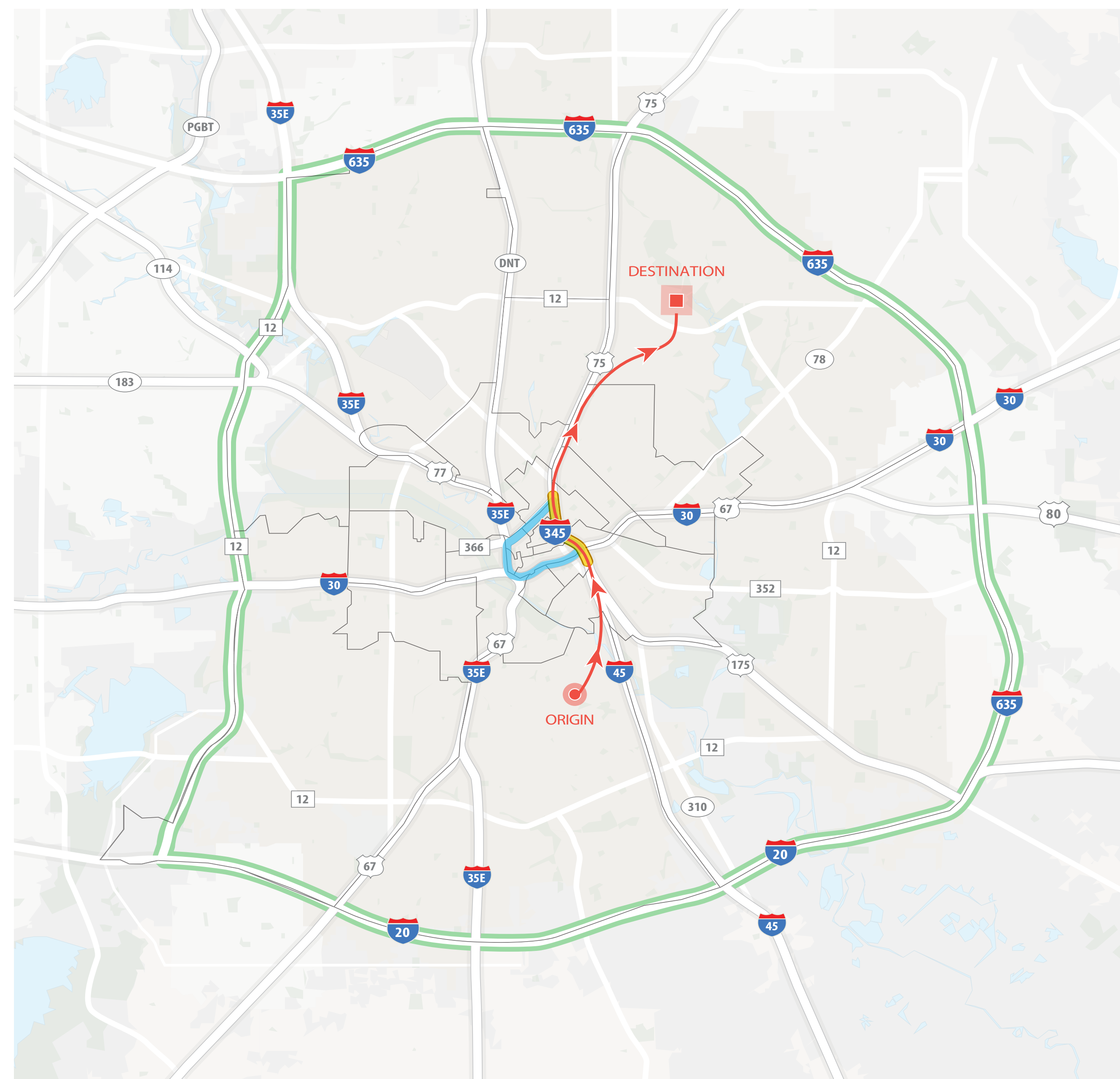




Example Origin & Destination Route



LEGEND

- Study Area
- Study Limits
- Downtown Area
- Zone Boundary

What is Origin-Destination data?

Origin-destination data represents movement from an origin (starting point) to a destination (ending point). Origin-destination data is sourced from smart phones and in-vehicle navigation systems.

TxDOT does not know exactly where a trip originates or is destined to. The data is based on zones as outlined in the map within the study area boundary. TxDOT respects the privacy of the traveling public.

When was the Origin-Destination and traffic data collected?

Origin-Destination data was collected over a six month period from fall 2017 to spring 2018.

Traffic Data, including traffic counts, was collected in 2018 prior to the COVID-19 pandemic.

Why is this information important to the I-345 Feasibility Study?

A key to evaluating the alternatives is to understand the travel patterns of current users of I-345 within the study area, and into and out of the study area. The information is not limited to the I-345 study limits. **Changes within the I-345 feasibility**

study limits could potentially impact other freeways and arterials within the study area.

Following this introduction are representative examples of the data that can be sourced from the origin-destination dashboard tool. TxDOT is presenting three origin-destination examples at this public meeting.

How was the Origin-Destination data used in the I-345 Feasibility Study?

With the representative examples of the origin-destination data, TxDOT prepared travel time exhibits from various zones. TxDOT is presenting several travel time exhibits at this public meeting.

How was the travel time developed?

The travel time percent change shown on the following exhibits was developed using the 2045 calibrated subarea regional model*. It is an average percent change of 2045 projected travel times when compared to the No Build/Leave I-345 As-Is Alternative.

Why are specific routes not shown?

There are many routes that can be used. Routes were selected using freeways and

major arterials passing thru I-345.

For the removal alternative, travel times were averaged using all the downtown streets since travelers can take any combination of streets downtown.

Does the travel time percent change assume incidents or accidents that might occur?

The travel time percent change does not assume any incidents or accidents in the calibrated subarea model, consistent with the NCTCOG regional model. The travel time percent change is the average travel time compared to the No Build/Leave I-345 As-Is Alternative. All travel time comparisons were calculated using traffic projections for the year 2045.

How many vehicles travel on I-345 each day? How many vehicles are expected in the traffic analysis year in 2045?

Existing I-345 has approximately 180,000 vehicles each day, including northbound and southbound directions. These numbers were based on pre-COVID traffic counts collected in 2018. The expected traffic in 2045 will increase to approximately 206,000 vehicles each day, both northbound and southbound directions.

*The 2045 calibrated subarea model is based on the 2045 NCTCOG regional traffic model to include study area traffic counts and adjacent projects. Adjacent project updates included the Horseshoe project, I-35E Lowest Stemmons, I-30 Canyon, I-30 East Corridor, and SM Wright (PH 1 and PH 2) as of latest plans available (May 2021).



