



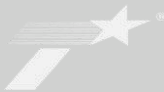
# Impact of Freight to the Texas and DFW Economy and Transportation Infrastructure

Caroline A. Mays, AICP, Director  
Planning and Modal Programs, TxDOT

**Transportation Crossroads Conference**

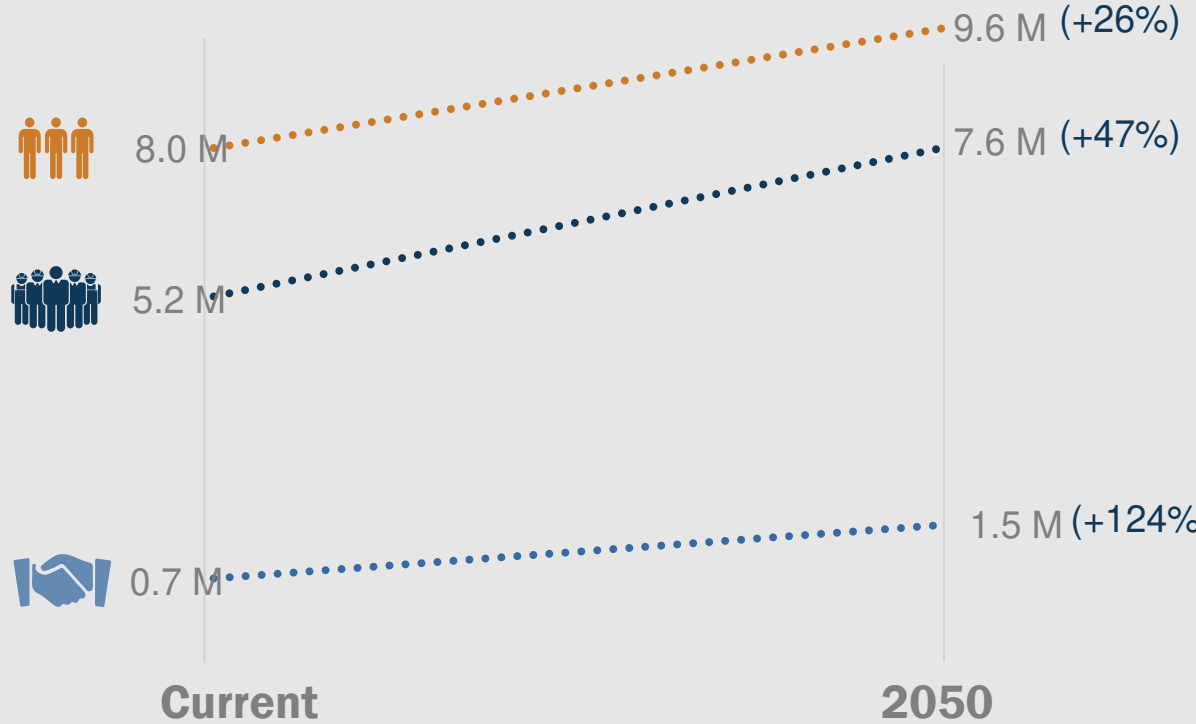
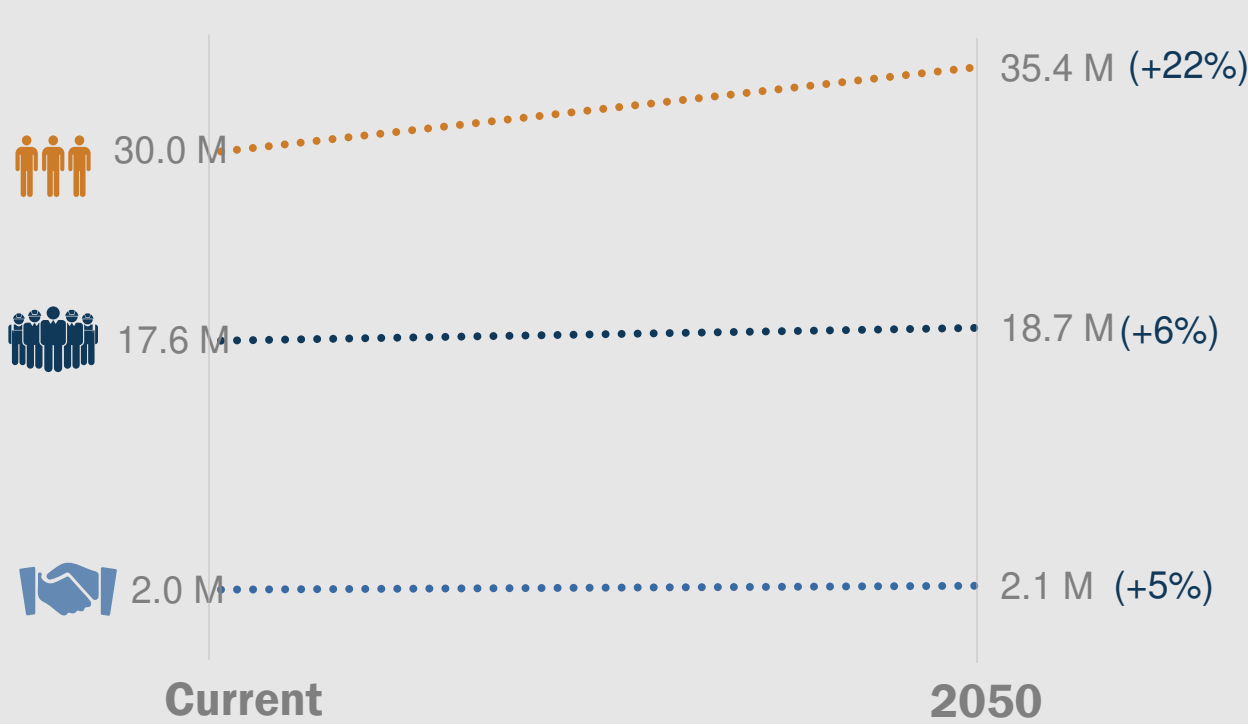
**November 17, 2023**



