Quick Take

What:

The Freight Congestion and Delay Study was one of several recommended studies following a comprehensive analysis of the region's freight system, Freight North Texas. The study focused on roadway movements, utilizing data from various sources to identify specific causes of congestion and delay.

Significance:

The study primarily examined congestion in four areas that represent diversity in regional freight facilities. As a result of study findings, policies and programs were identified that can be applied on a regional level, along with recommended projects unique to each focus area. Implementation of these projects is intended to relieve regional congestion in each focus area, within the "last/first" mile of a freight trip.

By the Numbers:

77 percent

The rate of regional freight tonnage moved by trucks.

Freight Congestion and Delay Study
Examining North Texas Freight Efficiency

The Freight Congestion and Delay Study began with a region-wide examination of freight efficiency. The study concentrated on recurring, non-recurring, and non-transportation related delay. A variety of data sources were reviewed, including truck volumes on regional facilities, regional truck congestion, traffic-control delay, and locations for reported truck-involved crashes. After soliciting input from the Regional Freight Advisory Committee on data-collection efforts and study methodology, attention shifted from a broad regional analysis to the following distinct freight-oriented areas:

- Alliance Texas: Operational master-planned logistics hub/inland port
- Great Southwest Industrial Park: Older industrial park/warehouse area
- Inland Port of Dallas: Master-planned logistics hub/inland port in development
- Mesquite Intermodal Hub: Older intermodal hub

Assessment/Analysis:

The study assessed the following kinds of delay:

Recurring – This delay generally occurs daily and in consistent locations. Recurring delay is typically created by transportation system deficiencies such as insufficient roadway capacity, traffic signals, speed limits, and major construction.

Non-Recurring – This delay is typically random. Non-recurring congestion is generally created by unforeseen circumstances such as inclement weather or construction and is typically not a product of transportation system deficiencies. Other non-recurring delay can be caused by traffic incidents, special events, or maintenance closures.

Non-Transportation – This delay can be both recurring and non-recurring. Non-transportation delay can include equipment shortages, inefficient operations at freight terminals, and labor disruptions.

Photos: Getty Images

The Freight Congestion and Delay Study, a follow up to NCTCOG's Freight North Texas, examined the causes of congestion and made recommendations for how to improve the efficiency of goods movement.

FACT*Sheet*

Based on the three congestion categories, the following components were reviewed: truck traffic forecasts, traffic signal assessment, truck-involved crashes, truck-route assessment, and roadway/railroad crossing assessment. The results of these evaluations led to recommendations for policies and programs as well as specific projects for each of the focus areas.

POLICIES

Policies collectively identify the freight goals for the region and are intended to guide freight decisions, programs, and projects. Based on the congestion and delay analyses, three principal policies emerged essential to improving freight congestion in North Central Texas.

Safety – Create safer truck routes and conditions for freight movement.

Efficiency – Ensure continuous truck routes between municipalities allowing freight to move efficiently to designated facilities. Improve access to the "first/last mile" using designated truck routes. Follow appropriate heavy-truck design standards, including turning radius. Retime traffic signals to minimize delays.

Comprehensive – Create far-reaching freight networks (primary, secondary or local) to ensure project continuity and increase funding eligibility.

PROGRAMS

Programs are policies in action. They are more focused ideas based on the policies. The programs encompass the entire region to help meet policy goals. The following programs are based on the congestion and delay analyses:

Truck-Route Network Continuity – Coordinate with local municipalities to designate appropriate truck-route facilities allowing for efficient, connected truck routes.

Local Government Freight Education – Create freight education programs for local governments.

Intersection Improvements – Review traffic signals for optimal freight conditions on designated truck routes. Make geometric improvements to truck routes to improve freight movement.

Access to and Egress from Freight Facilities – Enhance freight facilities to improve the flow of goods across the various freight networks.

Data Collection – Improve quantity and quality of information using public and private sources.

Local Government/Railroad Partnerships – Encourage these entities to cooperate on the best outcome for improving rail crossings.
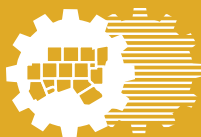
PROJECTS

Projects are separated into five categories. The focus areas do not have a project in all categories, and the number of projects may vary depending on need.

- **Truck-Route Network Continuity**
- **Intersection Improvements on Truck Routes**
- **Road Capacity Improvements**
- **Railroad Relocation**
- **Railroad Crossing Improvements**

What's Next?

The next step is to adopt the policies, initiate congestion-relief programs, and ensure projects are included in the Metropolitan Transportation Plan for future funding through the Transportation Improvement Program.