Feasibility Study

Origin and Destination Distribution of Thru Traffic Northbound on I-345



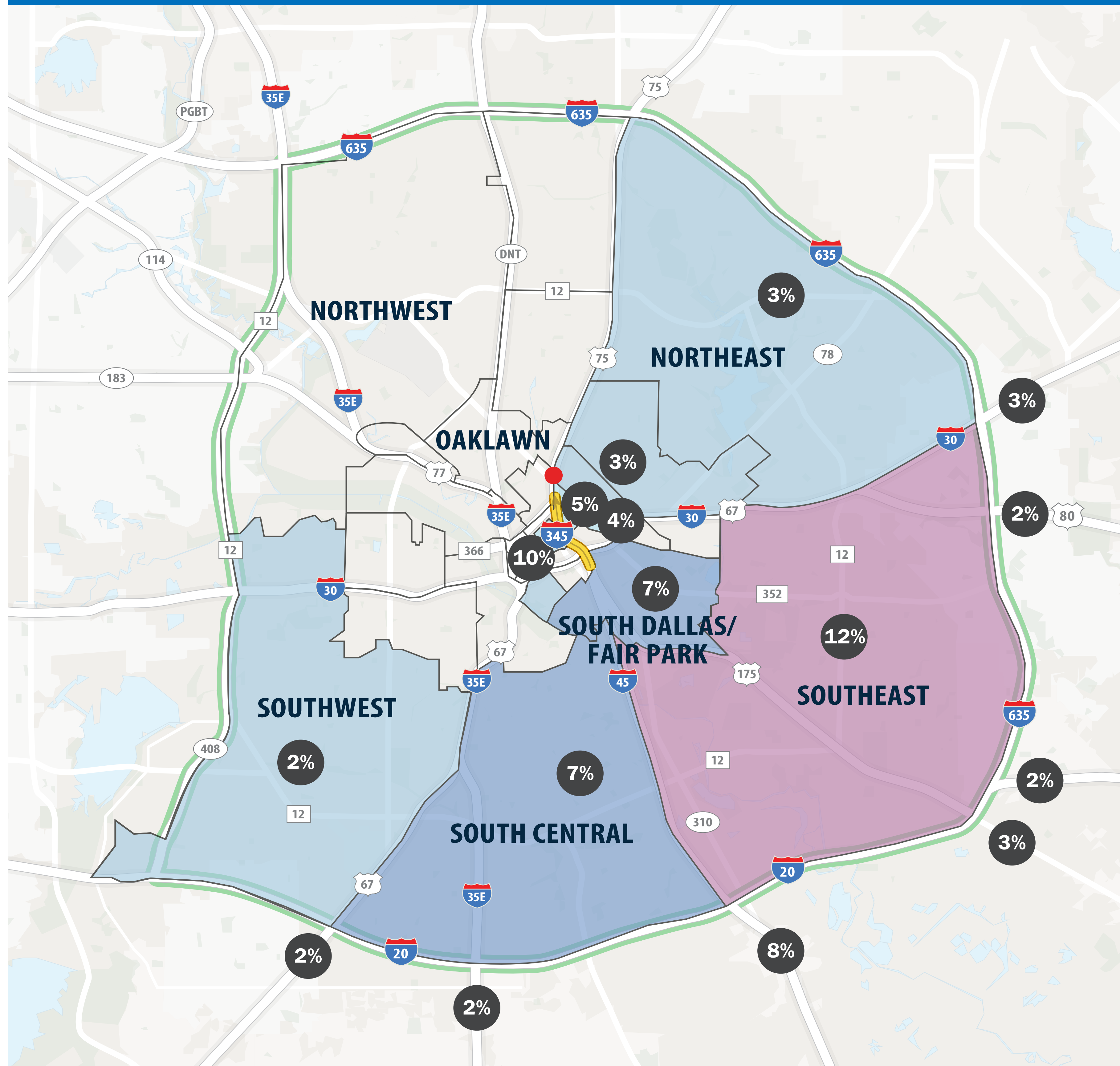
Key Takeaway

Daily* traffic using I-345 northbound mainlanes is originating from the southern half of Dallas and is destined to the northern half of Dallas.

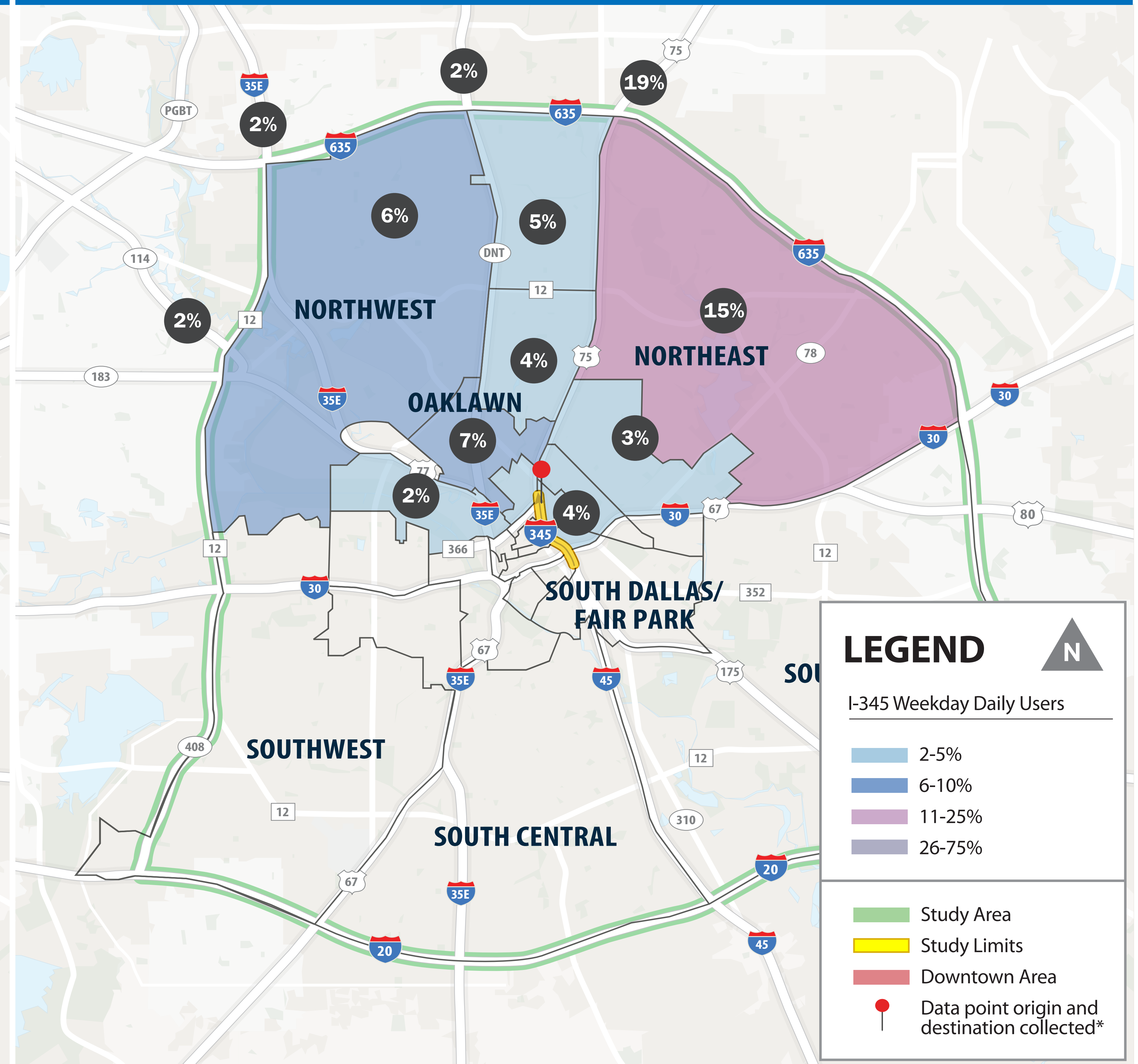
The distribution shown is approximately 75% of the daily traffic traveling northbound on I-345. Approximately 7% of the remaining traffic originates within the study area in multiple zones with small distributions. Approximately 18% of the traffic originates outside the study area through other roadways (minor arterials) not collected in the data.

The distribution shown is approximately 71% of the daily traffic traveling northbound on I-345. Approximately 14% of the remaining traffic is disbursed within the study area in multiple zones with small distributions. Approximately 15% of the traffic leaves the study area through other roadways (minor arterials) not collected in the data.

ORIGIN MAP



DESTINATION MAP



LEGEND

I-345 Weekday Daily Users

- 2-5%
- 6-10%
- 11-25%
- 26-75%

Study Area

Study Limits

Downtown Area

Data point origin and destination collected*

This is the same information presented at the June 2021 public meetings.

