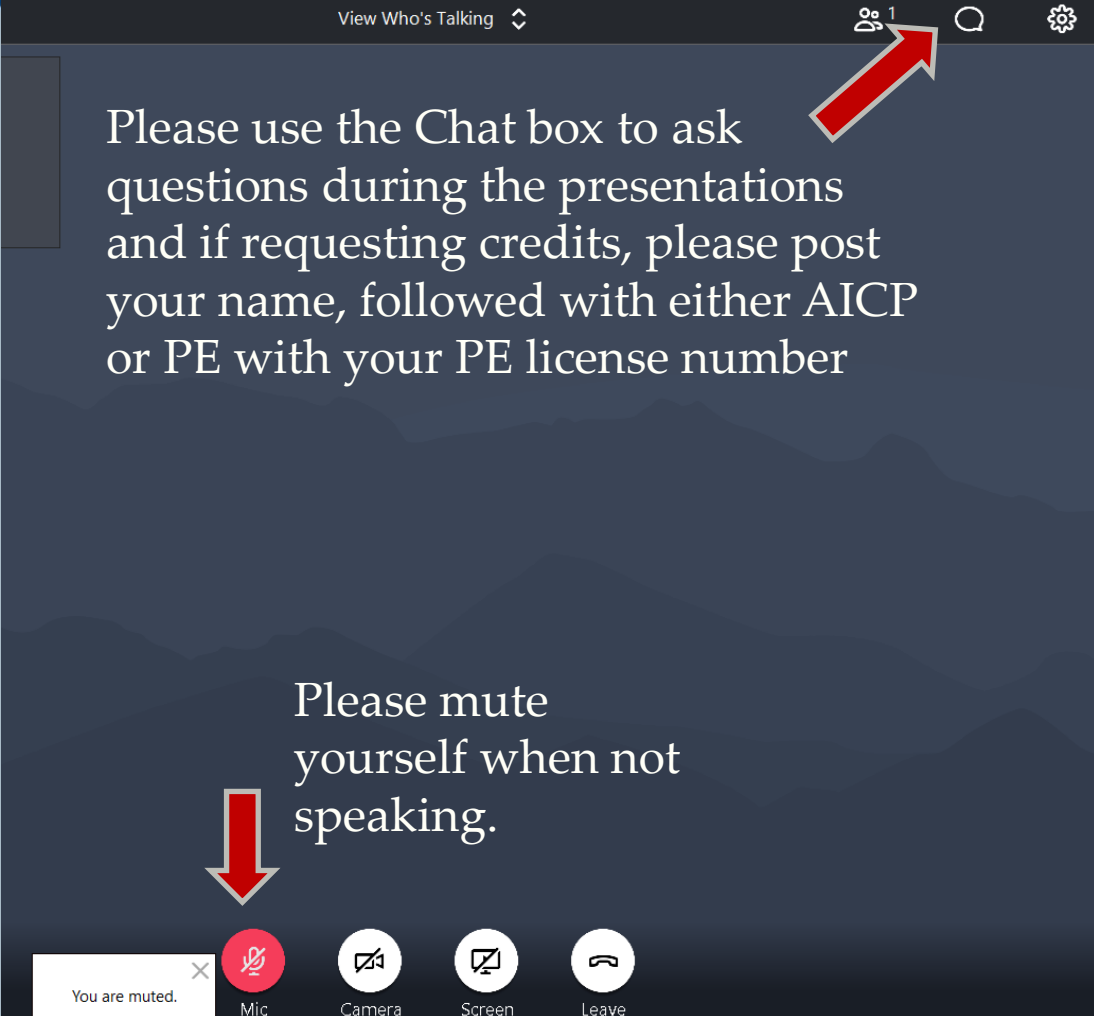


August 15 Freight Initiatives Committee Agenda

- Roll Call of Members
- Approval of Minutes
- Update on NJTPA Freight Division Activities
- 2022 New Jersey State Freight Plan Update and Discussion
 - Genevieve Clifton, Manager, Maritime Resources, Freight Planning and Grants Management, New Jersey Department of Transportation
 - Stephen Chiaramonte, AICP/PP, Assistant Vice President, Supervising Transportation Planner, Project Delivery Manager, Eastern Pennsylvania, WSP
- Two-minute Reports on Freight Activities from Committee Members
- Next Meeting: Monday, October 17, 2022 – Strategies and Effective Practices for Planning for and Working with Developers on Industrial Development in Communities
- Adjournment

A screenshot of a Zoom meeting interface. At the top, it says "View Who's Talking" with a dropdown arrow. On the right, there are icons for a chat box (with a red arrow pointing to it and a "1" above it), a search icon, and a settings gear icon. The main area contains white text on a dark background: "Please use the Chat box to ask questions during the presentations and if requesting credits, please post your name, followed with either AICP or PE with your PE license number". Below this, another line of text says "Please mute yourself when not speaking." with a red arrow pointing down to the "Mic" button in the bottom toolbar. The toolbar also includes "You are muted.", "Camera", "Screen", and "Leave" buttons.

View Who's Talking

Please use the Chat box to ask questions during the presentations and if requesting credits, please post your name, followed with either AICP or PE with your PE license number

Please mute yourself when not speaking.

You are muted. Mic Camera Screen Leave

2Q22 Industrial Market

- 860 million SF in the region
- 13.1 million SF under construction



840K SF lease to List Logistics in former Toys'R'Us bldg. in Morris County
Source: Re-NJ.com



191K SF spec building under construction in North Brunswick
Source: Re-NJ.com

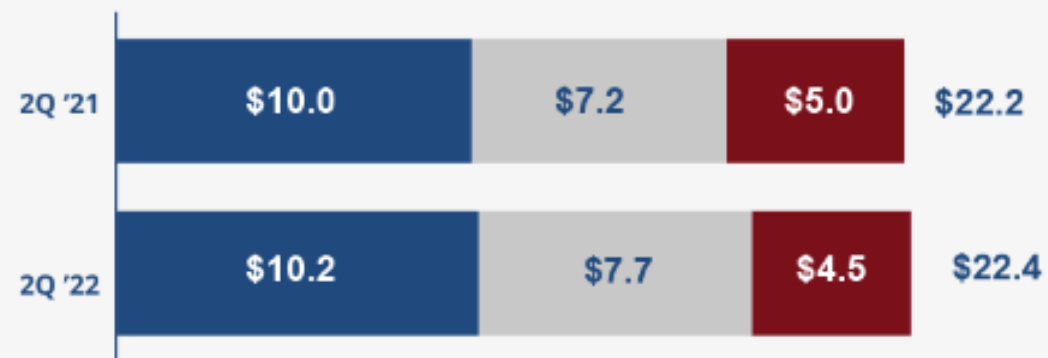


IDI Lease of 111K SF building to Lowes in Passaic
Source: Re-NJ.com

Buy On-Line Remains a Key Market

U.S. Online Grocery Sales: 2nd Quarter YOY

Total spending past 90-day periods - Billions, USD

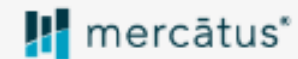


- Pickup** includes in-store, curbside, lockers, and drive up
- Delivery** includes first- and third-party providers
- Ship-to-Home** includes common and other parcel carriers

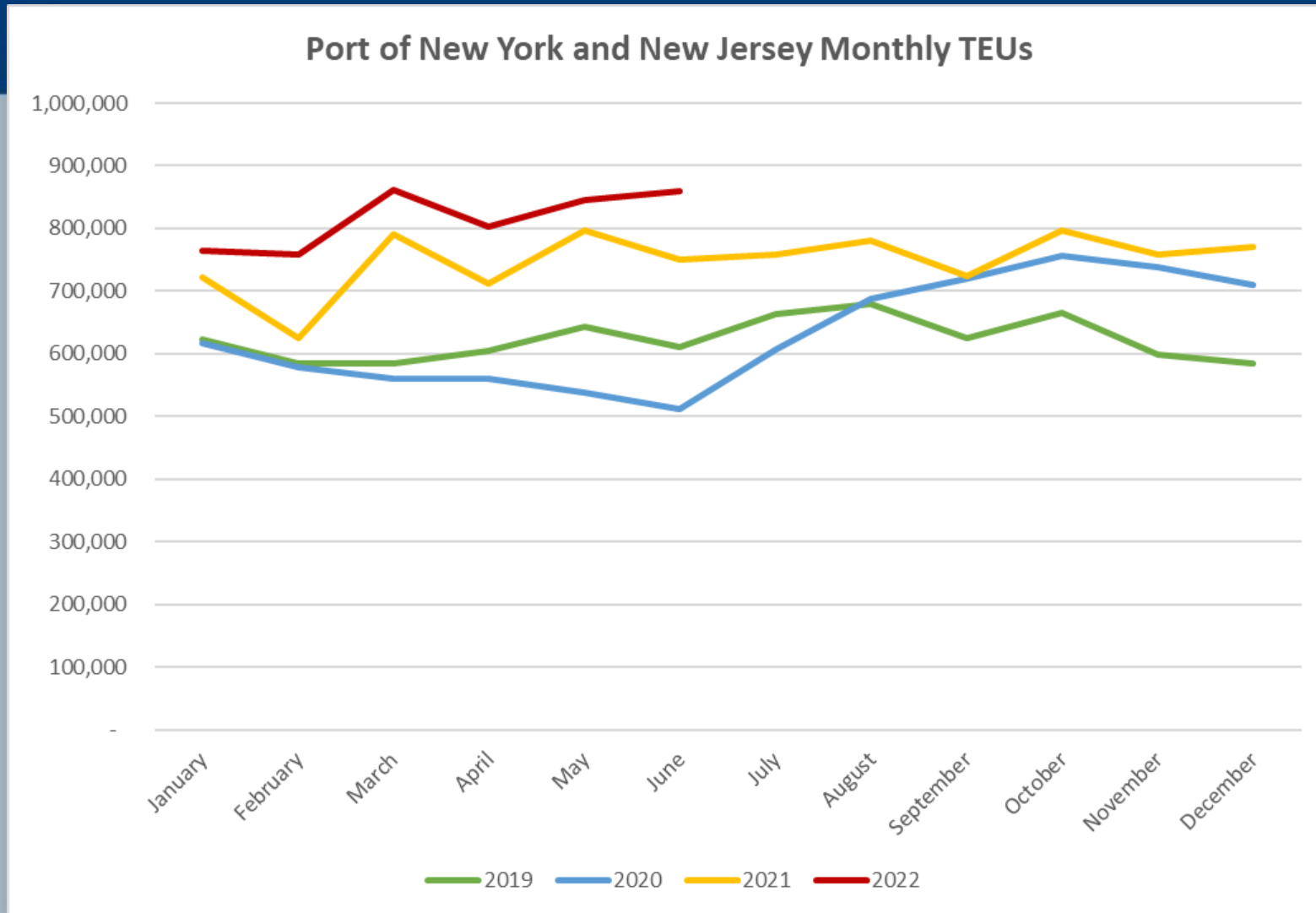
* Total may not be equal due to rounding.



