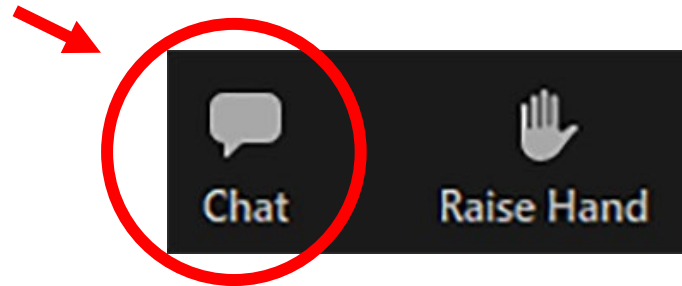


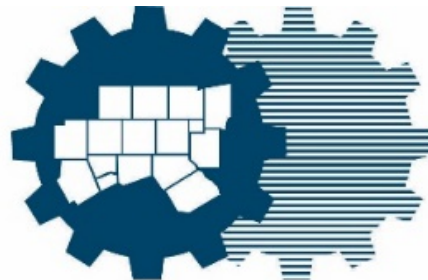
Welcome

The Southern Dallas County Transit Study PAC meeting will begin shortly.

Please enter your name and organization in the chat box.



THANK YOU



**North Central Texas
Council of Governments**

How to Participate

There are a few ways you can participate in today's meeting.

- **Raise Hand**

- Virtually raise your hand to notify a team member that you have a question.

- **Chat**

- Type your question in Chat to be answered by a member of our team.



SOUTHERN DALLAS COUNTY TRANSIT PLANNING STUDY

PROJECT ADVISORY COMMITTEE

APRIL 28, 2021



SPEAKERS

- **Jodi Hodges – AECOM**
- **Shannon Stevenson - NCTCOG**
- **Andrew Ittigson – AECOM**
- **Tim Simon – ATG**
- **Kristen Lueken - AECOM**
- **Jessica Jones – AECOM**

AGENDA

- Project Overview and Schedule
- Public/Stakeholder Input
- Technical Analysis – Transit Needs
- Scenario Development
- Recommended Alternative
- Financial Planning
- Freight/Goods Movement
- Next Steps

STUDY PURPOSE

- Develop a comprehensive approach for planning and strategic implementation of transit and mobility services in Southern Dallas County focused on:
 - Internal and regional connections
 - Increased transportation options and innovation
 - People and goods movement
 - Implementation strategies
 - Feasible funding options
 - Private sector participation

www.sdctransitstudy.com

What is our Study Area?

Southern Dallas County

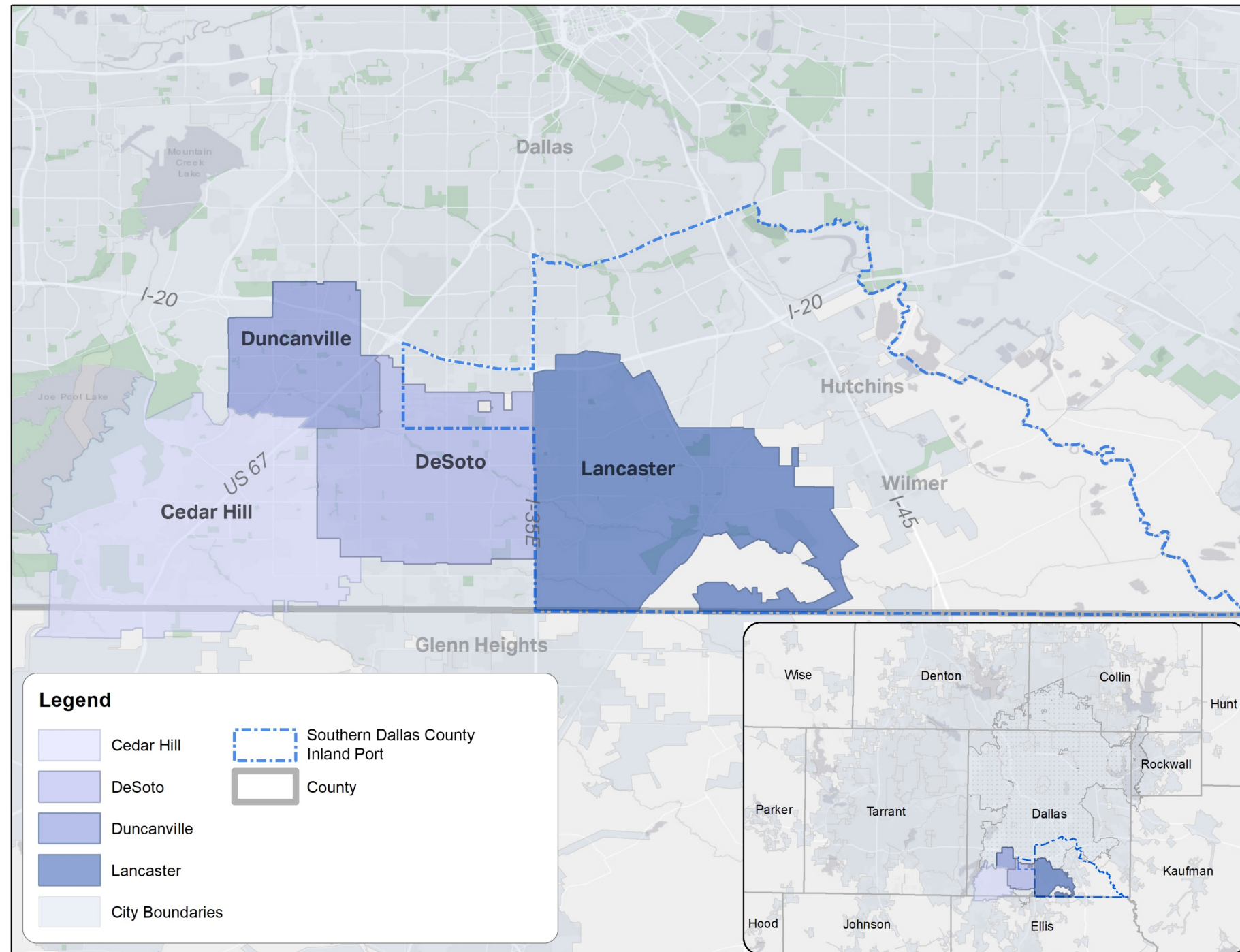
Cities:

- Cedar Hill
- DeSoto
- Duncanville
- Lancaster
- Best Southwest Cities Partners
 - Hutchins
 - Wilmer

Southern Dallas County Inland Port

Transit Agencies

- DART
- STAR Transit



INLAND PORT TMA CONNECT GOLINK SERVICE



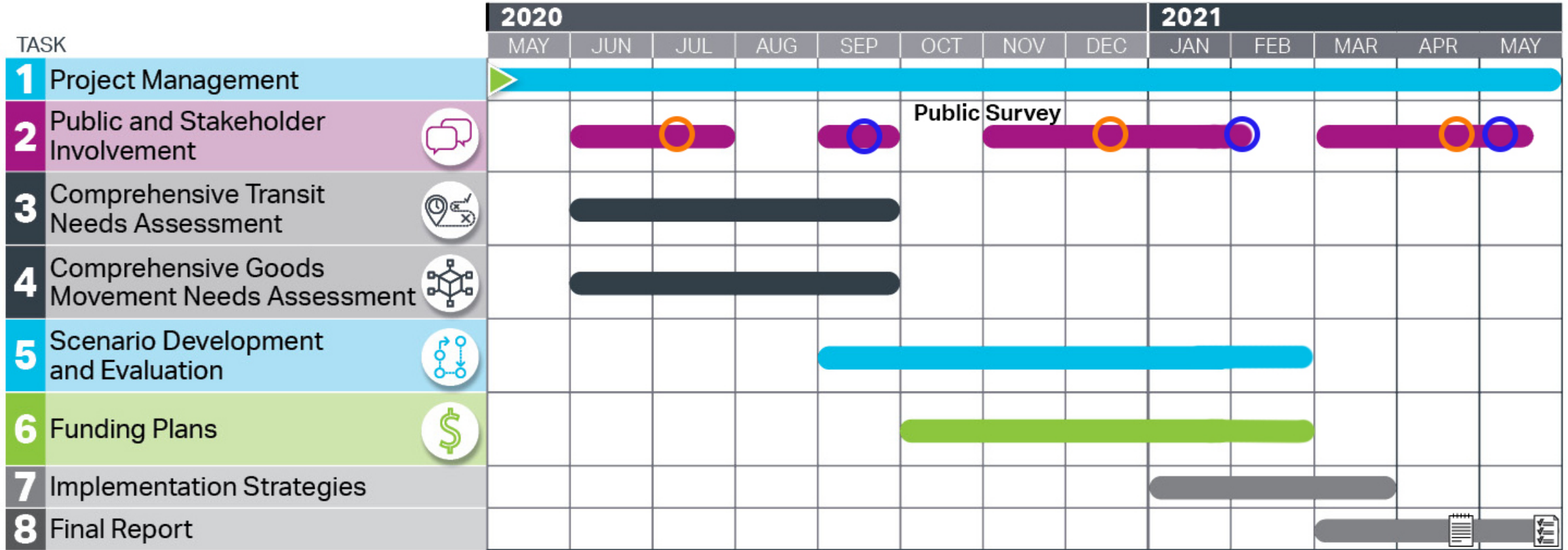
- Started service on November 2, 2020
- GoLink and UberPool vehicles (curb-to-curb service)
- Serves entire Inland Port with connections to UNT-Dallas Station and the Methodist Hospital



Southern Dallas County
Inland Port Transportation
Management Association

GoLink serves UNT Dallas Station, for connections to DART Rail and buses

SCHEDULE



▶ Kick off meeting

■ Draft Report

■ Final Report

○ Public Meeting

○ Project Advisory Committee Meeting

PUBLIC OUTREACH

- Project Advisory Committee (PAC)
 - 45+ members
 - Staff from cities
 - Transit agencies
 - Dallas County
 - Higher education
 - Railroads (BNSF, UP)
 - Chambers of commerce
- Ongoing meetings with Inland Port TMA throughout the study
- Project website, Facebook page, online survey, meetings with each project city
- Upcoming public meeting on May 6

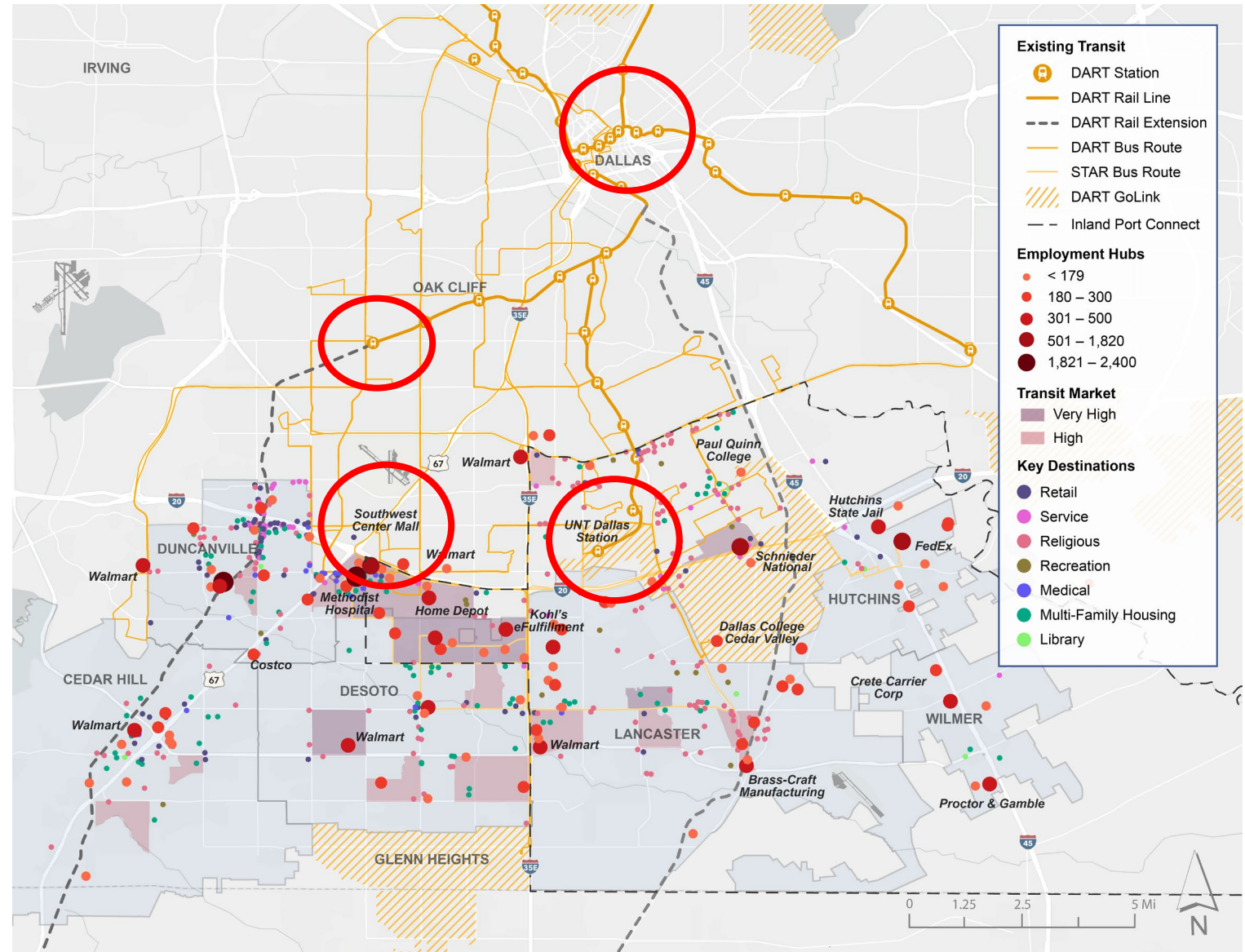
Meeting	Date	Attendees/ Responses
Project Advisory Committee Meeting	July 2020	26
Public Meeting	September 2020	65
Project Advisory Committee Meeting	December 2020	35
Online Survey	December 2020	240
Public Meeting	February 2021	74
Meeting with DeSoto	March 2021	
Meeting with Cedar Hill	April 2021	
Meeting with Duncanville	April 2021	
Meeting with Lancaster	April 2021	