*Volume at the data point is approximately 83,000 northbound trips a day



Feasibility Study

Origin and Destination Distribution from Westbound I-30 to Northbound I-345



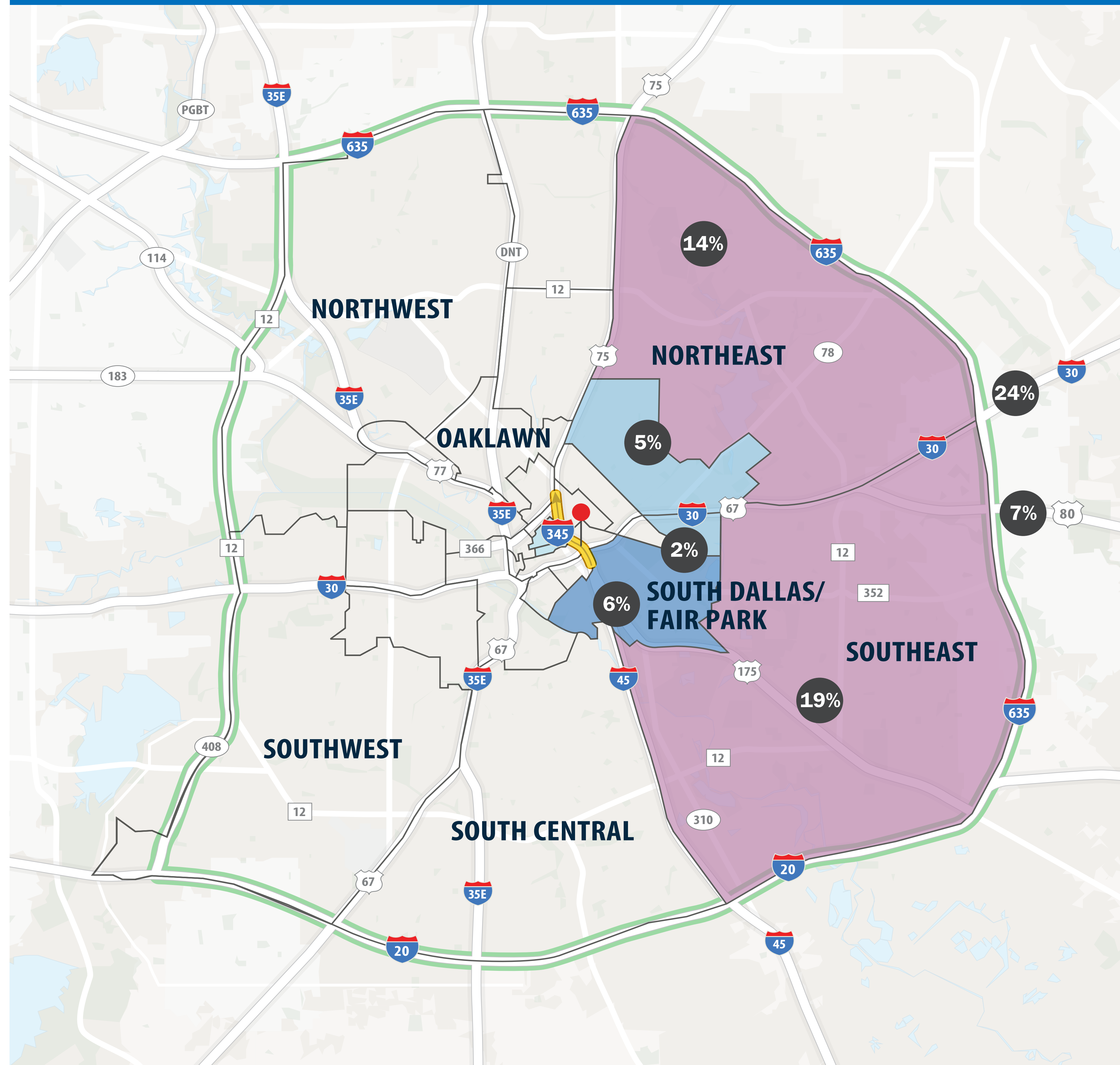
Key Takeaway

AM Peak Traffic* using the westbound I-30 to northbound I-345 ramp are originating from the eastern sections of Dallas and the eastern suburbs and is destined mainly to downtown and the northwest quadrant of Dallas.

The distribution shown is approximately 77% of the AM Peak Period ramp traffic. Approximately 4% of the remaining traffic originates within the study area in multiple zones with small distributions. Approximately 19% of the traffic originates outside the study area through other roadways (minor arterials) not collected in the data.

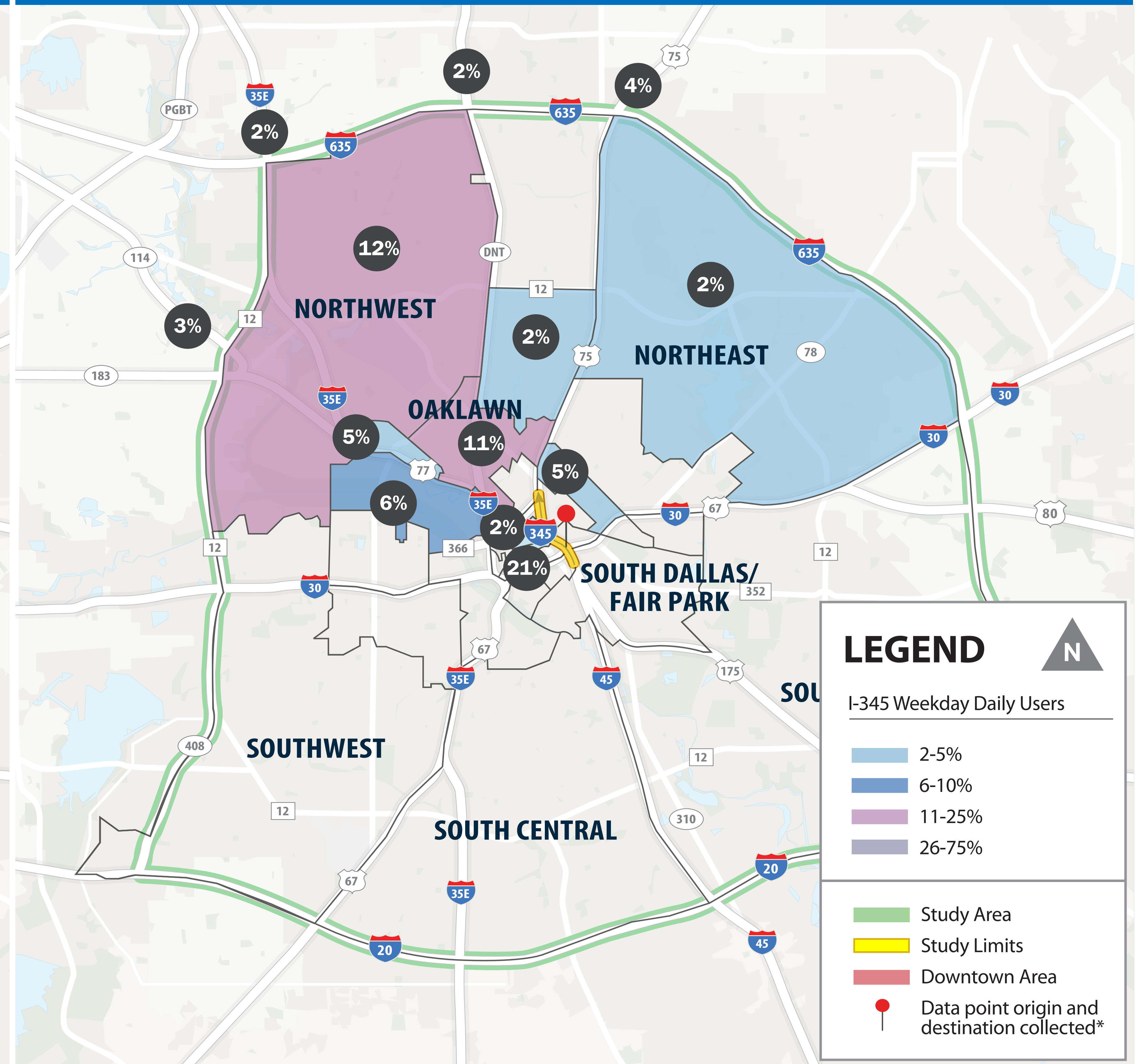
The distribution shown is approximately 77% of the AM Peak Period ramp traffic. Approximately 7% of the remaining traffic is disbursed within the study area in multiple zones with small distributions. Approximately 16% of the traffic leaves the study area through other roadways (minor arterials) not collected in the data.

ORIGIN MAP



This is the same information presented at the June 2021 public meetings.

DESTINATION MAP



*Volume at the data point is approximately 8,900 on the ramp in the AM peak period (6-10 AM)

