

Develop Proposed Operating Framework

Information Sources:

- Stakeholder Outreach
- TOD Analysis (NJ TRANSIT Transit Friendly Data Application)

Service Needs Parameters

- Days and Time Periods
- Route Alignment and Service Patterns
- Minimum Service Frequency
- Key Transfer Stops and Hub Locations
- Identify Potential Support and Promotion Resources

Results Summary

Shuttle Bus Service Exceeds Typical Market Parameters Needed for Successful Operation

- 93% of city land areas well suited to transit service
- Many city residents and workers do not own personal vehicles
- Service area average household income levels well below those of county

72% of All Stakeholder-Identified Needs Locations are within 2 Block Walking Distance of Route

- 50 Percent of needs locations directly on the route
- Access to government / social services, shopping and restaurants expected to be major trip purposes.
- Heaviest ridership expected between 9:00 AM 4:00 PM

Proposed Shuttle Service Framework

- Seven Days per Week and Most Holidays 6:00 AM 11:00 PM
- 15 20 Minute Headways
- Route patterns adjust after noon to better serve certain destinations more directly.
- Later evening service proposed hold/timed transit connections and possible flexing of route on request to improve rider security.

Shuttle Bus Planning Evaluation

Market Demand Identification:

- Community Stakeholder-Identified Location Needs and Opportunities Map
- Travel Market Summary (Community Stakeholders and NJ TRANSIT Transit-Friendly Data Application)

Route and Service Needs Analysis:

- Expected Shuttle Uses
- Travel Days and Time Periods
- Route Proximity Analysis and Refinement

Recommended Route and Service Framework:

- Service Objectives and Route Service Patterns by Operating Time Period
- Recommended Headway and Service Hours
- Key Transfer Locations

Support Opportunities:

- Fares or Free
- Stakeholder / Community Resources
- Branding Concept

Next Steps for City Action:

- Identify Resources Needed vs. Available
- Develop Service Schedule
- Secure Operator
- Implement and Monitor Service

Community Stakeholder Research

Stakeholders Interviewed

- City Agencies
 - Youth Council
 - Senior Affairs
 - Recreation and Human Services
 - Health
 - Community Development
 - Public Works and Engineering
- Community Support Organizations
 - Passaic Alliance
 - Mi Casa es Puebla
 - United Passaic Organization

Community Stakeholder Comments Summary

Expected Shuttle Bus Benefits

- Intra-City Mobility Service Focus provides direct one-seat ride.
- Strengthens connections with NJ TRANSIT and jitney services.
- Provides access to critical social support and assistance service locations for challenged populations.
- Reduces isolation and expands community participation opportunities for seniors.
- Increases access to city and outside employment, education and training opportunities.
- Increases tourism opportunities to support local economy and businesses.
- Can reduce city congestion by making local travel easier than by auto.
- Reduces security concerns in accessing certain city areas during evening travel time periods.

Community Stakeholder Comments Summary (Continued)

Identified Service Need Locations

- City Hall
- Shop Rite
- Home Depot
- St Mary's Hospital
- United Passaic Organization
- Mercado Ocho on 8th Street
- Gromex on Market / Passaic Streets
- 3rd Ward Park, Pulaski Park, Dundee Island
- Passaic County College in Passaic and Paterson
- Market Street (Bistro District)
- Passaic Alliance 286 Passaic Street
- Dignity House
- Broadway (Restaurant District)
- Food pantries United Passaic: Mount Pilgrim Church on Autumn Street, Union Baptist on Myrtle Ave
- VFW

ALSO: New Brunswick (The Mexican Consulate comes to Passaic every two months and attracts many people that are transit dependent. All other times they must travel to New Brunswick. Can the shuttle help improve access for New Brunswick trips in some way)?

Community Stakeholder Comments Summary (Continued)

Challenges and Other Considerations

- There could be cultural and language barriers with much of the potential customer base
- Major languages English, Spanish, Polish
- Some sections of the service area can be dangerous, especially after dark.
- Provide narration onboard to inform riders about city amenities and historical sites.
- The City already provides senior transportation services (which does not run on weekends) for senior citizens. Senior access and coordination with the new shuttle service will be needed.
- Travelers currently use Uber, NJT, jitneys, auto.
- Access between Passaic High School on Passaic Street neighborhoods north of Monroe Street is a major challenge for students. Most walk given no school bus transportation. The pending demolition of the old high school and construction of the new will create added access challenges.

Security / Safety Needs

- Well-lit stops
- Shelters
- Avoid dangerous blocks if possible

Shuttle Bus Service Needs Analysis

Verify and Refine Initially Proposed Shuttle Route:

- Expected Shuttle Bus Uses
- Travel Need Time Periods
- Service Location Needs
- Walk Distances Between Travel Needs Locations and Shuttle Route
- NJ TRANSIT and Jitney Transfer and Connection Locations

NJ TRANSIT Transit-Friendly Data Application - Market Evaluation Information

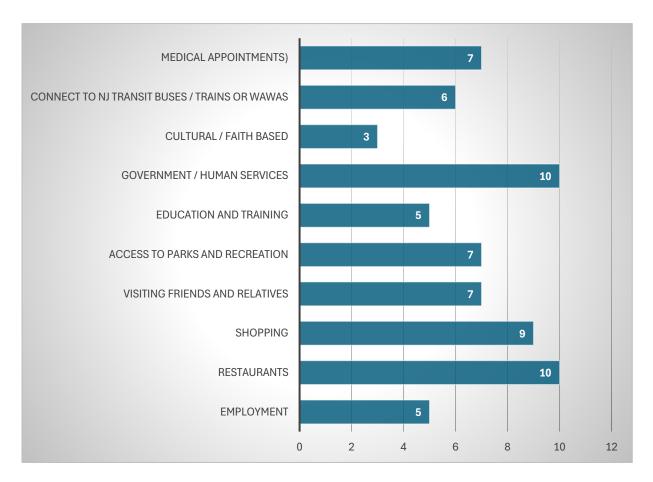
- Assess Land Use Density
- Identify Auto Ownership
- Determine Average Income Levels

• Shuttle Bus Service Operating Framework Parameters:

- Recommended Minimum Service Frequency and Hours of Operation
- Recommended Service Patterns

Shuttle Uses Projected by Stakeholders

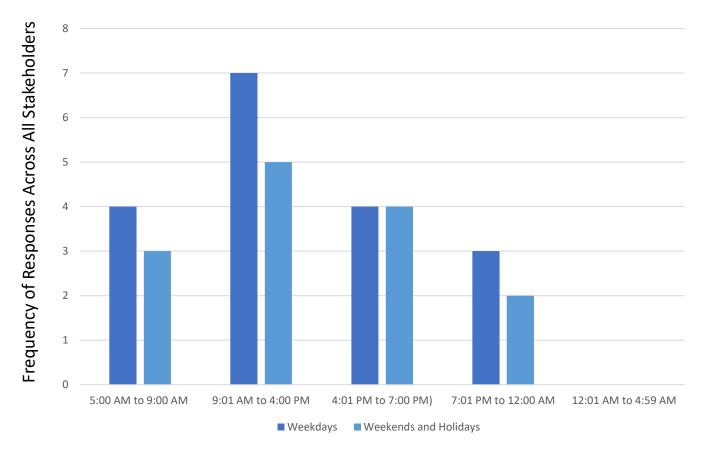
(weighted by projected usage levels suggested by respondents)



- Government / Human Services
- Restaurants
- Shopping
- Medical Appointments
- Visiting Friends and Relatives
- Access to Parks and Recreation

Total Weighted Points by Projected Shuttle Trip Purpose Across All Stakeholder Agencies / Organizations

Travel Days and Time Periods Projected by Stakeholders



Service Days and Time Periods

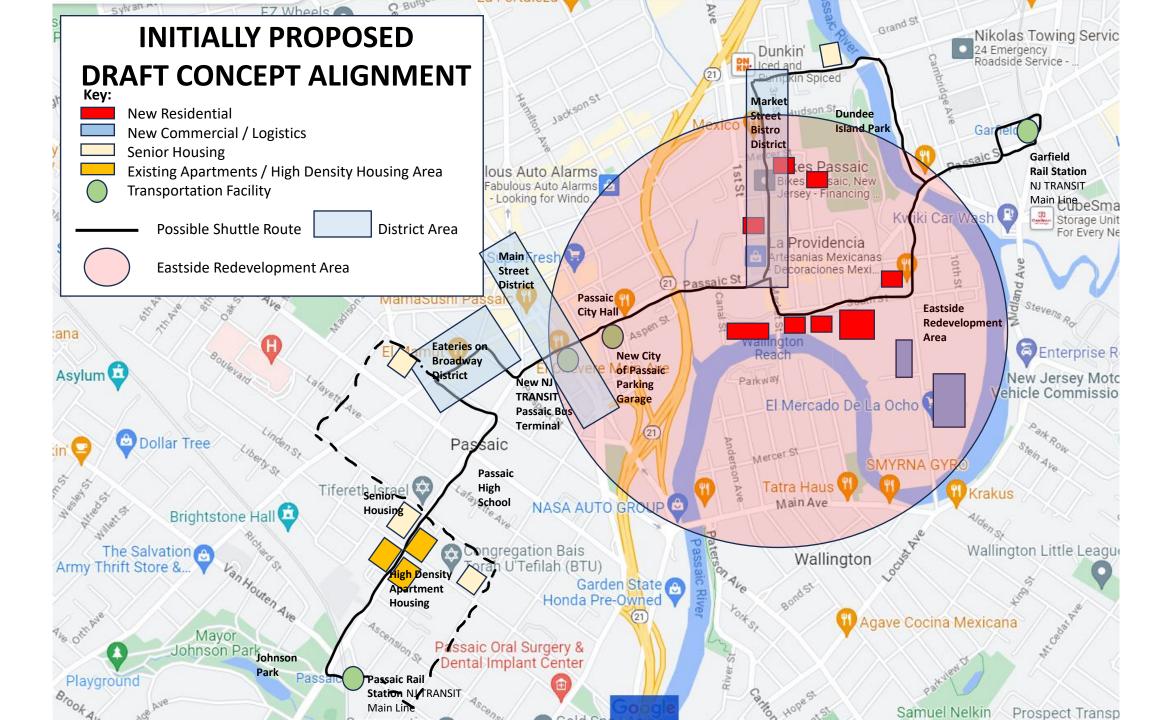
Projected Use:

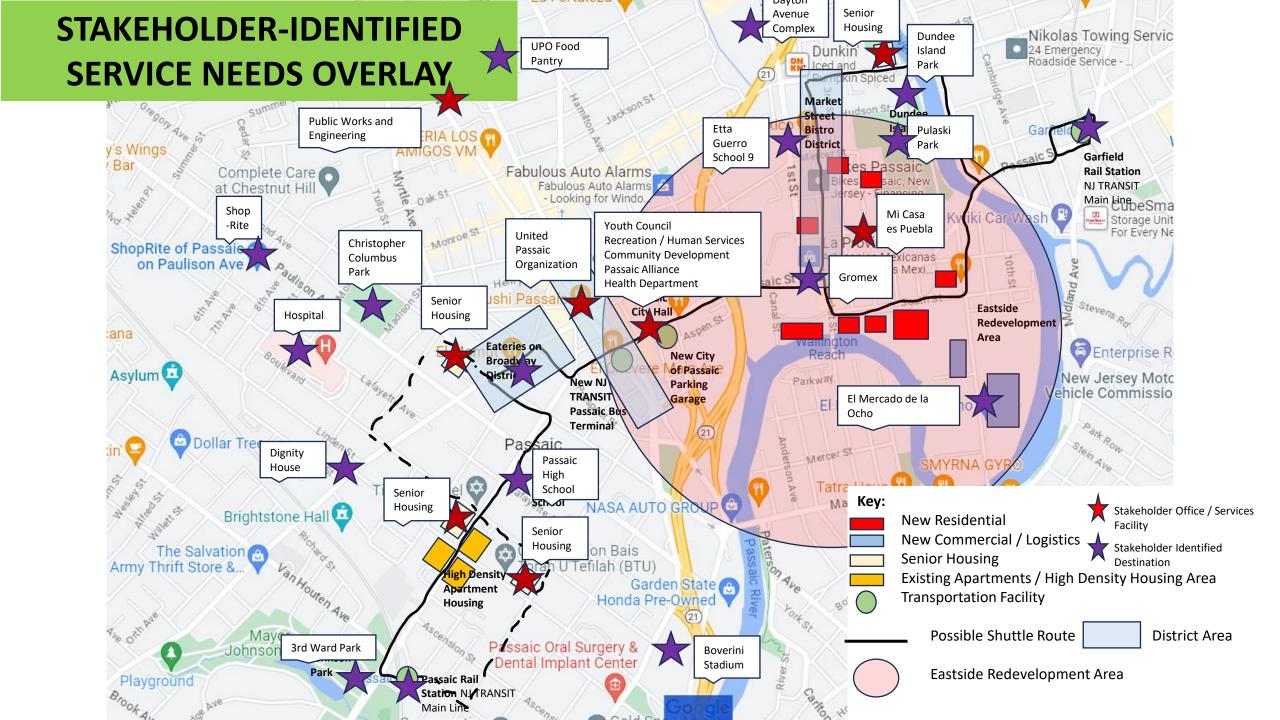
- Seven Days per Week Including Holidays
- Roughly 5:00 AM 12:00 AM
- Highest Projected Use During Middays
- No service needs projected for overnight hours

Service Location Needs According to Stakeholders

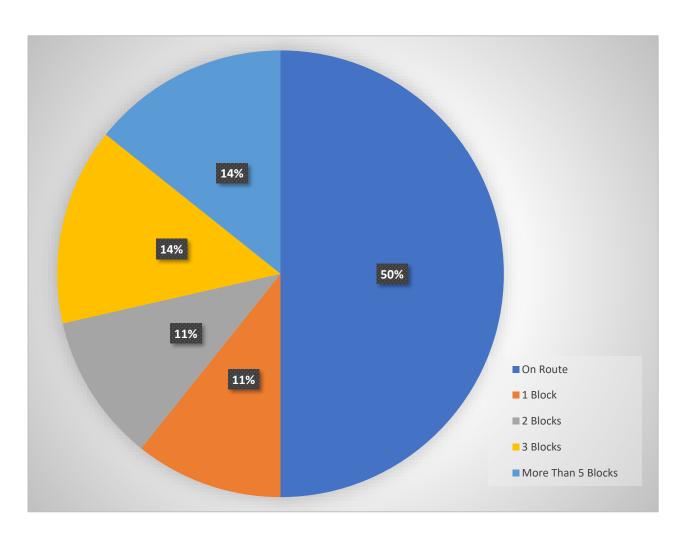
by Time Period and User Market

Access To:	5:00 AM – 9:00 AM	9:00 AM – 4:00 PM	4:00 PM – 7:00 PM	7:00 PM – 12:00 AM	12:00 AM – 5:00 AM	Weekdays	Weekends	Holidays	City Residents	Students	Seniors	Visitors	Social Service Clients	Youth	Commuters
NJ TRANSIT / Jitney Stops	Х	X	X	X		X	X	X	X			X			X
Local Employment	Х	X	X	X		X	Х	X	Х						X
City Hall		X				X			Х		Х		X		
Community Services		X				X			Х		Х		X	X	
Hospital		X				Х			Х		Х				
Medical Offices		X				X			Х		X				
Food Pantries		X				X	Х		Х		Х		X		
Libraries		X	X			X			Х	X	X			X	
Parks and Recreation		X	X			X	Х	X	Х		Х	х		X	
Special Services / Training			X	X		X	X		X				X		
City Education	Х	x				X				X				X	
Higher Education		X	X	X		X			Х	X					
Grocery Stores		X				X	Х	X	Х		Х		X		
Restaurants		Х	X	X		Х	X	X	Х		Х	Х		Х	
Retail and Services		Х	X	X		Х	Х	Х	Х		Х	х		X	
Mayor's / City Special Events			X	X		X	X	X	X		Х	X		Х	

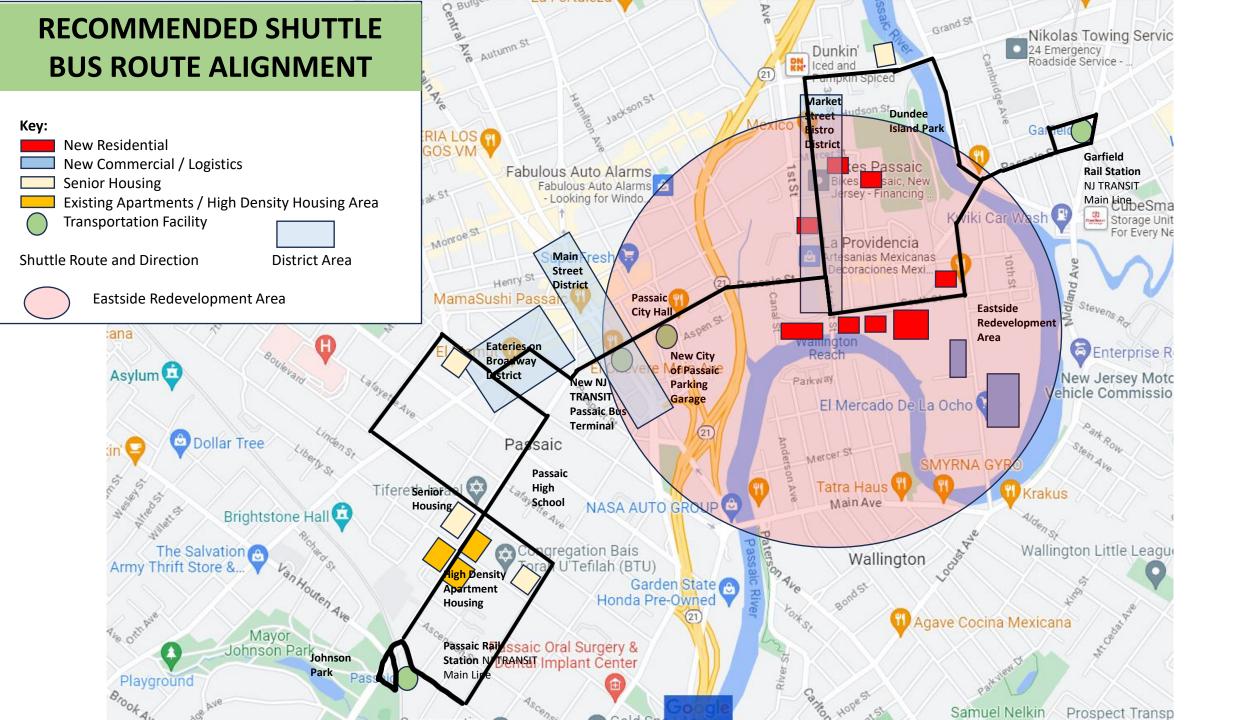




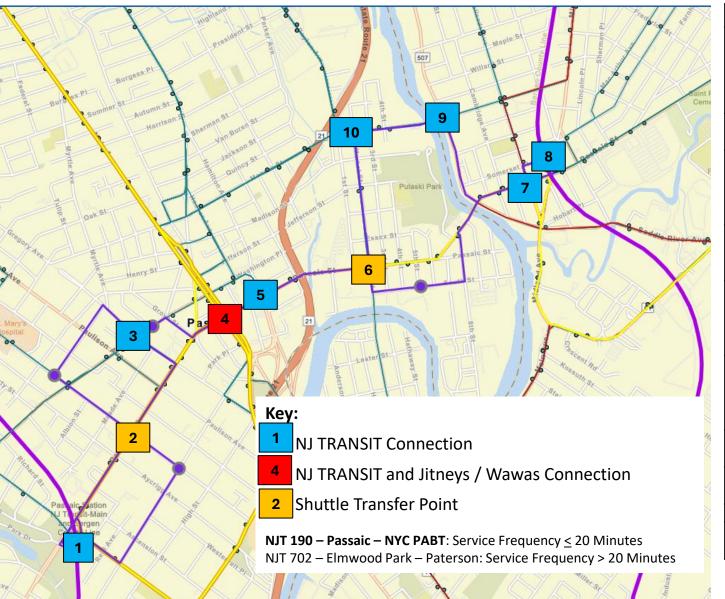
Proximity of Stakeholder-Identified Service Needs Locations to Initially Proposed Shuttle Route



- 72% of All Destinations within 2
 Block Walking Distance of Route
- 50% Directly On Proposed Route
 - All Senior Housing Locations
 - City Hall
 - Main Avenue
 - Eateries on Broadway District
 - Market Street Bistro District
 - 3rd Ward Park
 - NJ TRANSIT Bus and Train Stations
 - Passaic High School
 - Gromex
- 22% Within 2 Block Walk of Proposed Route
 - Mi Casa es Puebla
 - United Passaic Organization
 - Dignity House
 - Food Pantry
 - Dundee Island Park
 - St. Mary's Hospital

