



THE DELAWARE VALLEY
**GOODS MOVEMENT
TASK FORCE**

The background of the slide is a blue-tinted aerial photograph of an industrial facility. The facility features numerous large, cylindrical storage tanks, several large rectangular buildings, and a network of roads and walkways. A river or canal is visible on the right side of the image. The overall scene is industrial and somewhat desaturated due to the blue tint.

Freight Funding Awards 2021

Pennsylvania Freight Funds

Rail Freight Assistance Program (RFAP) and Rail Transportation Assistance Program (RTAP)

2020 Awards

- East Penn- Bucks/Chester - **\$500k**
- CSX - Delaware - **\$8.4M**
- PA Northeastern - Montgomery - **\$483k**

2021 Awards

- Bucks County Railroad Preservation & Restoration Corporation - Bucks - **\$490k**
- East Penn - Chester - **\$700k**
- International Paper Co. - Chester - **\$371k**
- CSX - Philadelphia - **\$6M**

Pennsylvania Freight Funds

Commonwealth Financing Authority Multimodal Transportation Fund (MTF)

- \$24 M awarded regionally
- \$1 M awarded in Philadelphia- Morris Iron & Steel Company, Preserving Philadelphia's NE Industrial Waterfront through the 777R State Road Pier Rehabilitation

New Jersey Freight Funds

Local Freight Impact Fund

- 7 awards (\$3.288 M) in the DVRPC Region
- Pavement Preservation

Rail Freight Assistance Program

- No awards in 2021

Federal Funding Programs

2021 Diesel Emission Reduction Act (DERA)

- PhilaPort- **\$1.287M** for the conversion of a ship to shore gantry crane
- MARAMA - **\$1.397M** to replace 40 drayage trucks with newer, cleaner vehicles

Airport Infrastructure Grant Program

- PHL - **\$30.7M** in part to support the cargo expansion program

Infrastructure for Rebuilding America (INFRA)

- PhilaPort - **\$49M** for a new multi-use berth at SouthPort
- South Jersey Port Corporation - **\$9M** for bulkhead rehabilitation and expansion to 500 feet; dredge the new berth; acquire an adjacent approximate 6-acre former glass manufacturing facility; and perform site preparation, improvements, and refurbish a multi-modal rail connection

INFRASTRUCTURE INVESTMENT AND JOBS ACT

aka Bipartisan Infrastructure Law
aka The BIL

DVRPC Goods Movement Task Force – 1/14/22

Milestones Toward Enactment of BIL

Date	Milestone
July 2021	Senators released bipartisan infrastructure framework
August 10, 2021	Senate passed Bipartisan Infrastructure Deal (BIL)
November 5, 2021	House passed BIL
November 15, 2021	President Biden signed BIL into law (Public Law No: 117-58)

BIL Goes Beyond Transportation

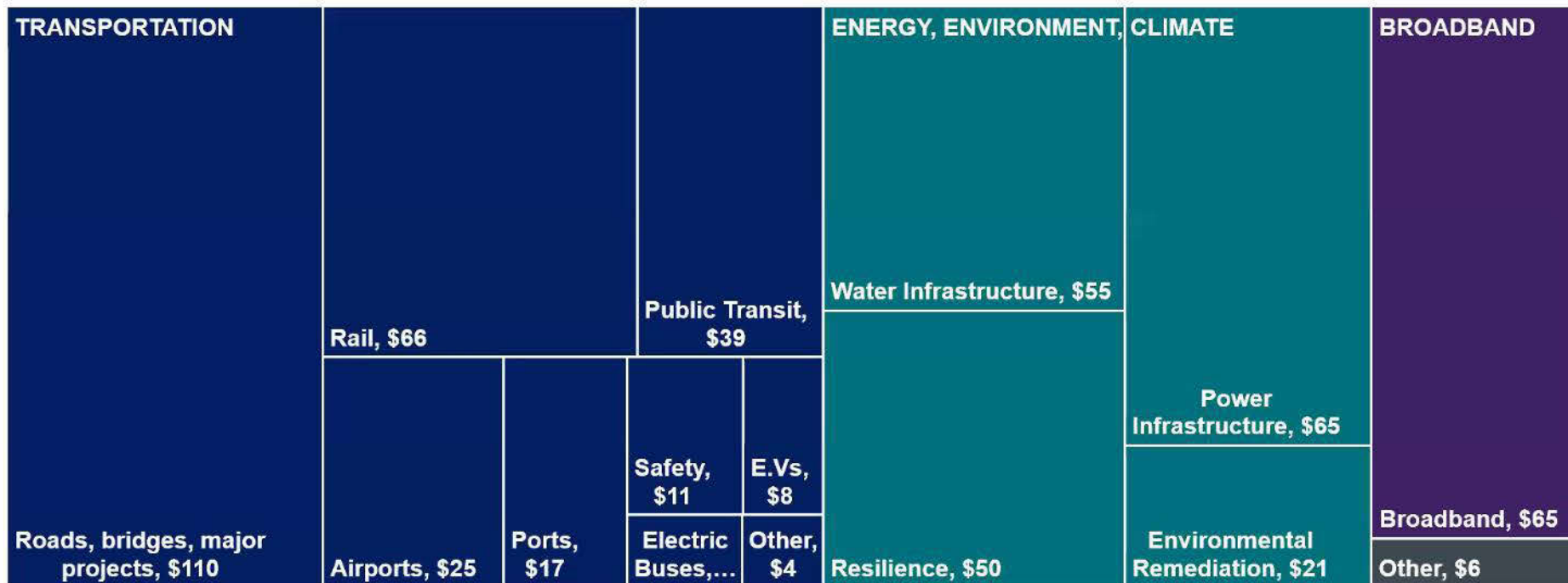
- Once-in-a-generation investment in infrastructure
- Grows the economy, enhances U.S. competitiveness, creates good jobs, and makes the U.S. economy more sustainable, resilient, and equitable
- Around \$550 B in new Federal infrastructure investment, with about half of that for Transportation, including—
 - Largest federal investment in public transit ever
 - Largest federal investment in passenger rail since the creation of Amtrak
 - Largest dedicated bridge investment since the construction of the Interstate System
 - Largest investment in clean drinking water & wastewater infrastructure in U.S. history
 - Largest investment in clean energy transmission & electric vehicle infrastructure in history
 - Ensuring every American has access to reliable high-speed internet
- On average, around 2 million jobs per year