LEGEND

I-345 Weekday Daily Users

- 2-5%
- 6-10%
- 11-25%
- 26-75%

Study Area

Study Limits

Downtown Area

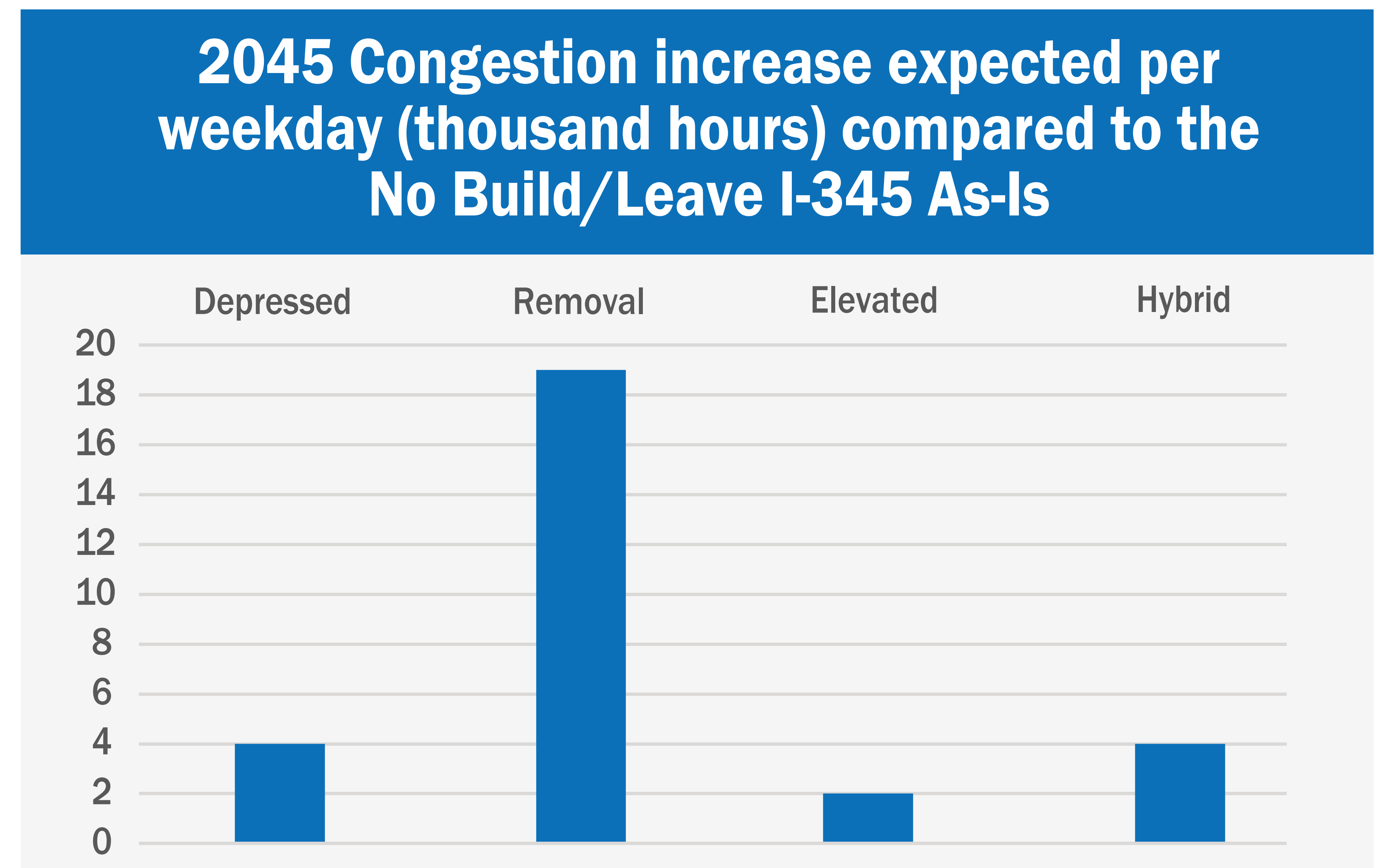
Data point origin and destination collected*



KEY TAKEAWAY

The Removal alternative significantly increases the hours of congestion per weekday compared to the No Build/Leave I-345 As-Is alternative due to the elimination of the freeway connection from I-30 to Woodall Rodgers Freeway.

Alternative	2045 Congestion increase expected per weekday (thousand hours) compared to the No Build/Leave I-345 As-Is
Depressed	4
Removal	19
Elevated	2
Hybrid	4



This is the same information provided by NCTCOG that was presented at the June 2021 public meetings.



KEY TAKEAWAY

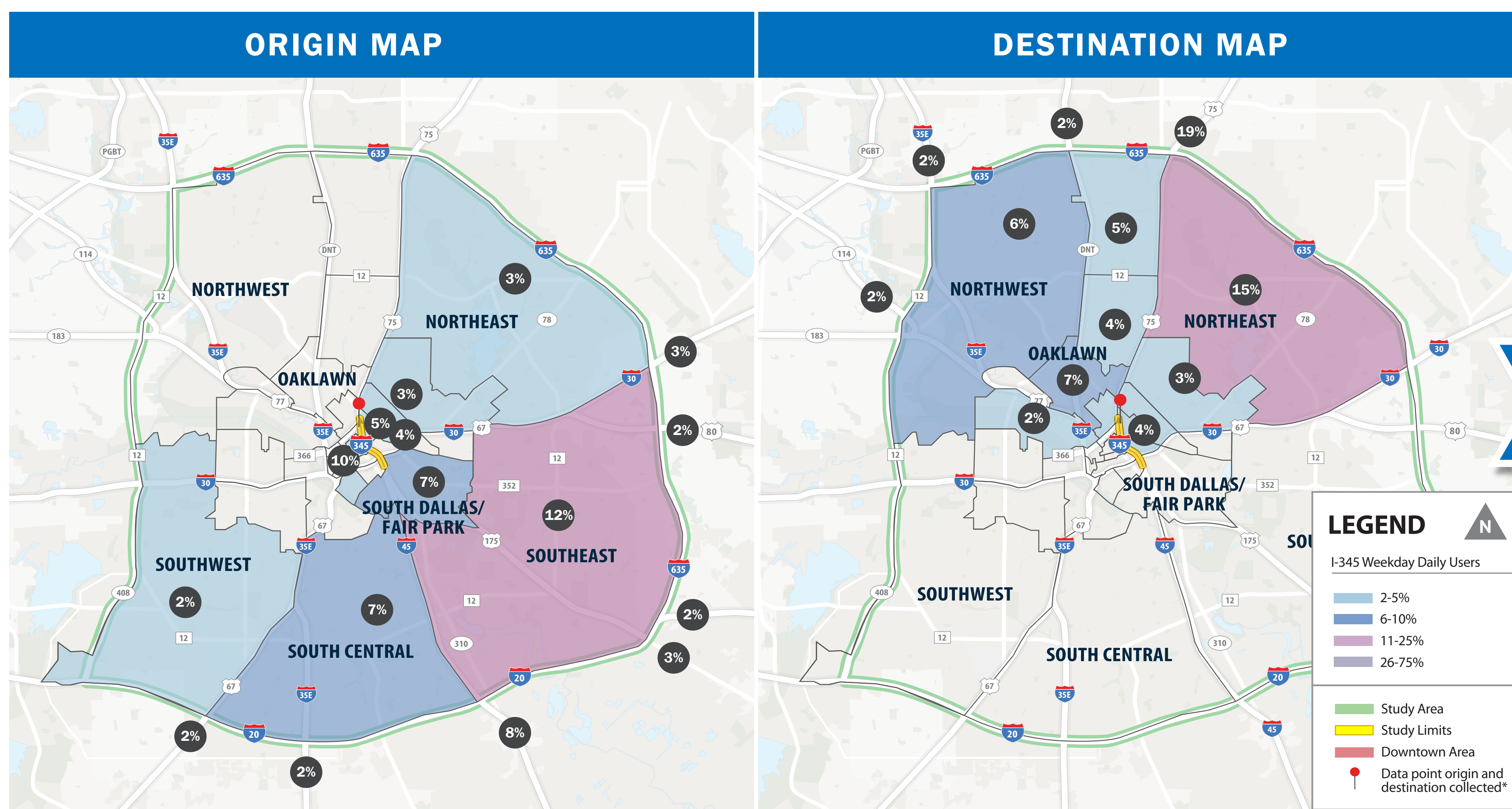
The origin and destination data was used to identify zones (areas of interest based on input) to evaluate the proposed build alternatives impact to 2045 travel times between zones. Several representative travel times are presented.

How was the travel time developed?

The travel time percent change shown on the following exhibits was developed using the 2045 calibrated subarea regional model*. It is an average percent change of 2045 projected travel times when compared to the No Build/Leave I-345 As-Is Alternative.

