

The Evolving Global Supply Chain Context

Maritime Education, Training, Research & Innovation (METRI) Virtual Summit

November 2020



Anne Strauss-Wieder
Director, Freight Planning
North Jersey Transportation Planning Authority



What are Supply Chains?



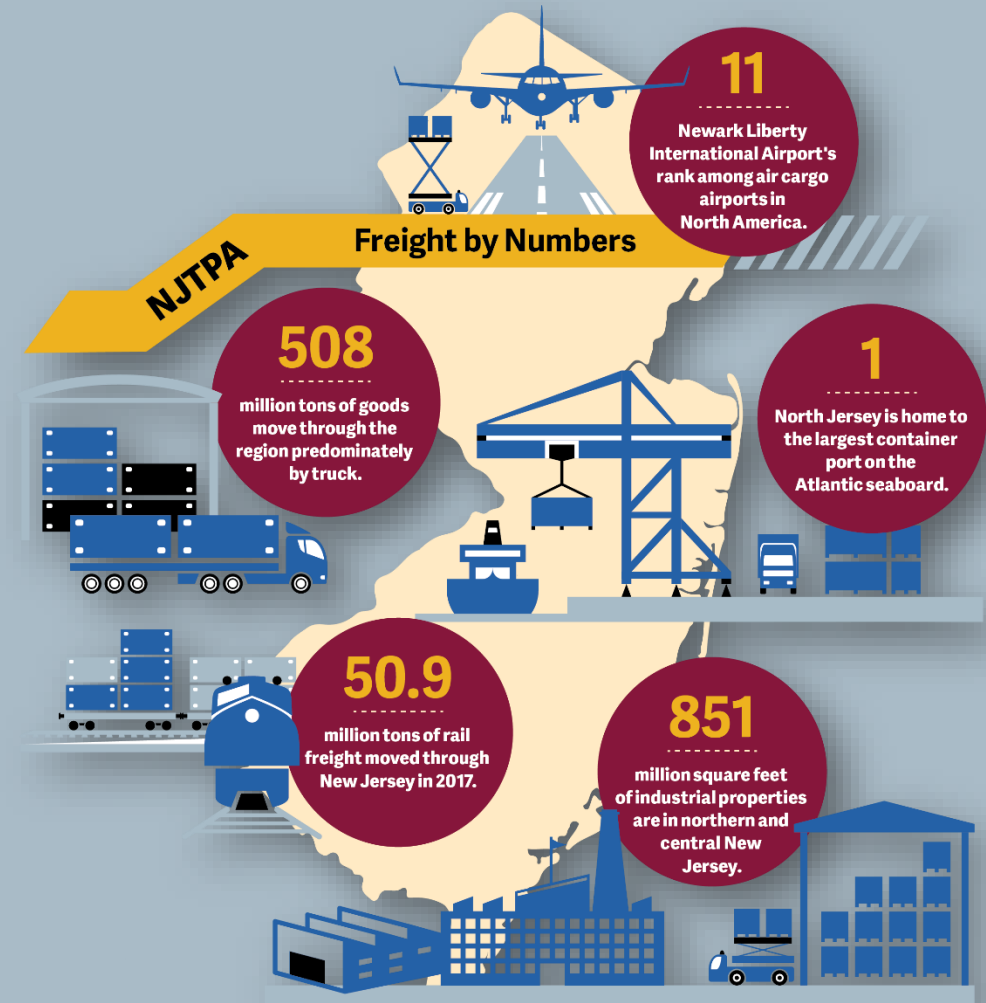
How goods move starting from material sourcing to where production occurs and then to where they are consumed.

Business continuity refers to the capacity to continue to delivery products or services after a disruptive event.



