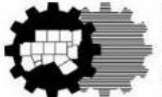


# **FY 2023-2026 MANAGEMENT AND OPERATIONS (M&O), REGIONAL/AIR QUALITY, AND SAFETY FUNDING PROGRAM – FY 2023 FUNDING**

Regional Transportation Council

January 13, 2022



North Central Texas  
Council of Governments  
Transportation Department

# BACKGROUND

- In 2019, the Regional Transportation Council (RTC) extended existing and funded new Air Quality and Management and Operations projects/programs for Fiscal Years (FY) 2020-2022
- Some projects/programs do not have sufficient existing revenues to continue without interruption through FY 2023, so additional funding is needed sooner than the entire M&O program is ready.
- Staff is proposing to split approval of the 2023-2026 M&O program into two phases. Phase 1 will cover funding needed for FY 2023 only, and Phase 2 will request funding for FY 2024-2026, and possibly new initiatives for FY 2023.

# PROPOSED PROJECTS FOR FY 2023 FUNDING

Project/Program	Proposed Funding <sup>1</sup>	Pass Through vs. Staff Time
Region-Wide Employer Trip Reduction Program	\$733,000 (STBG)	Staff Time/Pass Through
Regional Aviation Program	\$240,000 (RTC Local)	Staff Time
Air Quality Public Education and Outreach Program	\$440,000 (STBG)	Staff Time
Regional Air Quality Initiatives	\$1,086,000 (STBG)	Staff Time
Land Use/Transportation and Bike/Pedestrian Initiatives	\$1,000,000 (STBG)	Staff Time/Pass Through
Auto Occupancy Detection and Verification Implementation Program	\$646,400 (STBG)	Staff Time/Pass Through
Regional Parking Management Tools and Strategies Program	\$250,000 (STBG)	Staff Time/Pass Through
<b>Total Proposed Funding</b>	<b>\$4,395,400</b>	

1: Funding is RTC share only

# NEXT STEPS

- Finalize the amounts of funding to be requested for 2024-2026, along with the specific list of projects and programs to be recommended
- Bring back the 2024-2026 list to the public and committees for review and approval

# REQUESTED ACTION

- RTC approval of:
  - The proposed FY 2023 funding for the 2023-2026 M&O, Regional/Air Quality, and Safety Program
  - Administratively amending the Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP) and amending other planning/administrative documents to incorporate these changes.

# QUESTIONS?

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**Brian Dell**

Principal Transportation Planner

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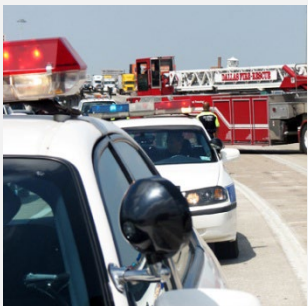
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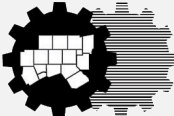
[cderrick@nctcog.org](mailto:cderrick@nctcog.org)



# 2021 INCIDENT MANAGEMENT FREEWAY BLOCKING EQUIPMENT CALL FOR PROJECTS RECOMMENDATIONS

## Regional Transportation Council

Sonya J. Landrum  
Program Manager  
January 13, 2022



North Central Texas  
Council of Governments



# 2021 Incident Management Freeway Blocking Equipment Call for Projects Overview

In August 2021, the Regional Transportation Council approved \$1M in Regional Toll Revenue (RTR) funds to implement the 2021 Incident Management (IM) Freeway Blocking Equipment Call for Projects

Based on local government interest resulting from the 2020 IM Freeway Blocking Equipment Pilot Project Initiative

**Purpose:** Assist partner agencies in purchasing scene management blocking equipment to provide protection to incident responders responding to traffic crashes

**Supports:** Current incident management training recommendation to use best practices equipment and technology

**Emphasizes:** Importance of implementing incident management strategies and training

Improves regional roadway safety for responders and drivers





# Eligible Recipients and Activities

## Eligible Recipients

- Public sector partner agencies within the North Central Texas Council of Governments (NCTCOG) 12-County Metropolitan Planning Area actively involved in incident management

## Eligible Counties

- Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, Wise

## Eligible Activities

- Purchase of scene management blocking equipment to provide protection to incident responders responding to traffic crashes, while reducing the need for additional fire truck emergency strobe lighting
  - Examples include: Crash attenuators, crash barriers, crash cushions, etc.

## Ineligible Activities

- Personnel and staffing charges
- Fire trucks/engines
- Non-attenuator vehicles

\*ANY project-related purchases or procurement activities completed **BEFORE** an Agreement between the awarded agency and TxDOT has been executed and/or a Notice to Proceed has been issued will be ineligible for payment under this Call for Projects effort.

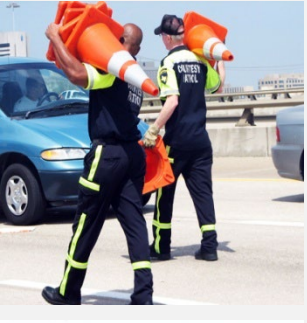
# Eligible Recipients and Activities (Cont.)



## Eligible Crash Attenuator Equipment Examples

- Crash Attenuator Trucks
- Crash Attenuator Trailers
- Crash Attenuator that attach 'to' another vehicle





# Funding Availability and Submitted Projects

**\$1 million in Regional Toll Revenue Funds approved by the Regional Transportation Council**

- **Twenty percent Local Match requirement**

-----

**Total applications and funding requests received: 16 applicants (17 projects) - \$2,596,025**

Applications and funding received (East): 12 projects - **\$2,116,513**

Applications and funding received (West): 5 projects - **\$ 479,512**

## **Ineligible Projects**

Ineligible projects received (East): 3 projects - \$415,520

Ineligible projects received (West): 1 project - \$200,000

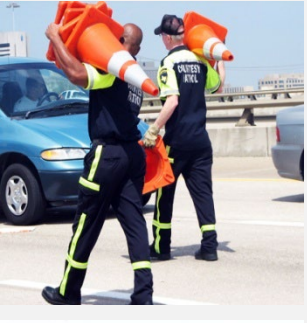


# Eastern Sub-Region Applications

1. City of Cedar Hill Fire – 1 project
2. City of Coppell Fire – 1 project
3. City of Dallas – Office of Government Affairs – 2 projects (*1 ineligible*)
4. City of Dallas Police – 1 project (*Ineligible*)
5. City of Denton Fire – 1 project
6. City of Frisco Fire – 1 project
7. City of Garland Fire – 1 project
8. City of Irving Fire – 1 project (*Ineligible*)
9. City of Lancaster Fire – 1 project
10. City of Rowlett Fire – 1 project
11. City of Terrell Emergency Management – 1 project

## Ineligible Projects Submitted

- City of Dallas Government Affairs: Truck with Message Board – \$55,000
- City of Dallas Police: Truck with Arrowboard & Plow attachment – \$278,634
- City of Irving Fire: Arrowboards – \$81,886



# Western Sub-Region Applications

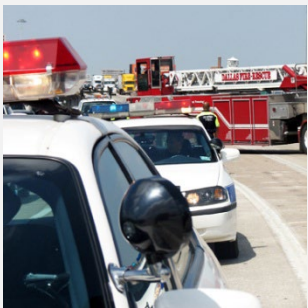
1. City of Burleson Fire – 1 Project
2. City of Euless Police – 1 Project
3. City of Fort Worth Police – 1 Project (*Ineligible*)
4. City of Grapevine Fire – 1 Project
5. City of North Richland Hills Fire – 1 Project



## Ineligible Projects Submitted

- City of Fort Worth Police: All in one TIM Vehicle – \$200,000





# Scoring Criteria

Scoring Component	Available Points
TIM Training Attendance – NCTCOG or In-house Training (Since August 2013), TIM Self-Assessment Participation	20
Crash Data in Jurisdiction (2016 - 2020)	10
Adoption of Incident Management Resolution	10
Incident Management Goals/Targets in Place	5
Adoption/Implementation of Regional Performance Measure Standard Definitions	5
Explanation of how equipment will be used to provide protection to First Responders (Specify if the equipment will be mounted to vehicles other than fire apparatus) – <i>15 points for innovativeness (Non-fire truck vehicle deployment)</i>	50
<b>Total Score</b>	<b>100</b>

# Projects Recommended for Funding

Minimum Project Score Considered for Project Funding is 70.

	City/Agency Name	Total Project Cost	Approved Project Cost (80%)	Equipment Requested	Quantity Requested	Project Score
<b>PROJECTS RECOMMENDED FOR FUNDING - SCORE '70' OR ABOVE</b>						
1	City of Frisco Fire (East)	\$153,580	\$122,864	Crash Attenuator Truck	1	94
2	City of Coppell Fire (East)	\$112,334	\$89,867	Highway Safety Attenuator/Arrowboard Combo	1	93
3	City of Dallas (Government Affairs) (East)	\$375,000	\$300,000	Scorpion/Truck Combo	3	92
4	City of Terrell Emergency Management (East)	\$127,295	\$101,836	Truck Mounted Attenuator (all-in-one)	1	88
5	City of North Richland Hills Fire (West)	\$136,441	\$109,153	Truck Mounted Attenuator (all-in-one)	1	87
6	City of Lancaster Fire (East)	\$112,217	\$89,774	Attenuator Truck	1	86
7	City of Euless Police (West)	\$57,814	\$46,251	Truck Mounted Crash Attenuator	1	80
8	City of Denton Fire (East)	\$200,000	\$160,000	Public Safety Blocker Unit (Truck/Attenuator)	1	73
9	City of Garland Fire (East)	\$450,000	\$360,000	Scorpion Attenuator	3	71
10	City of Grapevine Fire (West)	\$40,292	\$32,234	Scorpion II Model C	1	71
	<b>Total</b>	<b>\$1,764,973</b>	<b>\$1,411,979</b>			

## Projects not recommended for funding - received a project score below 70

- City of Cedar Hill Fire: Scorpion II, TL-3 Towable Attenuator - \$60,000
- City of Burleson Fire: Scorpion II Model C, TL-3 Truck Mounted Attenuator - \$44,965
- City of Rowlett Fire: Scorpion II, TL-3 Attenuator - \$110,567

# 2021 IM Freeway Blocking Equipment CFP Recommendations

**Staff recommends increasing available funding amount from \$1 million to \$1,411,979 in Regional Toll Revenue Funds**

**Total recommended funding (80% total):            \$1,411,979**

- Funding recommended (East):            \$1,224,341
- Funding recommended (West):            \$ 187,638

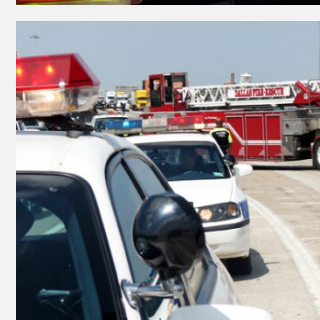
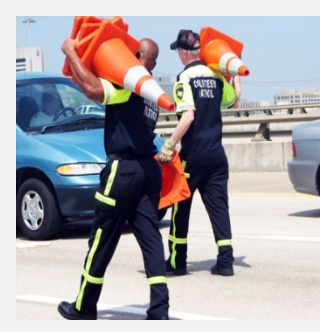
**Based on funding inquiries received after the CFP closed, staff may consider issuing a new Call For Projects in the future.**

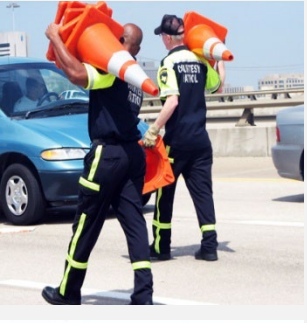




# Schedule

Date	Action
July 23, 2021	<del>Regional Safety Advisory Committee (Info) – IM Freeway Blocking Equipment CFP Notice</del>
August 12, 2021	<del>RTC (Action) – Request RTR Funds to Conduct CFP</del>
August 27, 2021	<del>STTC (Action) – Endorsement of RTC Action</del>
September 3, 2021	<del>Open Call for Projects (60 days)</del>
September 13, 2021	<del>IM Blocking Equipment CFP Forum</del>
November 1, 2021	<del>Close Call for Projects</del>
Nov. 2 – Nov. 16, 2021	<del>Evaluate Submitted Proposals</del>
<b>December 3, 2021</b>	<b>STTC (Action) – Approval of Selected Projects</b>
December 13, 2021	<del>Public Comment Period Begins</del>
January 13, 2022	RTC (Action) – Approval of Selected Projects
January 28, 2022	TIP Mods Due
Late June/Early July 2022	Federal/State STIP Approval
July 2022	TTC Approval
Fall/Winter 2022	Agencies Execute Agreement with TxDOT
30 Days after executed agreement and/or 30 Days prior to FY noted in agreement	TxDOT Sends RTR Funding to City/Implementing Agency
Winter 2022	Agencies Purchase Blocking Equipment





## Requested Action

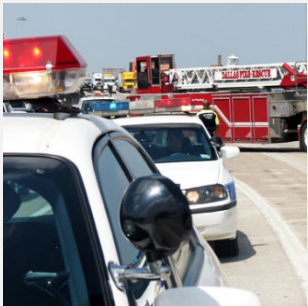


**Approve Allocation of an Additional \$411,979 in Regional Toll Revenue Funding for a Total of \$1,411,979 to Fund the Incident Management Freeway Blocking Equipment Call for Projects**



**Approve the Project Recommendations for the 2021 Incident Management Freeway Blocking Equipment Call for Projects**





# Contact Information

<https://www.nctcog.org/fimcfp>

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# CHANGING MOBILITY

DATA, INSIGHTS, AND DELIVERING  
INNOVATIVE PROJECTS DURING COVID  
RECOVERY

Regional Transportation Council  
January 2022

Michael Morris, P.E.  
Director of Transportation

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# TRAVEL BEHAVIOR BY MODE

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Bicycle/Pedestrian (+28%, September)  
Toll Road (+2%, September)  
Freeway Volumes (0%, October)



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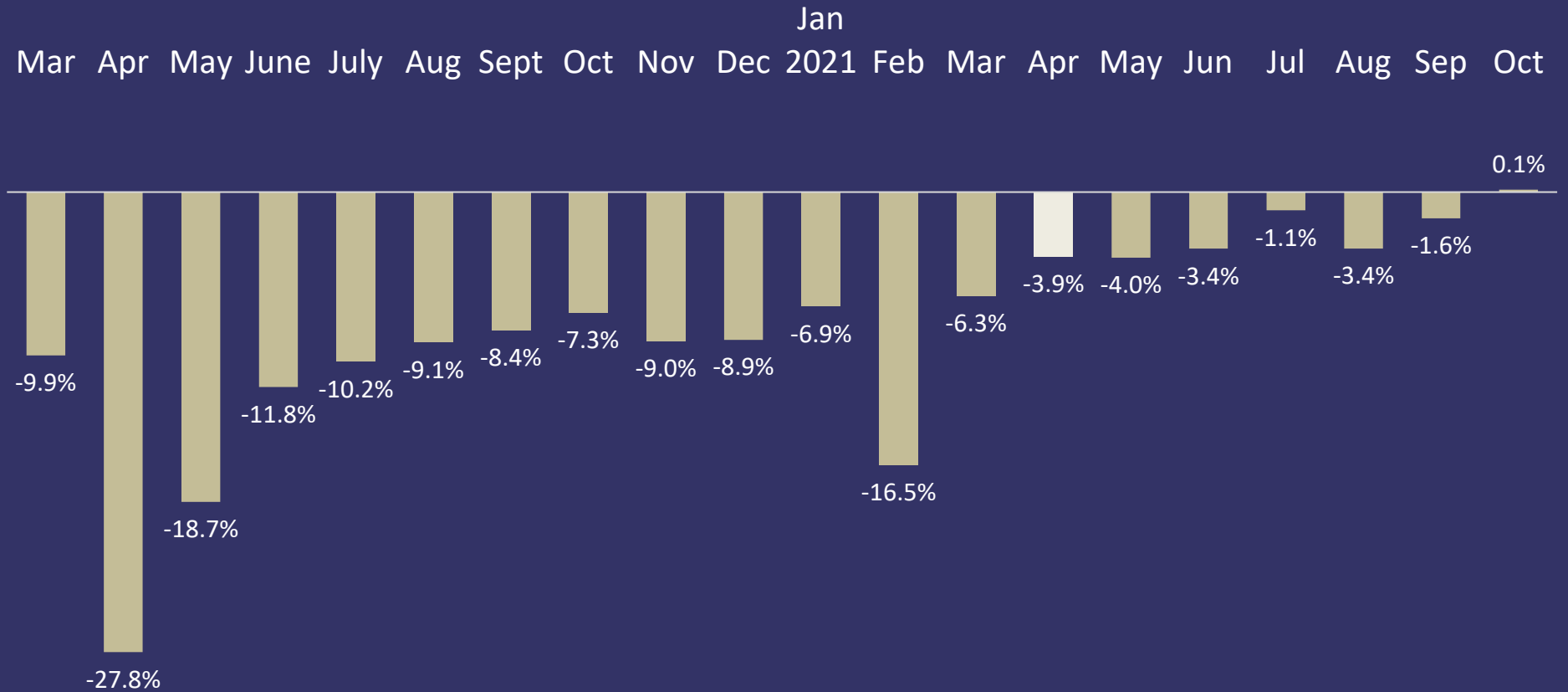
Airport Passengers (-10%, October)  
Transit Ridership (-41%, November)



# ROADWAY TRENDS

## Average Weekday Freeway Volumes

### Traffic Decrease vs Baseline



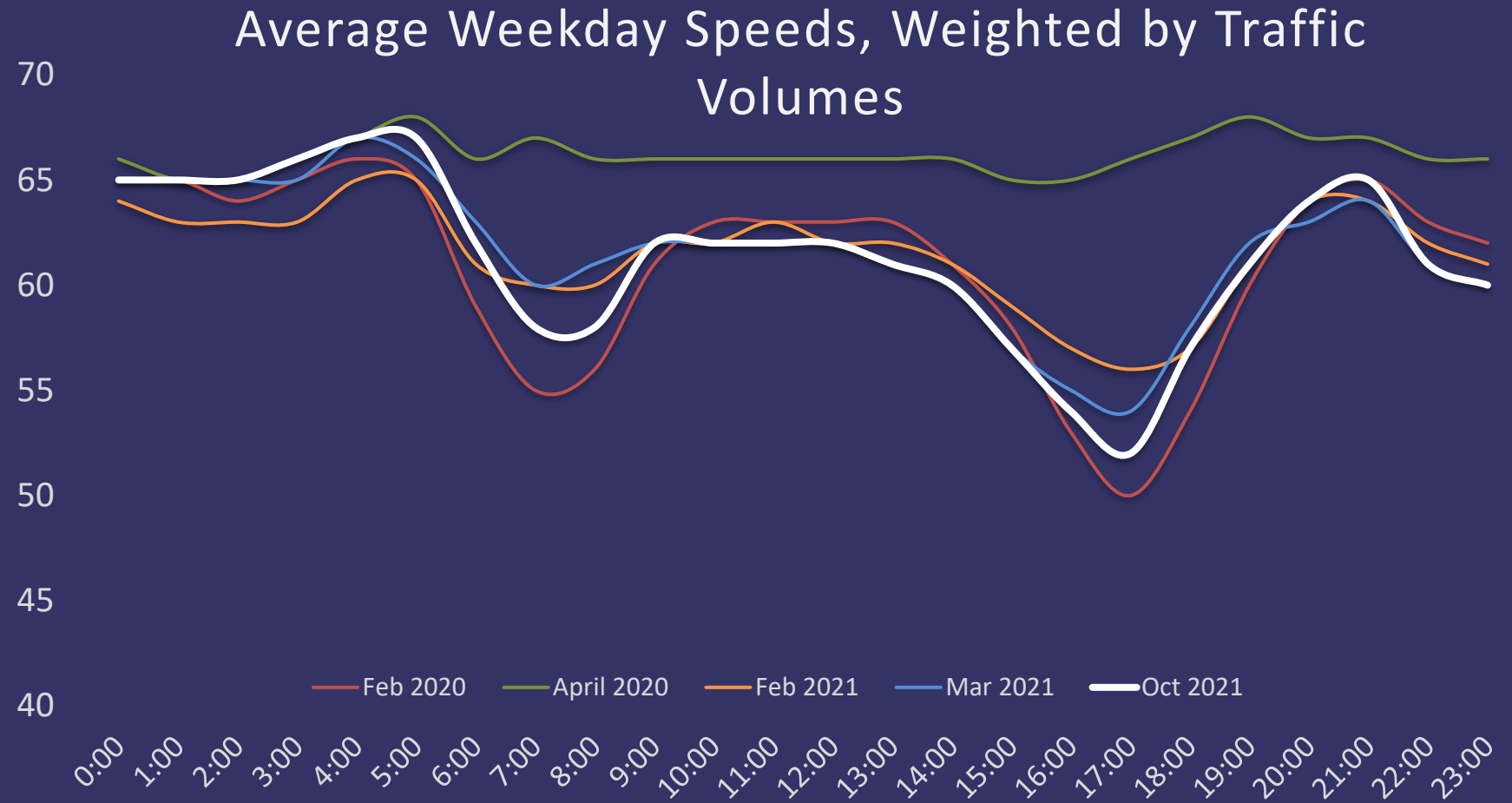
Source: TxDOT Dallas/TxDOT Fort Worth Radar Traffic Counters. As of October, growth calculated based on Fort Worth

Note: Baseline is March 2019-February 2020.

Note: Drop in freeway volumes in Feb 2021 due in large part to week-long winter storm.