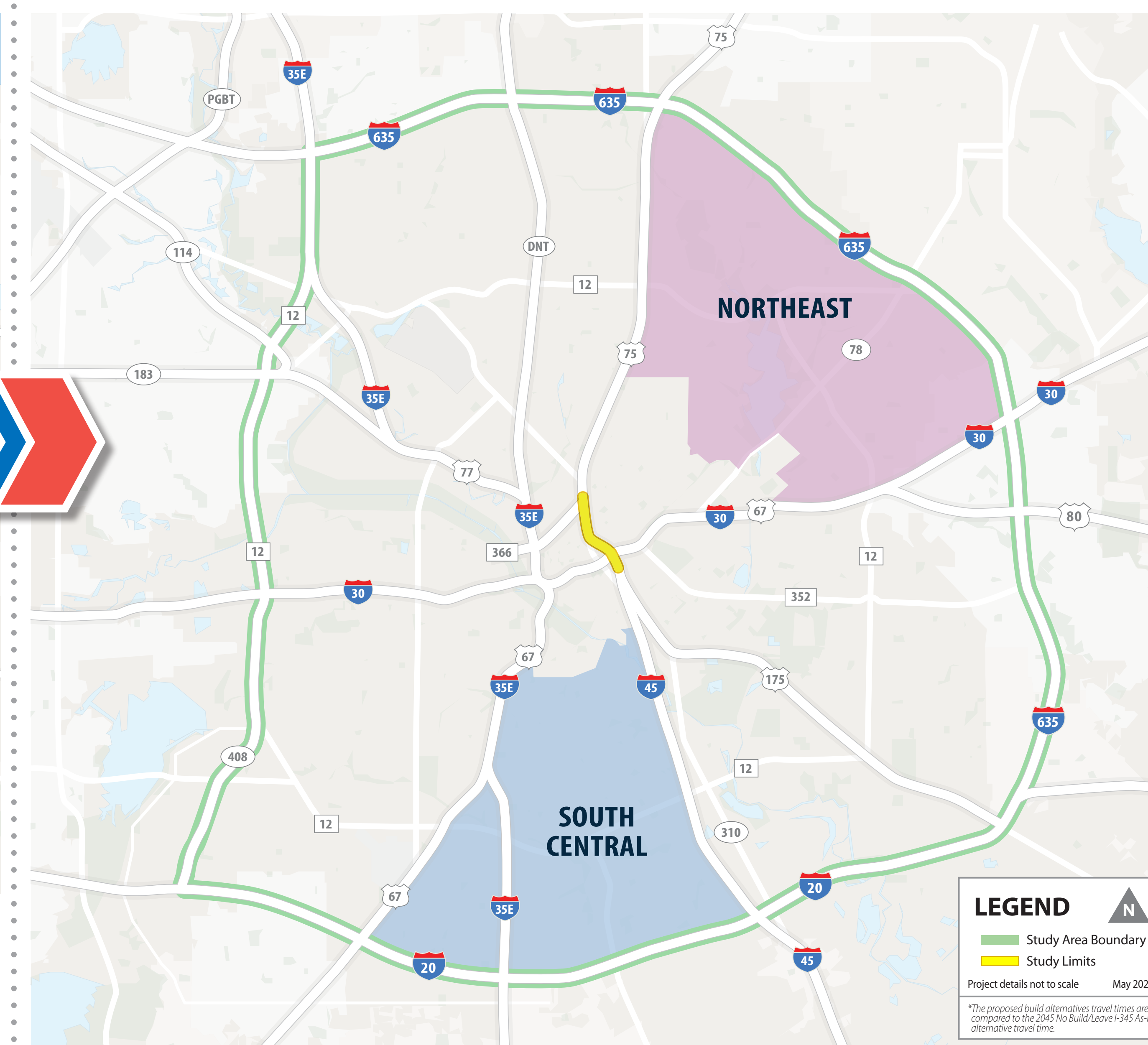
Below is an example of origin destination data (left image) used to identify zones to develop the representative travel time exhibits (right image).

Origin & Destination Distribution of Thru Traffic Northbound on I-345



*The 2045 calibrated subarea model is based on of the 2045 NCTCOG regional traffic model to include study area traffic counts and adjacent projects. Adjacent project updates included the Horseshoe project, I-35E Lowest Stemmons, I-30 Canyon, I-30 East Corridor, and SM Wright (PH 1 and PH 2) as of latest plans available (May 2021).

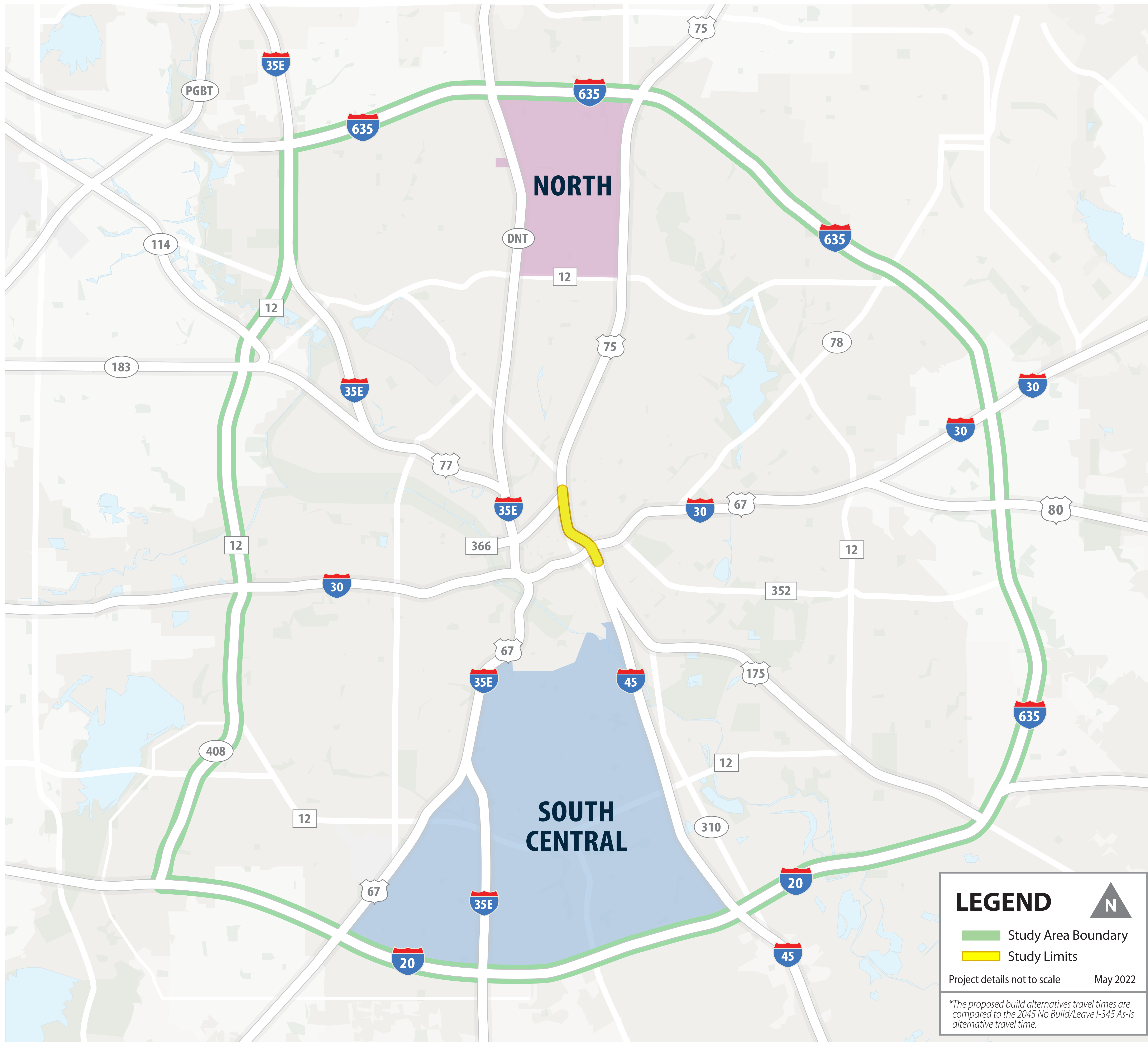
Round Trip between South Central and Northeast 2045 Travel Times



KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the south central and northeast zones. Impacts to 2045 travel times between the south central and northeast zones are significantly impacted with the Removal alternative.

South Central to Northeast						
Percent Increase in Travel Time (6:30-9:00AM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed	🟢	🟢	🟢	🟢	🟢	🟢
Removal	🟢	🟡	🔴	🔴	🔴	🔴
Elevated	🟢	🟢	🟢	🟢	🟢	🟢
Hybrid	🟢	🟢	🟢	🟢	🟢	🟢
Northeast to South Central						
Percent Increase in Travel Time (3:00-6:30PM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed	🟢	🟢	🟢	🟢	🟢	🟢
Removal	🟢	🟡	🔴	🔴	🔴	🔴
Elevated	🟢	🟢	🟢	🟢	🟢	🟢
Hybrid	🟢	🟢	🟢	🟢	🟢	🟢



KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the south central and north zones. Impacts to 2045 travel times between the south central and north zones are significantly impacted with the Removal alternative.