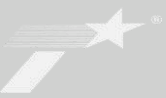


## Texas

## DFW Region

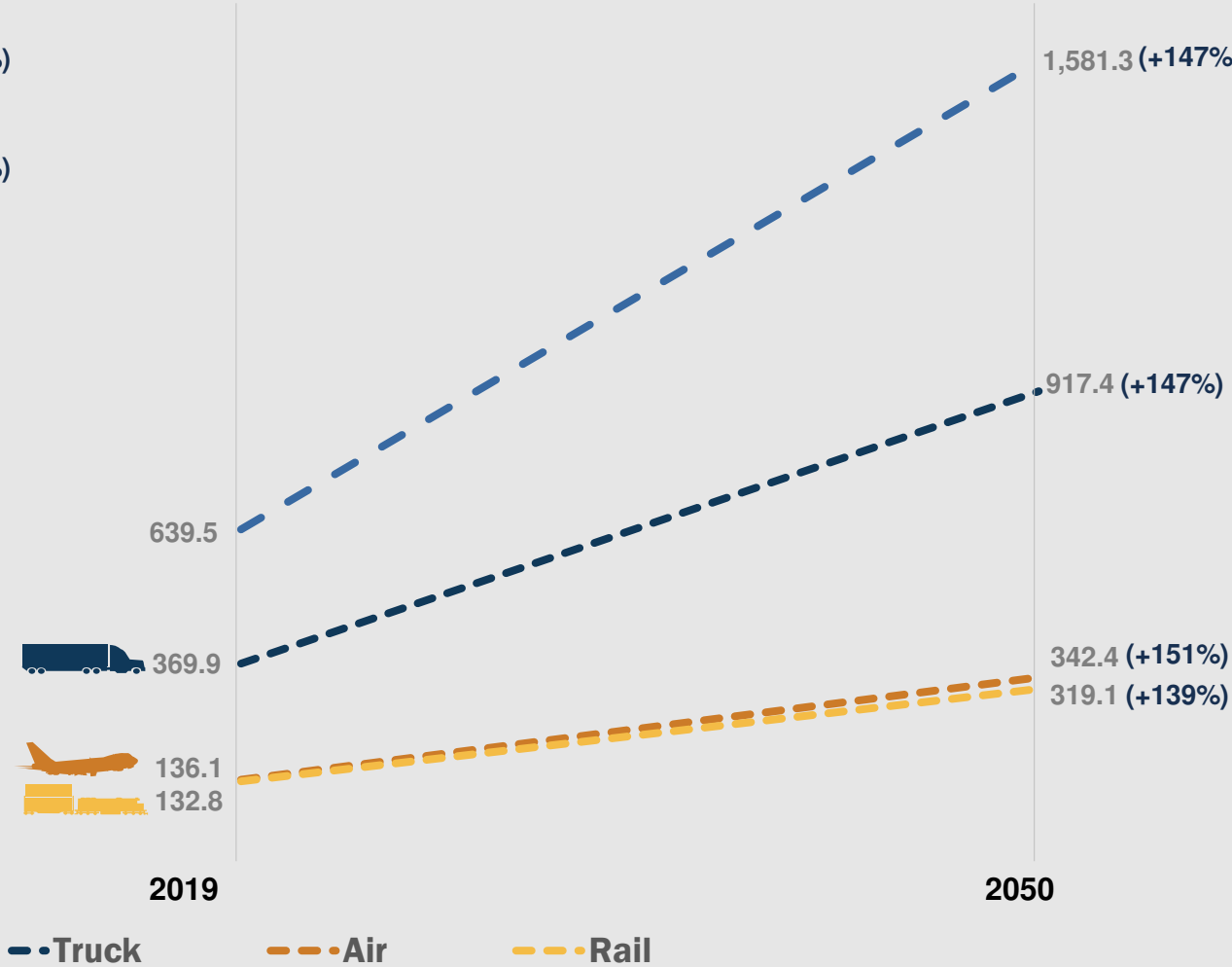
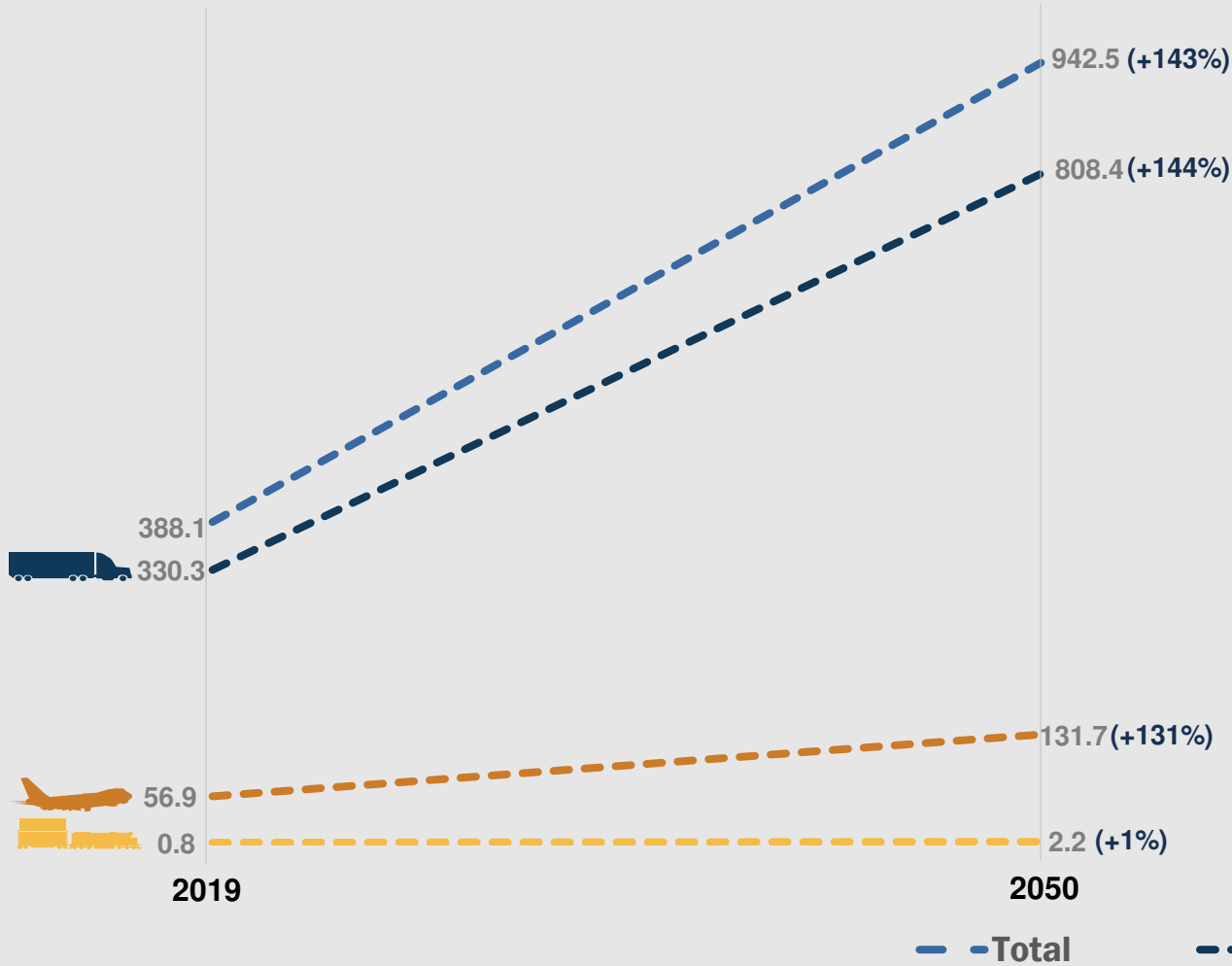


