



# UNION COUNTY TRUCK MOBILITY STUDY



Technical Advisory Committee  
Meeting 2  
30 March 2021



# Agenda

- Study schedule and status
- Stakeholder outreach
- Data analysis
- Critical site identification
- Improvement concepts
- Next steps

## Today's Key Outcome:

Review candidate locations and representative improvement concepts.



**We invite you to comment throughout the presentation**



# Study Schedule and Status

## Work Completed/Ongoing

- **Tech Memo #1**
  - Summary of outreach and stakeholder/public involvement
- **Tech Memo #2**
  - Summary of data collection
- **Tech Memo #3**
  - Data analysis and identification of priority sites
- **Recommendations**
- **Final Report**



Public Meeting - April

Draft Report Review – April

Final Report Delivery - May

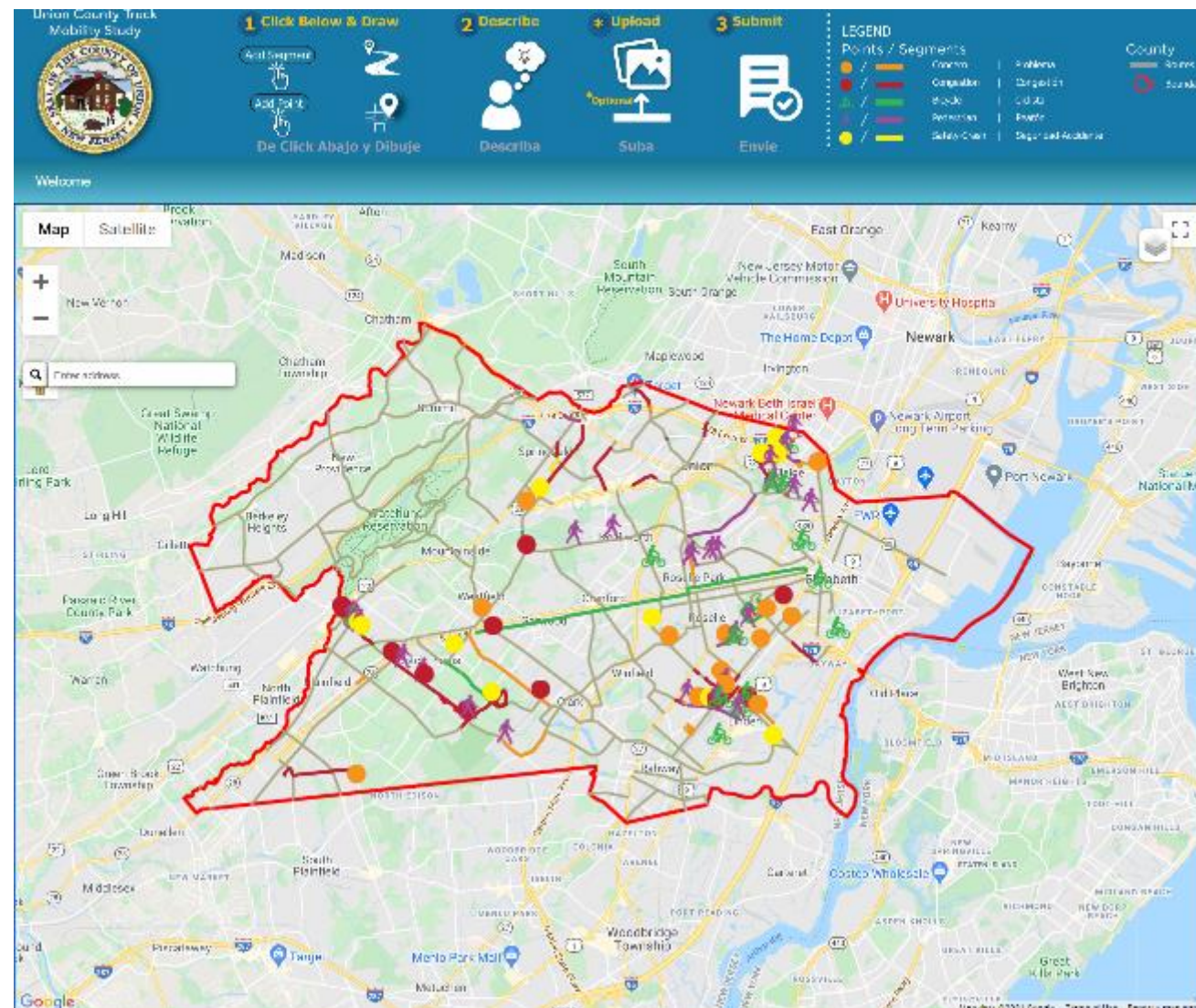
## Remaining Milestones





# Outreach

- **Wikimap**
  - **136 Responses**
    - Congestion – 36
    - Pedestrian – 36
    - Concern – 31
    - Bicycle – 18
    - Safety - 15
  - **Common Themes:**
    - Traffic – Pedestrian – Narrow – High Crash – Trucks - Schools
- **Focus Group Outreach:**
  - **Municipal**
    - 15 Survey Responses
  - **Freight Industry**
    - 8 Survey Responses
  - **Bike/Ped**
    - 14 Participants
- **Pending:**
  - Public Meeting





# Focus Group Surveys - Municipal

Is there a perception that trucks are a concern in your municipality?

**13/15 - Yes**

If yes, how has that perception changed during 2020?

**8/13 - Getting Worse**

In the next five years do you expect substantial growth in your municipality for warehousing or industrial uses or other land uses that generates substantial volumes of truck traffic?

**8/14 - Yes**

Truck  
street  
traffic

Bridge

Cong

Lack

Specific Issues



Park Avenue (CR 655) (Scotch Plains)

Vauxhall at Liberty – ped. signal/bridge strikes  
(Union Twp)



# Focus Group Surveys – Trucking Industry

Is inconsistent or incorrect mapping/info pushing drivers onto residential streets?

**3/7 – Yes**

Issues:

**GPS/Traffic  
Controls/Signage/  
Loading Zones**

Other Concerns:

**Roadway repairs that  
require lane closures  
Truck routing signage  
Snow Removal**

**Congestion**

Poor Roadway  
Condition

Desire to be Safe  
and Efficient

Bridge weight limits

Concerns and Bottlenecks

Street Lighting on  
Randolph Avenue  
(Rahway)

**Bridge Clearances -  
Detours**

**Turning Radii**

**Wayfinding signage**

Roadway Improvements

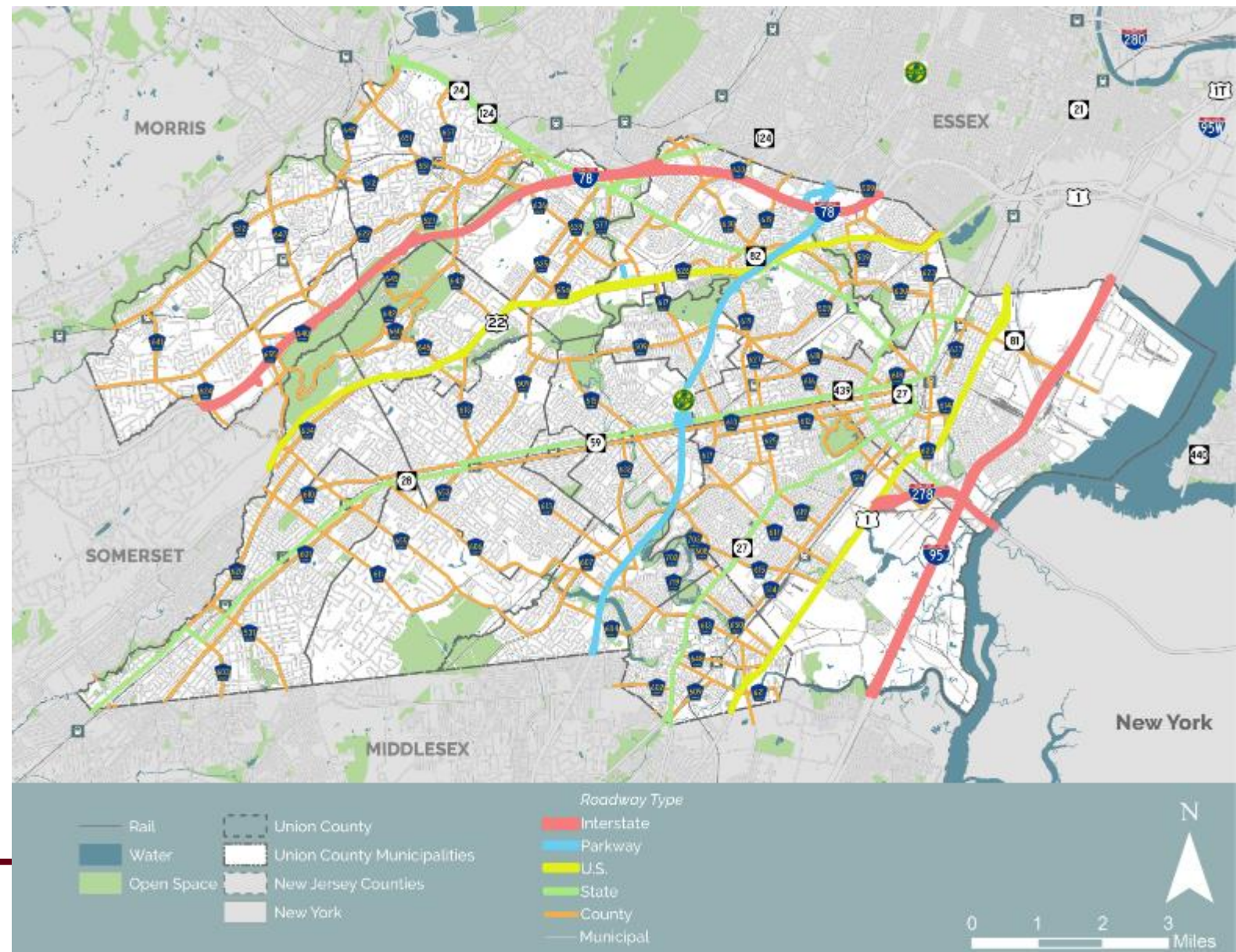
What does the trucking industry need?