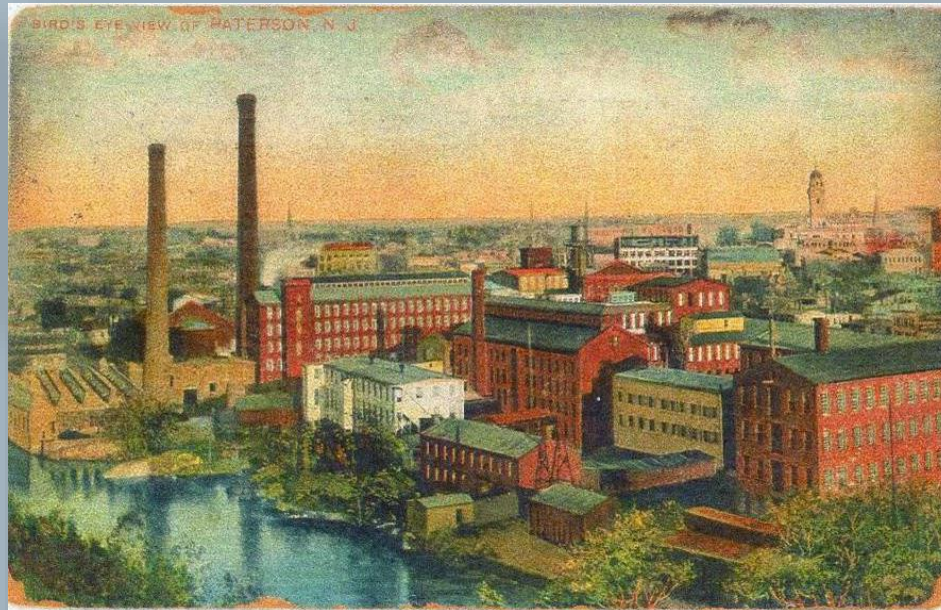
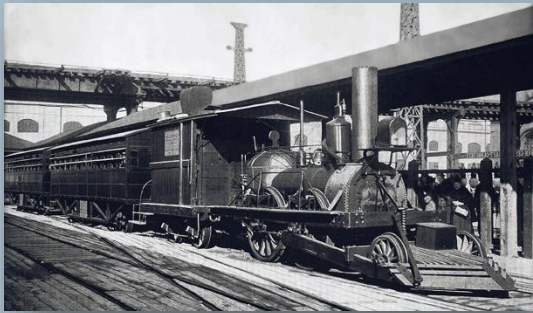
New Jersey is the Supply Chain State

- Over 500,000 workers employed in transportation, logistics and distribution
- Over 1 billion SF of industrial space in NJ
 - 851 million SF in NJTPA region, with 3 million in new starts
- Largest Port on the East Coast – nearly 7.5 million TEUs in 2019
- Robust Rail Freight Network – 2 Class Is, Conrail, shortlines
- Extensive Roadway Network

