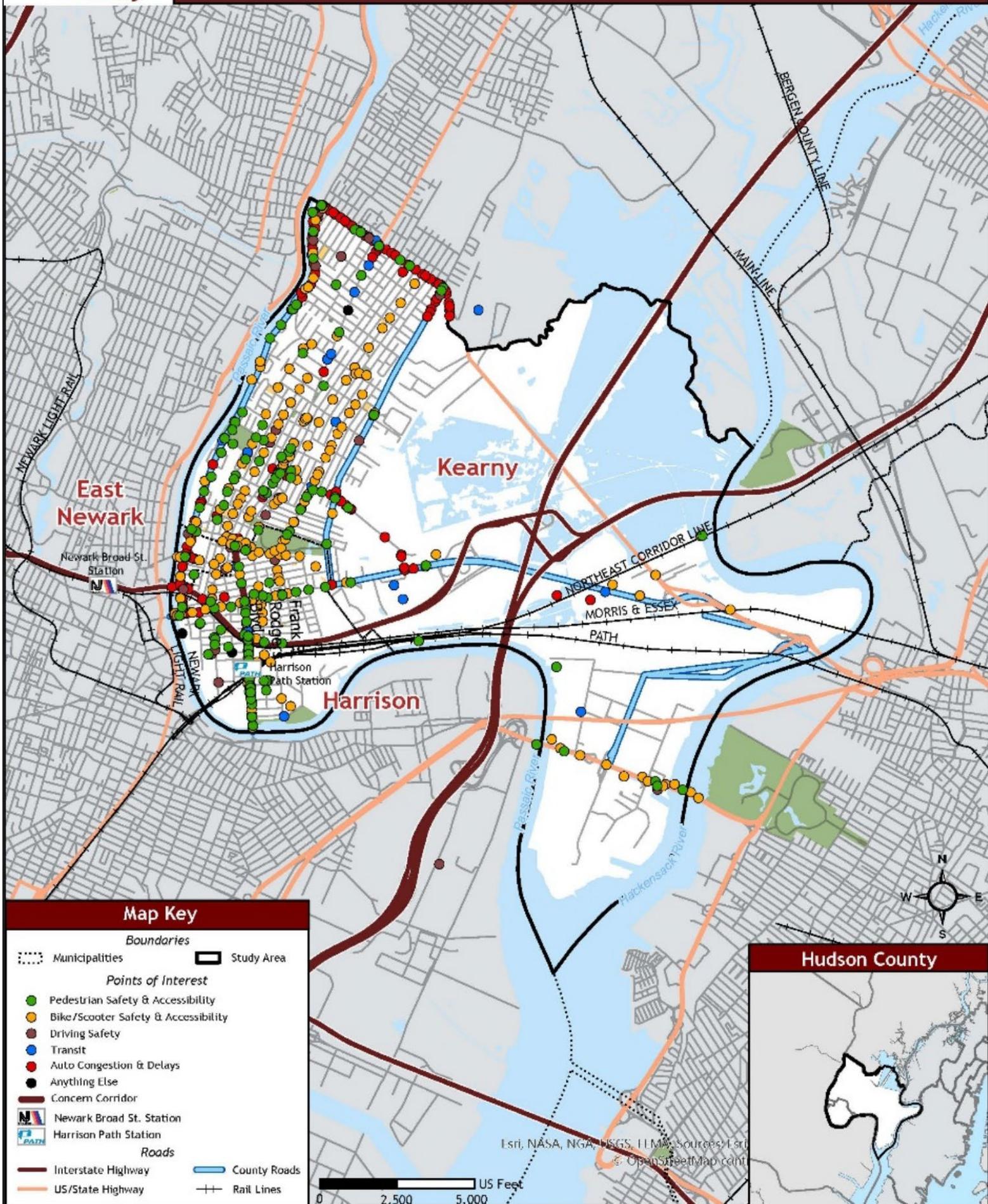


Figure 33. Concerns and Opportunities Map Pins



During the focus group discussion and through the online survey and map, participants also identified the places they visit most frequently, both within and outside of West Hudson. These included destinations for dining, entertainment, recreation, healthcare, and other services. The combined mapping data shows a high concentration of destination pins in and around key activity centers such as downtown Harrison and the Kearny Avenue commercial corridor. Notable clusters also appear near key transit nodes like Harrison and Newark Penn Stations, suggesting a correlation between accessibility and destination choice. Additional pins are dispersed throughout the broader region, including parts of Newark, Jersey City, and north of Hudson County, highlighting the travel patterns for West Hudson residents and visitors.

The map below illustrates the variety of destinations highlighted by outreach participants (Figure 34).

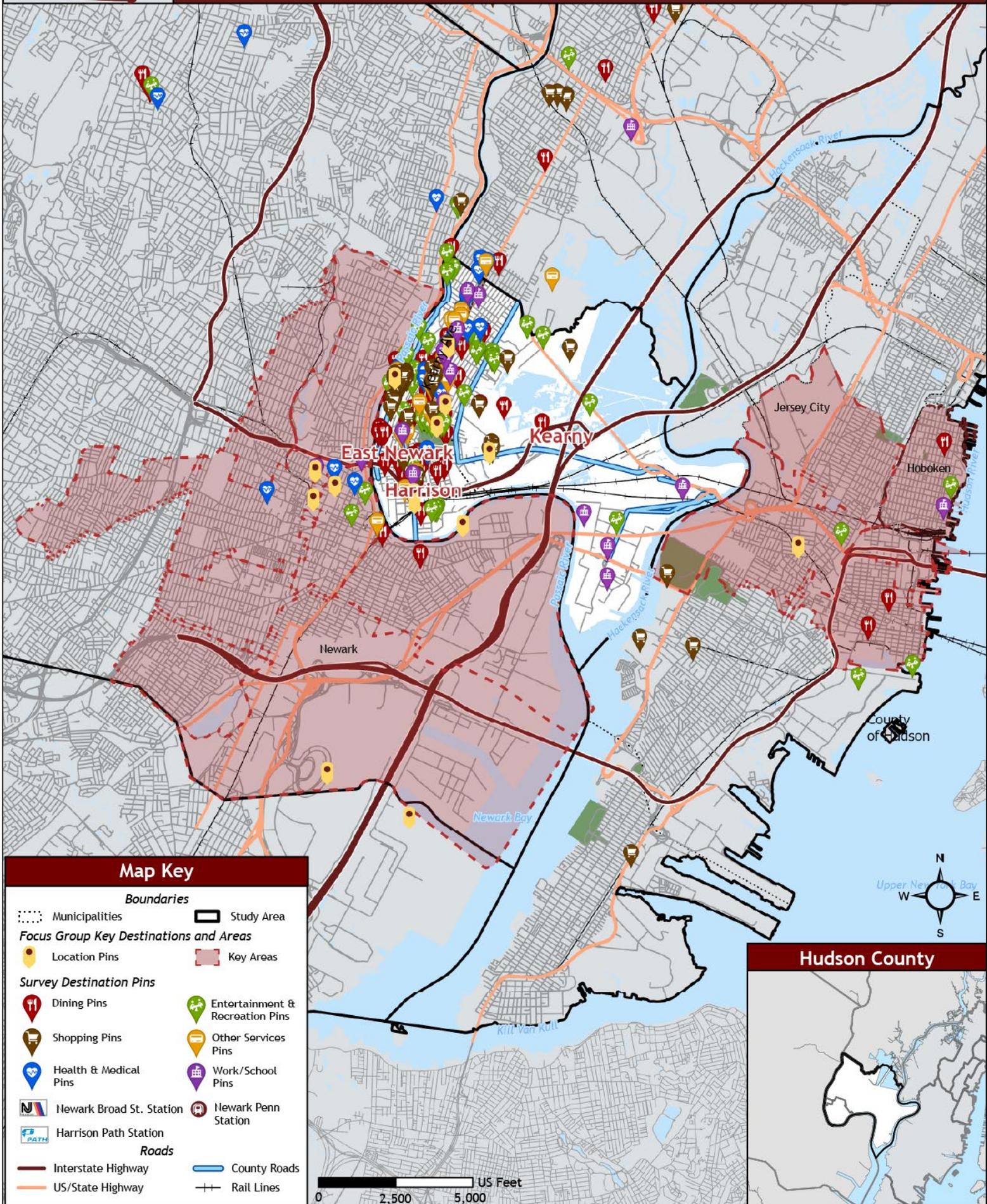


Figure 34. Key Destinations Map Pins

MOST FREQUENTLY NOTED CONCERNS

Ultimately, more than 350 stakeholders were engaged through outreach methods that allowed them to share their concerns, experiences, and insights related to circulation, mobility, and connectivity within West Hudson and beyond. The most frequently noted concerns and ideas included:

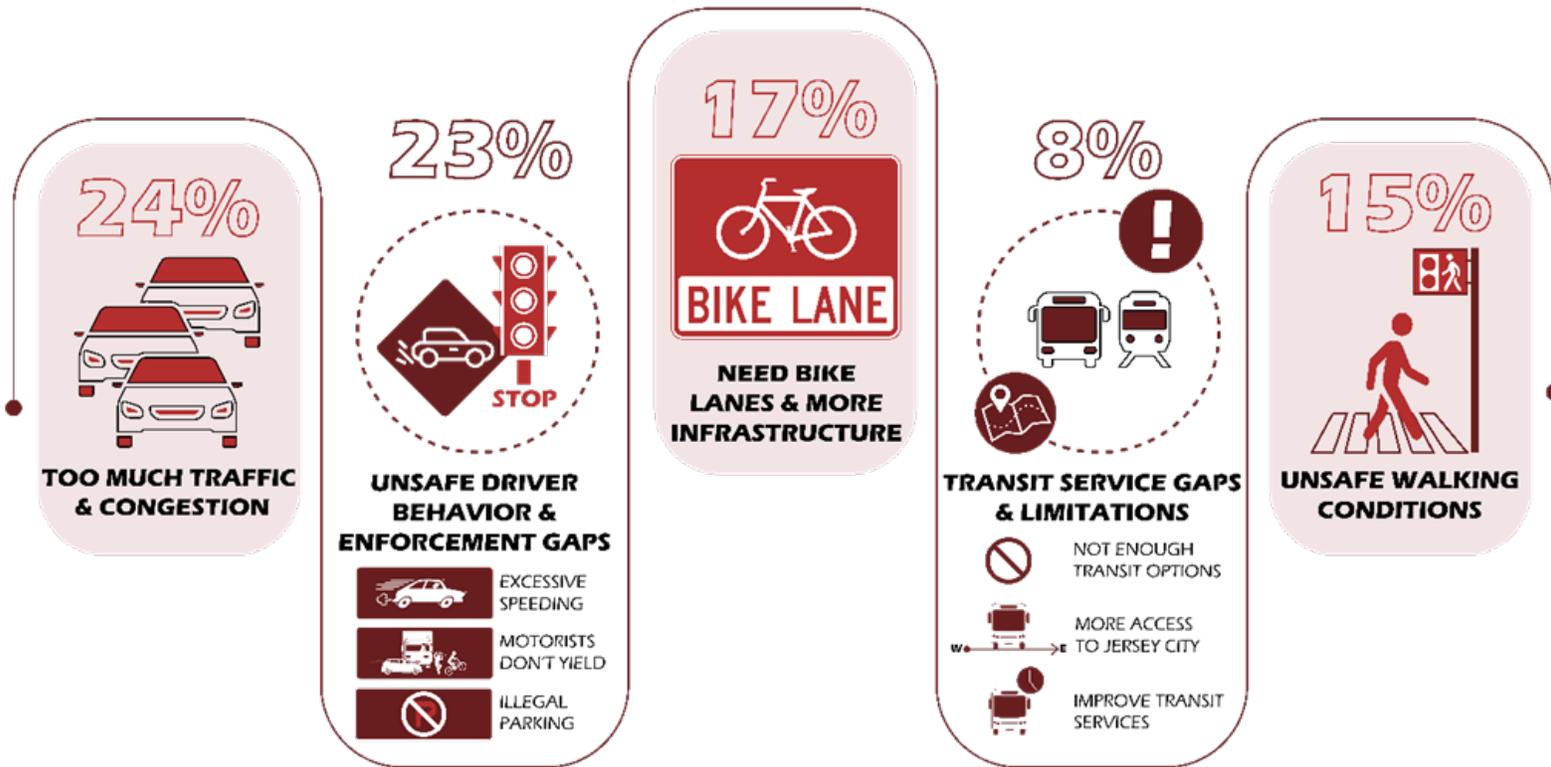


Figure 35. Combined Results (All Activities & Questions)