Overall new funding in the BIL

At a glance: The Bipartisan Infrastructure Deal

The Bipartisan Infrastructure Deal, \$Billions | \$550B/\$1.2T

■ TRANSPORTATION ■ ENERGY, ENVIRONMENT, CLIMATE ■ OTHER ■ BROADBAND



High Points of BIL Transportation Provisions

- Funds programs for five years (FY 22-26)
- \$350.8 B for highway programs
- \$108.2B for transit programs
- More than a dozen new funding programs, including—
 - **Formula:** resilience, carbon reduction, safety, bridges and electric vehicle (EV) charging infrastructure, transit state of good repair
 - **Discretionary:** bridges, transit rail cars and stations, EV charging infrastructure, rural projects, resilience, wildlife crossings, and reconnecting communities
- Focus on safety, bridges, climate change, resilience, and equity
- More opportunities for local governments and other non-traditional entities to access new funding
- \$118 B transfer (GF->HTF) to keep the HTF Highway Account solvent for years

Funding Available to a Range of Recipients

Program Examples	State	MPO	Local	Tribe	PA*	Territory	FLMA*
Apportioned programs (formula)	✓						
Bridge Program (formula)	✓			✓			
National Electric Vehicle Formula Program	✓		✓				
Safe Streets and Roads for All program		✓	✓	✓			
PROTECT Grants (discretionary)	✓	✓	✓	✓	✓		✓
Charging and Fueling Infrastructure Program	✓	✓	✓	✓	✓	✓	
Congestion Relief Program	✓	✓	✓				
Bridge Investment Program (discretionary)	✓	✓	✓	✓	✓		✓
Reconnecting Communities Pilot Program	✓	✓	✓	✓			
Rural Surface Transportation Grants	✓		✓	✓			
INFRA	✓	✓	✓	✓	✓		✓
Nat'l Infra. Project Assistance	✓	✓	✓	✓	✓		
Local and Regional Project Assistance	✓	✓	✓	✓	✓	✓	

Note: This table does not include all BIL programs or eligible entities, and there are additional nuances not represented in this table. Additional programmatic information is provided in later slides. FHWA will administer most, but not all, programs listed.

* "PA" means a special purpose district or public authority with a transportation function; FLMA means Federal Land Management Agency ¹⁵

Discretionary Programs

INFRA - **\$8 billion**

- adds eligibility for marine highway corridor functionally connected to NHFN and highway, bridge, or freight project on NMFN
- increases funds available for non-highway freight projects to 30%

Local and Regional Project Assistance Program (RAISE, formerly BUILD) - **\$7.5 billion**

- to fund projects with a significant local or regional impact that improve transportation infrastructure
- codifies the existing Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program

Discretionary Programs

National Infrastructure Project Assistance Program (Mega-projects) [new] - **\$10 billion**

- to support freight-related projects, including roads and bridges, intermodal facilities, grade separation or elimination, intercity passenger rail, public transportation, or a combination of these

Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) [new] - **\$1.4 billion**

- enhancing the resiliency of infrastructure assets, including projects to improve the resilience of surface transportation assets and evacuation routes
- Planning Grants at \$140 million
- Resilience Improvement Grants at \$980 million

Discretionary Programs

Port Infrastructure Development Program - **\$2.25 billion**

- to fund projects that invest in America's coastal ports and inland waterways, helping to improve the supply chain and enhancing the resilience of our shipping industry
- expanded eligibility to include projects at ports including port electrification for EV chargers or hydrogen refueling infrastructure and medium or heavy-duty trucks and locomotives that serve the port and grid updates

Reduction of Truck Emissions at Port Facilities Program [new] - **\$400 million**

- to reduce truck idling and emissions at ports, including through the advancement of port electrification.