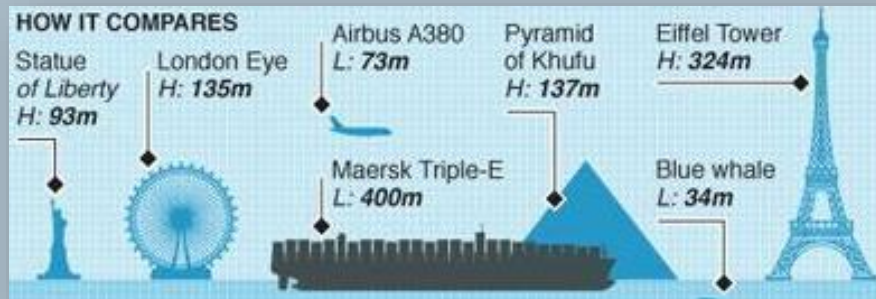
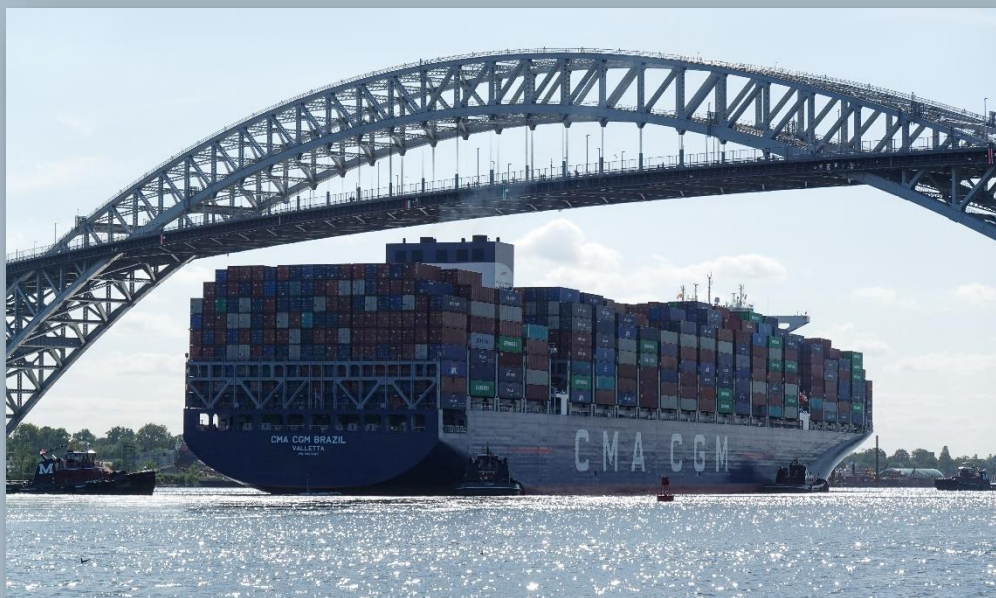


New Jersey: A History of Supply Chain Innovation

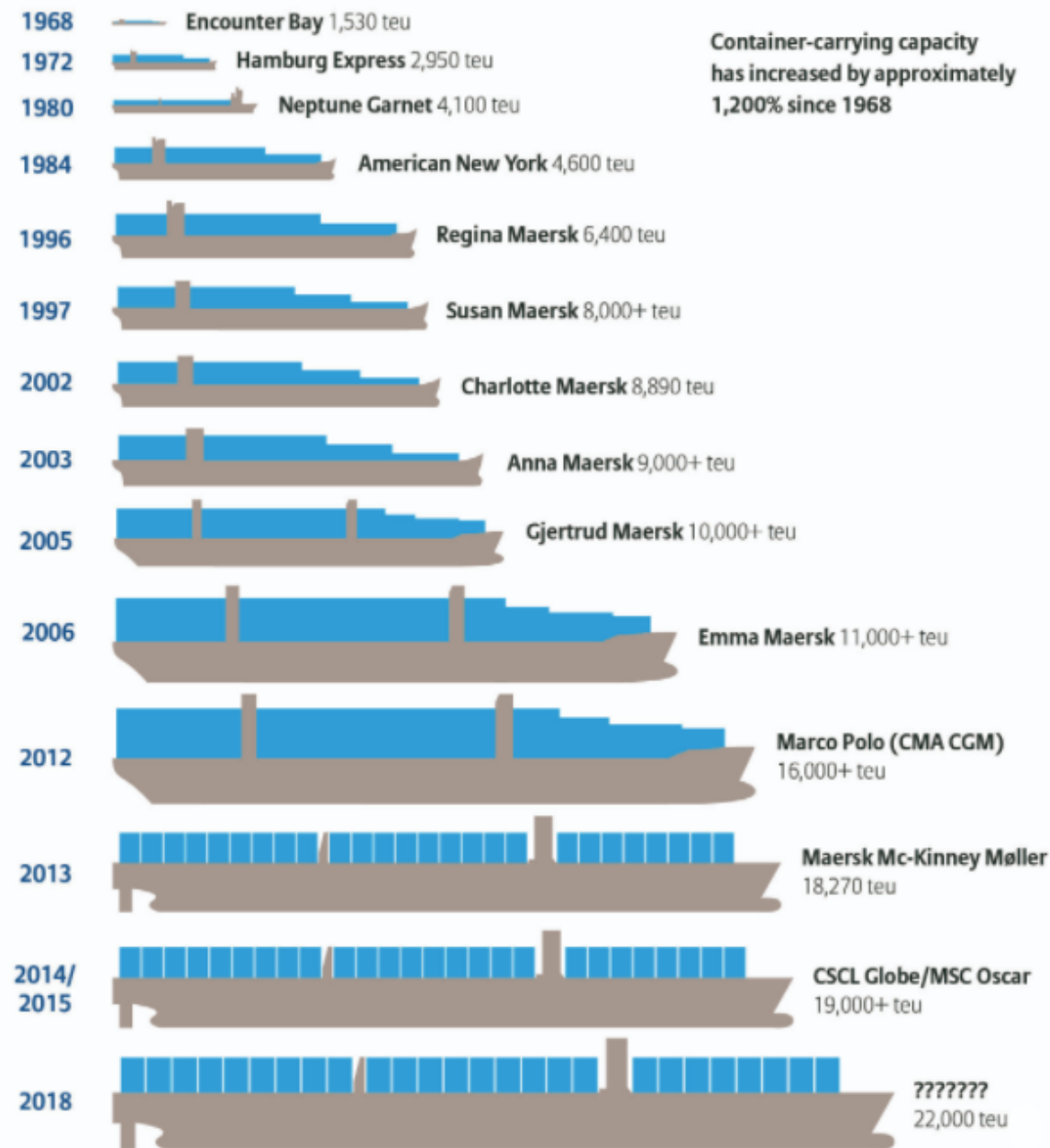
- Birthplace of the American Industrial Revolution
- One of the earliest US railroads
- Birthplace of containerization – the Ideal X