.....GSP (million)      .....Jobs      .....Population

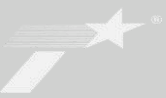


## Freight Tons by Mode, 2019-2050 (million Tons)

## Freight Value by Mode, 2019-2050 (billion USD)



# DFW Region's Multimodal Freight Transportation Network and Connectivity

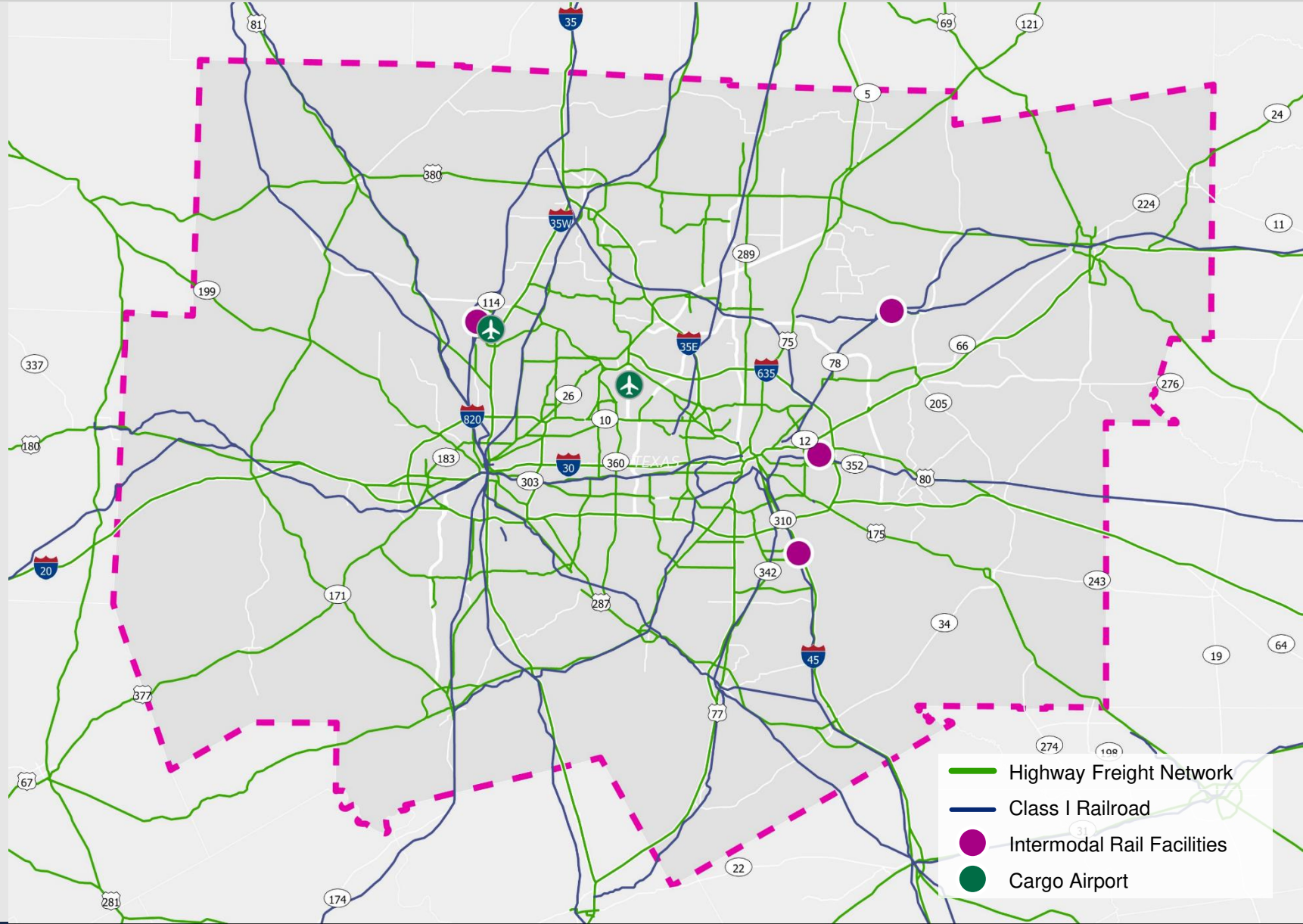


**2K**   
**TX HWY FREIGHT  
NETWORK MILES**

**2**   
**CARGO AIRPORTS**

**3**   
**CLASS 1 RAILROADS**

**4**   
**INTERMODAL RAIL YARDS**



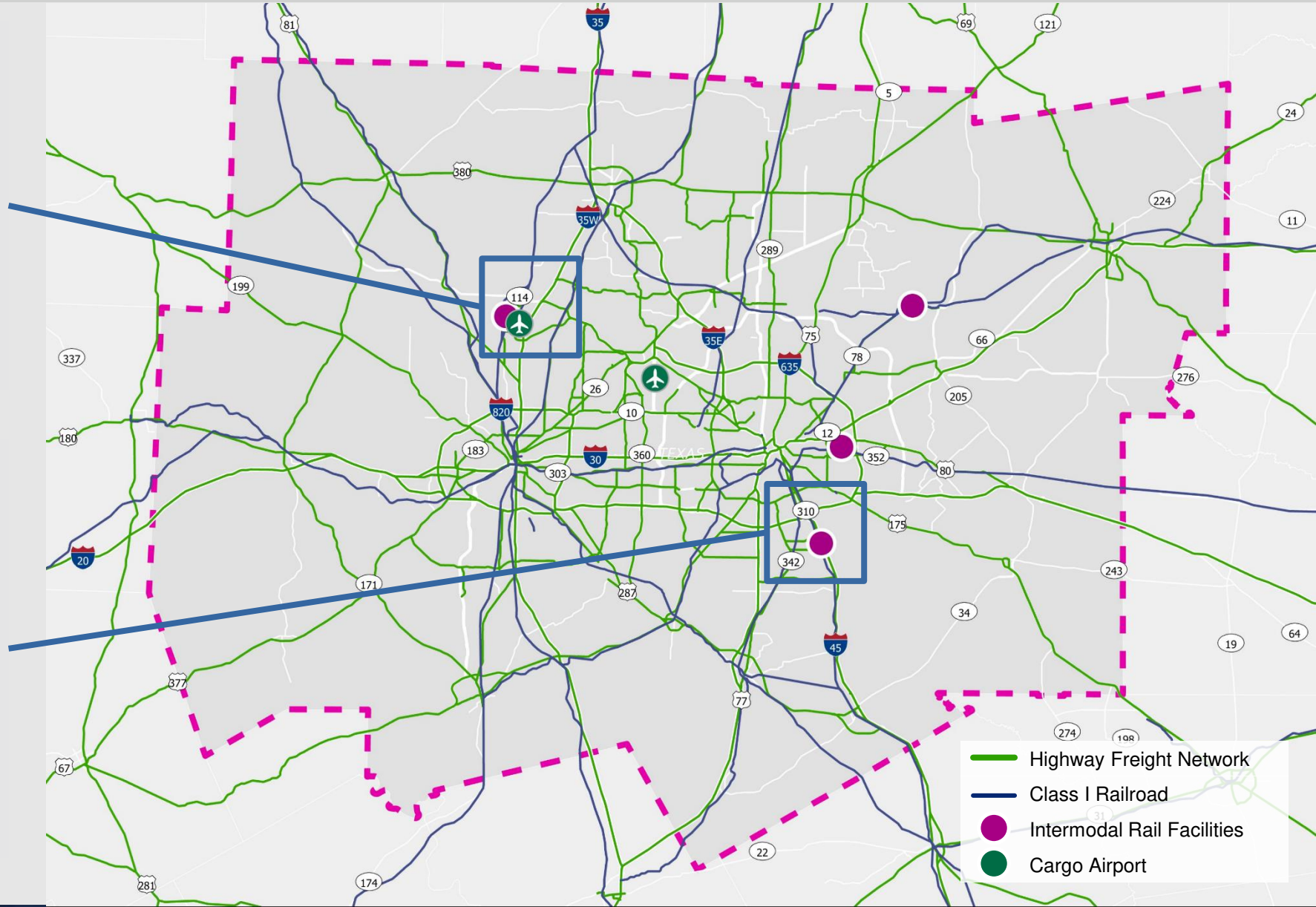


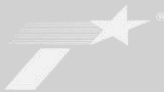
## Alliance Texas Logistics Hub

- International connectivity via BNSF Intermodal Yard, Alliance Airport, and I-35W
- 9,600-acre Foreign Trade Zone
- Amazon, FedEx, and UPS hubs

## Southern Dallas County Inland Port

- Direct access to I-45 and I-20, UP Dallas Intermodal Terminal, and Lancaster Airport
- 83 companies and 36 M square feet of operating or announced
- Foreign Trade Zone