Discretionary Programs

Consolidated Rail Infrastructure and Safety Improvements (CRISI) - **\$5 billion**

- to fund projects that improve the safety, efficiency, or reliability of intercity passenger and freight rail

Railroad Crossing Elimination [new] - **\$3 billion**

- To promote highway rail or pathway-rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods

Freight Provisions

Office of Multimodal Freight Infrastructure and Policy

- establishes new office in the Office of the Secretary of Transportation
- establishes an Assistant Secretary for Multimodal Freight

National Freight Strategic Plan

- adds new elements related to impacts of freight movement on environment and rural, underserved and historically disadvantaged communities, resilience, decarbonization, and economic growth

National Cooperative Freight Research Panel (NCFRP)

State Freight Plans

- Requires State freight plans to include several new requirements in categories such as adequacy of commercial motor vehicle parking and rest facilities, supply chain cargo flows, inventory of commercial ports, impacts of e-commerce, and strategies and goals to address impacts of freight movement on the environment

National Highway Freight Program

- States may use up to 30% of NHFP funds on freight intermodal or freight rail projects, subject to certain restrictions
- adds eligibility for marine highway projects that are:
 - functionally connected to the National Highway Freight Network; and
 - likely to reduce on-road mobile source emissions
- increases the mileage allowance for Critical Freight Corridors

Rail Provisions

Railroad-Highway Crossing Program (Section 130)

- eliminates 50% set-aside for protective devices
- increase in maximum incentive a State may pay a local govt for closing public crossing to \$100k
- increases Federal share of projects from 90% to 100%

Railroad Rehabilitation and Improvement Financing (RRIF)

- adds landside port infrastructure as an eligible project category

FRA Blocked crossing portal pilot

Trucking Provisions

Women of Trucking Advisory Board

- identify barriers and industry trends that directly or indirectly discourage women from pursuing and retaining careers in trucking, and examine ways to facilitate support for women pursuing careers in trucking including training and outreach programs

Automatic Emergency Braking for heavy-duty commercial vehicles

- Within 2 years, prescribe a motor vehicle safety standard and accompanying performance requirements

Apprenticeship pilot program

- 3,000 apprentice limit, qualified drivers between 18 and 21

2022 Meeting Dates

- Wednesday, April 20
- Wednesday, July 20
- Wednesday, October 19

Warehouse Sprawl: Regional Significance Calls For Regional Perspective

Tim Evans

New Jersey Future

Delaware Valley Goods Movement Task Force

January 14, 2022



Warehouse Sprawl: Plan Now or Suffer the Consequences

Author: Tim Evans
March 2021




Industries devoted to the movement and storage of goods provide jobs to nearly one out of every eight employed New Jersey residents. Thanks to growth in both e-commerce and the volume of trade at the Port of New York and New Jersey, the amount of land needed for warehousing has been growing. So far, most new distribution facilities have arisen on already-developed lands in the vicinity of the port that were previously used for something else, a legacy of New Jersey's industrial history. At least, this is true in New Jersey; the situation is different across the Delaware River in eastern Pennsylvania's Lehigh Valley, where warehouse development along I-78 has been consuming farmland at an alarming rate. This warehouse sprawl could easily creep back east across the border into western New Jersey if demand keeps growing as expected. In fact, a number of municipalities in Warren County are currently considering warehouse development proposals, tempted by the boon that such development represents to local tax bases. But leaving the fate of one of New Jersey's most

Drivers of Warehouse Growth

- Global: Port of New York and New Jersey
- Local: e-commerce



Port of New York and New Jersey

- Growth in US trade with South Asia (India, Pakistan) → faster to ship to East Coast than West Coast
- Panama Canal widening → shorter travel time to East Coast ports from East Asia
- Port of New York and New Jersey is now 2nd busiest in the US – and easily accessible from eastern PA via 
- Industries devoted to the movement and storage of goods employ 12.2% (1 out of 8) of employed New Jersey residents
 - Highest among 50 states
 - National percentage is only 8.6%

Warehouse Redevelopment

Much of NJ's new warehouse space has been constructed in redevelopment areas, on land that had previously been in use for some other purpose (often some other industrial use, like manufacturing)