- **Congestion and delays** are major concerns in the study area, with heavy traffic and bottlenecks at key intersections. Many participants expressed their frustration about having to leave earlier, alter travel plans, or risk being late to work due to traffic. Congestion also contributes to a sense of unsafe travel conditions.
- **Behavior and enforcement** issues by vehicles, including excessive speeding, illegal parking, and not yielding to pedestrians and cyclists, all create unsafe conditions for active transportation in the area. Additionally, concerns were raised about bike and scooter users not following traffic rules, particularly riding on sidewalks.
- Concerns were raised about the **limited transit options** both within the study area and for travel to Jersey City or other parts of the County (East Hudson). There is a need for better access to transit service information and for creating an integrated platform, such as a mobile app, which brings together all available transit options. Participants emphasized the need to improve West-East connectivity, particularly to Jersey City.

- Enhancing the overall **transit experience** was also desired, including improved bus stop amenities like shelters, benches, and clear signage.
- Improving **first- and last-mile connectivity** to the PATH station in Harrison, especially for those without a car and/or living in the more suburban areas of North Kearny.
- Desire for protected **bike lanes**, particularly improving north-south connections to enhance access to the PATH station in Harrison and east-west routes to destinations in South Kearny, Jersey City, and Newark. Participants also emphasized the importance of developing a comprehensive and connected bike network across the County.
- Improving **pedestrian infrastructure** by maintaining sidewalks, installing pedestrian beacons, enhancing accessibility at crosswalks, and reducing long crossing distances.

6. RECOMMENDATIONS

The study recommendations were developed based on local needs identified through data collection and analysis, as well as stakeholder and public input. These needs are reflected in the study area's goals to enhance accessibility and connectivity, safety, transit, and stormwater management.

Recommendations were presented to the County, municipal partners, TAC members, including representatives from NJ TRANSIT, the Port Authority of New York and New Jersey (PANYNJ), EZ Ride, Hudson TMA, NJSEA, and the NJ Bike & Walk Coalition, and members of the public. At each review opportunity, individuals were able to provide input on the recommendations, which were then refined based on the feedback gathered from each round of engagement and outreach.

The recommendations in this section are organized by the following categories (with reference abbreviations shown):

- **Traffic/Operations (TO)**
- **Safety (S)**
- **Transit (TR)**
- **Active Transportation (AT)**
- **Sustainable and Resilient Solutions (SR)**
- **Public Realm Enhancements (PR)**

Recommendations are a combination of location-specific strategies based on unique issues raised within each municipality and improvements that are applicable throughout the study area.

Each recommendation includes details on:

- **Timeframe:** short-term (0-2 years), mid-term (2-5 years), or long-term (5 years or over)
- **Order of magnitude costs:** low (under \$100,000), medium (between \$100,000 and \$1 million), and high (\$1 million or over)
- **Responsible parties:** organizations/agencies that may lead and/or participate in future implementation efforts
- **Study goal(s)** being addressed

Table 10. Recommendations Matrix legend.

Timeframe	🕒	0-2 years
	🕒🕒	2-5 years
	🕒🕒🕒	Over 5 years
Costs	\$	<\$ 100,000 (Low)
	\$\$	\$ 100,000 – \$ 1 Million (Mid)
	\$\$\$	>\$ 1 Million (High)
Responsible Parties	Lead Organization(s)	

A summary of all the study recommendations with implementation timeframes, costs, and responsible parties can be found at the end of the Recommendations Chapter (Table 11).

TRAFFIC/OPERATIONS (TO)

Recommendations in this category are focused on enhancing roadway design, operations, and overall performance within the study area’s well-developed road network.

TO RECOMMENDATION 1

Consider implementing one-way street conversions to reduce left turns onto Passaic Avenue. Potential candidates include Mulock Place, Searing Avenue, and Reynolds Avenue. To complement the one-way conversions, implement traffic calming measures along local roads, including speed bumps, to prevent speeding.

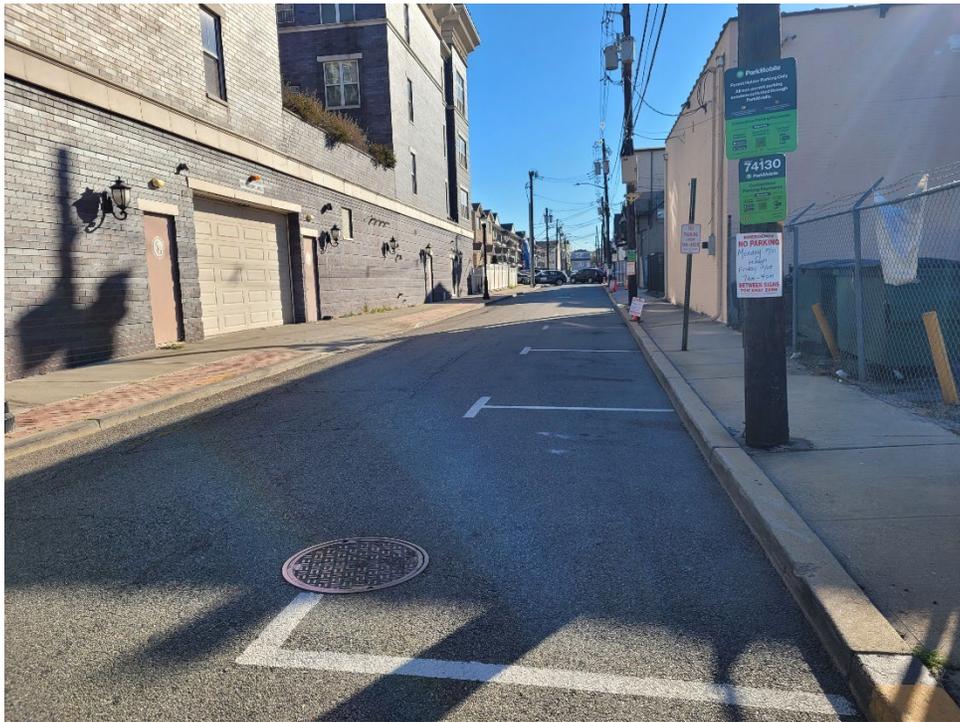


Figure 36. Mulock Place in East Newark

The East Newark portion of Passaic Avenue is in Hudson County’s Priority High-Injury Network for all modes. One-way street conversions can reduce left-turn conflicts on Passaic Avenue.

Timeframe	🕒	0-2 years
Costs	💰	<\$100,000
Responsible Parties	East Newark, Harrison, Hudson County	
Study Goals	Improve Safety	

TO RECOMMENDATION 2

Consider emergency vehicle preemption (EVP) signals on Bridge Street and Harrison Avenue in Harrison.

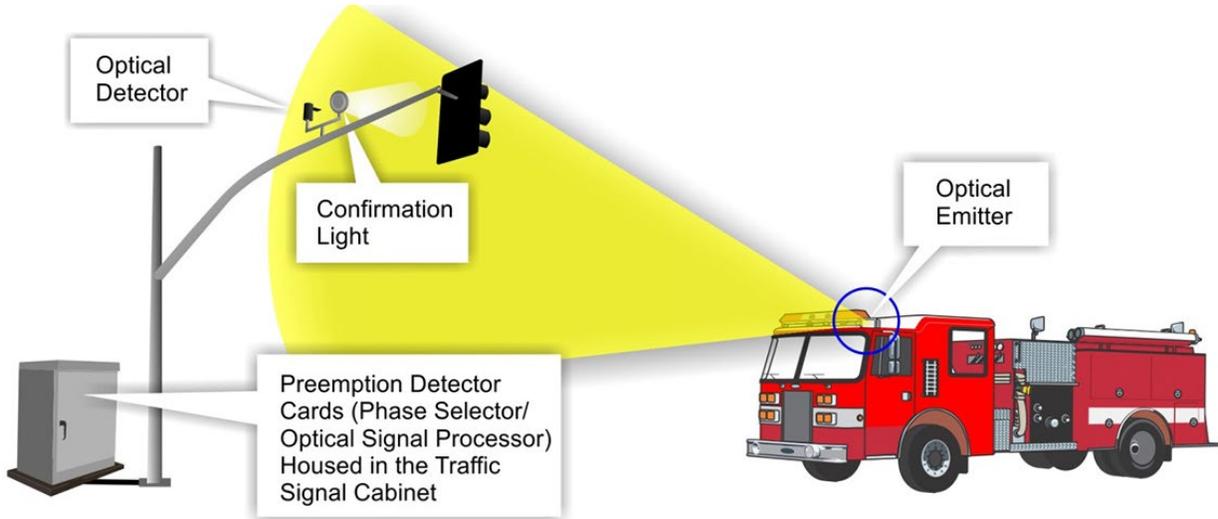


Figure 37. Components of an EVP. Source: Maricopa Association of Governments

There are no hospitals within the study area. The closest hospital is Saint Michael's Medical Center to the west, in the City of Newark (Essex County). The most direct route to Saint Michael's from the study area is through Harrison Avenue and Bridge Street. Emergency vehicle preemption overrides traffic signal operations to give emergency vehicles like ambulances and fire trucks a green light at intersections, reducing their travel time.

Timeframe	🕒🕒	2-5 years
Costs	💰💰	\$100,000 – \$1 Million
Responsible Parties	Hudson County, Harrison, NJDOT	
Study Goals	Improve Safety	

TO RECOMMENDATION 3

Hudson County will be coordinating with NJDOT, Bergen County, the Town of Kearny, and the Borough of North Arlington on an intersection project at Passaic Avenue and Belleville Turnpike. The County can leverage this opportunity to explore signal operations.

Queuing on the Belleville Turnpike at the Passaic Avenue intersection was observed during the field visit at the approaches in both directions. Field visit participants noted that queuing can extend as far as Kearny Avenue during peak periods.

Timeframe	🕒	0-2 years
Costs	\$	<\$100,000
Responsible Parties	NJDOT, Hudson County, Coordinate with Bergen County, Town of Kearny, and the Borough of North Arlington	
Study Goals	Connect Communities, Improve Safety	

TO RECOMMENDATION 4

Conduct corridor studies for the most congested roadways in the study area. These corridors provide access to key destinations within the study area. Studies should consider signal timing, adaptive signaling, lane configuration at intersections, removal of parking spaces at intersections to improve safety and traffic flow, and redesign of intersecting roadways (including potential one-way conversions) to reduce the number of conflict/access points and better funnel traffic to intersections capable of handling traffic.

The Trip Distribution and Routing and Traffic Volume analyses showed that Kearny Avenue, Schuyler Avenue, Harrison Avenue, Passaic Avenue, and Frank E. Rodgers Boulevard are the main corridors used to access key destinations within the study area and, due to their local and regional significance, are also the most congested roadways.