### Ranking



**68 M sq ft**  
of industrial space  
under construction



**463 M sq ft**  
of industrial space

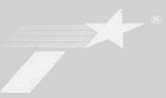


**3.1%**  
GDP Growth in 2022





# DFW Region's Freight National and North American Connectivity by Truck

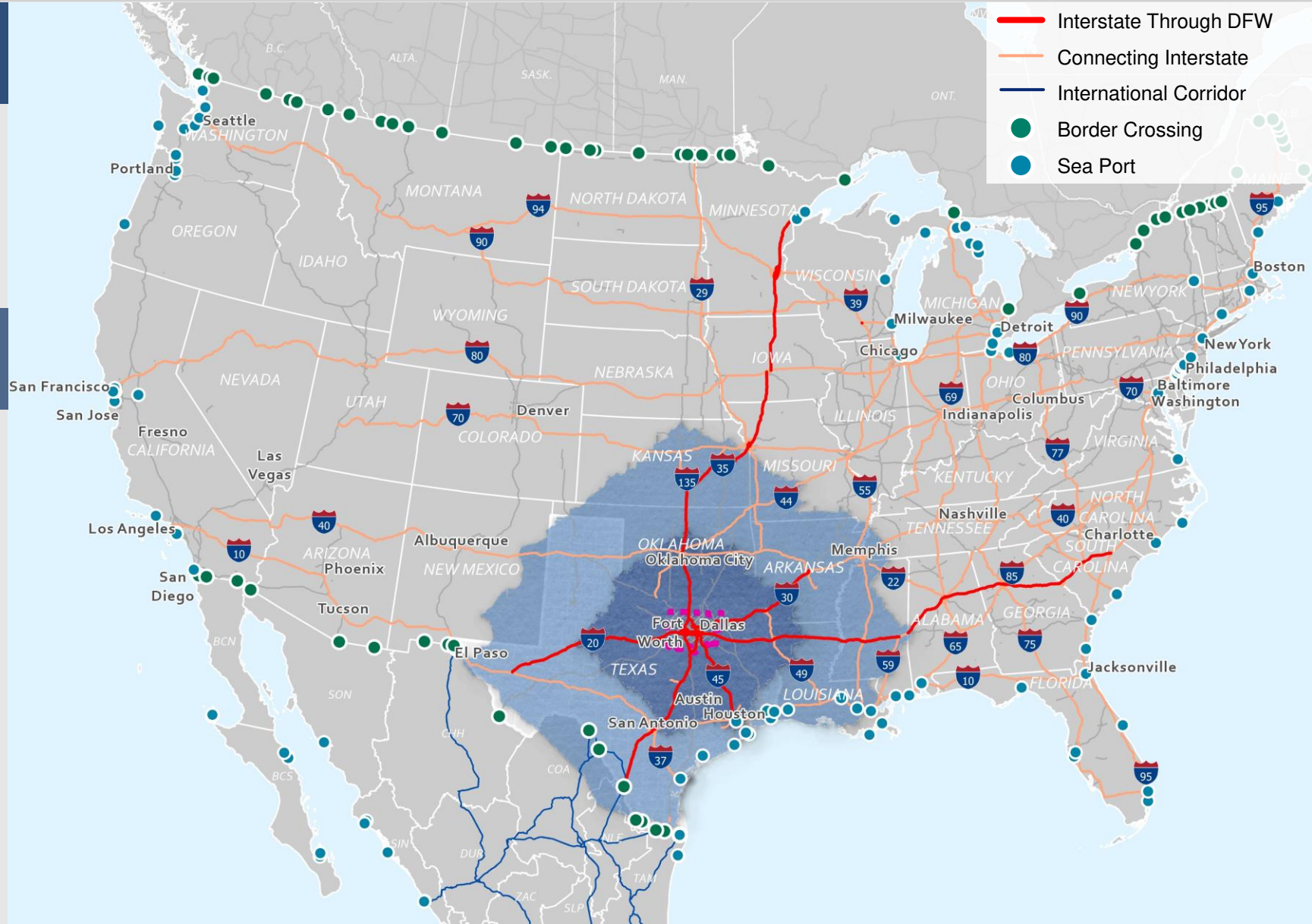


 4 hours

5 major metro areas  
4 states

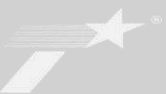
 8 hours

Metro areas in 5 states  
12 truck border crossings  
16 container port terminals





# DFW Region Freight National and North American Connectivity by Truck



 4 hours

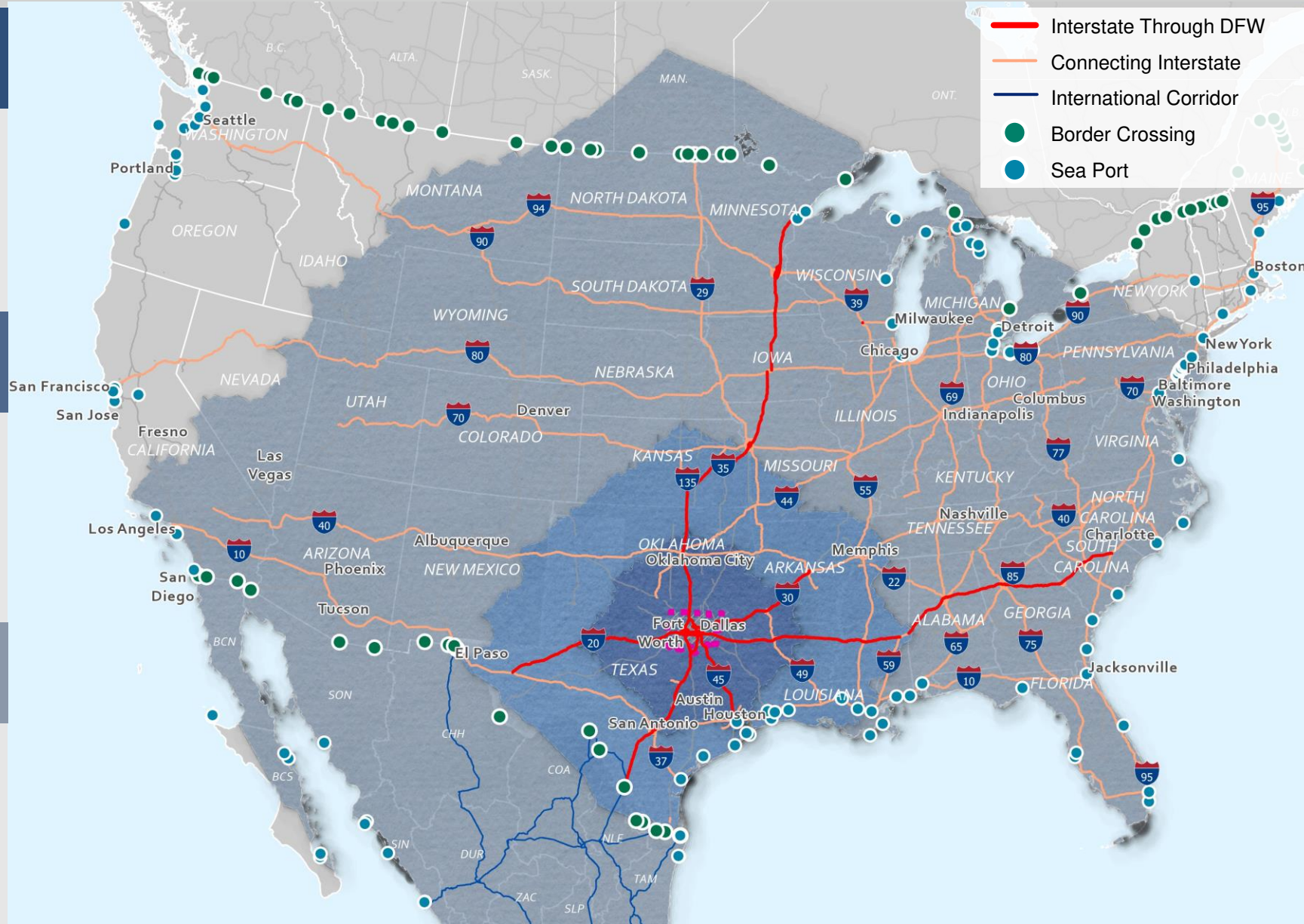
5 major metro areas  
4 states

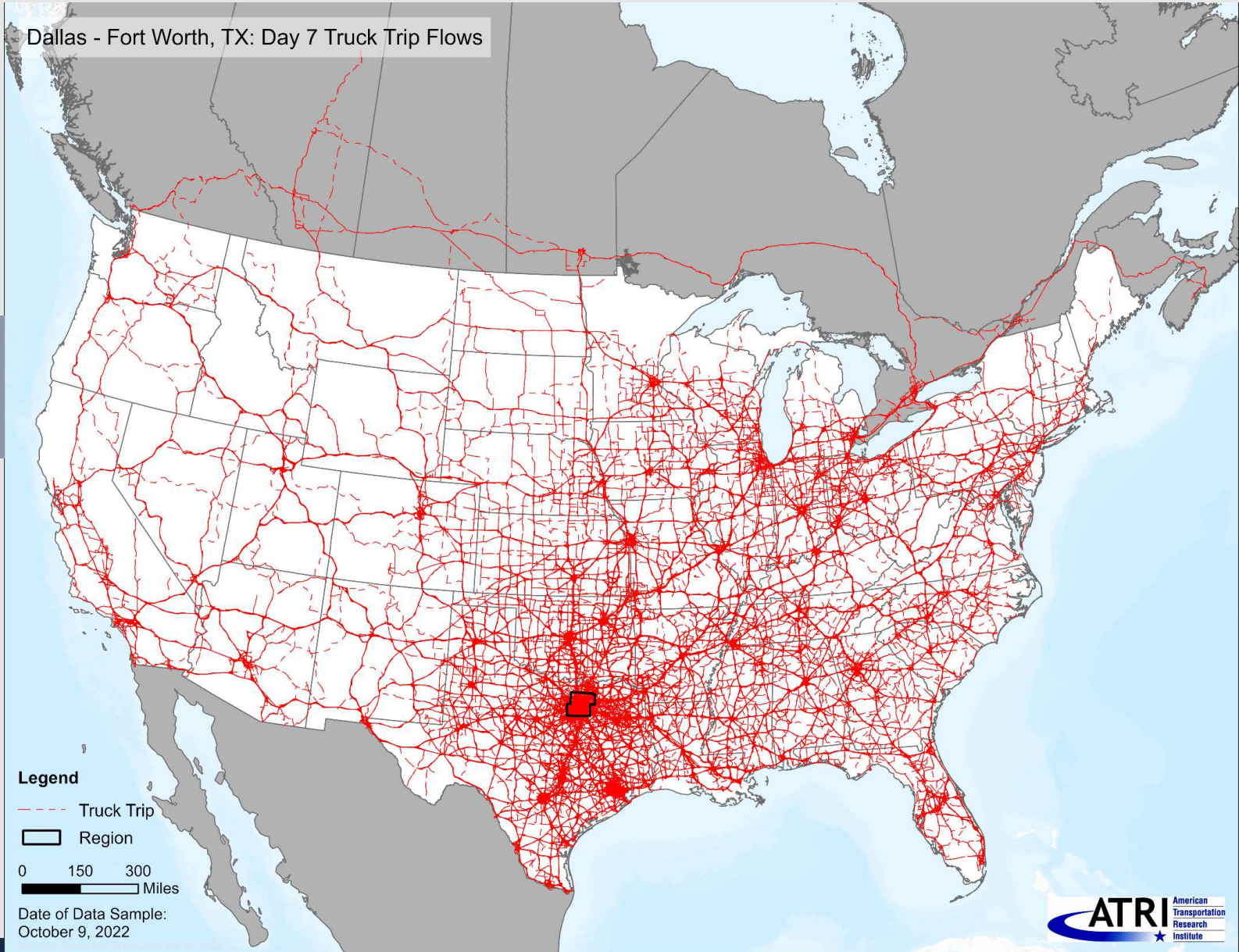
 8 hours

Metro areas in 5 states  
12 truck border crossings  
16 container port terminals