Sources: Brick Meets Click/Mercatus Grocery Shopping Survey, April, May, and June 2021 and 2022.



Container Movements at the Port



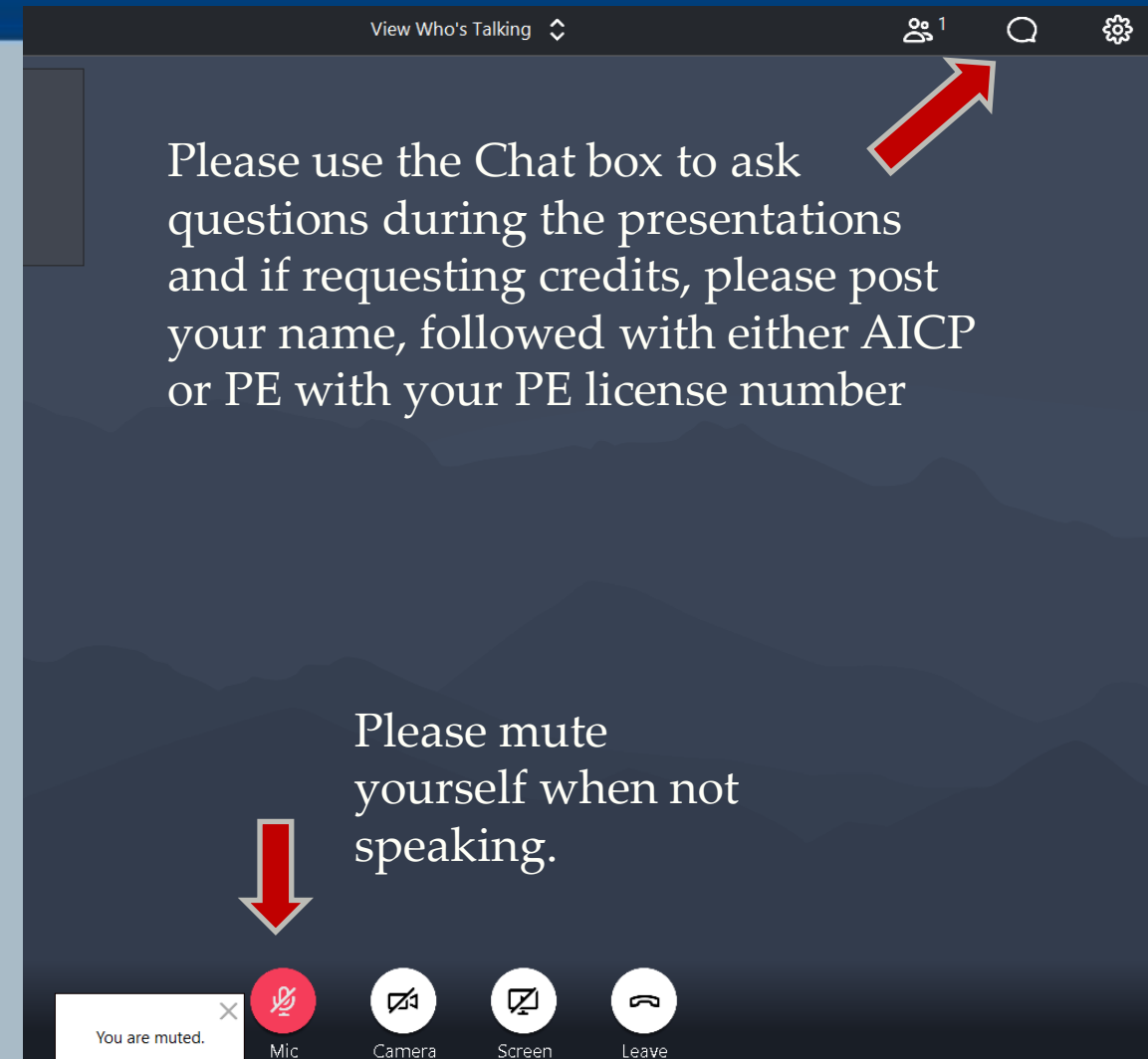
Source: Port Authority of New York and New Jersey

NJTPA Freight Division Update

- Updating and enhancing the Goods Movement Strategies for Communities Webtool
- Advancing FY 2021 Freight Concept Development Program
- Progressing the Rail Grade Crossing Assessment Update
- Beginning work on enhancing last mile commutation options for workers at freight facilities
 - Fall Peer Exchange/Workshop on Effective Practices Planned

New Jersey State Freight Plan Update

- **Genevieve Clifton**, New Jersey Department of Transportation
- **Stephen Chiaramonte**, WSP



A screenshot of a Zoom meeting interface. At the top, it says 'View Who's Talking' with a dropdown arrow, a '1' next to a person icon, a chat icon, and a settings gear icon. A red arrow points from the chat icon to the text below. The main text reads: 'Please use the Chat box to ask questions during the presentations and if requesting credits, please post your name, followed with either AICP or PE with your PE license number'. Below this, another red arrow points down to a 'You are muted.' notification box. To the right of the notification, the text says: 'Please mute yourself when not speaking.' At the bottom, there are icons for 'Mic' (muted), 'Camera', 'Screen', and 'Leave'.

View Who's Talking 1

Please use the Chat box to ask questions during the presentations and if requesting credits, please post your name, followed with either AICP or PE with your PE license number

You are muted. X

Please mute yourself when not speaking.

Mic Camera Screen Leave



NJTPA Freight
Initiatives
Committee
15 August 2022



New Jersey
Statewide Freight
Plan - 2022



2022 NJ Statewide Freight Plan

- Updating the last SFP - completed in 2017
- Much has changed in 5 years:
 - E-commerce expansion
 - COVID-19
 - Higher quality datasets
 - Focus on equity and quality of life
- NJ Freight industry thriving despite challenges

The 2022 New Jersey Statewide Plan is an actionable plan aimed at solidifying New Jersey's status as the world's premier freight and logistics nexus, advancing innovative technologies and state of the art infrastructure, and supporting the growth of the nation's most advanced transportation workforce.



NJ Statewide Freight Plan

- Federal Requirements
 - FAST Act/Infrastructure Investment and Jobs Act (IIJA)
- Existing Conditions
 - Highway
 - Rail
 - Maritime
 - Equity
- Plan Framework (Final Document)
- Schedule and Next Steps



In a few words, what is your number one priority for freight in New Jersey?

safety

Sustainable

Ease movement less community disruption

Equity

Increase in truck drivers

Improved rail access and service

Sustainability equity

Resilient

Meet supply/demand

In a few words, what is your number one priority for freight in New Jersey?

Cost efficient, environmentally sustainable, community considered, safe and resilient

a better balance between trucks and freight rail

Air quality

Redundancy

Capturing economic value

Increasing business hours being worked

Regional Economic Competitiveness

Safety and Equity

Can be leveraged to create economic opportunities

In a few words, what is your number one priority for freight in New Jersey?

Safety

marine highway

Cost

Balance freight and community impacts

shared responsibility for safety

Cognizant of, and connected to host communities in an equitable manner

Truck parking

Responsive

Alleviating congestion in Northern NJ
Redundancy in event of mishaps/blockage/accidents

In a few words, what is your number one priority for freight in New Jersey?

Multimodal

Acknowledging truck drivers

Congestion mitigation, carbon emissions mitigation

More use of rail to move freight within the region

partnerships

balancing the needs of the truck industry with congested urban areas

Rail connections

maritime connections

Rail connections

In a few words, what is your number one priority for freight in New Jersey?