Legend

Square Feet Occupied

Production

- 0 - 24,999
- 25,000 - 49,999
- 50,000 - 249,999
- 250,000 +

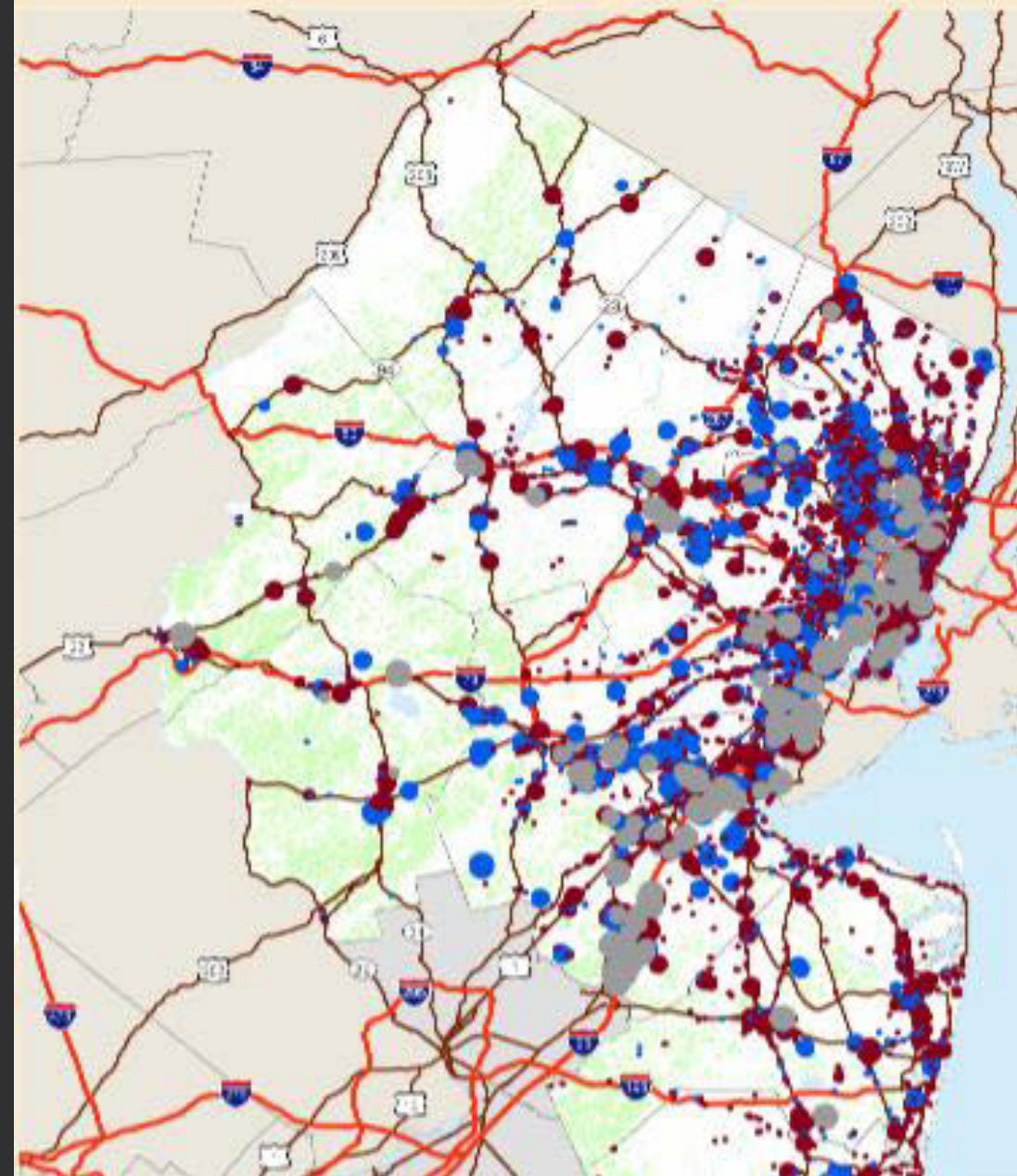
Logistics

- 0 - 24,999
- 25,000 - 49,999
- 50,000 - 249,999
- 250,000 +

Sales

- 0 - 24,999
- 25,000 - 49,999
- 50,000 - 249,999
- 250,000 +

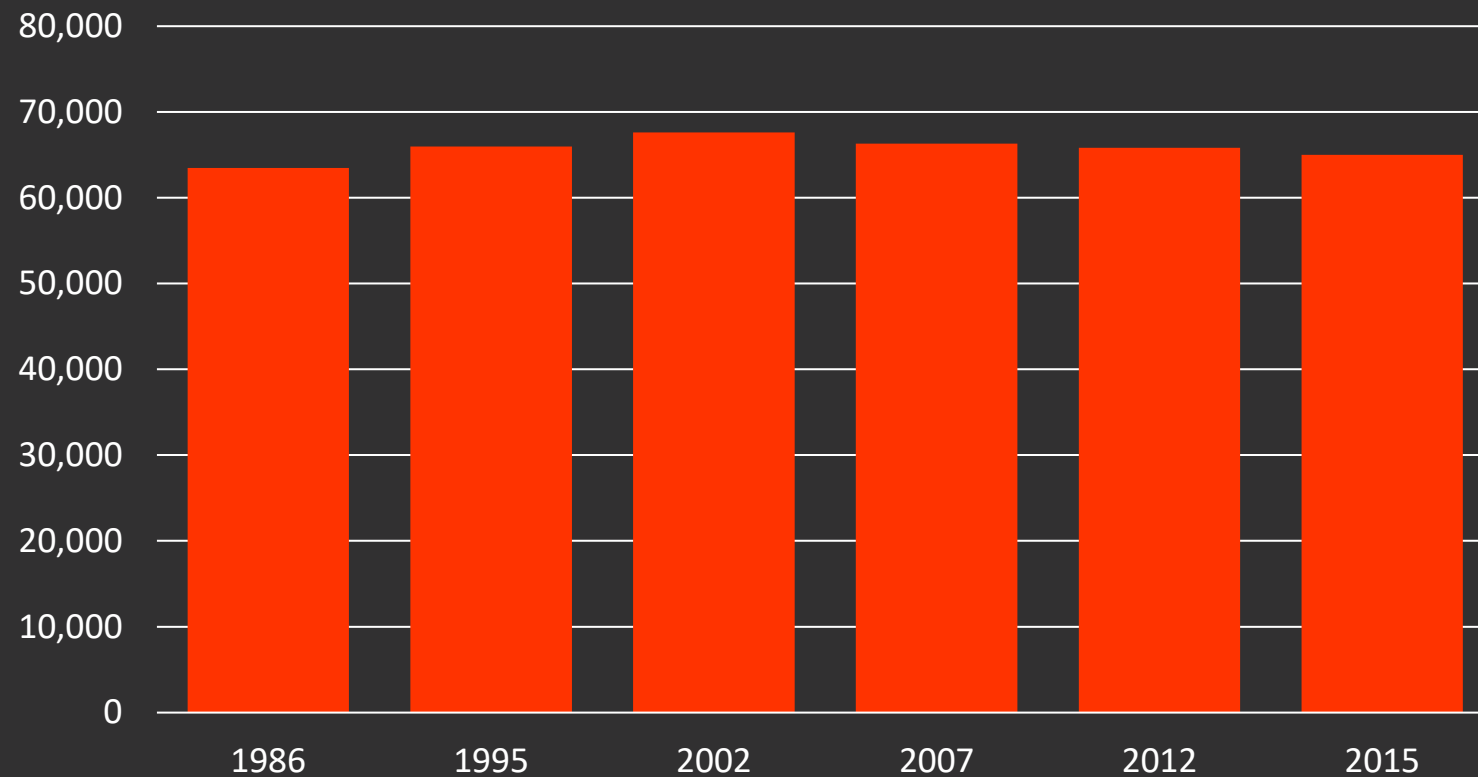
Business Square Footage by Industry Type