 24 hours

77% of US Urbanized Areas  
29 Mexican States  
3 Canadian Provinces

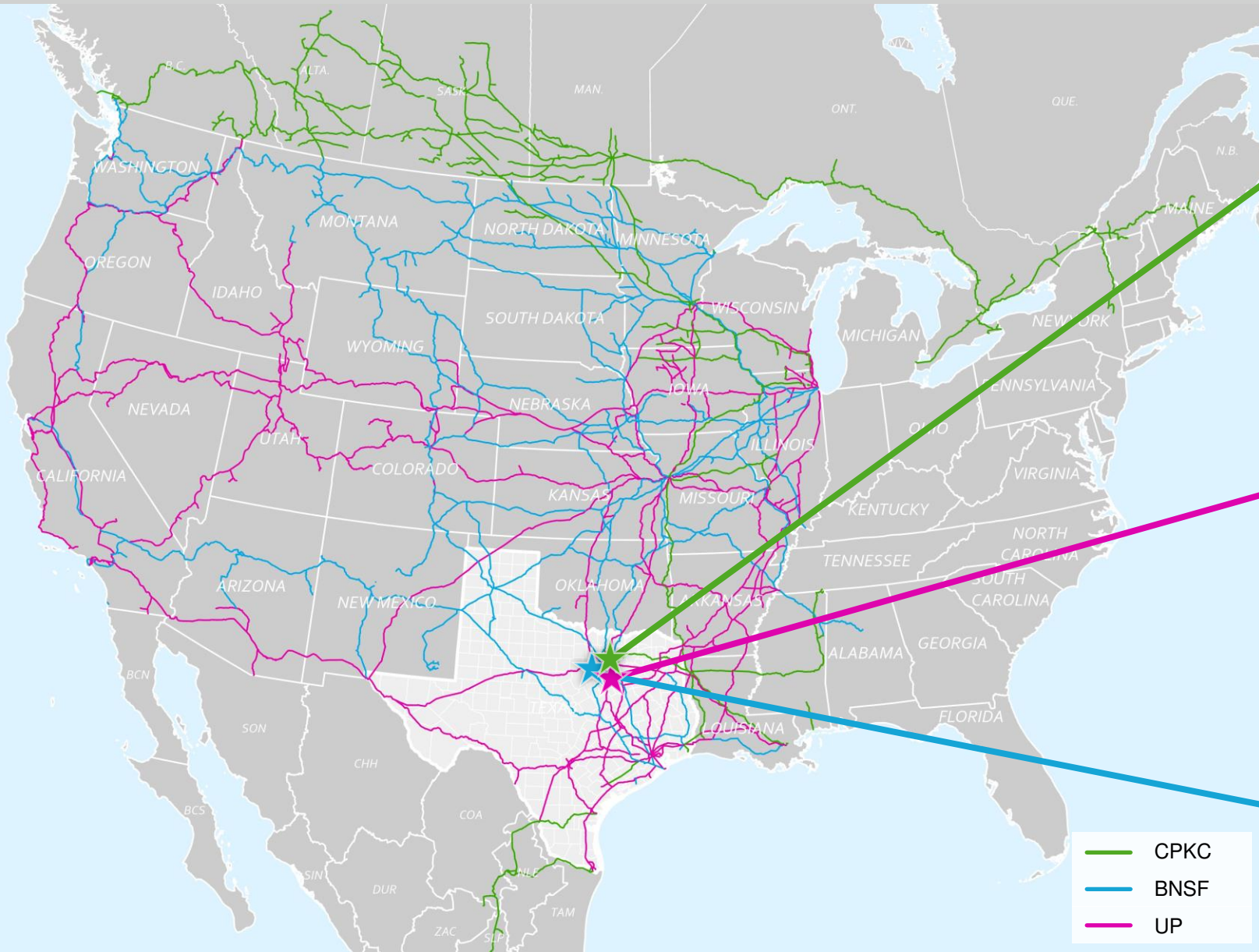
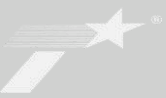




## 7 Days Truck Trips from DFW

100% of United States  
Canadian Provinces  
Mexico

# DFW Region – National and North American Rail Connectivity Impact



- CPKC
- BNSF
- UP

### CPKC DALLAS TERMINAL



### UP DALLAS INTERMODAL TERMINAL



### BNSF ALLIANCE INTERMODAL TERMINAL





## 1 in every 7 jobs

in DFW Metroplex is supported by freight transportation and handling industries in 2021



### Direct Jobs and Labor Income in Freight Transportation and Handling Industries in DFW Metroplex in 2021



### Total Economic Impact of Freight Transportation and Handling Industries in DFW Metroplex in 2021





*Total economic impacts of direct employment in the freight transportation and handling industries plus direct economic impacts of freight-dependent industries in DFW Metroplex in 2021*

**1.1M**  
jobs

**\$82.7B**  
in labor income

**\$149.0B**  
in GSP

**\$19.9B**  
in federal, state, and  
local tax revenue

These impacts equate to

**21% (1 in <5)**  
of DFW Metroplex **Jobs**



**21%**  
of DFW Metroplex **labor income**



**23%**  
of DFW Metroplex **GSP**



**in 2021**



## Industry Direct Impact in 2021



### TEXAS



GDP (\$M)

\$ 29,740

\$ 17,166

57.7%

DFW



EMPLOYMENT

98,390

52,961

53.8%



LABOR INCOME (\$M)

\$ 11,098

\$ 6,765

61.0%

Source: TREDIS, 2021

## Selected Top Firms in the DFW Region



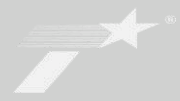
**BOMBARDIER**



general motors



# Economic Impact of Integrated Binational Automotive Manufacturing Supply Chain



### Texas Overview (2020): Automobile Manufacturing

Employment	38,724
Average Wages	\$68,099
Establishments	549
Gross Domestic Product	\$15.1 B
Exports to Mexico	\$6.7 B
Imports from Mexico	\$10.6 B

Source: JobsEQ; Texas Comptroller of Public Accounts analysis

### Top Automotive Manufacturing Employers along I-35 (2019)

General Motors	7,300+
Toyota	3,200
Peterbilt Motors	3,000

Source: [https://gov.texas.gov/uploads/files/business/automotive\\_May2021](https://gov.texas.gov/uploads/files/business/automotive_May2021)