# Existing Network

- Study is focused on County roadway network
- 174 miles of roadway
  - 5 – 500 series routes
  - 58 – 600 series routes
- Backbone of mobility for the County
- Provides connections between origins/destinations and the regional network





# Bridge Clearances

- 23 bridges on County roadways below 14'-6"
- 18 involve rail crossings

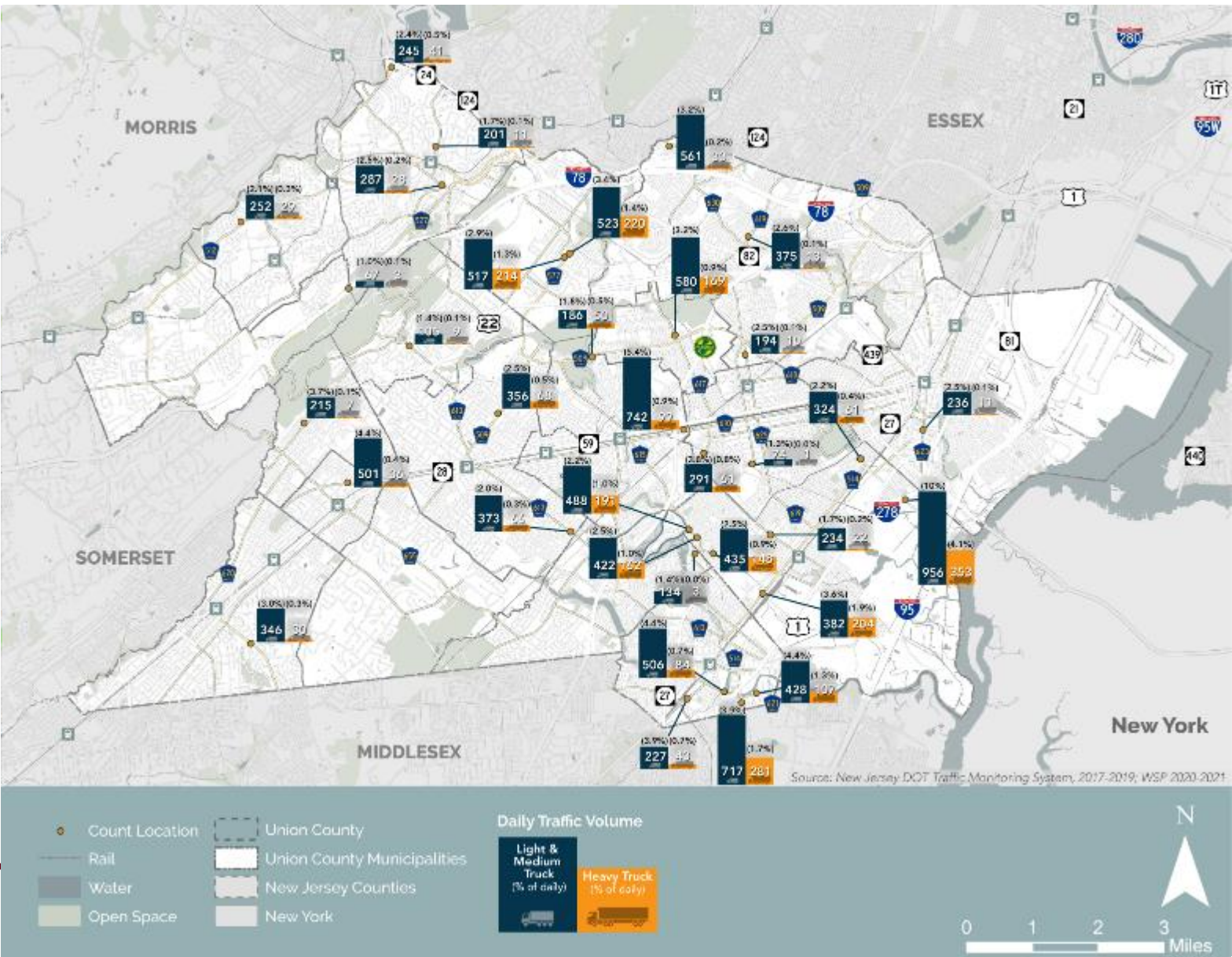
Roadway		Crossing Road/Rail	Clearance (feet)	Municipality
Passaic Ave	CR 649	Morristown Line	11.58	Summit
Locust St	CR 619	Lehigh Line/RVL	12	Roselle Park
Wood Ave	CR 617	Northeast Corridor Line	12.58	Linden
Scott Ave	CR 652	Northeast Corridor Line	12.9	Rahway
New Brunswick Ave	CR 609	Jersey Coast Line	12.9	Rahway
Hazelwood Ave	CR 621	Northeast Corridor Line	13.1	Rahway
Conant St	CR 630	Lehigh Line/RVL	13.2	Hillside
Walnut Ave	CR 632	Garden State Parkway	13.5	Clark
Pearl St	CR 614	US 1&9	13.71	Elizabeth
Pearl St	CR 614	Northeast Corridor Line	13.75	Elizabeth
Centennial Ave	CR 615	Raritan Valley Line	13.75	Cranford
Central Ave	CR 613	Raritan Valley Line	13.99	Westfield
Walnut Ave	CR 632	Lehigh Line/RVL	14	Cranford
Central Ave	CR 613	Garden State Parkway	14.1	Clark
Grand Ave	CR 514	Northeast Corridor Line	14.1	Rahway
Milton Ave	CR 608	Northeast Corridor Line	14.1	Rahway
Chestnut St	CR 627	Lehigh Line/RVL	14.19	Roselle Park
Central Ave	CR 613	Garden State Parkway	14.2	Clark
Centennial Ave	CR 615	Lehigh Line/RVL	14.2	Cranford
Faitoute Ave	CR 617	Lehigh Line/RVL	14.29	Roselle Park
Plainfield Ave	CR 663	Interstate 78	14.42	Berkeley Heights
Stiles St	CR 615	Northeast Corridor Line	14.42	Linden
Galloping Hill Rd	CR 616	Lehigh Line/RVL	14.46	Roselle Park





# Traffic Counts

- Reviewed traffic counts from NJDOT database
  - 435 Collected
    - 180 in County roads
- Identified supplemental (primary) count locations
  - to fill gaps,
  - and confirm volume trends