Adapting to Meet Consumer Demands



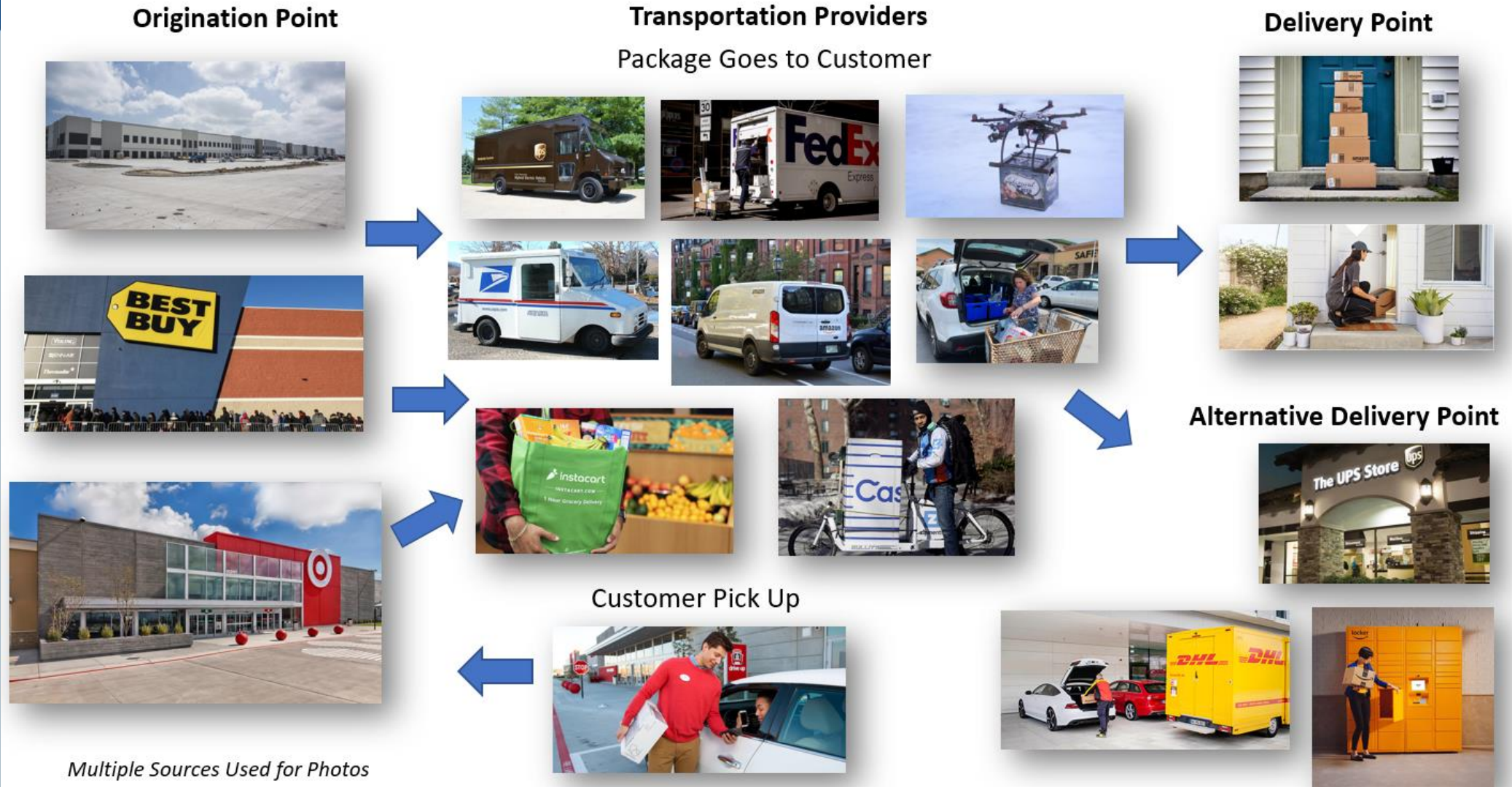
50 years of Container Ship Growth



Graphic: Allianz Global Corporate & Specialty.
Approximate ship capacity data: Container-transportation.com

Source: <http://www.worldshipping.org/about-the-industry/liner-ships/container-ship-design>