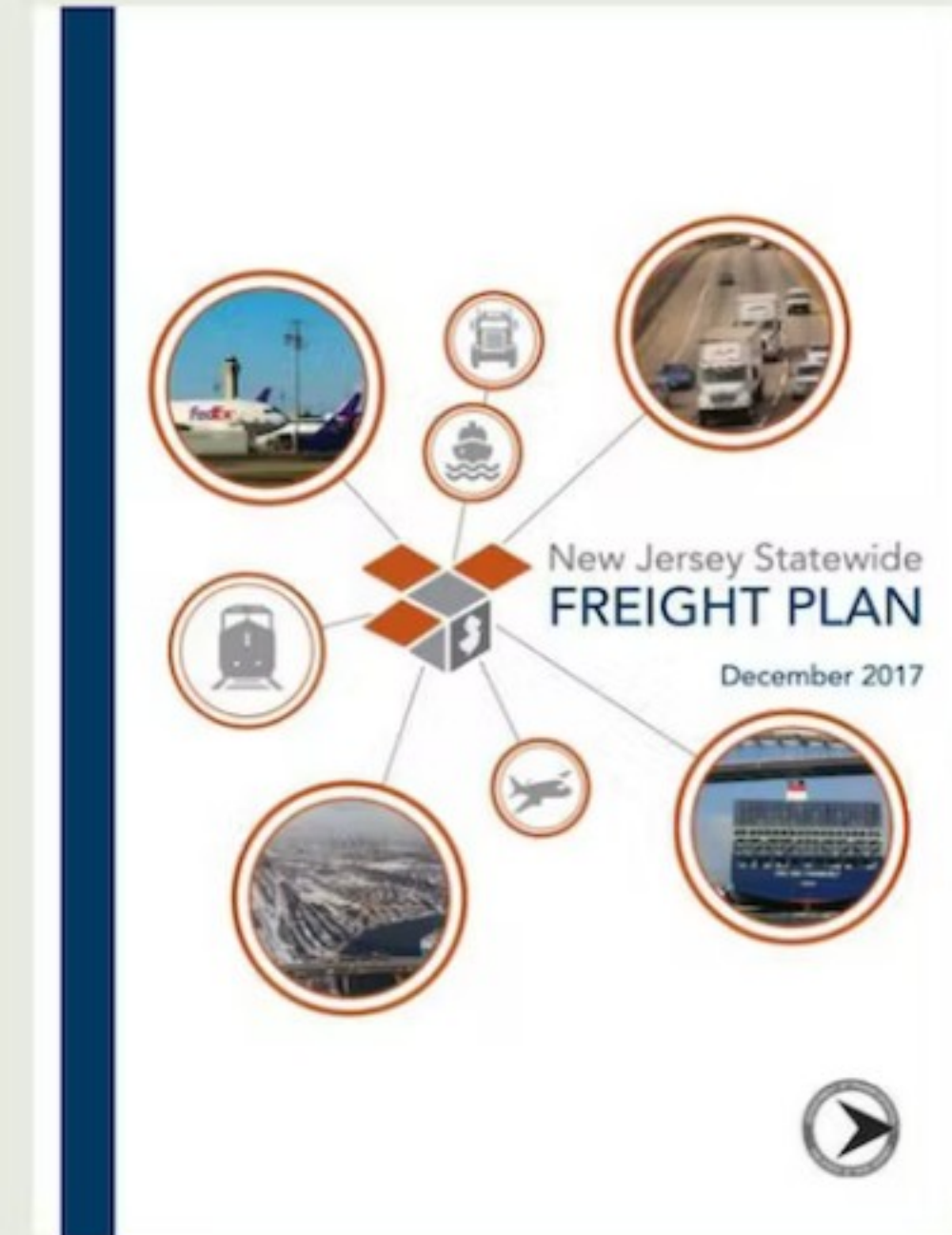
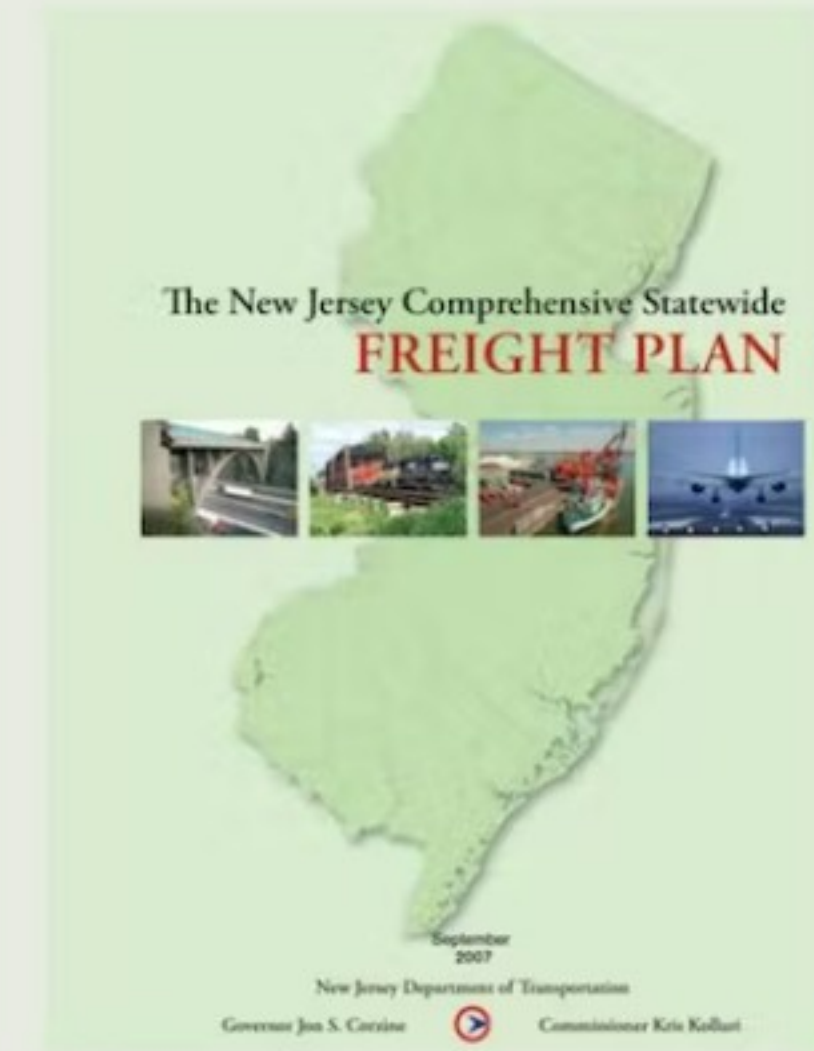
Preservation of light density or currently inactive corridors for potential reactivation/increased use

preservation of rail corridors for freight

Adding infrastructure to meet more demand

Why Do We Need a Freight Plan?

- Originally mandated by the FAST Act (2015)
 - Mandated that all states complete a Freight Plan every 5 years (now 4 years – IIJA)
 - Freight Plan requirement tied to NHFP funding
- Recognition of the need to understand how, where, and what goods move on a state's multimodal freight network, providing:
 - Inventory of existing conditions
 - Identification of needs, actions, and policies
- FAST Act Requirements have been enhanced by IIJA



Freight Plan Requirements

10 Requirements consistent with FAST Act (holdovers from 2017 Plan):

Freight system trends/needs/issues	Freight policies/strategies/performance measures
List of CUFC/CRFC	Link plan with Federal Freight Policy and Program goals
Innovative technologies/strategies	Improvements specific to heavy vehicles/pavement deterioration
Inventory of bottlenecks	Mitigation strategies for delay/congestion
Freight investment plan	FAC Consultation



Freight Plan Requirements

New requirements within the IJA (new to the 2022 Plan):

Truck parking facilities assessment	Supply chain cargo flows (by mode)
Inventory of commercial ports	Considerations made by any multi-state freight compact (not applicable to NJ)
Impacts of e-commerce on freight infrastructure	Considerations of military freight
Strategies to address impacts of weather/natural disasters on freight	Strategies to address impacts of freight on air pollution
Strategies to address impacts of freight on flooding/stormwater runoff	Strategies to address impacts of freight on habitat loss

Other Federal Priorities

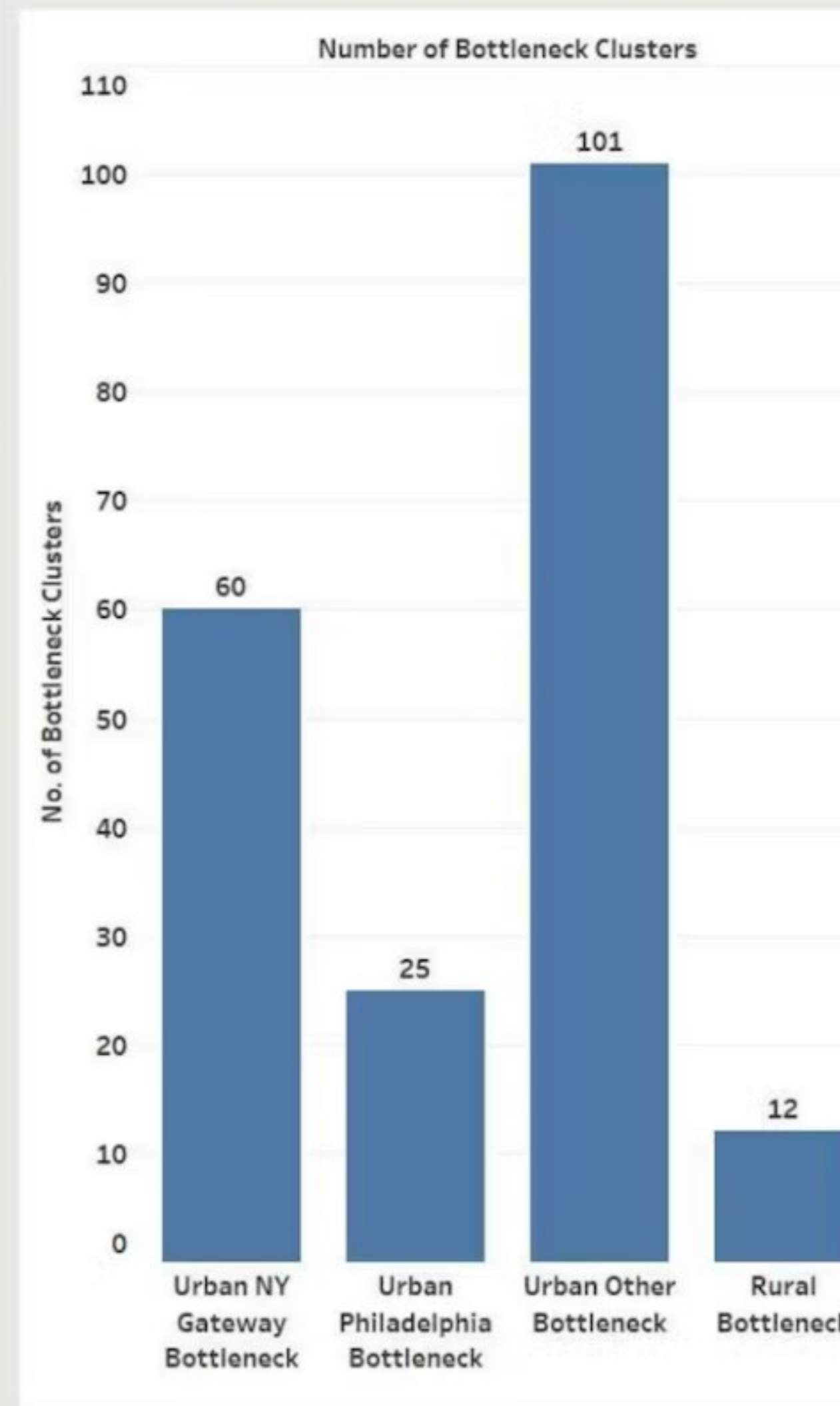
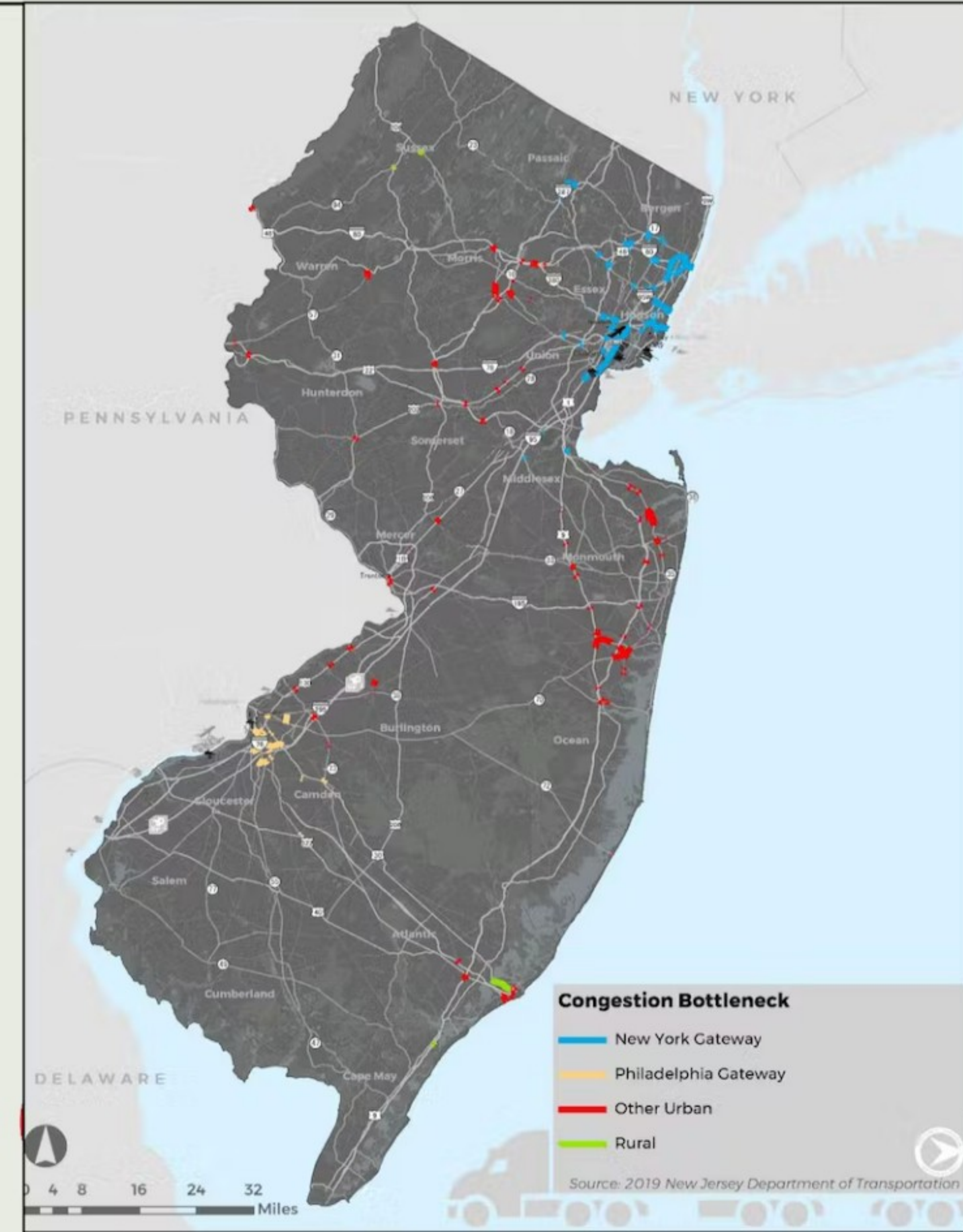
- Marine Highway – Port Linkages
- Maritime Development
- Environmental Justice and Equity
- Job Access
- Cross-jurisdictional coordination
- Improved data access
- Link to other plans (NJ Rail Plan)



