



TETC Freight Program

Presentation to BRTB Freight Movement
Task Force
March 24, 2022





## Today



Introduction – TETC Coalition



**TETC Freight Program Overview** 



**TETC Freight Program Highlights** 



### WHO IS THE COALITION?







## ABOUT THE EASTERN TRANSPORTATION COALITION

- 17 States and DC
  - 190 agencies
    - Transportation, Toll, Bridge, MPOs



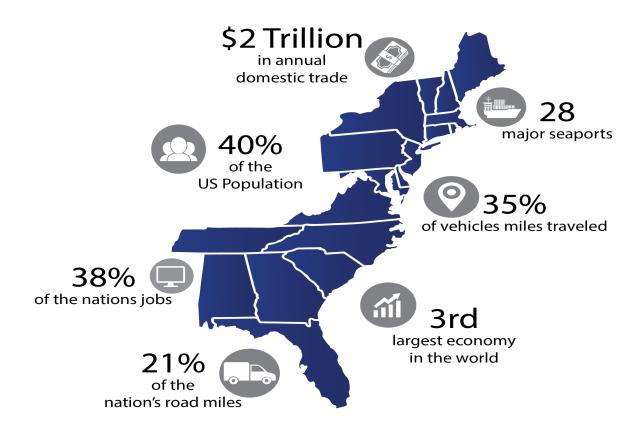


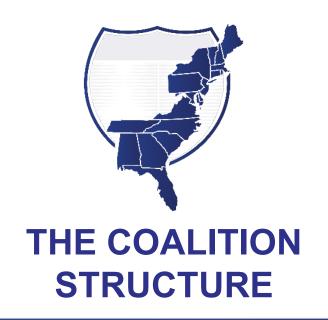
## Our newest member...





# The Eastern Transportation Coalition Region







#### PROGRAM TRACK COMMITTEES

### TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS

**VPP MARKETPLACE** 

**DATA TOOLS & USER GROUPS** 

TRAVELER INFORMATION

TRAFFIC INCIDENT / EVENT MANAGEMENT

**OPERATIONS ACADEMY** 

#### **FREIGHT**

FREIGHT PLANNING

FREIGHT DATA

TRUCK PARKING

SUPPLY CHAIN PERFORMANCE

FREIGHT ACADEMY

### INNOVATION IN TRANSPORTATION

CONNECTED & AUTONOMOUS VEHICLE

**TOLLING RECIPROCITY** 

MILEAGE-BASED USER FEE



## **TETC Freight Program**





## TETC Freight Program

#### Emphasis areas:

- Freight Planning
- Freight Data
- Truck Parking
- Supply Chain Performance
  - Safety and Reliability
    - >Addressing freight for weather, disruptions
- Innovations impacting Freight Industry
  - Connected/Automated Vehicles
    - ➤ Truck Platooning
  - Integration of Alternative Fuel Vehicles





### **TETC Freight Committee**

Comprised of public agency staff from DOTS, Transportation Authorities, MPOs and related agencies

- ► Planning, Operations, Policy
- Focuses efforts on the movement of freight across multiple jurisdictions and across multiple modes.
- Share best practices
- Support states in developing and implementing state freight and operational plans that support freight/supply chain movement
- Support states in access to and understanding and application of freight data resources
- Support Staff Development

### **TETC Freight Data Working Group**



#### **Objective:**

- Serve as a "user group" for freight data
  - Sharing innovative applications of data for freight planning
  - Leverage experiences as agencies procure/integrate freight data from
    - TETC TDM "Marketplace"
    - FAF Disaggregation project
- Begin meetings late spring 2022

## **TETC Truck Parking Working Group**

A forum for TETC State DOTs and MPOs, Planning and Operations staff

- Share recent activities and various approaches to address truck parking needs
  - What works and is not working well
- Leverage knowledge base from national and agency work
  - Studies, RFPs, SOWs, Project Implementation
- Consider the unique attributes and perspective of this corridor
- Serve as a resource to connect members and information]
- Meets bi-monthly



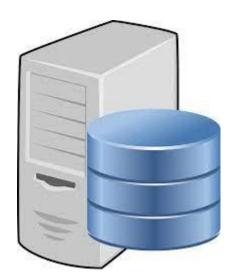


## TETC Freight Program Highlights



➤ Create a repository of information on truck parking activities and materials as a resource for TETC members