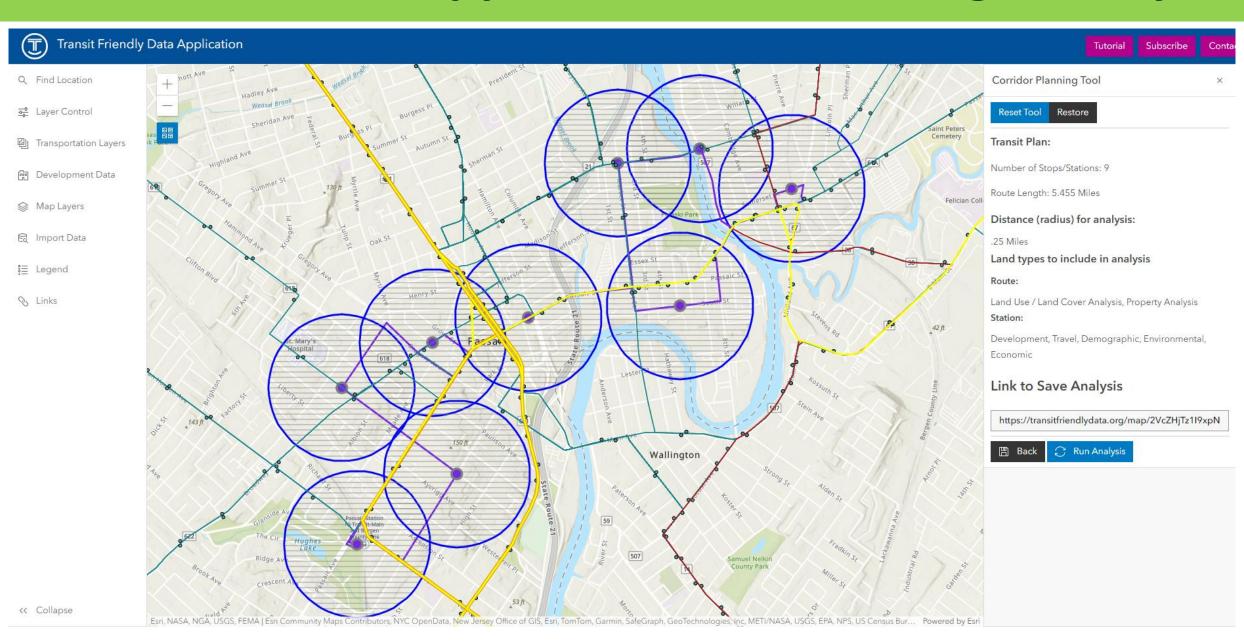


NJ TRANSIT and Jitney Connection Locations



	Location	Connections					
	Location						
1	NJ TRANSIT Passaic Station	NJT 190 - Passaic – NYC PABT NJT 702 - Elmwood Park – Paterson NJT Rail – Main Line					
2	Passaic at Boulevard	Passaic Shuttle (Transfer)					
3	Restaurant District (Broadway at Gregory)	NJT 709 - Bloomfield – Garden State Plaza (Paramus)					
4	NJ TRANSIT Bus Terminal (Main at Passaic)	NJT 190 - Passaic – NYC PABT NJT 703 - Haledon – Meadowlands Jitneys / Wawas					
5	City Hall and Parking Garage (State and Passaic)	NJT 709 - Bloomfield – Garden State Plaza (Paramus)					
6	Market at Passaic	NJT 707 - Paterson – Saddle Brook NJT 709 - Bloomfield – Garden State Plaza (Paramus) Passaic Shuttle (Transfer)					
7	Paulison at Passaic	NJT 160 - Garfield – NYC PABT NJT 161 - Paterson – NYC PABT					
8	NJ TRANSIT Garfield Station	NJT Rail – Bergen County Line					
9	River at Monroe	NJT 702 - Elmwood Park – Paterson					
1	Monroe at	NJT 707 - Paterson – Saddle Brook					
0	Market	NJT 744 - Wayne - Passaic					

NJ TRANSIT Data Application Route Design Analysis



Passaic Shuttle Market Analysis Summary

Analysis Suggests that Shuttle Bus Service Exceeds Typical Market Parameters Needed for Successful Operation

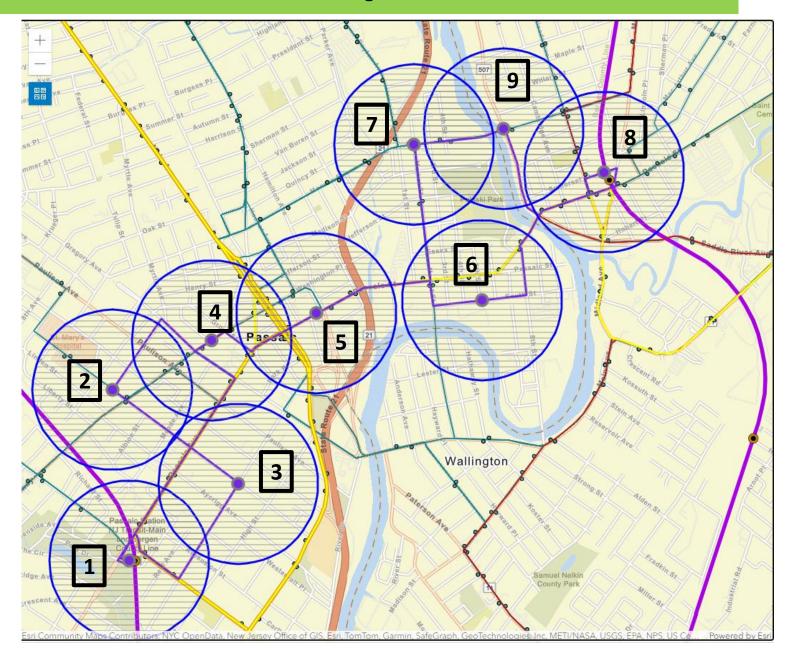
- 93% of Land Areas Well Suited to Transit Service
 - 59% High Density Residential
 - 34% Commercial / Services/ Industrial / Other Urban
- Many Residents and Workers Lack Personal Vehicles
 - More than 40% of Residents in Core Passaic Downtown Areas
 - More Than 25% of Workers in Core Passaic Downtown Areas
 - Greatly exceeds Passaic County Averages of 17% Residents and 11% Workers
- Overall Average Household Income Levels Are Low Relative to County
 - Core Passaic Downtown area levels are almost half those of Passaic County.

Passaic Shuttle Market Analysis

Land Area (Acres) Served Along Route

- Residential: Single unit, low density 9.22 (0%)
- Residential: Single unit, medium density 121.58 (6%)
- Residential: High density or multiple dwelling 1,148.78 (59%)
- Mixed Residential 0.00 (0%)
- Commercial / Services 281.22 (14%)
- Industrial and Commercial Complexes 0.00 (0%)
- Industrial 69.23 (4%)
- Other Urban 310.08 (16%)

Auto Ownership – Zero Cars

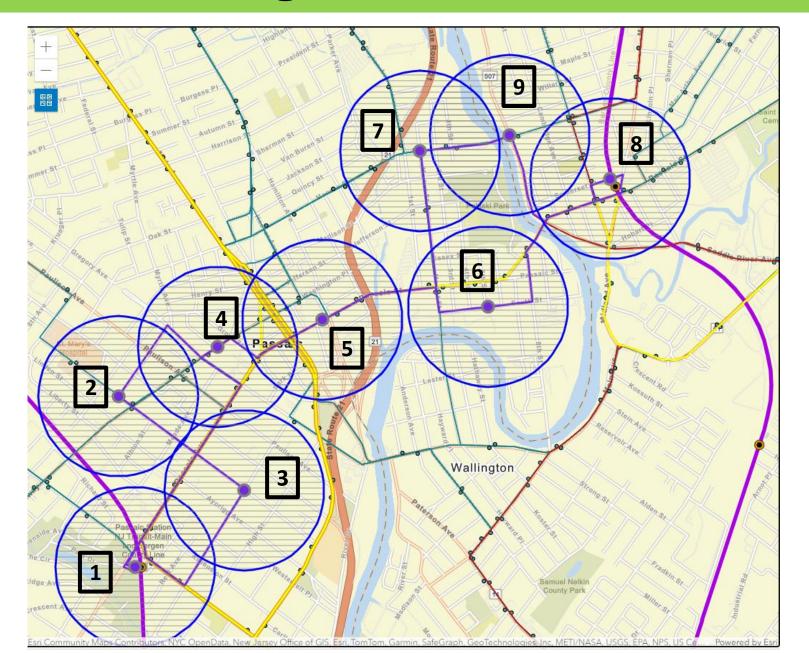


Shuttle Service Area

- 19% Residence in Area 11% Workplace in Area
- 35% Residence in Area 16% Workplace in Area
- 28% Residence in Area 15% Workplace in Area
- 40% Residence in Area 25% Workplace in Area
- 46% Residence in Area 29% Workplace in Area
- 44% Residence in Area 34% Workplace in Area
- 46% Residence in Area 29% Workplace in Area
- 25% Residence in Area 25% Workplace in Area
- 31% Residence in Area28% Workplace in Area

Passaic County: 17% Residence in Area 11% Workplace in Area

2022 Average Household Income



Shuttle Service Area

- \$115,135
- \$ 75,888
- \$ 82,557
- \$ 67,975
- \$ 58,852
- \$ 66,200
- \$ 64,590
- \$ 68,740
- \$ 64,709

Passaic County: \$112,557

Proposed Route and Service Framework

Total Route Length:

- One Way Trip: 2.6 3.5 Miles (Depending on Segments Travelled)
- Total All Segments: 5.5 Miles

Estimated One Way Travel Time:

• Entire Route (Passaic to Garfield Stations): 15 – 20 Minutes

Recommended Recovery Time:

Allow Up to 3 Minutes

Expected Congestion Locations:

- Market Street
- Monroe Street
- River Street (Garfield)
- Passaic Street (Passaic River Bridge, Downtown)

Special Evening Service Considerations:

- Security: Route Flex Deviation and Transfer Hold Connections
- Ease of Use: Timed Train Connections (Late Evening)

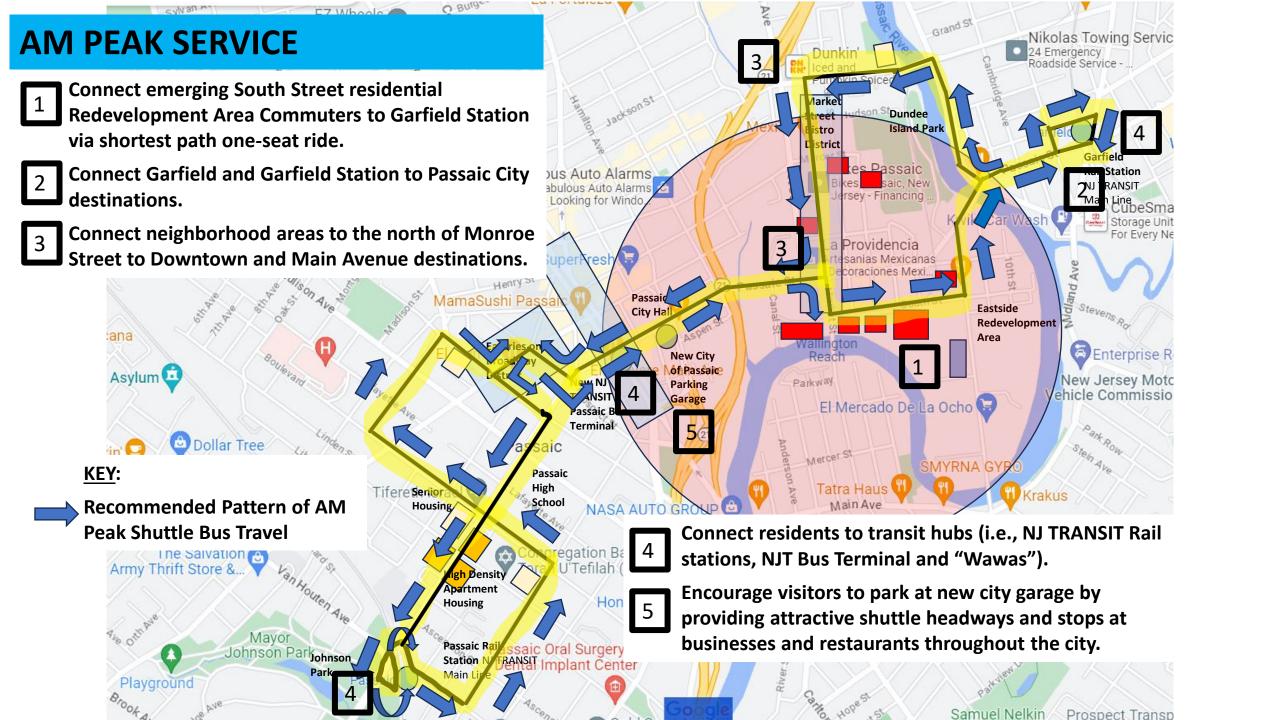
Recommended Headway and Service Span Hours