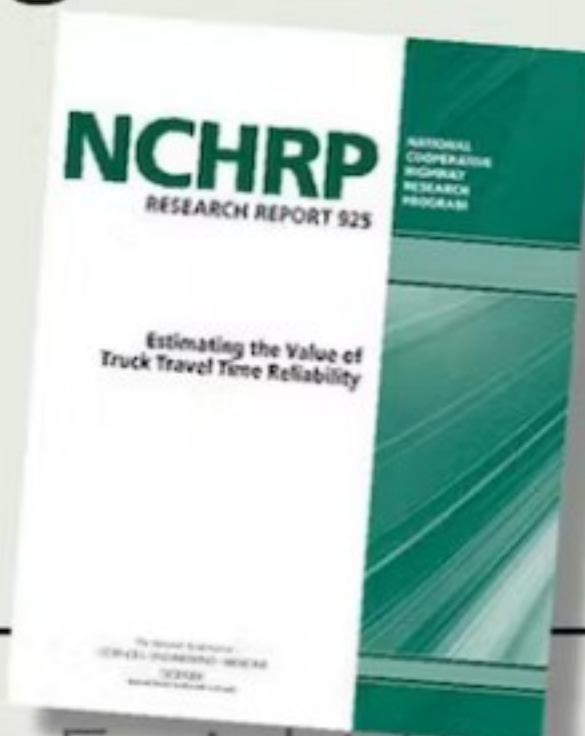
What else should our freight plan include?



Highway Bottlenecks



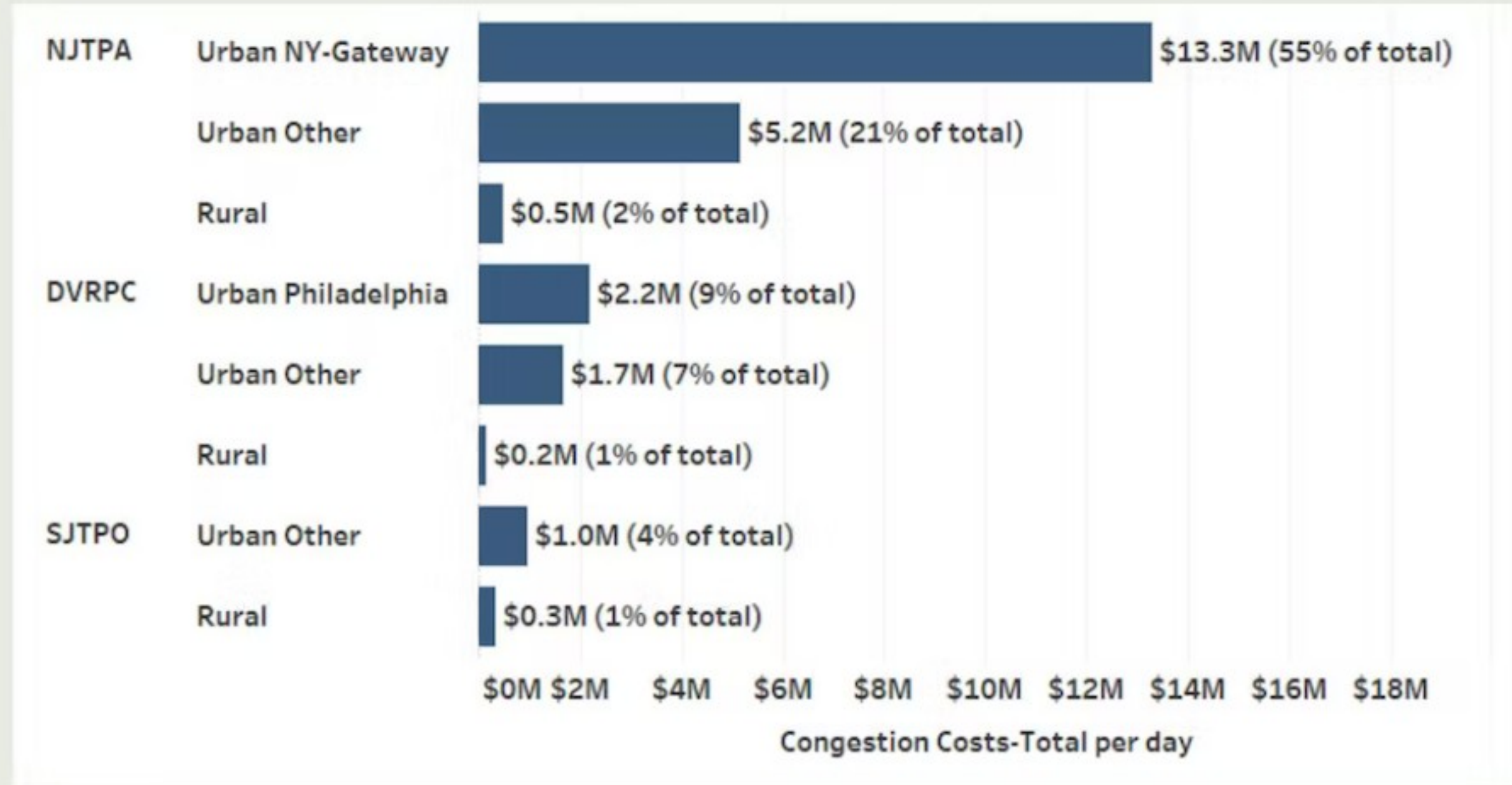
- 2021 travel time data
- Recurring and non-recurring congestion
- Estimated costs on trucking and shippers using NCHRP 925



Highway Freight Congestion Costs

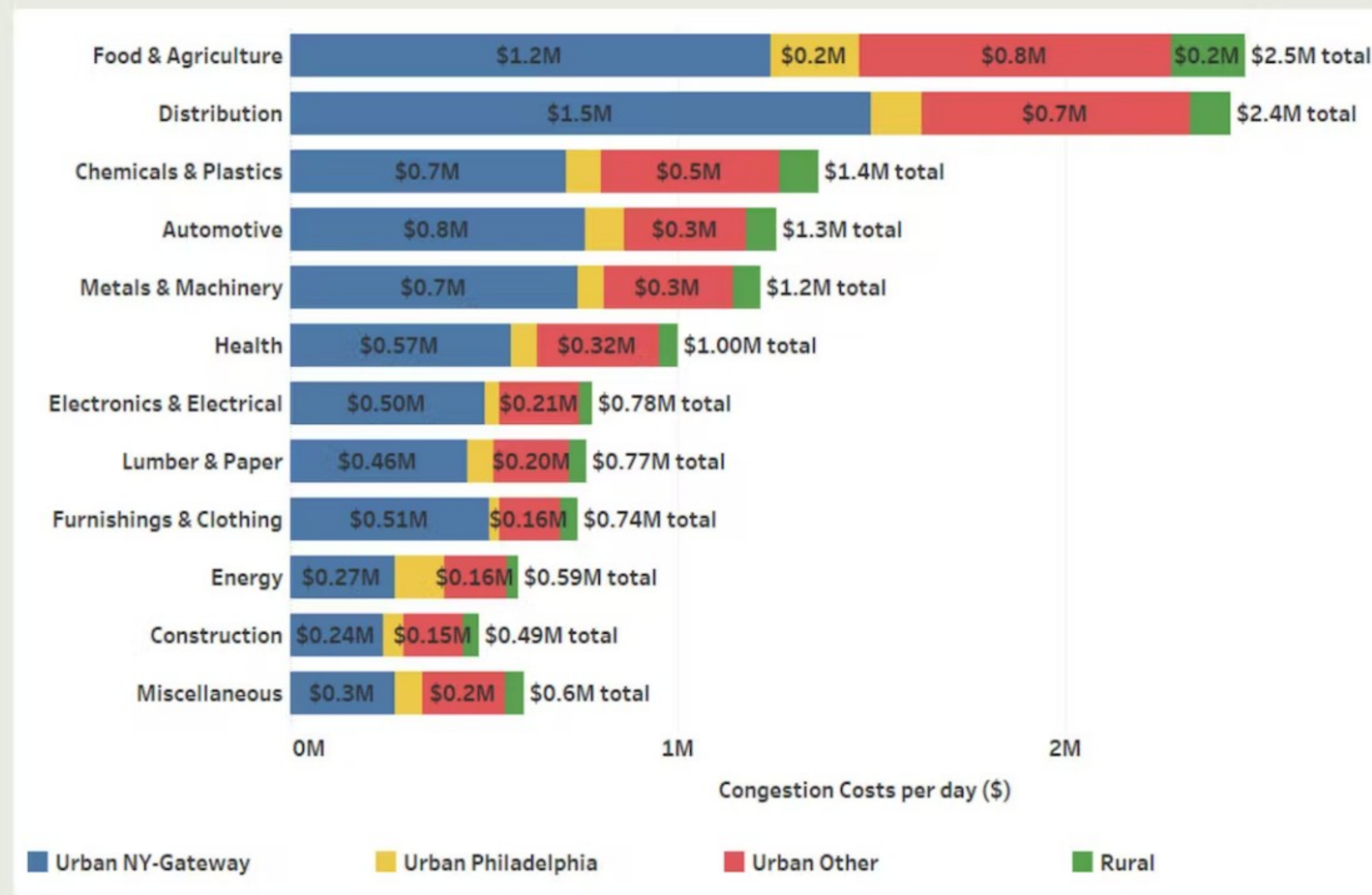


- Apportioning freight congestion costs by roadway type and geography
- Roadways in NJ cause \$24.3 million/day in congestion costs to freight



Highway Congestion Impacts on NJ Supply Chains

- Commodity flow data from Transearch was used to assign congestion costs to supply chains
- Top supply chains affected are: Food & Agriculture, Distribution, Chemicals & Plastics, and Automotive.