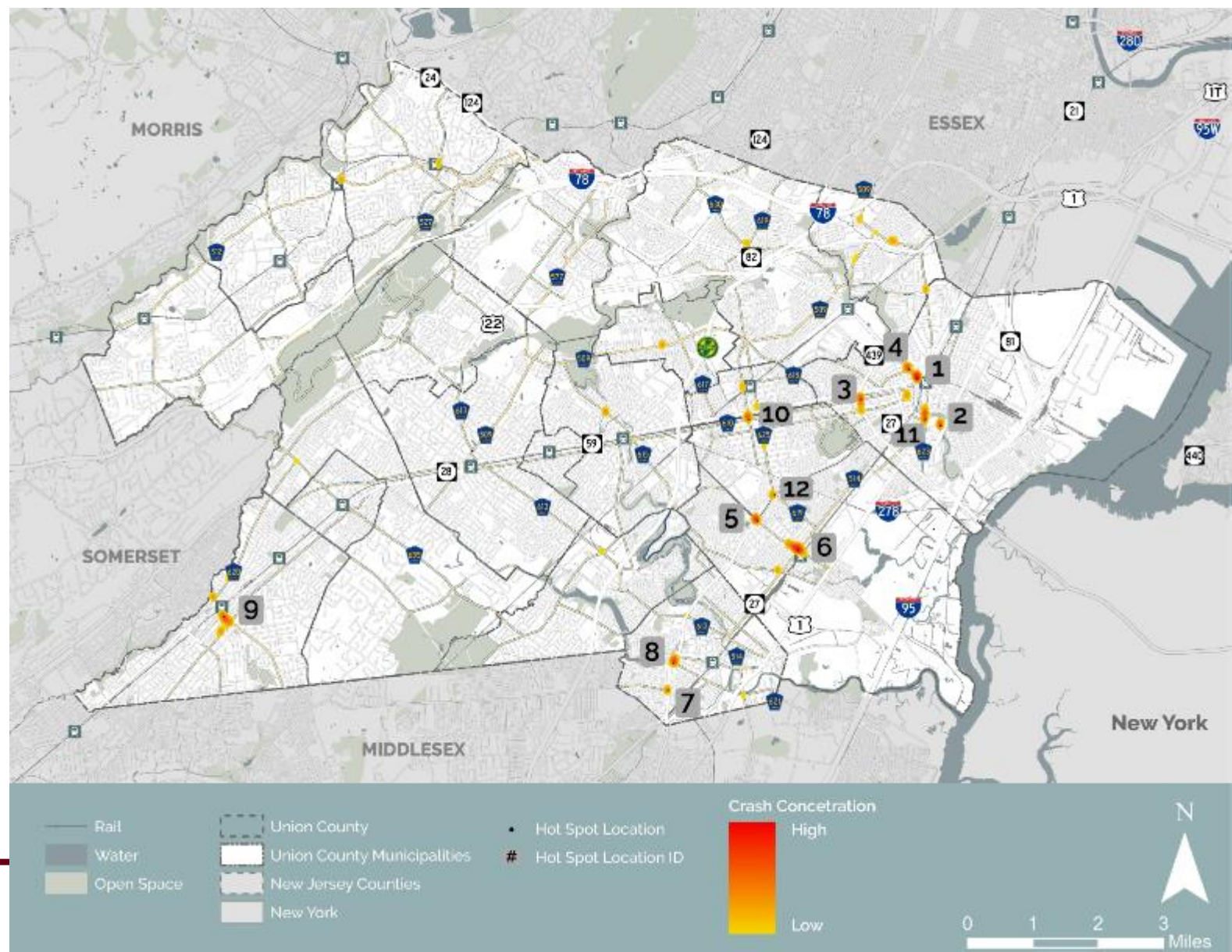






# Crash Data (2016 – 2018)

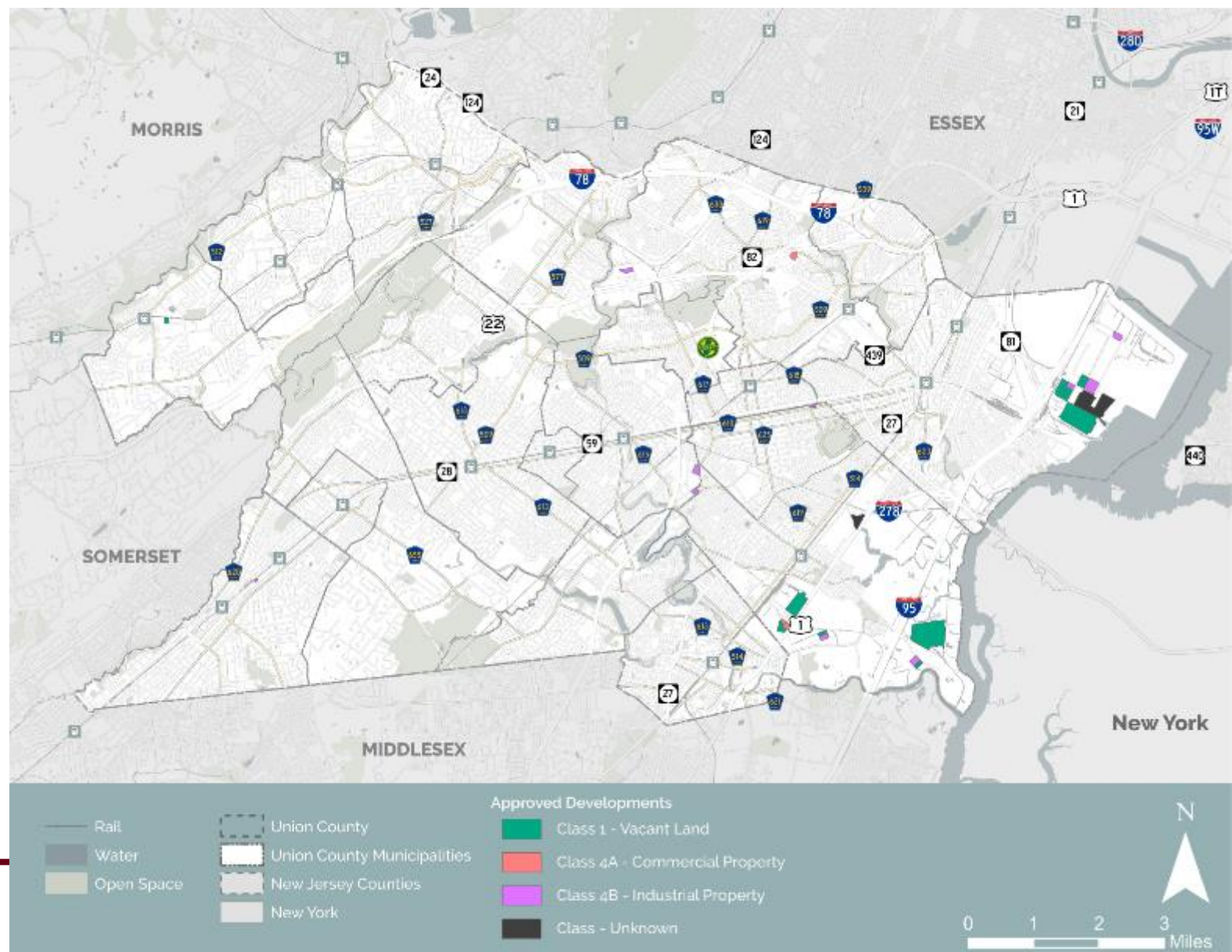
- **61,817 total crashes**  
(1,618 involving trucks, 2.6%)
  - **County roadways – 18,212**  
(880 Involving trucks, 4.8%)
- **Identified truck crash clusters**
- **Identified bike/ped crash clusters**
- **Reviewed NJDOT Network Screening Lists**





# Freight Land Uses

- Identified clusters of outbound and inbound tonnage
- Clusters of industrial developments
  - Square footage
  - Sales volume
  - Employment
- Approved Developments

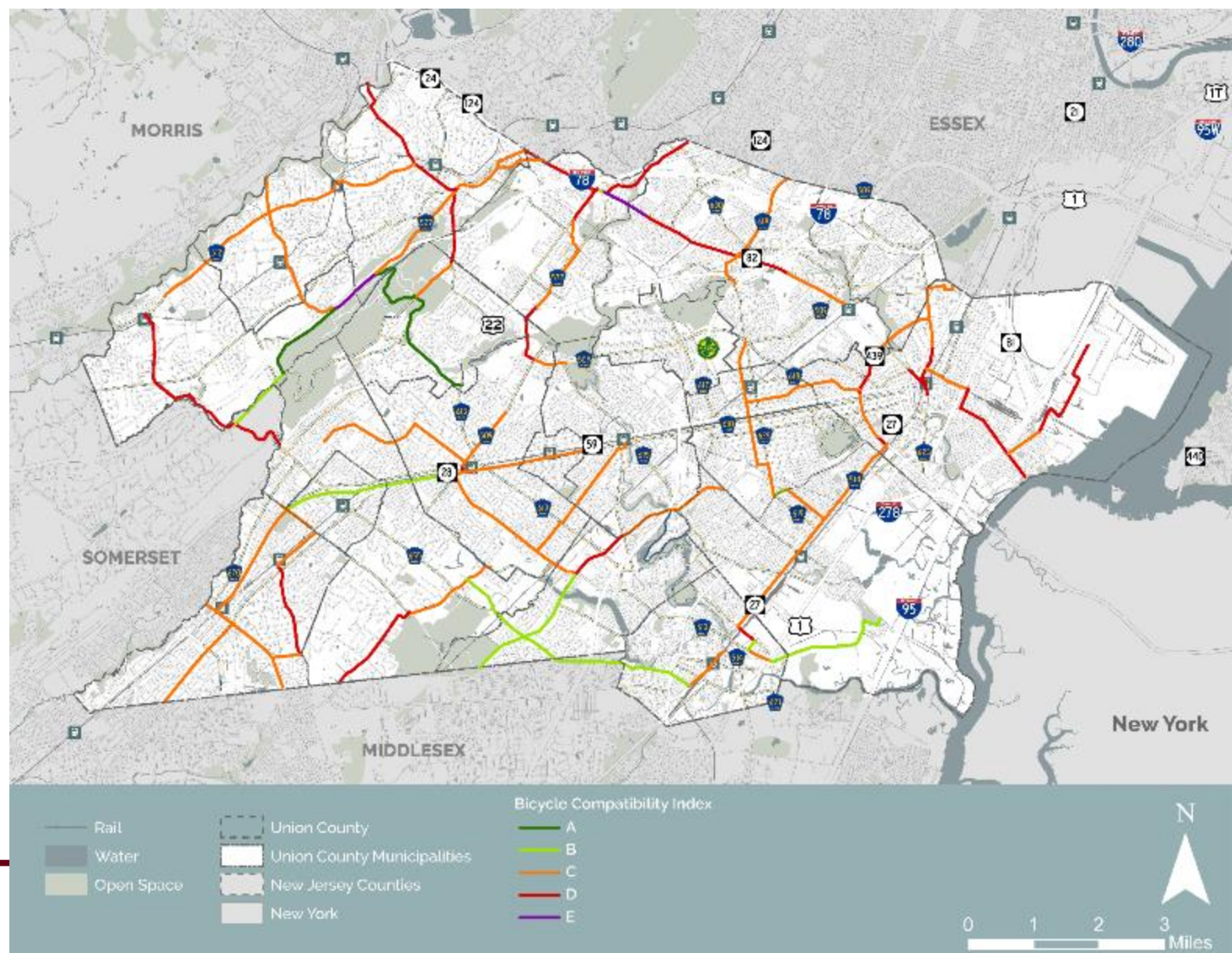






# Additional Datasets

- Identification of potential conflict areas with non-motorized traffic
  - Schools
  - Bicycle compatibility