Of note, Frank E. Rodgers is currently in the Preliminary Engineering (PE) phase of the NJTPA’s Local Safety Engineering Assistance Program (LSEAP), and Harrison Avenue was included as a “Focus Corridor,” with specific design suggestions included in the Harrison Streets for All Design Guide (2024). Any future corridor studies could prioritize other corridors that have not yet been evaluated for improvements.

Timeframe	🕒🕒🕒	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Hudson County, Municipalities	
Study Goals	Increase Accessibility, Improve Safety	

SAFETY (S)

West Hudson residents and visitors travel by car, bus, walking, or biking. These modes often occupy the same spaces, so safety recommendations are critical to promoting safe travel conditions for all. Many of these recommendations incorporate FHWA Proven Safety Countermeasures (PSC) to improve pedestrian visibility, slow vehicles, and support safe streets in the study area.

S RECOMMENDATION 1

Install high-visibility crosswalks across Passaic Avenue and on minor approaches in East Newark.

High-density residential, commercial, and recreational uses generate pedestrian activity along the corridor. High-visibility crosswalks are an FHWA Proven Safety Countermeasure and can potentially reduce pedestrian injury crashes.

Timeframe	⌚	0-2 Years
Costs	\$	<\$100,000
Responsible Parties	Hudson County, East Newark	
Study Goals	Improve Safety	

S RECOMMENDATION 2

Install a Rectangular Rapid Flashing Beacon (RRFB) on Passaic Avenue at the Reynolds Avenue intersection in East Newark.



Figure 38. RRFB in Millburn, NJ

The planned and proposed Passaic River Greenway segments along the waterfront will generate additional bicycle and pedestrian trips along Passaic Avenue. RRFBs are an FHWA Proven Safety Countermeasure that can increase motorist yielding rates and reduce pedestrian crashes. This location is approximately halfway between two signalized crossings, Hamilton Street and the future traffic signal at President Street.

Timeframe	🕒	0-2 Years
Costs	💰	<\$100,000
Responsible Parties	Hudson County	
Study Goals	Improve Safety	

S RECOMMENDATION 3

Install a Rectangular Rapid Flashing Beacon (RRFB), high visibility crosswalk, curb extensions, and rumble strips near the northern entrance to the East Newark Waterfront Park on Passaic Avenue, south of Johnston Avenue in East Newark.



Figure 39. Curb extension on JFK Boulevard in Hudson County

Completion of the East Newark Waterfront Park will increase active transportation on Passaic Avenue. RRFBs are an FHWA Proven Safety Countermeasure that can increase motorist yielding rates and reduce pedestrian crashes.

Timeframe	🕒	0-2 Years
Costs	\$	<\$ 100,000
Responsible Parties	Hudson County	
Study Goals	Improve Safety, Increase Accessibility	

S RECOMMENDATION 4

Consider installing curb extensions at marked crossings to Kearny Riverbank Park at locations where 11-foot travel lanes can be maintained on Passaic Avenue between Belleville Turnpike and Bergen Avenue in Kearny.

These are the multiple entry points to the park that are along Passaic Avenue (CR 699), which is a residential street that has a speed limit of 25 mph. Curb extensions visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians.

Timeframe	⊕⊕	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Hudson County	
Study Goals	Improve Safety, Increase Accessibility	

S RECOMMENDATION 5

Consider implementing traffic calming measures including speed humps, curb extensions, and speed feedback signs to deter I-280 cut-through traffic on Grant Avenue, from Hamilton Street to Belgrove Drive.



Figure 40. Grant Avenue in East Newark

East Newark field visit participants noted that Grant Avenue is a cut-through for I-280 ramp access.

Timeframe	🕒🕒	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities	
Study Goals	Improve Safety	

S RECOMMENDATION 6

Encourage all municipalities within the study area to adopt a Complete Streets policy. A Complete Streets policy and design guide was prepared for the Town of Harrison in 2023, which can be used as a model for East Newark and Kearny to create and adopt their own Complete Streets policies.

Complete Streets policies encourage the implementation of safer, multifunctional streets that better accommodate all users, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.

Timeframe	🕒	0-2 Years
Costs	\$	<\$100,000
Responsible Parties	Municipalities, Hudson TMA	
Study Goals	Improve Safety, Increase Accessibility	

S RECOMMENDATION 7

Consider the Safe Routes to Schools (SRTS) program or other funding opportunities to plan and fund traffic calming measures near schools, encouraging walking and bike trips and reducing vehicle use. Funds can be used to implement traffic calming measures near schools within a quarter mile of any of the County's Vision Zero HINs (all modes, pedestrian, and bicycle).

Schools within a quarter mile of the County's HIN:

- East Newark Public School
- Franklin Elementary School
- Hamilton Intermediate School
- Harrison High School
- Kearny Christian Academy
- Kearny High School
- Kennedy Elementary School
- Lincoln Elementary School
- Marwah Academy
- Washington Elementary School
- Washington Middle School

Funding from SRTS can help with the implementation of traffic calming measures and local infrastructure upgrades, which may lead to improved active transportation options to/from schools, alleviating congestion.

Timeframe	🕒🕒	2-5 years
Costs	\$	<\$100,000
Responsible Parties	Municipalities, Hudson TMA, NJ DOT	
Study Goals	Improve Safety, Increase Accessibility	

TRANSIT (TR)

Recommendations in this category are focused on improving public transportation accessibility and connectivity and are meant to complement existing transit studies and investments, including NJ TRANSIT’s NewBus Newark Study, the PATH Forward program, and the Gateway Program. Improving transit conditions is critical for those who do not own a car or depend on the relative affordability that transit service provides.

TR RECOMMENDATION 1

Consider providing shuttle service from a central location in East Newark to the Harrison PATH station, operating on fixed routes similar to Hoboken's HOP service.

There is no direct transit service from East Newark to the PATH station. The East Newark Redevelopment Plan's Circulation section dictates that the future East Newark Town Center property owner shall establish, operate, and maintain a shuttle bus to provide residents within the complex a connection to the Harrison PATH station. Other East Newark residents and surrounding Harrison residents could benefit from a similar service, operating from a public "transit hub" or pickup location that may reduce vehicle trips on Frank E. Rodgers Boulevard.

Timeframe	⌚⌚	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	East Newark with potential support from Hudson TMA, NJ TRANSIT, or other service providers	
Study Goals	Connect Communities, Expand Transit Options	

TR RECOMMENDATION 2

Consider evaluating, planning and implementing a mobility hub in Harrison, east or west of the Jackson Street Bridge.

The Hudson County Ferry Expansion Study recommended focus on the investigation on South Harrison, South Kearny, Bayfront, and Bayonne as proposed landing sites for the ferry service concept. South Harrison has large, undeveloped areas suitable for new ferry terminals. A mobility hub with a ferry terminal, bus routes serving the area, bike infrastructure, parking, and its convenient location near Harrison PATH station would improve access to/from Harrison. The ferry service could run between Harrison and South Kearny and also provide direct ferry connections to Jersey City. This recommendation aligns with the Hudson County Ferry Expansion Study recommendation.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Harrison, NJ TRANSIT, PANYNJ	
Study Goals	Expand Transit Options, Increase Accessibility	

TR RECOMMENDATION 3

Consider working with the Port Authority of NY/NJ or private developers to identify, evaluate, and implement a designated pick-up/drop-off area at/near the PATH station, off of Frank E. Rodgers Boulevard.

Field visit participants observed frequent passenger drop-offs in active travel lanes on Frank E. Rodgers Boulevard, causing vehicles to come to an unexpected stop or quickly switch lanes to avoid a crash. Bus transit could also utilize the drop-off area and potentially add a PATH Station stop to existing routes.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Harrison, developers, PANYNJ, NJ TRANSIT	
Study Goals	Improve Safety, Expand Transit Options	

TR RECOMMENDATION 4

Consider installing Transit Signal Priority along Kearny Avenue, enhancing NJ TRANSIT bus routes 30 and 109.

TAC members noted that Kearny Avenue is a major route for NJ TRANSIT buses within the study area and would benefit from improved bus service and reliability.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Hudson County, Harrison, Kearny, NJDOT, NJ TRANSIT	
Study Goals	Expand Transit Options	

TR RECOMMENDATION 5

Consider a study to investigate the demand and feasibility for Hudson-Bergen Light Rail (HBLR) expansion across the Hackensack River with a station in South Kearny along the former rail right-of-way.

Direct, fixed-route transit leveraging the existing HBLR alignment would provide a transit connection to employment destinations in South Kearny.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Kearny, NJ TRANSIT	
Study Goals	Connect Communities, Expand Transit Options, Increase Accessibility	

TR RECOMMENDATION 6

Consider investigating the feasibility of establishing a shuttle service between central/northern Kearny and Journal Square.

Project stakeholders in Kearny expressed a desire for improved connections to Jersey City to access services. However, there are no direct connections between Kearny and Jersey City.

Timeframe	⊕⊕	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Kearny with potential support from Hudson TMA, Hudson County, NJ TRANSIT, or other service providers, PANYNJ	
Study Goals	Connect Communities, Expand Transit Options, Increase Accessibility	

TR RECOMMENDATION 7

Consider installing Transit Signal Priority along NJ TRANSIT Route 40 and build stop enhancements at all bus stops.

Limited north/south connections from Kearny to Harrison with public transit. Connections that do exist mix with local traffic and are on roads which are at or near capacity. Bus priority at signals and stop enhancements can improve transit reliability and access.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Hudson County, Harrison, Kearny, NJDOT, NJ TRANSIT	
Study Goals	Expand Transit Options	

TR RECOMMENDATION 8

Consider evaluating, planning, and implementing mobility hubs.



Figure 41. Mobility hub including transit, micromobility docking stations, and EV chargers.
Source: PTV Group

Potential locations include but are not limited to:

- East Newark Town Center
- Passaic Avenue shopping centers in Kearny
- Arlington Depot Park

Mobility hubs combine parking with other transportation services such as transit, bike parking, or car sharing at a single centralized location. These can serve as transfer points between multiple transportation modes. Electric vehicle chargers can also be installed at these locations as an added amenity, further encouraging transit use.

Timeframe	⌚⌚⌚	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	East Newark, Kearny, NJ TRANSIT, PANYNJ	
Study Goals	Expand Transit Options, Increase Accessibility	

TR RECOMMENDATION 9

Consider a shuttle service route from “hub” locations in East Newark and Kearny to the Harrison PATH station.

Limited existing transit in the area, especially with express/direct connection between Kearny and Harrison PATH Station.

Timeframe	⌚⌚	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities, Hudson County	
Study Goals	Connect Communities, Expand Transit Options, Increase Accessibility	

TR RECOMMENDATION 10

Consider possible Transportation Network Company (TNC) subsidies to improve first-mile and last-mile connectivity to the Harrison PATH Station.

TNCs, or rideshare/ride hailing companies that provide on-demand transportation services for passengers, such as Uber and Lyft, can help fill transit gaps in the northern portion of the study area.

Timeframe	⌚⌚	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities, TNCs	
Study Goals	Expand Transit Options, Increase Accessibility	

TR RECOMMENDATION 11

Consider upgrading or enhancing bus stops at locations with high ridership (generally >400 passengers/week). Amenities can include shelter, seating, signage, trash receptacles, lighting, bicycle racks, and service information. Stop amenities can be scaled as space permits. Municipalities can consider leveraging private partnerships with advertising companies for funding.