Maritime Update

- Update on facilities changes/additions
- Update on commodity tons & value (international and domestic)
- Update on facility usage changes
 - Wind Port
- Next Steps: Review investment needs
 - Maritime facilities
 - Landside connections



Port of Paulsboro Wind Turbine Manufacturing Facility, 2022

Maritime Update

- The plan looks at Northern New Jersey, Southern New Jersey, and briefly, Philadelphia Ports
- **Port of New York and New Jersey**
 - 3rd TEUs
 - 4th total tonnage
- **South Jersey Port District**
 - 24th TEUs
 - 35th total tonnage
- **Port of Philadelphia**
 - 17th TEUs
 - 23rd total tonnage

Source: 2020 BTS, Waterborne Commerce Statistics



Broadway Terminal, SJPC

Key Facility Updates Since Last Plan

- NJ Wind Port
 - Port of Paulsboro
 - Ocean Wind EEW facility to manufacture monopiles operational in 2022
- Port of Salem
 - 2021 -awarded \$9 million in INFRA funding to expand vessel capacity and intermodal rail connectivity
- ExpressRail completion at Port Jersey (2019)
- Completion of Bayonne Bridge (2019)
- Rehabilitation of Middle Thorofare Bridge(2021)



Top Commodities International Imports

- Petroleum products led tonnage, followed by coal, foodstuffs, alcoholic beverages, and other manufacturing and construction related commodities
- 60% of imports have their first destination in Northern NJ
- 7% destined for Southern NJ
- 33% other regions
- The profile of top commodities by value is quite different from tonnage – led by textiles, motorized vehicles, machinery, and electronics

Commodities by Tonnage (Thousands of Tons)	Total
Crude petroleum	11,174
Gasoline	10,003
Fuel oils	6,749
Petroleum Products Total	27,925
Coal-n.e.c.	4,939
Other foodstuffs	4,392
Nonmetal mineral products	2,971
Plastics/rubber	2,422
Alcoholic beverages	2,165
Nonmetallic minerals	2,122
Textiles/leather	2,025
Basic chemicals	1,878
Machinery	1,668
Furniture	1,613
Motorized vehicles	1,567
Articles-base metal	1,330
Base metals	994
All other commodities Total (includes additional commodities to the above)	39,141
Grand Total	67,068

Commodities by Value (Millions of Dollars)	Total
Crude petroleum	\$ 3,604
Gasoline	\$ 4,883
Fuel oils	\$ 2,443
Petroleum Products Total	\$ 10,930
Textiles/leather	\$ 17,907
Motorized vehicles	\$ 16,218
Machinery	\$ 12,780
Electronics	\$ 8,779
Other foodstuffs	\$ 7,877
Plastics/rubber	\$ 7,305
Chemical prods.	\$ 5,679
Furniture	\$ 5,617
Alcoholic beverages	\$ 5,573
Basic chemicals	\$ 5,413
Misc. mfg. prods.	\$ 4,814
Meat/seafood	\$ 4,122
Coal-n.e.c.	\$ 2,114
All other commodities Total (includes additional commodities to the above)	\$ 128,695
Grand Total	\$ 139,625



Top Commodities by Tonnage – International Exports

- Overall, a large majority of exported tons (81%) originate outside New Jersey. This volume is primarily coal, which originates in West Virginia

Thousands of Tons	Total
Coal	21,139
Waste/scrap	2,802
Fuel oils	2,451
Cereal grains	683
Motorized vehicles	360
Mixed freight	280
Gasoline	273
Basic chemicals	233
Misc. mfg. prods.	217
Wood products	173
All other commodities	1,126
Grand Total	26,391



Domestic Inbound and Outbound Commodities

Domestic Inbound Tonnage (Thousands of Tons)		Domestic Outbound Tonnage	
Crude petroleum	322	Coal-n.e.c.	586
Fuel oils	1,581	Fuel oils	200
Gasoline	55	Gasoline	55
Transport Equipment	0.24	-	-
Grand Total	1,959	Grand Total	841

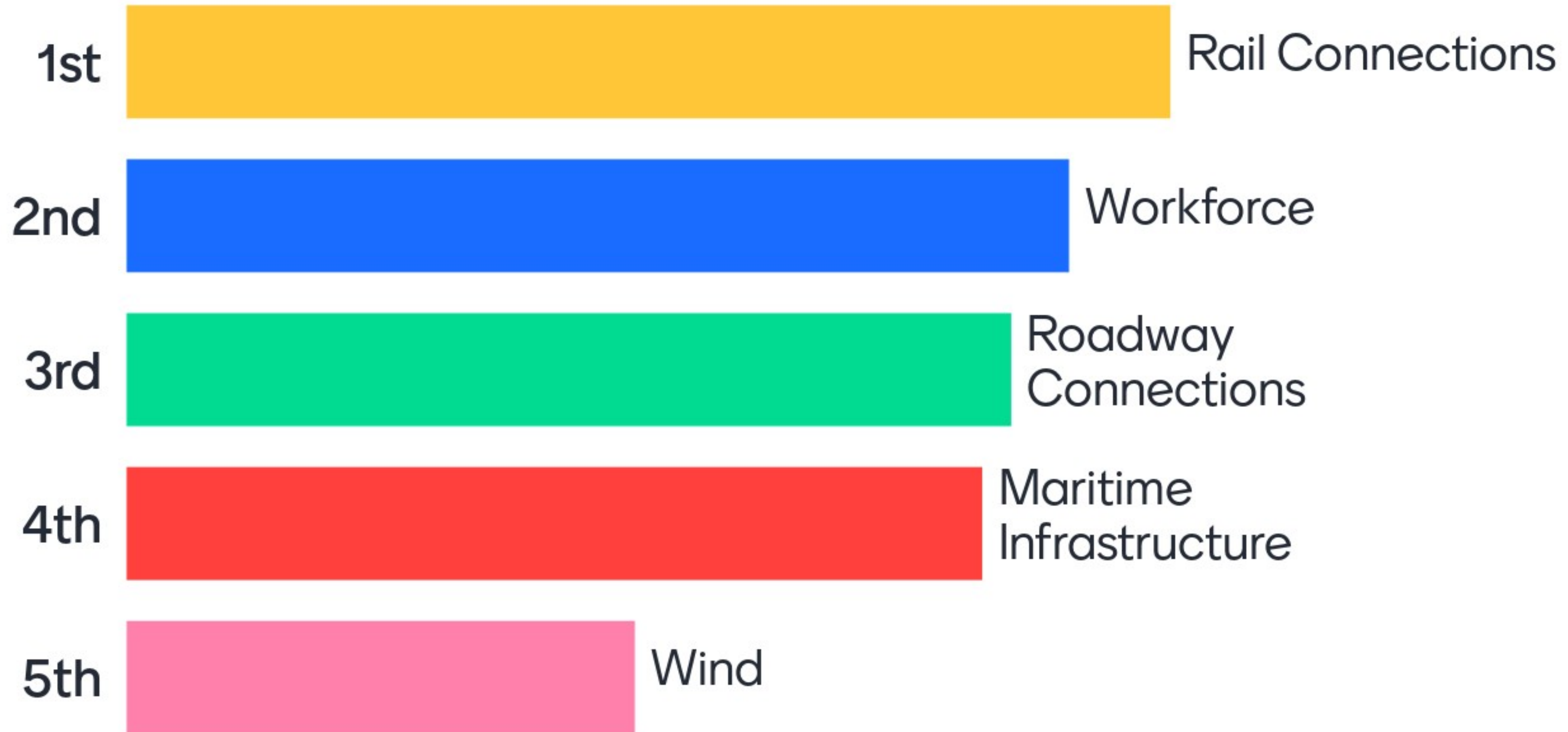


Looking Ahead – Future Challenges

- In its 2050 Master Plan, PANYNJ anticipates that it will need to accommodate 2.8 million intermodal rail lifts, 1.3 million autos, 5.5 million tons of bulk cargo, and 17 million TEUs
 - Managing this thruput for the New Jersey ports will involve both landside connections – road and rail- as well as marine highway connections to ship goods within NJ and throughout the Northeast and Mid-Atlantic.
 - Maritime highway connections could also be made, especially for bulk goods that do not require much pre-sorting
- Wind Port will be a manufacturing center and marshalling port for East Coast offshore wind farms
 - Landside challenges include signage and signaling improvements, as well as bridges that do not have the load capacity for the larger turbine components.
 - Potential connection to I-295
 - Potential rail connections
 - Maintenance of the maritime system



Please rank the importance that you think NJDOT should give to the following maritime investments:



NJ Rail Network

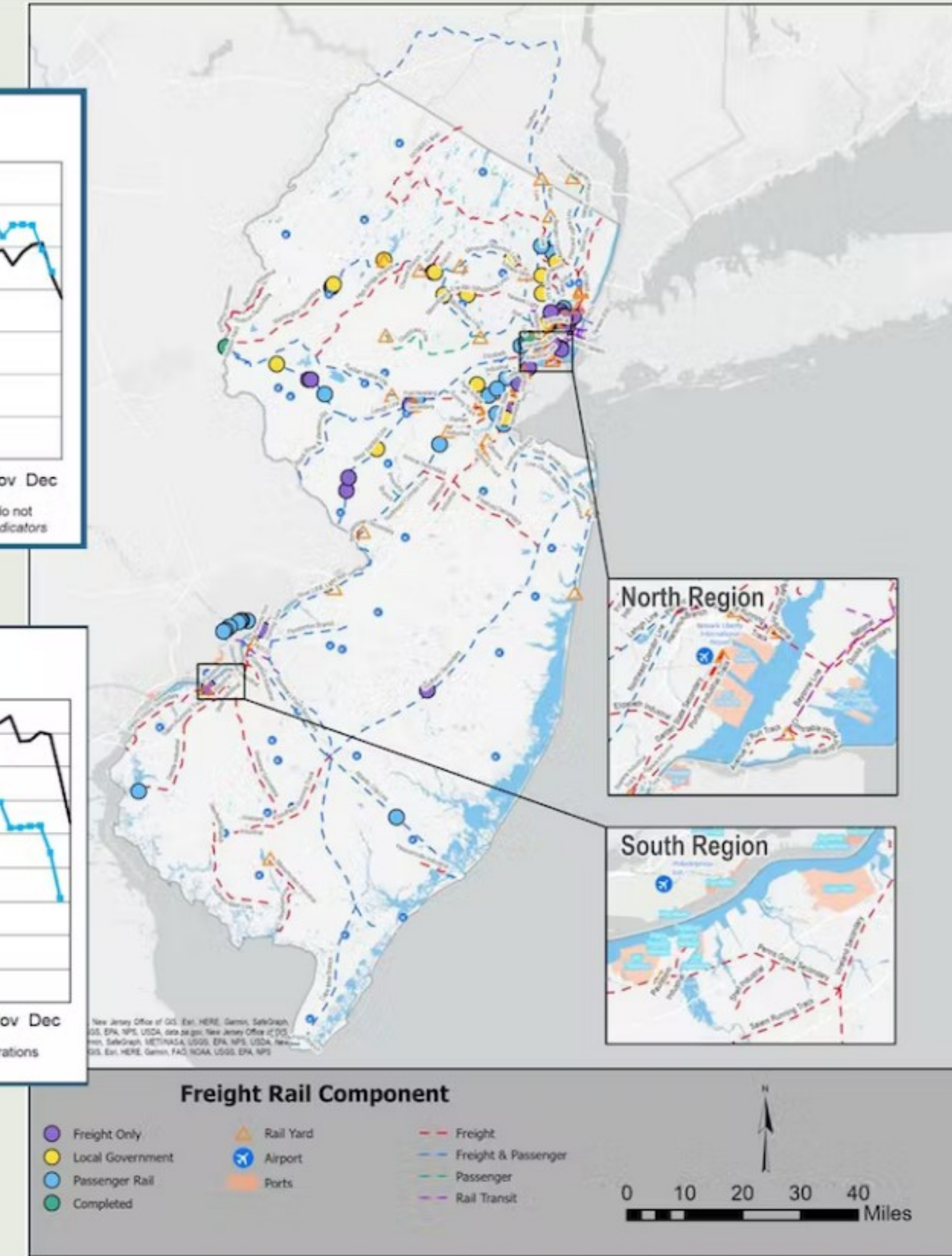
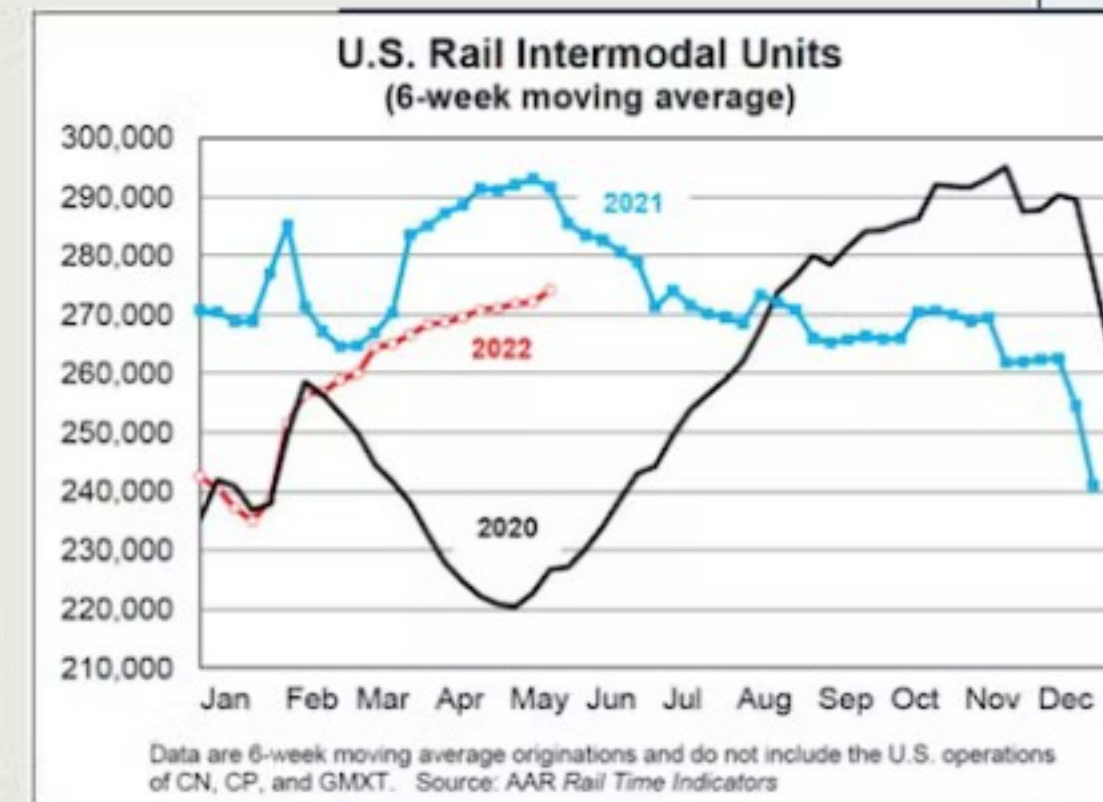
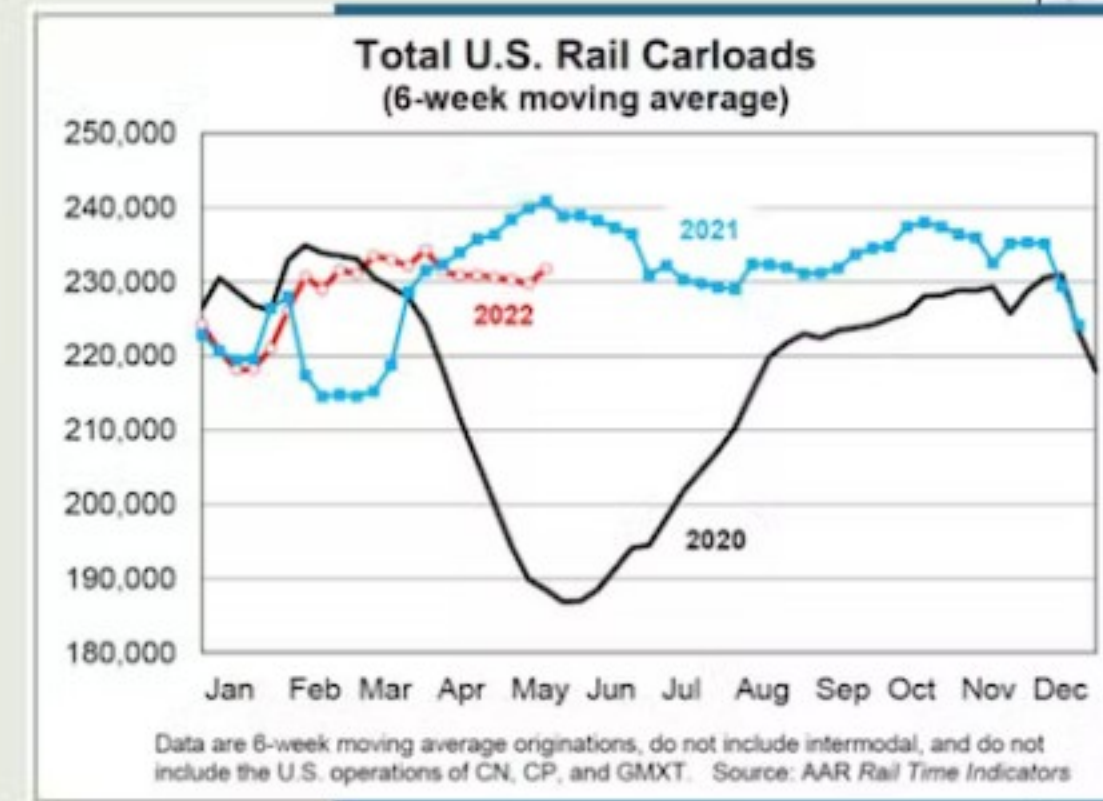
- NJ Rail Network and Operators and mileage remain similar to 2017:
 - 20 Current Operators
 - 1,068 Track Miles Owned and Operated by Freight Railroads
 - 603 Track Miles Owned by Passenger Railroads
 - 2,427 Track Miles Operated Over by Freight Railroads

Class/Type	Railroad Name	Miles Operated
Class I and Canadian	CSX Transportation	641
	Norfolk Southern Corporation	904
Class II and Class III (Regional)	New York, Susquehanna and Western Railway	91
	Belvidere and Delaware River Railway Company	19
Class III (Local)	Dover and Delaware	109
	Dover and Rockaway	17
	Black River and Western	17
	Morristown and Erie Railway, Inc.	9
	New Jersey Rail Carrier, LLC	2
	Cape May Seashore Line	13
	SMS Rail Service, Inc.	18
	Southern Railroad Company of New Jersey	47
	Winchester and Western Railroad	47
	Bayway Terminal Switching Co	1
	Conrail, Inc.	469
Switching and Terminal Railroads	East Jersey Railroad and Terminal Company	3
	Hainesport Industrial Railroad	1
	Hainesport Secondary, LLC	1
	New York New Jersey Rail, LLC	1
	Raritan Central Railway, LLC	17



Changing Volumes and Employment

- Fluctuation in Volume
 - 2019 Saw Rail Volumes Decline – Primarily Due to Coal and Grain
 - 2020 Saw Q3 Volume Recovery
 - Today Seeing Return to Pre-Pandemic Volumes in Many Markets
 - Decline in Employment – Due in Part to Precision Scheduled Railroading (PSR)