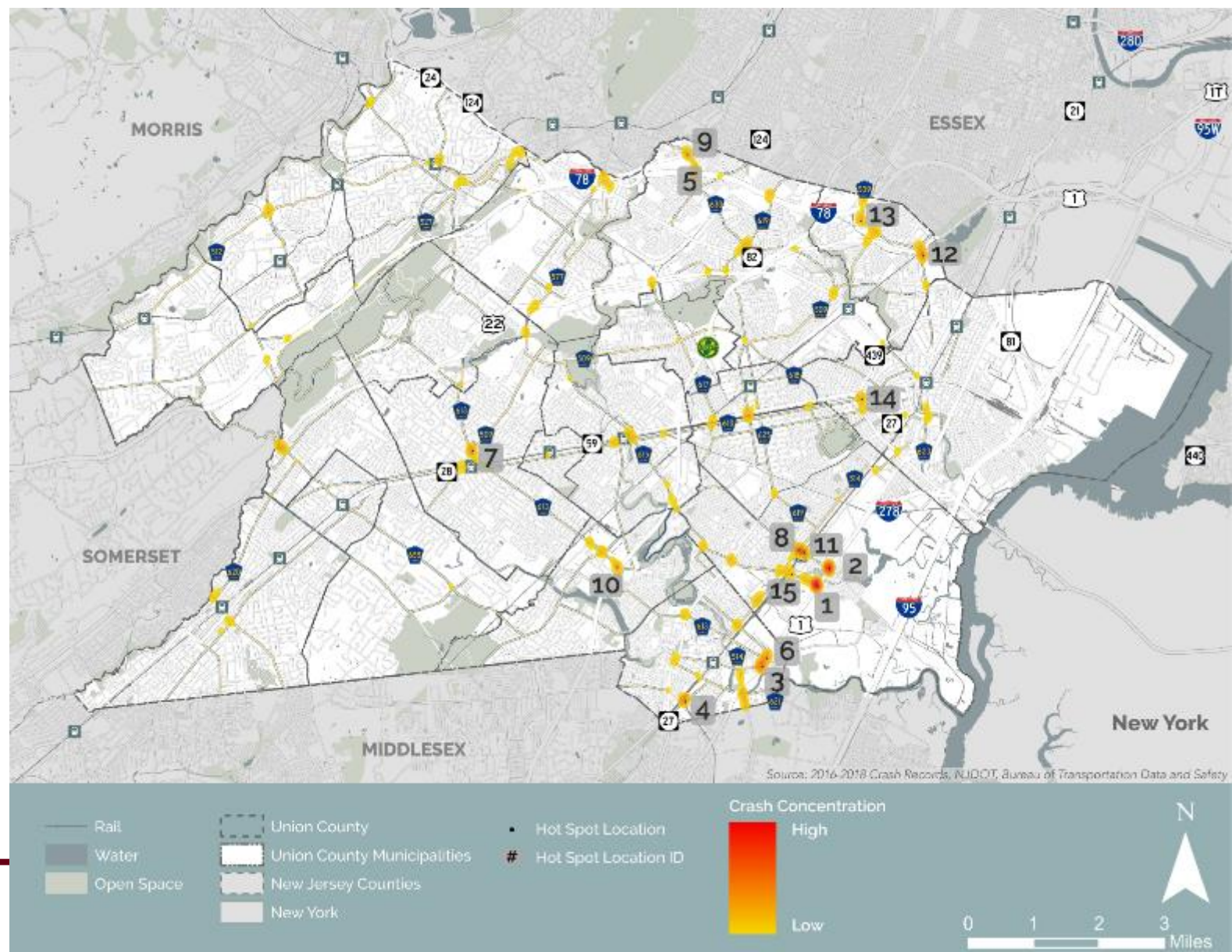






# Site Identification

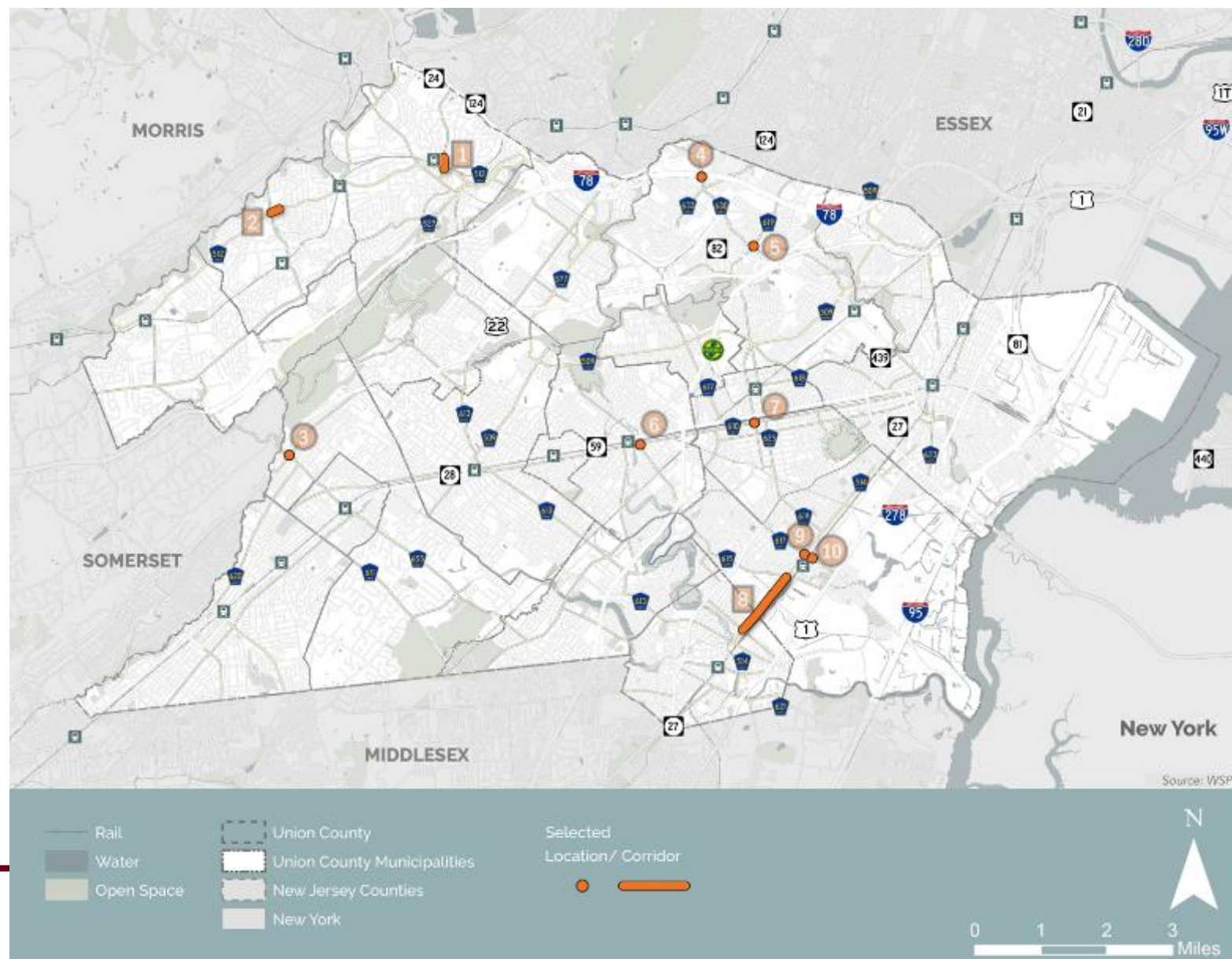
- Identified freight generating clusters
  - Land use
  - Industry data: size, employment, sales volume, and tonnage
- Looked at existing truck traffic patterns
  - NJ Truck Access Network
  - Vertical Clearances
  - Challenging geometries - Turning radii
  - Truck volumes
- Identified impacts
  - Truck crash clusters
  - Bike/Ped crash clusters
- Convergence of truck activity and impacts