South Central to North

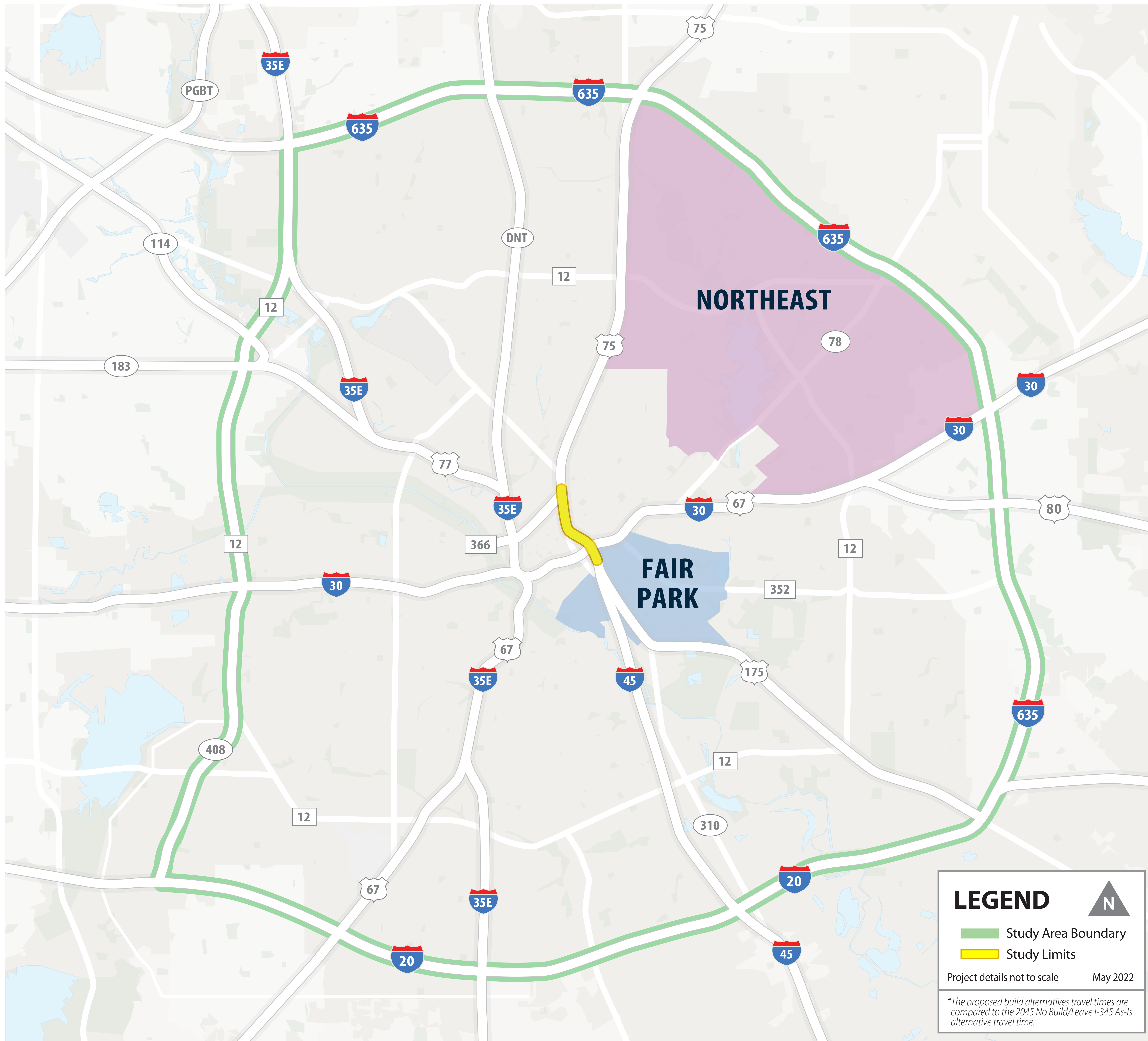
Percent Increase in Travel Time (6:30-9:00AM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						

North to South Central

Percent Increase in Travel Time (3:00-6:30PM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the Fair Park and northeast zones. Impacts to 2045 travel times between the Fair Park and northeast zones are significantly impacted with the Removal alternative.

Fair Park to Northeast

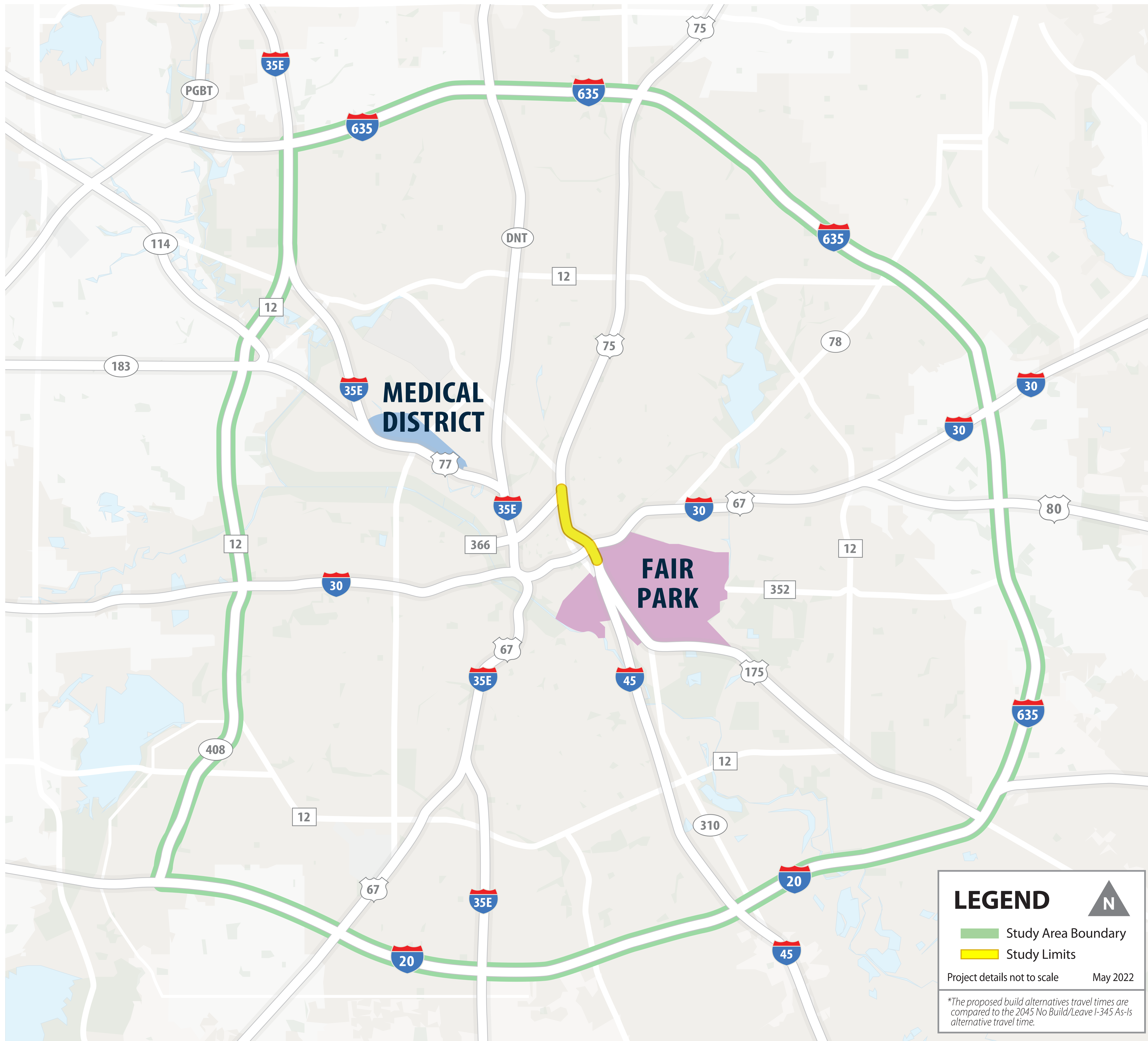
Percent Increase in Travel Time (6:30-9:00AM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						

Northeast to Fair Park

Percent Increase in Travel Time (3:00-6:30PM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



LEGEND

- Study Area Boundary
- Study Limits

Project details not to scale May 2022

*The proposed build alternatives travel times are compared to the 2045 No Build/Leave I-345 As-Is alternative travel time.