Source: North Jersey Transportation Planning Authority

Industrial Redevelopment

NJ Industrial Acres



Warehouse Sprawl

lehighvalleylive.com

News

Old MacDonald had a farm? Not anymore. Latest census results confirm steady decline of Lehigh Valley's agricultural acreage

Updated Apr 18, 2019; Posted Apr 18, 2019

FARMLAND ACREAGE OPERATED

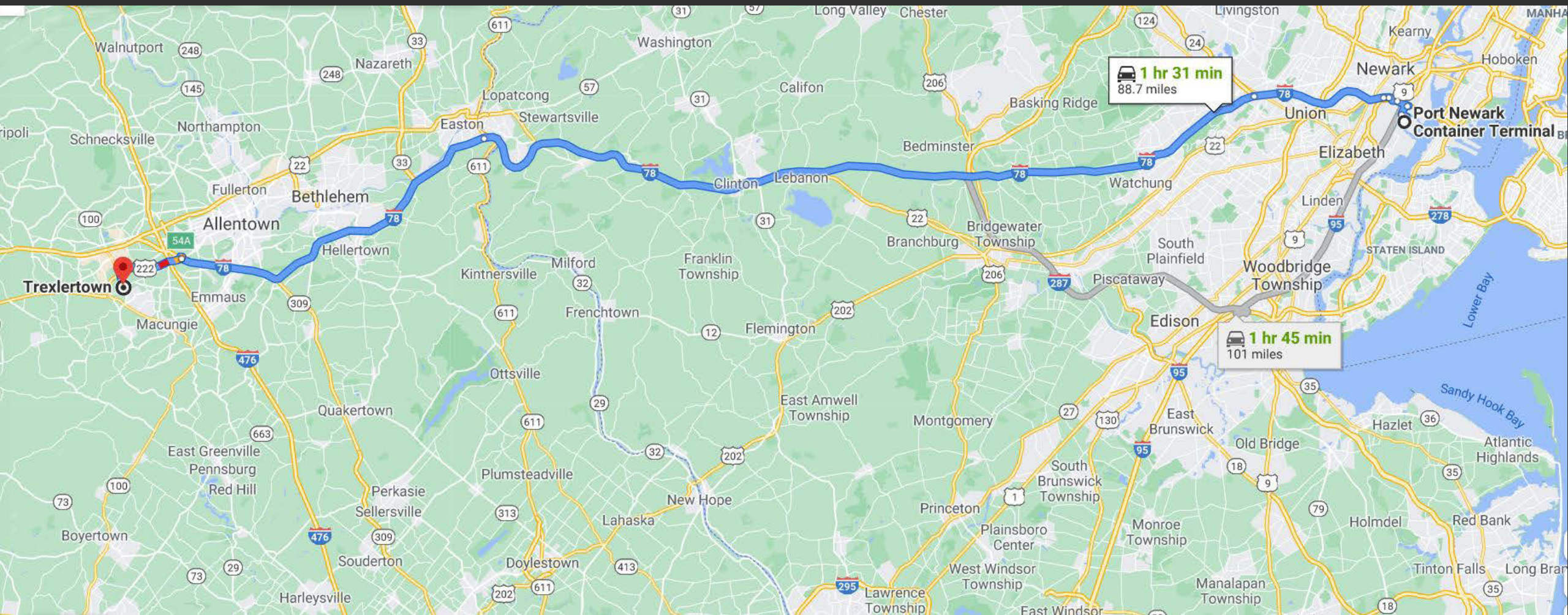
Northampton County

- 1997: 84,639
- 2002: 77,556
- 2007: 68,252
- 2012: 65,744
- 2017: 59,195

Lehigh County

- 1997: 97,500
- 2002: 91,304
- 2007: 84,643
- 2012: 76,331
- 2017: 74,511

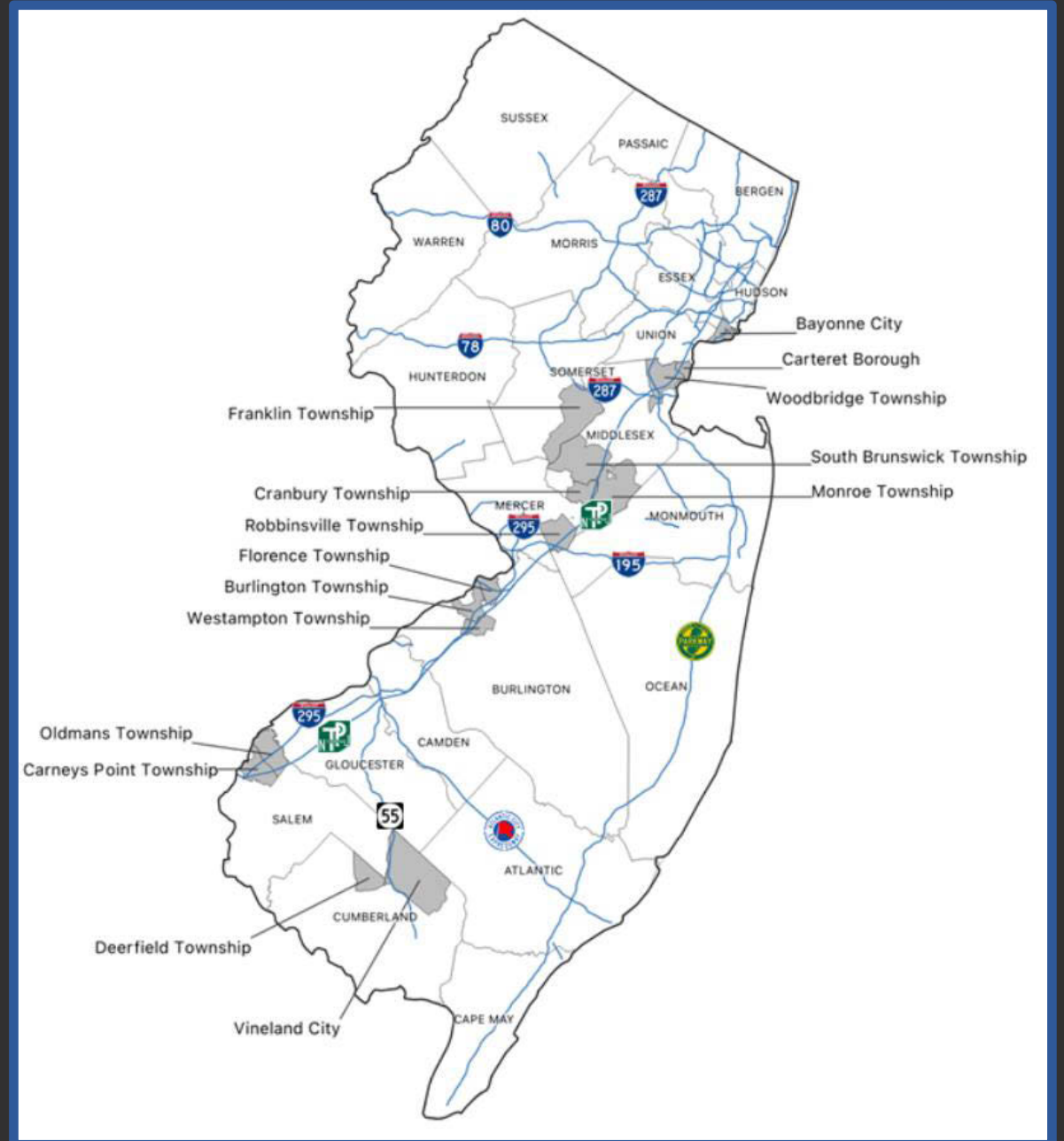




Warehouse Sprawl

15 NJ municipalities where...

1. industrial uses account for at least 10% of all non-residential developed acres as of 2015
2. industrial acreage has increased by at least 20 acres from 1995 to 2015 and is greater in 2015 than in 2007 (indicating that growth in industrial land use is not confined to redevelopment areas)
3. employment in wholesale trade and transportation/warehousing accounts for at least 12.2% of total private-sector employment (the statewide average) or
4. has increased by at least 10% from 2003 to 2019 (indicating that the increase in industrial land use is most likely due to warehousing rather than other industrial uses)



Drivers of Warehouse Growth

- Global: Port of New York and New Jersey
- Local: e-commerce



E-Commerce

- Warehousing becoming more decentralized and hierarchical
- Rise of “delivery centers” designed to handle “last-mile” deliveries
- These can be on smaller plots of land, opening up new redevelopment opportunities:
 - “Dead malls”
 - Obsolete office parks

New distinction for Amazon: Largest employer in N.J.