# Improvement Locations

- Initial list of **~40** sites identified
  - Data analysis
  - Wikimap
  - Focus groups
  - County input
  - EJ analysis
- 10 sites advanced for planning level concepts







# Candidate Improvement Locations

Loc.	Street Name	Cross Street	Municipality	Crash Hotspot	Truck Generator s	Connector Route	High Volume/ Flow	Point of Interest
1	Summit Ave (CR	Between Broad St Springfield Ave	Summit	Truck/ BikePed	Y	NJ 24	N	
2	Springfield Ave	Between Passaic St Academy St	New	Truck	Y	NJ 24	N	New Providence
3	New Providence Rd	Park Ave (CR 655)/ (CR 641)	Scotch	Truck	Y	I-78/ US 22	N	Weldon Concrete School
4	Vauxhall Rd (CR	Liberty Ave	Union	Truck	Y	I-78/ US 22	Y	Jefferson
5	Vauxhall Rd (CR	Stuyvesant Ave (CR	Union	Truck/ BikePed	Y	I-78/ US NJ 28	N	
6	South Ave (CR 610)	Centennial Ave (CR	Cranford	Truck	N	US 1/ NJ 28	Y	Lincoln School
7	1st Ave (CR 610)	Locust St (CR 619)	Roselle	Truck/ BikePed	N	US 22/ NJ	Y	
8	Elizabeth Ave (CR	Scott Ave (CR 650) 615)	Linden	Truck	Y	CR parallel 27	Y	Former GM Plant
9	Elizabeth Ave (CR	Wood Ave (CR 617)	Linden	Truck/ BikePed	Y	US 1/ NJ US 22	-	Linden Train
10	Wood Ave (CR 617)	Linden Ave	Linden	Truck/ BikePed	Y	US 1/ NJ US 22	-	Linden Train

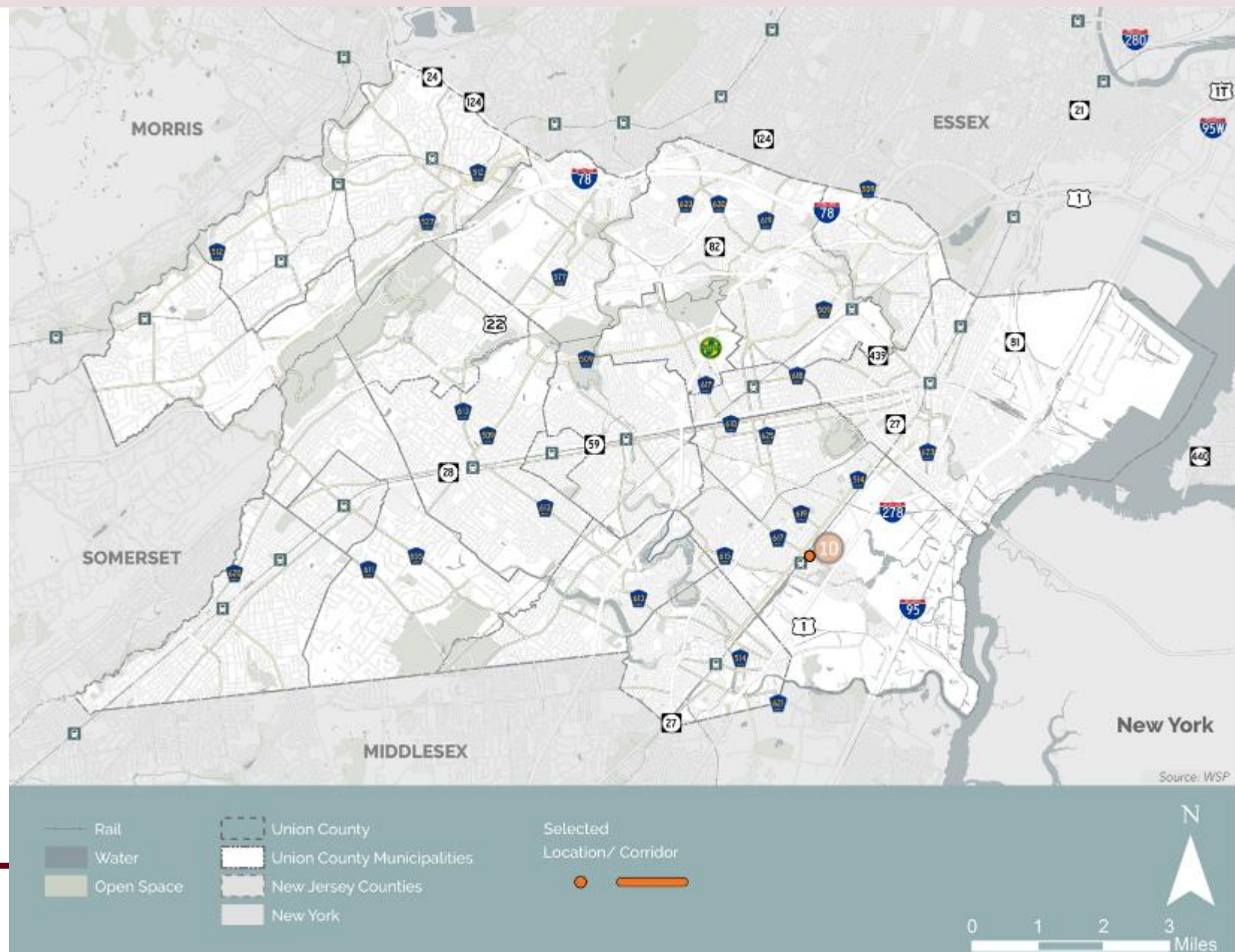
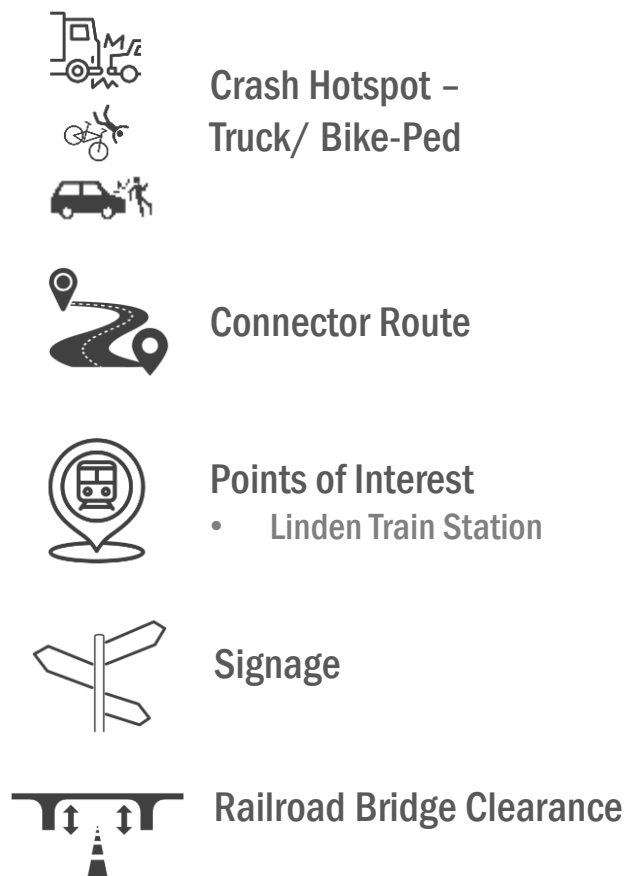


# Improvement Types

Improvement Type		Focus Area				
		Capacity	Demand Management	Circulation	Safety	Bicycle/ Pedestrian
	Increased Capacity	●		●		
	Signage		●	●	●	
	Wayfinding Improvements			●	●	
	Signal Improvements	●		●	●	
	Truck Prohibitions		●	●	●	●
	Alternate Routing			●	●	●
	Striping Improvements			●	●	
	Increased Bridge Clearances		●	●		
	Bicycle or Pedestrian Improvements			●	●	●
	Operator Outreach		●	●		