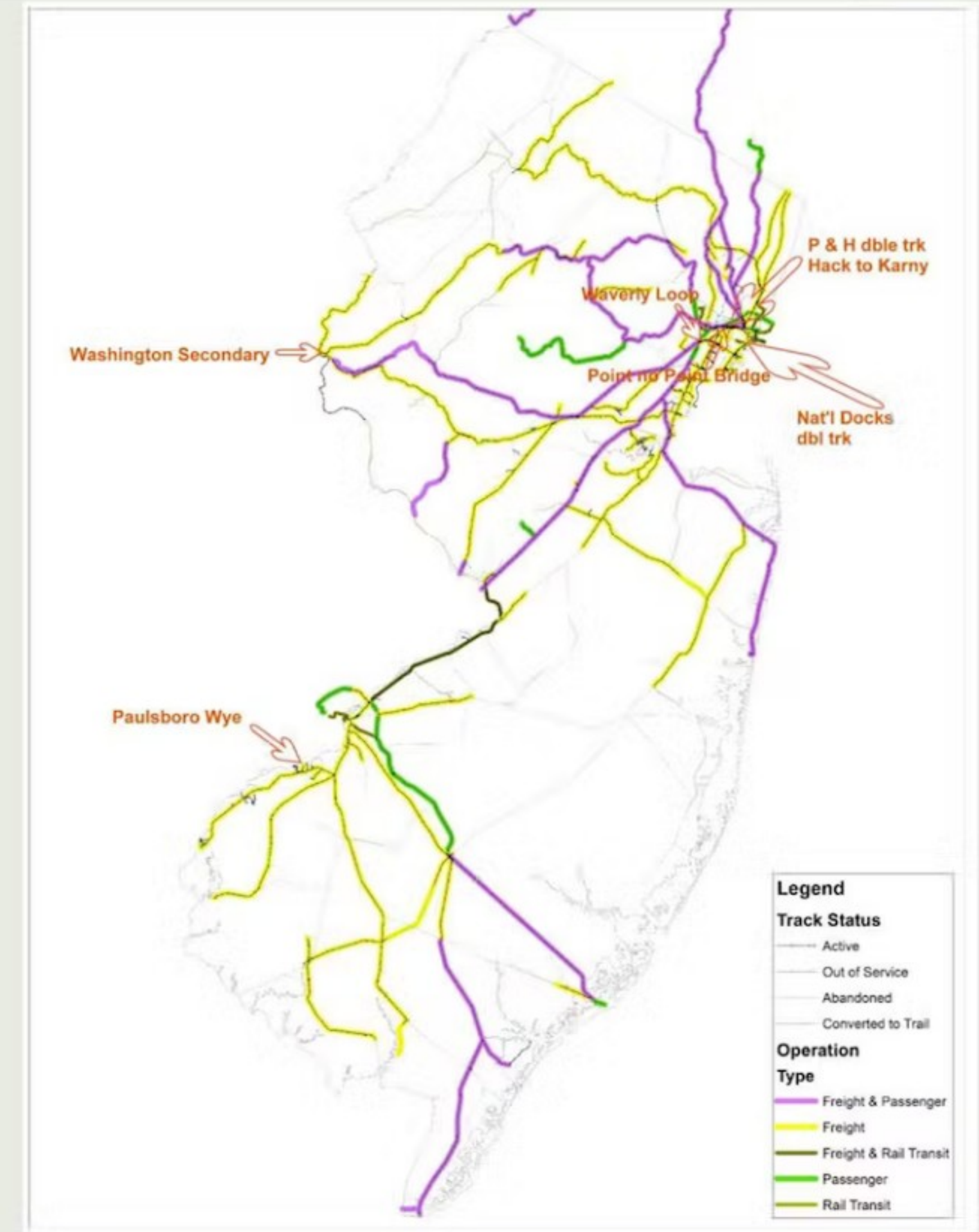


File: \\s1c016\Shw\NJDOT\DOT_Statewide_Freight_Plan\FreightPlan_NJDOT_Freight_Plan_Figures_User_SHONTEW_12/2/2022 6:40 AM



Freight Rail Infrastructure Improvements

- NJ Rail Network remains generally as it was in 2017 with several notable improvements:
 - Waverly Loop
 - P&H Double Tracking – Hack to Kearny
 - National Docks – Double Track
 - Point-No-Point Bridge (Construction Started July 2022)
 - Paulsboro Wye Track and Siding Track
 - Washington Secondary – Clearance beneath S. Main Street Bridge



Constraints to Freight Rail

- Weight Limitations
- Vertical Clearance Constraints
- Capacity Constraints / Bottlenecks
- Yard Capacity
- Inter-Agency Collaboration
- Grade Crossing Safety
- Bi-State Collaboration / Cooperation



Setting Priorities for Future Investment

- Revised Approach to Grouping and Prioritization of Issues and Constraints
- 3 Project Categories
 - **Freight Rail** – Freight Only Corridors
 - **Local Government** – “Spot” Projects Requiring Local Support
 - **Passenger Rail** – Longer Term Coordination and Policy Revision Required Issues

The 2022 SFP will provide the NJDOT Office of Freight Planning and Office of Grants Management guidance to assist in determining where best to prioritize and invest in freight rail improvements for the benefit of the state.



What would you consider the most important issue to address to improve freight rail in New Jersey?



What does "Equity" mean?

- Addressing historic harms to overburdened communities (OBCs)
- Aligns with federal and state law

Equity: NJ Environmental Justice Law (2020)

- At least **35 percent** of the households qualify as **low-income households** (at or below twice the poverty threshold as determined by the United States Census Bureau); or
- At least **40 percent** of the residents identify as **minority** or as members of a **State recognized tribal community**; or
- At least **40 percent** of the households have **limited English proficiency (LEP)**, defined as households without an adult that speaks English “very well” according to the United States Census Bureau.



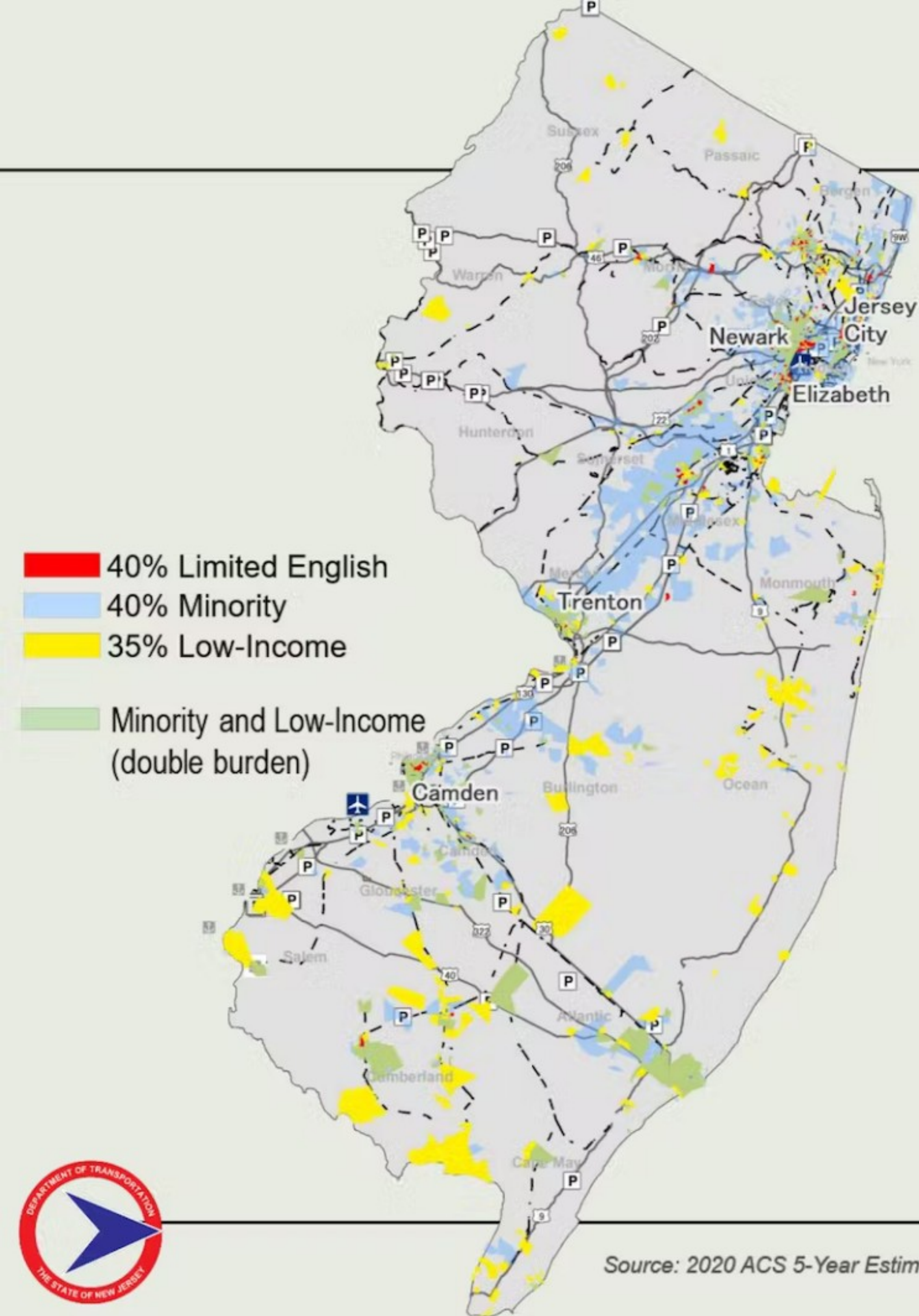
Equity: Methodology

- 2020 5-year American Community Survey data
 - Contained more of the data categories
 - 2020 Decennial Census data was problematic due to messaging about the census (counting LEP populations)
- Unit of measurement: Census block groups
 - Consistent with 2020 NJ EJ Law
 - More accurate data capture (600-3,000 people) than tracts (1,200-8,000)
- Geodata on freight facilities (ports, rail facilities, etc) and industrial land use (NJDEP land use/land cover 2015)



Equity: Where are OBCs?