E-commerce giant, which just announced 7K more jobs, will top 40K employees by end of year, believed to be highest for any company

By **Tom Bergeron** (New Jersey) - September 15, 2020



An Amazon facility. (File photo)

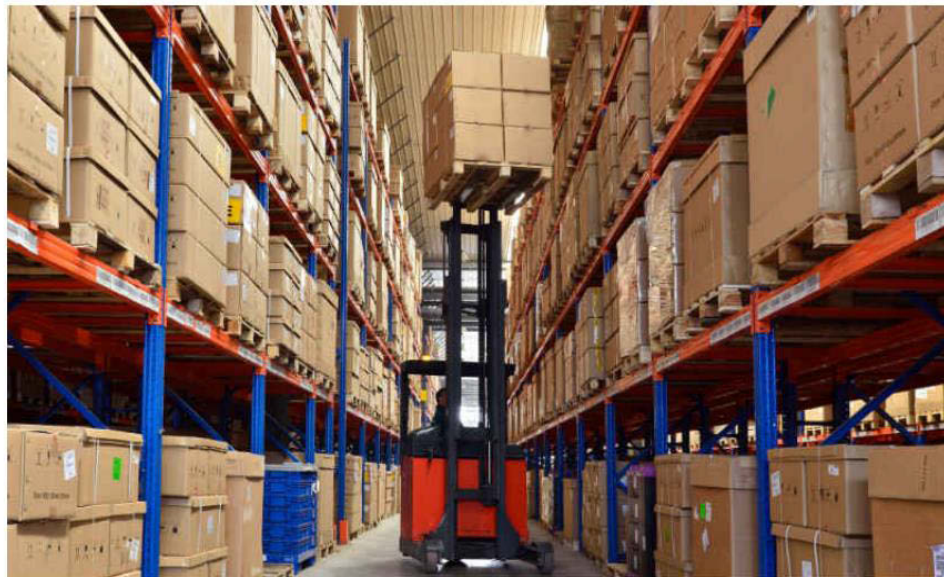
Source: ROI-NJ

More Is Likely on the Way – and in More Places



North Jersey's industrial rent growth leads nation so far in 2021

By Eric Strauss (New Jersey) - June 24, 2021



- File photo

The Top 15 markets were:

- Northern New Jersey, 33.3%;
- Inland Empire, California, 24.1%;
- Philadelphia, 19.7%;
- Louisville, Kentucky, 19%;
- Orange County, California, 16.9%;
- Boston, 14.8%;
- Nashville, Tennessee, 14.5%;
- Sacramento, California, 14.1%;
- Central New Jersey, 13.6%;
- Indianapolis, 13.4%;
- Phoenix, 12.1%;
- Reno, Nevada, 11.4%;
- Denver, 9.6%;
- East Bay, California, 8.3%;
- Los Angeles County, California, 7.6%.

Year-over-year
rent increase,
2020 to 2021



Regional Perspective Is Needed

- Municipal leaders like warehouses because they help keep property taxes down – even if their town isn't the best place for them

Regional Perspective Is Needed

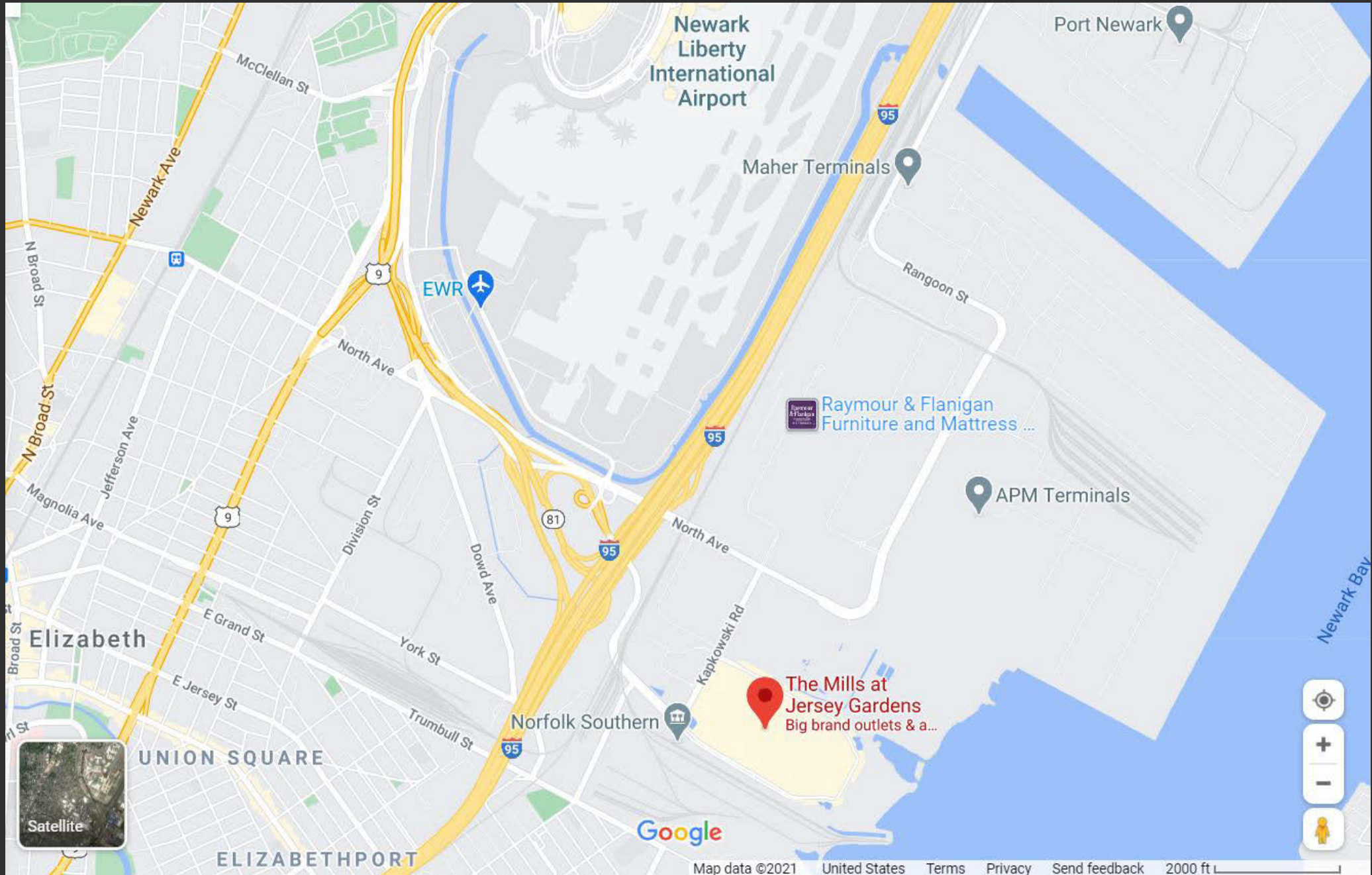
- Municipal leaders like warehouses because they help keep property taxes down – even if their town isn't the best place for them
- Avoid letting warehouses consume valuable farmland and open spaces