# Wood Ave at Linden Ave – Identified Issues







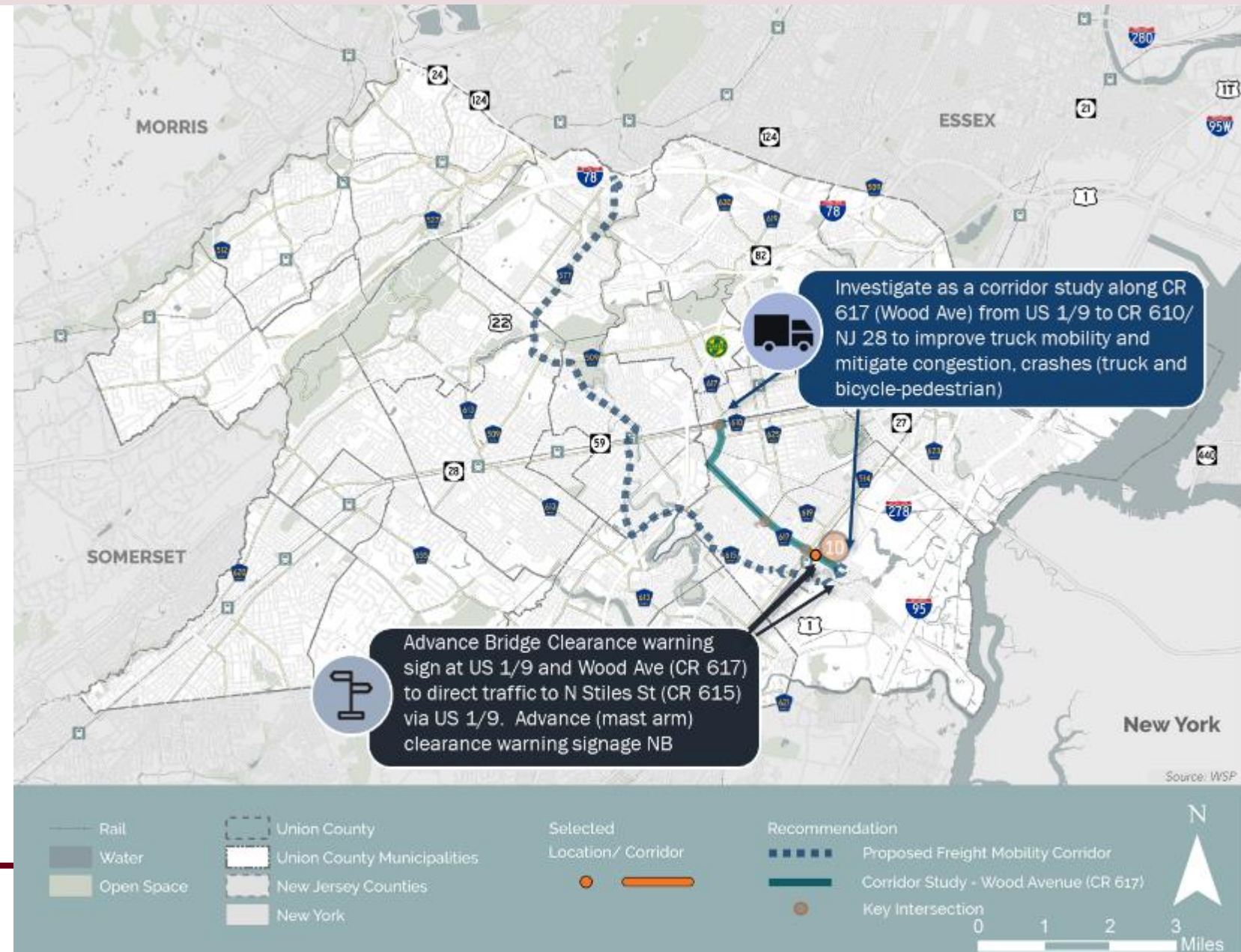
# Wood Ave at Linden Ave – Recommendations