Bus stops with over 400 riders per week include:

- Frank E. Rodgers Boulevard and Cleveland Avenue
- US 1&9 Truck and Hackensack Avenue
- Kearny Avenue and Bergen Avenue
- Belgrove Drive and Woodland Avenue
- Kearny Avenue and Midland Avenue
- Belgrove Drive and Bergen Avenue

Enhancing stops with shelter, seating, lighting, service information, and other amenities would improve conditions for bus riders and encourage bus use.

Timeframe	⌚	0-2 Years
Costs	\$	<\$100,000
Responsible Parties	Municipalities, NJ TRANSIT	
Study Goals	Expand Transit Options, Increase Accessibility	

TR RECOMMENDATION 12

Evaluate developing a trip planning app that consolidates transit information from multiple service providers into a single resource. Information can also be provided on bikeshare and carshare locations, if implemented, as well as walking and biking routes, and accessible routes with curb ramps and ADA-compliant transit options.

The app should be multilingual to better serve residents of the study area. Additionally, the app should feature high-contrast elements, transcripts for audio or video components, and text-to-speech options.

QR codes providing app information can be placed at transit stops and other destinations for promotional purposes. Consider seeking sponsorships from local businesses to help fund the app while promoting local destinations.

Navigating the local and regional transit network can be confusing with multiple services. A single, user-friendly resource would allow users to better plan trips that meet their individual needs.

Timeframe	⌚⌚	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Hudson County, municipalities, Hudson TMA, PANYNJ, NJ TRANSIT	
Study Goals	Expand Transit Options, Increase Accessibility	

ACTIVE TRANSPORTATION (AT)

Active Transportation refers to more “active” modes of travel, specifically walking, biking, or scootering. While the West Hudson study area is highly walkable, with a defined and interconnected street grid with sidewalks, other active modes have fewer dedicated facilities for safe and convenient travel. Recommendations in this category, therefore, suggest trail and bike routes that can enhance connectivity within the study area, reduce dependence on vehicle travel, and increase mobility options for both residents and visitors.

See Figure 46 for a map of the active transportation network recommendations.

AT RECOMMENDATION 1

Work with East Newark to determine the ownership status of the parking lot under the William A. Stickel Memorial Bridge to inform the process of potentially redeveloping the lot and incorporating the waterfront area into the Passaic River Greenway.

This short segment is key for connecting the Harrison Waterfront Walkway and the East Newark Waterfront Park.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$	<\$100,000
Responsible Parties	East Newark, Hudson County	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 2

Per the Passaic River Greenway Plan, Hudson County can consider working with East Newark to acquire public easements along the waterfront between the William A. Stickel Memorial Bridge and Clay Street Bridge in East Newark through grants or other available programs.



Figure 42. Parking lot located under the William A. Stickel Bridge

Existing private properties, including a general contractor and concrete supplier, span the entire segment between the William A. Stickel Memorial Bridge and Clay Street Bridge, creating a gap between the completed Harrison Waterfront Walkway and the East Newark Waterfront Park.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	East Newark, Hudson County	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 3

Evaluate the feasibility of building a tunnel under the rail line connecting South 5th Street to the south side of the tracks.



Figure 43. Existing tunnel under the rail line in Harrison, NJ

There are no existing north-south connections in Harrison besides Frank E. Rodgers Boulevard. The Harrison Redevelopment Plan shows a revised street grid that includes a South 5th Street extension north of Guyon Drive, which can be reconnected to the north side through the tunnel. Field observations revealed a former tunnel entrance on the north side of the tracks near the southern terminus of South 5th Street.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Harrison, Amtrak, PANYNJ, NJ TRANSIT	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 4

Consider installing bike lanes on Hamilton Street from Passaic Avenue to Schuyler Avenue in Harrison (See Figure 46 for a map of the active transportation network recommendations).

Based on the Bicycle Demand Analysis, Hamilton Street is located within the highest bicycle demand area in the West Hudson study area. An east-west bicycle route on Hamilton Street would provide connections to Washington Middle School, Harrison High School, and adjacent recreational facilities, and is in close proximity to West Hudson Park. Hamilton Street has a bike Level of Traffic Stress score of 2, making it accessible to most riders.

Timeframe	⊕⊕	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Harrison	
Study Goals	Improve Safety, Increase Accessibility	

AT RECOMMENDATION 5

Install bike lanes on the Jackson Street Bridge by working with Essex County as part of future rehabilitation or replacement.

Bike lanes would provide a key active transportation connection between Newark and Harrison.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Hudson County, Essex County	
Study Goals	Connect Communities, Improve Safety, Increase Accessibility	

AT RECOMMENDATION 6

Work with the Town of Harrison to apply for grants to develop the proposed portion of the Passaic River Greenway, between Jackson Street and New Jersey Railroad Avenue, along the waterfront, as outlined in the County Plan (See Figure 46 for a map of the active transportation network recommendations).

Significant progress has been made on the Passaic River waterfront with the construction of the Waterfront Park in Harrison, the Waterfront Walkway between New Jersey Railroad Avenue and the Newark Drawbridge, and the East Newark Waterfront Park. These developments provide active transportation amenities but are segmented, with no continuous path along the waterfront. The Town of Harrison could explore grant programs to build the proposed greenway, completing the network in Harrison in the interim of any redevelopment work in the area.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Harrison, NJDEP	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 7

Consider installing bike lanes on Bergen Avenue, between Passaic Avenue and Harrison Avenue, providing connections to the Kearny Shopping Center and Kearny Commons to the west and Walmart Supercenter to the east (See Figure 46 for a map of the active transportation network recommendations).

This is a key east/west route, connecting directly to shopping destinations such as Target, ShopRite, Marshalls, and Walmart. Implementing supportive biking infrastructure could encourage more active transportation trips for jobs and shopping.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Kearny	
Study Goals	Connect Communities, Improve Safety, Increase Accessibility	

AT RECOMMENDATION 8

Consider installing a shared-use path on the southbound side of Passaic Avenue spanning the length of the Riverbank Park to create a continuous north-south facility for biking/walking. The shared use path would be located adjacent to Passaic Avenue to maintain a continuous path, bypassing the elevation changes within the park, south of Laurel Avenue.

Kearny Riverbank Park, directly adjacent to Passaic Avenue, could provide space for a north-south active transportation facility, which stakeholders have expressed interest in.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Hudson County, Kearny	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 9

Consider installing bike lanes on Passaic Avenue, connecting Kearny Riverbank Park in the vicinity of Bergen Avenue or Afton Street in Kearny and Central Avenue in East Newark. Investigate possible extensions north and/or south.

A bike lane on Passaic Avenue would connect the shared-use path recommendation, if implemented, at Riverbank Park, and extend the network to the East Newark Riverfront Park.

Timeframe	⊕⊕	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Hudson County, East, Newark, Kearny	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 10

Consider installing bike lanes/sharrows on Stewart Avenue to serve as an east/west connection for the bike network across Kearny (See Figure 46 for a map of the active transportation network recommendations). Add a crossing at the Passaic Avenue intersection.

Stewart Avenue runs east-west across Kearny, connecting to Kearny Riverbank Park in the west. This alignment could integrate with the shared-use path at the park, potentially extending around the western edge of the study area. It would also provide connections to potential facilities on Devon Street running north-south and access to the residences along the way.

Timeframe	🕒🕒	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Kearny	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 11

Consider striping sharrows on Forest Street, between Garafola Place (the Greenway) and King Street, connecting the Greenway and Kearny High School (See Figure 46 for a map of the active transportation network recommendations).

Forest Street, which runs parallel to Devon Street (recommended as a key north-south bike route), shares similar road characteristics and could serve as an alternate bike route. It offers potential connections to the Greenway and Gunnell Oval.

Timeframe	🕒	0-2 years
Costs	\$	<\$100,000
Responsible Parties	Kearny	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 12

Consider creating a spur trail along the western bank of the Hackensack River, along the former right-of-way in Kearny between the DB Drawbridge and South Kearny, that ties into the Greenway.

While gaps would have to be filled, this trail would directly connect the Greenway and South Kearny.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Kearny, Hudson County, NJDEP, NJSEA	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 13

Work with Kearny to procure grants from Green Acres or the Recreational Trail Program to fill gaps in the Passaic River Greenway in/along Kearny Riverbank Park from Bergen Avenue to Belleville Turnpike.

While the Greenway runs through existing park space in Kearny, space and elevation constraints would require dedicated funding for planning, evaluation, and design.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Kearny, Hudson County, NJDEP	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 14

Coordinate with the state to plan and construct an ADA-compliant connection between the Greenway and the Passaic River Greenway per the County's Passaic River Greenway Plan in Kearny.

The connection between the two greenways would help advance a regional active transportation network.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$	<\$100,000
Responsible Parties	Kearny, NJDEP	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 15

Evaluate the feasibility of constructing a shared-use path on the eastbound side of the Newark-Jersey City Turnpike, from Bergen Avenue to the eastern terminus of the study area, with potential connections to eastern Hudson County through the existing sidewalk on the Wittpenn Bridge. This route aligns with NJTPA's Regional Active Transportation Plan.

The Newark-Jersey City Turnpike is a key east-west corridor within the study area that plays an important role in connecting eastern and western Hudson County. Consult the NJTPA's Active Transportation Facility Design at Highway Interchanges Case Study for further guidance.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Hudson County, NJDOT	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 16

Evaluate coordinating with the City of Newark to investigate the feasibility of installing bike lanes along the abandoned rail right-of-way (ROW) from St. Charles Street/Ferry Street in Newark to Doremus Avenue and then crossing the Hackensack River to Central Avenue in South Kearny, or connect to Route 1&9 Truck via Doremus Avenue to cross the Hackensack River (See Figure 46 for a map of the active transportation network recommendations).

An extension of the bike network proposed as part of the BIKENewark study (2024) would provide an active transportation connection between Harrison and South Kearny via Newark.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Municipalities, NJDOT, NJ TRANSIT	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 17

Consider working with NJDOT and the City of Newark to create a connection to BIKENewark’s proposed bicycle facility on Raymond Boulevard, from its eastern terminus on Chapel Street to South Kearny via Route 1&9 Truck.

An extension of the proposed bike lanes on Raymond Boulevard would provide an active transportation connection between Harrison and South Kearny via Newark.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Municipalities, NJDOT, Hudson County	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 18

Consider striping sharrows along with traffic calming measures on Grant Avenue, continuing on Belgrove Drive for north-south connections in the study area through Kearny and East Newark (See Figure 46 for a map of the active transportation network recommendations). Sharrows can be installed on Grant Avenue, from Hamilton Street to Belgrove Drive, and Belgrove Drive from Grant Avenue to Midland Avenue in East Newark and Kearny.

North-south bicycle connection on the west side of the study area, connecting East Newark to Harrison and Kearny. Based on the Bicycle Demand Analysis, this leg of the network also begins in the portion of the study area with the highest bicycle demand. Belgrove Drive has a bicycle Level of Traffic Stress score of 2, making it accessible to most riders.

Timeframe	⊕	0-2 years
Costs	\$	<\$100,000
Responsible Parties	Municipalities, Hudson County	
Study Goals	Increase Accessibility	

AT RECOMMENDATION 19

Develop a vision and concept design for the Norfolk Southern rail right-of-way from Passaic Avenue to Schuyler Avenue that fulfills the transportation and recreational needs of study area residents. (See Figure 46 for a map of the active transportation network recommendations.)



Figure 44. Norfolk Southern ROW in Kearny

Field visit participants noted that residents currently use the Norfolk Southern ROW as a walking path and for informal parking. Because the ROW lies at the border of Kearny and East Newark, a shared vision for the space should be developed. The ROW could also provide a direct connection to Harrison High School. (East Newark high school students attend Harrison High School.)