- Type of Activity (study, capacity expansion project of existing locations, real time parking information system, brand new capacity at new
- Status and date or estimated date (In procurement, Underway, Planned, Completed
- Agency Project Manager/contact information
- Vendor(s) (if applicable)
- Links to final reports/project deliverables as applicable
- Links to Procurement, SOW or other relevant materials if available
- Cost
  - Project cost and if grant, award amount and match
  - Cost-per-space-added calculation if available
- Funded (e.g., federal grant, state funds, PPP, other)





# **Supply Chain Performance - Safety and Reliability:**

# Addressing freight for congestion, weather disruptions

• Enhance safety, reduce system disruptions from crashes, due to congestion, weather

 Provide desired information that is accurate, reliable, timely and accessible to truckers

Closures, slow/stopped traffic alerts, detours







## **TETC TIS Summit – TSMO/Freight Event**

Topic: Improving Safety: Implementing New Traveler Information

Services for Commercial Vehicles

100+ Attendees

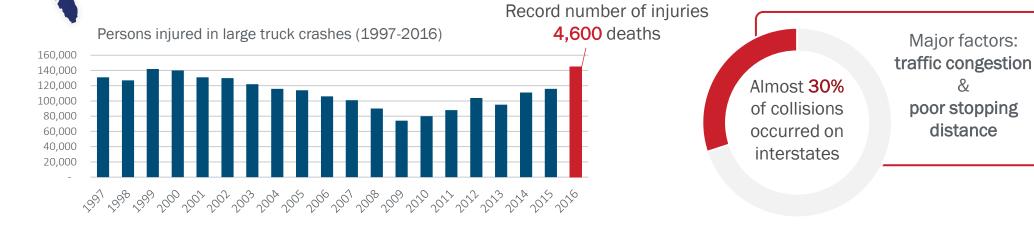
#### **Presentations:**

- NC and NJ programs on truck safety alerts
- PA Turnpike Low Bridge Clearance



### Road Congestion is a Critical Safety Issue

Reducing congestion reduces dangerous and unanticipated slowdowns – and reduces collisions



A fully loaded truck traveling 65 mph takes 66% longer to brake and stop than a passenger car

distance



## Why is it important that truckers get good, reliable Traveler Information?



Tractor-trailer crash cause over 10 mile backup on I-95 south in Caroline County

### Freight data in new TETC Transportation Data Marketplace

A variety of freight related data including the following:

- Travel Time, Speed and Volume data (as well as reliability)
- Origin and Destination information for longhaul and regional fleets,
- Parking data including availability and utilization.
- In addition, commodity movement is also being provided.

#### Vendors awarded:

- Future Mobility
- Geotab
- INRIX
- Quetica
- Streetlight







0, 2021

\*Formerly the

# TETC FAF Disaggregation Project

#### Objective

- Support states in freight planning and related activities
- Provide members Freight Analysis
   Framework ("FAF") disaggregated data
- Builds on TETC work to enhance agency staff data knowledge
- Save time/\$ for all members states by providing an enhanced data product