WHAT WE HEARD

- Connect to regional transit services
 - Workforce
 - Education
 - Entertainment
- Local circulators for seniors and transit dependent population
- Bus service downtown areas
- Connections to jobs in the Inland Port area
- Transit connections to future planned rail stations

REGIONAL CONNECTIONS

- **Downtown Dallas**
 - DART buses and light rail
 - TRE
- **UNT-Dallas Station**
 - DART buses and Blue Line light rail
- **Westmoreland Station**
 - DART buses and Red Line light rail
- **Red Bird Mall Transit Center**
 - DART buses



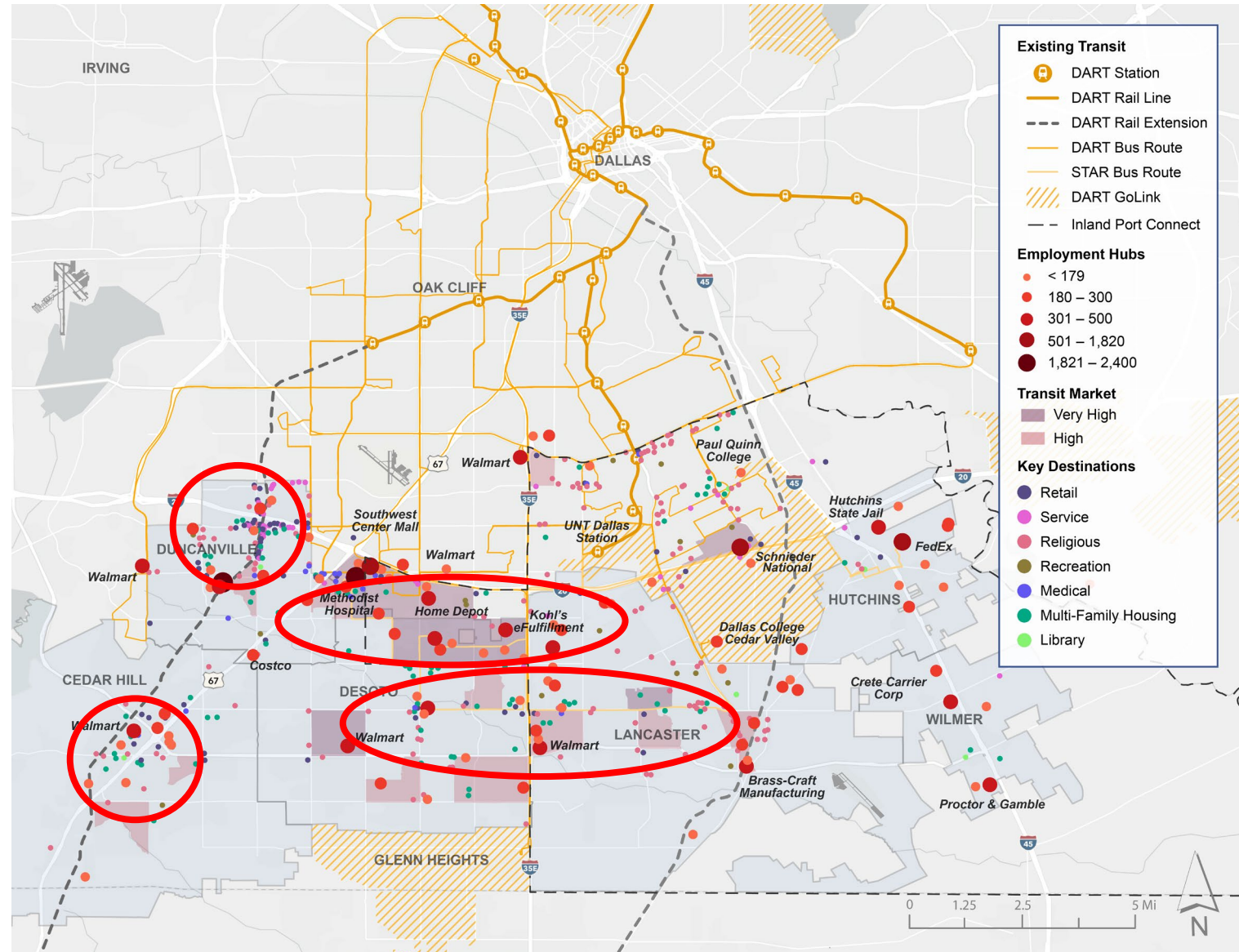
Source: NCTCOG and U.S. Census

PHASED IMPLEMENTATION OF TRANSIT

- 20-Year Plan
- Phased plan based on transit potential and available resources
 - **Phase 1: Years 1 – 5 Near Term Solutions**
 - Microtransit zones for mobility coverage in each city
 - Regional connections
 - **Phase 2: Years 6 – 10 Updates to Phase 1 and New Service**
 - Updates could be earlier than Year 6
 - Update frequencies, spans of service, days of service
 - Route modifications and extensions
 - New routes based on new development or other transit generators
 - **Phase 3: Years 11 – 20 Long Term Transit Needs**
 - Connections to future high-capacity transit stations
 - Connections to future transit generators and growth areas

PHASE 1 TRANSIT NEEDS

- **High transit propensity areas**
 - Cedar Hill – downtown and retail centers
 - Duncanville – Main Street area and Wheatland
 - DeSoto – Distribution centers, Wintergreen and Hampton
 - Lancaster – Daniieldale and Pleasant Run corridors
- **Connections to regional transit hubs**



Source: NCTCOG and U.S. Census

TYPES OF TRANSIT SERVICE

Service Type		Description	Key Markets
Express Bus		Commuter service that often travels on freeways with limited stops from residential areas to employment centers	Commuter service
Local Bus (Fixed Route)		Bus service with a designated route and stops and often travels on a regular schedule throughout the day	Shopping, workforce, medical, education and connections to regional services
Microtransit		Operates dynamic on-demand curb-to-curb service within a zone with established departure and arrival times at one or more locations. Uses app-based trip scheduling. (DART GoLink and STARNow)	Lower density areas, lifeline services, areas with limited sidewalks

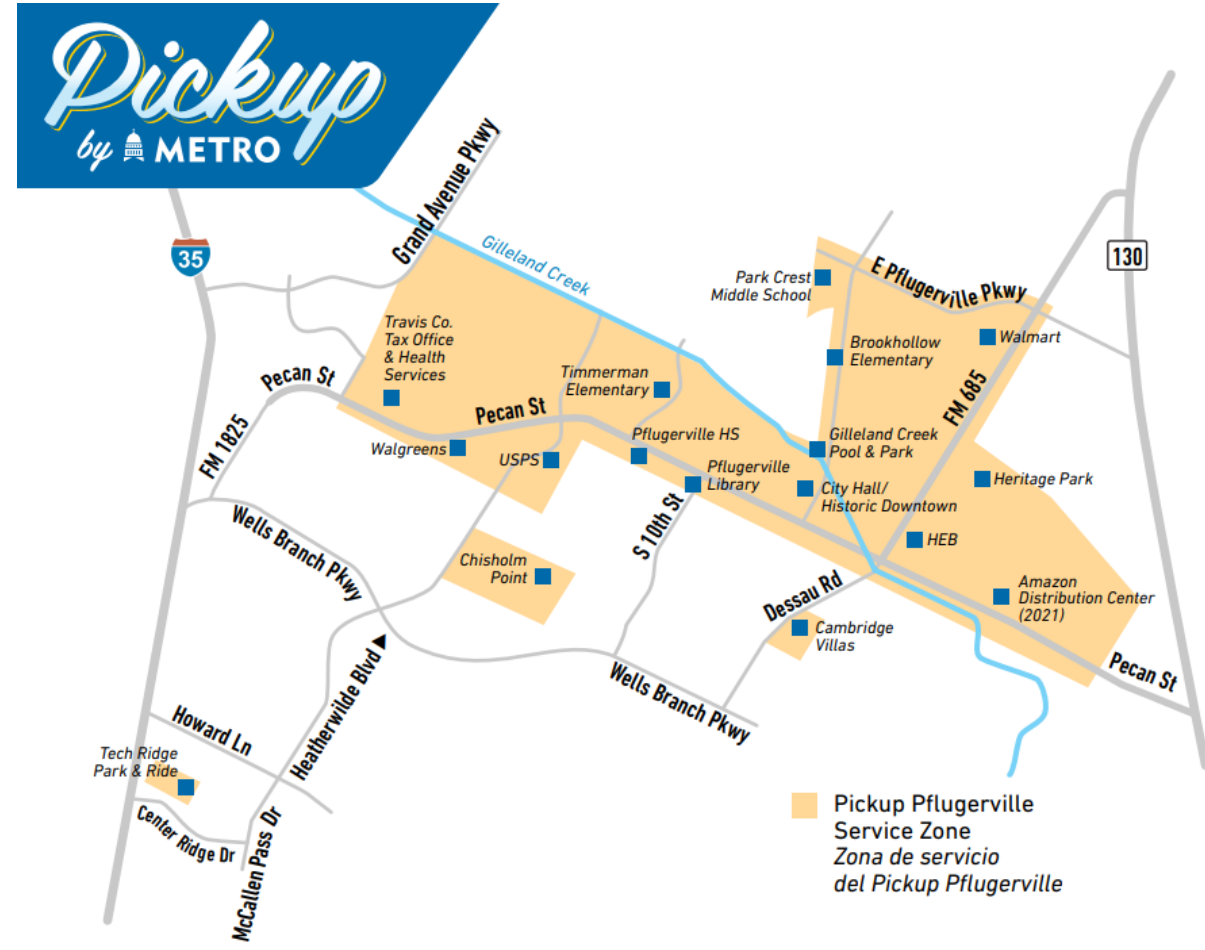
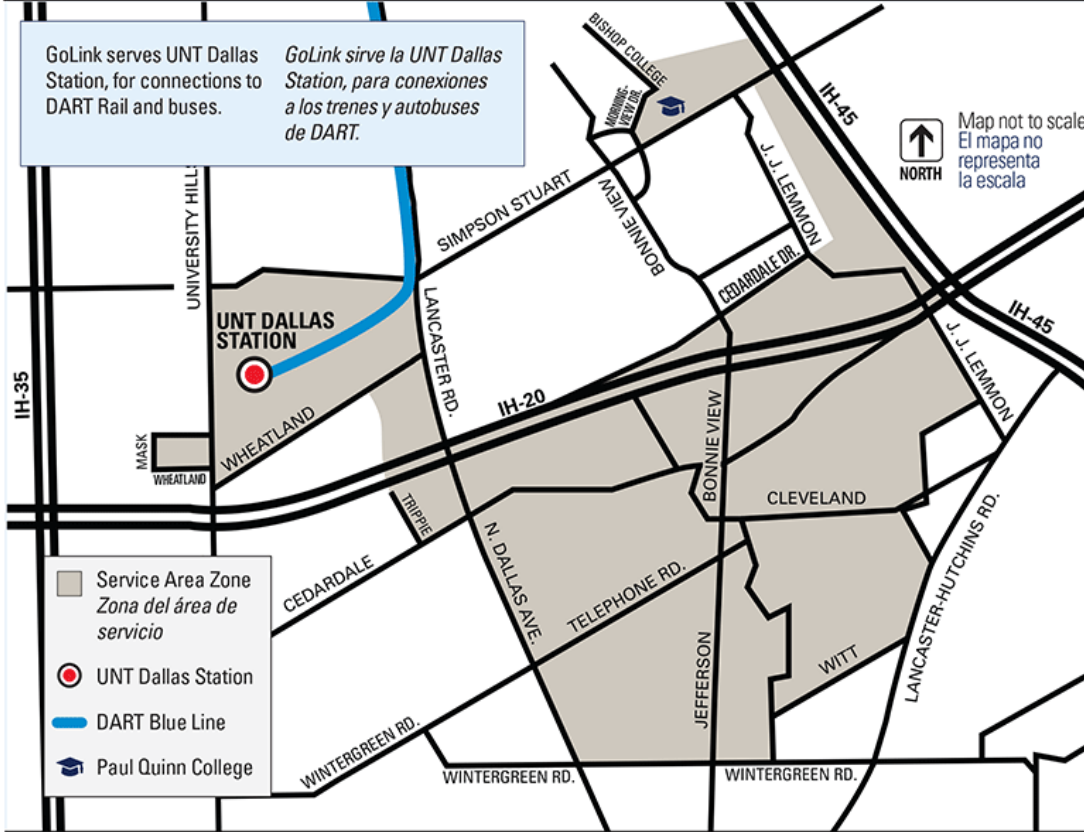
What is Microtransit?