This inactive rail line could be reimagined as a shared-use path, increasing opportunities for active transportation and providing a safe pedestrian and bicyclist connection between East Newark and Harrison. The ROW is also within a half mile of Harrison Avenue and could serve as an east-west bike route, as recommended in the NJTPA's Regional Active Transportation Plan.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Municipalities, Hudson County, Norfolk Southern	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 20

Consider installing a bike route beginning on South 5th Street and Crucible Drive in Harrison and extending north into Kearny via Devon Street to Belleville Turnpike, providing a connection to the Greenway (See Figure 46 for a map of the active transportation network recommendations). Traffic calming measures should be implemented along the route to allow bicycles and vehicles to share the roadway safely. Alternatively, consider removing street parking to accommodate on-street bike lanes.

South 5th Street/Devon Street would fulfill the NJTPA's Regional ATP recommendation of providing bike infrastructure along/adjacent to the Kearny Avenue corridor. This particular alignment using South 5th Street and Devon Street would provide key connections to Washington Middle School, West Hudson Park, Kearny High School, and the Greenway. It would also utilize the existing pedestrian bridge over the existing Norfolk Southern rail ROW.

Timeframe	⌚⌚⌚	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Municipalities, Hudson County	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 21

Consider a secondary north-south bike route along Davis Avenue, from Harrison Avenue to Midland Avenue, connecting with the Devon Street facilities and key destinations like Harrison Avenue, West Hudson Park, and Kearny High School (See Figure 46 for a map of the active transportation network recommendations).

Davis Avenue, north of Dukes Street, has a bicycle Level of Traffic Stress Score of 2, making it accessible to most riders, especially as it runs adjacent to Kearny High School and West Hudson Park with potential connections to the Greenway and Gunnell Oval.

Timeframe	⊕⊕	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities, Hudson County	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 22

Plan a contiguous greenway around the entire study area, leveraging the Passaic River Greenway and the Greenway for increased active transportation connections (See Figure 46 for a map of the active transportation network recommendations).

Creating a fully connected greenway around the study area would introduce a circuit of off-street bicycle and pedestrian paths that are generally safer than on-street routes. This greenway would encourage both recreational and commuter trips throughout the study area.

Timeframe	⊕⊕⊕	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Municipalities, Hudson County, NJDEP	
Study Goals	Connect Communities, Increase Accessibility	

AT RECOMMENDATION 23

Consider a bike-sharing program to support mobility in the study area.



Figure 45. Citi Bike station. Source: City of Hoboken

Potential dock locations include but are not limited to the following:

- PATH station
- Sports Illustrated Stadium
- West Hudson Park
- Gunnell Oval
- Kearny Plaza Shopping Center
- Kearny Riverbank Park
- Walmart
- East Newark Town Center
- East Newark Waterfront Park
- Arlington Depot Park

With the development of various parks and trails within the study area, including the Passaic River Greenway, bike-sharing can support active transportation and shorter trips in the study area and reduce auto trips and parking demand. These recommendations would align with the [Let's Ride JC](#) (the City of Jersey City Bicycle Master Plan) and [BIKENewark](#) (a bicycle master plan for the City of Newark).

Timeframe	⌚⌚	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities, Hudson County, Hudson TMA, Service Provider, City of Newark (if joint)	
Study Goals	Connect Communities, Increase Accessibility	

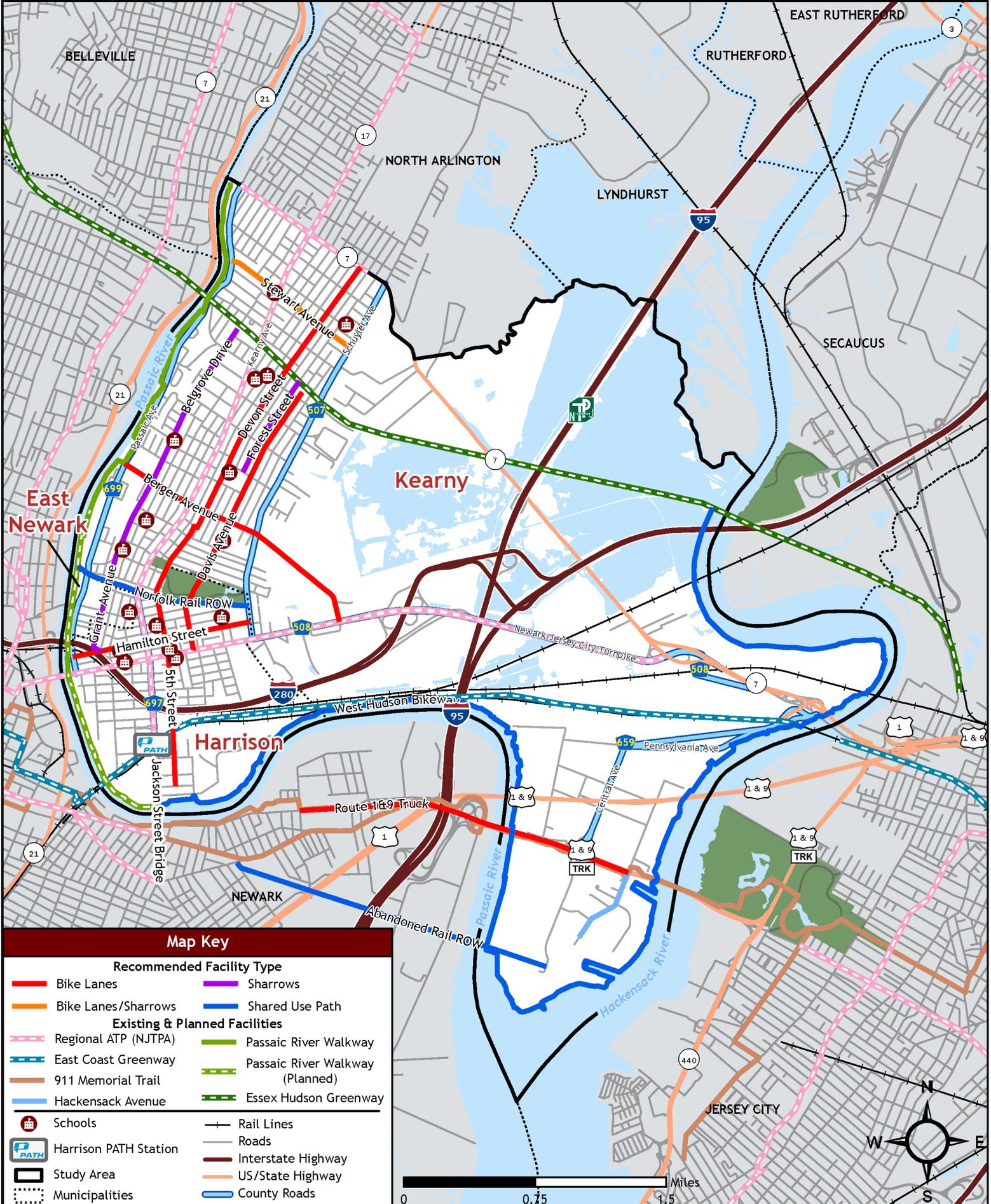


Figure 46. West Hudson Active Transportation Recommendations

SUSTAINABLE AND RESILIENT SOLUTIONS (SR)

Recommendations in this category are environmentally-focused and include strategies for managing and filtering stormwater, limiting roadway safety impacts due to localized flooding or ponding, sustaining transportation infrastructure, and supporting increased demand for electric vehicles.

SR RECOMMENDATION 1

Consider installing inlets and street trees along Cape May Street and a grass swale or bioswale outside of Sports Illustrated Stadium.



Figure 47. Bioswale on Hackensack Avenue in South Kearny

This area is outside the floodplain and is not noted to have contaminated groundwater. In addition to removing pollutants and reducing runoff from the parking lots and buildings, this could improve aesthetics near the venue.

Timeframe	🕒🕒	2-5 years
Costs	💰	<\$100,000
Responsible Parties	Harrison	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 2

Consider installing a sidewalk rain garden to capture runoff at the intersection of Supor Boulevard and Bergen Street in Harrison.



Figure 48. Rain garden in Hoboken. Source: Rutgers Center for Urban Environmental Sustainability

Ponding and erosion are occurring along Supor Boulevard. It is adjacent to a groundwater contamination area and is outside of the floodplain. This would mitigate the ponding occurring through infiltration and filter the stormwater.

Timeframe	🕒	0-2 years
Costs	💰	<\$100,000
Responsible Parties	Harrison	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 3

Consider planting trees and implementing a small-scale bioswale on the outskirts of the parking lot adjacent to the sidewalk at the intersection of Frank E. Rodgers Boulevard and Scott Mobus Place in Harrison.

This area is outside the floodplain and has not been noted to have contaminated groundwater. A small-scale bioswale can remove pollutants, reduce runoff from the parking lot and building, and improve the aesthetics of the venue.

Timeframe	🕒	0-2 years
Costs	💰	<\$100,000
Responsible Parties	Harrison	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 4

Consider planting trees and implementing a small-scale bioswale at the Harrison School District parking lot.

This area is outside the floodplain and is not noted to have contaminated groundwater. Trees or a small-scale bioswale can be implemented on the outskirts of the parking lot to remove pollutants, reduce runoff from the parking lot, buildings, and improve aesthetics.

Timeframe	🕒	0-2 years
Costs	💰	<\$100,000
Responsible Parties	Harrison	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 5

Consider installing a bioswale acting as a barrier between Central Avenue and the railroad tracks (between John Miller Way and Distribution Avenue) in Kearny.

This area is in the 100-year floodplain and is not noted to have contaminated groundwater. This will remove pollutants and slow down runoff from nearby buildings, roads, or other impervious surfaces.

Timeframe	🕒	0-2 years
Costs	\$	<\$100,000
Responsible Parties	Kearny	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 6

Install pervious pavement at the intersection of Hackensack Avenue and Campus Drive in Kearny.

This area is in the 100-year floodplain and is not noted to have contaminated groundwater. This will reduce surface ponding and filter stormwater runoff.

Timeframe	🕒	0-2 years
Costs	\$	<\$100,000
Responsible Parties	Kearny	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 7

Consider installing a rain garden to capture runoff from the Walmart Shopping Center near the Bergen Avenue and Newark-Jersey City Turnpike intersection in Kearny.

This area is in the 100-year floodplain and is not noted to have contaminated groundwater. There is an existing retention pond and ditch lined with rip rap. There are signs of heavy erosion on the curb and sidewalk. This would reduce the volume and filter the stormwater runoff.

Timeframe	🕒	0-2 years
Costs	\$	<\$100,000
Responsible Parties	Kearny, Property Owners	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 8

Consider regrading and repaving Sandford Avenue, near the intersection with Ann Street, with pervious pavement where ponding occurs.

This area is outside the floodplain and has not been noted to have contaminated groundwater. This would reduce the ponding and filter the stormwater. The right-of-way would have to be checked in this area since it is close to a residence.

Timeframe	⊕⊕	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Kearny	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 9

Consider installing a bioswale at the Harvey Field Complex parking lot located on Schuyler Avenue between Garfield Avenue and Bergen Avenue in Kearny.

This area is outside the floodplain and is not noted to have contaminated groundwater. Several of the parking bumpers are broken, and the parking lot is prone to ponding since it is a low point. A bioswale or rain garden can be implemented within the parking lot to remove pollutants, reduce runoff from the parking lot and building, and improve aesthetics.

Timeframe	⊕	0-2 years
Costs	\$	<\$100,000
Responsible Parties	Kearny	
Study Goals	Address Flooding Issues	

SR RECOMMENDATION 10

Upgrade inlets throughout the study area to include bicycle-safe grates and appropriate "Dump no Waste" signage as part of the County's road maintenance/repaving program.