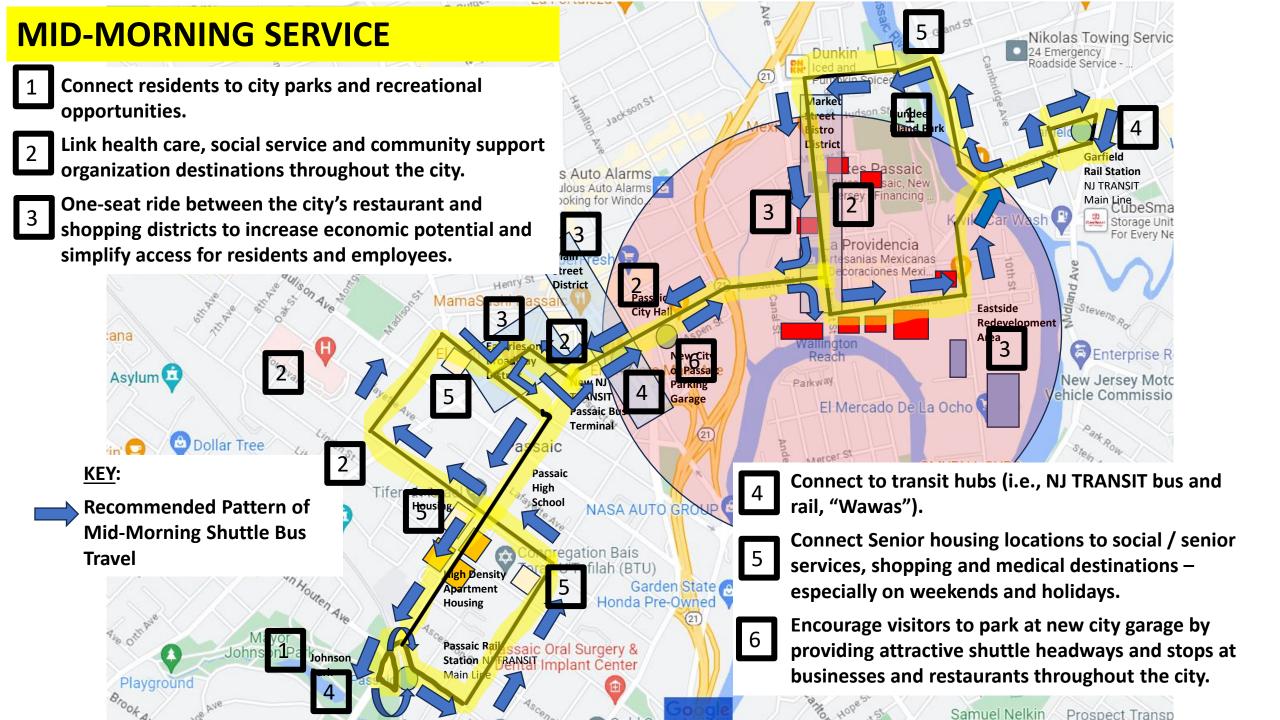
	AM Peak Period	Mid-Morning Period	Afternoon Period	PM Peak Period	Evening Period
Hours	6:00 AM – 8:00 AM	8:00 AM – Noon	Noon – 4:00 PM	4:00 PM – 7:00 PM	7:00 PM – 11:00 PM
Weekdays	Every 20 Minutes	Every 15 Minutes	Every 15 Minutes	Every 15 Minutes	Every 20 Minutes*
Weekends	No Service	Every 15 Minutes	Every 15 Minutes	Every 15 Minutes	Every 20 Minutes*
Holidays	No Service	Every 20 Minutes	Every 20 Minutes	Every 20 Minutes	Every 20 Minutes**

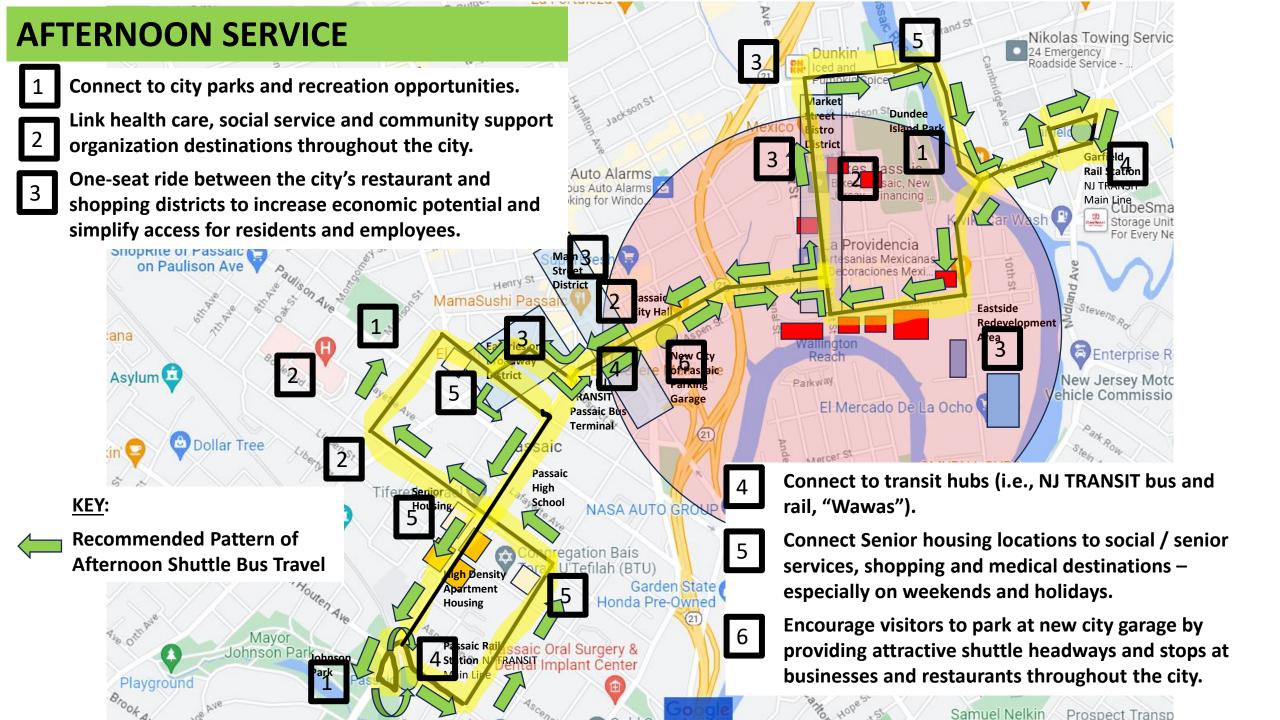
^{*} During special events, may increase headway / hours of operation.

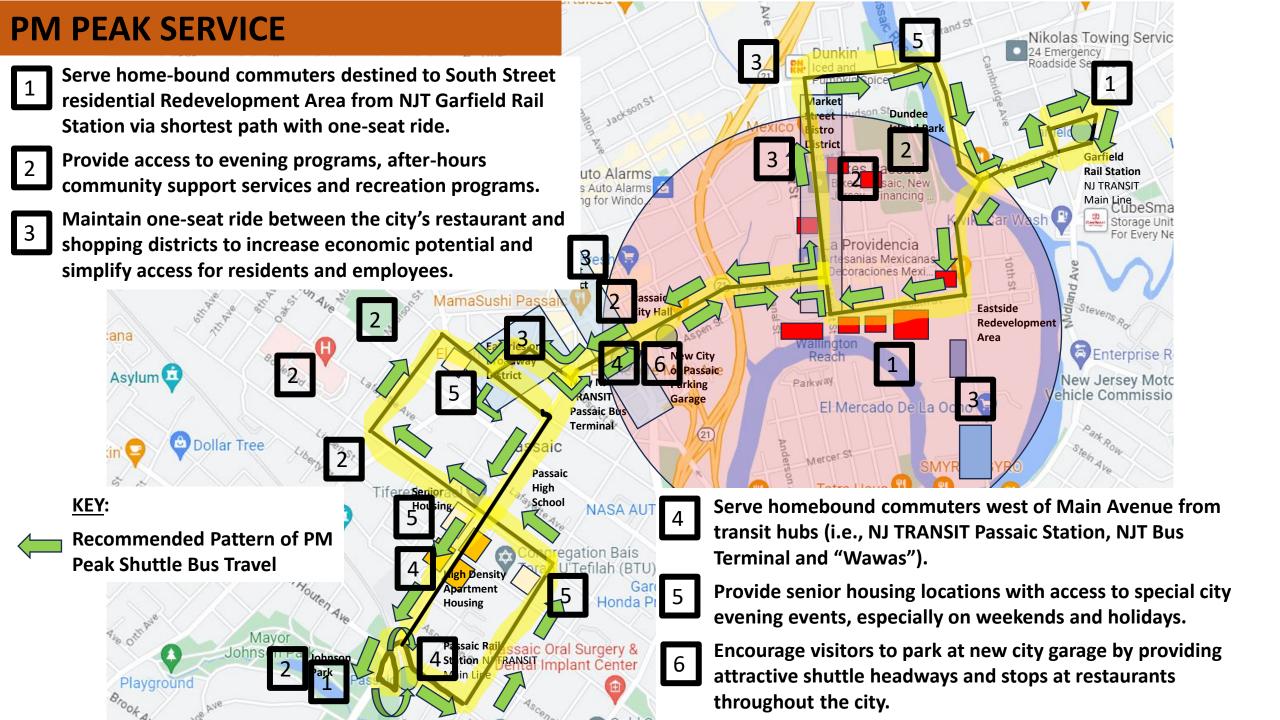
The recommended headways above assume adequate vehicle, driver and operating support availability and capacity to accommodate rider demand.

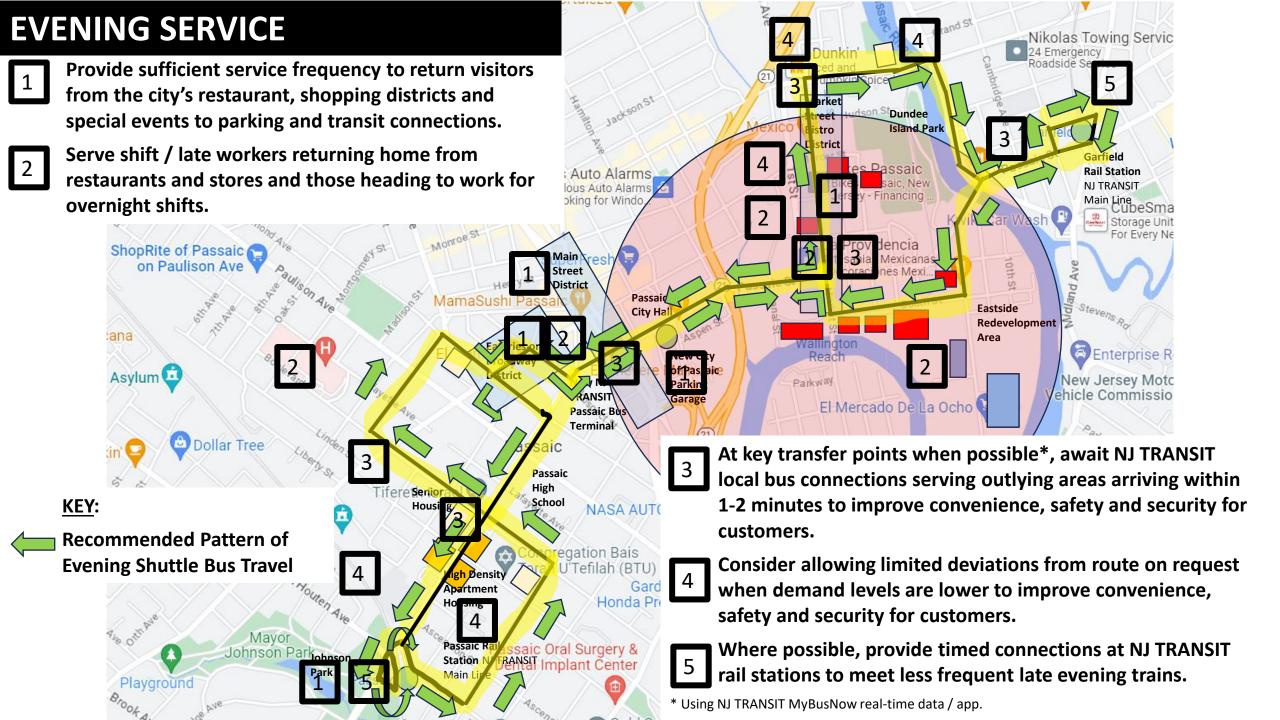
^{**} Reduce Headway / End Service Later in Period. During special events, may increase headway / hours of operation.