KEY TAKEAWAY

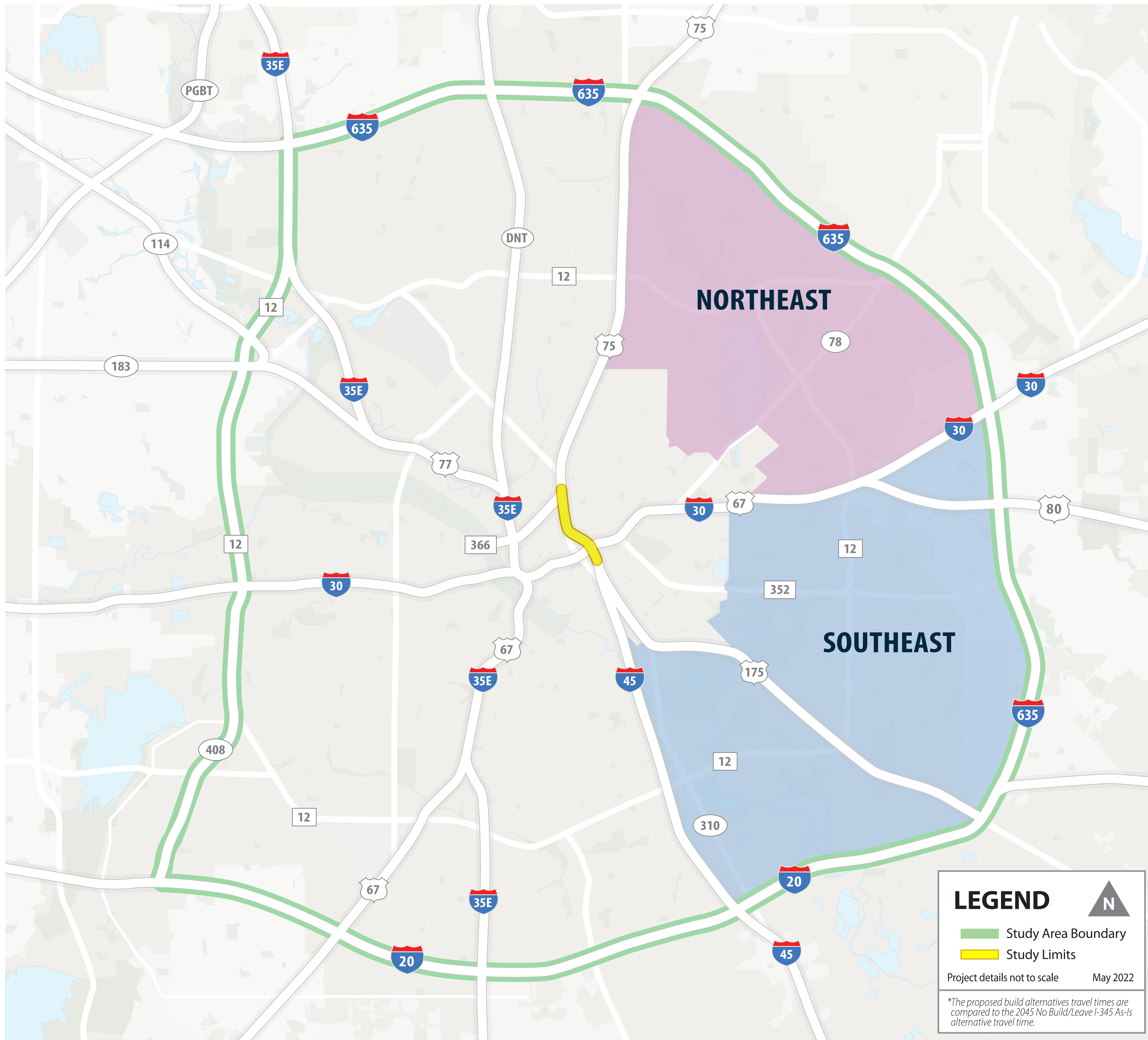
The Elevated and Hybrid alternatives have negligible impacts to travel times between the Fair Park and Medical District zones. Impacts to 2045 travel times between the Fair Park and Medical District zones are significantly impacted with the Removal alternative.

Fair Park to Medical District						
Percent Increase in Travel Time (6:30-9:00AM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						
Medical District to Fair Park						
Percent Increase in Travel Time (3:00-6:30PM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



Feasibility Study

Round Trip between Southeast and Northeast 2045 Travel Times



LEGEND

- Study Area Boundary
- Study Limits

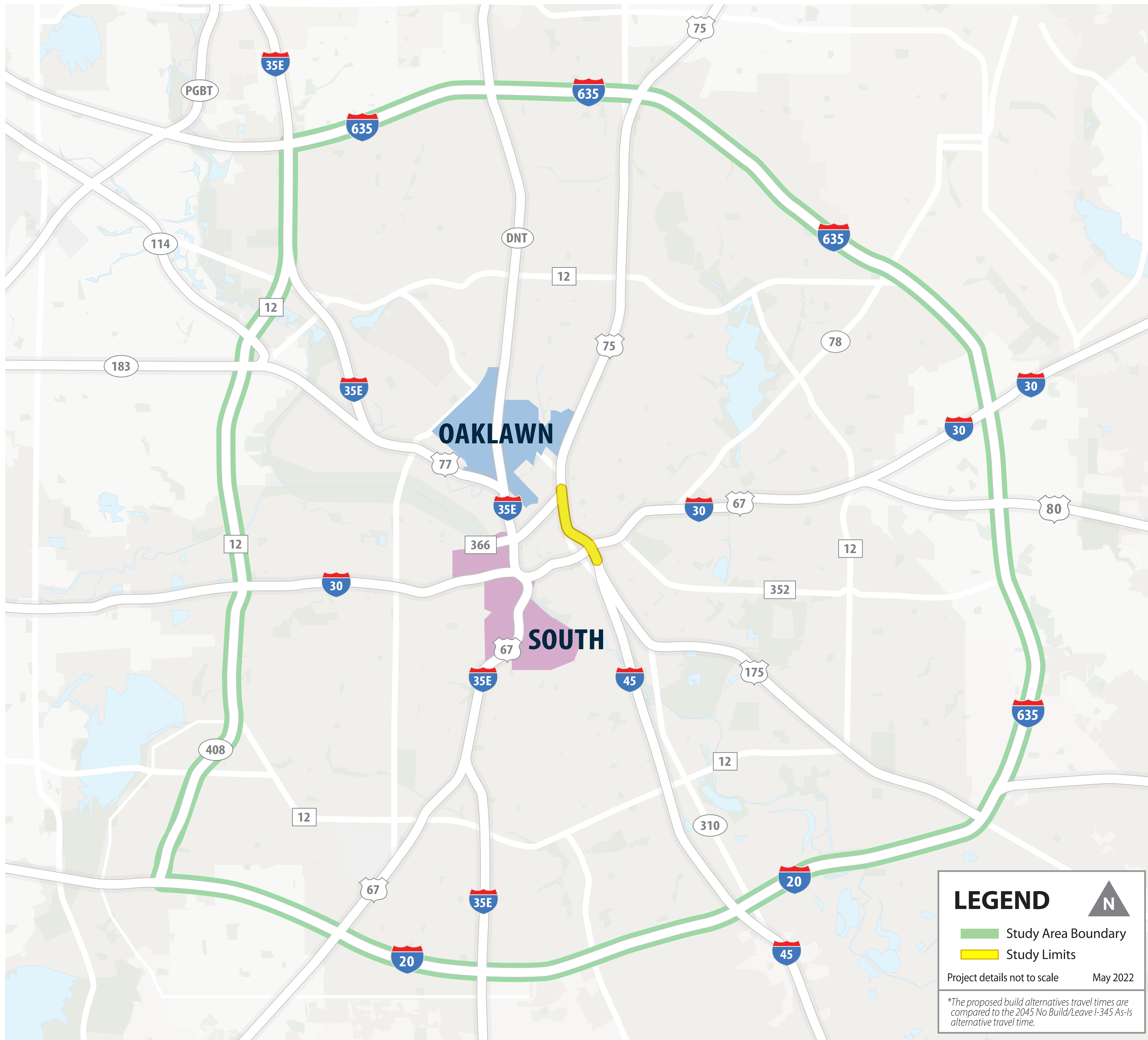
Project details not to scale May 2022

*The proposed build alternatives travel times are compared to the 2045 No Build/Leave I-345 As-Is alternative travel time.

KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the southeast and northeast zones. Impacts to 2045 travel times between the southeast and northeast zones are significantly impacted with the Removal alternative.