## Freight Analysis Framework (FAF)

 A federal database of regional freight flows

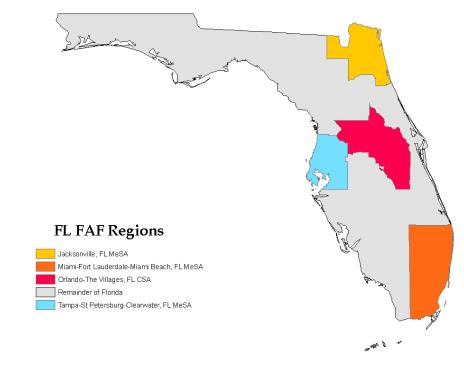
			Within the given state (S to S)		Outbound from the given state (S to all other states)		Inbound to the given state (all other states to S)	
State (S)	Trade Type	▼ Domestic Mode	tons_within 🔻 t	ons_within_pctg	tons_out 🔻	tons_out_pctg 💌 t	tons_int	ons_in_pctg
New York	Total Flow		401,038.1	100.0%	128,317.2	100.0%	207,023.1	100.0%
		Air (include truck-air)	14.3	0.0%	203.3	0.2%	285.2	0.1%
		Multiple modes & mail	2,118.6	0.5%	5,689.8	4.4%	15,988.3	7.7%
		Other and unknown	163.5	0.0%	334.7	0.3%	149.8	0.1%
		Pipeline	35,156.7	8.8%	24,734.2	19.3%	61,829.9	29.9%
		Rail	10,508.7	2.6%	9,828.3	7.7%	13,688.2	6.6%
		Truck	350,459.5	87.4%	85,449.3	66.6%	113,436.4	54.8%
		Water	2,616.6	0.7%	2,077.6	1.6%	1,645.4	0.8%
New York	Domestic Only		374,639.8	93.4%	99,800.3	77.8%	151,255.0	73.1%
		Air (include truck-air)	0.1	0.0%	15.9	0.0%	50.8	0.0%
		Multiple modes & mail	1,007.6	0.3%	4,588.5	3.6%	10,222.0	4.9%
		Pipeline	29,805.7	7.4%	20,135.0	15.7%	55,828.4	27.0%
		Rail	9,268.7	2.3%	2,385.8	1.9%	4,600.7	2.2%
		Truck	331,941.1	82.8%	70,771.9	55.2%	80,505.1	38.9%
		Water	2,616.6	0.7%	1,903.3	1.5%	48.0	0.0%
New York	Export		13,213.0	3.3%	3,475.2	2.7%	41,153.9	19.9%
		Air (include truck-air)	4.3	0.0%	48.0	0.0%	143.0	0.1%
		Multiple modes & mail	404.6	0.1%	123.6	0.1%	4,298.4	2.1%
		Other and unknown	74.1	0.0%	325.9	0.3%	145.5	0.1%
		Pipeline	2,045.5	0.5%	0.0	0.0%	6,001.5	2.9%
		Rail	207.2	0.1%	815.0	0.6%	5,980.1	2.9%
		Truck	10,477.4	2.6%	2,015.6	1.6%	23,572.0	11.4%
		Water	0.0	0.0%	147.0	0.1%	1,013.5	0.5%
New York	Import		13,185.2	3.3%	25,041.8	19.5%	14,614.2	7.1%
		Air (include truck-air)	9.8	0.0%	139.4	0.1%	91.3	0.0%
		Multiple modes & mail	706.5	0.2%	977.7	0.8%	1,467.9	0.7%
		Other and unknown	89.5	0.0%	8.9	0.0%	4.3	0.0%
		Pipeline	3,305.6	0.8%	4,599.2	3.6%	0.0	0.0%
		Rail	1,032.8	0.3%	6,627.4	5.2%	3,107.4	1.5%
		Truck	8,041.1	2.0%	12,661.8	9.9%	9,359.4	4.5%
		Water	0.0	0.0%	27.3	0.0%	583.9	0.3%

 An assignment of the average number of freighthauling trucks to individual highway segments on the national network



# Why Disaggregate? Can Fill Small Geography Data Needs

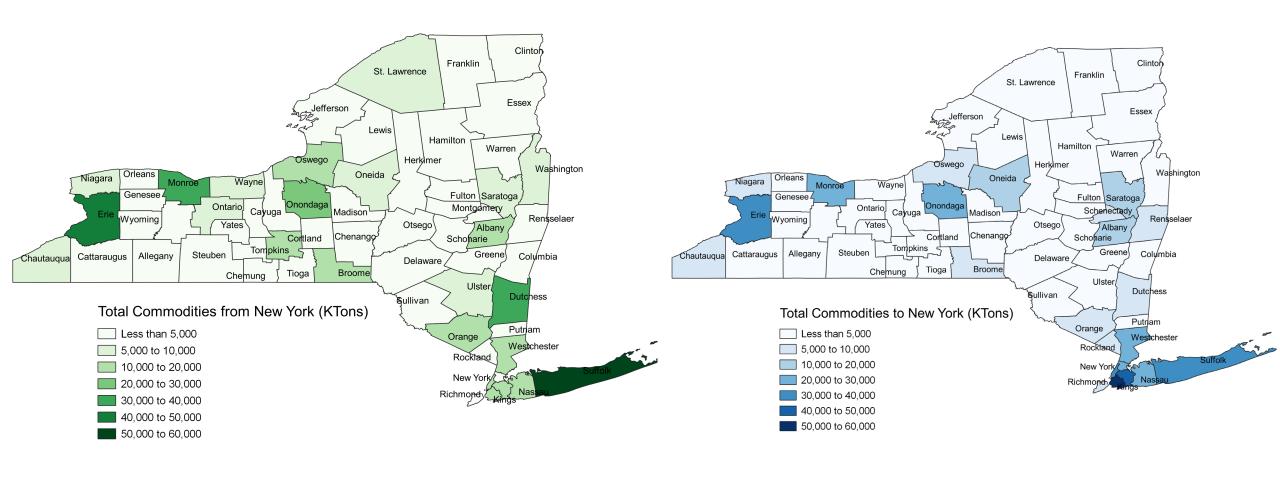
- Fill gap in available data or complement other data sources procured by agencies
- Help integration with statewide freight planning efforts and MPO plan/program development
- Help identify freight needs and improvement strategies
- Help performance-based planning





More than half of freight movements happening within TETC states are internal to that specific state. This highlights the need for a disaggregation approach that can distribute this freight to geographies below the MSA and/or state level.