Truck Mobility Improvement  
*Corridor Study*



Wayfinding and Signage  
Improvement







# Wood Ave at Linden Ave - Recommendations







# Vauxhall Rd at Liberty Ave – Identified Issues



Crash Hotspot – Truck



Connector Route



Intersection Geometry



Points of Interest

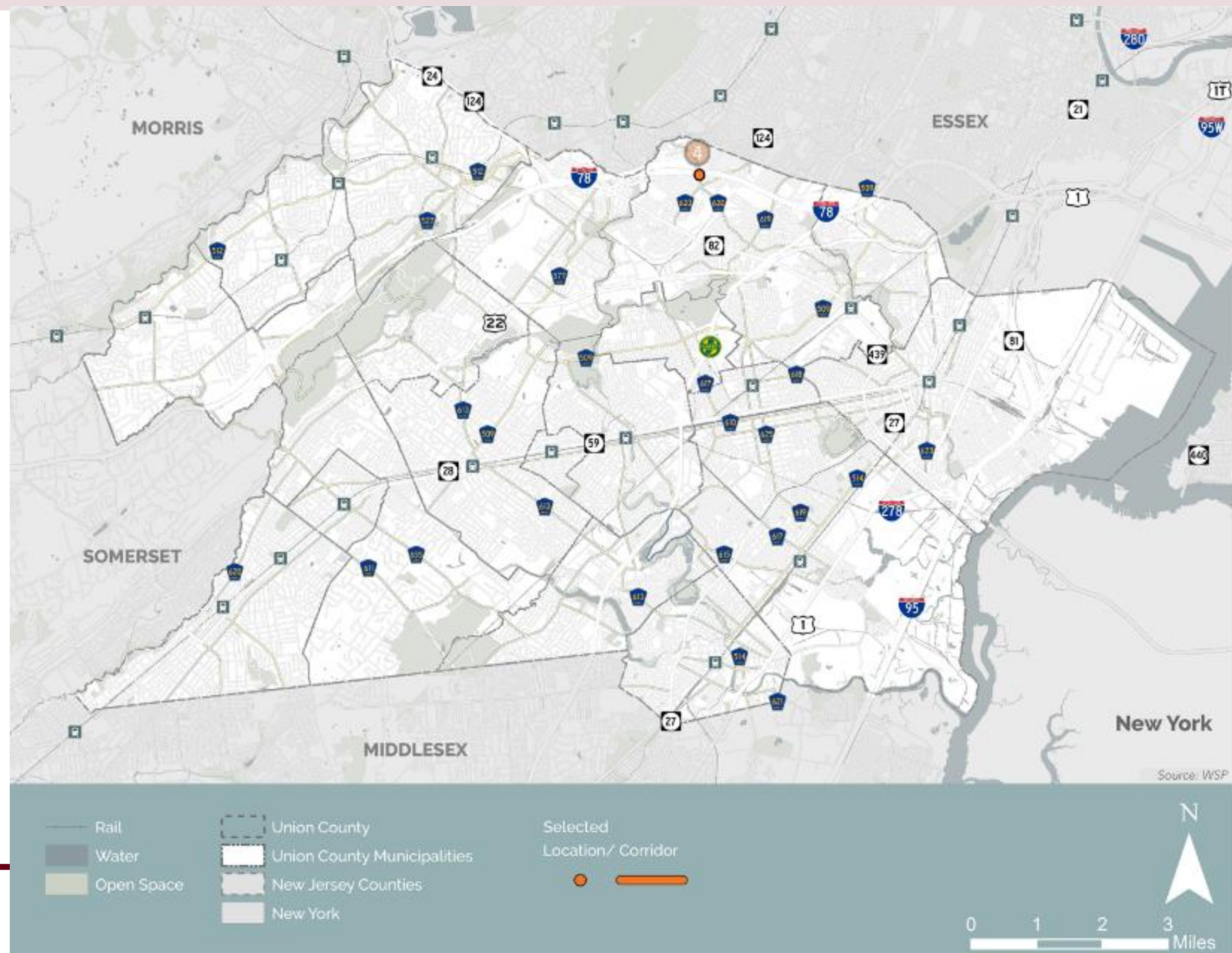
- Jefferson Elementary



Signage



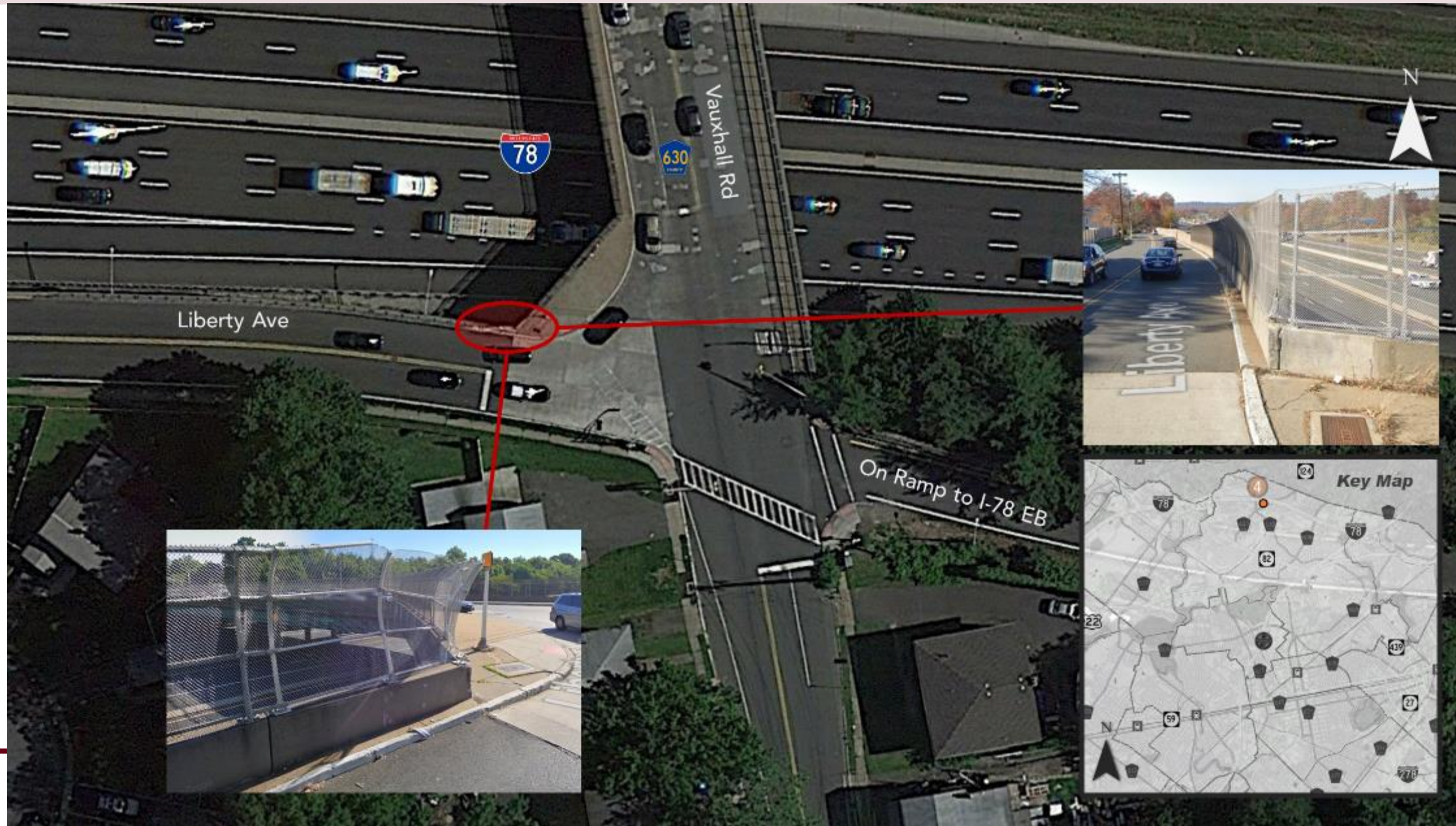
High Truck Volumes







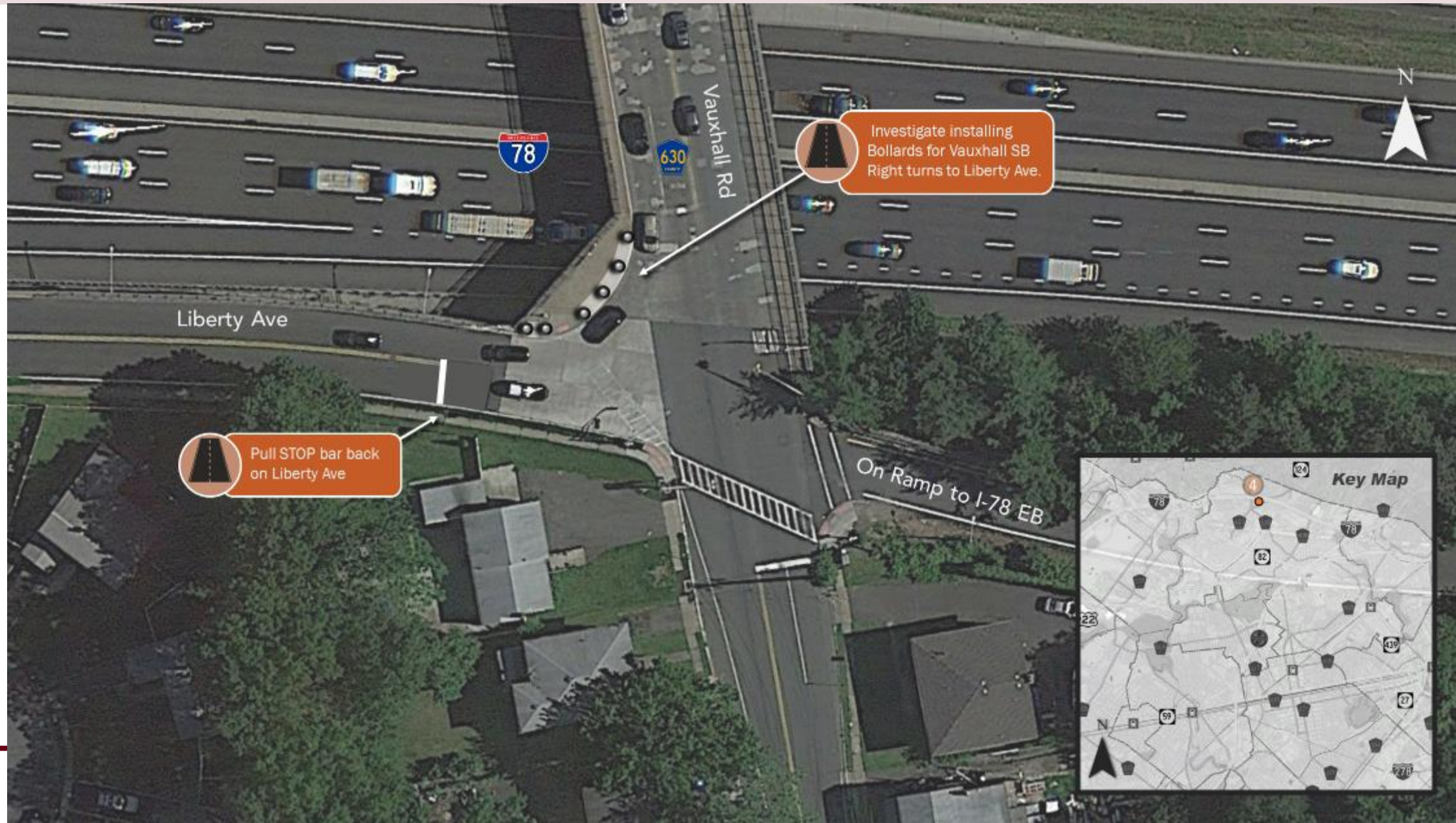
# Vauxhall Rd at Liberty Ave – Identified Issues







# Vauxhall Rd at Liberty Ave – Recommendations



Pull STOP bar back on Liberty Ave



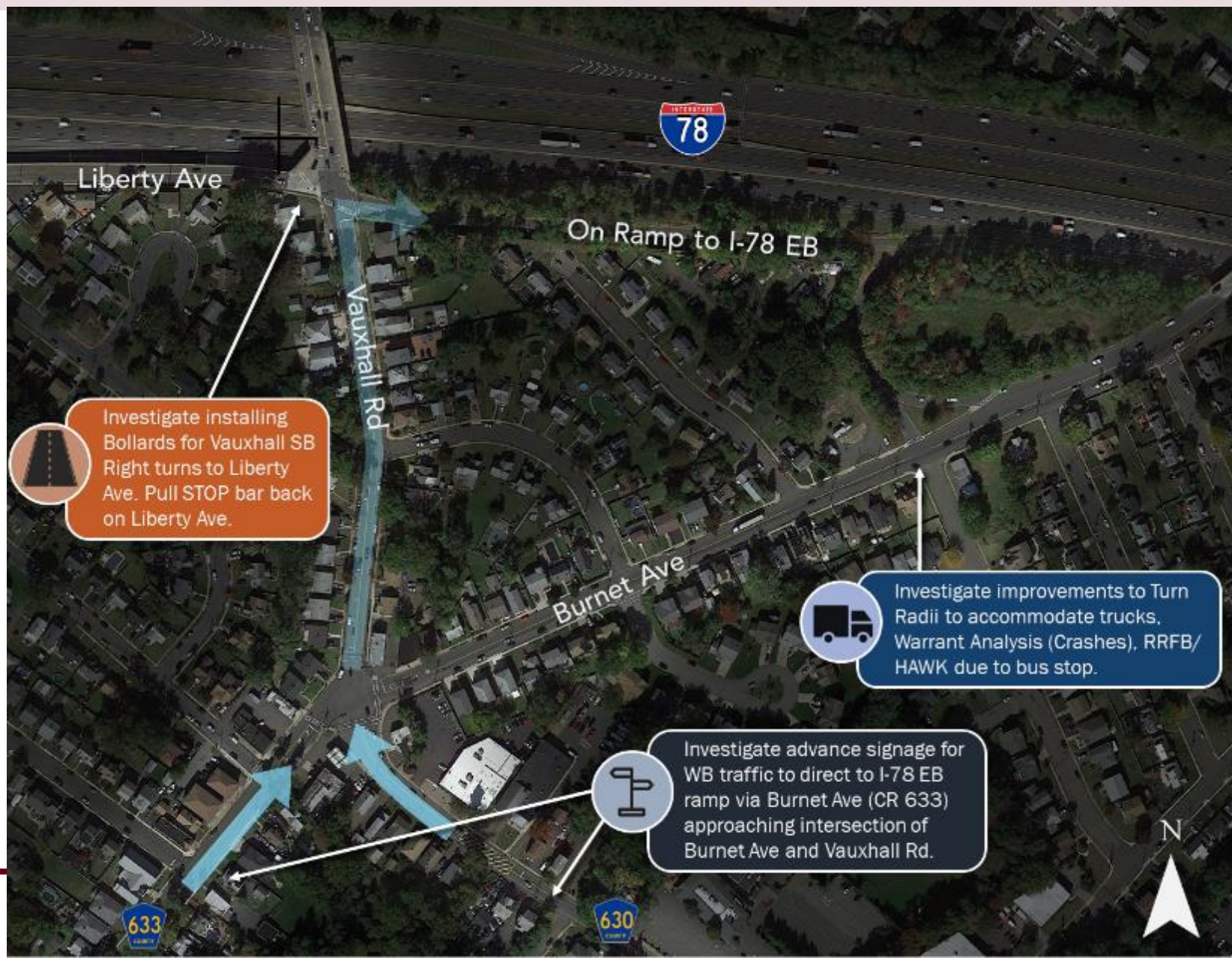
Investigate installing Bollards for Vauxhall SB Right turns to Liberty Ave.