# ROADWAY TRENDS

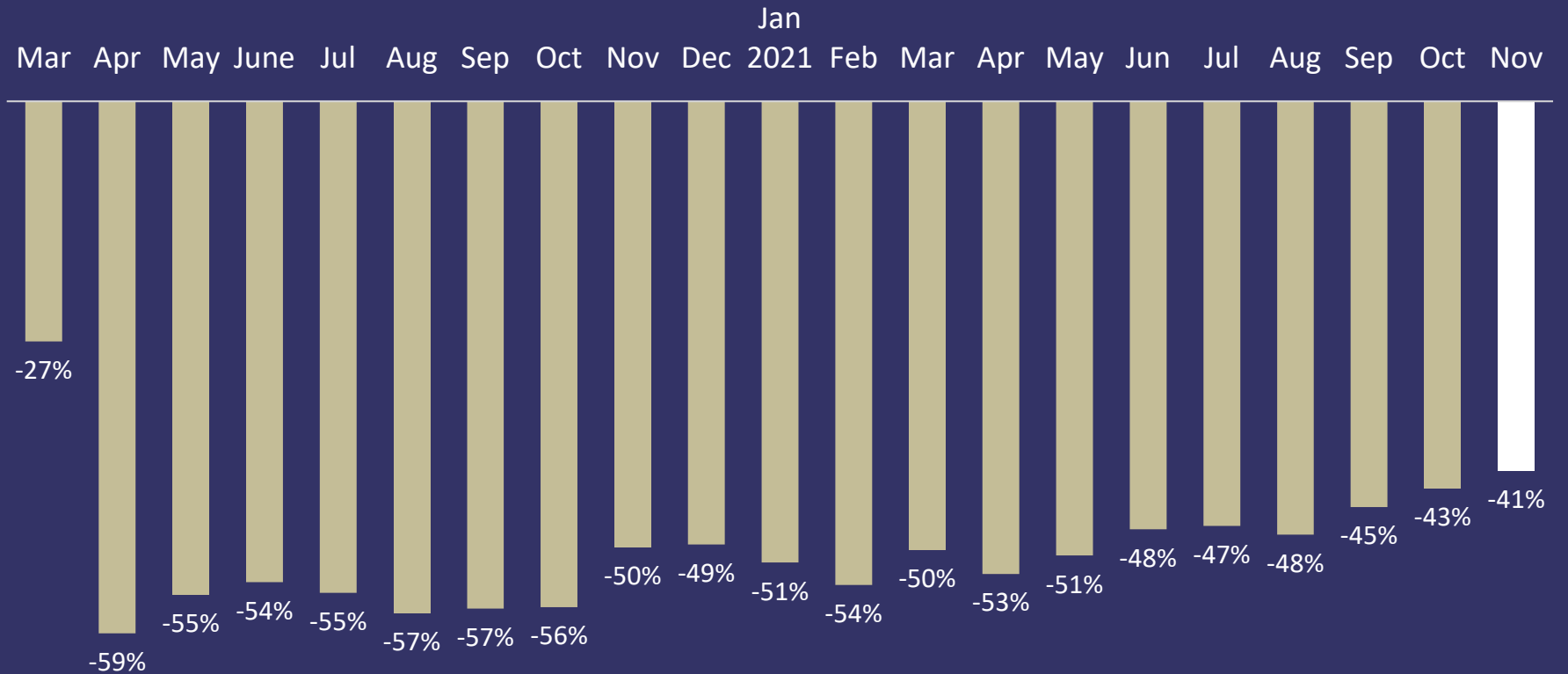
## Regional Average Freeway Speeds



# TRANSIT IMPACTS

## Weekday Ridership

### Passenger Decrease vs Baseline



Source: DART, DCTA, and Trinity Metro

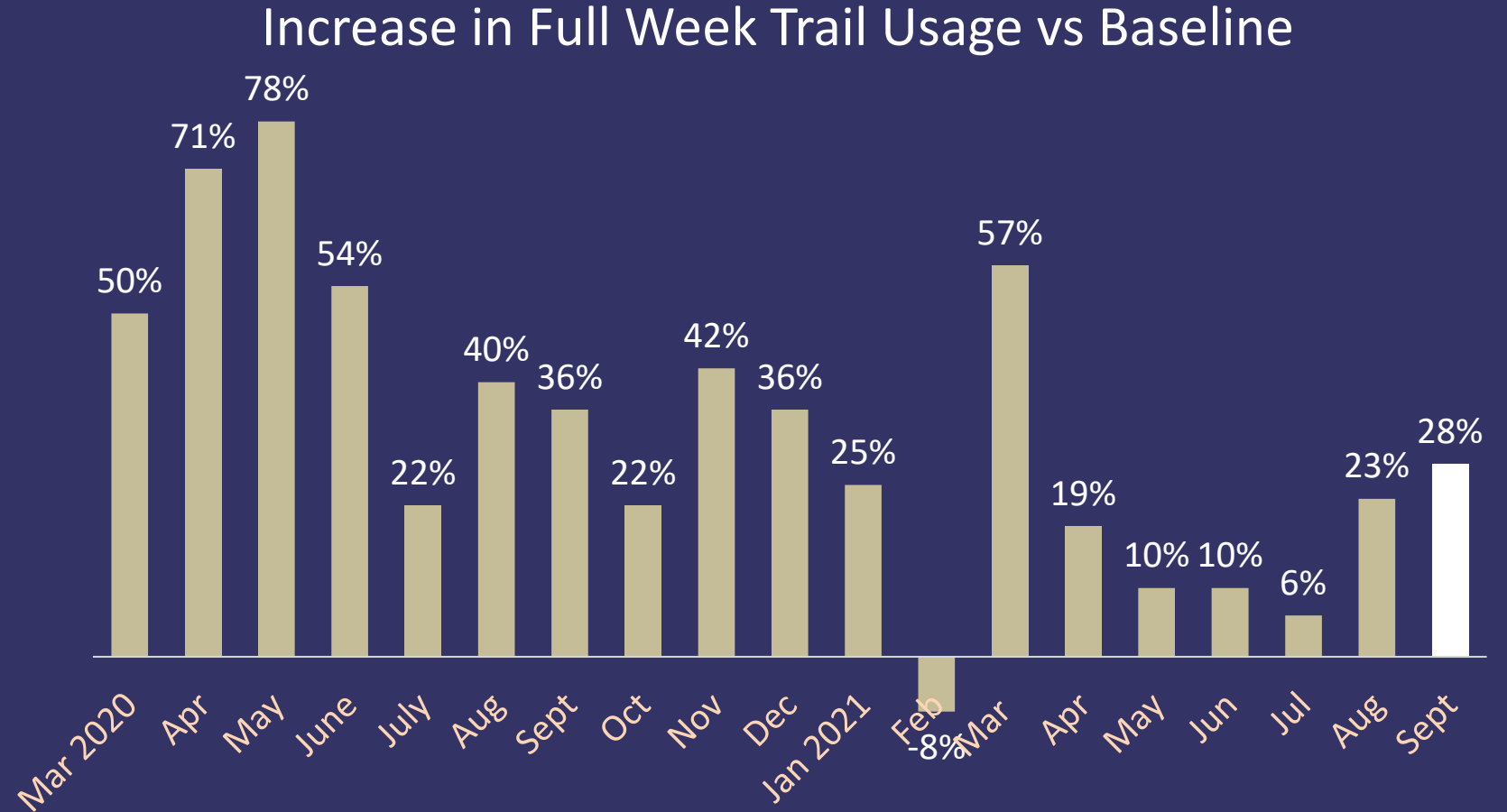
Note: Baseline is March 2019-February 2020.

Note: Transit ridership impacted in Feb 2021 by week-long winter storm.



# BICYCLE AND PEDESTRIAN IMPACTS

## Trail Counts



Source: NCTCOG - collected at 8 sites located in Plano, North Richland Hills, Denton, Dallas, Fort Worth, and Allen

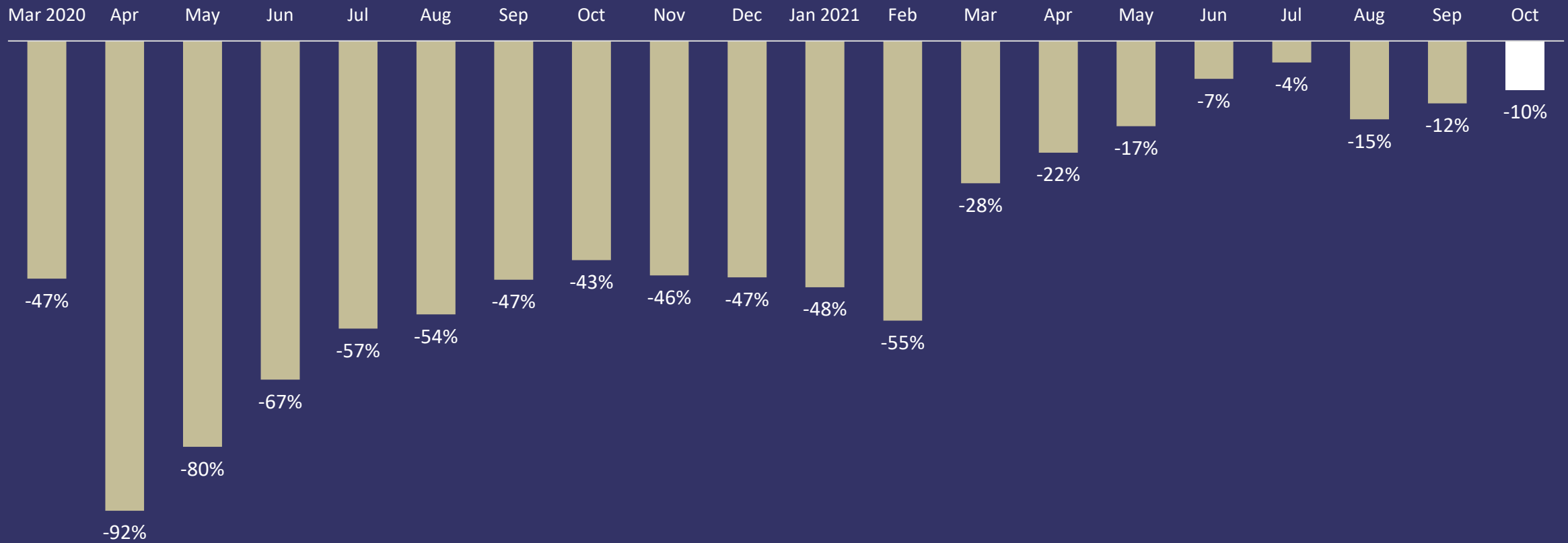
Note: Baseline is March 2019-February 2020; No adjustments for weather were applied.

Note: Trail usage impacted in Feb 2021 by week-long winter storm

# AIRPORT TRENDS

## Passengers

### Change in Airport Passengers vs Baseline



Source: Dallas Love Field and DFWIA Websites

Note: Baseline is March 2019-February 2020.

# FINANCIAL IMPACT SUMMARY

## FY 22-23 Comptroller's Certified Revenue Estimate

State Motor Fuels Tax: Estimated \$5.4 Billion

- Increase of 8% over 20-21 biennium estimate

Oil & Gas Severance (Prop 1): Estimated \$3.9 Billion

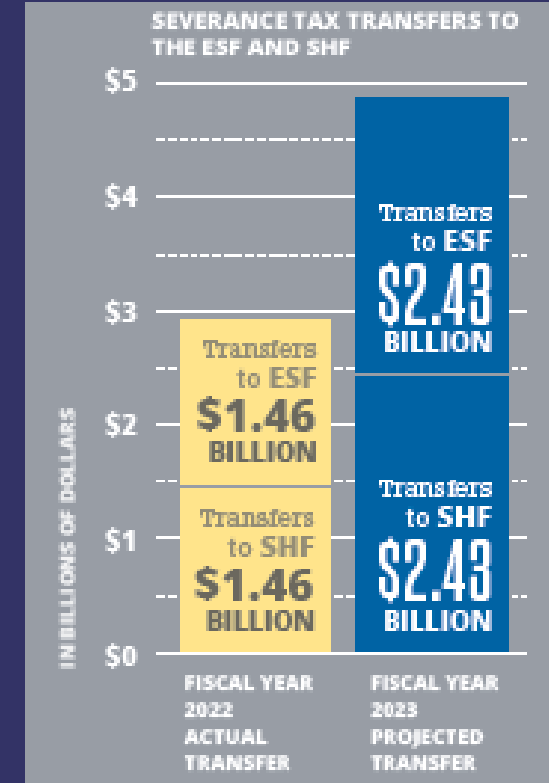
- Increase of 39% over 20-21 biennium estimate

Motor Vehicle Sales Tax (Part of Prop 7): Estimated \$635 Million

- Increase of 100% over 20-21 biennium estimate

General Sales Tax (Part of Prop 7): Estimated \$5 Billion

- Increase of 35% over 20-21 biennium estimate



# FUNDING IMPACT

## NTTA Transactions

### Change in Tollway Transactions vs Baseline



Source: NTTA

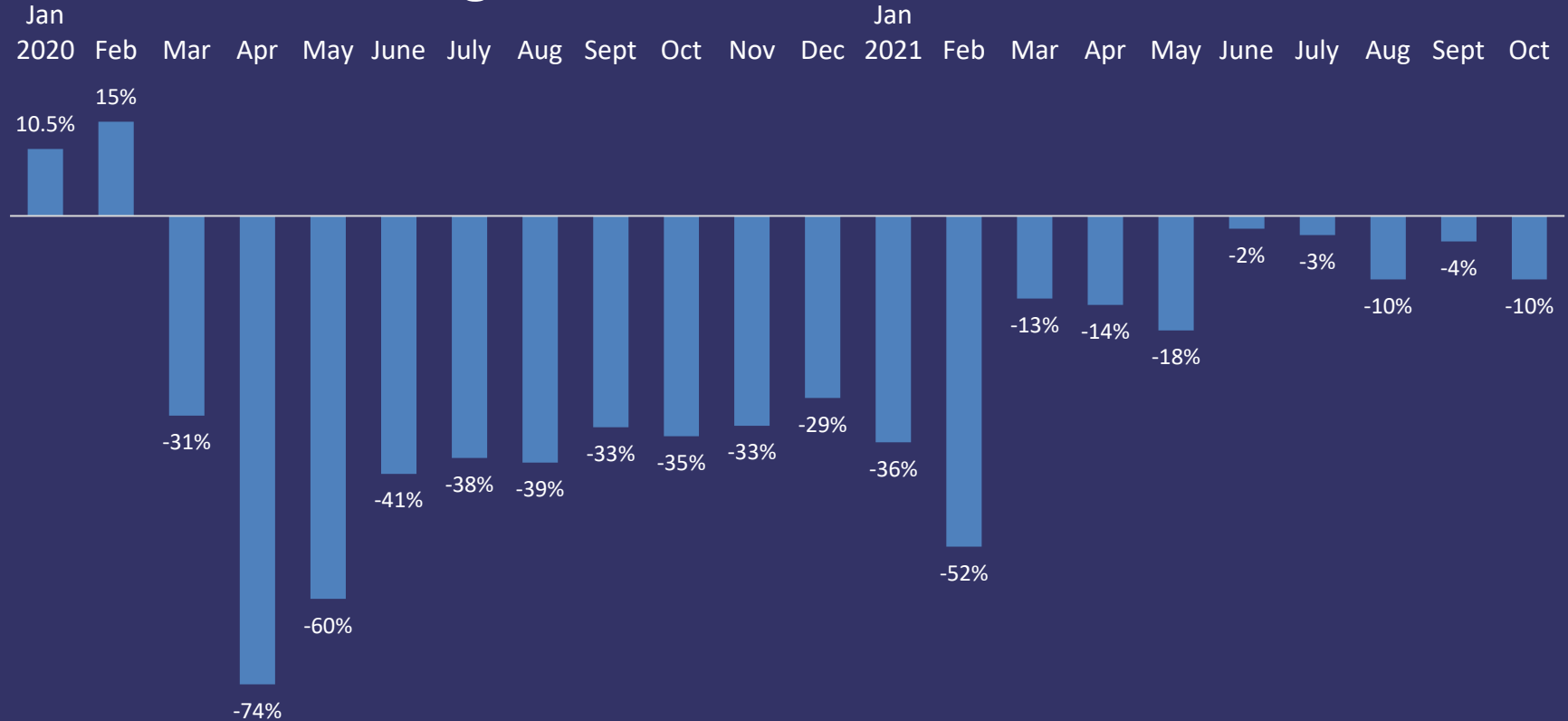
Notes: Baseline is March 2019-February 2020. Change for NTTA includes 360 Tollway. No current impact to RTC backstop expected.

Note: Drop in transactions in Feb 2021 due in large part to week-long winter storm.

# FUNDING IMPACT

## I-35E TEXpress Lane Transactions

### Change in Transactions vs Baseline



Source: TxDOT

Note: Baseline is March 2019-February 2020; TIFIA loan not impacted at this time as interest only payment period does not begin until May 2022

Note: Drop in transactions in Feb 2021 due in large part to week-long winter storm.



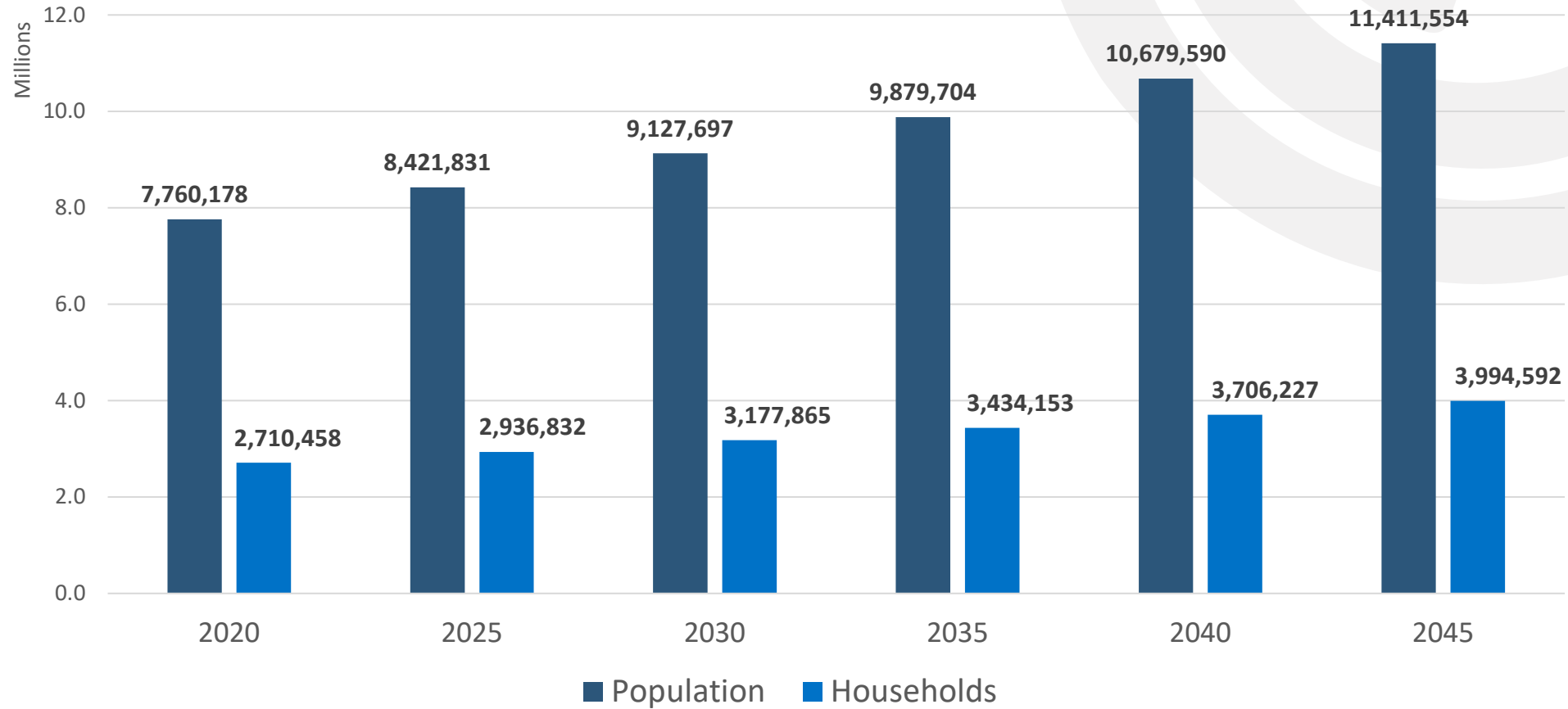
# 2045 DEMOGRAPHIC FORECASTS

REGIONAL TRANSPORTATION COUNCIL  
JANUARY 13, 2022

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# REGIONAL CONTROL TOTALS - POPULATION



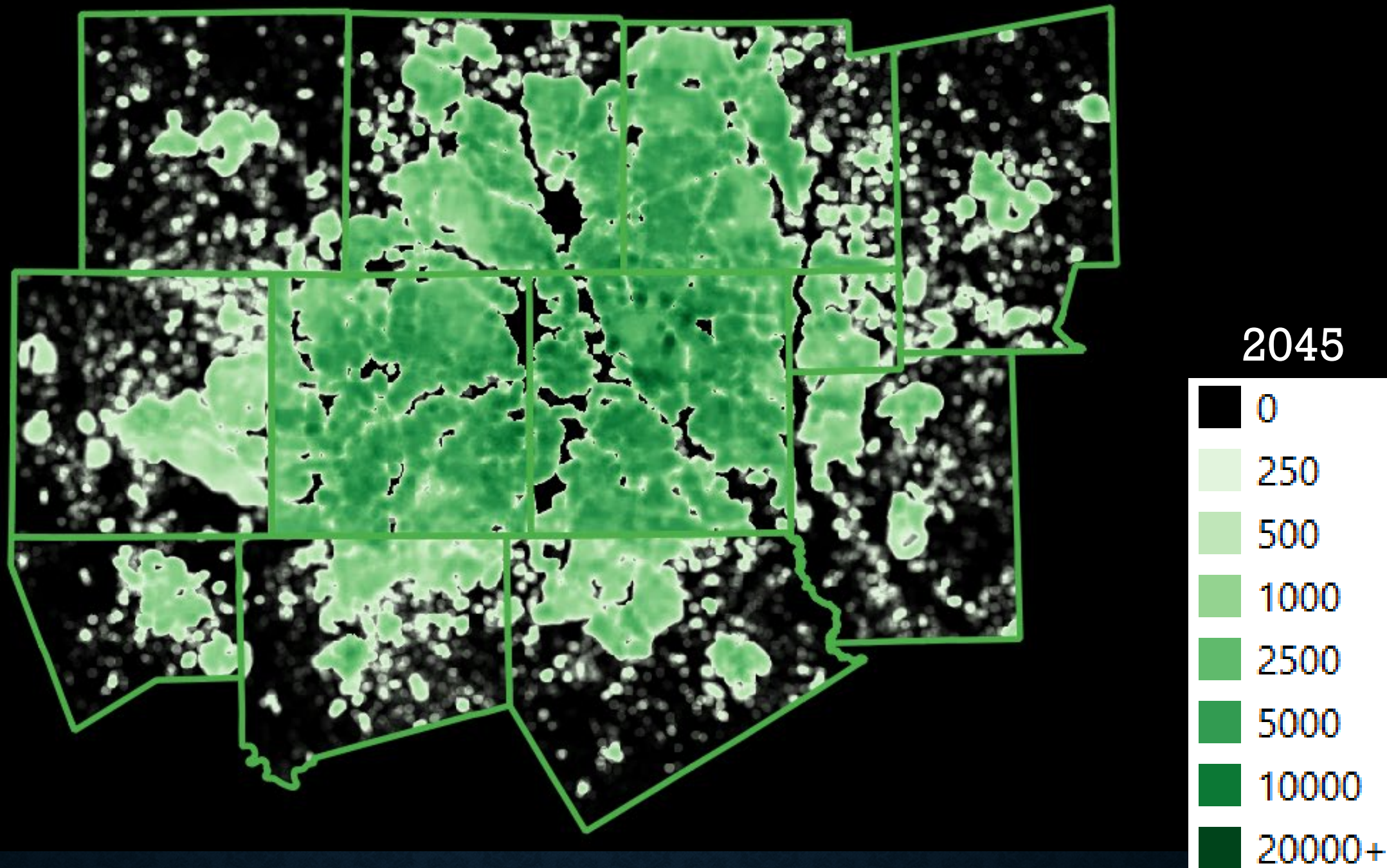
Source: The Perryman Group. (March 2020). A Long-Term Employment and Population Forecast for the North Central Texas Council of Governments Region