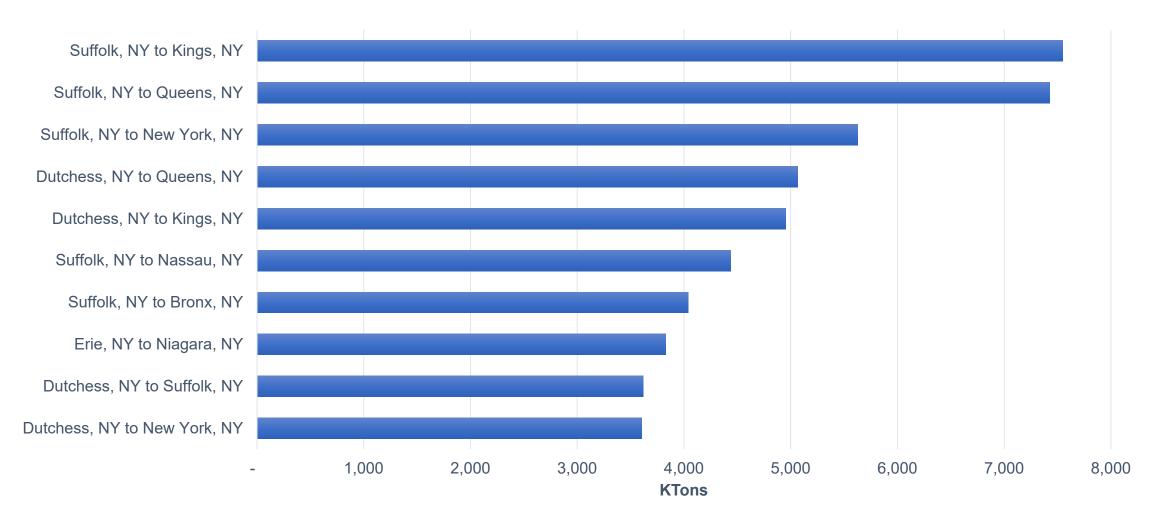
## **New York Commodity Flows**



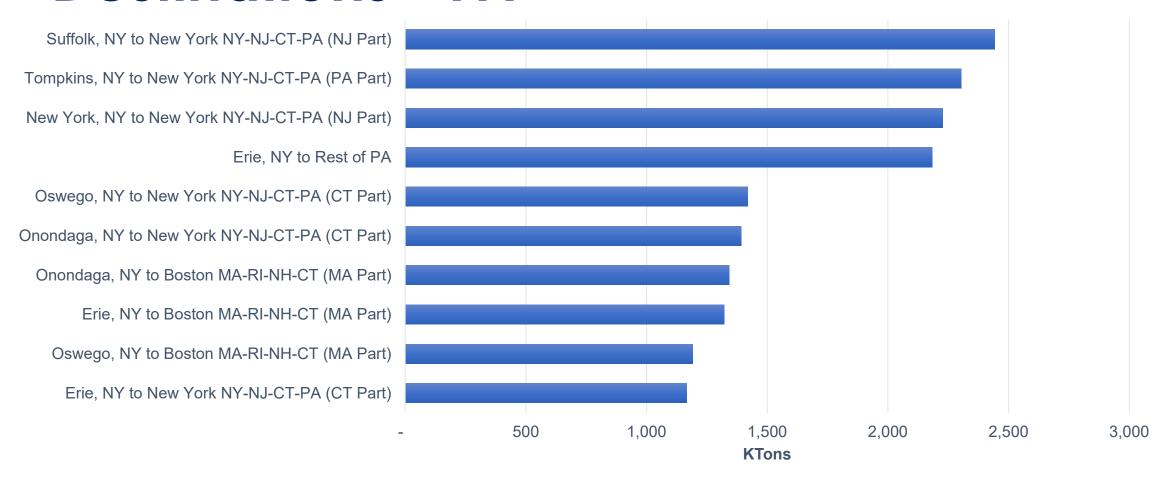
Commodities from NY Counties (KTons)