The Changing Last Mile of Retail



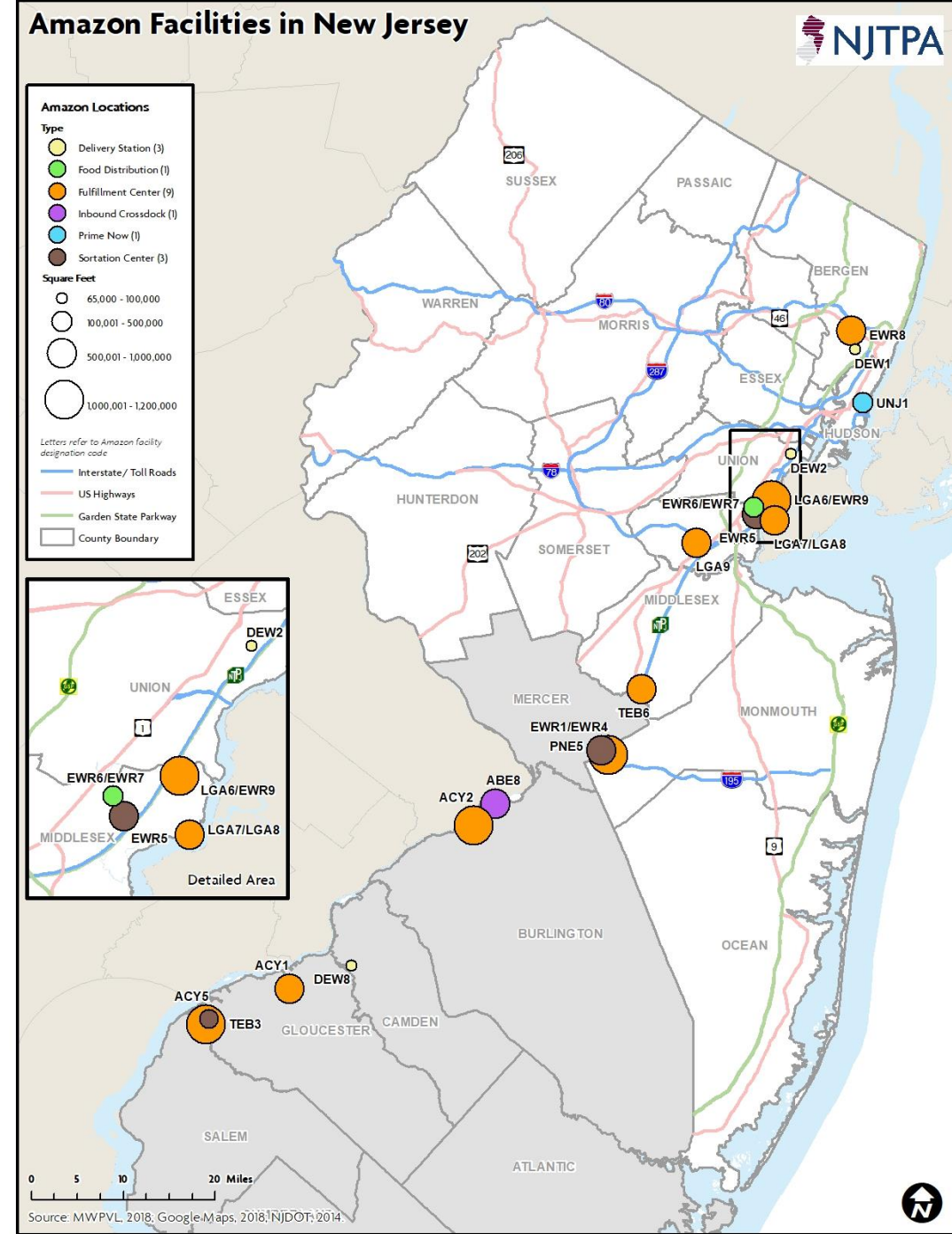
Example of Changing Retail Trends: Amazon

Facilities in NJ in 2019:

- 9 fulfillment centers (four over 1M sq ft)
- 3 sortation facilities
- 1 food distribution facility complex
- 3 delivery stations
- 1 inbound cross dock
- 1 Amazon Prime Now (one hour delivery service)



Source: Google Maps.



Regional Supply Chain Executives Discussion: Industry Changes

- E-commerce-style customer demands
- Increases in product types
- E-commerce creates more returns
- Facilities moving toward 24/7 operations
- More automation
- Increased reliance on real-time information



Emerging Longer-Term Trends from the Pandemic

Context Shifting

- Economic, business and trade trends

Demand Reshaping

- Accelerating ecommerce growth and reshaping of the retail sector
- Accelerating the diversification & pivoting of production locations
- Reviewing suppliers and supplier connectivity

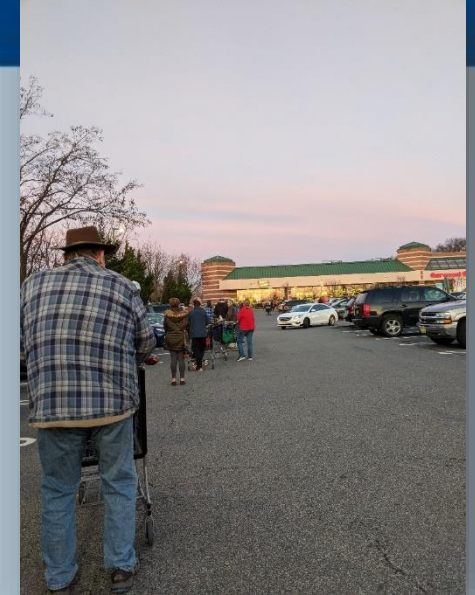
Supply Reshaping

- Ensuring workforce health and safety.
- Accelerating the financial condition of certain transportation providers/sectors
- Accelerating the deployment of certain technologies