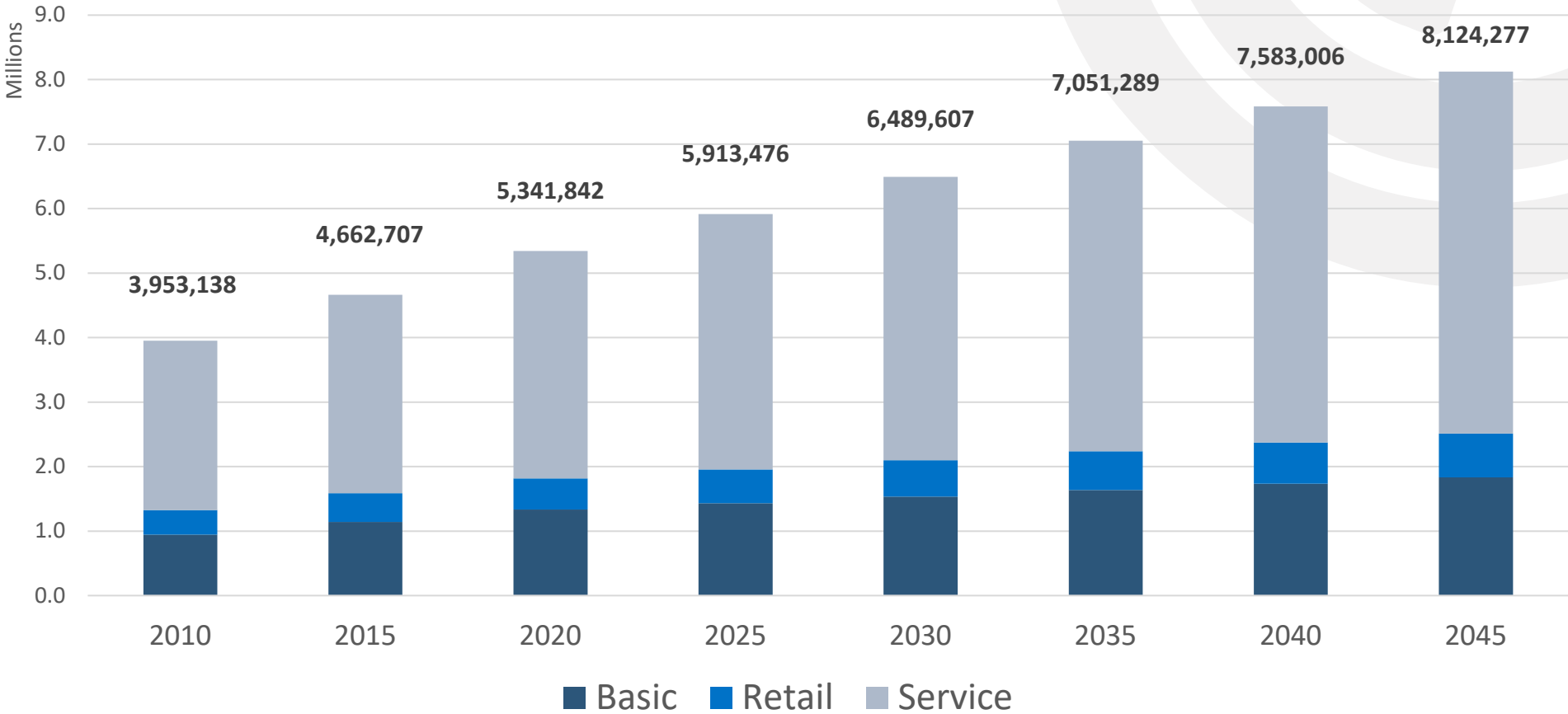
<b>2045 Total Population Forecast</b>				
	<b>2020 Census</b>	<b>2045</b>	<b>Change</b>	<b>Compound Annual Growth Rate</b>
Collin	1,064,465	1,789,900	725,435	2.19%
Dallas	2,613,539	3,533,500	919,961	1.26%
Denton	906,442	1,518,900	612,458	2.17%
Ellis	192,455	318,250	125,795	1.83%
Hood	61,598	95,184	33,586	1.52%
Hunt	99,956	143,620	43,664	1.51%
Johnson	179,927	258,030	78,103	1.53%
Kaufman	145,310	209,440	64,130	1.93%
Parker	148,222	234,660	86,438	1.17%
Rockwall	107,819	161,580	53,761	1.70%
Tarrant	2,110,640	3,044,500	933,860	1.54%
Wise	<u>68,632</u>	<u>104,010</u>	<u>35,378</u>	1.75%
<b>TOTAL</b>	<b>7,699,005</b>	<b>11,411,574</b>	<b>4,606,756</b>	<b>1.65%</b>



Household Population per Square Mile for a 1 SqMi circle around each 30x30m grid cell



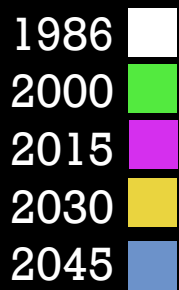
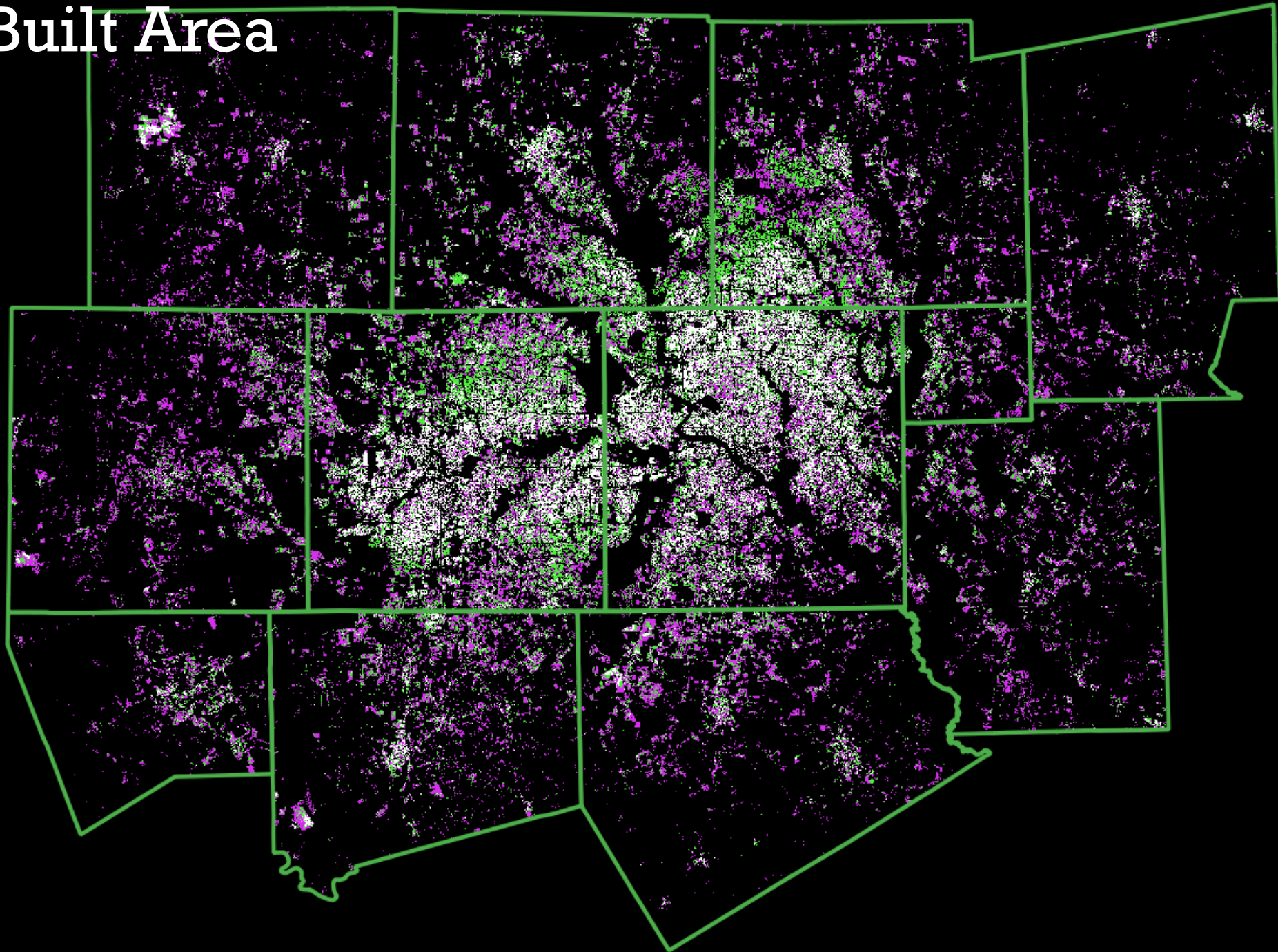
# REGIONAL CONTROL TOTALS - EMPLOYMENT



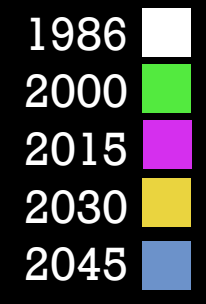
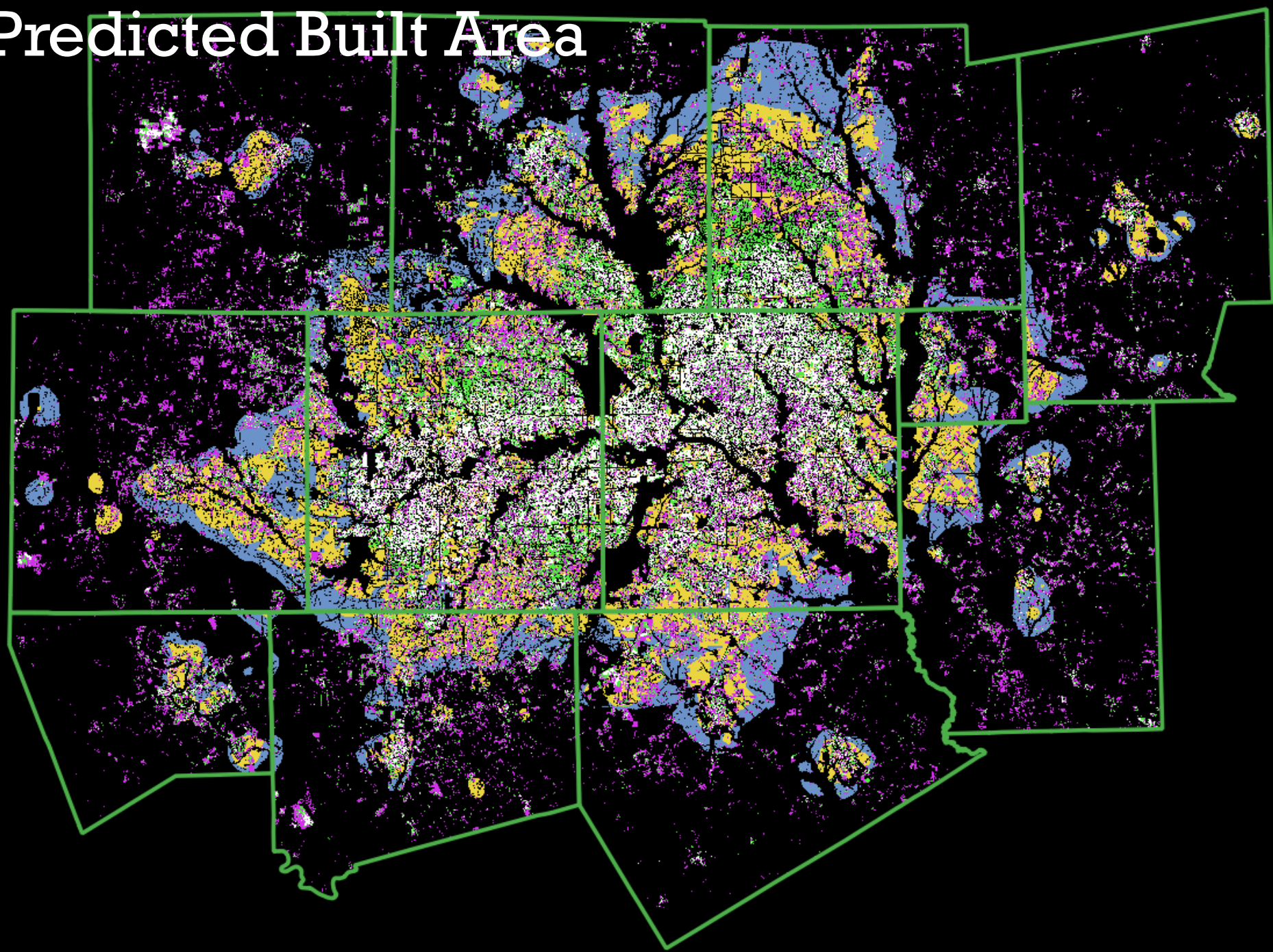
Source: The Perryman Group. (March 2020). A Long-Term Employment and Population Forecast for the North Central Texas Council of Governments Region

<b>2045 Control Total Employment Forecast</b>				
	<b>2019 BEA</b>	<b>2045</b>	<b>Change</b>	<b>Compound Annual Growth Rate</b>
Collin	666,572	1,068,600	402,028	1.99%
Dallas	2,365,389	3,577,100	1,211,711	1.74%
Denton	433,036	715,810	282,774	2.12%
Ellis	86,545	136,110	49,565	1.90%
Hood	30,859	47,312	16,453	1.80%
Hunt	46,374	70,605	24,231	1.77%
Johnson	80,090	120,540	40,450	1.72%
Kaufman	56,474	82,627	26,153	1.60%
Parker	68,593	102,280	33,687	1.68%
Rockwall	55,514	88,708	33,194	1.97%
Tarrant	1,332,042	2,047,100	715,058	1.81%
Wise	<u>36,215</u>	<u>54,376</u>	<u>18,161</u>	1.71%
<b>TOTAL</b>	<b>5,257,703</b>	<b>8,124,278</b>	<b>4,606,756</b>	<b>1.83%</b>

# 2015 – Built Area



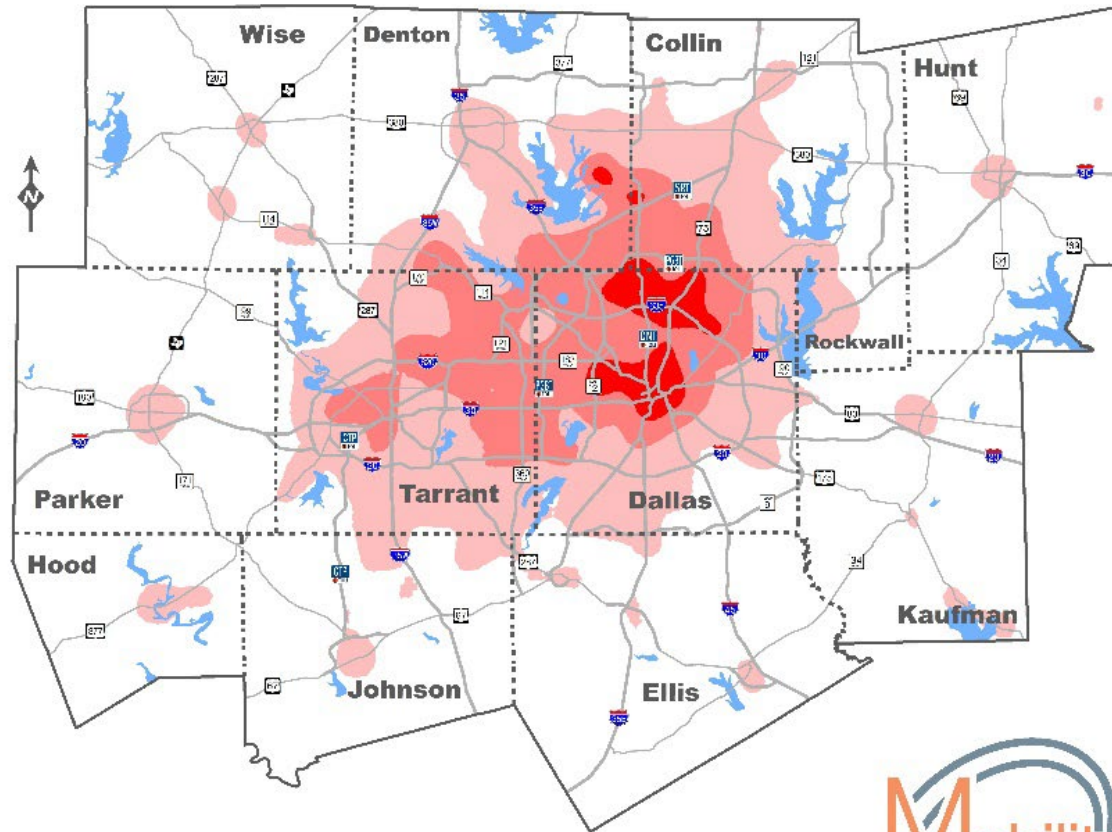
# 2045 – Predicted Built Area



# 2018 Levels of Congestion/Delay

## Congestion Index

-  No Congestion
-  Light Congestion
-  Moderate Congestion
-  Severe Congestion

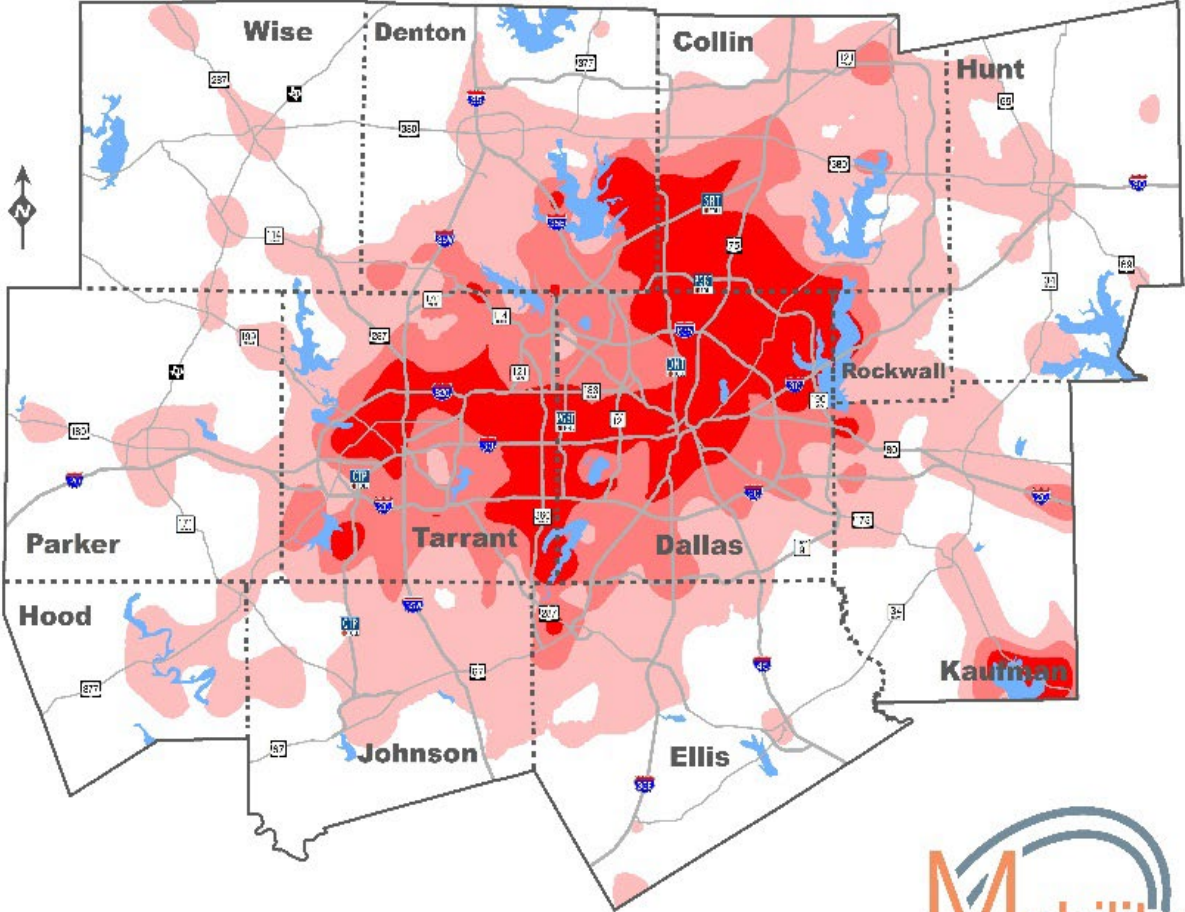
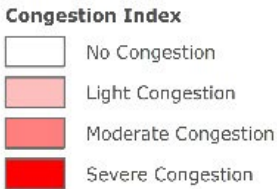


 North Central Texas  
Council of Governments  
June 2018

**Cost of Congestion/Delay: \$12.1 billion**  
Congestion Index is based on a percent increase in travel time.



# 2045 Levels of Congestion/Delay



 North Central Texas Council of Governments  
June 2018

**Cost of Congestion/Delay: \$27.2 billion**  
Congestion Index is based on a percent increase in travel time.



# 2045 DEMOGRAPHIC FORECASTS

## FUTURE CHALLENGES AND OPPORTUNITIES

New Regional Control Totals call for increase of 200,000 additional people and 1,100,000 additional jobs above the current 2045 forecasts previously used to develop the Mobility 2045 Plan in 2018

Over 50 percent of the population growth projected to occur by 2045 is anticipated to occur outside existing incorporated areas

By 2045 over 60 percent of the region's population and over 40 percent of the region's employment is anticipated to reside outside the current DART, Trinity Metro and DCTA Transit Authority service areas

Without continued planning for higher residential and employment densities future development will occur in areas where our ability to provide transportation infrastructure will be challenged

Demographic and Travel Modelling Tools are now readily available to facilitate scenario planning