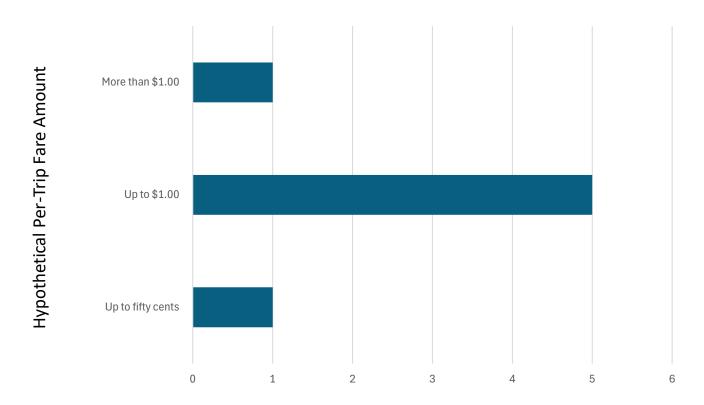




Shuttle Support and Promotion

- Fares or Free
- Stakeholder / Community
- Branding and Identity

If a Fare Needs to Be Charged, What Amount Would Be Affordable?



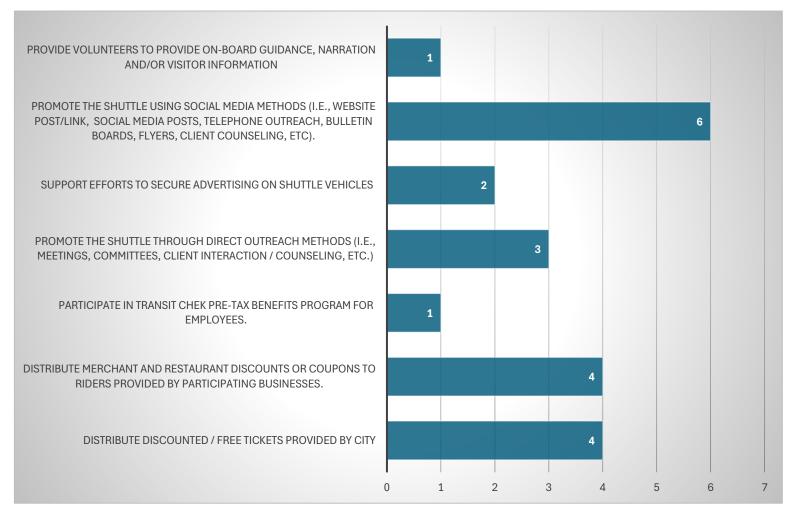
- One-way fare should not exceed \$1.00.
- Stakeholder agencies / organizations willing to distribute discounted or free tickets to their clients.

Community Stakeholder Comments (Continued)

How Stakeholders Could Assist in Marketing

- Through agencies
- Combined marketing with businesses and employers in Passaic
- Through schools for students
- LED Message boards
- Mayor's groups
- Social media
- Facebook groups

Can Your Agency / Organization Help Promote the Shuttle?



- Expressed willingness to:
 - Send messaging using their available social media methods.
 - Distribute discounted / free tickets to clients provided by city.
 - Distribute merchant / restaurant discount coupons provided by businesses to clients.

Branding Concept

Challenge: Find a Name for the Bus that Translates Across Multiple Languages.



Shuttle Bus Service – Possible Branding Concept

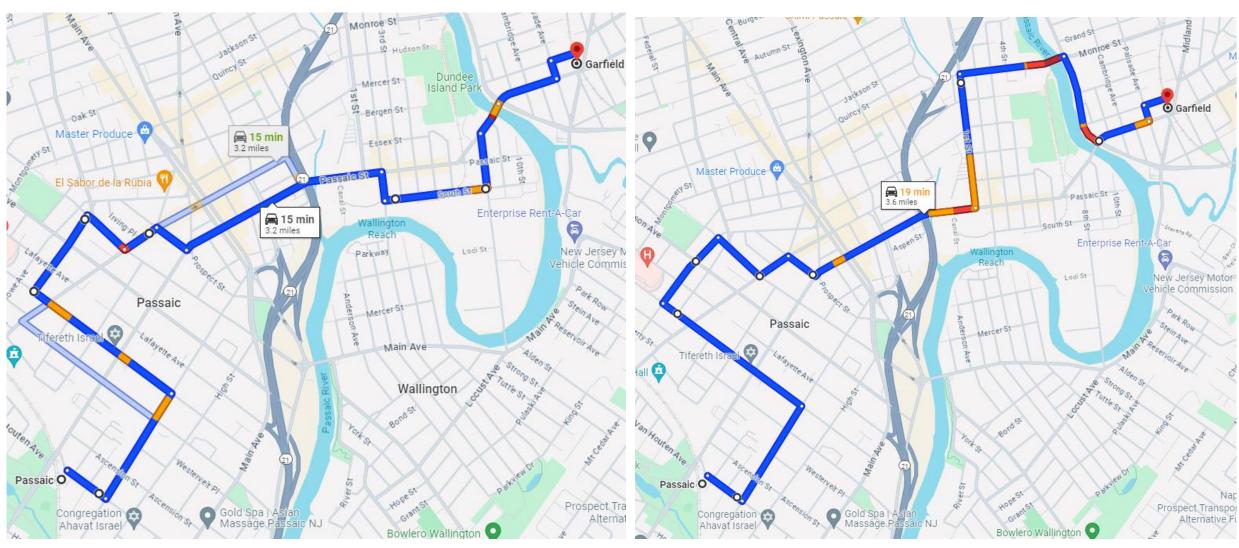


Appendix

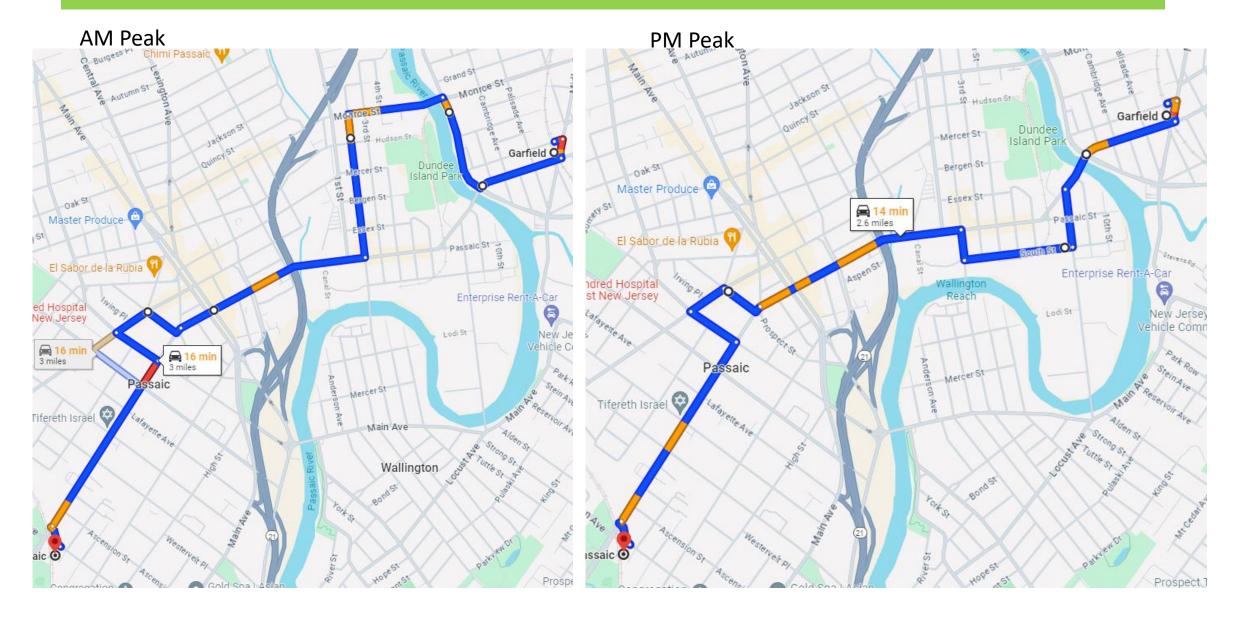
- Route Pattern and Travel Time Analysis
- Connecting NJ TRANSIT Route Information
- NJ TRANSIT TOD Tool Market Analyses
- Survey Questions