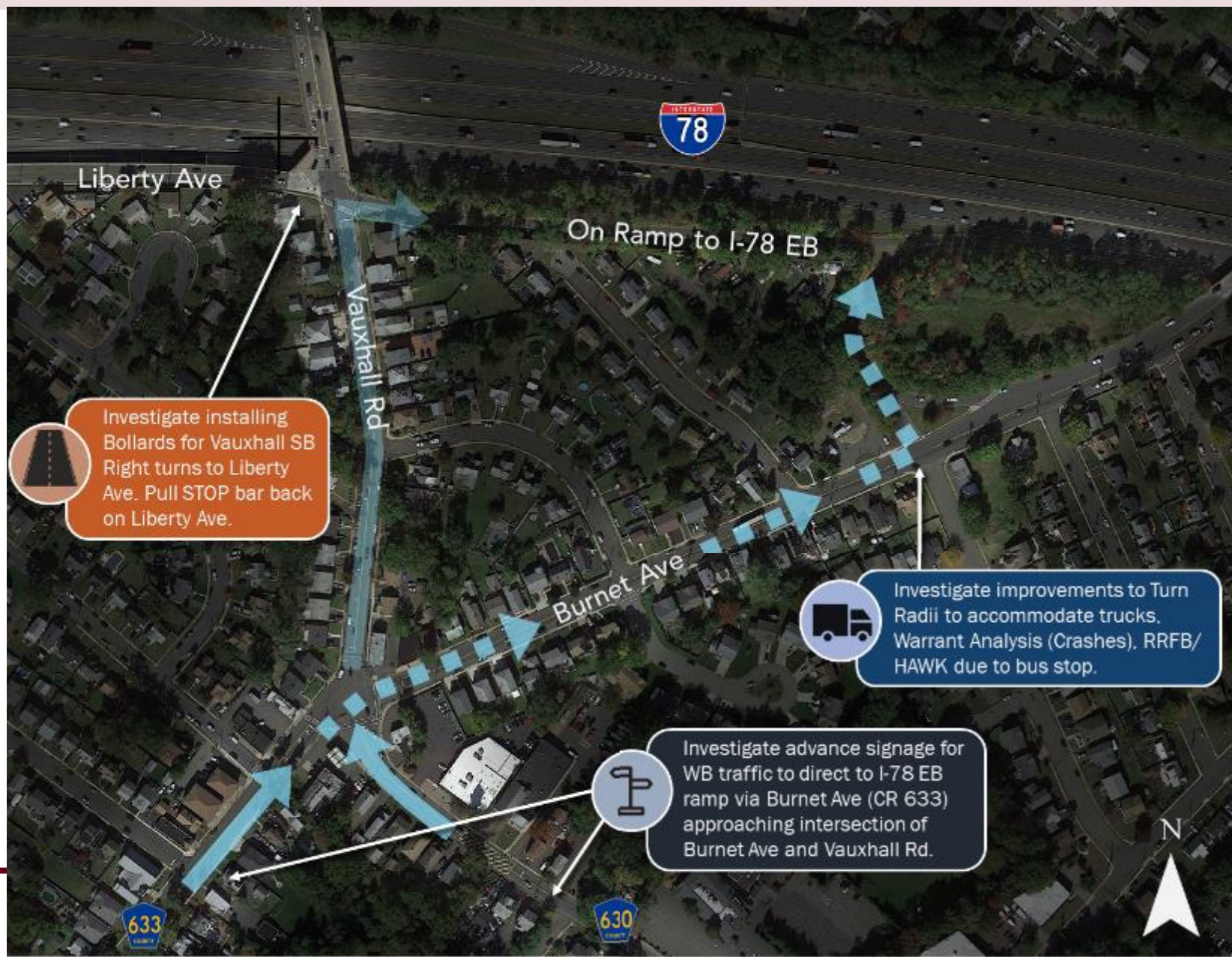
# Vauxhall Rd at Liberty Ave - Recommendations







# Vauxhall Rd at Liberty Ave - Recommendations











# New Providence Rd at Park Ave – Recommendations



Truck Mobility Improvement  
*Corridor Study*



Wayfinding and Signage  
Improvement



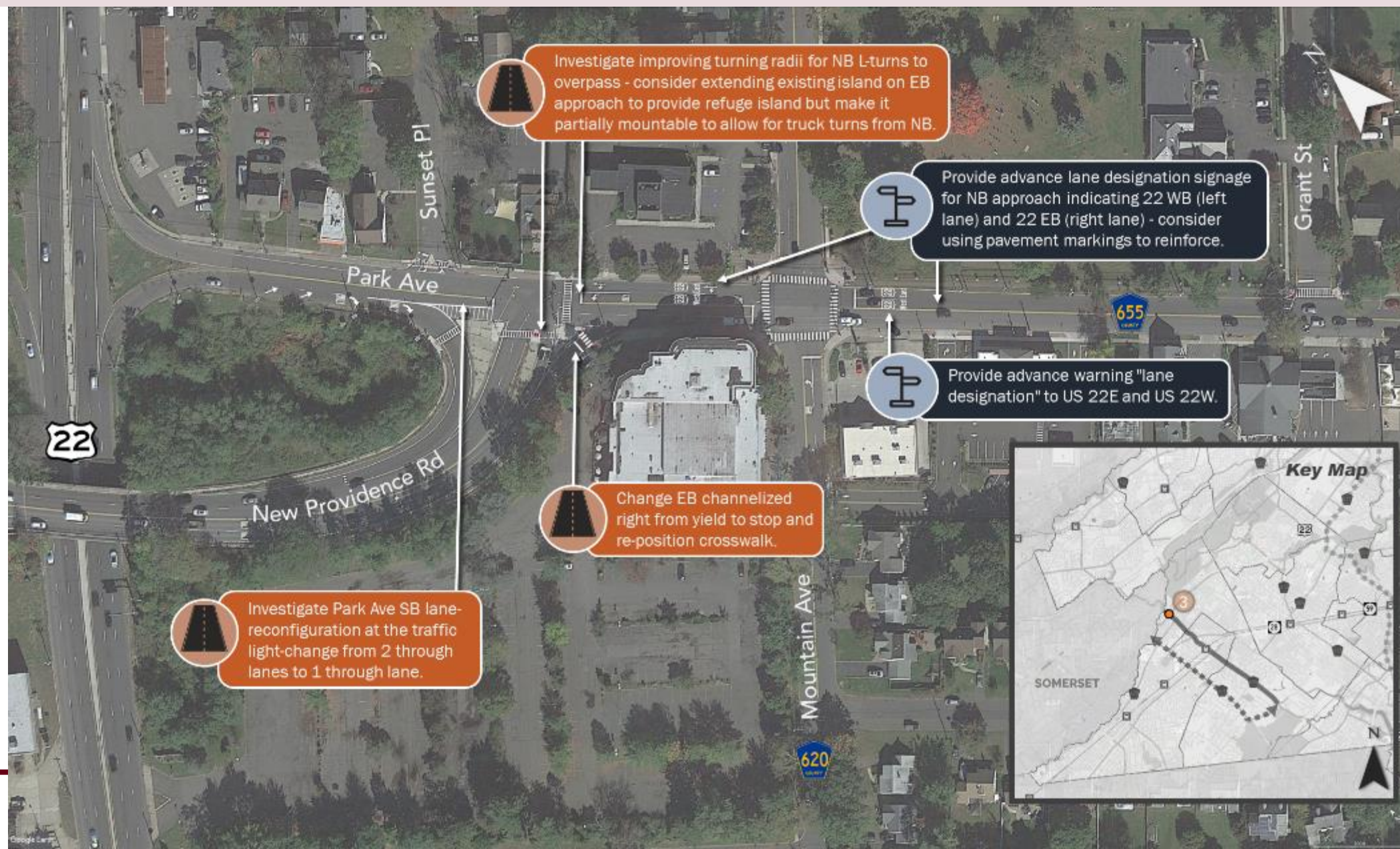
Roadway/ Infrastructure  
Improvement







# New Providence Rd at Park Ave – Recommendations







# Next Steps and Contacts

- Public Meeting and Newsletter #2
- Finalize concepts at Improvement Sites with County staff
- Prepare Draft Document and share with TAC for review

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