# SCHEDULE

**July/September 2021**

*Draft forecasts for internal review*

**October/November 2021**

*Draft forecasts for external review*

**December 2021**

*Finalization of forecasts*

**February 2022**

*Presentation of final forecasts to  
NCTCOG Executive Board*



# FORECAST TEAM

## RESEARCH & INFORMATION SERVICES



**Mark Folden**  
Senior Predictive  
Analytic Specialist

**Kyle Caskey**  
Research Data Analyst

**Donna Coggeshall**  
Manager of Research

## TRANSPORTATION



**Arash Mirzaei**  
Senior Program Manager

**Zhen Ding**  
Senior Transportation  
System Modeler

**Dan Kessler**  
Assistant Director of  
Transportation

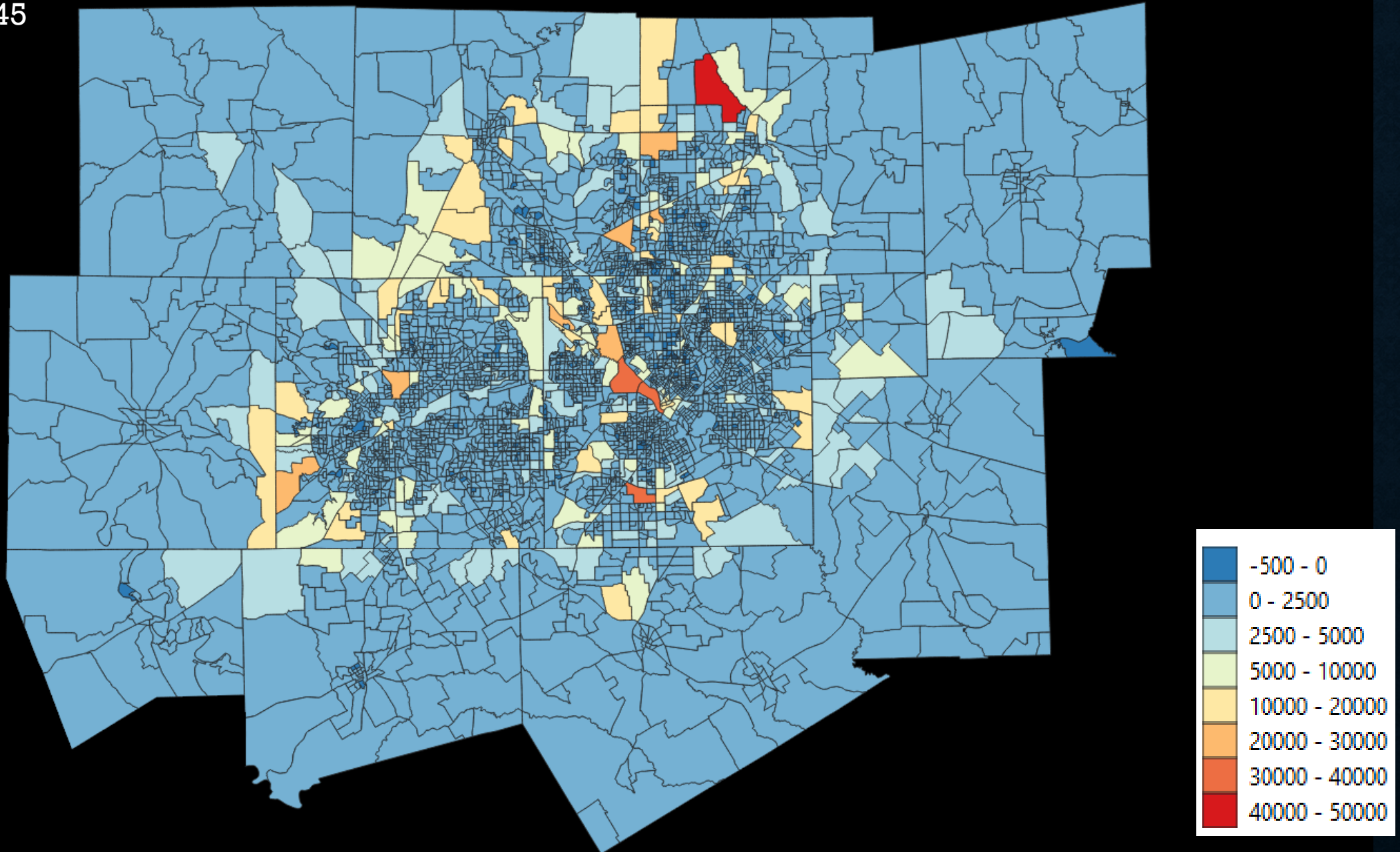




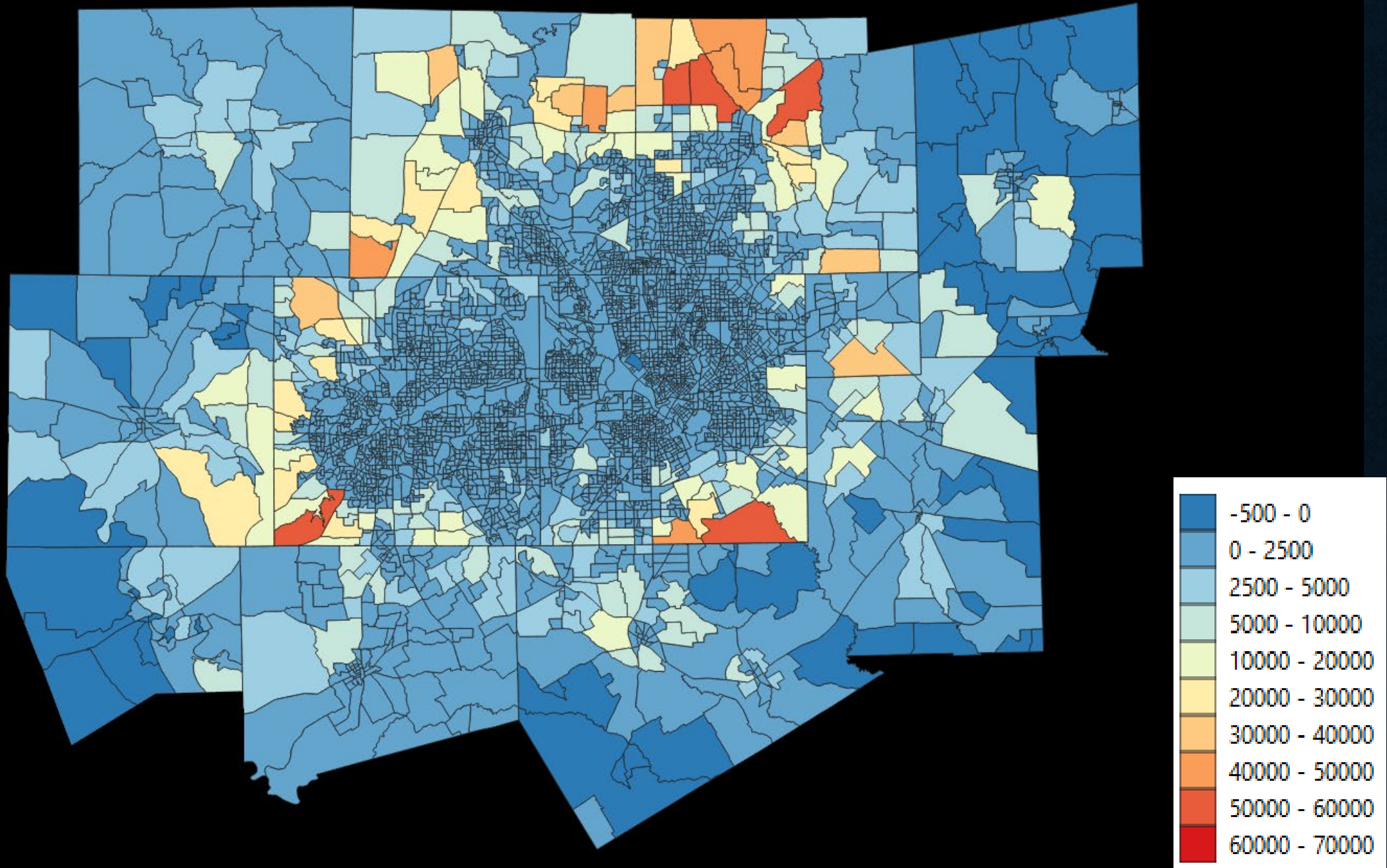
# QUESTIONS

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# Change in Total Employment 2015-2045



# Change in HH Population 2015-2045



# LARGEST CITIES POPULATION

Name	2020 Census Population	2045 Draft Forecast	Change	% Change	CAGR
Dallas	1,289,961	1,621,500	331,539	25.7%	0.9%
Fort Worth	901,434	1,172,600	271,166	30.1%	1.1%
Arlington	388,680	486,570	97,890	25.2%	0.9%
Plano	284,519	317,150	32,631	11.5%	0.4%
Garland	244,984	290,760	45,776	18.7%	0.7%
Irving	255,247	289,450	34,203	13.4%	0.5%
Frisco	199,863	252,160	52,297	26.2%	0.9%
Grand Prairie	195,432	244,620	49,188	25.2%	0.9%
McKinney	193,488	234,450	40,962	21.2%	0.8%
Denton	132,437	208,550	76,113	57.5%	1.8%
Mesquite	149,523	192,430	42,907	28.7%	1.0%
Carrollton	132,791	148,590	15,799	11.9%	0.5%
Richardson	112,657	127,970	15,313	13.6%	0.5%
Lancaster	40,930	117,890	76,960	188.0%	4.3%
Lewisville	111,410	115,840	4,430	4.0%	0.2%
Allen	104,294	111,480	7,186	6.9%	0.3%
Mansfield	72,040	102,920	30,880	42.9%	1.4%
Cedar Hill	48,985	98,332	49,347	100.7%	2.8%
Flower Mound	75,690	98,279	22,589	29.8%	1.1%
DeSoto	55,771	90,267	34,496	61.9%	1.9%

# LARGEST CITIES POPULATION

Name	2020 Census Population	2045 Draft Forecast	Change	% Change	CAGR
North Richland Hills	69,649	88,638	18,989	27.3%	1.0%
Celina	16,654	83,280	66,626	400.1%	6.7%
Rowlett	62,255	82,818	20,563	33.0%	1.1%
Eules	60,942	68,893	7,951	13.0%	0.5%
Keller	45,487	67,123	21,636	47.6%	1.6%
Wylie	57,315	66,884	9,569	16.7%	0.6%
Grapevine	50,174	63,678	13,504	26.9%	1.0%
Little Elm	46,453	61,504	15,051	32.4%	1.1%
Bedford	49,570	61,041	11,471	23.1%	0.8%
Rockwall	46,862	60,836	13,974	29.8%	1.0%
Waxahachie	39,888	60,266	20,378	51.1%	1.7%
Haltom City	45,971	55,177	9,206	20.0%	0.7%
Prosper	30,174	53,314	23,140	76.7%	2.3%
Southlake	31,048	53,132	22,084	71.1%	2.2%
Midlothian	35,019	53,057	18,038	51.5%	1.7%
Burleson	47,493	51,006	3,513	7.4%	0.3%
Coppell	42,851	50,452	7,601	17.7%	0.7%
Duncanville	40,479	49,767	9,288	22.9%	0.8%
Hurst	40,202	47,812	7,610	18.9%	0.7%
The Colony	44,534	45,411	877	2.0%	0.1%

# LARGEST CITIES EMPLOYMENT

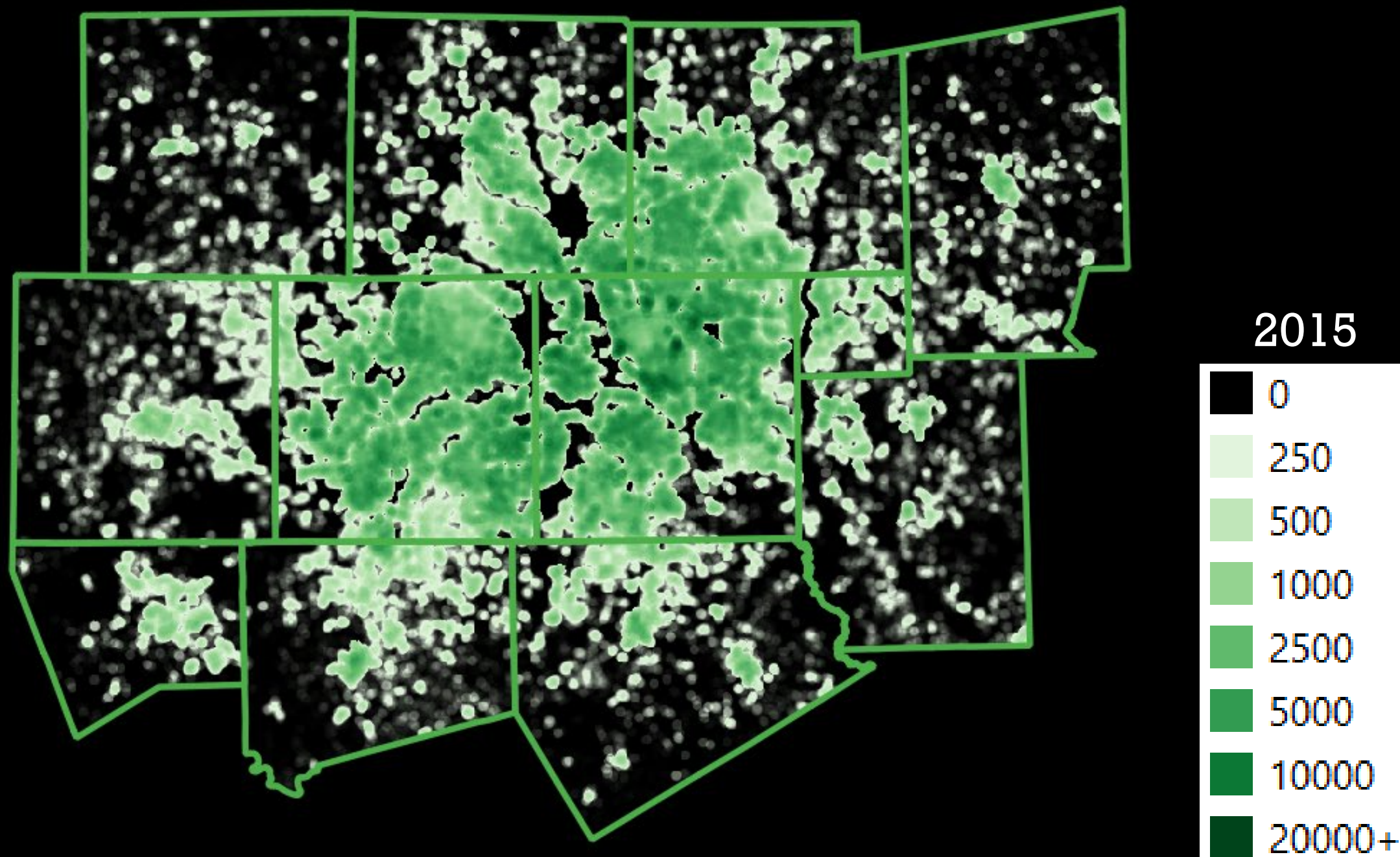
Name	2015 NCTCOG Employment	2045 Draft Forecast	Change	% Change	CAGR
Dallas	1,150,349	1,792,500	642,151	55.8%	1.5%
Fort Worth	530,119	974,730	444,611	83.9%	2.1%
Irving	289,318	456,220	166,902	57.7%	1.5%
Plano	271,915	405,540	133,625	49.1%	1.3%
Arlington	207,607	270,920	63,313	30.5%	0.9%
Richardson	152,845	218,500	65,655	43.0%	1.2%
Garland	105,832	181,560	75,728	71.6%	1.8%
Frisco	79,047	171,200	92,153	116.6%	2.6%
Carrollton	111,414	161,540	50,126	45.0%	1.2%
Denton	96,344	160,500	64,157	66.6%	1.7%
McKinney	62,137	159,380	97,243	156.5%	3.2%
Mesquite	67,813	156,160	88,347	130.3%	2.8%
Grand Prairie	88,020	154,880	66,860	76.0%	1.9%
Grapevine	104,368	144,810	40,442	38.7%	1.1%
Farmers Branch	82,392	119,820	37,428	45.4%	1.3%
Lewisville	83,184	116,800	33,616	40.4%	1.1%
Addison	74,033	113,440	39,407	53.2%	1.4%
Allen	39,063	84,472	45,409	116.2%	2.6%
Coppell	46,377	73,849	27,472	59.2%	1.6%
Mansfield	28,017	69,321	41,304	147.4%	3.1%



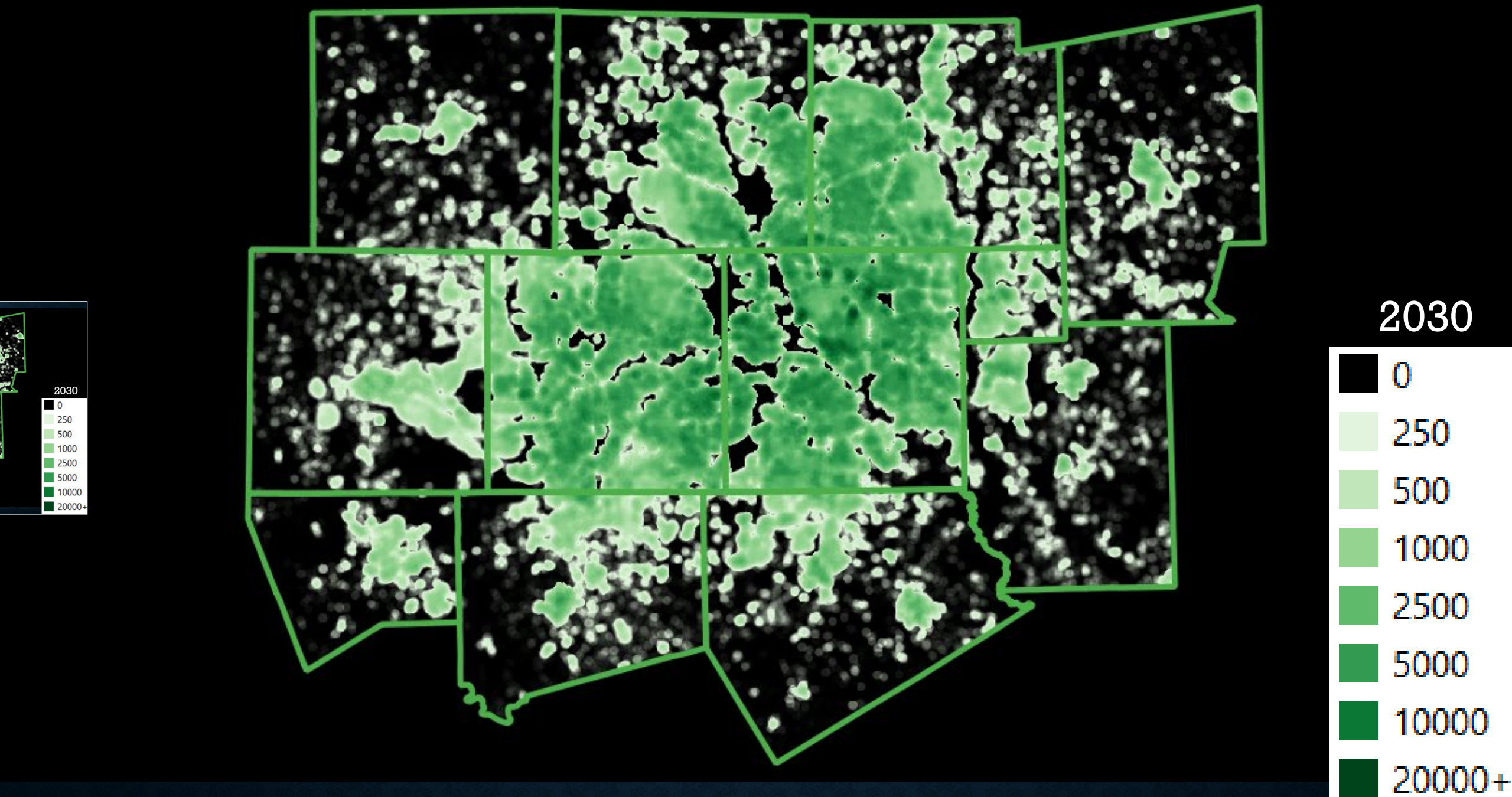
# LARGEST CITIES EMPLOYMENT

Name	2015 NCTCOG Employment	2045 Draft Forecast	Change	% Change	CAGR
Flower Mound	35,942	67,490	31,548	87.8%	2.1%
Lancaster	13,682	66,433	52,751	385.5%	5.4%
DeSoto	18,643	63,368	44,725	239.9%	4.2%
Westlake	9,435	63,273	53,838	570.6%	6.5%
Southlake	33,212	57,225	24,013	72.3%	1.8%
Rockwall	32,710	56,637	23,928	73.2%	1.8%
Cedar Hill	16,903	54,433	37,530	222.0%	4.0%
North Richland Hills	30,277	45,414	15,137	50.0%	1.4%
Bedford	31,080	42,519	11,439	36.8%	1.1%
Waxahachie	27,208	41,220	14,012	51.5%	1.4%
Prosper	3,205	41,188	37,983	1185.2%	8.9%
Rowlett	12,052	36,170	24,118	200.1%	3.7%
Haltom City	20,371	35,148	14,777	72.5%	1.8%
Euless	19,275	34,252	14,977	77.7%	1.9%
Burleson	18,935	32,750	13,815	73.0%	1.8%
The Colony	11,170	30,054	18,884	169.1%	3.4%
Duncanville	15,770	29,640	13,870	87.9%	2.1%
Weatherford	24,980	29,568	4,588	18.4%	0.6%
Hurst	22,126	29,224	7,098	32.1%	0.9%
Keller	16,266	28,518	12,252	75.3%	1.9%

Household Population per Square Mile for a 1 SqMi circle around each 30x30m grid cell



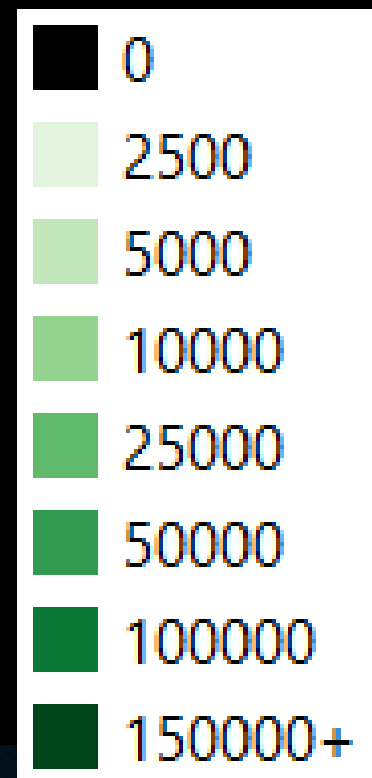
Household Population per Square Mile for a 1 SqMi circle around each 30x30m grid cell



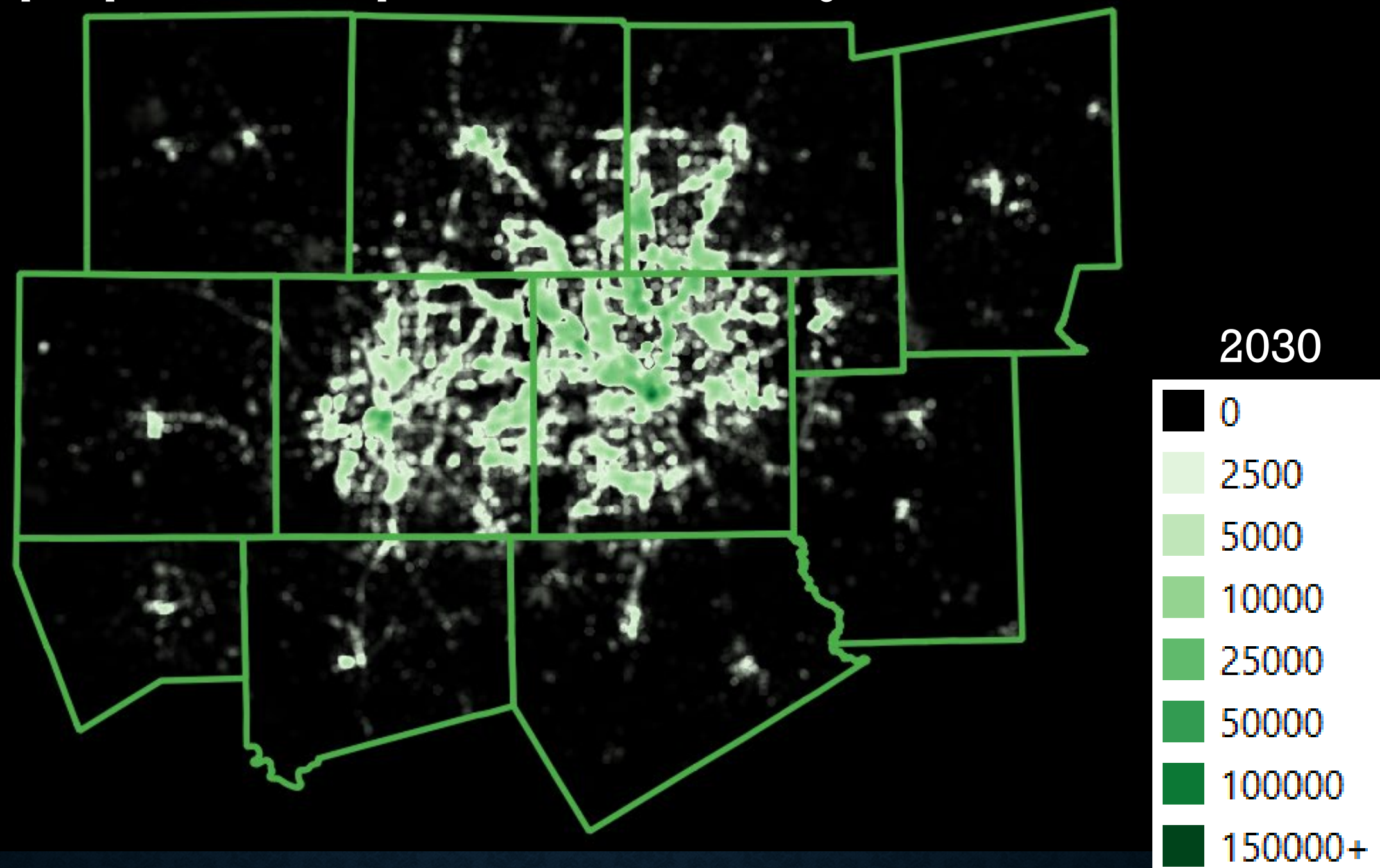
Total Employment per Square Mile for a 1 SqMi circle around each 30x30m grid cell