Passaic to Garfield Example Route Travel Time

AM Peak PM Peak



Garfield to Passaic Example Route Travel Time

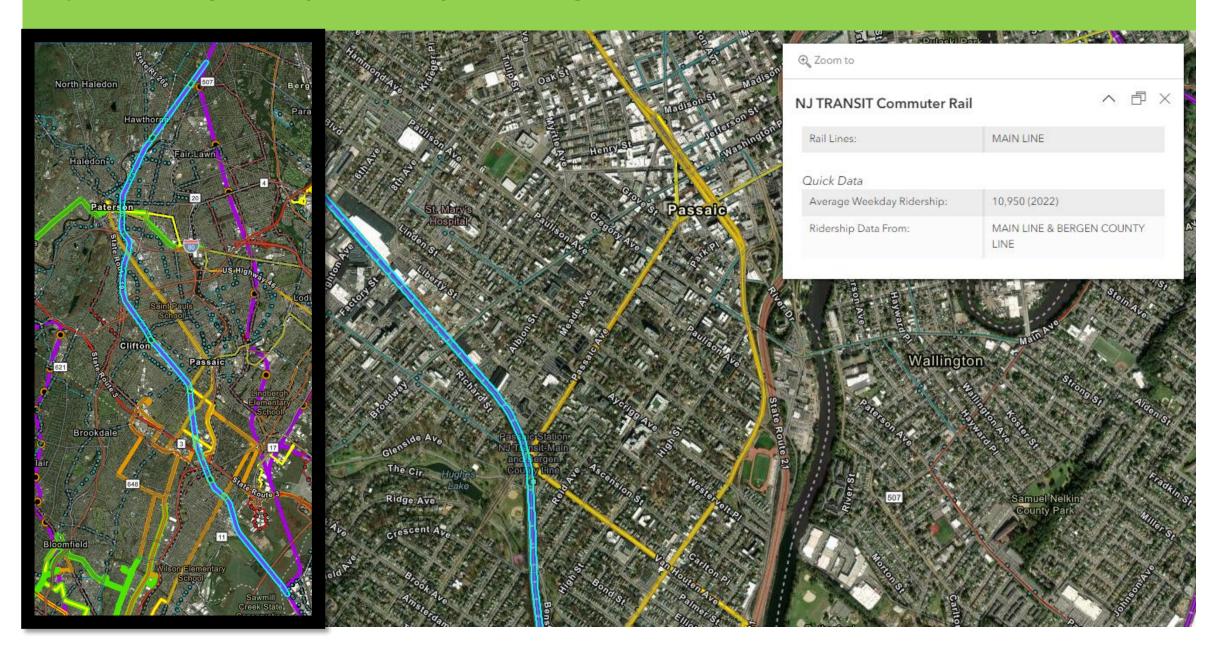


Connecting Transit Services

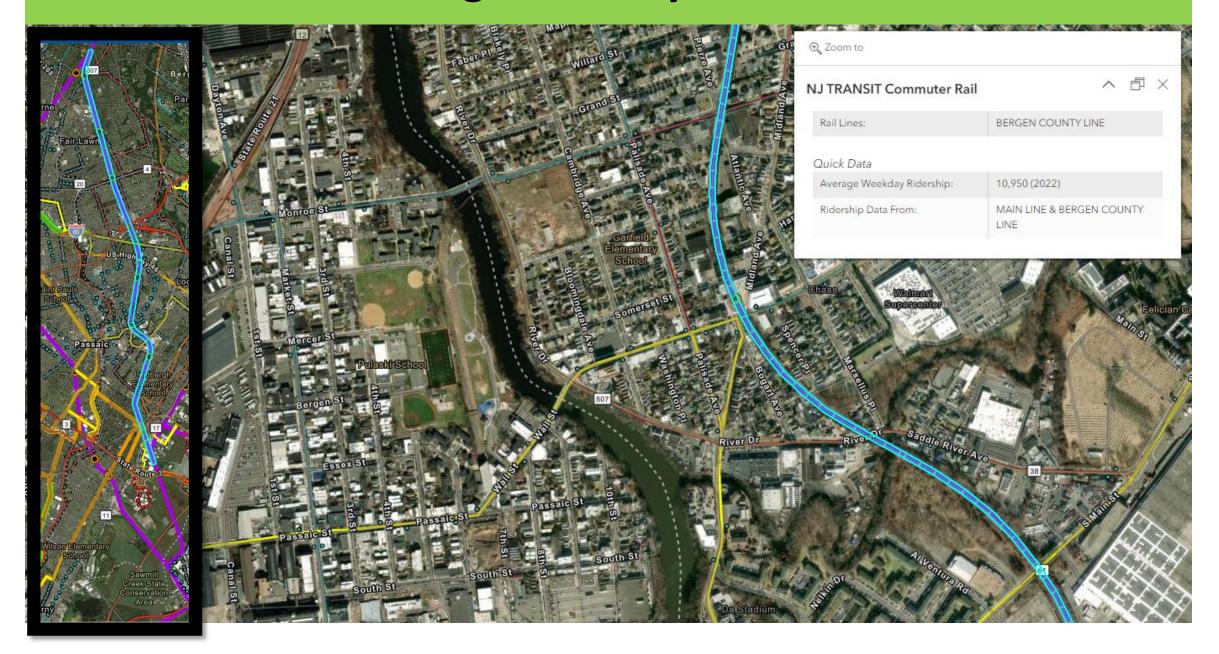
	Location	Connections			
1	NJ TRANSIT Passaic Station	NJT 190 - Passaic — NYC PABT NJT 702 - Elmwood Park — Paterson NJT Rail — Main Line			
2	Passaic at Boulevard	Passaic Shuttle (Transfer)			
3	Restaurant District (Broadway at Gregory)	NJT 709 - Bloomfield – Garden State Plaza (Paramus)			
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6	Market at Passaic	NJT 707 - Paterson – Saddle Brook NJT 709 - Bloomfield – Garden State Plaza (Paramus)			
7	Paulison at Passaic	NJT 160 - Garfield – NYC PABT NJT 161 - Paterson – NYC PABT			
8	NJ TRANSIT Garfield Station	NJT Rail – Bergen County Line			
9	River at Monroe	NJT 702 - Elmwood Park – Paterson			
10	Monroe at Market	NJT 707 - Paterson – Saddle Brook NJT 744 - Wayne - Passaic			

Connection Location:	Connecting Routes	Weekdays	Span and Frequency	Weekends	Frequency and Span	Holidays	Serves
	190	Y	5:45 AM – 9:00 PM 20 - 45 Minutes Peak 60 – 90 Minutes Off Peak	SA	8:30 AM – 7:45 PM 120 Minutes	Y	Passaic — PABT
NJ TRANSIT Passaic Station	702	Y	6:00 AM – 7:30 PM 30 Minutes Peak 60 Off Peak	SA	8:00 AM – 6:00 PM 120 Minutes	Y	Elmwood Park – Paterson
	ML		5:30 AM — 2:00 AM 30 Minutes Peak 60 Minutes Off-Peak	Y	6:45 AM – 2:00 AM 60 Minutes	Y	Suffern - Hoboken
NJ TRANSIT Main Avenue Bus Terminal (New Location)	190	Y	24 Hours 6 – 20 Minutes Peak 20 – 25 Off-Peak**	Y	24 Hours 15 Minutes	Y	Passaic — PABT
Terminal (New Location)	703	Y	5:30 AM – 12:00 AM 10 Minutes Peak 20 Minutes Off-Peak	Y	5:30 AM – 12:30 AM SA 7:30 – 11:30 PM SU 30 Minutes	Y	Haledon – Meadowlands
City Hall (State at Passaic)	709	Y	5:30 AM – 11:00 PM 30 Minutes	SA	6;15 AM – 10:30 PM 30 Minutes	Y	Bloomfield – Garden State Plaza (Paramus)
Passaic at Market	707	Y	5:45 AM – 7:00 PM 30 Minutes Peak 60 Minutes Off-Peak	SA	7:00 AM – 8:00 PM 60 Minutes	Y	Paterson – Saddle Brook
	709		5:30 AM – 11:00 PM 30 Minutes	SA	6;15 AM – 10:30 PM 30 Minutes	Y	Bloomfield – Garden State Plaza (Paramus)
	160	Y	5:15 AM – 12:30 AM 30 Minutes Peak 60 Off Peak	Y	8:30 AM = 1:00 AM SA 8:30 AM = 9:00 PM SU 60 = 75 Minutes	Y	Garfield – PABT
Paulison and Passaic (Garfield)	161		6:15 AM = 8:00 AM EB 6:00 PM = 6:45 PM WB 2 = 3 Trips Each Direction	N		N	Paterson – PABT
	BC		5:45 AM – 4:00 PM EB 9:00 AM – 1:00 AM WB 60 Minutes	Y	7:00 AM – 1:00 AM 60 Minutes	Y	Suffern - Hoboken
River at Monroe (Garfield)	702	Y	6:00 AM – 7:30 PM 30 Minutes Peak 60 Off Peak	SA	8:00 AM – 6:00 PM 120 Minutes	Y	Elmwood Park – Paterson
1≝ / Monroe at Market	707	Y	5:45 AM — 7:00 PM 30 Minutes Peak 60 Minutes Off-Peak	SA	7:00 AM — 8:00 PM 60 Minutes	Y	Paterson – Saddle Brook
	744	Y	5:45 AM – 8:00 PM 30 Minutes	SA	6:00 AM – 8:00 PM 60 Minutes	Y	Wayne - Passaic
Restaurant District (Broadway at Gregory)	709	Y	5:30 AM – 11:00 PM 30 Minutes	SA	6;15 AM – 10:30 PM 60 Minutes	Y	Bloomfield – Garden State Plaza (Paramus)