Inland Port GoLink Service

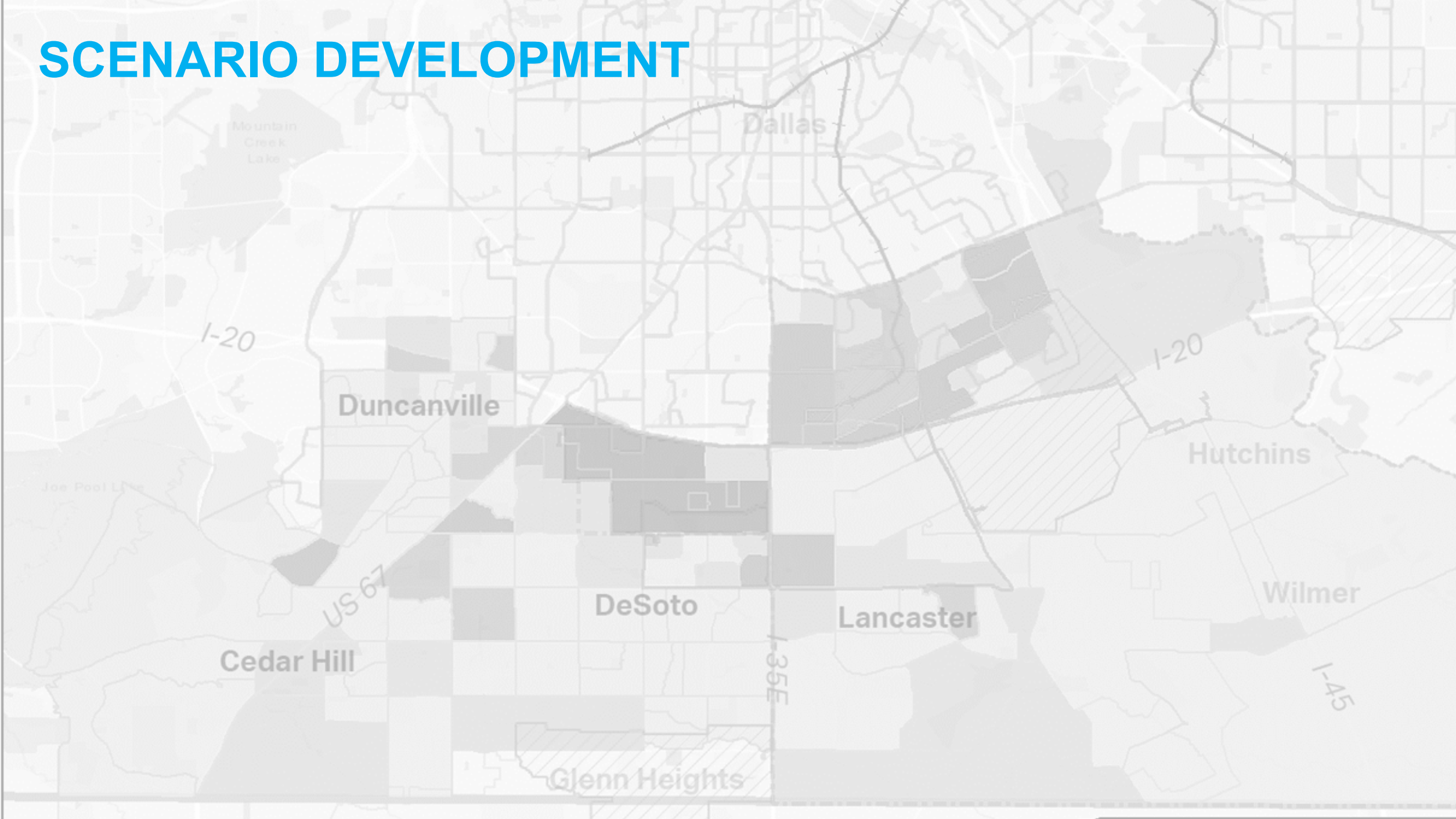
GoLink serves UNT Dallas Station, for connections to DART Rail and buses.

GoLink sirve la UNT Dallas Station, para conexiones a los trenes y autobuses de DART.

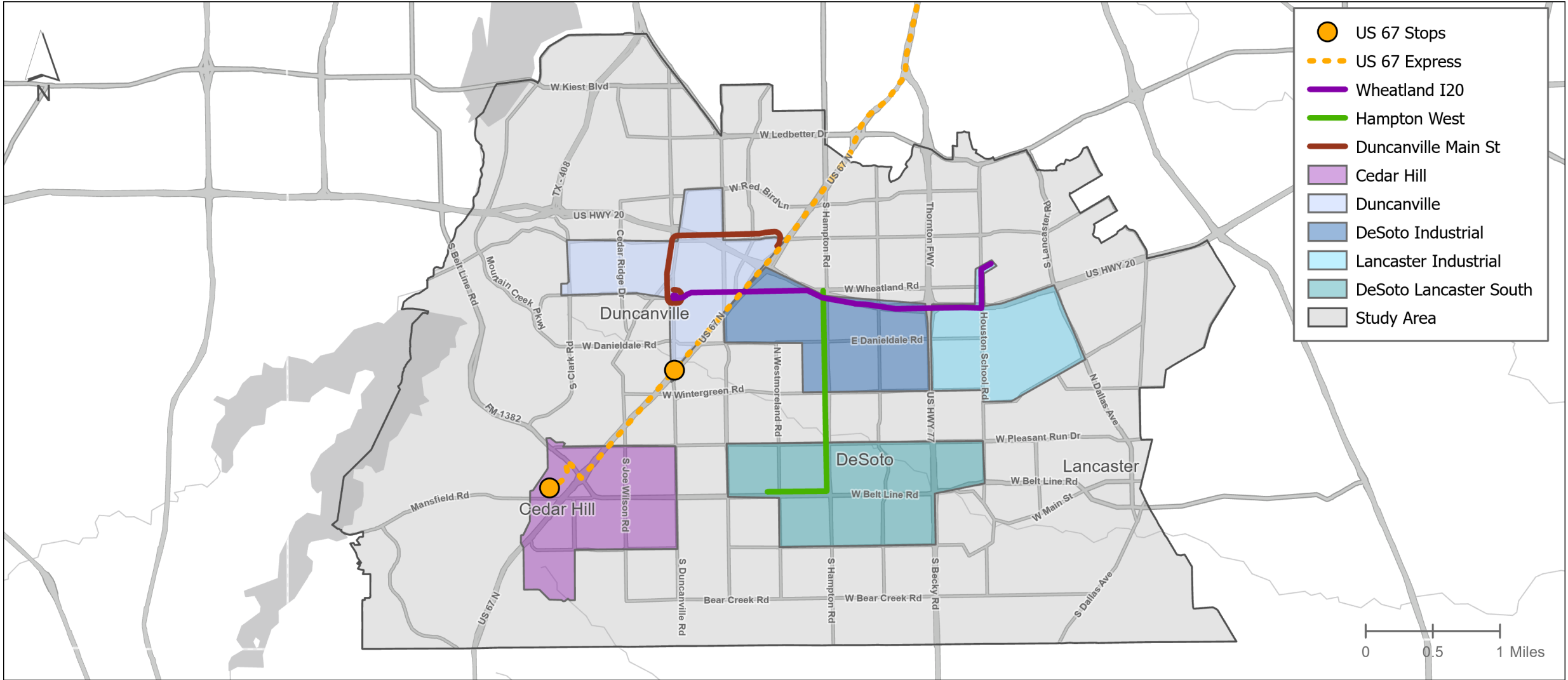
Map not to scale
El mapa no representa la escala



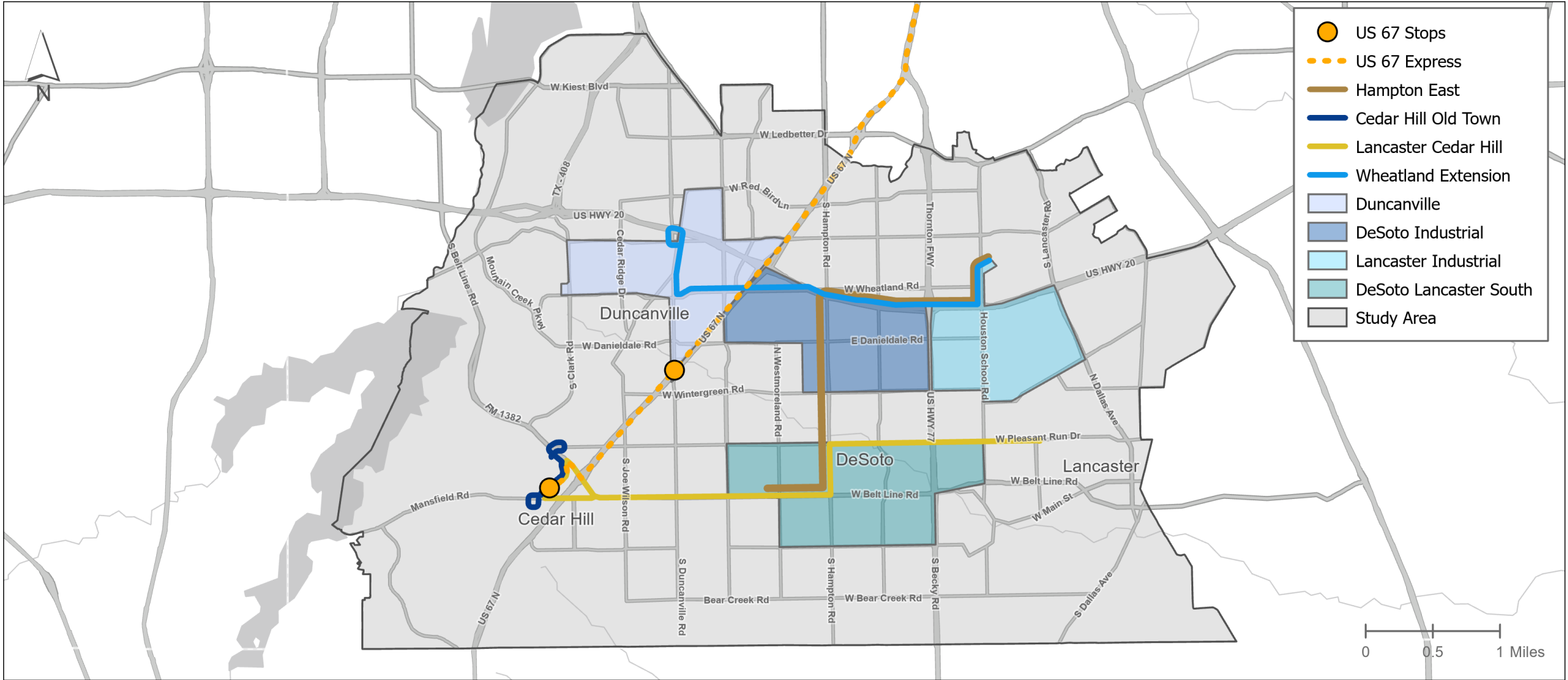
SCENARIO DEVELOPMENT



ALTERNATIVE 1



ALTERNATIVE 2

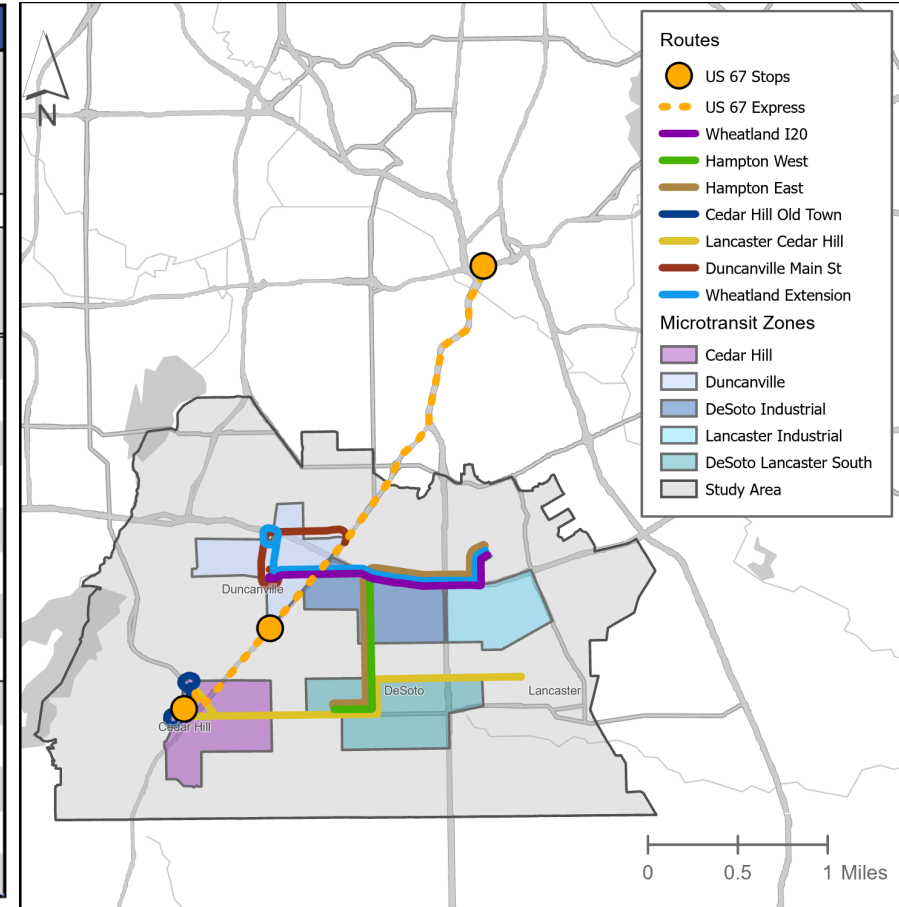


PRIORITIZATION METHODOLOGY

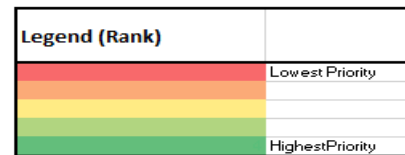


ALL PROPOSED ROUTE/ZONE PRIORITIZATION RANKINGS

PRIORITIZATION SCORES										
			Quantitative: 1 to 4 (Geometric Breaks)			Qualitative: 1 to 5 (low - high)	Qualitative: 0 to 2 (low - high)	Quantitative: 1 to 100 (low - high)		
			Weights		25%	25%	10%	20%	20%	
Name	Route or Zone	Alternative	Pop & Emp Density	Transit Dependency Index	Future Pop & Emp Density	Land Use/Key Destinations	Regional Connectivity	Prioritization Score	Rank by Service Type	RA
Wheatland I20	Route	1	2.60	2.35	3.00	2.81	2.00	93	1	Y
Hampton West	Route	1	2.38	2.44	3.00	2.29	1.00	43	6	N
Duncanville Main St	Route	1	3.00	2.44	3.00	1.52	1.00	57	5	N
Cedar Hill Old Town	Route	2	1.86	2.00	2.00	2.44	1.00	7	8	N
Lancaster Cedar Hill	Route	2	2.43	2.17	3.00	2.43	1.00	21	7	N
Wheatland Extension	Route	2	2.71	2.39	3.00	1.91	2.00	79	2	N
Hampton East	Route	2	2.22	2.48	3.00	2.31	2.00	71	3	Y
US 67	Route	1 & 2	2.50	2.17	3.00	2.00	2.00	64	4	Y
Cedar Hill	Zone	1	2.10	1.80	3.00	2.43	2.00	50	2	Y
DeSoto Lancaster South	Zone	1 & 2	2.14	2.18	2.00	2.50	1.00	14	5	Y
DeSoto Industrial	Zone	1 & 2	2.40	2.33	3.00	2.71	2.00	86	1	Y
Duncanville	Zone	1 & 2	2.70	2.36	3.00	1.94	1.00	36	3	Y
Lancaster Industrial	Zone	1 & 2	1.90	2.40	2.00	2.37	2.00	29	4	Y