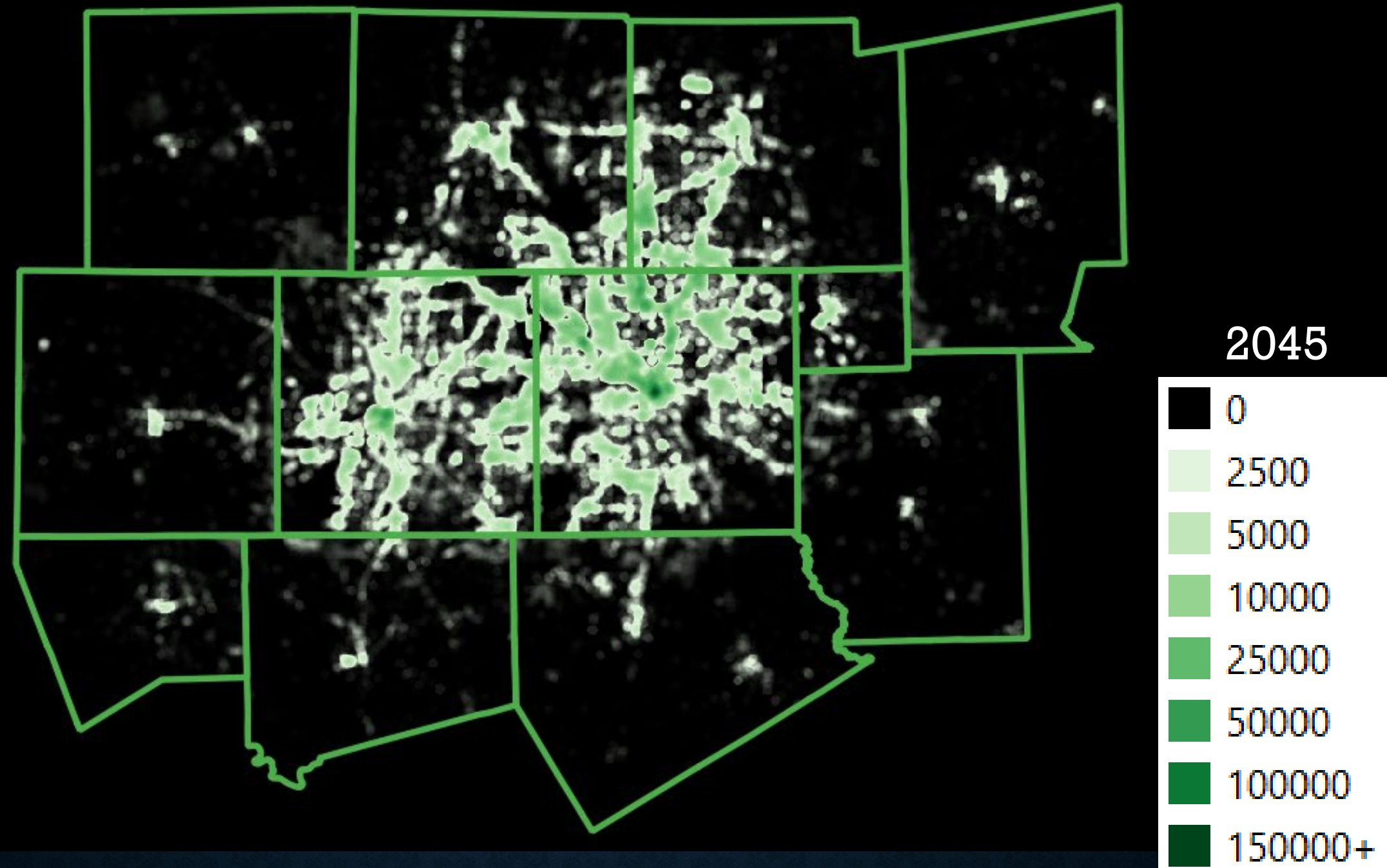
2015



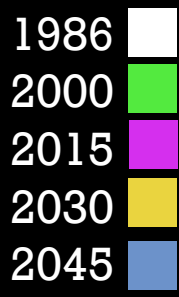
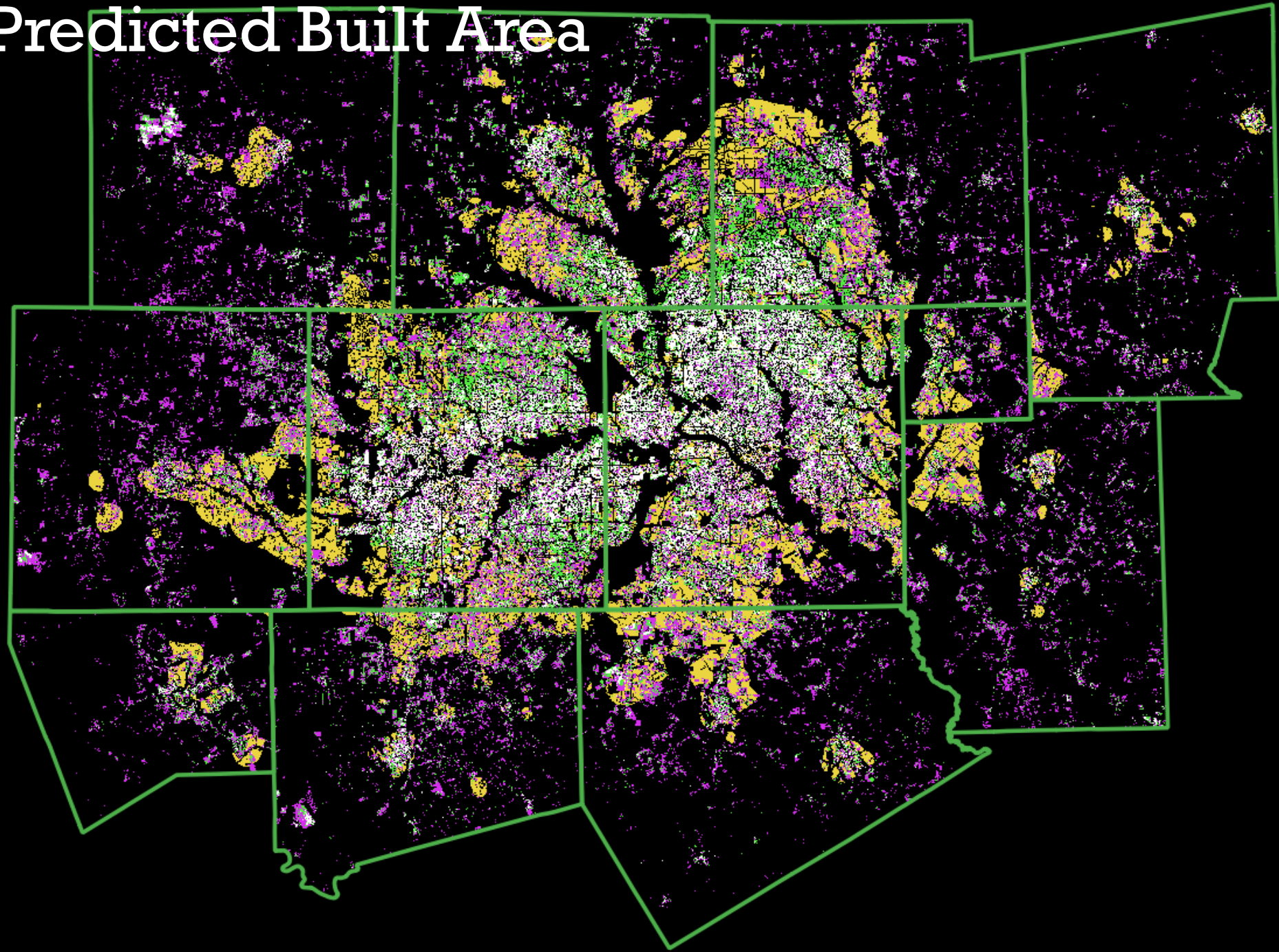
Total Employment per Square Mile for a 1 SqMi circle around each 30x30m grid cell



Total Employment per Square Mile for a 1 SqMi circle around each 30x30m grid cell

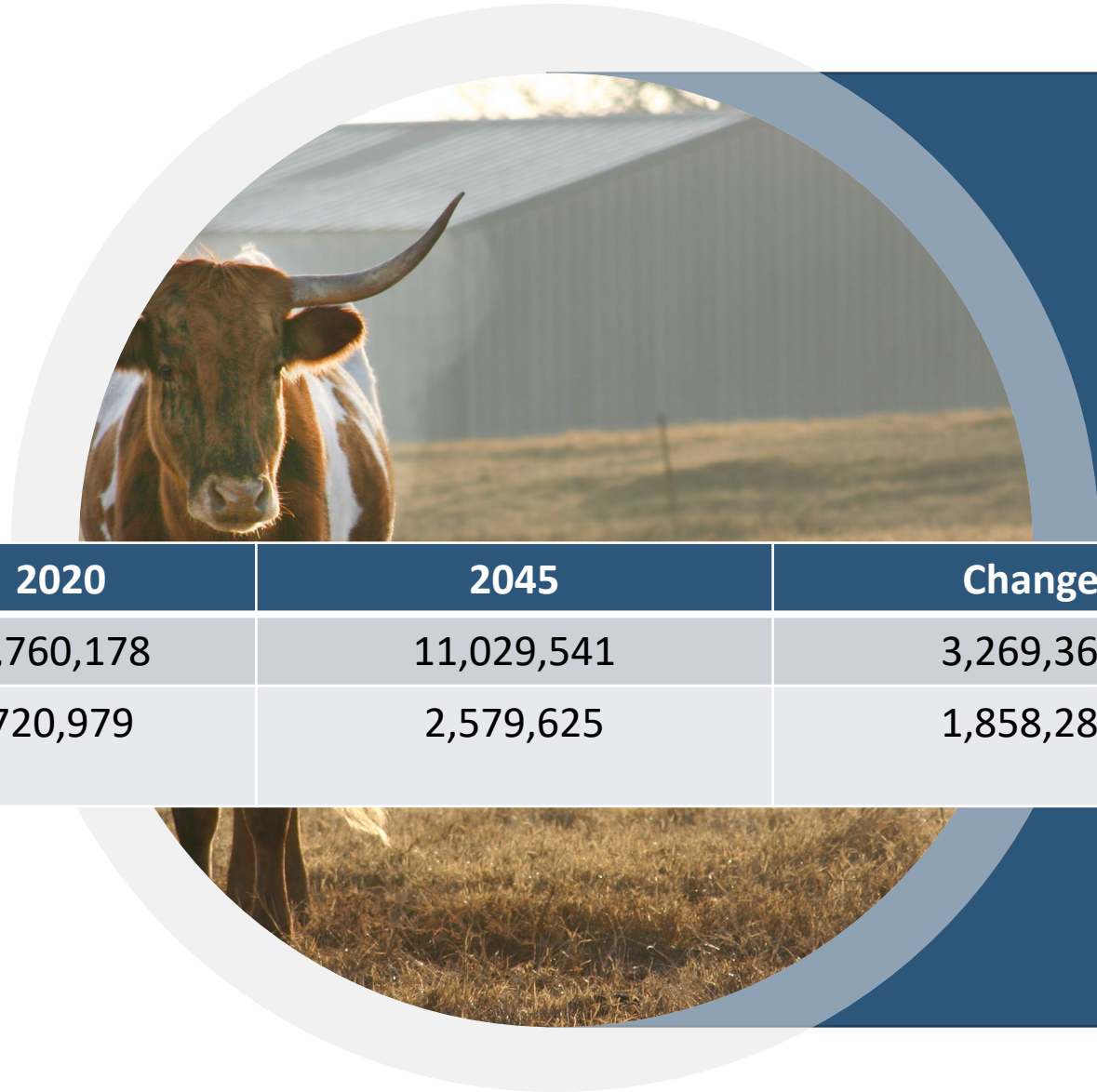


# 2030 – Predicted Built Area



## POPULATION FORECAST UNINCORPORATED AREA

- Based on 2020 City Boundaries



	2020	2045	Change
Total Population	7,760,178	11,029,541	3,269,363
Unincorporated Area Population	720,979	2,579,625	1,858,286