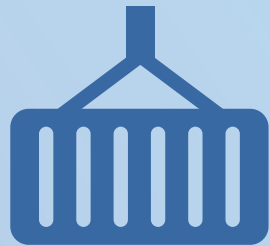


# DFW Region - Automotive and Aerospace Manufacturing Connections and Economic Impact

## Automotive and Aerospace Freight Movement in 2019



# 6.4



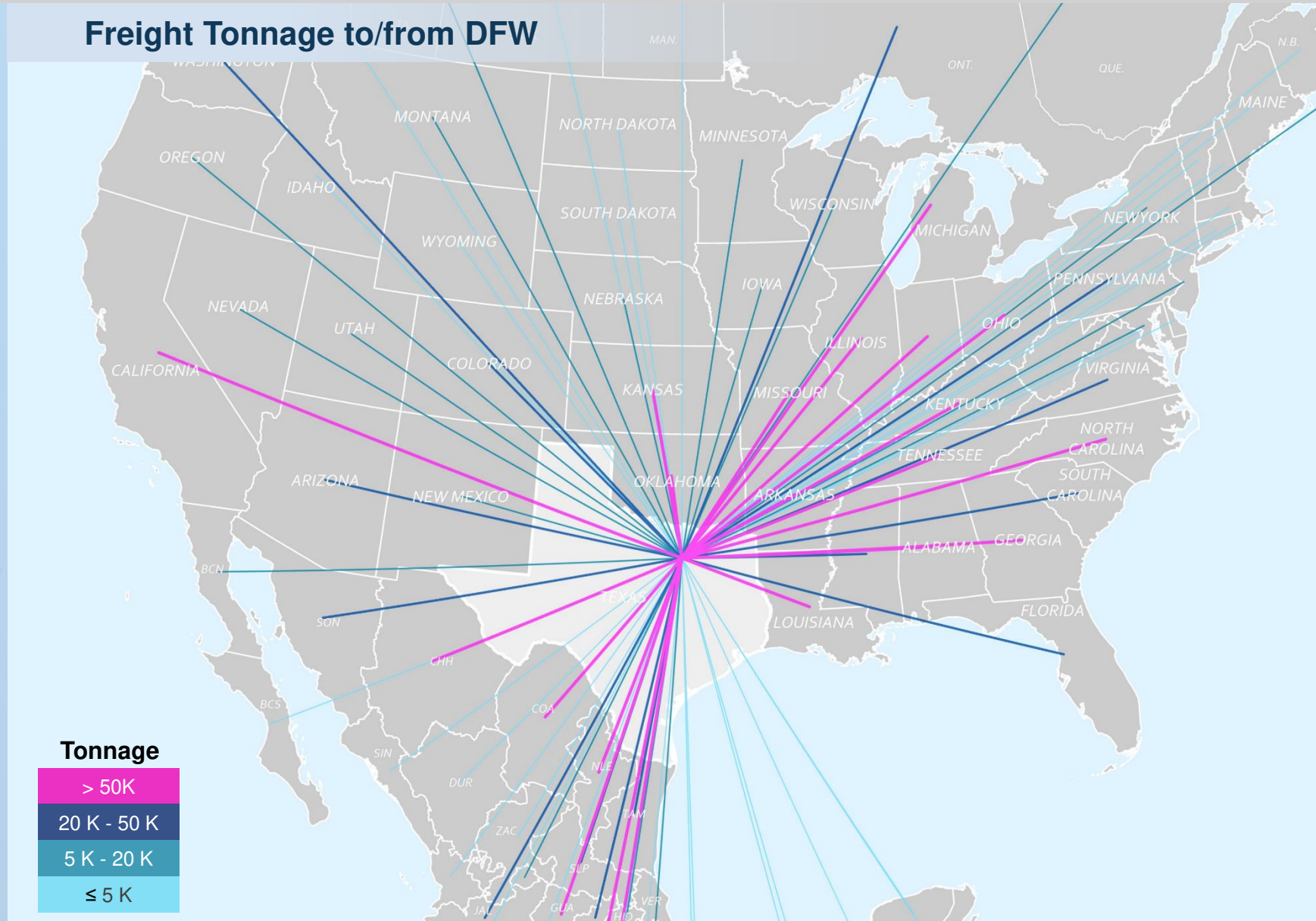
million **TONS** of freight



# \$68.8




billion **WORTH** of freight

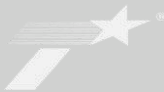
### Freight Tonnage to/from DFW



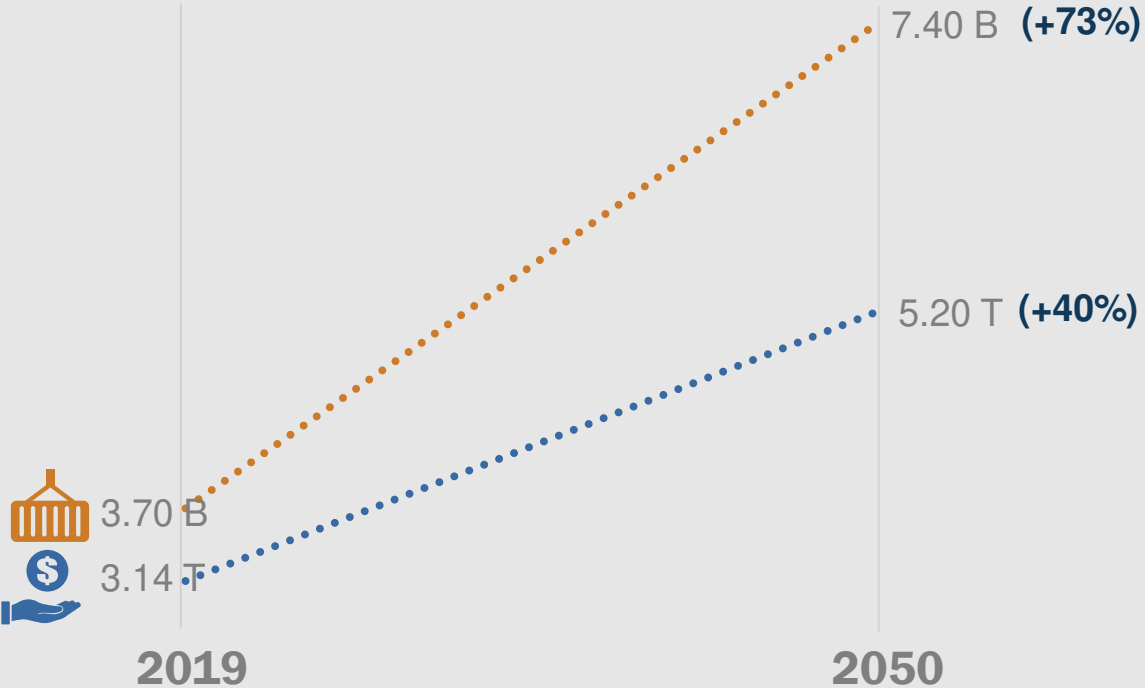




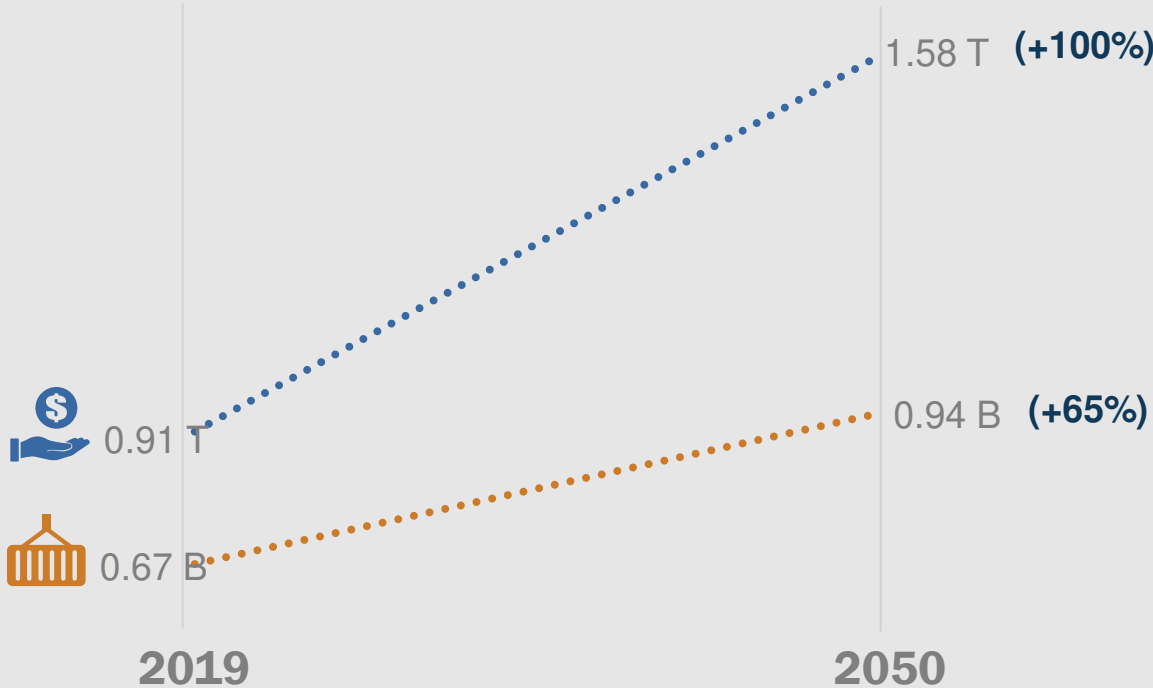
	Freight Tonnage and Value in 2019	Total Employment Impact in 2021	Total Labor Income Impact (\$B) in 2021	Total GSP Impact (\$B) in 2021
 <b>Trucking</b>	<b>330.3 million tons</b> valued at \$369.9 billion	<b>366,896</b>	<b>\$37.0</b>	<b>\$57.8</b>
 <b>Rail</b>	<b>56.9 million tons</b> valued at \$132.8 billion	<b>80,483</b>	<b>\$9.9</b>	<b>\$16.6</b>
 <b>Air</b>	<b>0.8 million tons</b> valued at \$136.1 billion	<b>129,884</b>	<b>\$15.3</b>	<b>\$18.6</b>