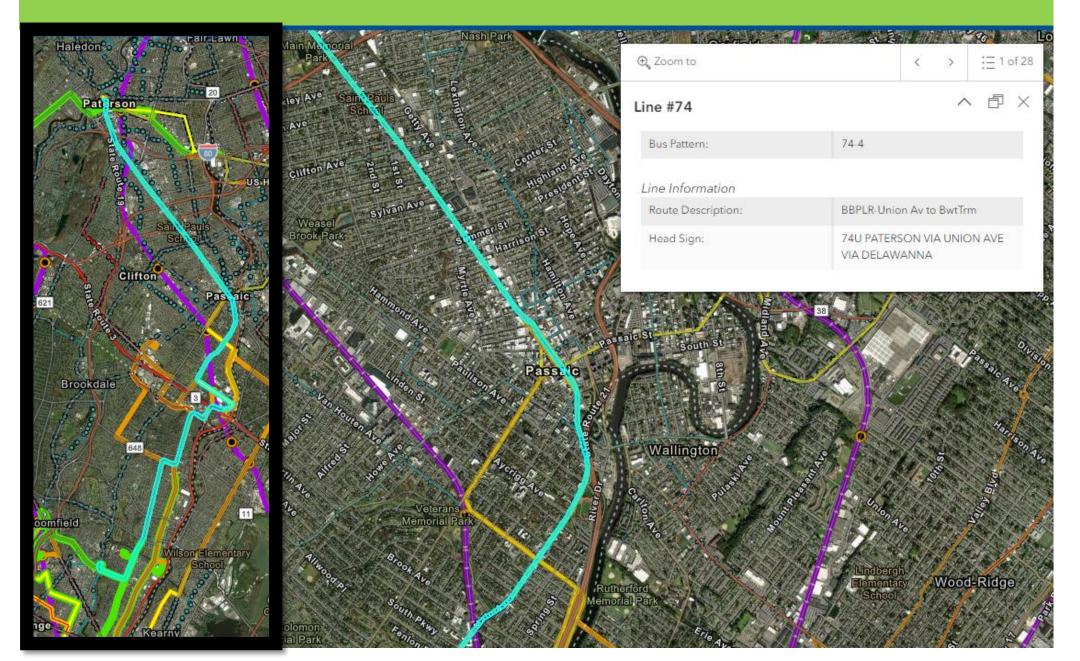
NJ TRANSIT Rail – Main Line



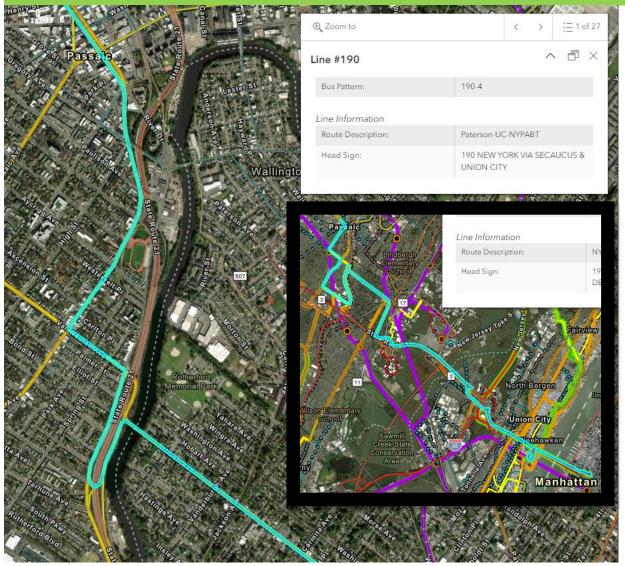
NJ TRANSIT Rail – Bergen County Line

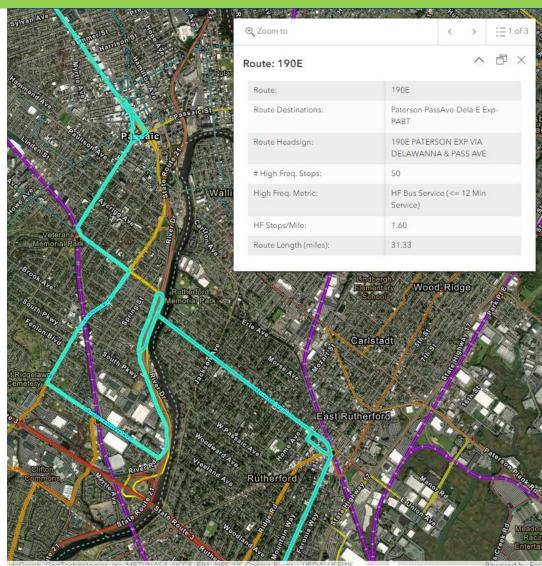


NJ TRANSIT 74 – Paterson - Bloomfield

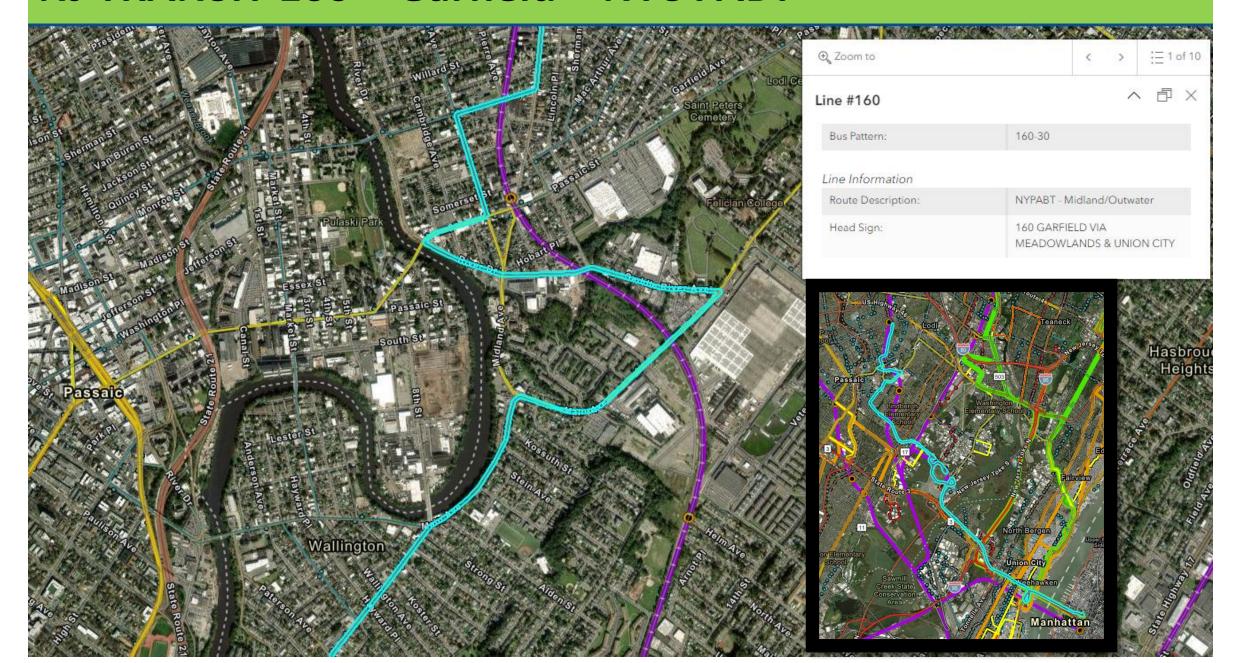


NJ TRANSIT 190 / 190E - Paterson - NYC PABT

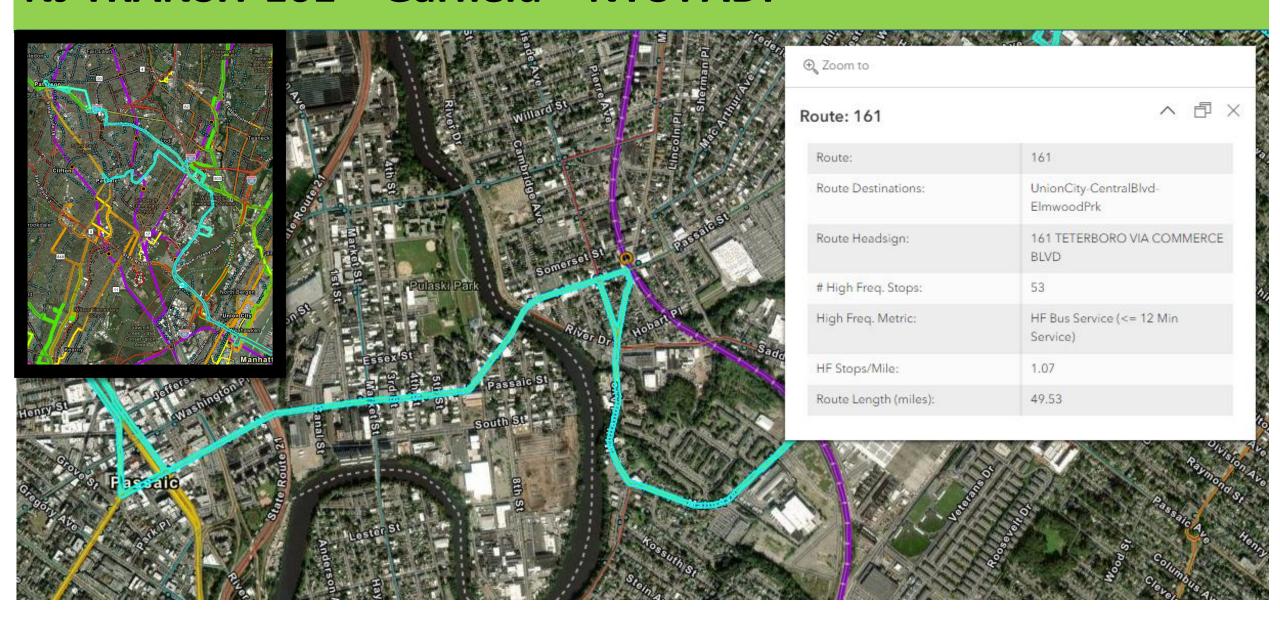




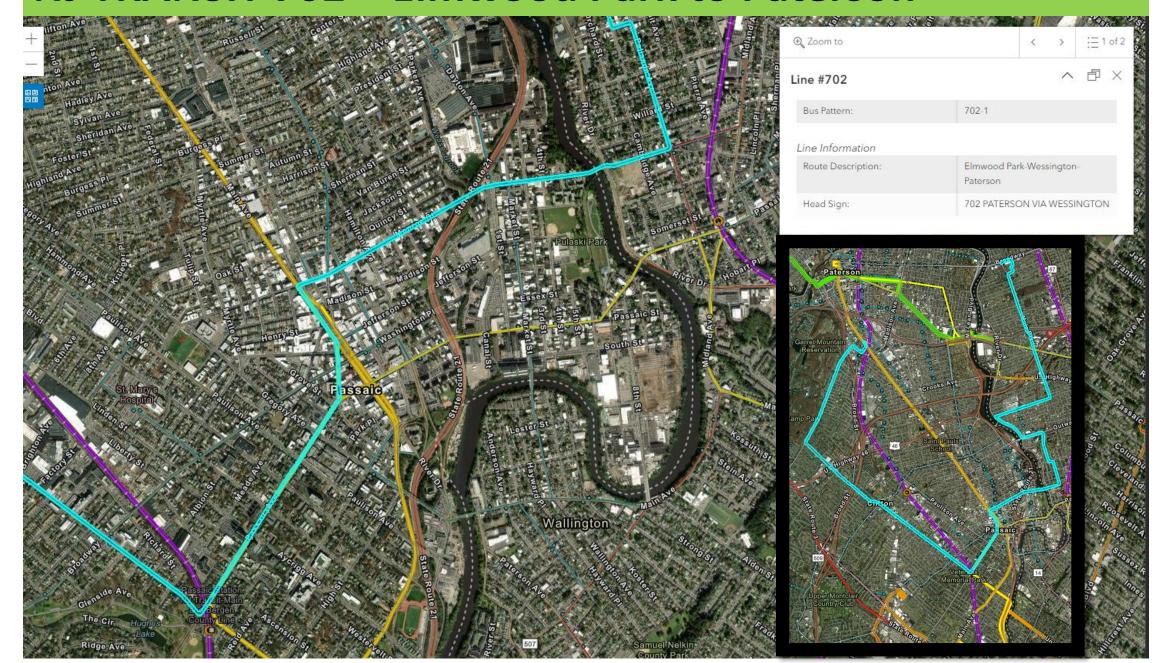
NJ TRANSIT 160 – Garfield – NYC PABT



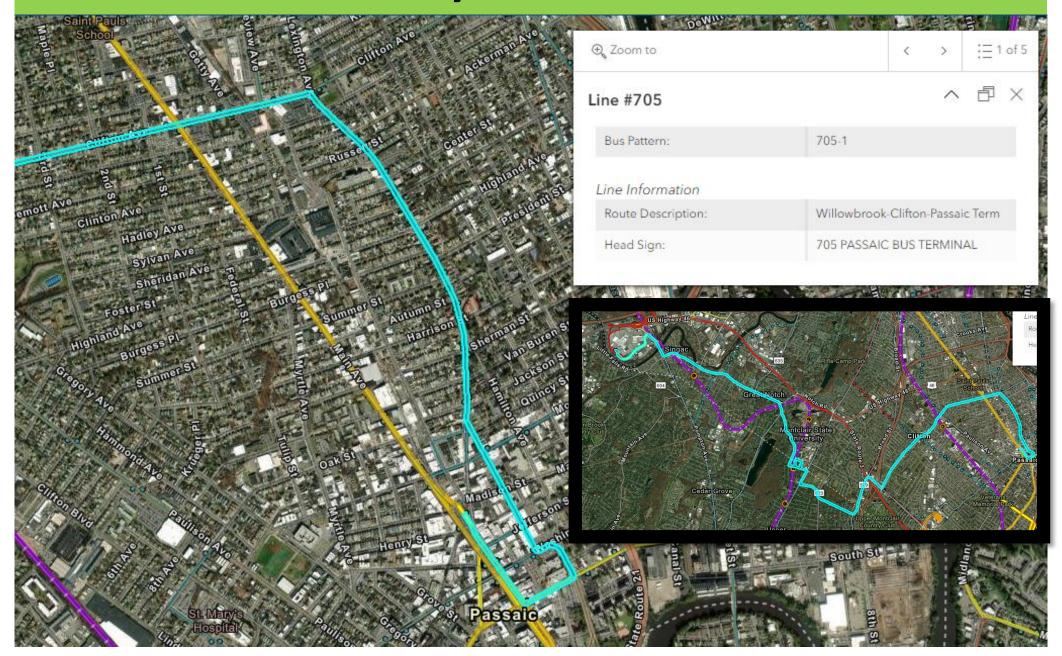
NJ TRANSIT 161 – Garfield – NYC PABT



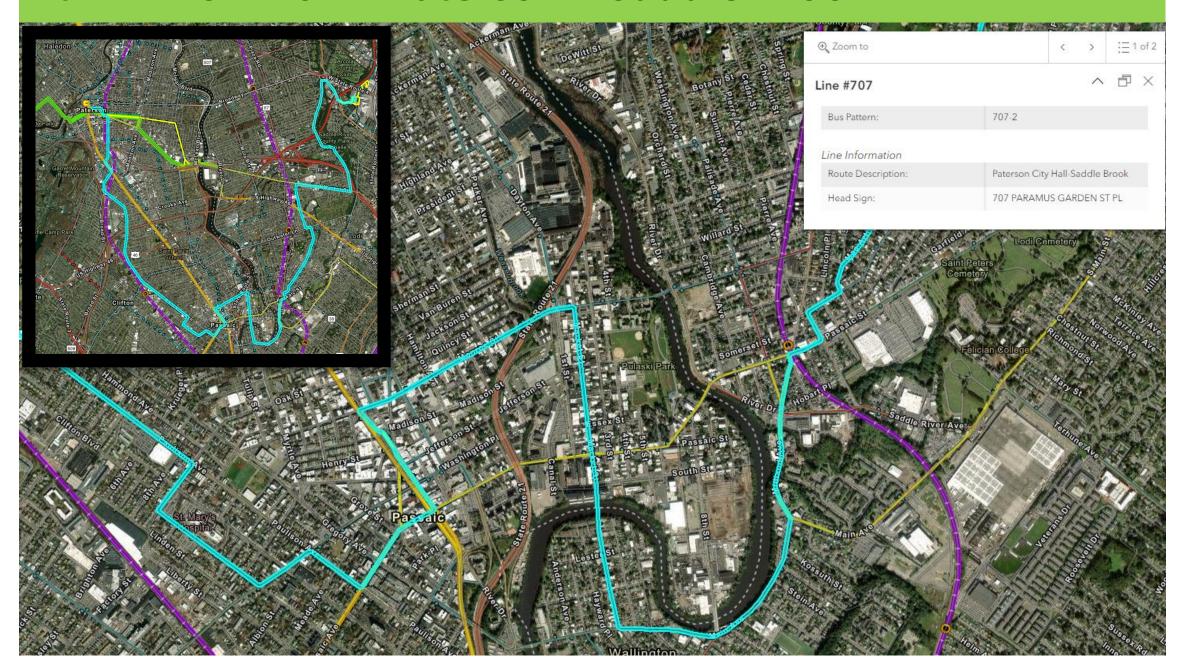
NJ TRANSIT 702 - Elmwood Park to Paterson