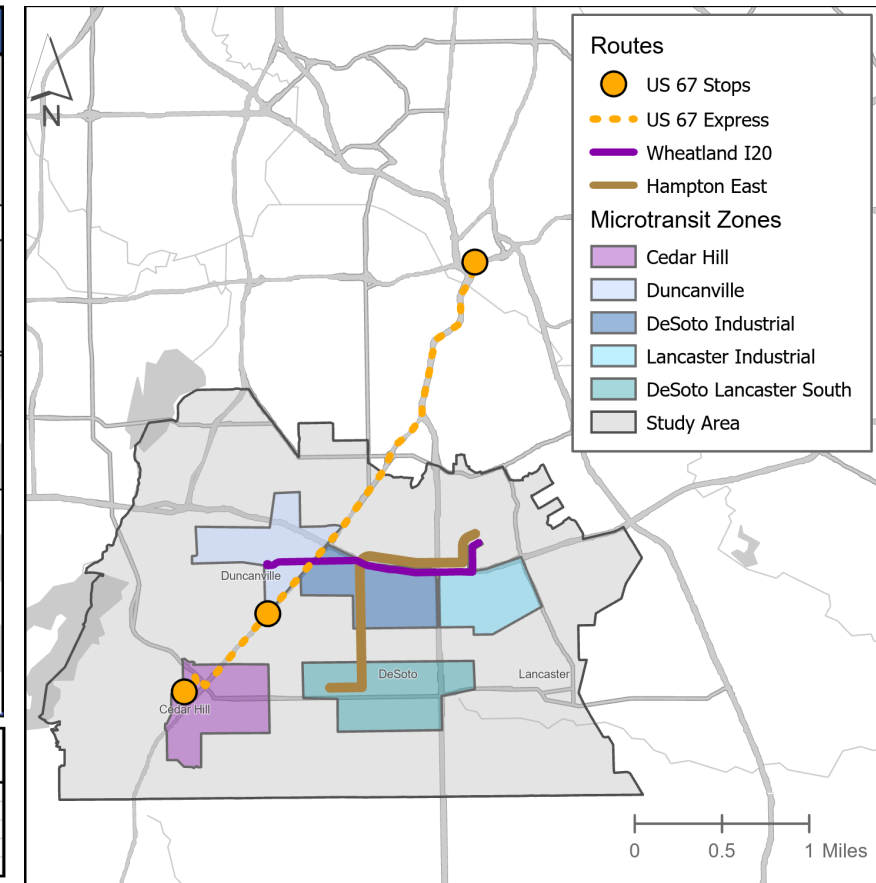
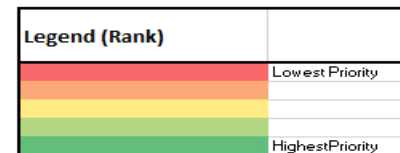
Overall Alternative Score	Average Score
Alternative 1 (Route) Score	64.23
Alternative 2 (Route) Score	48.52
Alternative 1 (Zone) Score	42.82
Alternative 2 (Zone) Score	41.03
Recommended Alt. (Route) Score	76.13
Recommended Alt. (Zone) Score	42.82



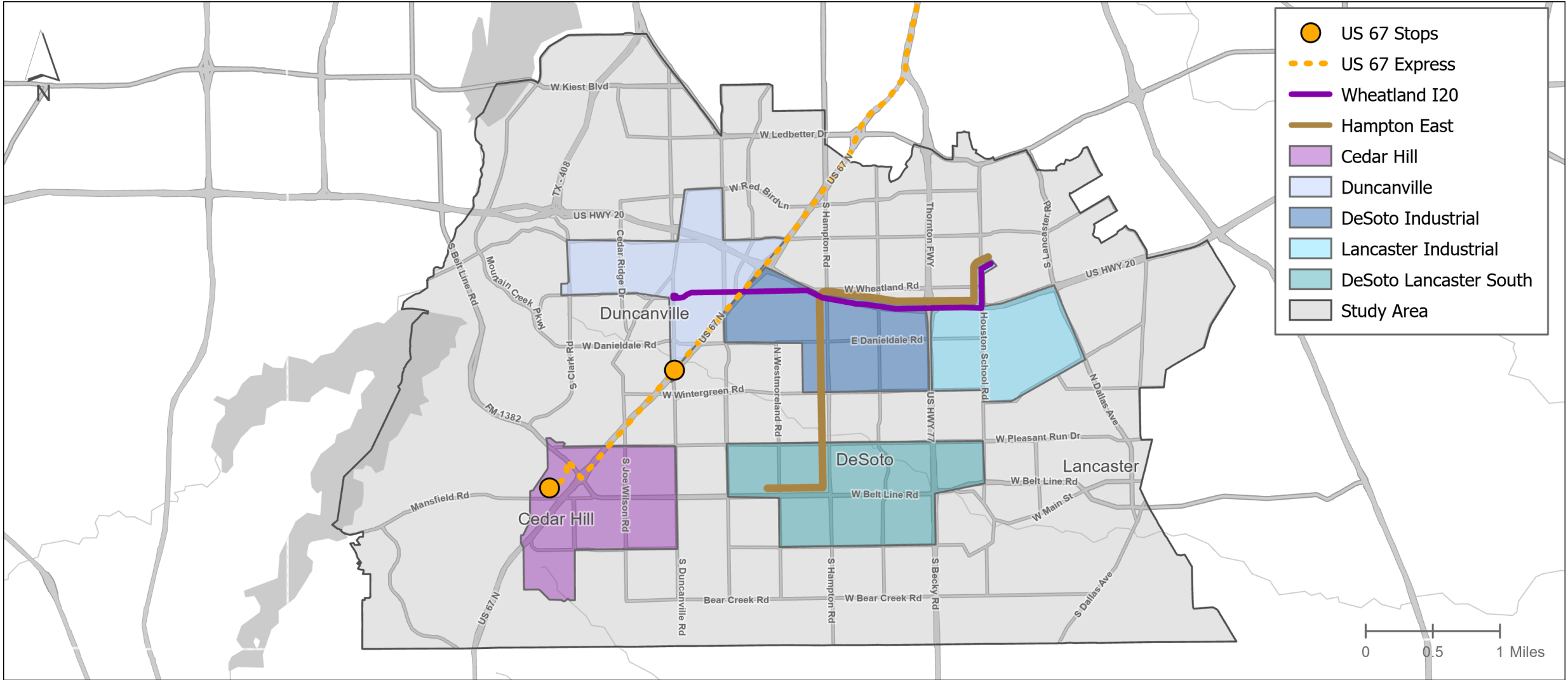
RECOMMENDED ROUTE/ZONE PRIORITIZATION SCORES

PRIORITIZATION SCORES											
			Quantitative: 1 to 4 (Geometric Breaks)			Qualitative: 1 to 5 (low - high)	Qualitative: 0 to 2 (low - high)	Quantitative: 1 to 100 (low - high)			
			25%	25%	10%	20%	20%				
Name	Route or Zone	Alternative	Pop & Emp Density	Transit Dependency Index	Future Pop & Emp Density	Land Use/Key Destinations	Regional Connectivity	Prioritization Score	Rank by Service Type	RA	
Wheatland I20	Route	1	2.60	2.35	3.00	2.81	2.00	93	1	Y	
Hampton East	Route	2	2.22	2.48	3.00	2.31	2.00	71	3	Y	
US 67	Route	1 & 2	2.50	2.17	3.00	2.00	2.00	64	4	Y	
Cedar Hill	Zone	1	2.10	1.80	3.00	2.43	2.00	50	2	Y	
DeSoto Lancaster South	Zone	1 & 2	2.14	2.18	2.00	2.50	1.00	14	5	Y	
DeSoto Industrial	Zone	1 & 2	2.40	2.33	3.00	2.71	2.00	86	1	Y	
Duncanville	Zone	1 & 2	2.70	2.36	3.00	1.94	1.00	36	3	Y	
Lancaster Industrial	Zone	1 & 2	1.90	2.40	2.00	2.37	2.00	29	4	Y	








Overall Alternative Score	Average Score
Alternative 1 (Route) Score	64.23
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Alternative 1 (Zone) Score	42.82
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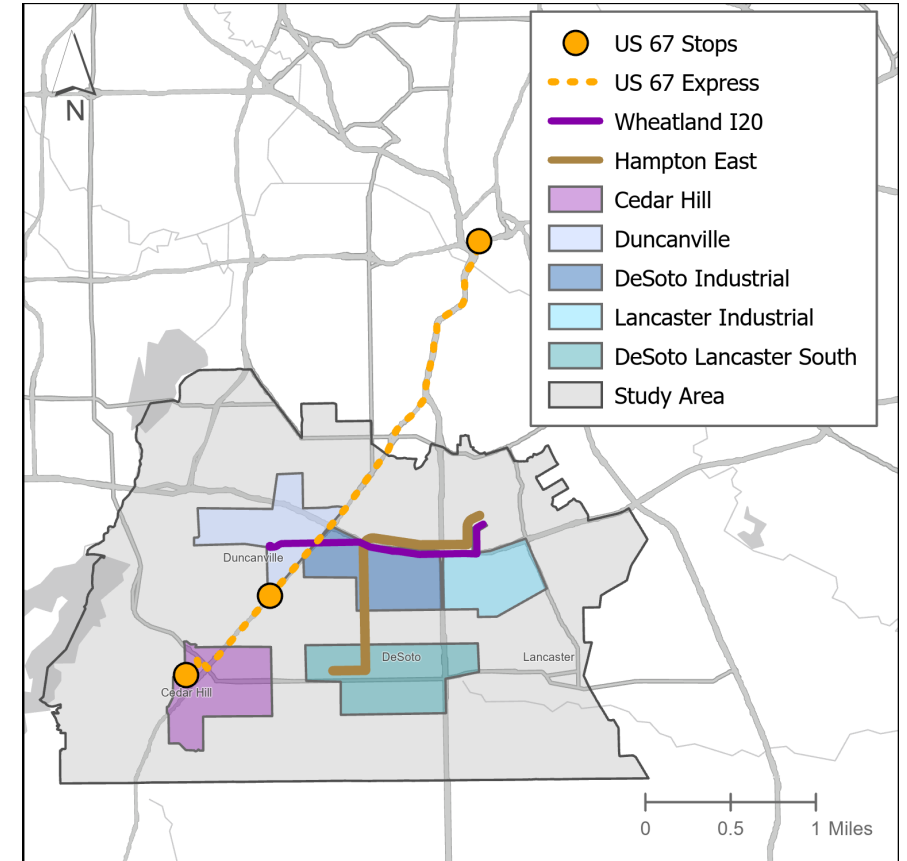
RECOMMENDED ALTERNATIVE



RECOMMENDED ALTERNATIVE TRANSIT BENEFITS

	Wheatland I20 Route	Hampton East Route	US 67 Express Route	Cedar Hill Zone	DeSoto Lancaster South Zone	DeSoto Industrial Zone	Duncanville Zone	Lancaster Industrial Zone	Total
 Existing Population	10,205	13,133	1,577	22,945	22,369	11,983	25,664	8,497	116,373
 Existing Employment	5,705	4,487	345	5,326	7,627	15,597	8,864	3,236	51,187
 Future Population	10,416	14,640	1,340	32,085	32,260	15,609	29,830	9,235	145,414
 Future Employment	12,550	8,402	3,186	17,534	12,246	22,932	22,802	5,314	104,966
 Key Destinations	37	29	4	37	38	38	102	19	304
 Transit Dependency Index	7,367	9,634	1,270	14,139	14,206	8,959	18,797	4,652	79,025
 Regional Connections	Fixed Route & HCT	Fixed Route & HCT	Fixed Route & HCT	Fixed Route & HCT	Fixed Route Only	Fixed Route & HCT	Fixed Route Only	Fixed Route & HCT	NA

*HCT = High-Capacity Transit



TIME SAVINGS EXAMPLE

Benefits:

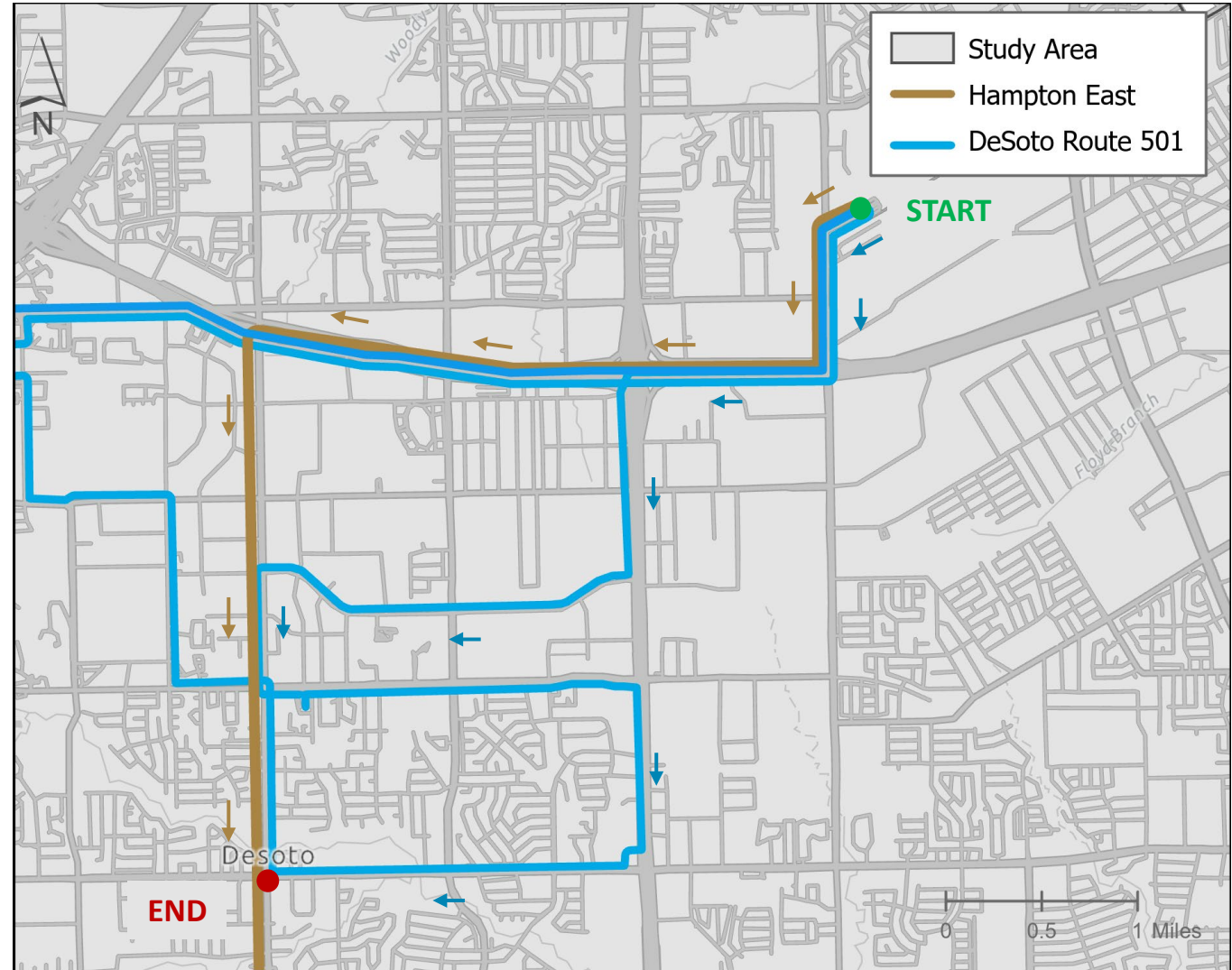
- Bi-Direction route design
- Decreased travel times

UNT Dallas Station to DeSoto City Hall/Civic Center:

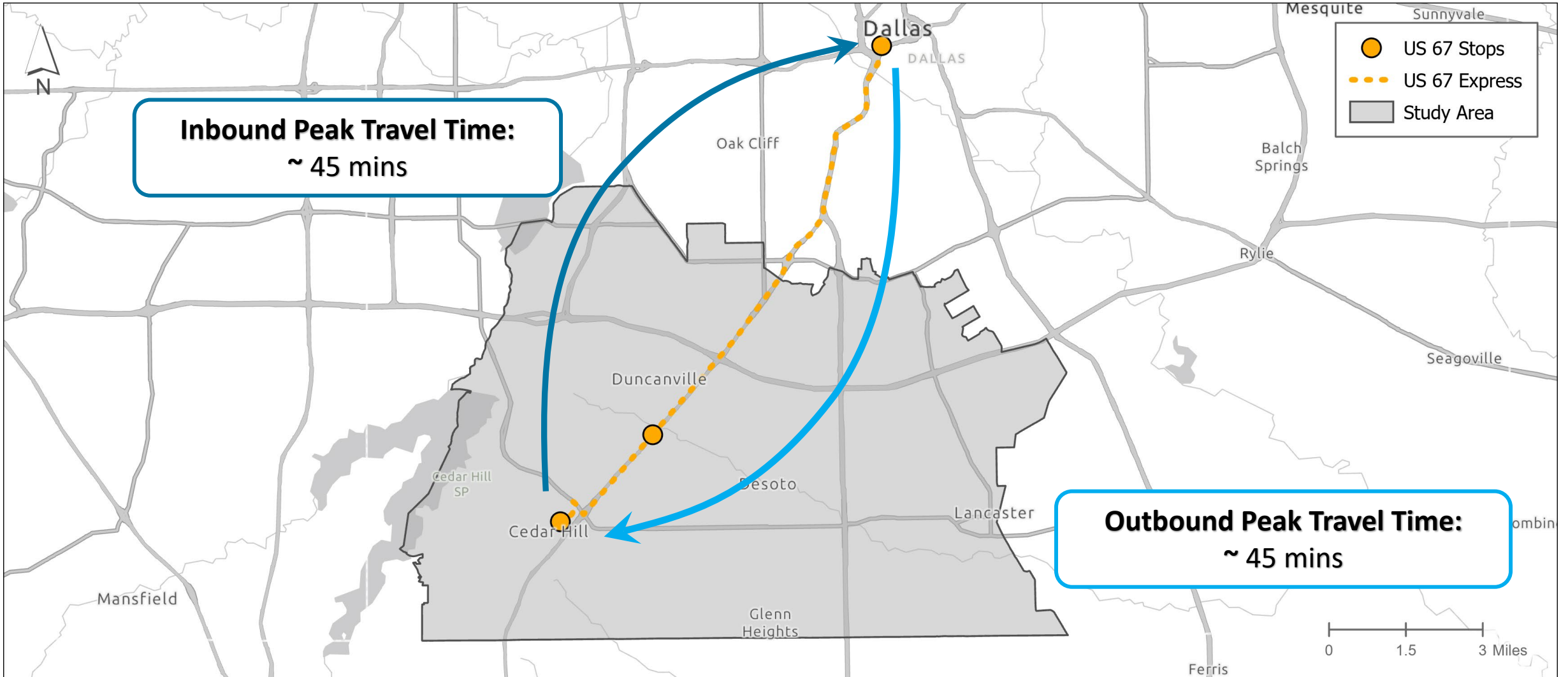
	Existing	Proposed
Travel Time	36 mins	11 mins

25 Minutes Saved

* Example shown for Peak PM commute



US 67 EXPRESS ROUTE



* Peak Period refers to PM commute

PHASE 1 COSTS AND FUNDING

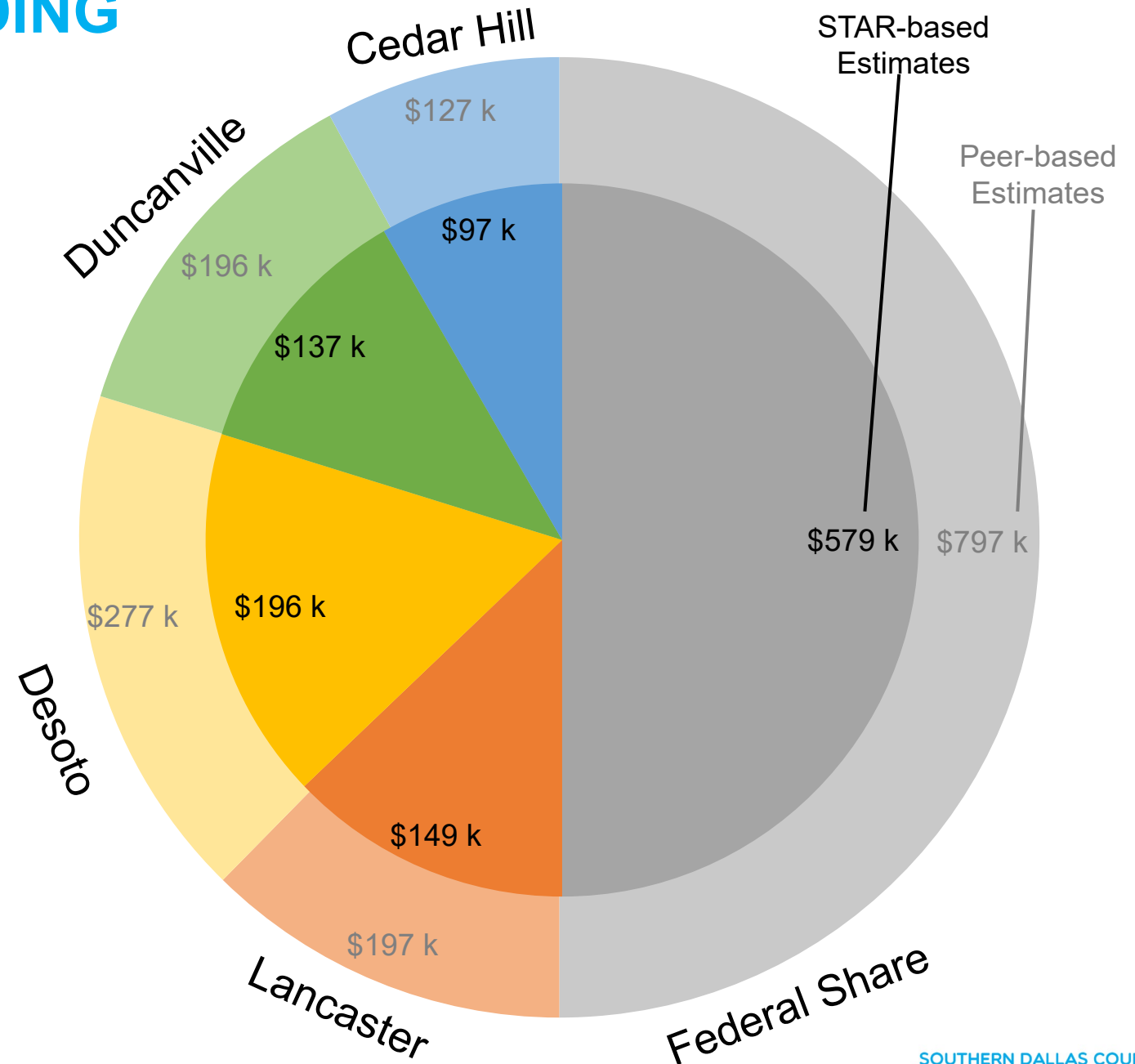
Costing Assumptions	Local	Express	Micro-transit
Span of Service	12 hours M-F	6 hours M-F	12 hours M-F
Frequency	60-75 minutes	90 minutes	On-Demand
Vehicle Requirements	1 per route	1 per route	1 per zone
Cost per revenue hour*	\$50-\$85	\$50-\$85	\$50-\$60
Cost per route/zone	\$154k - \$263k	\$77k - \$132k	\$154k - \$187k

*Unit costs per revenue hour based on information from STAR (\$50/hr, fully allocated); National Transit Database peers (\$85/hr, excludes capital and fare offsets); and SMART Micro-transit pilot study (\$60/hr, turn-key)

PHASE 1 COSTS AND FUNDING

Phase 1 Cost Sharing

- \$1.2M- \$1.6M total cost
- 50% Federal Match
- 1 Express Route costs split by stop
- 2 Local Routes costs split by lane mile
- 5 micro-transit zones costs split by cities served



PHASE 1 COSTS AND FUNDING

Cedar Hill Service Allocation and Annual Costs:

Route/Service	US 67 Express	Cedar Hill Microtransit	Total
Frequency of service	60 minutes	On-Demand	
Weekday Span	6 hours	12 hours	
Annual Revenue Hours	1,560 hours	3,120 hours	
Total Cost of Service	\$77k-\$132k	\$154k-\$187k	
Cedar Hill Service Allocation	50%	100%	
Cedar Hill Cost of Service	\$39k-\$66K	\$154K-\$187K	\$193k - \$253k
Estimated Federal Revenue (50%)			\$97k - 127k
Cedar Hill Local Match			\$97k - 127k

PHASE 1 COSTS AND FUNDING

Duncanville Service Allocation and Annual Costs:

Route/Service	US 67 Express	Wheatland/I-20	Duncanville Microtransit	Total
Frequency of service	60 minutes	60 minutes	On-Demand	
Weekday Span	6 hours	12 hours	12 hours	
Annual Revenue Hours	1,560 hours	3,120 hours	3,120 hours	
Total Cost of Service	\$77k-\$132k	\$154k-\$263k	\$154k-\$187k	
Duncanville Service Allocation	50%	53%	100%	
Duncanville Cost of Service	\$39k-\$66K	\$82k-\$142k	\$154k-\$187k	\$275k-\$393k
Estimated Federal Revenue (50%)				\$137k-\$196k
Duncanville Local Match				\$137k-\$196k

PHASE 1 COSTS AND FUNDING

Desoto Service Allocation and Annual Costs:

Route/Service	Hampton East	Wheatland/ I-20	Desoto Industrial Microtransit	Desoto-Lancaster Microtransit	Total
Frequency of service	75 minutes	60 minutes	On-Demand	On-Demand	
Weekday Span	12 hours	12 hours	12 hours	12 hours	
Annual Revenue Hours	3,120 hours	3,120 hours	3,120 hours	3,120 hours	
Total Cost of Service	\$154k-\$263k	\$154k-\$263k	\$154k-\$187k	\$154k-\$187k	
Desoto Service Allocation	100%	4%	100%	50%	
Desoto Cost of Service	\$154k-\$263k	\$6k-\$11k	\$154K-\$187K	\$77k-\$94k	\$392k-\$555k
Estimated Federal Revenue (50%)					\$196k-\$277k
Desoto Local Match					\$196k-\$277k