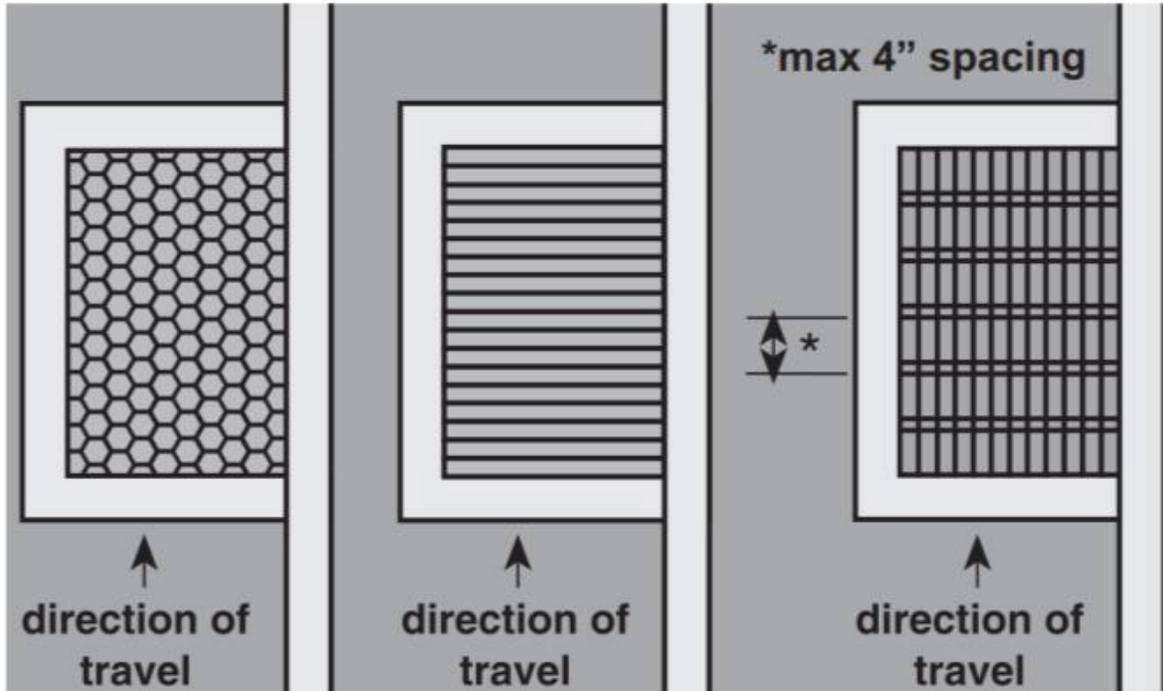


Figure 49. Bicycle safe grate examples. Note, drain grates should be level with the surrounding pavement and should have a design that prevents bicycle tires from being trapped by slots parallel to the roadway. Source: Oregon Bicycle and Pedestrian Design Guide, Oregon DOT

Existing inlets do not follow best practice related to bicycle safety and "Dump no Waste" signage.

Timeframe	⊕⊕	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Hudson County, Municipalities	
Study Goals	Improve Safety, Address Flooding Issues	

SR RECOMMENDATION 11

Install public charging ports to meet projected EV demand, leveraging grants and private partnerships for funding. Charger locations vary but should be informed by the suitability analysis priority areas concentrated on the western portion of the study area.

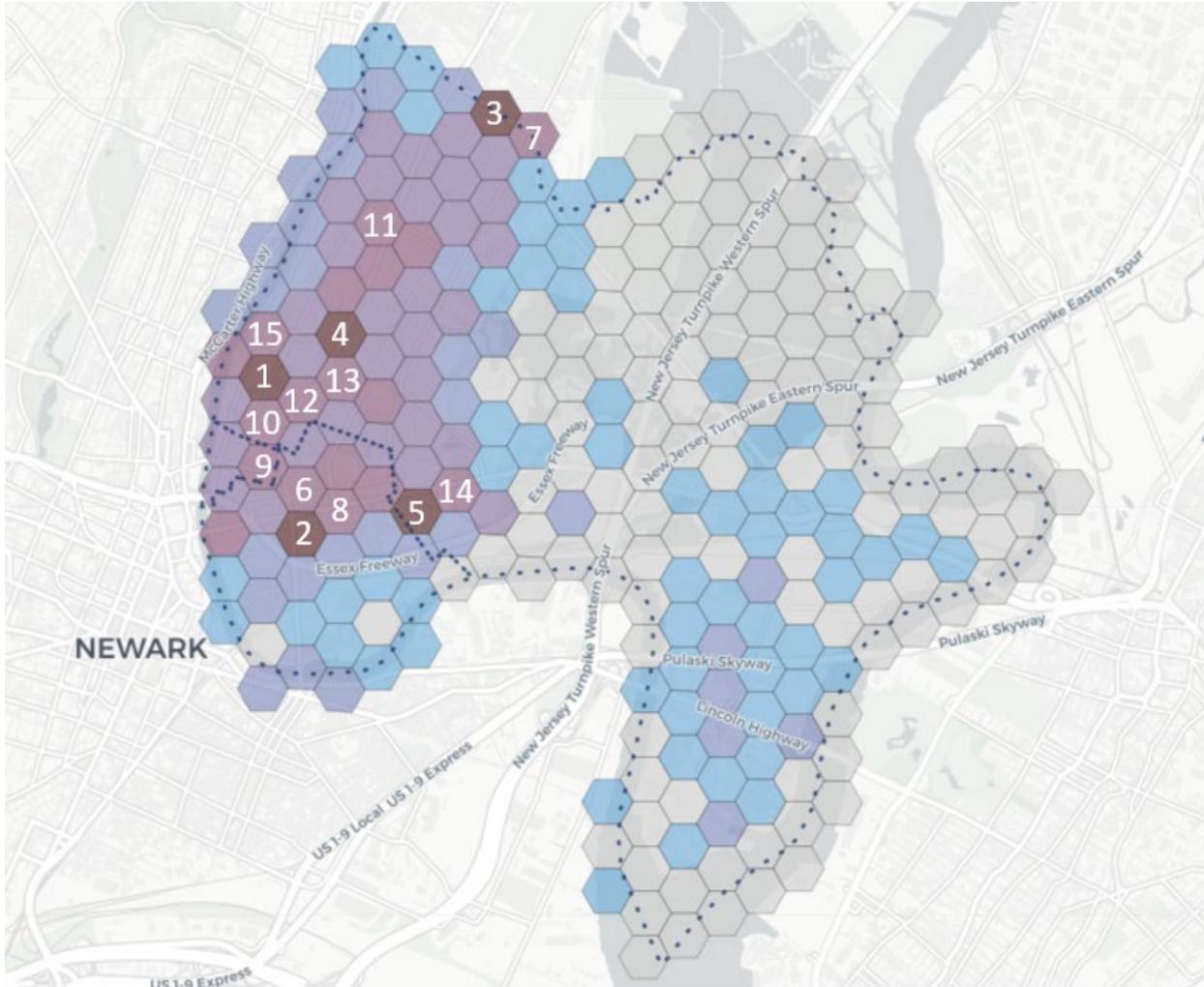


Figure 50. Locations of highest scoring potential public charging sites

Per the EV Analysis, with a goal of maintaining a ten-to-one ratio of EVs to ports, West Hudson should have approximately 500 publicly accessible charging ports in 2029 to support EV projections.

Timeframe	⌚⌚⌚	Over 5 years
Costs	\$\$\$	>\$1 Million
Responsible Parties	Municipalities, Hudson County, Property Owners	
Study Goals	Increase Accessibility	

SR RECOMMENDATION 12

Implement a car-sharing program similar to Hoboken's Corner Cars among West Hudson residents.



Figure 51. Hoboken Corner Cars locations. Source: City of Hoboken

Roadways in the district are at or near capacity. Encouraging car sharing can limit personal car ownership, trips, and parking demand.

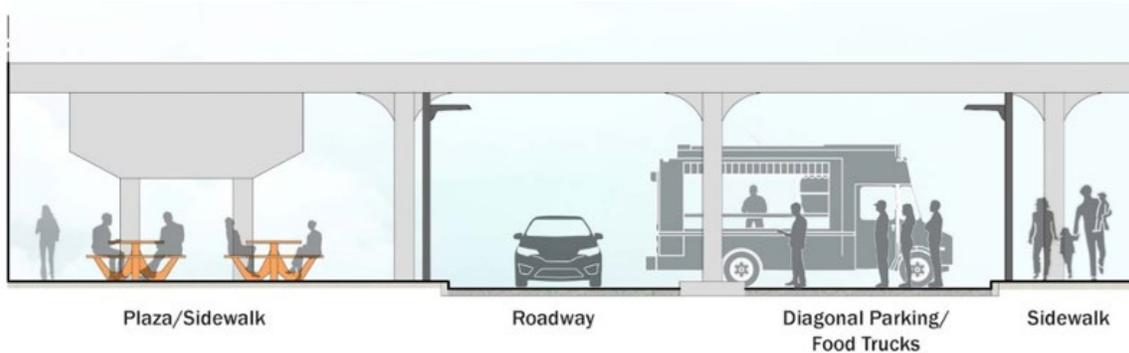
Timeframe	🕒🕒	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities, Service Provider TBD	
Study Goals	Increase Accessibility	

PUBLIC REALM ENHANCEMENTS (PR)

Recommendations that support transportation and mobility while providing a distinct enhancement to the character of the study area, such as public beautification, wayfinding, and Parking Benefit Districts, qualify as Public Realm Enhancements.

PR RECOMMENDATION 1

Explore recommendations that activate and beautify spaces underneath transportation infrastructure, such as the I-280 and rail overpasses. Recommendations can include guidelines for lighting, sidewalks, and civic art installations.



Section B: 12th Street

Figure 52. Proposed Design for 12th Street in Jersey City. Source: City of Jersey City

Underpasses are located on the following streets within the study area:

- Passaic Avenue
- Hamilton Street
- Cleveland Avenue
- Harrison Avenue
- Warren Street
- Sussex Street
- Bergen Street
- Frank E. Rodgers Boulevard
- South 5th Street

Elevated structures for I-280 and rail lines pass through the study area, creating underpasses with narrow sidewalks and low lighting.

Timeframe	🕒🕒	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities, NJDOT, NJ TRANSIT, Amtrak	
Study Goals	Connect Communities, Improve Safety	

PR RECOMMENDATION 2

Develop a wayfinding program for drivers and pedestrians, depending on the context, to navigate visitors to major destinations within the study area. The program could be tied to the Passaic River Greenway Plan's wayfinding recommendations, creating one uniform theme for signage that directs visitors to greenways, parks, the stadium, and other destinations within the study area.