Regional Perspective Is Needed

- Municipal leaders like warehouses because they help keep property taxes down – even if their town isn't the best place for them
- Avoid letting warehouses consume valuable farmland and open spaces
- Keep port-dependent warehousing near the port as much as possible

Regional Perspective Is Needed

- Keep port-dependent warehousing near the port as much as possible:
 - Avoid letting port-adjacent redevelopment opportunities get used for non-port-related activities (e.g. Jersey Gardens Mall)



Regional Perspective Is Needed

- Keep port-dependent warehousing near the port as much as possible:
 - Avoid letting port-adjacent redevelopment opportunities get used for non-port-related activities (e.g. Jersey Gardens Mall)
 - Avoid costly highway widenings in outlying areas

NJ
Turnpike

Interchange **6 to 9**
>>>>>> Widening Program



Learn more about the NJ Turnpike Interchange 6 to 9 Widening Program by viewing the video: "NJ Turnpike, the backbone of NJ"

PLAY VIDEO >

Take a look at what's going on with the Widening Program. View recent aerial and ground photos.

VIEW GALLERY >

> HOME

> NJ TURNPIKE HISTORY

> WIDENING PROGRAM OVERVIEW

> CONSTRUCTION

> Construction Updates

CONSTRUCTION PHASE

ON SCHEDULE AND MORE THAN \$200 MILLION UNDER BUDGET, the Interchange 6 to 9 Widening Program between Interchange 6 in Burlington County and Interchange 9 in Middlesex County is nearly complete. Northbound lanes opened Monday, October 27, 2014 and southbound lanes opened Monday, November 3, 2014. The Widening doubles capacity on a chronically congested 35-mile stretch of the roadway, adding three lanes in each direction between Interchanges 6 and 8A and one lane in each direction between 8A and 9.

Role for the State Planning Commission

- Statewide warehouse plan – identify most appropriate sites for large warehouse development
- Work with municipal governments to make zoning changes
- Balance needs of logistics industry with those of host communities, whether urban, suburban, or rural

Questions to Be Answered

- What are the different sizes/classes of warehouses? What are their functions? How do their locational needs differ from one another?
- Should warehousing be encouraged to continue using redevelopment sites?
 - Opportunities for brownfield cleanup
 - Environmental justice considerations in urban areas near the port – trucks bring air pollution

Questions to Be Answered

- How to mitigate effects on host communities?
 - In urban areas: keep trucks out of neighborhoods
 - In rural areas: keep trucks off 2-lane roads that weren't built for them
- Where might electric trucks be deployed?
- Community Benefits Agreements – could these help address environmental-justice concerns?

Questions to Be Answered

- Is warehousing the optimal use for:
 - A large piece of land near a transit station that could be used for TOD?
 - A large piece of land in a car-oriented suburb that could be used for the creation of a new town center?
- Do obsolete office parks and shopping malls represent new redevelopment opportunities for logistics uses?
 - Locally-focused delivery centers could re-use the land formerly occupied by the malls and shopping centers that they are effectively displacing.

Questions to Be Answered

- Pros and cons of warehouse jobs in more urbanized areas:
 - Cons: High urban land costs and large development footprints argue in favor of car-dependent locations where land is cheaper, but harder to access by transit. Low # of jobs / sq mi argues against using transit-adjacent sites.
 - Pros: good-paying jobs nearby that don't require a 2-hour reverse-commute bus ride to suburban retail or office location

Questions to Be Answered

- Parallels to residential and office “smart growth”:
 - Increase **density** and save land by building up rather than out – are “High Cube” warehouses a potential solution? (less land, but same truck volume)
 - **Mode shift** from road to rail – how much of NJ’s freight traffic could feasibly move by rail instead?



Thank you!

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