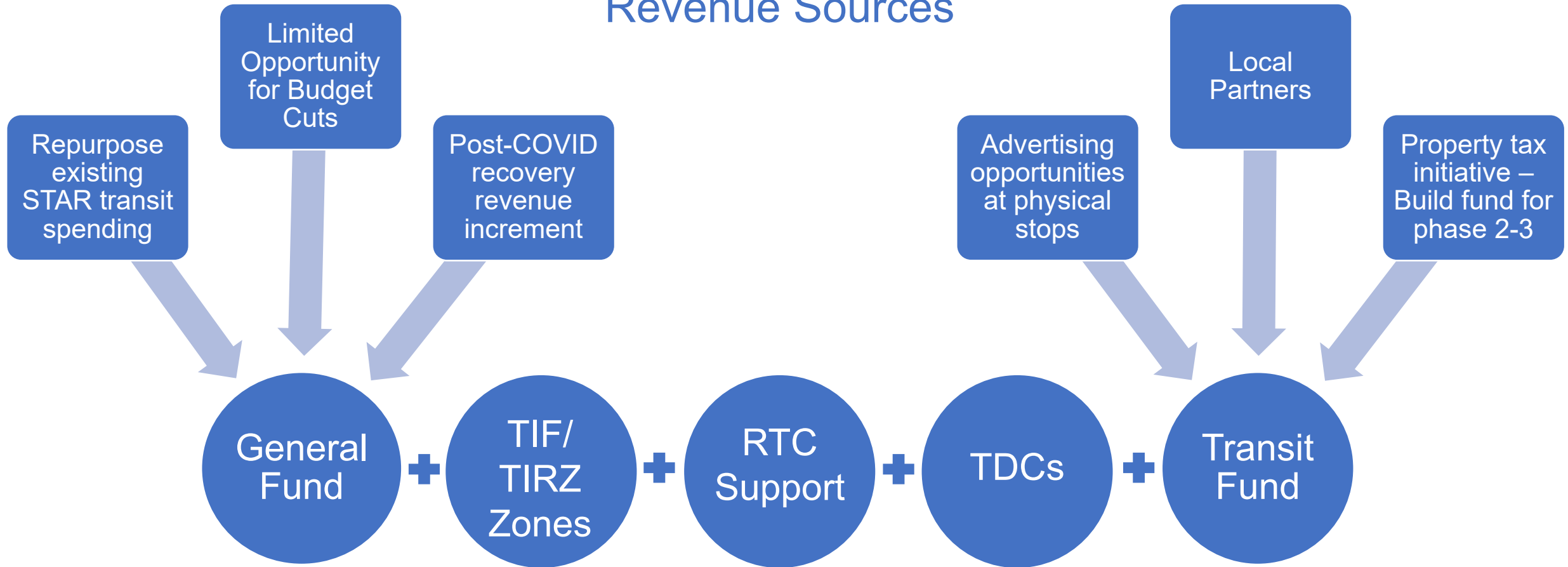
PHASE 1 COSTS AND FUNDING

Lancaster Service Allocation and Annual Costs:

Route/Service	Wheatland/ I-20	Lancaster Industrial Microtransit	Desoto-Lancaster Microtransit	Total
Frequency of service	60 minutes	On-Demand	On-Demand	
Weekday Span	12 hours	12 hours	12 hours	
Annual Revenue Hours	3,120 hours	3,120 hours	3,120 hours	
Total Cost of Service	\$154k-\$263k	\$154k-\$187k	\$154k-\$187k	
Lancaster Service Allocation	43%	100%	50%	
Lancaster Cost of Service	\$66k-\$113k	\$154K-\$187K	\$77k-\$94k	\$298k-\$394k
Estimated Federal Revenue (50%)				\$149k-\$197k
Lancaster Local Match				\$149k-\$197k

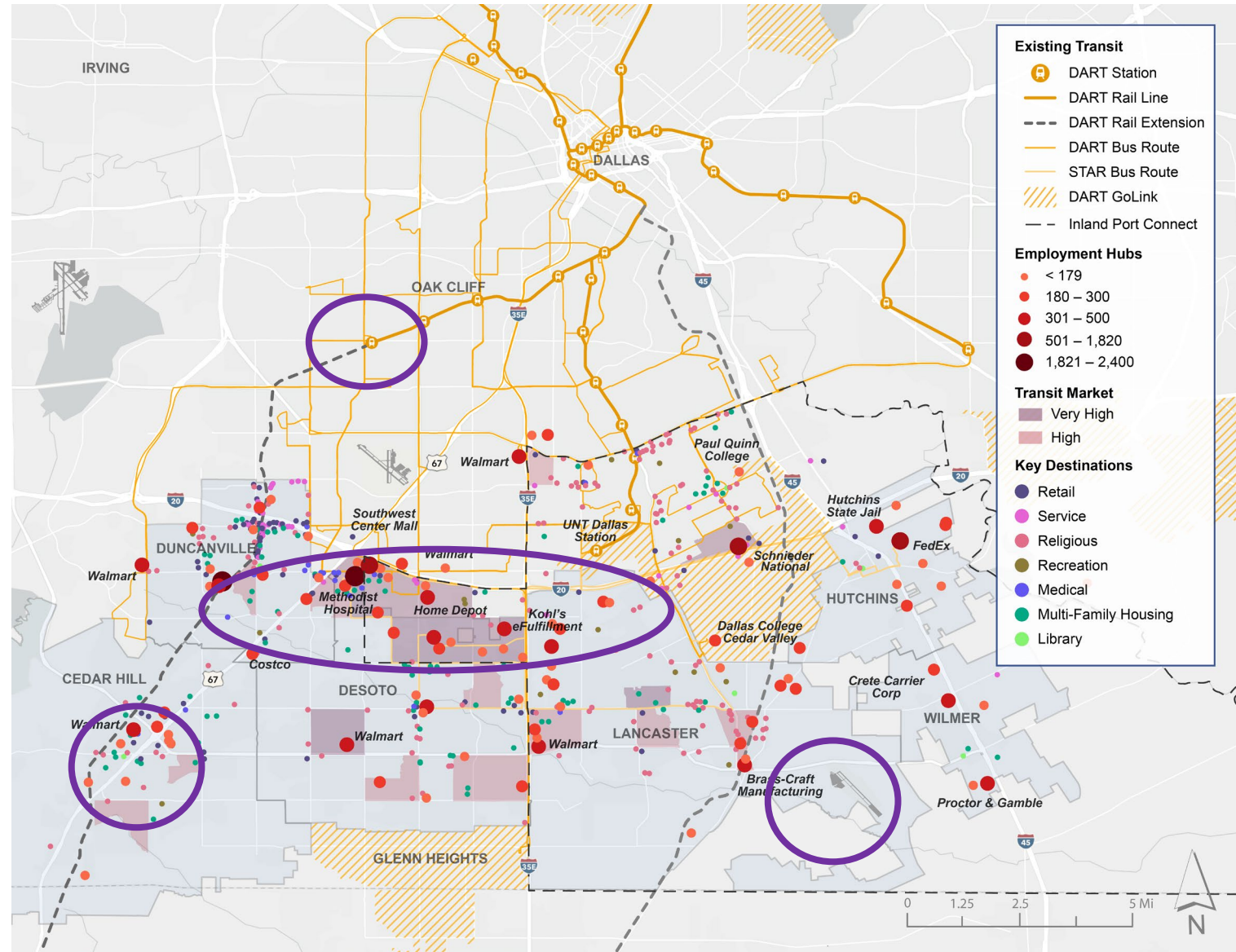
PHASE 1 COSTS AND FUNDING

Local Match Revenue Sources



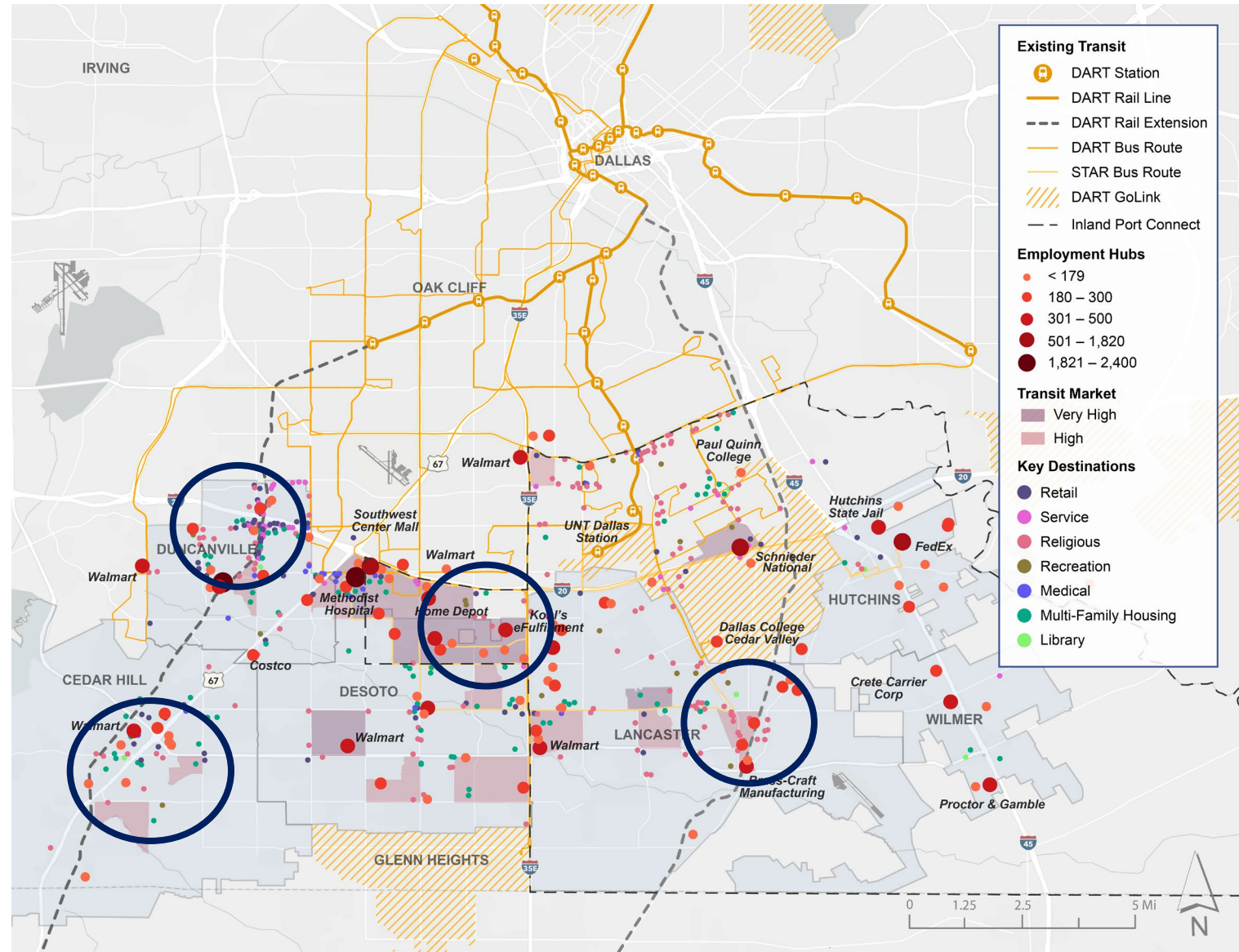
PHASE 2 TRANSIT NEEDS

- **Monitor Phase 1 services**
 - Update route frequencies
 - Adjust spans of service/days of service
 - Add extensions if needed
- **Target potential growth areas**
 - Lancaster Airport area
 - New development on the Wheatland and Danieldale Rd corridors
 - Central and southwest Cedar Hill
- **New connections to DART at Westmoreland Station**