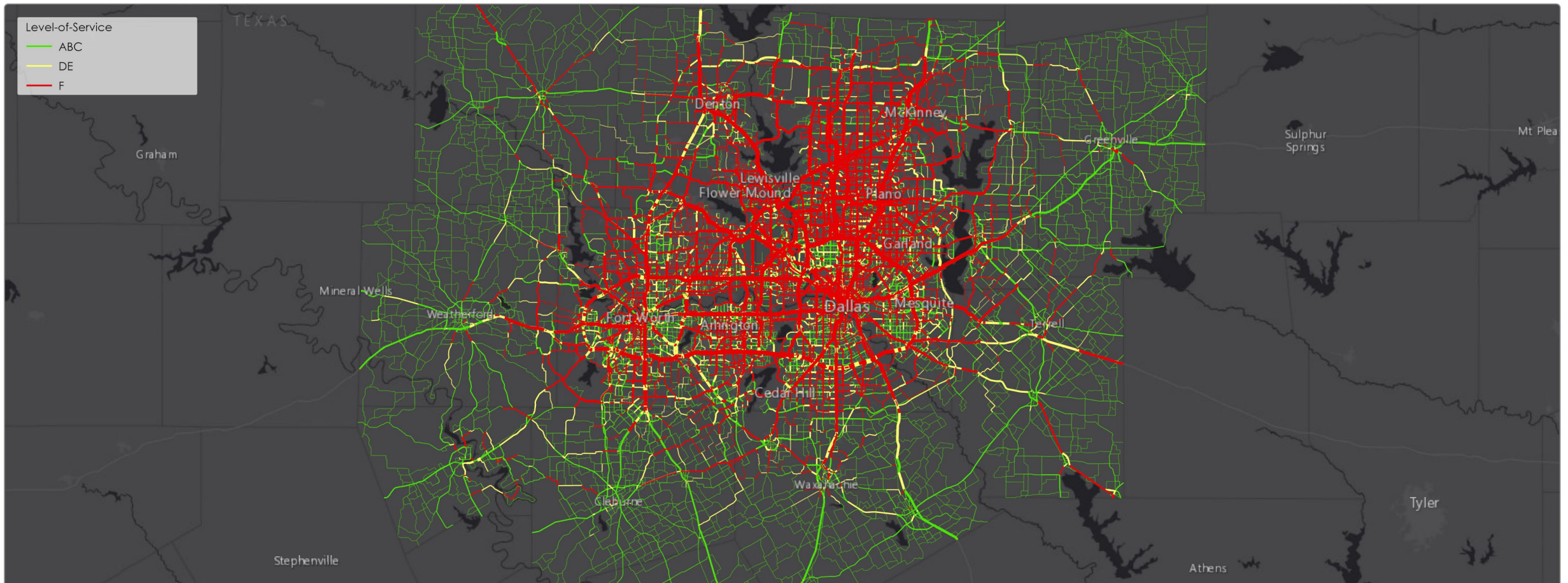




# DRAFT 2045 PEAK HOUR LEVEL OF SERVICE

NEW MODEL, NEW DEMOGRAPHICS, NEW CONTROL TOTALS (NNN) LEVEL-OF-SERVICE

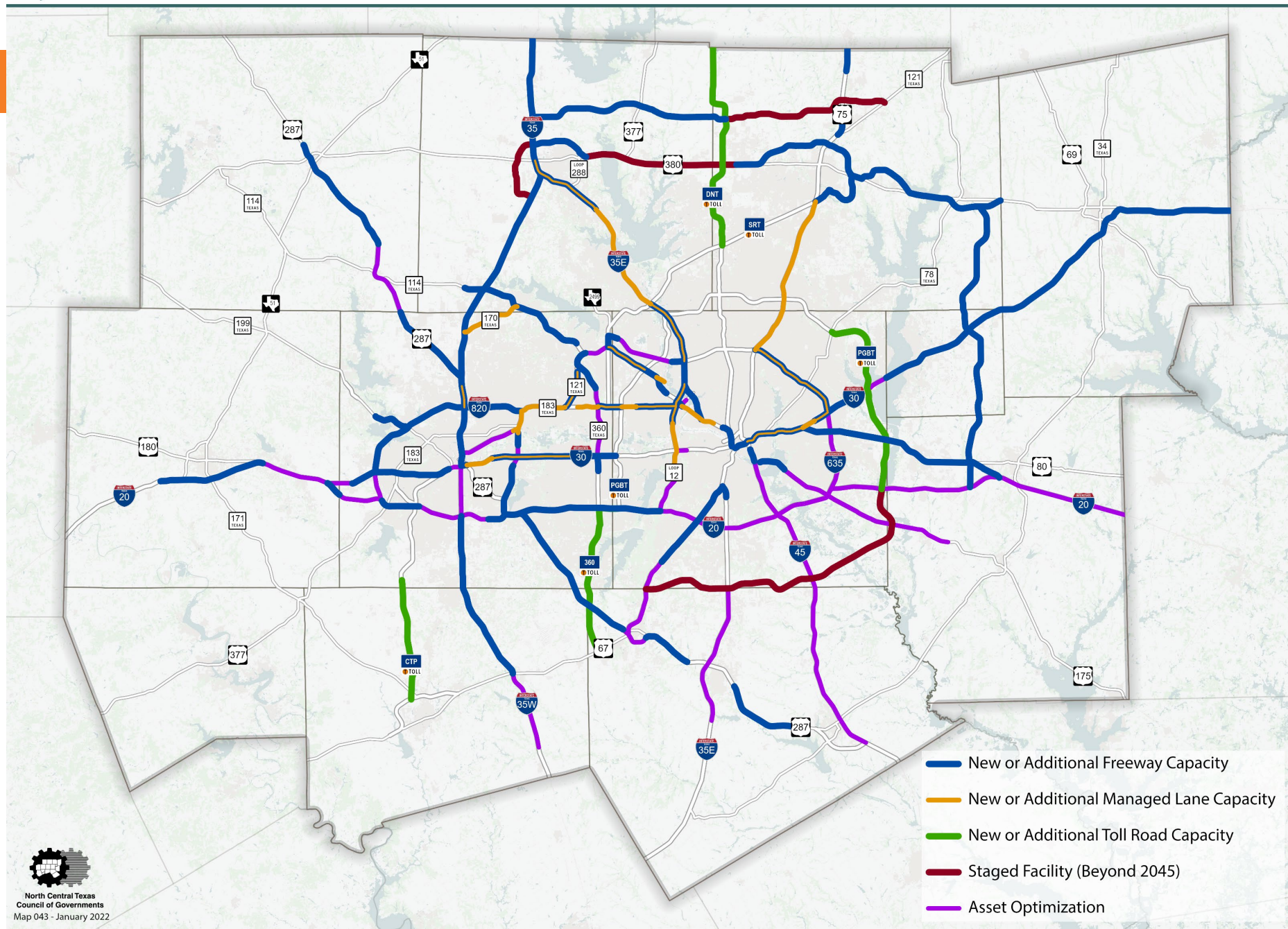
2045 ROADWAY NETWORK  
TAFI 1.4.1

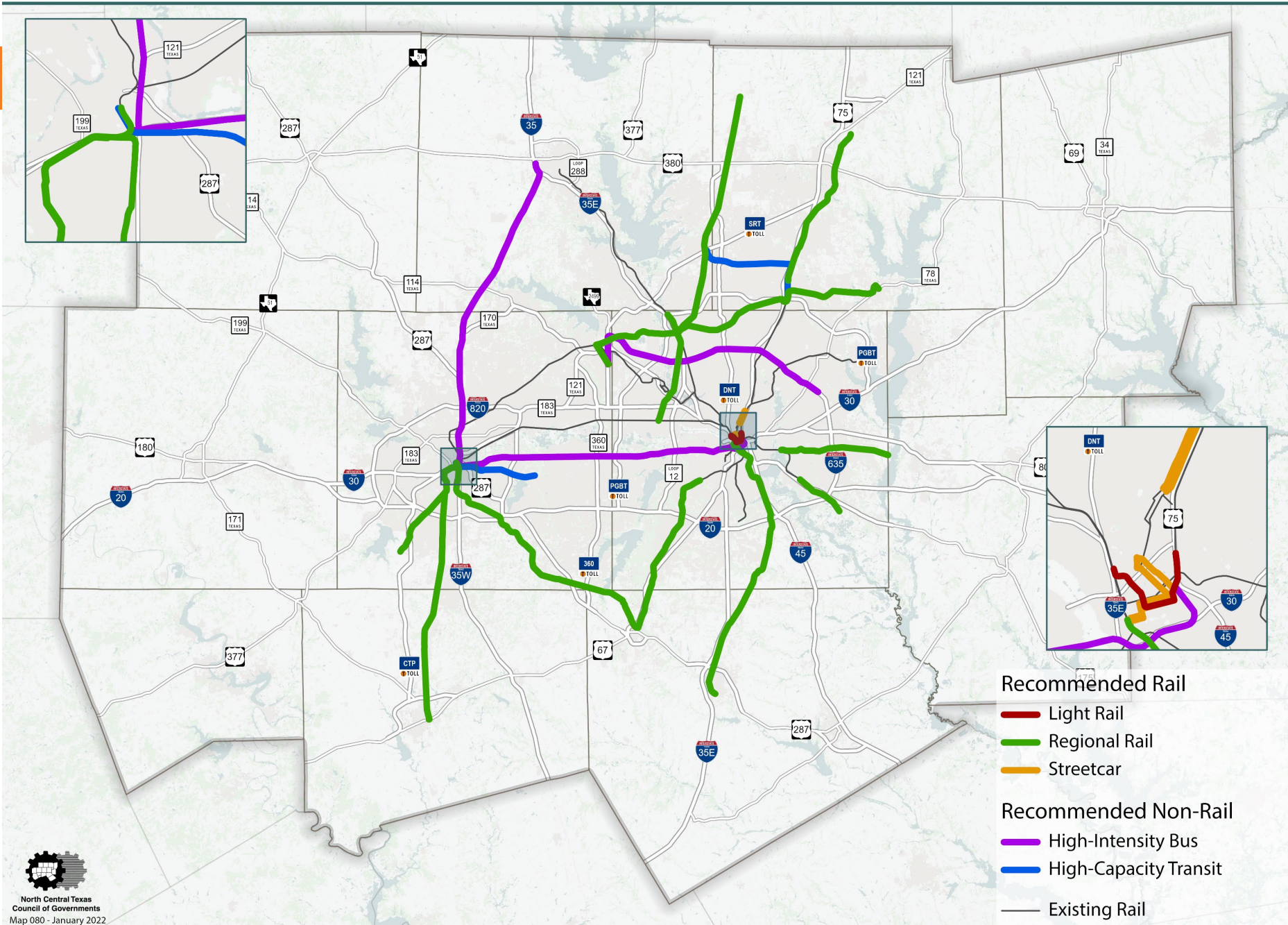


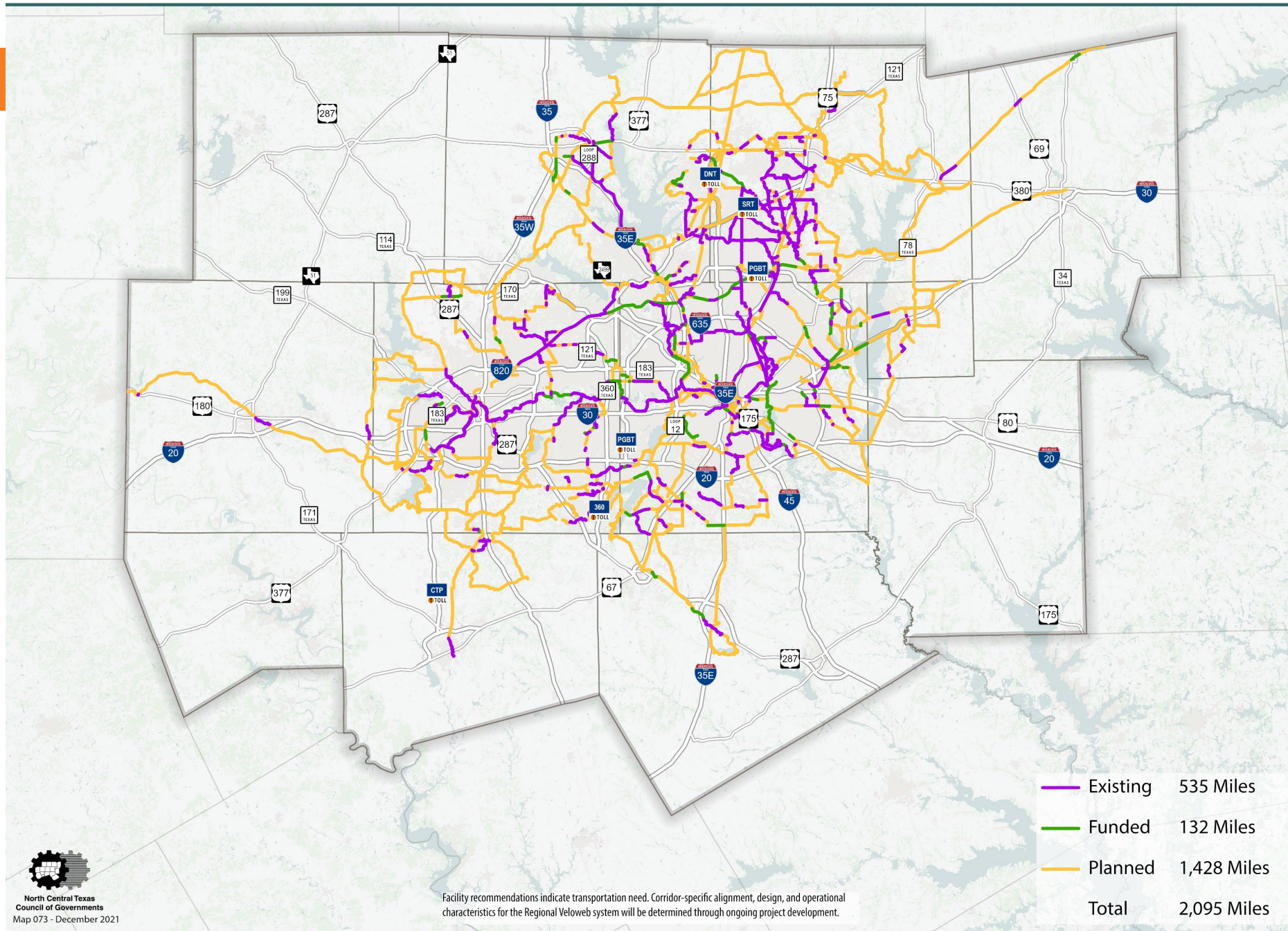
# MOBILITY 2045 2022 UPDATE

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January 13, 2022







<span style="color: purple;">—</span> Existing	535 Miles
<span style="color: green;">—</span> Funded	132 Miles
<span style="color: yellow;">—</span> Planned	1,428 Miles
<b>Total</b>	<b>2,095 Miles</b>

# HIGHLIGHTED POLICY AND PROGRAM UPDATES



## Safety

References new Pedestrian Safety Action Plan endorsed by the Regional Transportation Council on June 10, 2021



## Health Accessibility Program

Identify and support transportation solutions to address health disparities in underserved communities, including solutions that improve access to healthy food and medical care



## Environmental Considerations

Build on air quality, resiliency, and environmental programs and incorporate new strategies



## TDM Strategies

RTC Resolution R21-04 supports the establishment of a regional SOV trip reduction target of 20% annually

# HIGHLIGHTED TECHNOLOGY PROGRAM UPDATES



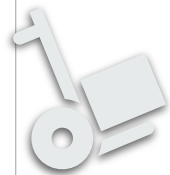
## Advance High-Speed Transportation recommendations

Consider high-speed rail and hyperloop between Dallas-Arlington-Fort Worth, as well as connectivity with the proposed Houston-Dallas high-speed rail and Fort Worth-Laredo high-speed/hyperloop



## Safe integration of Vertical Mobility Technology in the NCTCOG region

New policy to safely and efficiently integrate Vertical Mobility Technology, Advanced Air Mobility, Urban Air Mobility, Unmanned Traffic Management, Unmanned Aircraft Systems into the NCTCOG region



## Advance Automated Transportation Systems (ATS)

Apply ATS technology in passenger and freight applications for local circulation and first/last mile access to regional rail



## Automated Vehicles

Incorporate the new Automated Vehicle 2.0 initiative launched since the adoption of the last Mobility Plan



## Internet and Broadband

Incorporates a new topic of broadband internet through discussion of access, infrastructure, the intersection of communications and transportation, and potential uses

# **FINANCIAL PLAN**



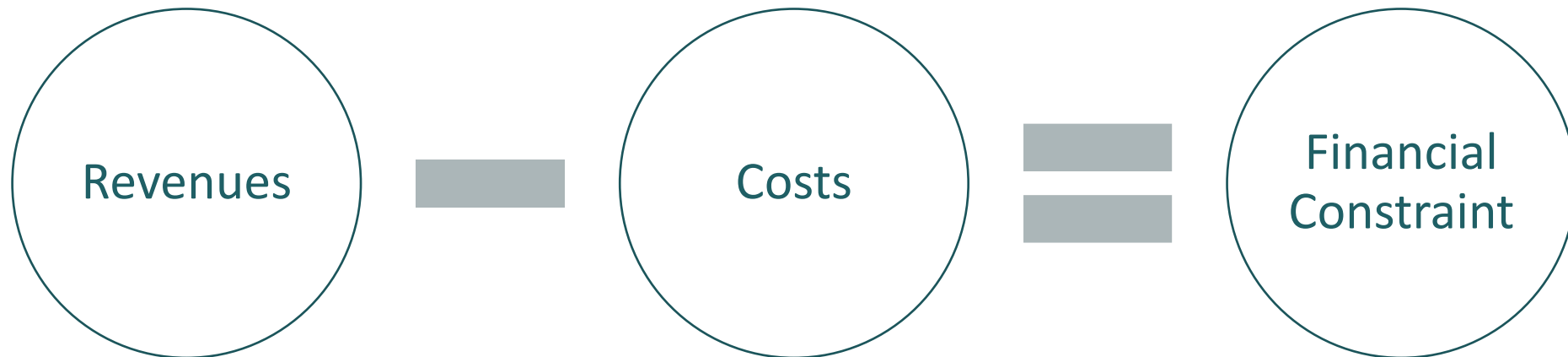
# FINANCIAL PLAN REQUIREMENTS

Plan must be financially constrained

Include all reasonably expected sources of revenue

Year of expenditure dollars

Balance priorities with available revenues



# PRELIMINARY FINANCIAL PLAN

	MOBILITY 2045	MOBILITY 2045 UPDATE
Infrastructure Maintenance	36.8	-15% ▼
Management & Operations	9.5	0%
Growth, Development, & Land Use Strategies	3.2	-60% ▼
Rail & Bus	33.3	+25% ▲
HOV/Managed Lanes + Freeways/Tollways and Arterials	53.6	+25% ▲
<b>Total, Actual \$, Billions</b>	<b>136.4 Billion</b>	<b>140-150 Billion ▲</b>

# REVENUE FORECAST: TRADITIONAL ROADWAY FUNDS

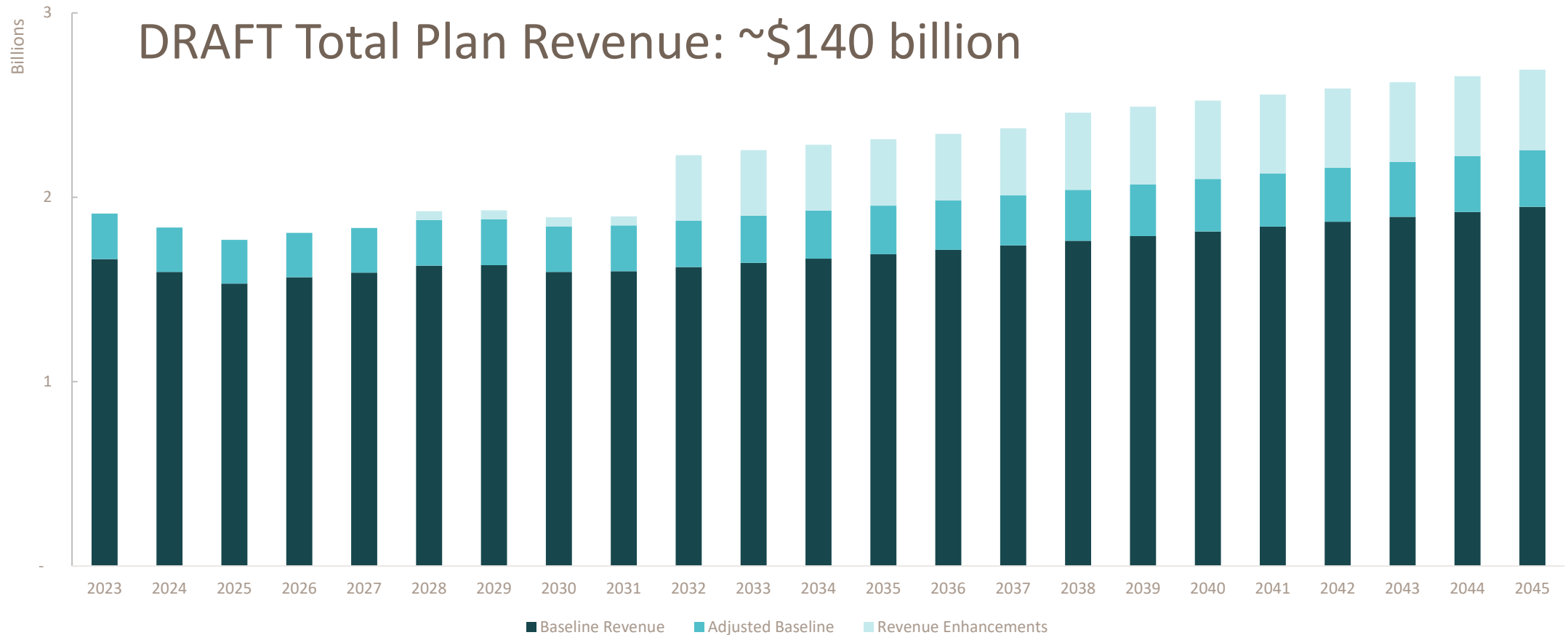


Chart above shows annualized revenue sources only and does not include all revenue totaling \$140 billion; additional lump sum revenues (i.e. competitive grants) not included in chart.

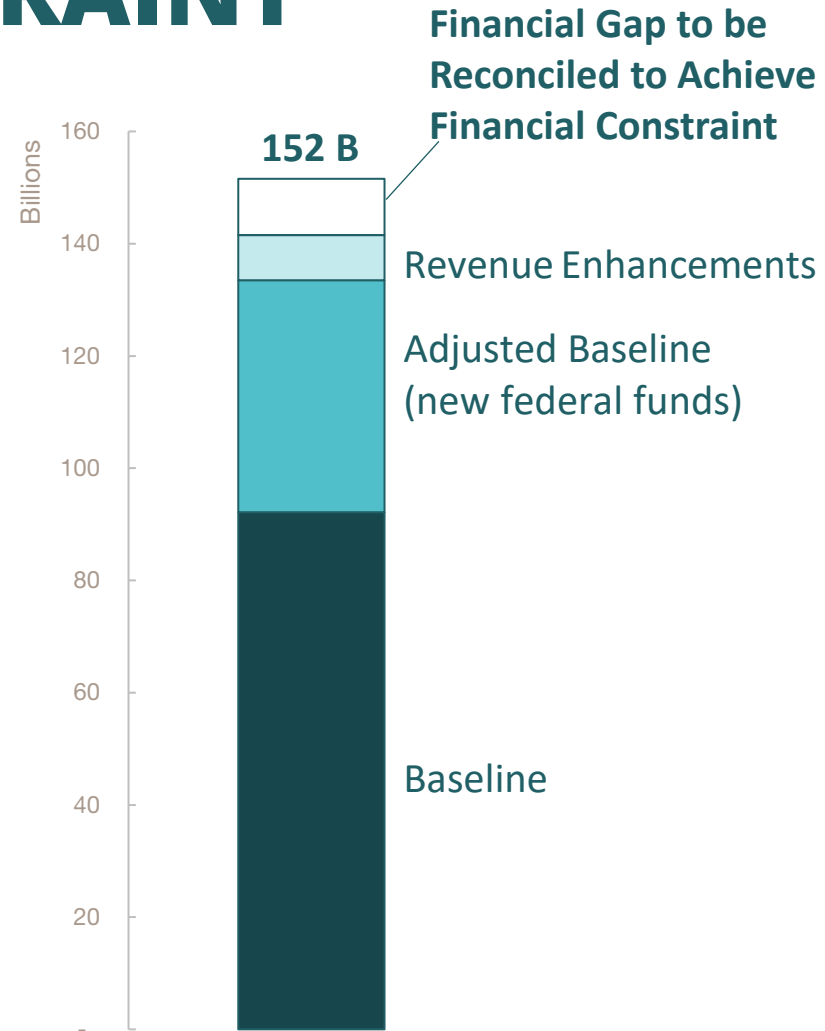
# FINANCIAL CONSTRAINT

## IN PROGRESS

Financial constraint expected

Refinement of project/program costs

Refinement of revenue forecast



# MOBILITY PLAN SCHEDULE



Notes:

- Public meetings held during highlighted months.
- Regional Transportation Council action on Mobility 2045 Update scheduled for June 9, 2022.

# CONTACT US



[nctcog.org/PlanInProgress](https://nctcog.org/PlanInProgress)



[mobilityplan@nctcog.org](mailto:mobilityplan@nctcog.org)



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*Principal Transportation Planner*

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(682) 433-0478

# FINANCIAL PLAN FUNDING BASICS

## Revenue Enhancements

- Equivalent of state gas tax increase
- Equivalent of federal gas tax increase
- Equivalent of registration fee increase

## Baseline Adjustments

- Infrastructure and Jobs Act (federal) – transit and roadway
- Increases due to data sources and formulas (federal)
- Continuation of Propositions 1, 7 (state)
- New TERP funds (state)
- Surplus tolled managed lane revenue (local/regional revenue)

## Baseline Revenue

- Traditional federal and state sources – transit and roadway
- Toll facility revenue
- Local revenue and local contributions



Regional Transportation Council

# Transit Studies Recommendations

Shannon Stevenson & Brendon Wheeler  
January 13, 2022





# BACKGROUND

Request from partners:

Best Southwest Partnership  
 Tarrant County Mayors' Council  
 Collin County and Cities within  
 County

Develop a comprehensive approach  
 in planning and implementing transit  
 services in the requested areas:

Balancing Needs  
 Addressing Equity  
 Member/Non-Member Cities  
 Considerations

Study Elements	Dallas County	Tarrant County	Collin County
Internal and regional connections	✓	✓	✓
Strategic implementation	✓	✓	✓
Near-term horizon (now to 10 years)	✓	✓	✓
Increase transportation options and innovation	✓	✓	✓
Funding options	✓	✓	✓
Private sector involvement	✓	✓	✓
People and goods	✓		
Integrated Rail Planning			✓



# BACKGROUND: BUILDING ON EFFORTS



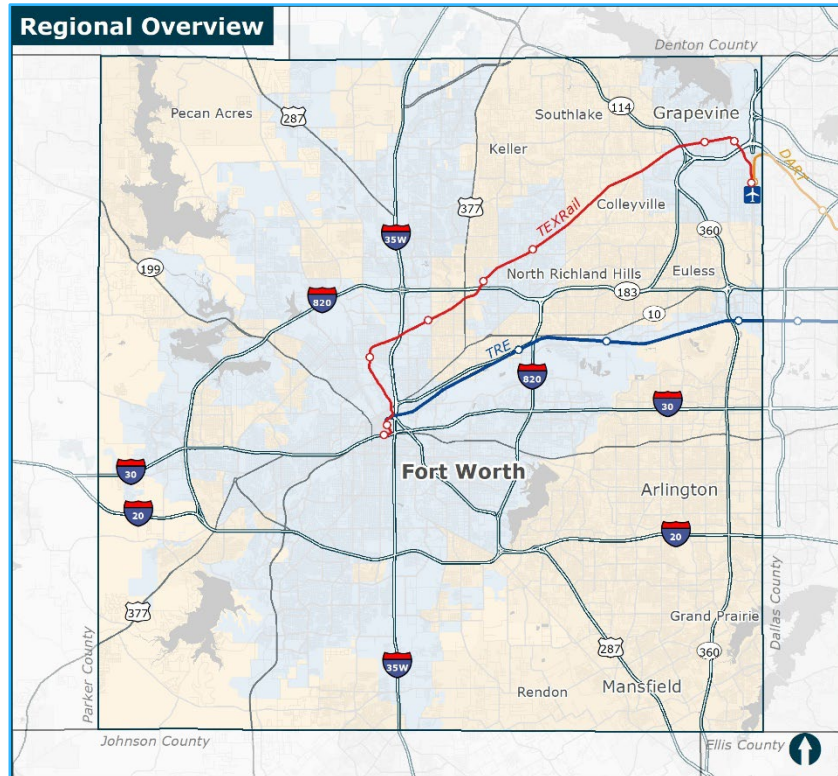
Transit Studies  
 Tarrant County  
 Southern Dallas County  
 Collin County

<b>Geographic Focus</b>	NCTCOG Region	NCTCOG Region	Outside Transit Authority Service Areas
<b>User Focus</b>	All Users	Vulnerable Users	All Users
<b>Travel Modes</b>	All Modes	Bus, Demand Response, and Paratransit	Bus and Demand Response (Rail & High-Capacity Transit)
<b>Planning Horizon</b>	Long Range	Short-Medium Range	Short-Medium (& Long) Range



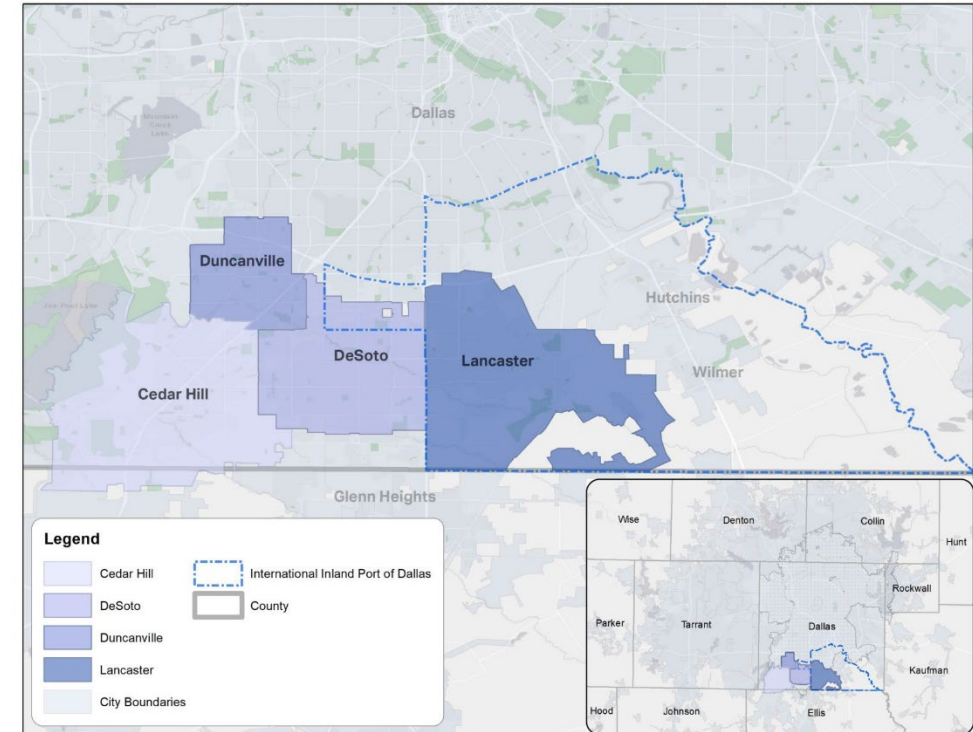
# STUDY AREAS

## Tarrant County



Focus Areas: Cities outside of Trinity Metro's service area

## Southern Dallas County



Focus Areas: Cedar Hill, Duncanville, DeSoto, Lancaster, and the Inland Port



# PUBLIC AND STAKEHOLDER ENGAGEMENT

Type	Tarrant County	Southern Dallas County
<b>Stakeholder Meetings*</b> (Project Advisory Committee)	3	3
<b>Public Meetings*</b>	2	3
<b>Input Survey</b>	✓ (607 total responses)	✓ (240 total responses)
Additional meetings with stakeholders were also held to discuss specific study-related topics.		