Supply Chain Shock and Never Again

- An unexpected shock to the supply chain will make shippers and freight providers radically alter the supply chain.
- Examples and **Outcomes**
 - 2002 West Coast Port Labor Disruption. *Port Diversification*
 - 2008 Abrupt Fuel Price Spike. *Increased use of rail, rethinking packaging, channel/capacity sharing.*
 - 2009 E. Coli and Peanut Butter Recalls. *Chain of custody monitoring, more local sourcing, recall logistics.*
 - 2008 “Great Recession.” *Permanent change in consumer spending habits.*
 - 2017 Not Petya Cyber Attack. *Enhanced cybersecurity*
 - Major Functional Disruptions. *Diversification of Production Locations, Supplier diversification, Production pivoting, Modal Flexing*



Workforce Considerations

- Perception and Awareness
- Recruitment
- Access
- Regulation
- Training and Pivoting
- Retention



Amateur Baker.
PROFESSIONAL TRUCK DRIVER.



WE'RE MORE THAN JUST PROFESSIONAL TRUCK DRIVERS. We're parents, neighbors, friends. Getting home safe is our number one priority, which is why we support our industry's ongoing commitment to accident-free driving. Because like you, we have a lot to live for.

TruckingtoAmerica.com



Amateur Coach.
PROFESSIONAL TRUCK DRIVER.



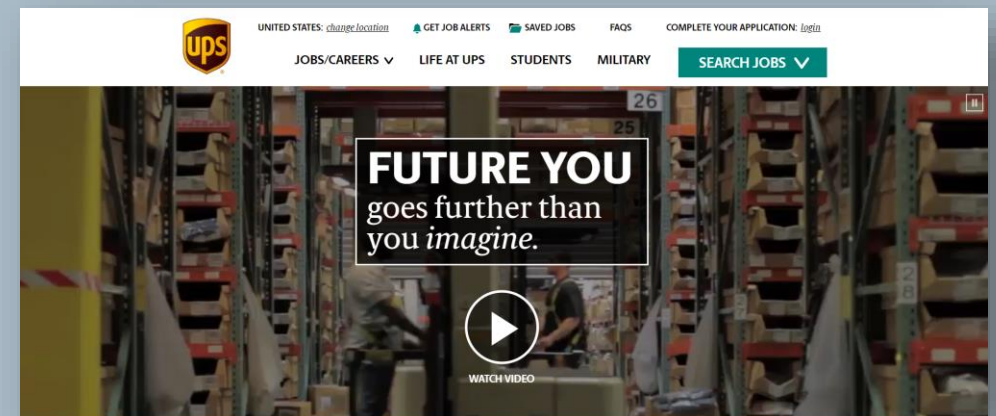
WE'RE MORE THAN JUST PROFESSIONAL TRUCK DRIVERS. We're parents, neighbors, friends. Getting home safe is our number one priority, which is why we support our industry's ongoing commitment to accident-free driving. Because like you, we have a lot to live for.

TruckingtoAmerica.com



Workforce – Effective Practices

- Market the opportunities
- Enhance demographic recruitment
- Develop skills and expertise
- Collaborations among employers and trainers
- Starting early in the education system
- Apprenticeship programs
- Enhance accessibility



Thank You



Find us on
Facebook!

follow us on
twitter 



Find Us On
Instagram



SUBSCRIBE
TO OUR CHANNEL

Defining the Vision. Shaping the Future.



NJTPA

**NORTH JERSEY
TRANSPORTATION
PLANNING AUTHORITY**

Anne Strauss-Wieder

Director, Freight Planning
(973) 639-8404

Strauss-Wieder@njtpa.org