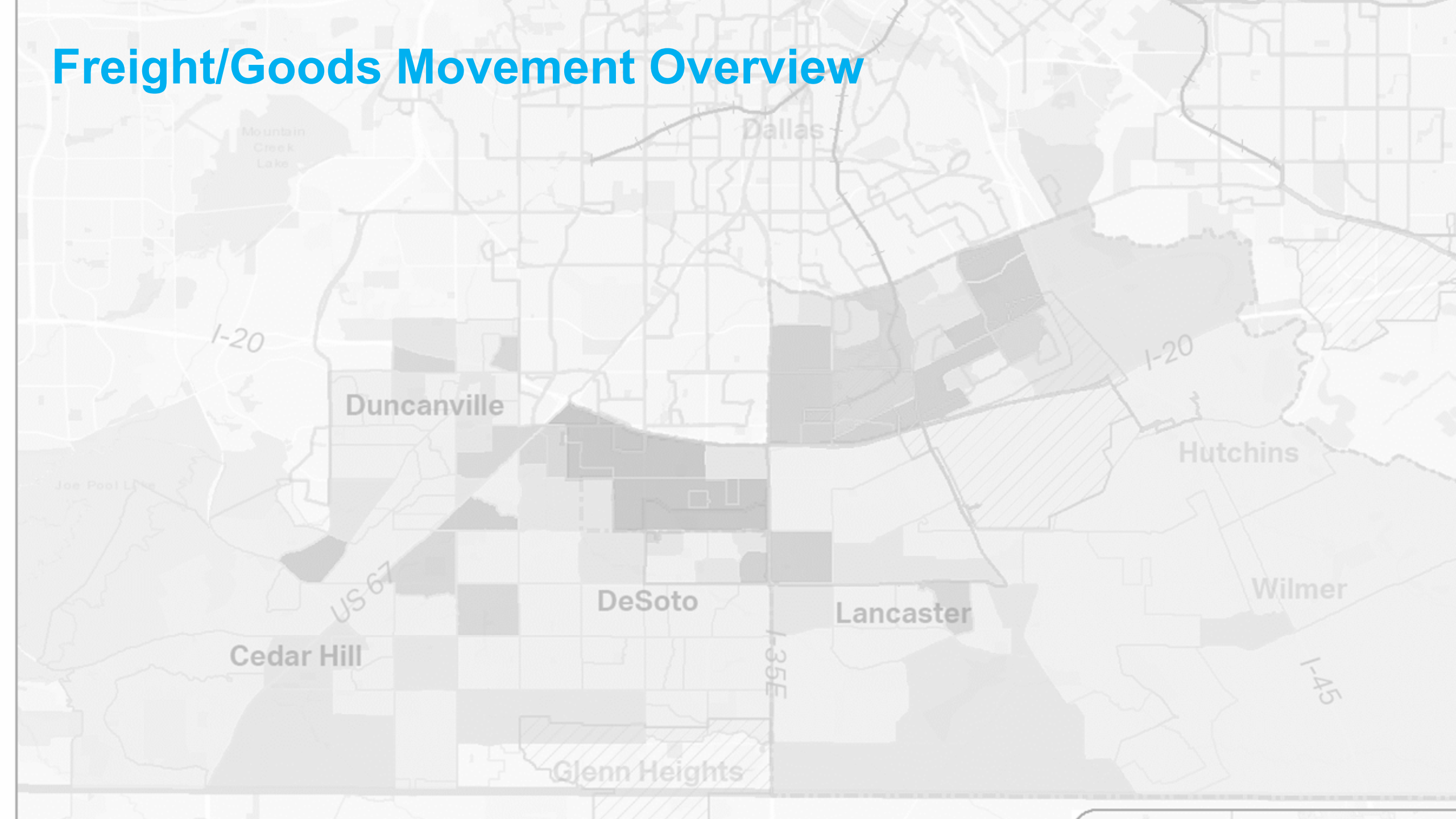


PHASE 3 TRANSIT NEEDS

- Connections to future high-capacity transit stations and growth areas
 - Cedar Hill - downtown
 - Duncanville – Main Street
 - Lancaster – downtown
 - DeSoto – continued growth along west of I-35

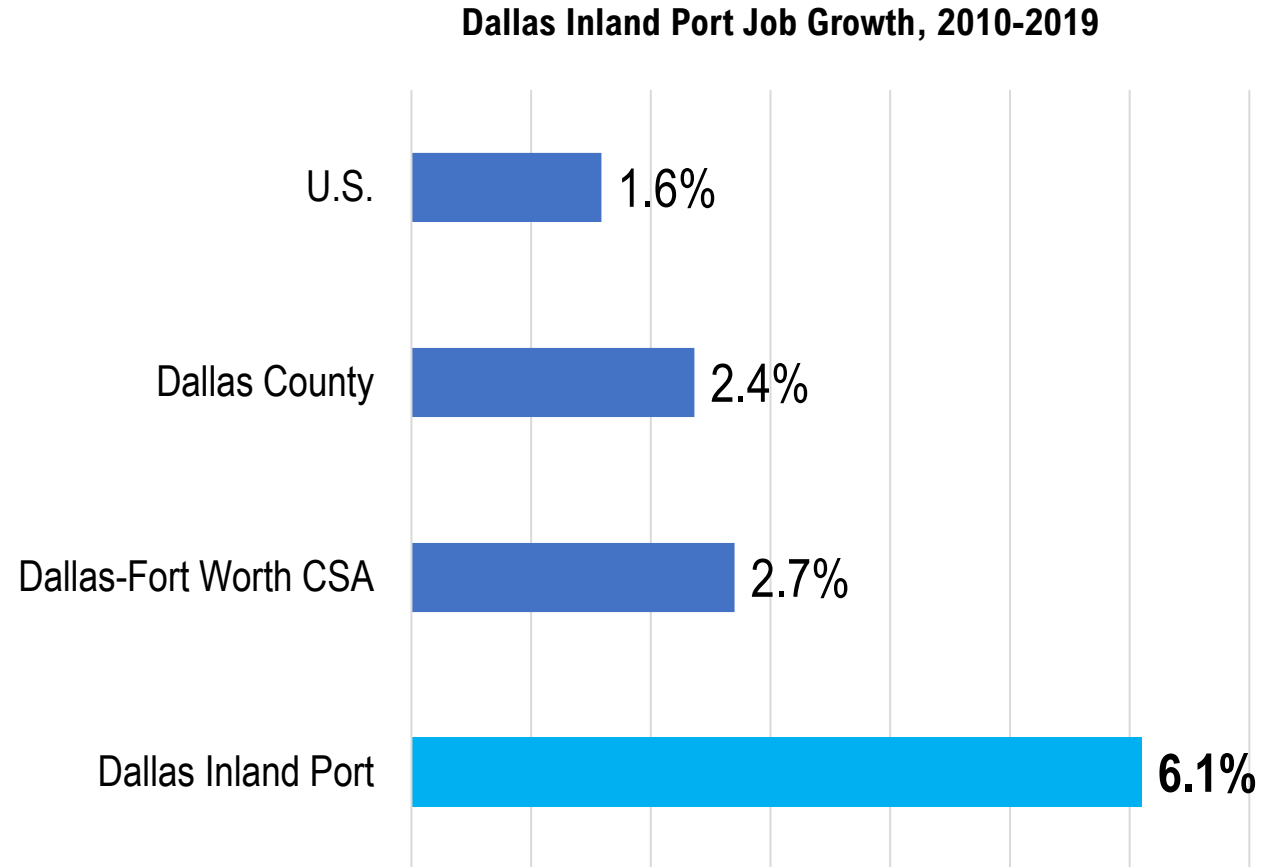


Freight/Goods Movement Overview



Growth in the South Dallas County Inland Port

- Over the past decade, the Inland Port has seen significant growth – **adding jobs at a rate 2.5x that of Dallas County and nearly 4x the U.S.**
- Since 2010, 17% of all Dallas-Fort Worth Metro Area job growth occurred in the Southern Dallas County Inland Port.
- As of 2019 (pre-COVID), the Inland Port supported 33,900 jobs – with more than 15,000 jobs in manufacturing, transportation and warehousing, wholesale, and e-commerce.
- At the current pace of growth, the Inland Port could see 50 to 100 million square feet of new development over the next decade, with the potential for more than 30,000 new jobs.

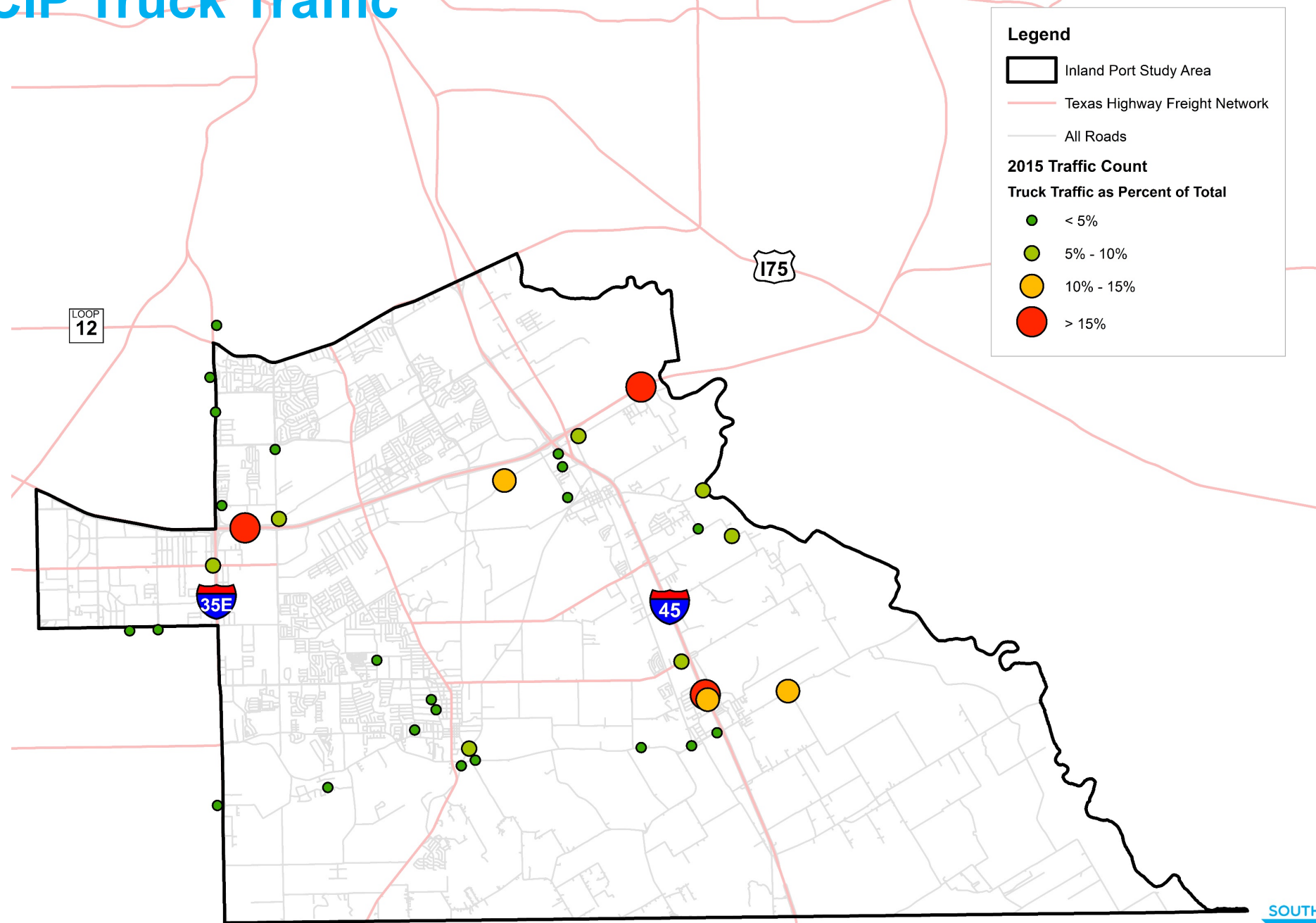


Future Growth in the Inland Port

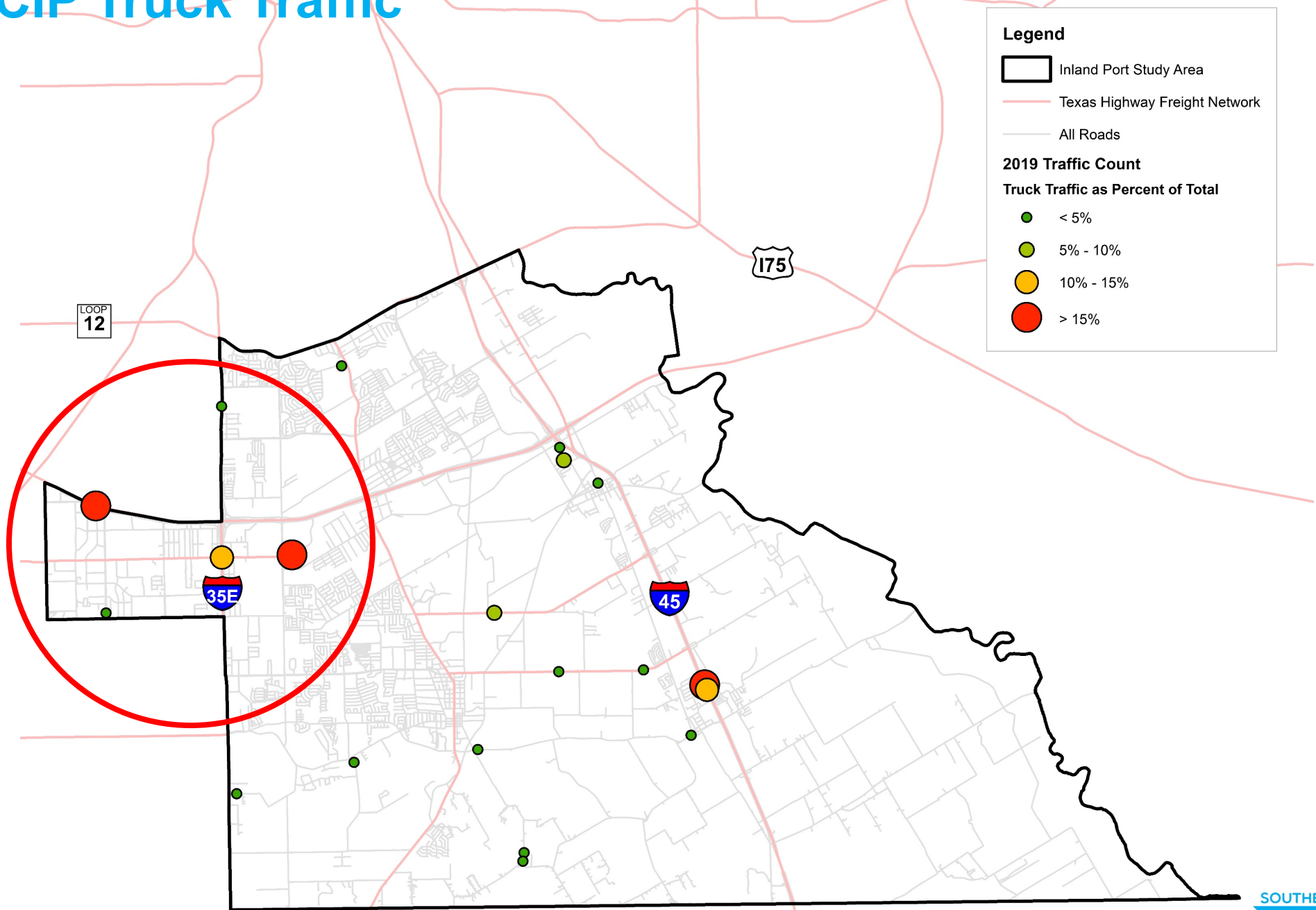
- The SDCIP currently hosts nearly 50 million square feet (or over 1,000 acres) of **occupied industrial space**.
- If this historic pace of growth continues, the Inland Port is poised to **more than double in size over the next 10 years**, seeing around **50 to 100 million square feet of new industrial development**.
- We have used two scenarios to project this scale of development:
 - **Scenario A** assumes gradual build-out over 10 years in line with current (10-year vs. 1-year) rates of growth.
 - **Scenario B** follows the same trajectory but assumes the full build-out of all current under-construction and proposed developments over the next 3-4 years.