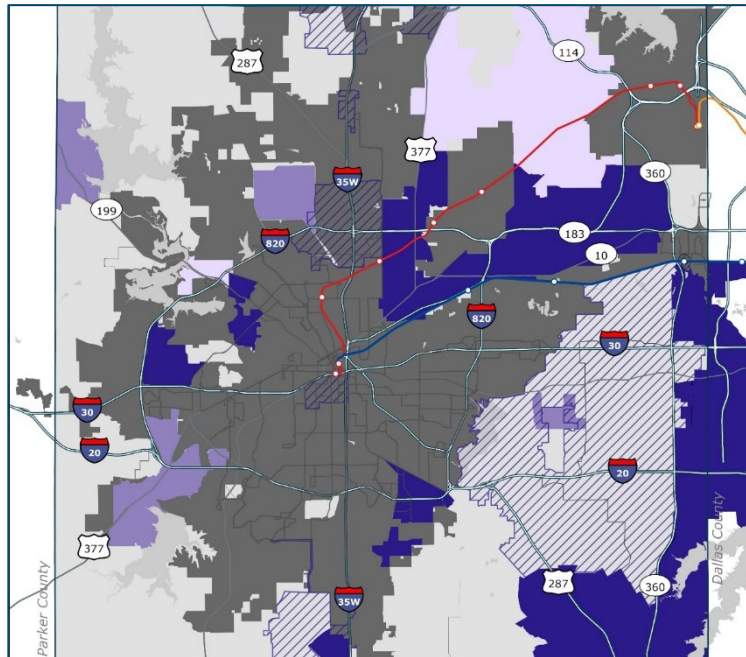
\*Due to COVID-19 constraints, public outreach was conducted through virtual meetings and online participation.



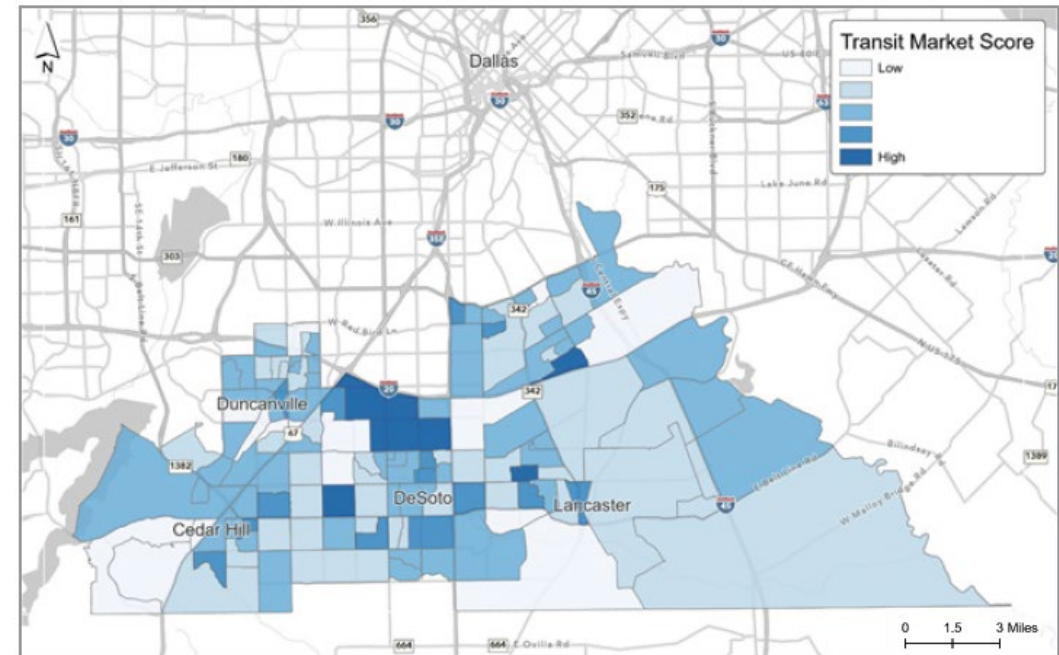
# TRANSIT NEEDS: TECHNICAL ANALYSES

Identified needs based on technical analyses:  
Population/Employment Densities  
Transit-Dependent Populations

Activity Centers  
Trip Patterns  
Existing Conditions



Tarrant County



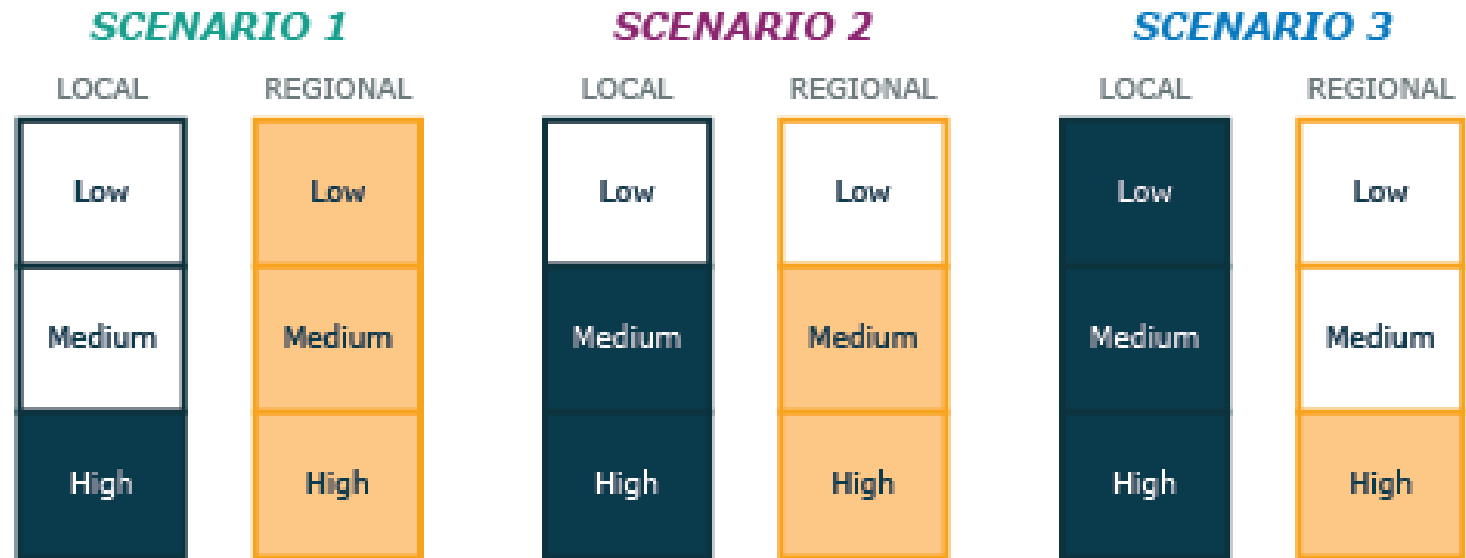
Southern Dallas County



# RECOMMENDED SCENARIOS: TARRANT COUNTY

Developed three scenarios based on identified needs, as well as stakeholder/public input

The scenarios provide a range of what services might look like throughout the county

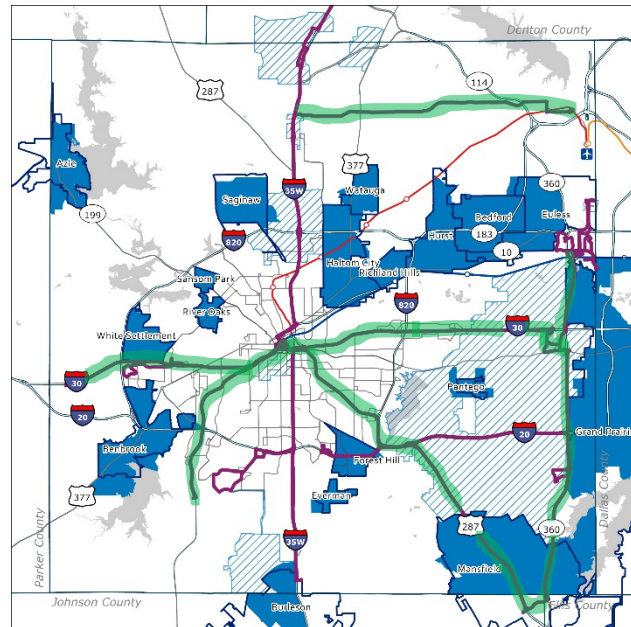


# RECOMMENDED SCENARIOS: TARRANT COUNTY

## Scenario 1

*Service Needs*

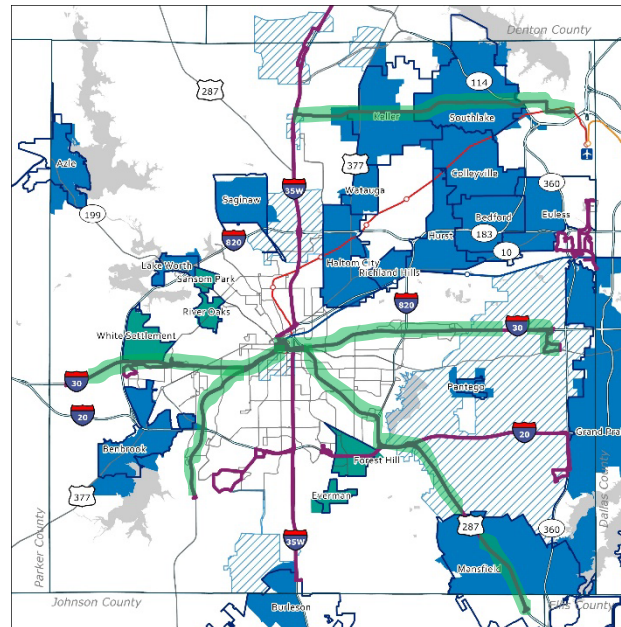
Local	Low	Med	Hi
Regional	Low	Med	Hi



## Scenario 2

*Service Needs*

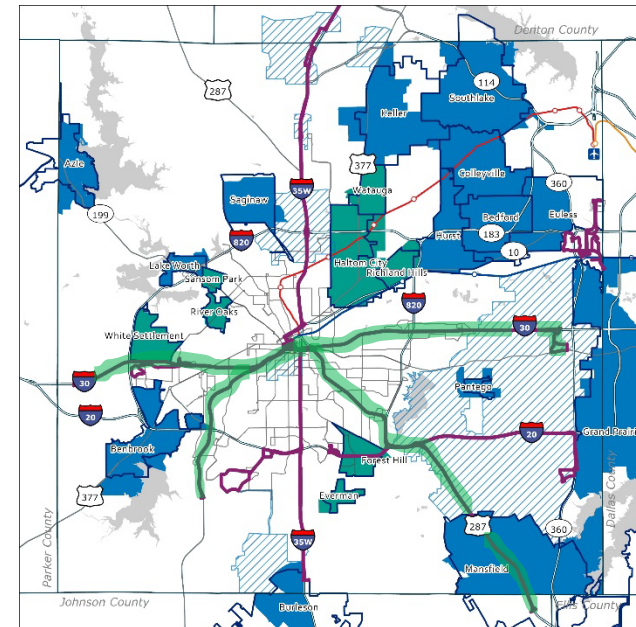
Local	Low	Med	Hi
Regional	Low	Med	Hi



## Scenario 3

*Service Needs*

Local	Low	Med	Hi
Regional	Low	Med	Hi



# COST ESTIMATES: TARRANT COUNTY

Baseline Budget Target  
(countywide): **\$18M to 18.4M**

Estimated cost breakdown by  
municipality is also provided

Municipalities can choose to move  
forward with service  
recommendations independently

Scenario	Estimated Cost	Local / Regional % Split
<b>Scenario 1</b>	\$18.1M	74% / 26%
<b>Scenario 2</b>	\$18.4M	82% / 18%
<b>Scenario 3</b>	\$18.3M	88% / 12%





# GOODS MOVEMENT: SOUTHERN DALLAS COUNTY

## Key Takeaways

Inland Port is **poised to more than double in size over the next 10 years** (50-100M sq. ft. of new industrial development)

As industrial buildings grow in size, so does corresponding truck traffic

Many local thoroughfares are experiencing high truck volumes, increased development could push these intersections to capacity

## Southern Dallas Inland Port



# RECOMMENDATIONS: SOUTHERN DALLAS COUNTY

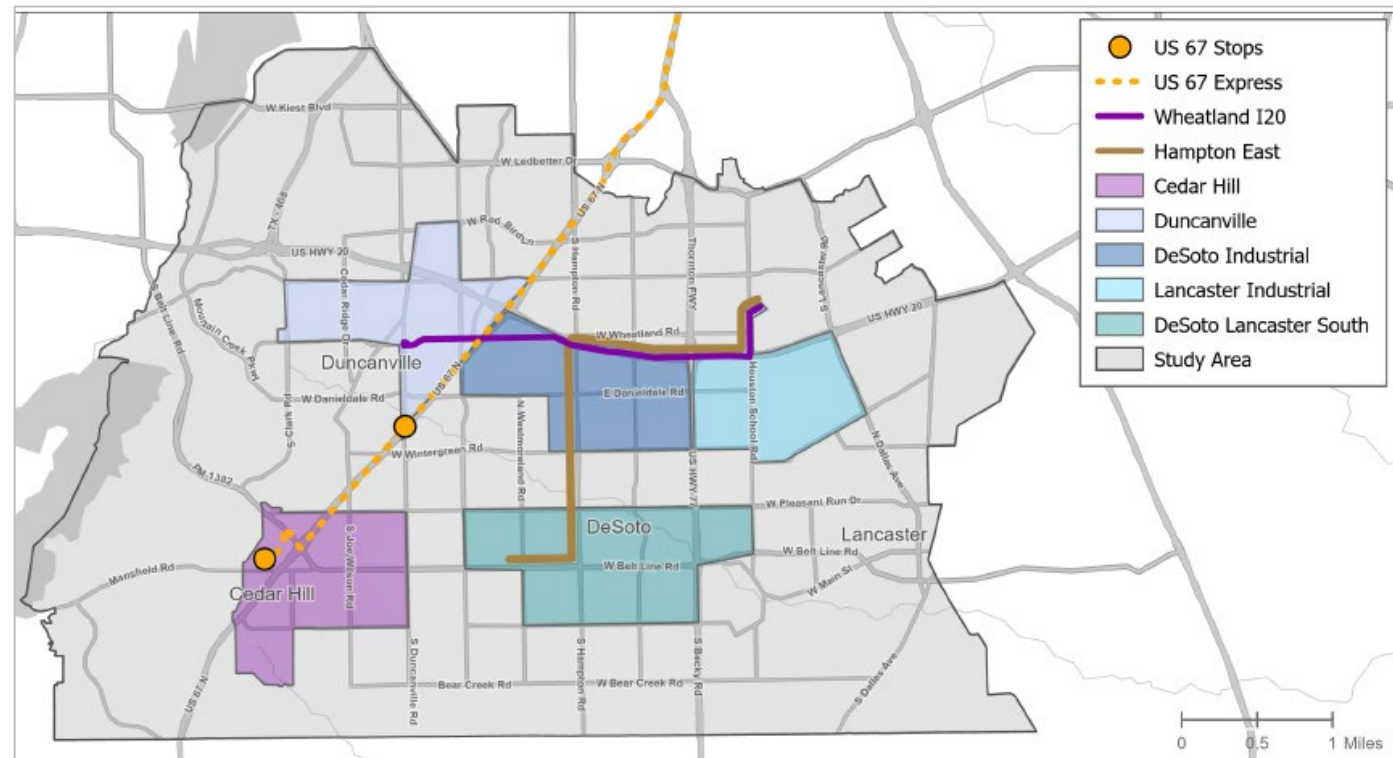
Based on identified needs, as well as stakeholder/public input

Phase 1 builds the foundation of transit service in the area; later phases build on this foundation

*Three fixed-routes*

*Five microtransit zones*

Coordinate transit/roadway planning to facilitate safe transit travel; prepare for continued growth in truck volumes in the Inland Port

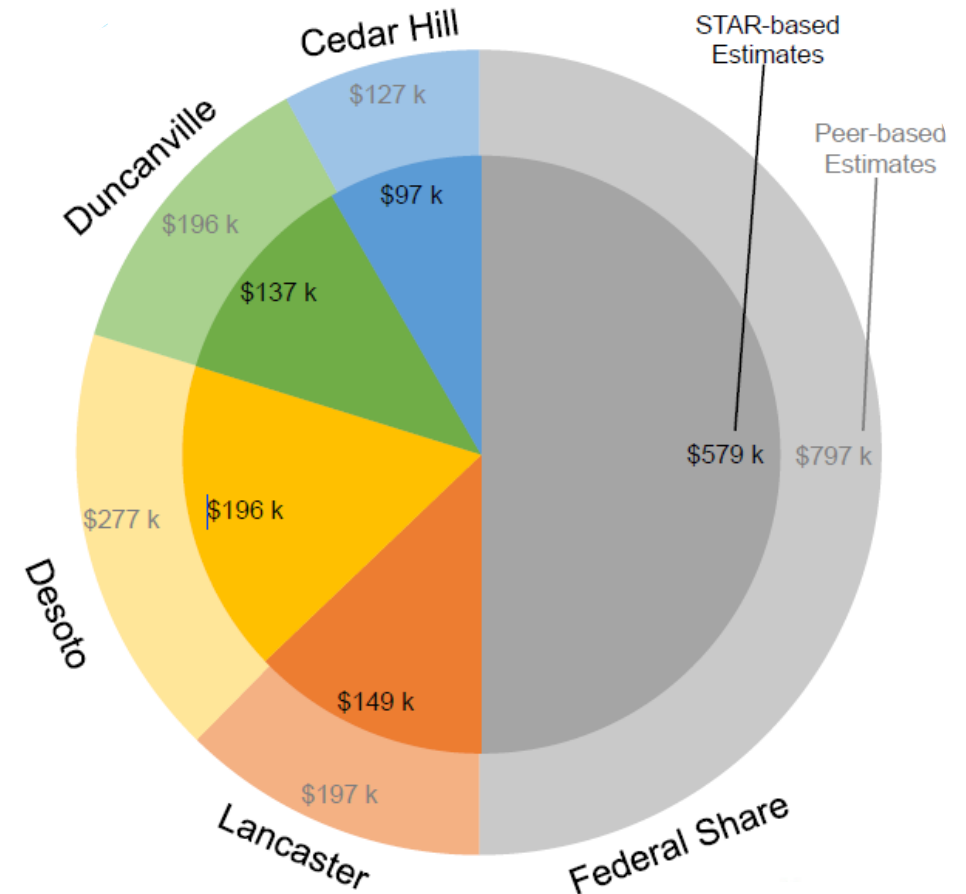


# SERVICE COST ESTIMATES: SOUTHERN DALLAS COUNTY

Phase 1: **\$1.2 to 1.6M** (combined total)

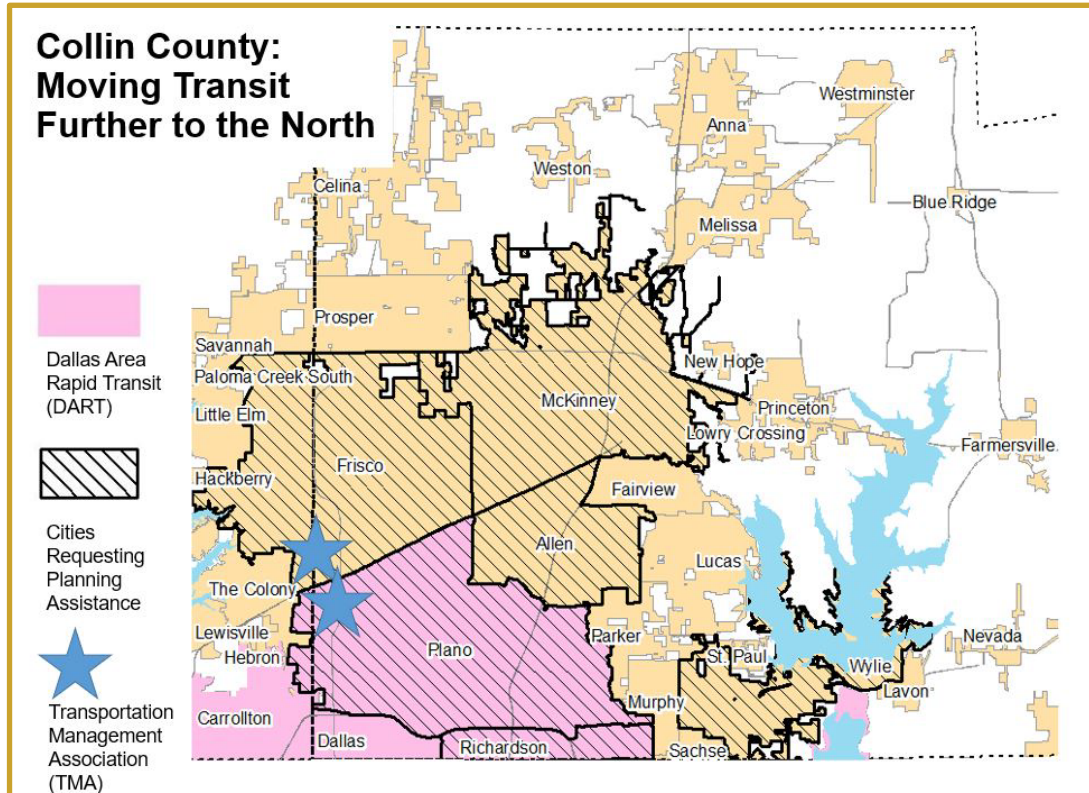
Phase 2: **\$2.12M** (reinvests in the core service of Phase 1 and expands coverage)