Commodities to NY Counties (KTons)

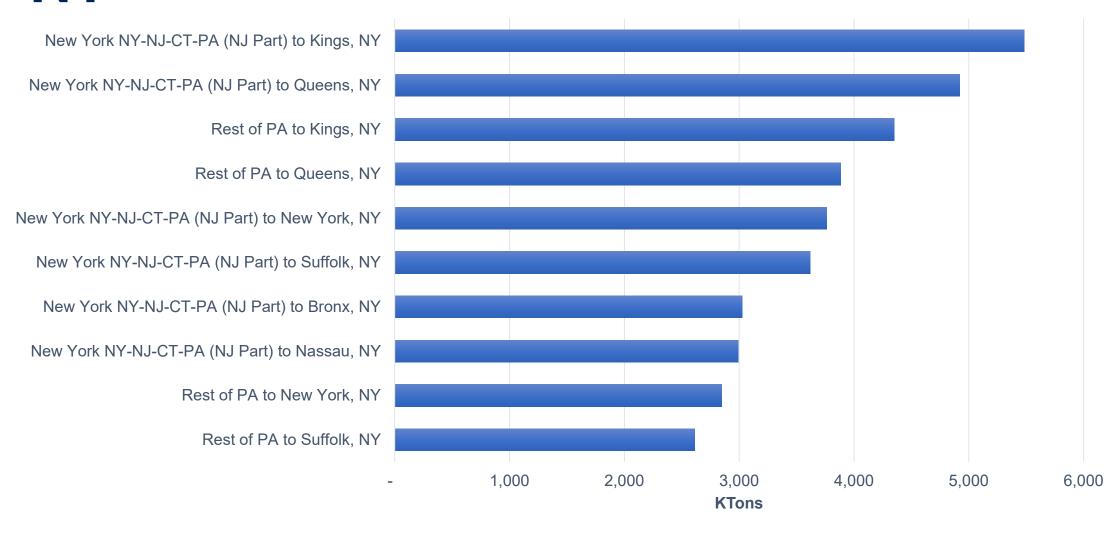
# Example: Top 10 County to County Flows - NY



# Example: Top 10 Domestic Destinations - NY



# Example: Top 10 Domestic Origins - NY



## FAF Disaggregation



Webinar on disaggregation methodology approach and data output examples held with TETC agencies on November 5



Final Technical Memorandum on Methodology provided to agencies



FAF Disaggregated files for all Coalition states and key border states distributed to member agencies



Review/share agency experiences/applications using FAF disaggregated data in TETC Freight Data Working Group "Wonderful to have this data!"-Pam Cotter, RIDOT

"Thank you for sharing this data as it will be very helpful in our Freight Plan update, especially with freight flow forecasting" – Linsey Callaghan, RI Statewide Planning.



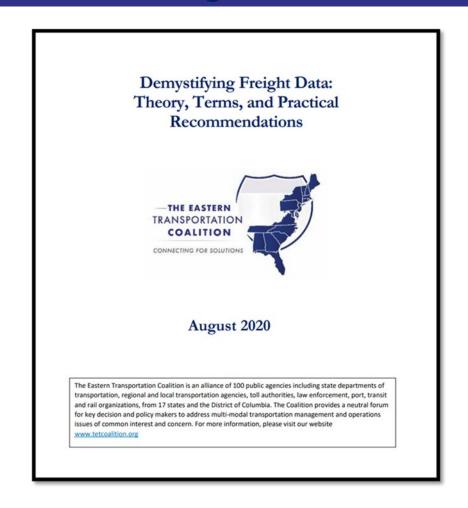
# Freight Data Matrix Project: The need to "Demystify" Freight Data



- Agencies face growing emphasis on understanding freight activity
- More software and data resources emerging/evolving applicable to freight
- Evaluating and effectively using new sources of data can be a challenge for public sector planners.
- Assist public sector practitioners in their understanding of various data sources that may be applicable to their work.

## Freight Data Matrix Project

- Gives background on the theoretical context around freight data
- Provides practical recommendations for public agency transportation planners/practitioners
- Provides some clarification of data terms
  - https://tetcoalition.org/frei ght-program/





### **Freight Academy**

An immersion program for public sector staff

- Helping planning, operations and policy staff better understand freight as an integral part of the transportation system;
- Engage with private sector entities and facility managers to advance understanding of transportation impacts
- Increase awareness of the dynamic changes in the goods movement industry













### **THANK YOU!**

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Connecting for Solutions

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