## Texas



## DFW Region





19

# Impact of Freight on the DFW Transportation Infrastructure

# Impact of Congestion on Freight Movement in the DFW, 2022



## Congestion Costs to Drivers in DFW in 2022



All Vehicles



Trucks

Delay  
(person-hrs)

**127**  
million hours

**8.0**  
million hours

Wasted Fuel  
(gallons)

**44.3**  
million gallons

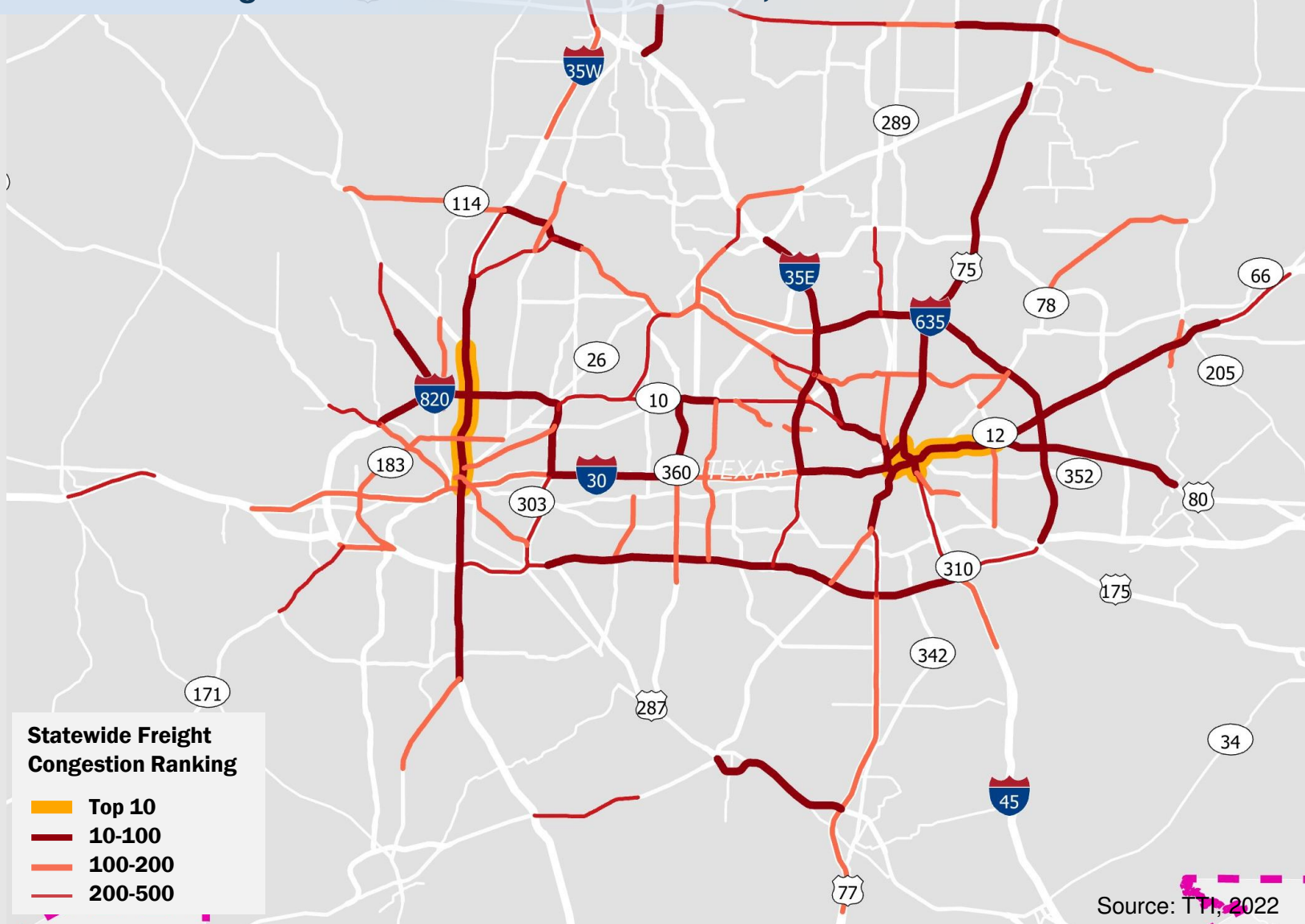
**11.6**  
million gallons

Congestion Cost  
(\$)

**\$3.2**  
billion

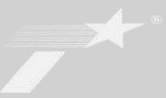
**\$473.1**  
million

## Most Congested Roads for Trucks in DFW, 2022



Source: TTI, 2022

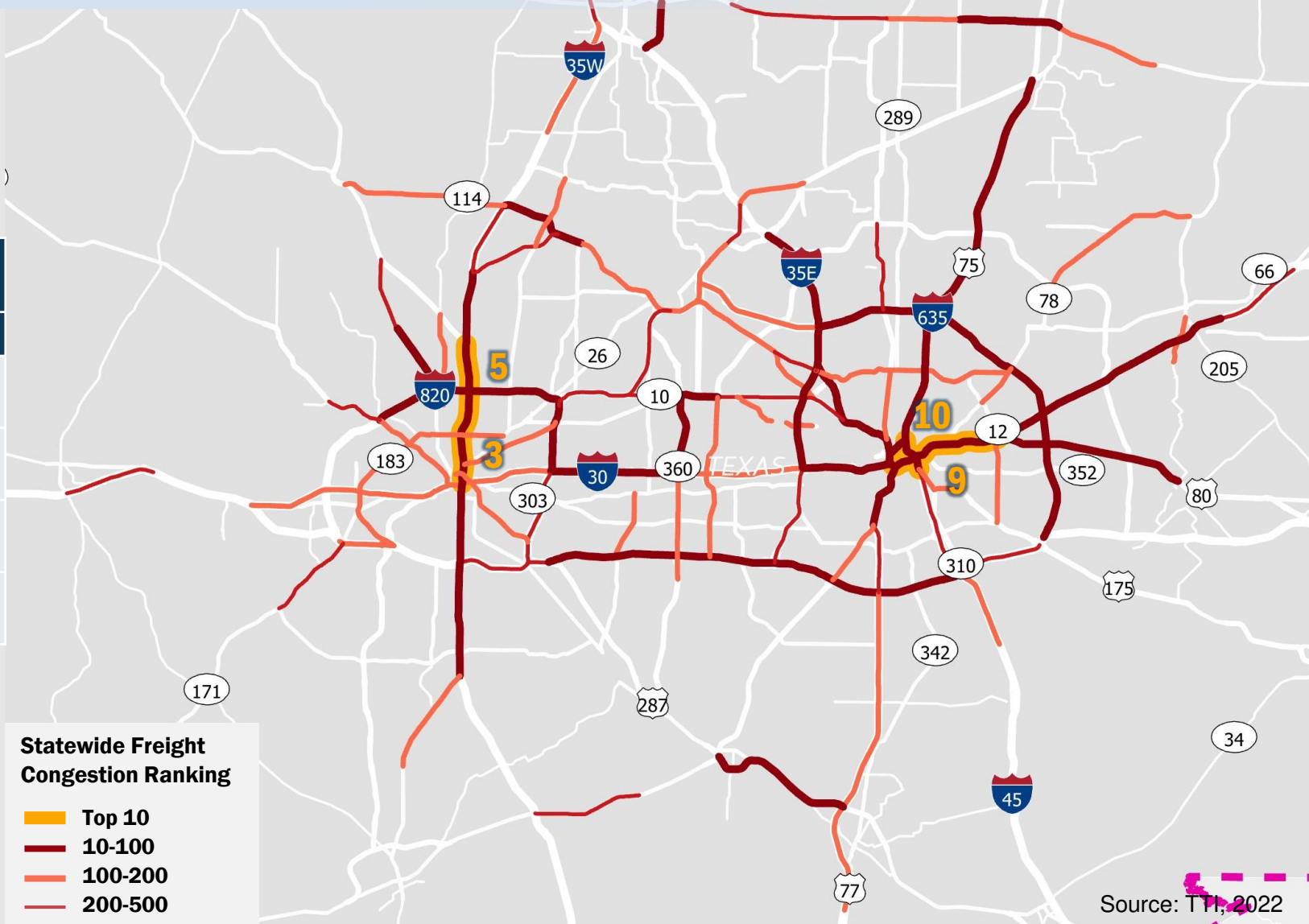
# Impact of Congestion on Freight Movement in DFW, 2022