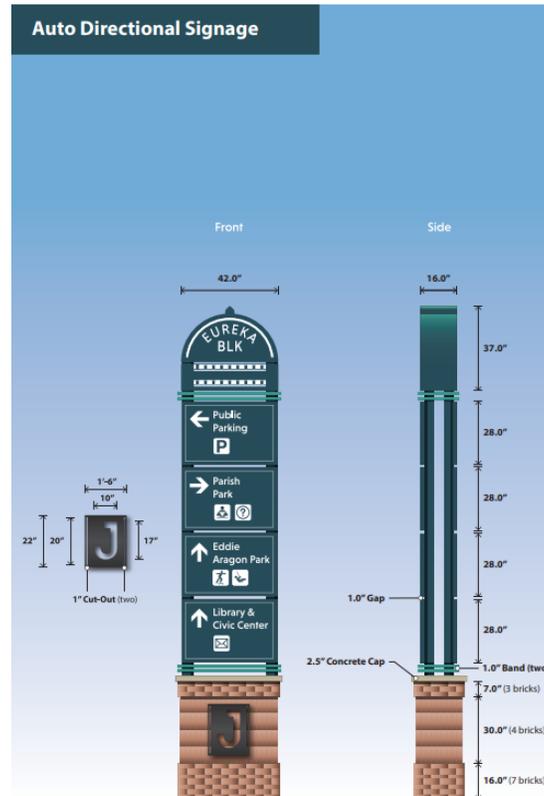


Figure 53. Example of auto directional signage.
Source: Downtown Johnstown Wayfinding Plan

Various redevelopment projects and active transportation facilities planned for the study area will benefit from wayfinding to foster navigation and assist with orienting residents and visitors to changing conditions.

Timeframe		0-2 years
Costs	\$	<\$100,000
Responsible Parties	Hudson County, Municipalities	
Study Goals	Connect Communities, Increase Accessibility	

PR RECOMMENDATION 3

Consider creating a Parking Benefit District (PBD) within the study area municipalities. A parking study must first be conducted to determine which areas have a high parking occupancy.

A Parking Benefit District is a designated geographical area with boundaries established by local ordinance. Within this area, all or a portion of paid parking revenue can be used to fund parking and mobility upgrades, including parking lot maintenance, lighting, sidewalk connections, transit amenities, active transportation facilities, or other improvements.

Timeframe	⌚⌚	2-5 years
Costs	\$\$	\$100,000 – \$1 Million
Responsible Parties	Municipalities	
Study Goals	Increase Accessibility	

RECOMMENDATIONS MATRIX

The following table includes all study recommendations organized by color-coded category (fourth column). The table provides details on each recommendation's location, estimated implementation timeframe and cost, and parties responsible for implementation. As summarized at the beginning of this chapter, timeframe and cost are categorized as follows:

- **Timeframe:** short-term (0-2 years), mid-term (2-5 years), or long-term (5 years or over)
- **Order of magnitude costs:** low (under \$100,000), medium (between \$100,000 and \$1 million), and high (\$1 million or over)

Table 11. West Hudson Recommendations Matrix

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Consider implementing one-way street conversions to reduce left turns onto Passaic Avenue. Potential candidates include Mulock Place, Searing Avenue, and Reynolds Avenue. To complement the one-way conversions, implement traffic calming measures along local roads, including speed bumps, to prevent speeding.	Reynolds Avenue, Searing Avenue, and/or Mulock Place	East Newark	Traffic/Operations	Short	Low	East Newark, Harrison, Hudson County
Consider emergency vehicle preemption (EVP) at traffic signals.	Bridge Street and Harrison Avenue	Harrison	Traffic/Operations	Mid	Mid	Hudson County, Harrison, NJDOT
Hudson County will be coordinating with NJDOT, Bergen County, the Town of Kearny, and the Borough of North Arlington on an intersection project at Passaic Avenue and Belleville Turnpike. The County can leverage this opportunity to explore signal operations.	Passaic Avenue and Belleville Turnpike (NJ 7)	Kearny	Traffic/Operations	Short	Low	NJDOT, Hudson County, Coordinate with Bergen County, Town of Kearny, Borough of North Arlington
Conduct corridor studies for the most congested roadways in the study area. These corridors provide access to key destinations within the study area. Studies should consider signal timing, adaptive signaling, lane configuration at intersections, removal of parking spaces at intersections to improve safety and traffic flow, and redesign of intersecting roadways (including potential one-way conversions) to reduce the number of conflict/access points and better funnel traffic to intersections capable of handling traffic.	Kearny Avenue, Schuyler Avenue, and Passaic Avenue	All	Traffic/Operations	Long	High	Hudson County, Municipalities
Install high-visibility crosswalks. High-visibility crosswalks are included in the Hudson County Vision Zero Safety Action Plan Countermeasures Toolkit. This recommendation is located on a priority high-injury network.	Across Passaic Avenue and on minor approaches	East Newark	Safety	Short	Low	Hudson County, East Newark
Install a Rectangular Rapid Flashing Beacon (RRFB) on Passaic Avenue at the Reynolds Avenue intersection. RRFBs are mentioned in the Hudson County Vision Zero Safety Action Plan Countermeasures Toolkit. This recommendation is located on a priority high-injury network.	Passaic Avenue at Reynolds Avenue	East Newark	Safety	Short	Low	Hudson County

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Install a Rectangular Rapid Flashing Beacon (RRFB), high visibility crosswalk, curb extensions, and rumble strips near northern entrance to the East Newark Waterfront Park. RRFBs are mentioned in the Hudson County Vision Zero Safety Action Plan Countermeasures Toolkit. This recommendation is located on a priority high-injury network.	Passaic Avenue, south of Johnston Avenue	East Newark	Safety	Short	Low	Hudson County
Consider installing curb extensions at marked crossings to Kearny Riverbank Park at locations where 11-foot travel lanes can be maintained. Curb extensions are included in the Hudson County Vision Zero Safety Action Plan Countermeasures Toolkit.	Passaic Avenue between Belleville Turnpike and Bergen Avenue	Kearny	Safety	Mid	Mid	Hudson County
Consider implementing traffic calming measures including speed humps, curb extensions, and speed feedback signs to deter I-280 cut-through traffic on Grant Avenue, from Hamilton Street to Belgrove Drive. Traffic calming elements like speed humps and curb extensions are included in the Hudson County Vision Zero Safety Action Plan Countermeasures Toolkit.	Grant Avenue, from Belgrove Drive to Hamilton Street	All	Safety	Mid	Mid	Municipalities
Encourage all municipalities within the study area to adopt a Complete Streets policy. A Complete Streets policy and design guide was prepared for the Town of Harrison in 2023, which can be used as a model for East Newark and Kearny to create and adopt their own Complete Streets policies.	East Newark, Harrison, Kearny	All	Safety	Short	Low	Municipalities, Hudson TMA, NJTPA
Consider the Safe Routes to Schools (SRTS) program or other funding opportunities to plan and fund traffic calming measures near schools, encouraging walking and bike trips and reducing vehicle use. Funds can be used to implement traffic calming measures near schools within a quarter mile of any of the County's Vision Zero HINs (all modes, pedestrian, and bicycles).	East Newark Public School, Franklin Elementary School, Hamilton Intermediate School, Harrison High School, Kearny Christian Academy, Kearny High School, Kennedy Elementary School, Lincoln Elementary School, Marwah Academy, Washington Elementary School, Washington Middle School	All	Safety	Mid	Low	Municipalities, Hudson TMA

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Consider providing shuttle service from a central location in East Newark to the Harrison PATH station, operating on fixed routes similar to Hoboken's HOP service.	Route dependent	East Newark	Transit	Mid	Mid	East Newark with potential support from Hudson TMA, NJ TRANSIT, or other service provider
Consider evaluating, planning and implementing a mobility hub in Harrison, east or West of the Jackson Street Bridge.	East or West of Jackson Street Bridge in Harrison	Harrison	Transit	Long	High	Harrison, Hudson County, NJ TRANSIT, PANYNJ
Consider working with the Port Authority of NY/NJ or private developers to identify, evaluate, and implement a designated pick-up/drop-off area at/near the PATH station, off of Frank E. Rodgers Boulevard.	North or south of the Harrison PATH Station	Harrison	Transit	Long	High	Harrison, developers, PANYNJ, NJ TRANSIT
Consider installing Transit Signal Priority along Kearny Avenue, enhancing NJ TRANSIT bus routes 30 and 109.	Kearny Avenue, from Johnston Avenue to Belleville Turnpike	Kearny	Transit	Long	Mid	Hudson County, Harrison, Kearny, NJDOT, NJ TRANSIT
Consider a study to investigate the demand and feasibility for Hudson-Bergen Light Rail (HBLR) expansion across Hackensack River with a station in South Kearny.	Former rail right-of-way in South Kearny	Kearny	Transit	Long	High	Kearny, NJ TRANSIT
Consider investigating the feasibility of establishing a shuttle service between central/northern Kearny and Journal Square.	Route dependent	Kearny	Transit	Mid	Mid	Kearny with potential support from Hudson TMA, NJ TRANSIT, or other service provider, PANYNJ
Consider installing Transit Signal Priority along NJ TRANSIT Route 40 and build stop enhancements at all bus stops.	Along NJ TRANSIT Route 40	Harrison, Kearny	Transit	Long	Mid	Hudson County, Harrison, Kearny, NJDOT, NJ TRANSIT
Consider planning and implementing mobility hubs.	TBD but possibly East Newark Town Center, and/or Passaic Avenue shopping centers in Kearny, and/or Arlington Depot Park.	All	Transit	Long	High	Municipalities, NJ TRANSIT, PANYNJ
Consider a shuttle service route from "hub" locations in East Newark and Kearny to the Harrison PATH station.	Route dependent	Harrison, Kearny	Transit	Mid	Mid	Municipalities, Hudson County

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Consider possible Transportation Network Company (TNC) subsidies to improve first-mile and last-mile connectivity to Harrison PATH Station.	Study Area	All	Transit	Mid	Mid	Municipalities, TNCs
Consider upgrading or enhancing bus stops at locations with high ridership (generally >400 passengers/week). Amenities can include shelter, seating, signage, trash receptacles, lighting, bicycle racks, and service information. Stop amenities can be scaled as space permits. Municipalities can consider leveraging private partnerships with advertising companies for funding.	Frank E. Rodgers Boulevard and Cleveland Avenue; US 1&9 Truck and Hackensack Avenue; Kearny Avenue and Bergen Avenue; Belgrove Drive and Woodland Avenue; Kearny Avenue and Midland Avenue; Belgrove Drive and Bergen Avenue	All	Transit	Short	Low	Municipalities, NJ TRANSIT
Evaluate developing a trip planning app that consolidates transit information from multiple service providers into a single resource. QR codes can be placed at all transit stops with app details. The app should be multilingual to better serve the study area. Consider seeking sponsorships from local businesses to help fund the app while promoting local destinations. Consider also including bikeshare and carshare locations, if implemented, as well as walking and biking routes.	Study Area	All	Transit	Mid	Mid	Hudson County, municipalities, Hudson TMA, PANYNJ, NJ TRANSIT
Per the Passaic River Greenway Plan, work with East Newark to acquire public easements along the waterfront.	Between the William A. Stickel Memorial Bridge and Clay Street Bridge, along the waterfront	East Newark	Active Transportation	Long	High	East Newark, Hudson County
Work with East Newark to determine the ownership status of the parking lot under the William A. Stickel Memorial Bridge to inform the process of potentially redeveloping the lot and incorporating the waterfront area into the Passaic River Greenway.	Public parking lot underneath William A. Stickel Memorial Bridge	East Newark	Active Transportation	Mid	Low	East Newark, Hudson County
Evaluate the feasibility of building a tunnel under the rail line connecting South 5th Street to the south side of the tracks.	Southern terminus of S. 5th Street	Harrison	Active Transportation	Long	High	Harrison, Amtrak, PANYNJ, NJ TRANSIT
Consider installing bike lanes on Hamilton Street.	Hamilton Street, from Passaic Avenue to Schuyler Avenue	Harrison	Active Transportation	Mid	Mid	Harrison
Install bike lanes on the Jackson Street Bridge by working with Essex County as part of future rehabilitation or replacement.	Jackson Street Bridge	Harrison	Active Transportation	Long	High	Hudson County, Essex County