Growth Trajectory	Rate	Basis	Scenario A 2030	Scenario B 2030
Baseline	12.4%	10-year growth rate	+ 103.7 million SF	+113 million SF
Slow Growth	5.3%	2019-2020 growth rate	+ 31.7 million SF	+ 101.2 million SF

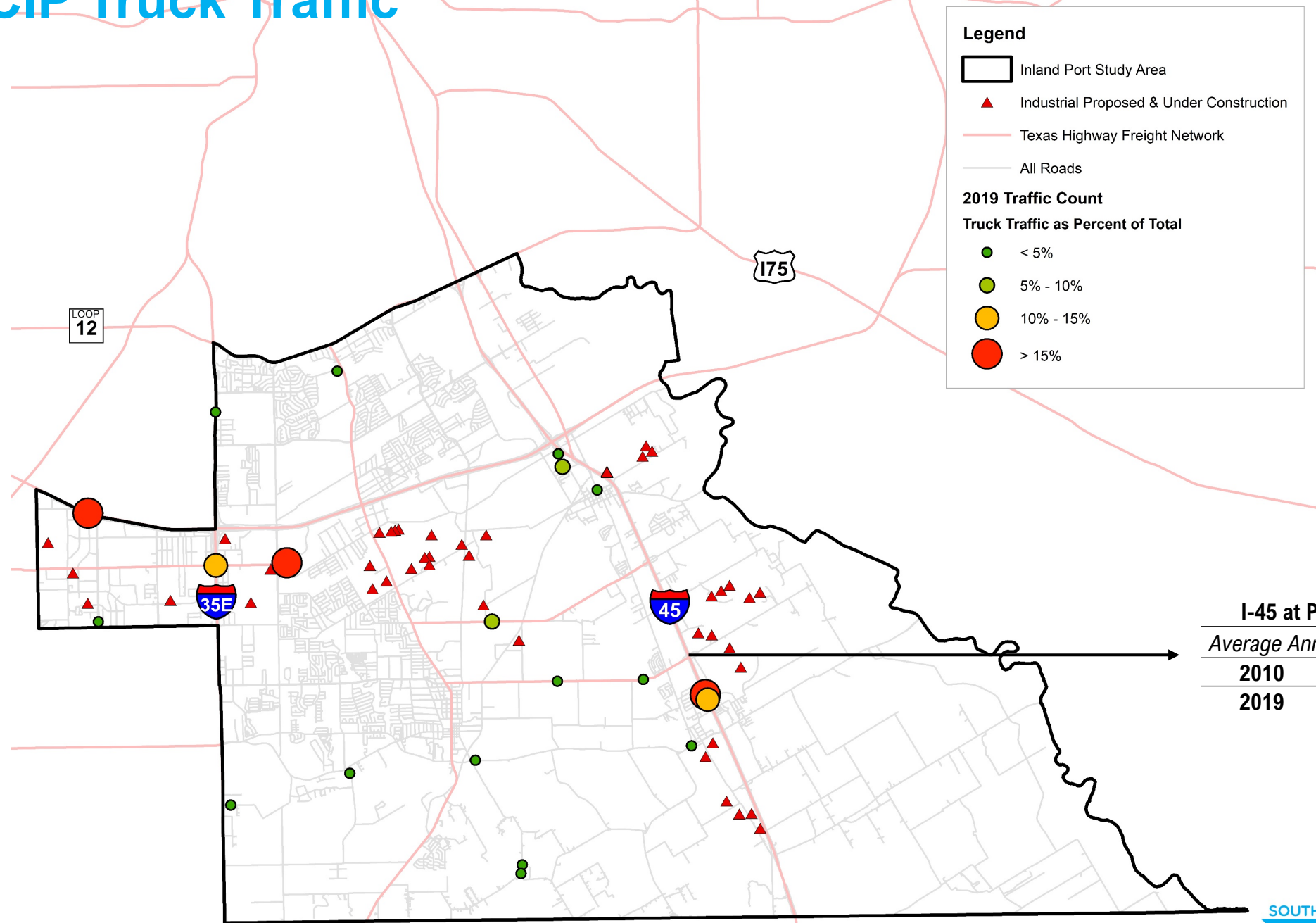
2015 SDCIP Truck Traffic



2019 SDCIP Truck Traffic



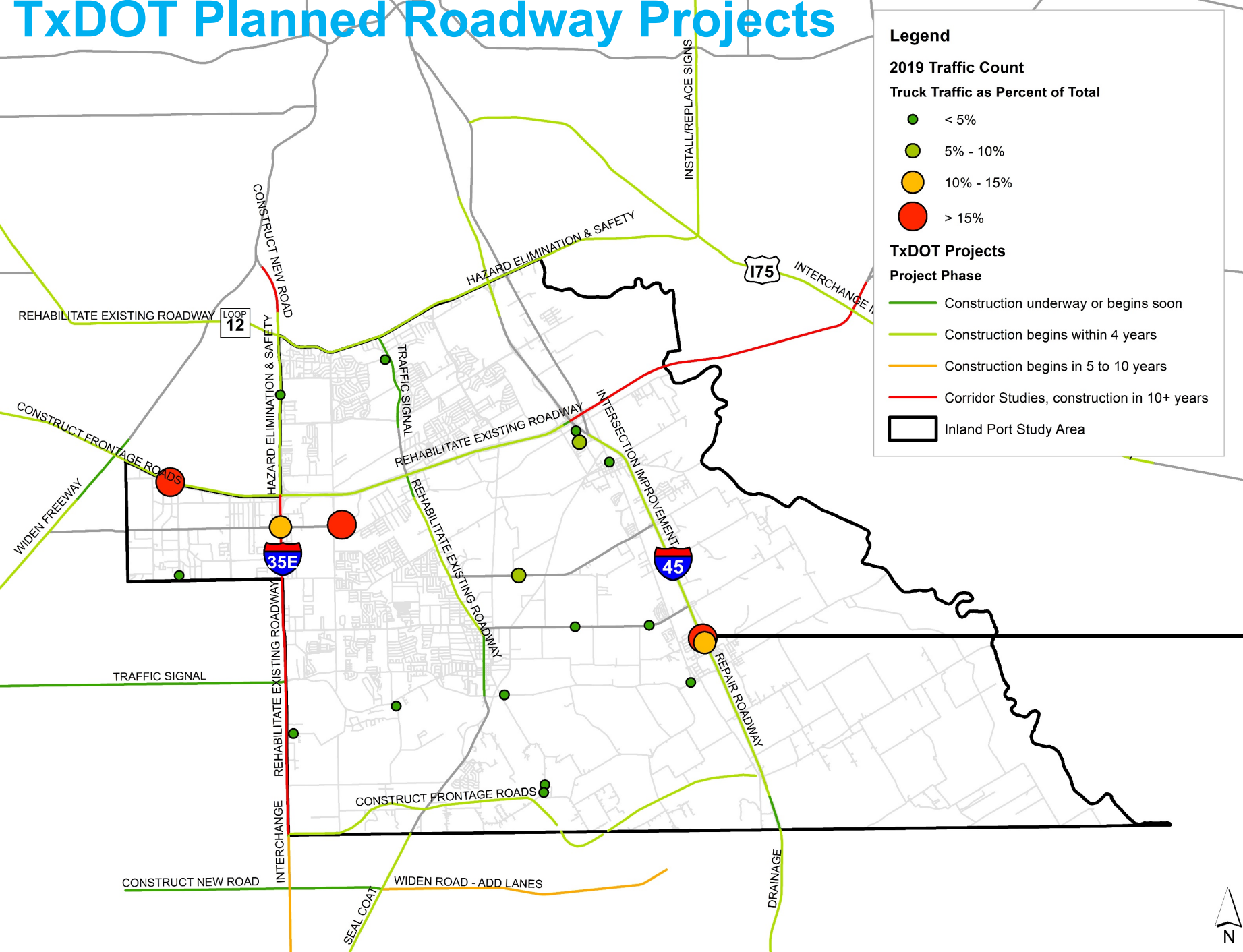
2019 SDCIP Truck Traffic



I-45 at Pleasant Run

<i>Average Annual Daily Traffic</i>	
2010	47,000
2019	60,993

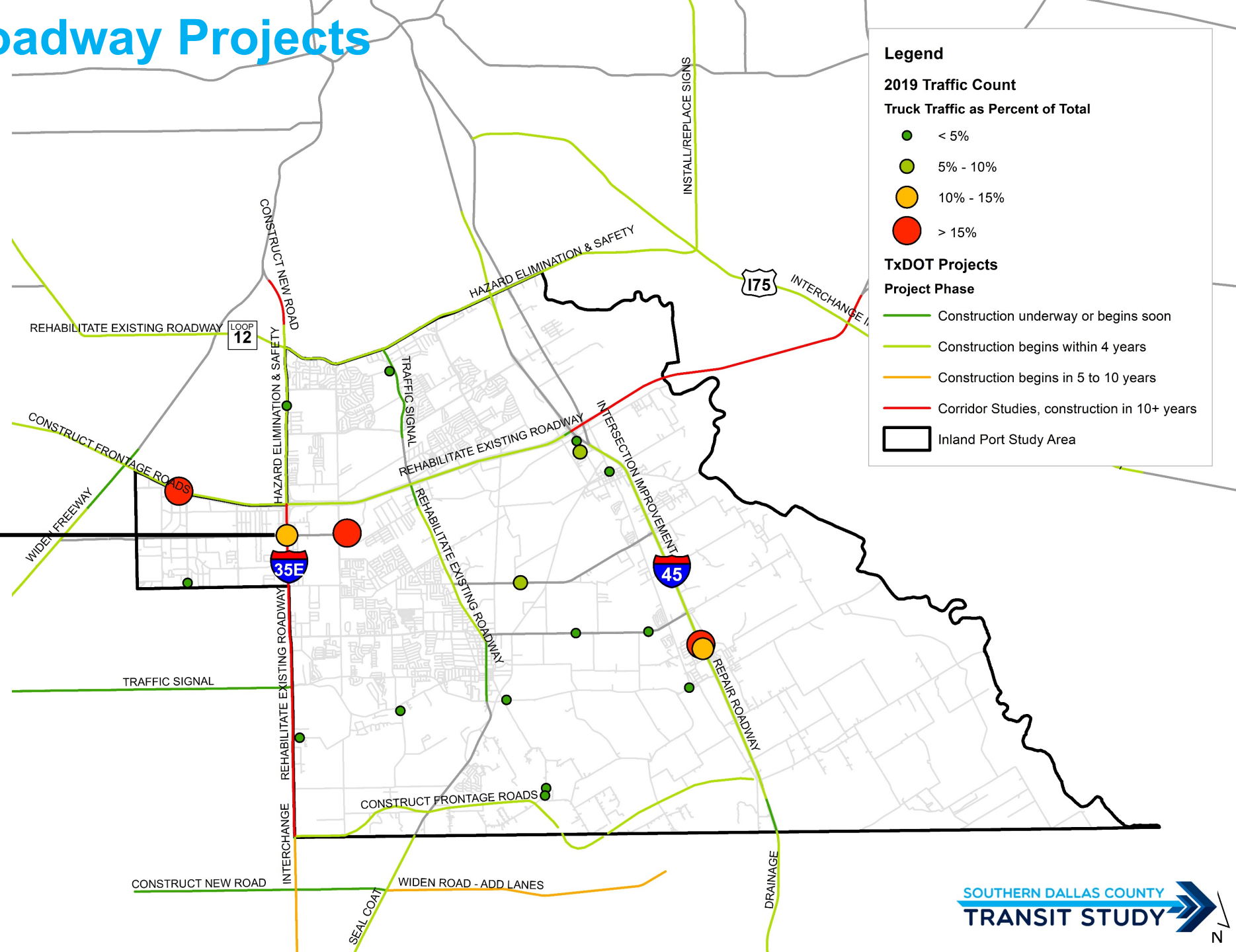
TxDOT Planned Roadway Projects



Significant truck traffic on I-45 and repair work planned, but frontage roads face worsening conditions.



TxDOT Planned Roadway Projects



Key Takeaways

- The South Dallas County Inland Port is poised to **more than double in size over the next 10 years**, seeing around **50 to 100 million square feet of new industrial development**. Looking at the pipeline of projects that are proposed and under construction, this growth is already on the horizon.
- There is a direct relationship between industrial development and truck counts: **as industrial buildings grow in size, so does corresponding truck traffic**.
- Many local thoroughfares are already seeing high truck volumes (10-15% of total traffic) – **increased development could push these intersections to capacity**, raising important concerns about the **design of local transportation infrastructure**, as well as **equity challenges linked emissions / air quality**.

NEXT STEPS

- Update plan based on PAC input
- Public Meeting – May 6
- Implementation Plans
- Final Plan and Report

CONNECT WITH THE PROJECT

- **Project Website:** www.sdctransitstudy.com
 - View project information, sign up for email updates or submit comments.
- **Project Facebook:** www.facebook.com/sdctransitstudy
 - “Like” the page to stay informed about upcoming public meetings.
- **Project Email:** sdctransitplan@gmail.com
 - Email us questions or comments.
- **Project Phone Line:** (469) 749-7541
 - No access to the Internet? Call us to ask a question or to request to be added to the project mailing list.

THANK YOU!

www.sdctransitstudy.com