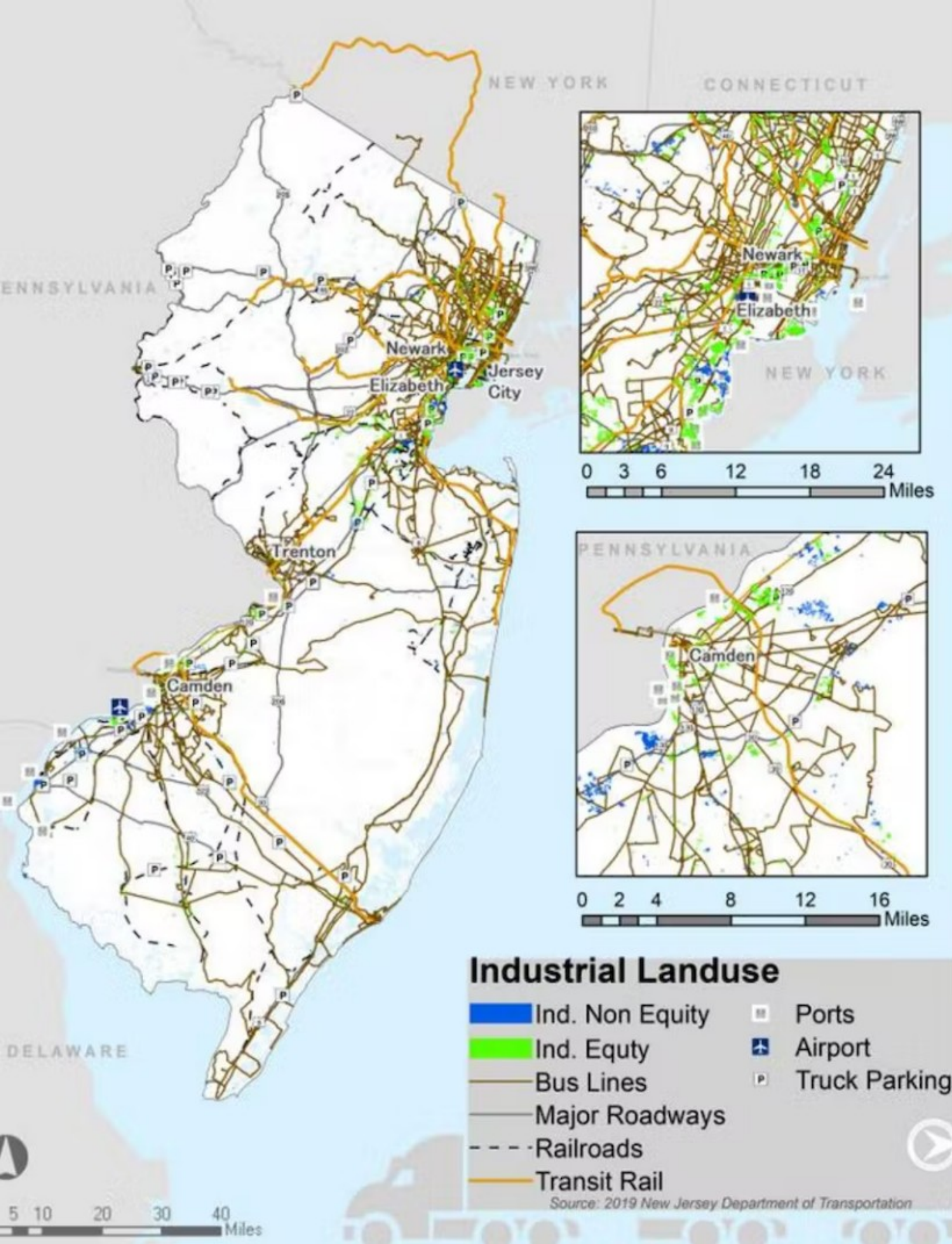
- **11.5%** of the population is considered low-income.
- **1%** of households are LEP, but the most concentrated in urban areas.
- **23.5%** of the state's population identify with ethnic and racial minority groups.



Source: 2020 ACS 5-Year Estimates



Equity and Freight



- **61%** of industrial land use overlaps defined equity areas, where communities are subject to disproportionately high number of environmental and public health stressors.
- Areas where equity measures and industrial land use intersect include:
 - Large cities (Newark, JC, Paterson, Elizabeth)
 - Other legacy industrial clusters (southern Bergen, western Hudson, northern Middlesex, northern Burlington)

Equity: Next Steps

- Qualitative analysis of beneficial and burdening aspects of freight in NJ
- Recommendations on increasing benefits and mitigating burdens. Examples may include:
 - Community & stakeholder engagement
 - Interagency coordination
 - Planning and policy initiatives
- Inform freight prioritization
 - Identify key issues, impacts, and opportunities

Given industrial uses within many overburdened communities, what are some strategies to improve quality of life, safety, and health outcomes?

creating local job opportunities, considering good neighbor practices

Electrification (reduction of air quality impacts)

Mitigation to air and noise pollutions

congestion mitigation

ensure safety for all

Clean technologies

Investment in infrastructure

clean trucks and freight facilities

Vehicle electrification, green infrastructure, community-benefit agreements

Given industrial uses within many overburdened communities, what are some strategies to improve quality of life, safety, and health outcomes?

Transportation efficiency measures by improving rail connections, lowering roadway congestion

Community engagement

Jobs, job training

Noise mitigation, truck routing policies

Jobs and access to said jobs

Flooding Impacts

Pedestrian/Cyclist Safety Investments

Enforce truck routes to mitigate per and bike crashes

Ev trucks and other tech to reduce climate change

Given industrial uses within many overburdened communities, what are some strategies to improve quality of life, safety, and health outcomes?

Noise mitigations.

Public and stakeholder outreach

Public/private/community collaborations

Engage municipalities

public/private/community collaborations

Community-benefit agreements

open fact based discussions

fact based discussions

What partnerships are needed to effect these changes?

public private community
state county local roads
work with nj ej office
dept of labor trust
relationship building industry
mpos grassroots
community municipalities
engage municipalities
community engagement
have more drop in medical
public
engage obcs
facilities

Final Plan Framework

- Introduction
- Goals and Objectives
- Ongoing/Completed Partner Efforts
- Current Trends
- New Jersey's Freight Economy
- Freight Network Performance
- Performance Measures
- Innovative Technologies
- Priorities and Actions
- Investment Plan



What is New Jersey's Greatest Challenge for Freight?

Maintenance

home rule

Cleaner, more rail less trucks

Being a densely populated state with legacy infrastructure

Roadway capacity

Congestion on antiquated infrastructure

Safety, Equity & Operations.

Accommodating growth and upgrading network.

Transition of long-distance modes to net zero emissions

What is New Jersey's Greatest Challenge for Freight?

Innovation and change

Accommodating growth while avoiding adverse community impacts

Need to upgrade infrastructure with cutting edge tech

Make everyone happy: balancing impacts to OBCs, and growing our economy.

Overall Schedule

Task	Effort	August	September	October	November	December	
1	Revised Goals and Objectives	Complete					
2	Previously Completed Work	Complete					
3	Current Trends	Complete					
4	New Jersey's Freight Economy	Draft Complete					
5	Modal Analyses	Draft Complete					
6	Performance Measures						
7	Innovative Technologies						
8	Actions and Implementation						
9	Draft Plan						
10	Final Plan						



Contact Us



Janice Marino-Doyle
NJDOT OFP Program Specialist

Janice.Marino-doyle@dot.nj.gov
609-963-1782







Stephen Chiaramonte
Supervising Planner WSP USA


S.Chiaramonte@wsp.com
609-865-3930









2022 State Freight Plan Update



View Who's Talking   1  

Please use the Chat box to ask questions during the presentations and if requesting credits, please post your name, followed with either AICP or PE with your PE license number 

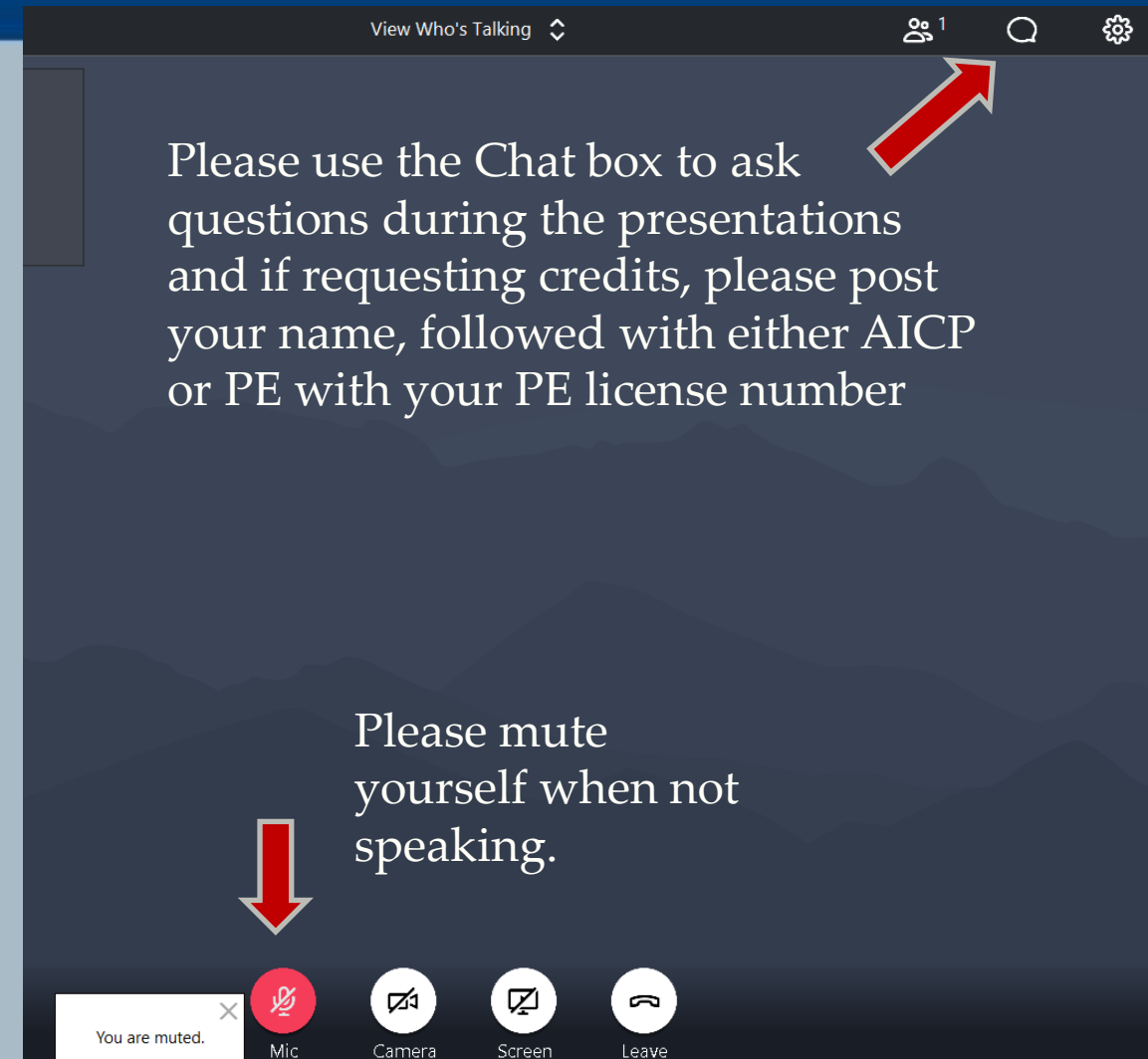
Please mute yourself when not speaking. 

You are muted.   Mic  Camera  Screen  Leave

August Freight Initiatives Committee Agenda

- Roll Call of Members
- Approval of Minutes
- Update on NJTPA Freight Division Activities
- State Freight Plan Update
- Two-minute Reports on Freight Activities from Committee Members
- Next Meeting: Monday, October 17, 2022 – Strategies and Effective Practices for Planning for and Working with Developers on Industrial Development in Communities

Thank you. Stay healthy and safe.



A screenshot of a Zoom meeting interface. At the top, it says 'View Who's Talking' with a dropdown arrow, a '1' next to a person icon, a chat icon, and a settings gear icon. A red arrow points from the chat icon to the text: 'Please use the Chat box to ask questions during the presentations and if requesting credits, please post your name, followed with either AICP or PE with your PE license number'. Below this, another red arrow points down to the text: 'Please mute yourself when not speaking.'. At the bottom, there is a 'You are muted.' notification box, a 'Mic' button with a red slash, and buttons for 'Camera', 'Screen', and 'Leave'.