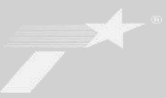
## DFW Roads in Texas' Top 10 Most Congested Truck Segments

## Most Congested Roads for Trucks in DFW, 2022

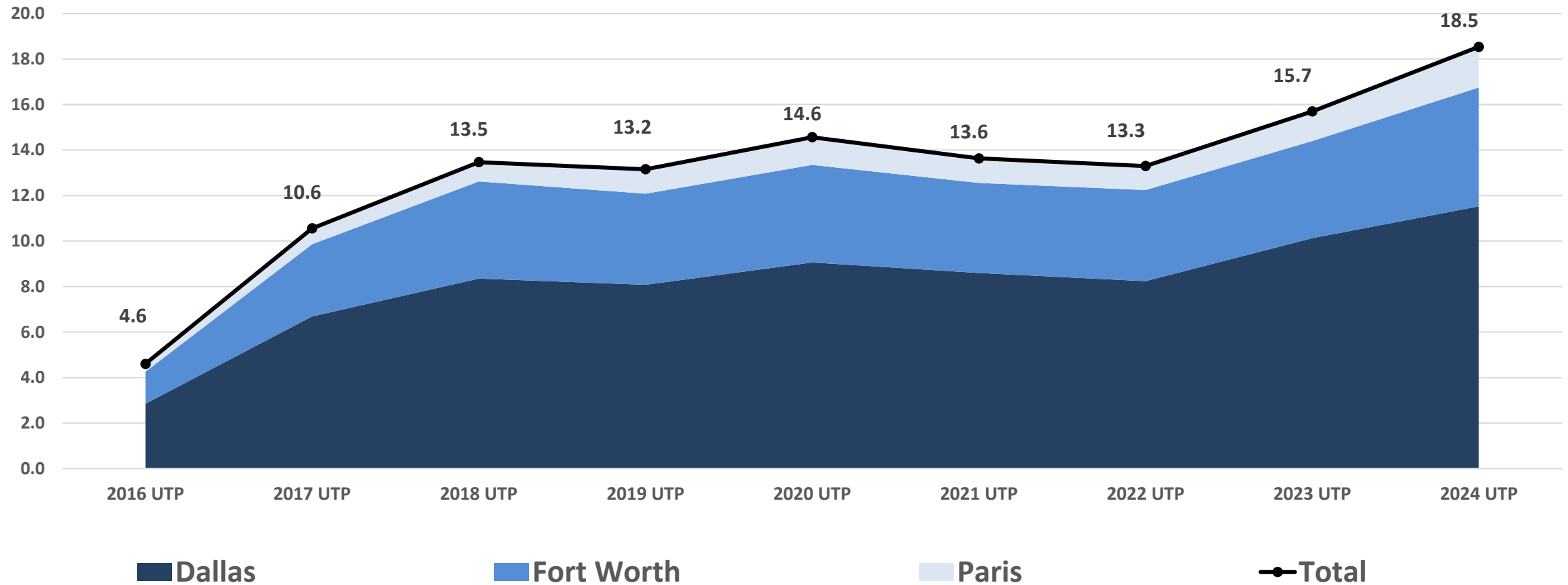
State Rank	Segment	All Vehicles (avg. speed, mph)		Trucks (avg. speed, mph)	
		Peak	Off-Peak	Peak	Off-Peak
3	I-35W SH 183 to IH 30	37.5	61.0	38.4	61.3
5	I-35W US 287 to SH 183	47.4	62.5	48.1	62.9
9	I-30 Jefferson Via. to SL 12 E	38.7	59.9	39.4	60.1
10	I-45 US 75 to US 175	37.7	56.1	38.6	57.3



Source: TTI, 2022

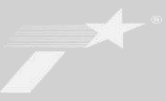


## Overview of Dallas-Fort Worth Regional UTP Funding (\$B) 2016 UTP – 2024 UTP



Figures represent 10-year UTP totals

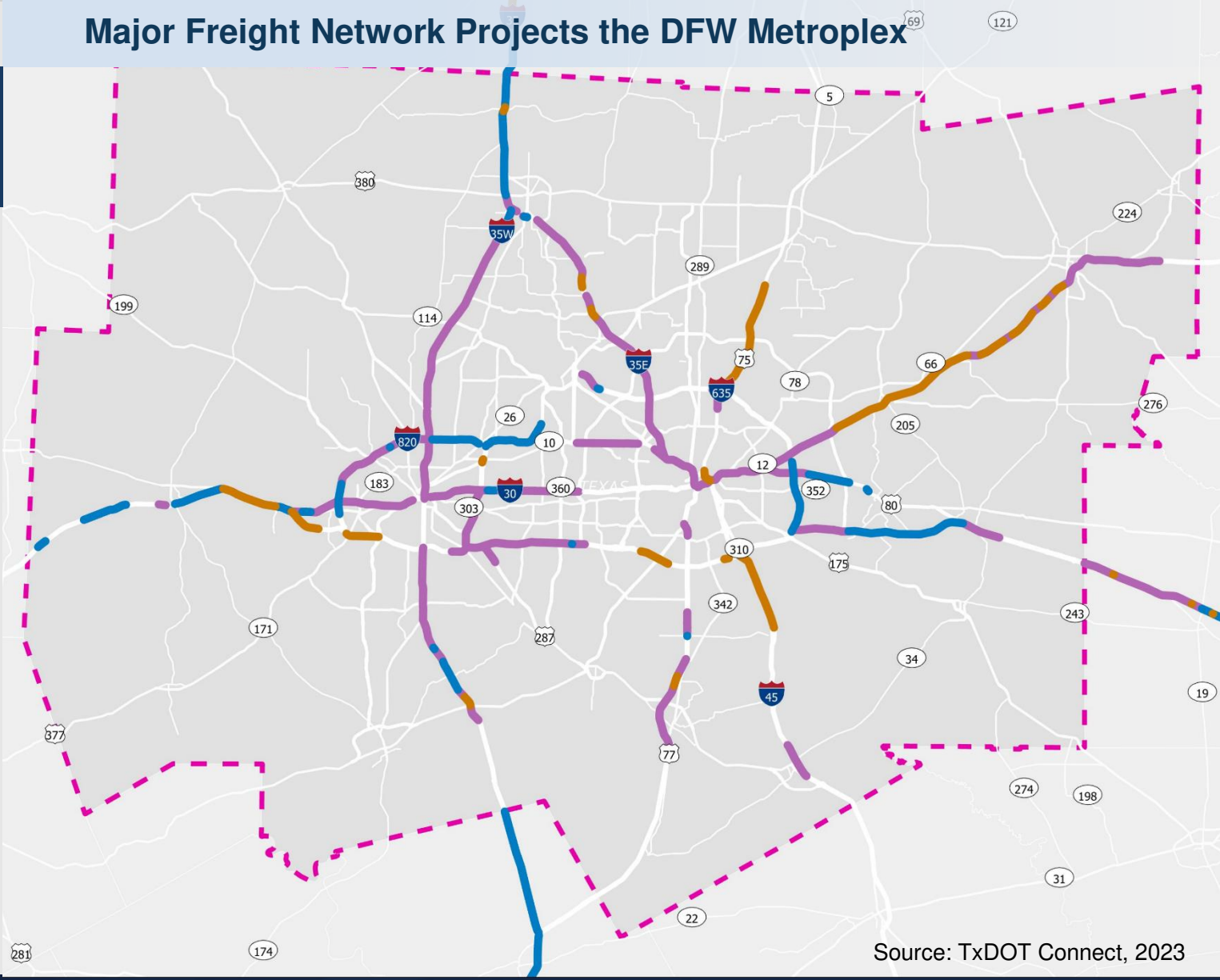
# Investment in the Freight Network in DFW



**TxDOT has committed over \$7.6 billion in improving the Freight Network in the metroplex over the next 10 years**

## Major Freight Network Projects the DFW Metroplex

Project Status	# of Projects	Const. Cost	Funding
<b>Under Construction</b>	146	\$1.8B	\$1.8B
<b>Fully Funded</b>	110	\$2.7B	\$2.9B
<b>Partial/Unfunded</b>	117	\$24.7B	\$2.9B
<b>Total</b>	<b>373</b>	<b>\$29.2B</b>	<b>\$7.6B</b>



Source: TxDOT Connect, 2023

# Thank you!



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Texas Department of Transportation  
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