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Work with the Town of Harrison to apply for grants to develop the proposed portion of the Passaic River Greenway as outlined in the County Plan.	Between Jackson Street and New Jersey Railroad Avenue, along the waterfront	Harrison	Active Transportation	Long	Mid	Harrison, NJDEP
Consider installing bike lanes on Bergen Avenue, providing connections to the Kearny Shopping Center and Kearny Commons to the west and Walmart Supercenter to the east.	Bergen Avenue between Passaic Avenue and Harrison Avenue	Kearny	Active Transportation	Long	High	Kearny
Consider installing a shared-use path on the southbound side of Passaic Avenue spanning the length of the Riverbank Park to create a continuous north-south facility for biking/walking. The shared use path would be located adjacent to Passaic Avenue to maintain a continuous path, bypassing the elevation changes within the park, south of Laurel Avenue.	Passaic Avenue	Kearny	Active Transportation	Long	High	Hudson County, Kearny
Consider installing bike lanes on Passaic Avenue, connecting Kearny Riverbank Park in the vicinity of Bergen Avenue or Afton Street in Kearny and Central Avenue in East Newark. Investigate possible extensions north and/or south.	Passaic Avenue	Kearny, East Newark	Active Transportation	Mid	Mid	Hudson County, East Newark, Kearny
Consider installing bike lanes/sharrows on Stewart Avenue to serve as an east/west connection for the bike network across Kearny. Add a crossing at the Passaic Avenue intersection.	Stewart Avenue	Kearny	Active Transportation	Mid	Mid	Kearny
Consider striping sharrows on Forest Street connecting the Greenway and Kearny High School.	Forest Street between Garafola Place (The Greenway) and King Street	Kearny	Active Transportation	Short	Low	Kearny
Consider creating a spur trail along the western bank of the Hackensack River that ties into the Greenway.	Former rail right-of-way in Kearny along the Hackensack River between the DB Drawbridge and South Kearny	Kearny	Active Transportation	Long	High	Kearny, Hudson County, NJDEP, NJSEA
Work with Kearny to procure grants from Green Acres or the Recreational Trail Program to fill gaps in the Passaic River Greenway in/along Kearny Riverbank Park.	From Bergen Avenue to Belleville Turnpike	Kearny	Active Transportation	Long	Mid	Kearny, Hudson County, NJDEP

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Coordinate with the state to plan and construct an ADA compliant connection between the Greenway and the Passaic River Greenway per the County's Passaic River Greenway Plan.	West Arlington Railroad Bridge and Kearny Riverfront	Kearny	Active Transportation	Long	Low	Kearny, NJDEP
Evaluate the feasibility of constructing a shared-use path on the eastbound side of the Newark-Jersey City Turnpike, connecting to the existing sidewalk on the Wittpenn Bridge. This route aligns with NJTPA's Active Transportation Plan.	Newark-Jersey City Turnpike (CR 508) from Bergen Avenue to the eastern terminus of the study area with potential connections to eastern Hudson County	Kearny	Active Transportation	Long	High	Hudson County, NJDOT
Evaluate coordinating with the City of Newark to investigate the feasibility of installing bike lanes along the abandoned rail ROW from St. Charles Street/Ferry Street in Newark to Doremus Avenue and then crossing the Hackensack River to Central Avenue in South Kearny, OR connect to Route 1&9 Truck via Doremus Avenue to cross the Hackensack River.	Abandoned rail ROW between St. Charles Street and Doremus Avenue in Newark and Central Ave in Kearny OR alternatively Route 1&9 Truck Bridge across the Hackensack River	Newark, Kearny	Active Transportation	Long	High	Municipalities, NJDOT NJ TRANSIT
Consider working with NJDOT and the City of Newark to create a connection to BIKE Newark's proposed bicycle facility on Raymond Boulevard, from its eastern terminus on Chapel Street to South Kearny via Route 1&9 Truck.	South Kearny	Newark, Kearny	Active Transportation	Long	High	Municipalities, Hudson County, NJDOT
Consider striping sharrows along with traffic calming measures on Grant Avenue, continuing on Belgrove Drive for north-south connections in the study area through Kearny and East Newark.	Grant Avenue, from Hamilton Street to Belgrove Drive and Belgrove Drive from Grant Avenue to Midland Avenue	East Newark, Kearny	Active Transportation	Short	Low	Municipalities, Hudson County
Consider installing a bike route beginning on S. 5th Street and Crucible Drive in Harrison and extending north into Kearny via Devon Street to Belleville Turnpike, providing a connection to the Greenway. Traffic calming measures should be implemented along the route to allow bicycles and vehicles to share the roadway safely. Alternatively, consider removing street parking to accommodate on-street bike lanes.	5th Street, from Crucible Drive to Johnston Avenue, and Devon Street from Johnston Avenue to the Belleville Turnpike	Harrison, Kearny	Active Transportation	Long	High	Municipalities, Hudson County
Consider a secondary north-south bike route along Davis Avenue, connecting with the Devon Street facilities and key destinations like Harrison Avenue, West Hudson Park, and Kearny High School.	Davis Avenue from Harrison Avenue to Midland Avenue	Harrison, Kearny	Active Transportation	Mid	Mid	Municipalities, Hudson County

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Plan a contiguous Greenway around the entire study area, leveraging the Passaic River Greenway and the Greenway for increased active transportation connections.	Perimeter of the study area	All	Active Transportation	Long	High	Municipalities, Hudson County, NJDEP
Develop vision and concept design for the Norfolk Southern rail right-of-way that fulfills the transportation and recreational needs of study area residents.	East-west Norfolk Southern ROW, from Passaic Avenue to Schuyler Avenue	All	Active Transportation	Long	High	Municipalities, Hudson County, Norfolk Southern
Consider a bike-sharing program to support mobility in the study area.	Potential dock locations: PATH station, Sports Illustrated Stadium, West Hudson Park, Gunnell Oval, Kearny Plaza Shopping Center, Kearny Riverbank Park, Walmart, East Newark Town Center, East Newark Waterfront Park, Arlington Depot Park	All	Active Transportation	Mid	Mid	Municipalities, Hudson County, Hudson TMA, Service Provider, City of Newark (if joint)
Consider installing inlets along Cape May Street, and a grass swale or bioswale outside of Sports Illustrated Stadium.	Cape May Street	Harrison	Sustainable & Resilient Solutions	Mid	Mid	Harrison
Consider installing a sidewalk rain garden to capture runoff.	Intersection of Supor Boulevard and Bergen Street	Harrison	Sustainable & Resilient Solutions	Mid	Low	Harrison
Consider implementing a small-scale bioswale on the outskirt of the parking lot adjacent to the sidewalk.	Parking at the intersection of Frank E. Rodgers Boulevard and Scott-Mobus Place	Harrison	Sustainable & Resilient Solutions	Short	Low	Harrison
Consider planting trees and implementing a small-scale bioswale at the Harrison School District parking lot.	Harrison Avenue and Patterson Street	Harrison	Sustainable & Resilient Solutions	Short	Low	Harrison
Consider installing a bioswale acting as a barrier between Central Avenue and the railroad tracks.	Central Avenue between John Miller Way and Distribution Avenue	Kearny	Sustainable & Resilient Solutions	Short	Low	Kearny
Consider installing pervious pavement.	At the intersection of Hackensack Avenue and Campus Drive	Kearny	Sustainable & Resilient Solutions	Short	Low	Kearny
Consider installing a rain garden to capture runoff from the Walmart Shopping Center.	Adjacent to the shopping center, at the intersection of Newark-Jersey City Turnpike and Bergen Avenue	Kearny	Sustainable & Resilient Solutions	Short	Low	Kearny, property owner

Recommendation	Location	Municipality	Category of Recommendation	Timeframe	Cost	Responsible Parties (not exhaustive)
Consider regrading and repaving Sandford Avenue with pervious pavement where ponding occurs.	Sandford Avenue near the intersection with Ann Street	Kearny	Sustainable & Resilient Solutions	Mid	Mid	Kearny
Consider installing a bioswale at the Harvey Field Complex lot.	Schuyler Avenue between Garfield Avenue and Bergen Avenue	Kearny	Sustainable & Resilient Solutions	Short	Low	Kearny
Consider upgrading inlets to include bicycle-safe grates and appropriate "Dump no Waste" signage as part of County's road maintenance/repaving program.	As needed	All	Sustainable & Resilient Solutions	Mid	Mid	Hudson County, municipalities
Consider installing public charging ports to meet projected EV demand, leveraging grants and private partnerships for funding.	Study area, charger locations vary but dependent on suitability analysis priority areas concentrated on the western portion of the study area	All	Sustainable & Resilient Solutions	Long	High	Municipalities, Hudson County, Property Owners
Consider implementing a car sharing program among West Hudson residents similar to Hoboken's Corner Cars.	Study area, vehicle locations vary	All	Sustainable & Resilient Solutions	Mid	Mid	Municipalities, service provider TBD
Explore recommendations that activate and beautify spaces underneath transportation infrastructure such as the I-280 and rail overpasses. Recommendations can include guidelines for lighting, sidewalks, and civic art installations.	Passaic Avenue, Hamilton Street, Cleveland Avenue, Harrison Avenue, Warren Street, Sussex Street, Bergen Street, Frank E Rodgers Boulevard, South 5th Street	East Newark, Harrison	Public Realm Enhancements	Mid	Mid	Municipalities, NJDOT, NJ TRANSIT, Amtrak
Develop a wayfinding program for drivers and pedestrians, depending on the context, to guide visitors to major destinations within the study area. The program could be tied to the Passaic River Greenway Plan's wayfinding recommendations, creating one uniform theme for signage that directs visitors to greenways, parks, and other destinations within the study area.	As needed	All	Public Realm Enhancements	Short	Low	Hudson County, municipalities
Consider creating a Parking Benefit District (PBD) within the study area municipalities. A parking study must first be conducted to determine which areas have a high parking occupancy.	Study area	All	Public Realm Enhancements	Mid	Mid	Municipalities

7. CONCLUSION

The West Hudson study area, which includes East Newark, Harrison, and Kearny, is a dynamic place characterized by redevelopment, changing land uses, a diverse population, and several key transportation assets including a major regional rail station (the PATH station at Harrison), interstate highways (I-280 and I-95), a distinct and walkable street grid, and several bridges providing critical connections to adjacent communities. These assets support and facilitate growth, particularly through increased real estate investment on formerly industrialized properties. However, this investment, in turn, puts pressure on the transportation system.

The West Hudson Circulation and Connectivity Study was conceived to create a shared vision among constituent communities and Hudson County to evaluate and address challenges unique to the study area, including growth, change, connectivity to East Hudson, and environmental constraints that can limit mobility. Comprehensive data analysis and community engagement efforts guided the development of dozens of recommendations that address the following project goals:

- Connect Communities including improved access to East Hudson
- Improve Safety
- Expand Transit Options
- Address Flooding Issues
- Increase Accessibility

Study recommendations related to Traffic Operations, Safety, Transit, Active Transportation, Sustainable and Resilient Solutions, and Public Realm Enhancements were identified to develop an actionable set of strategies that can be considered for implementation by the municipalities, Hudson County, local or regional agencies, or some combination of responsible parties. Collaboration is essential in a region with numerous agencies at the local and regional levels responsible for transit and road networks. These networks have the potential for greater integration and connectivity with neighboring partners, whether they are eastern Hudson County or other adjacent counties and municipalities.

By improving local and regional circulation and connectivity, the West Hudson study area can achieve the goals laid out in this study, expand transportation choice for those who rely on transit, walking, or biking, support a more sustainable and resilient future, improve circulation and connectivity with East Hudson, and support growth well into the future.