Estimated cost breakdown by municipality is also provided



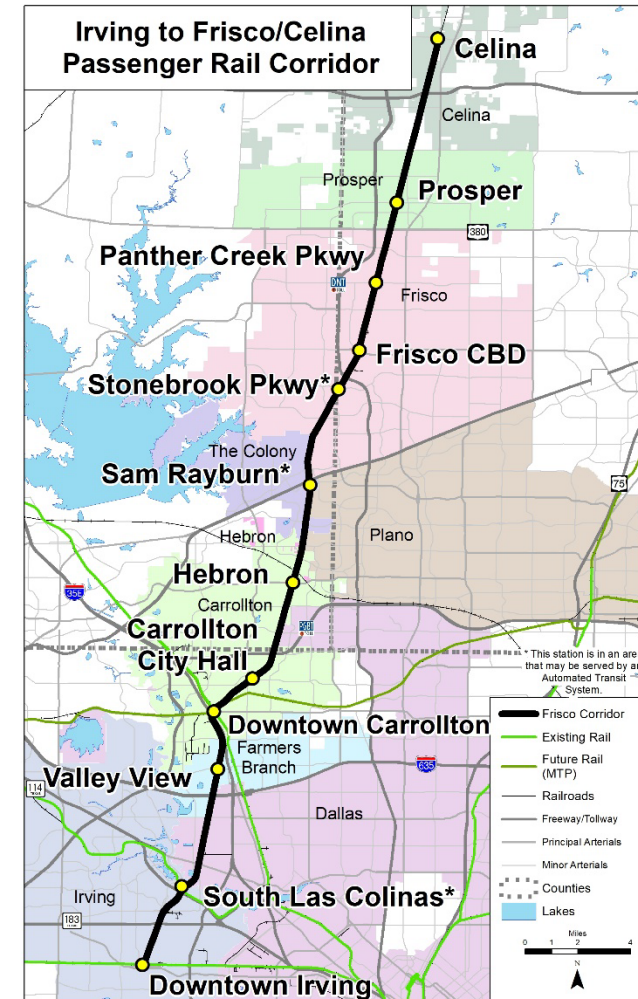
# STUDY AREAS

## Collin County



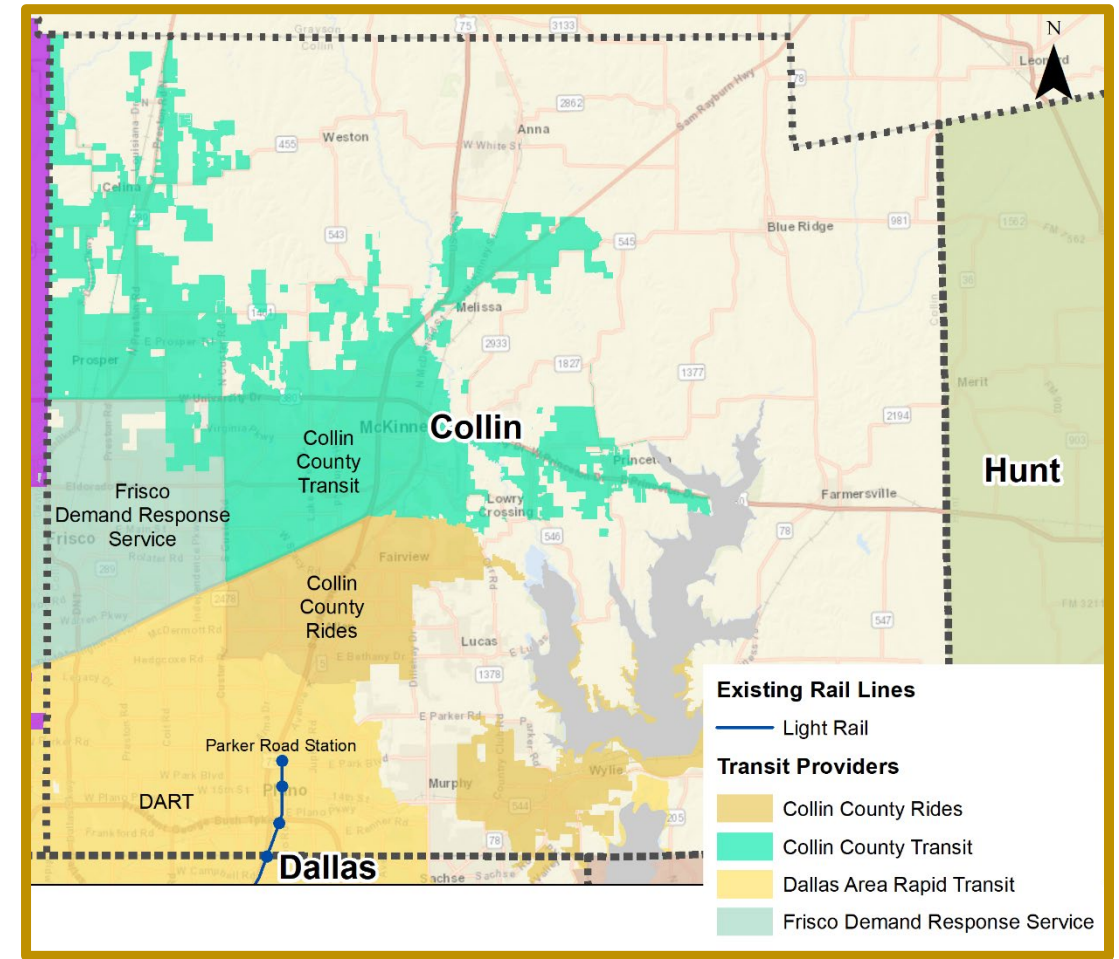
**Focus Areas:** Integration of transit across transit authority member and non-member cities

## Irving to Frisco Passenger Rail Corridor



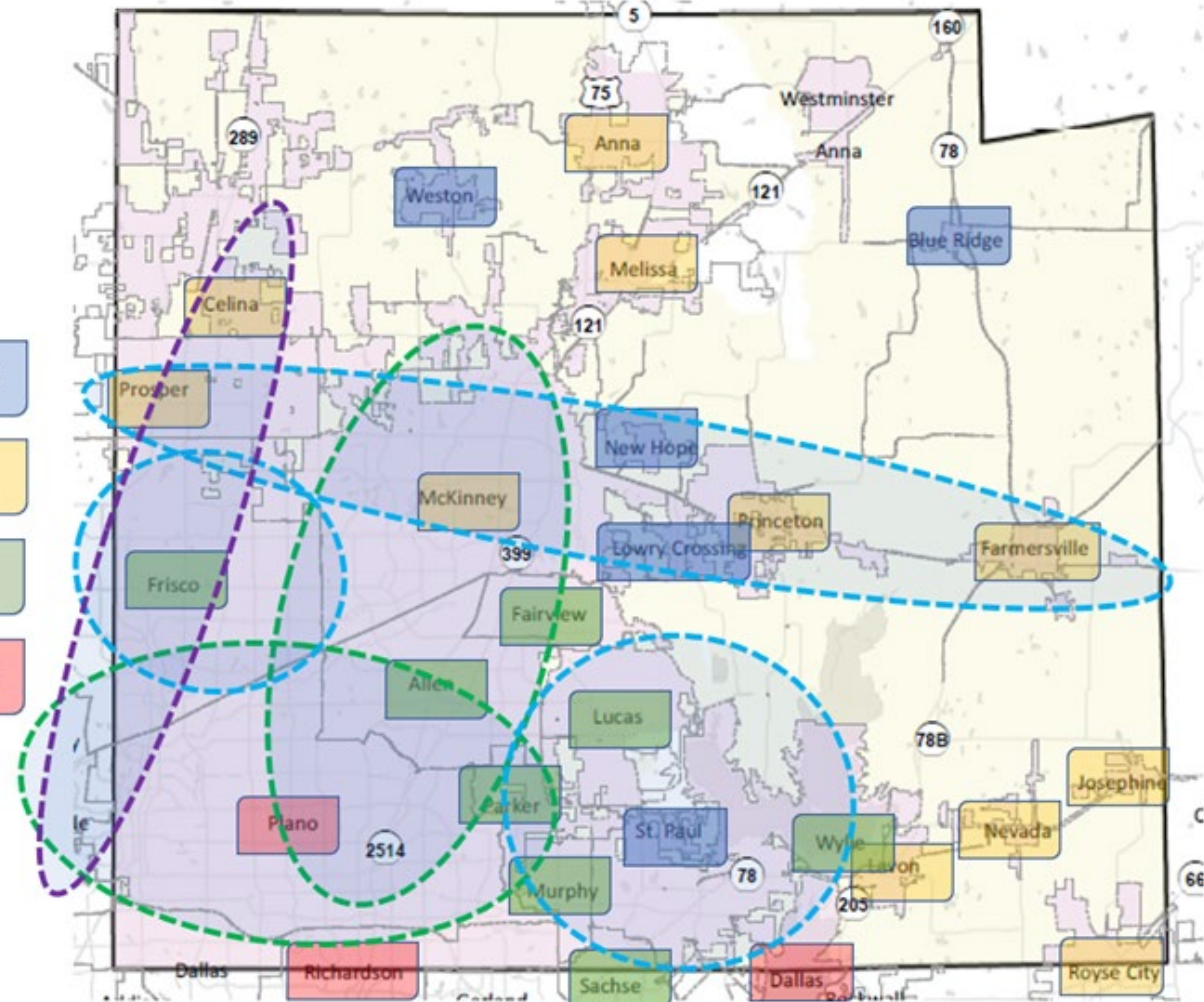
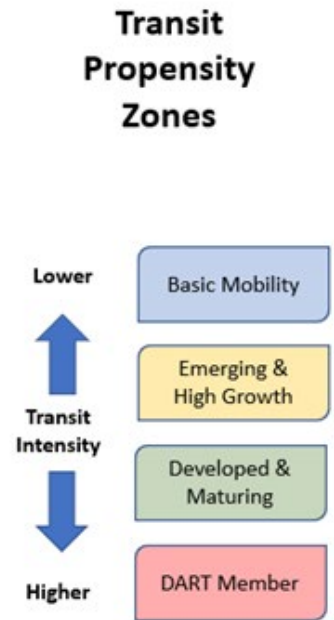
# EXISTING SERVICES: COLLIN COUNTY

Transit Service	Audience	Service Type
<b>Collin County Rides</b> (operated by DART)	Seniors Individuals with Disabilities	Demand-Response
<b>Collin County Transit</b> (operated by Irving Holdings, DCTA contractor)	Seniors Individuals with Disabilities Low Income	Demand-Response
<b>DART</b>	General Public	All Services
<b>Frisco Demand Response</b> (operated by DCTA)	Seniors Individuals with Disabilities Individuals Needing Medical Care	Demand-Response
<b>City of Richardson Van Service</b>	Seniors	Demand-Response
<b>City of Sachse Senior Transportation Program</b>	Seniors	Demand-Response



# TRANSIT SCENARIOS: COLLIN COUNTY

- Project Advisory Committee – Monthly
- Transit Propensity Analysis
- Policy Direction
- Trip Data
- Demographics/Land Use
- Planning Studies
- Travel Demand Forecasting
- Transit Scenarios
- Transit Service Mix
- Jurisdictional
- Phasing
- Cost of Not Implementing Transit
- Whitepaper

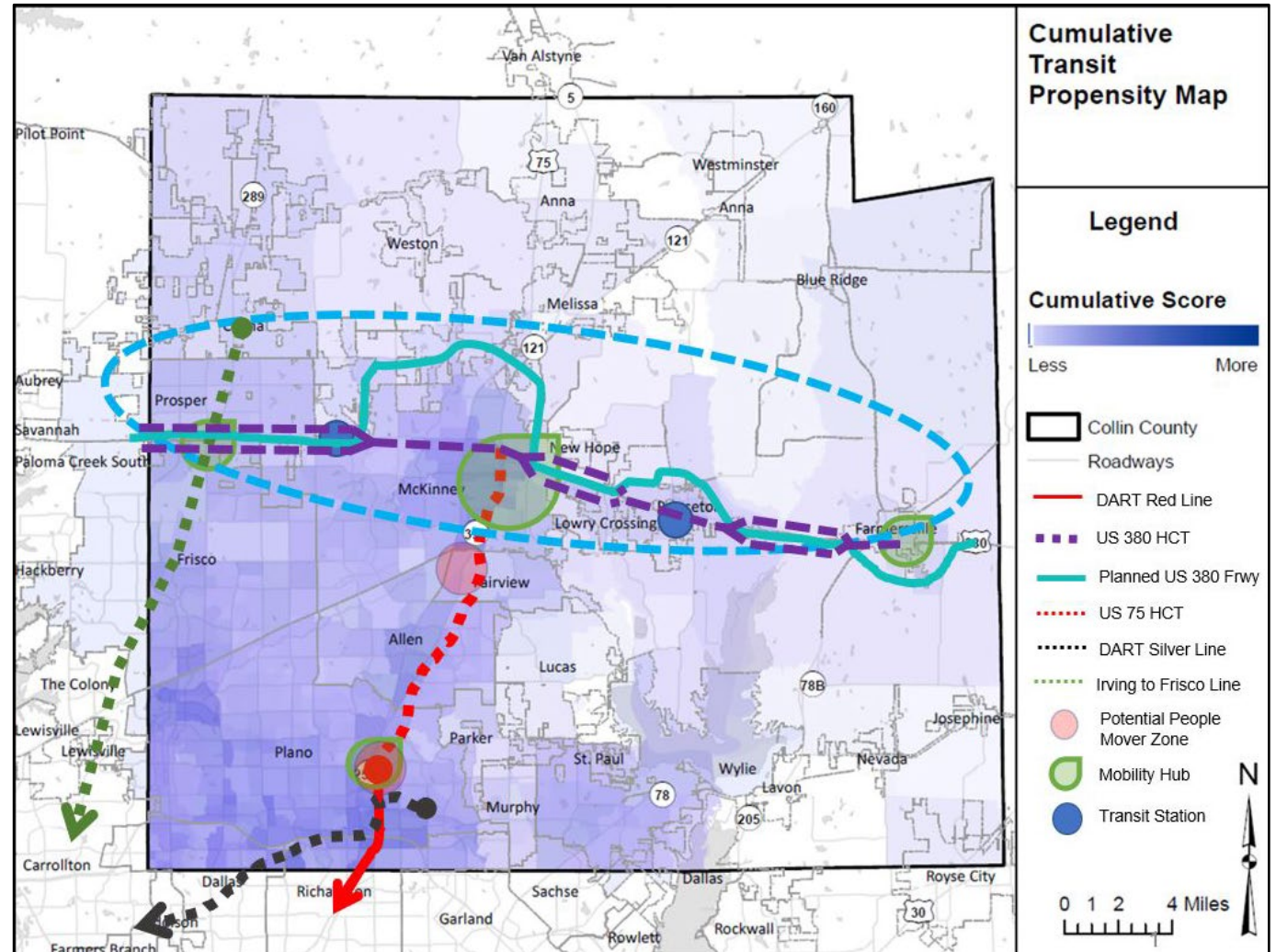


# RECOMMENDATIONS: COLLIN COUNTY

Phased Approach

Incorporate recommendations into Mobility Plan Update

Continued coordination among county, cities, and transit agencies



# STUDY OVERVIEW: IRVING TO FRISCO PASSENGER RAIL CORRIDOR

Project Advisory Committee – Monthly

Station location refinement

- 24 possible locations

- 12 selected for ridership modeling

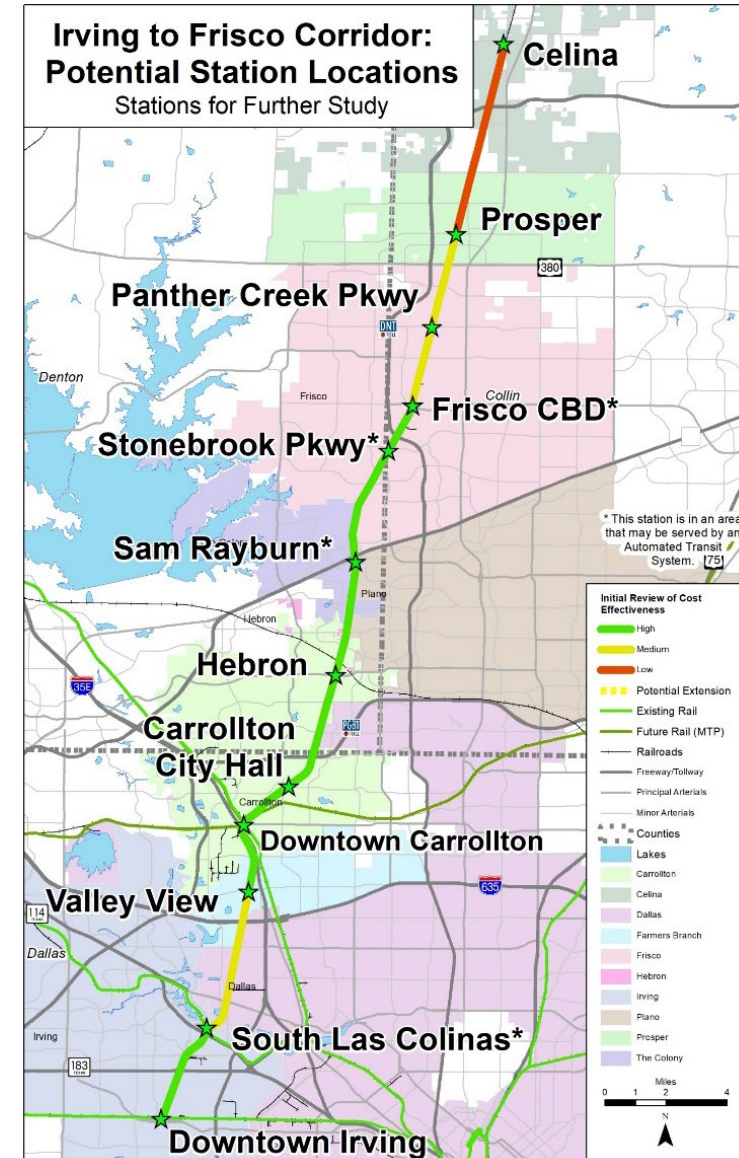
Station area land use analysis

People Mover/Automated Transportation System (ATS)

Interlining opportunity with TRE (Fort Worth leg)

- Significantly increases ridership between downtown Irving and downtown Carrollton

Cost analysis, funding, and governance





# RECOMMENDATIONS: IRVING TO FRISCO

## PASSENGER RAIL CORRIDOR

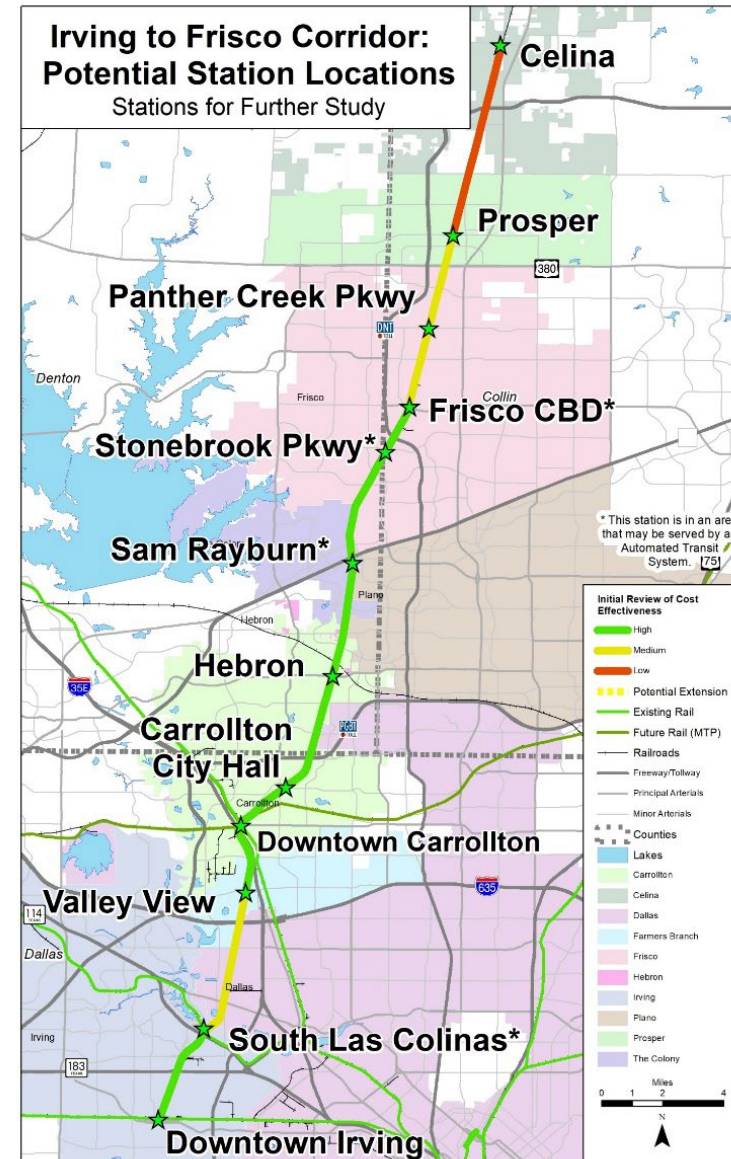
### Phased Approach

Supply-side approach coordinated with BNSF  
Advance planning with TxDOT and BNSF for  
“Poor Man’s Rail”

Incorporate recommendations into Mobility  
Plan Update

Interline with west leg of TRE  
Northern limits extended to Celina

Continued coordination among county, cities,  
and transit agencies



# IMPLEMENTATION STRATEGIES

Provide a framework for municipalities to establish or expand transit service based on recommended services

Designed as a flexible roadmap for municipalities to implement services that meet local/regional needs, priorities, and goals

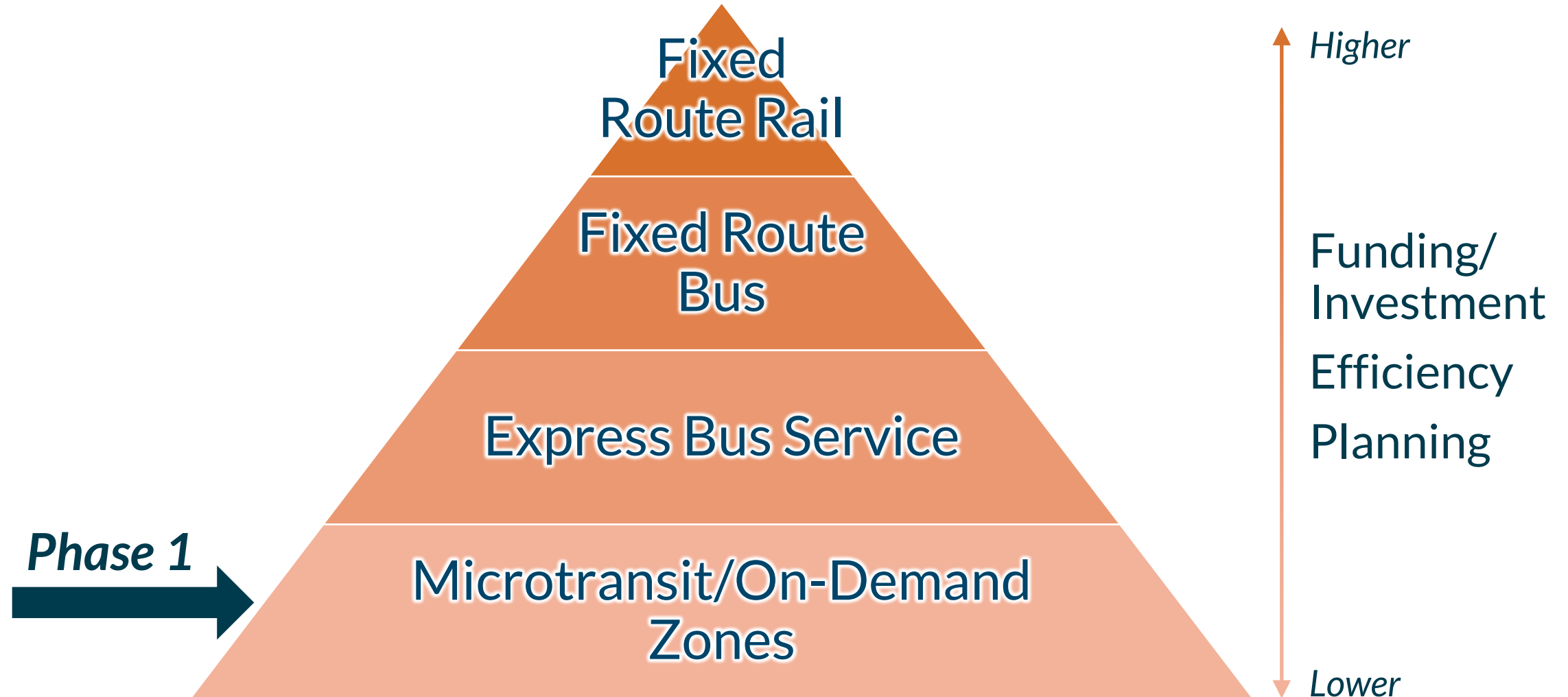
**Next Step:** continued coordination with partners and local governments



Service Model	Recommended
Agreement w/Transit Provider	Yes
Contracted Service	Caution
Consortium of Local Governments	Caution
Directly Operated by Municipality	No
The RTC and NCTCOG encourage municipalities to coordinate planning and implementation efforts with existing Transit Providers.	

# IMPLEMENTATION STRATEGIES

## *PHASED APPROACH*



# CONTACT INFORMATION



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