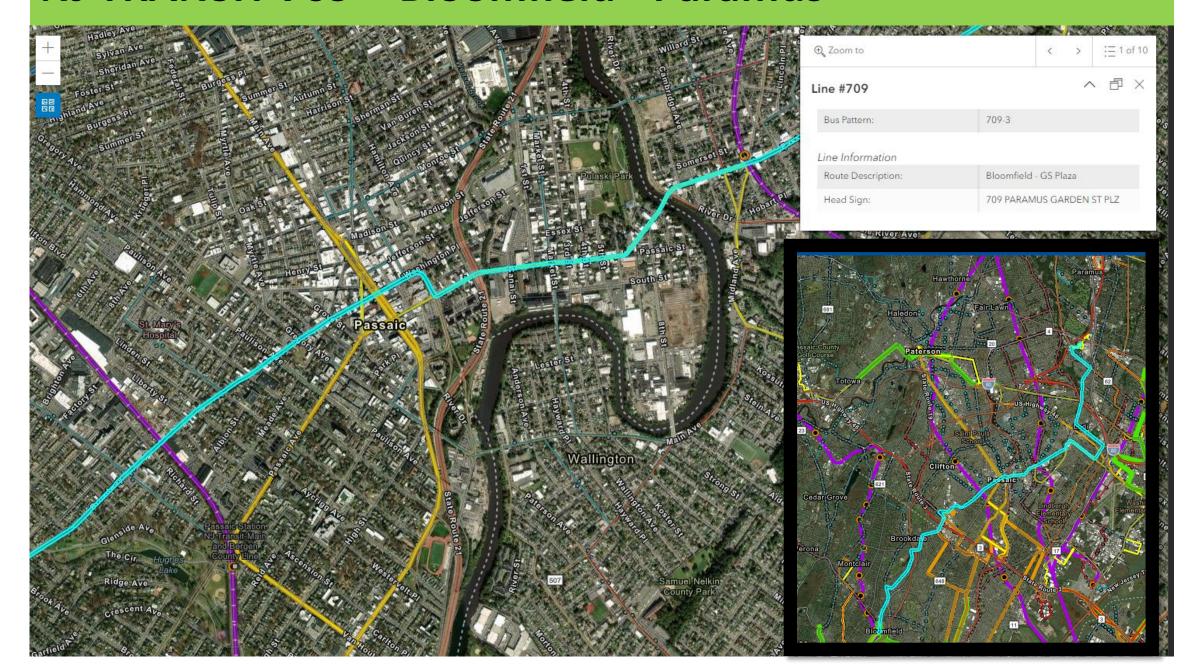
NJ TRANSIT 705 – Wayne - Passaic



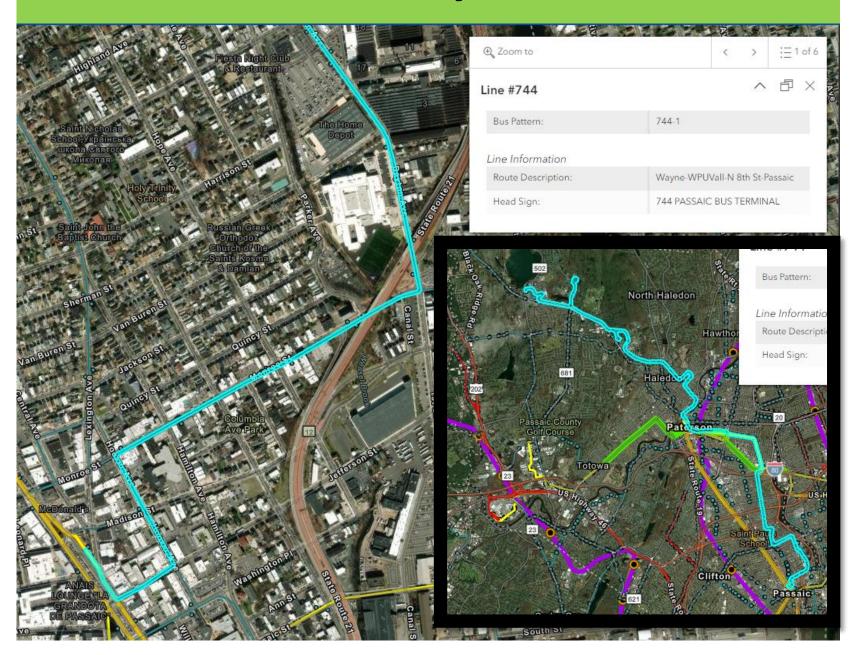
NJ TRANSIT 707 – Paterson – Saddle Brook



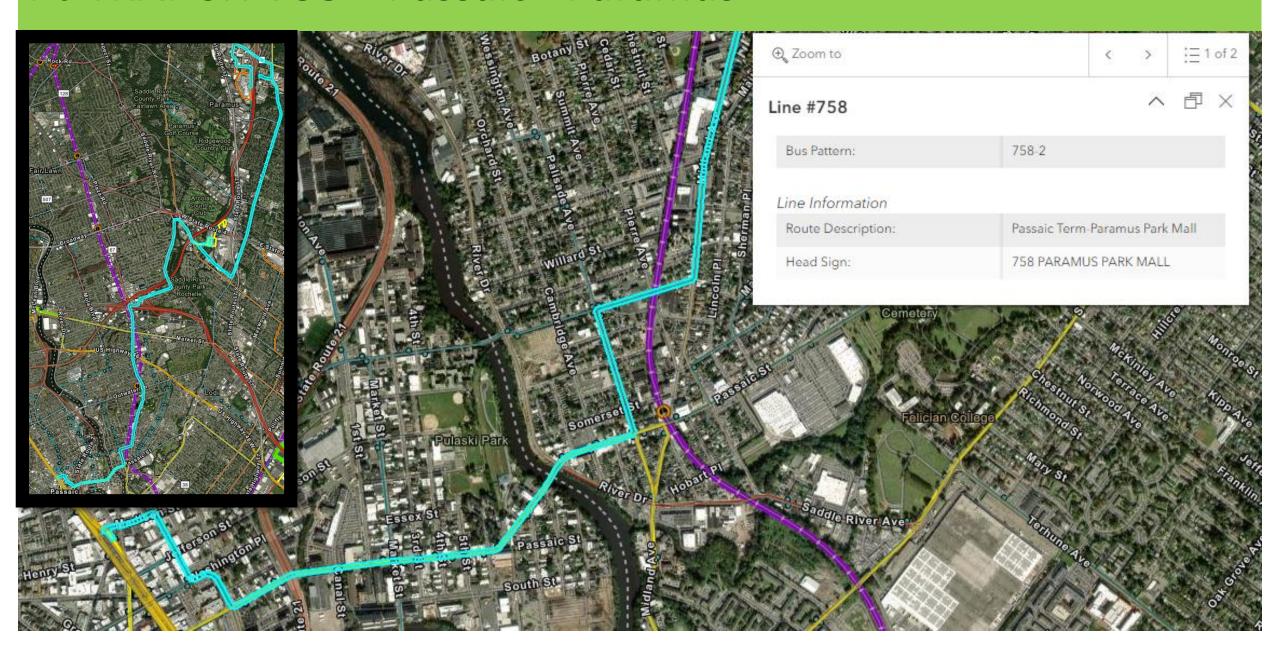
NJ TRANSIT 709 – Bloomfield - Paramus



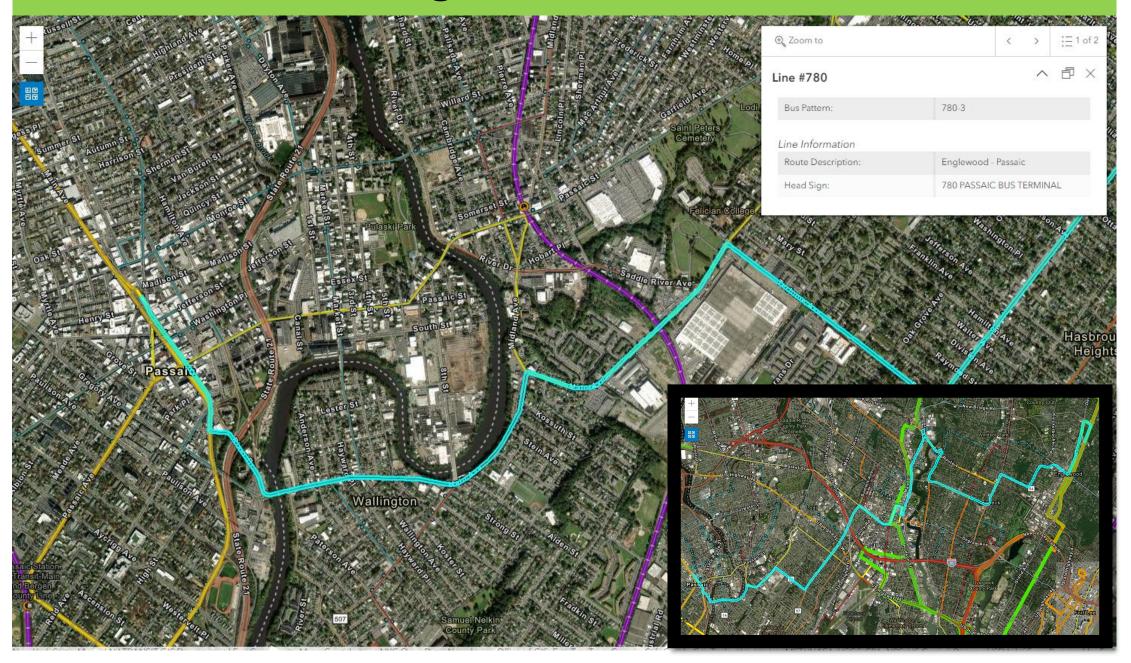
NJ TRANSIT 744 – Wayne - Passaic



NJ TRANSIT 758 – Passaic - Paramus



NJ TRANSIT 780 – Englewood - Passaic



NJ TRANSIT 703 – Haledon - Meadowlands