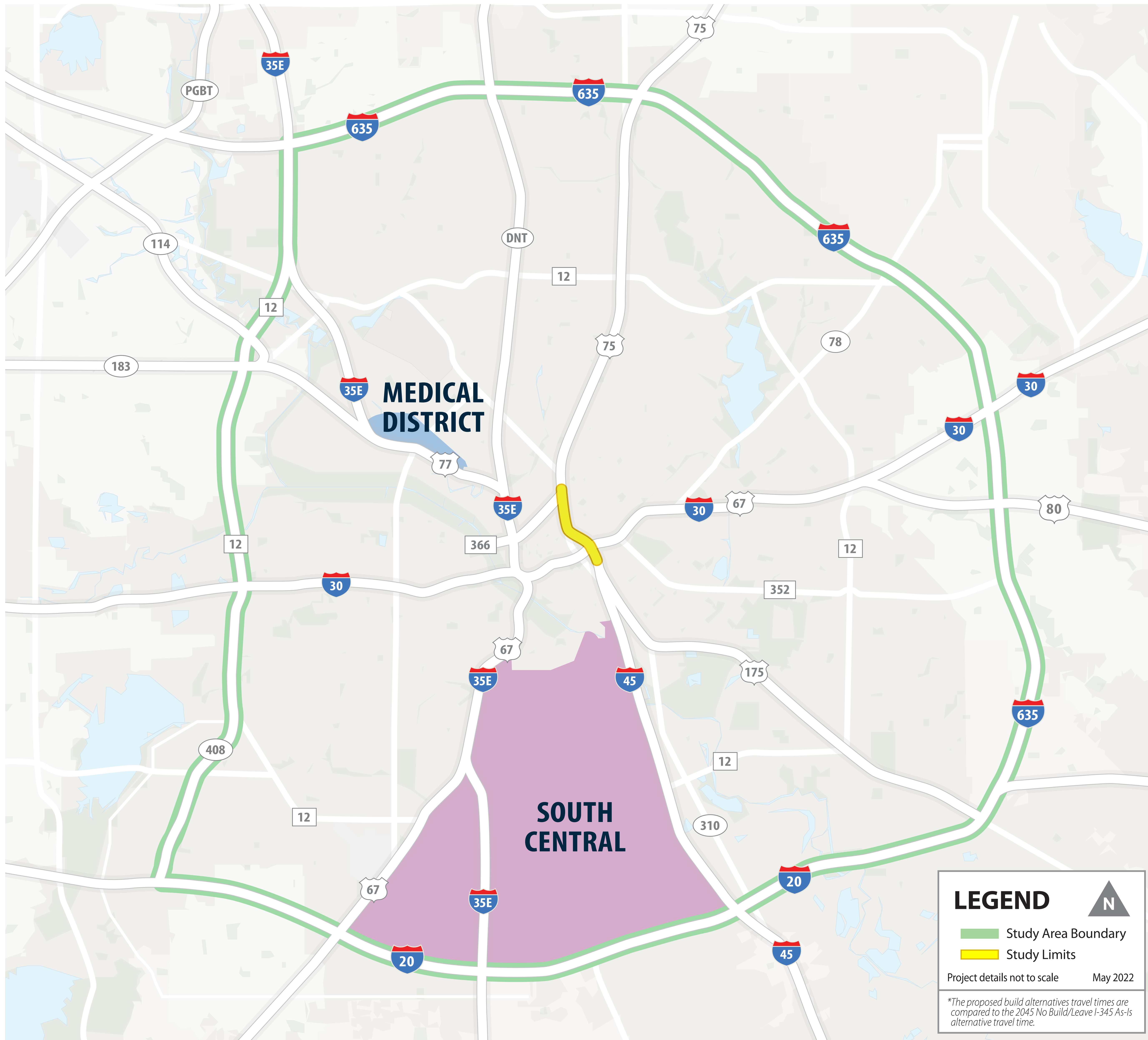
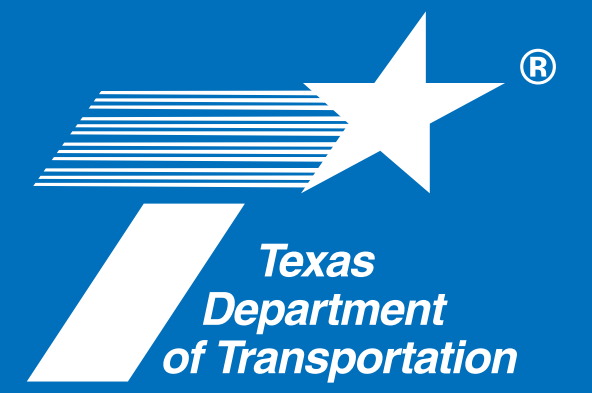
Southeast to Northeast						
Percent Increase in Travel Time (6:30-9:00AM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						
Northeast to Southeast						
Percent Increase in Travel Time (3:00-6:30PM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



KEY TAKEAWAY

The Elevated and Hybrid alternatives have negligible impacts to travel times between the south and Oaklawn zones. Impacts to 2045 travel times between the south and Oaklawn zones are significantly impacted with the Removal alternative.

South to Oaklawn						
Percent Increase in Travel Time (6:30-9:00AM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						
Oaklawn to South						
Percent Increase in Travel Time (3:00-6:30PM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



LEGEND

- Study Area Boundary
- Study Limits

Project details not to scale May 2022

*The proposed build alternatives travel times are compared to the 2045 No Build/Leave I-345 As-Is alternative travel time.

KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the south central and Medical District zones. Impacts to 2045 travel times between the south central and Medical District zones are significantly impacted with the Removal alternative.

South Central to Medical District

Percent Increase in Travel Time (6:30-9:00AM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						

Medical District to South Central

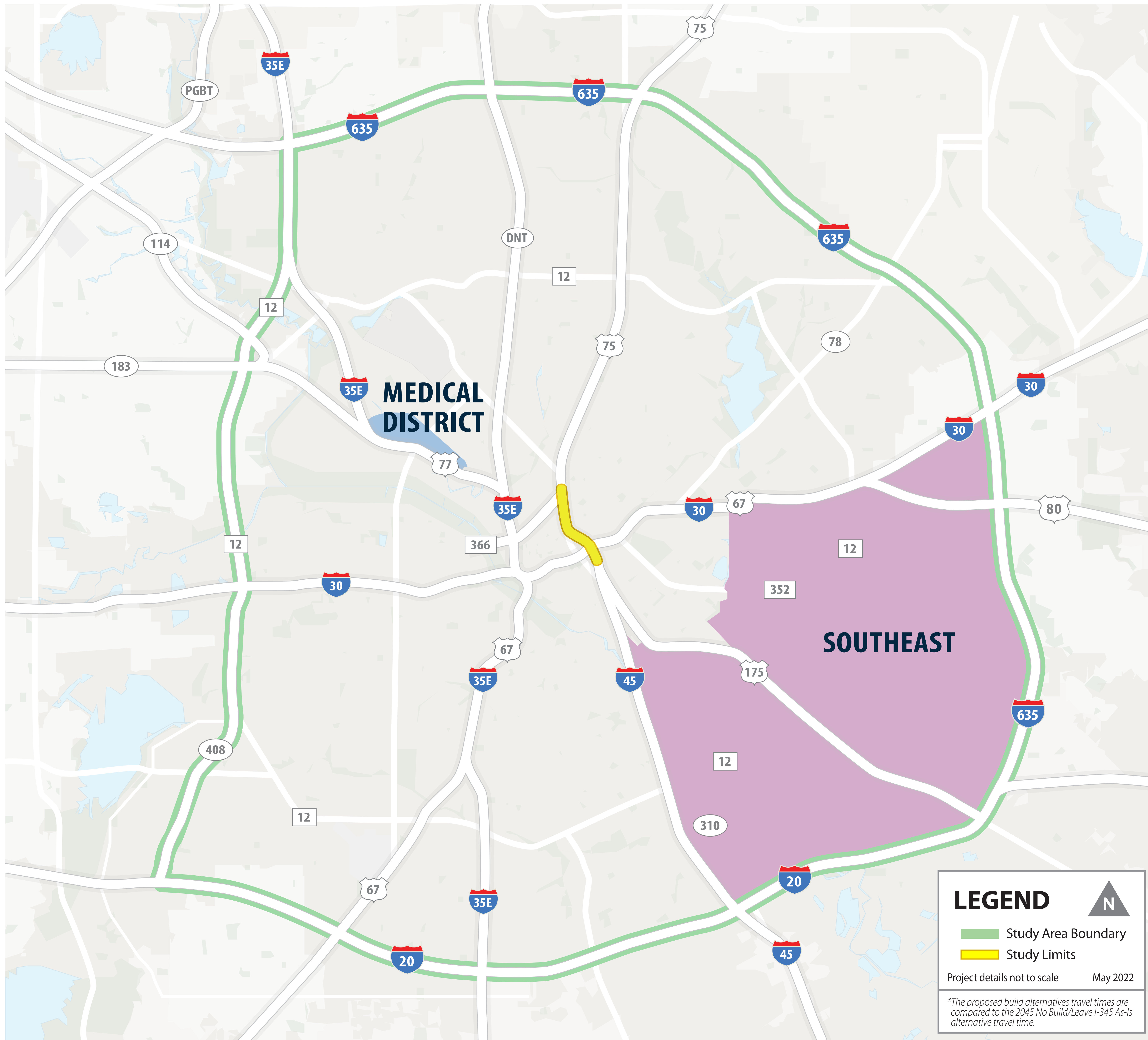
Percent Increase in Travel Time (3:00-6:30PM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



Feasibility Study

Round Trip between Southeast and Medical District 2045 Travel Times



LEGEND

Study Area Boundary
 Study Limits

Project details not to scale May 2022

*The proposed build alternatives travel times are compared to the 2045 No Build/Leave I-345 As-Is alternative travel time.

KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the southeast and Medical District zones. Impacts to 2045 travel times between the southeast and Medical District zones are significantly impacted with the Removal alternative.

Southeast to Medical District

Percent Increase in Travel Time (6:30-9:00AM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						

Medical District to Southeast

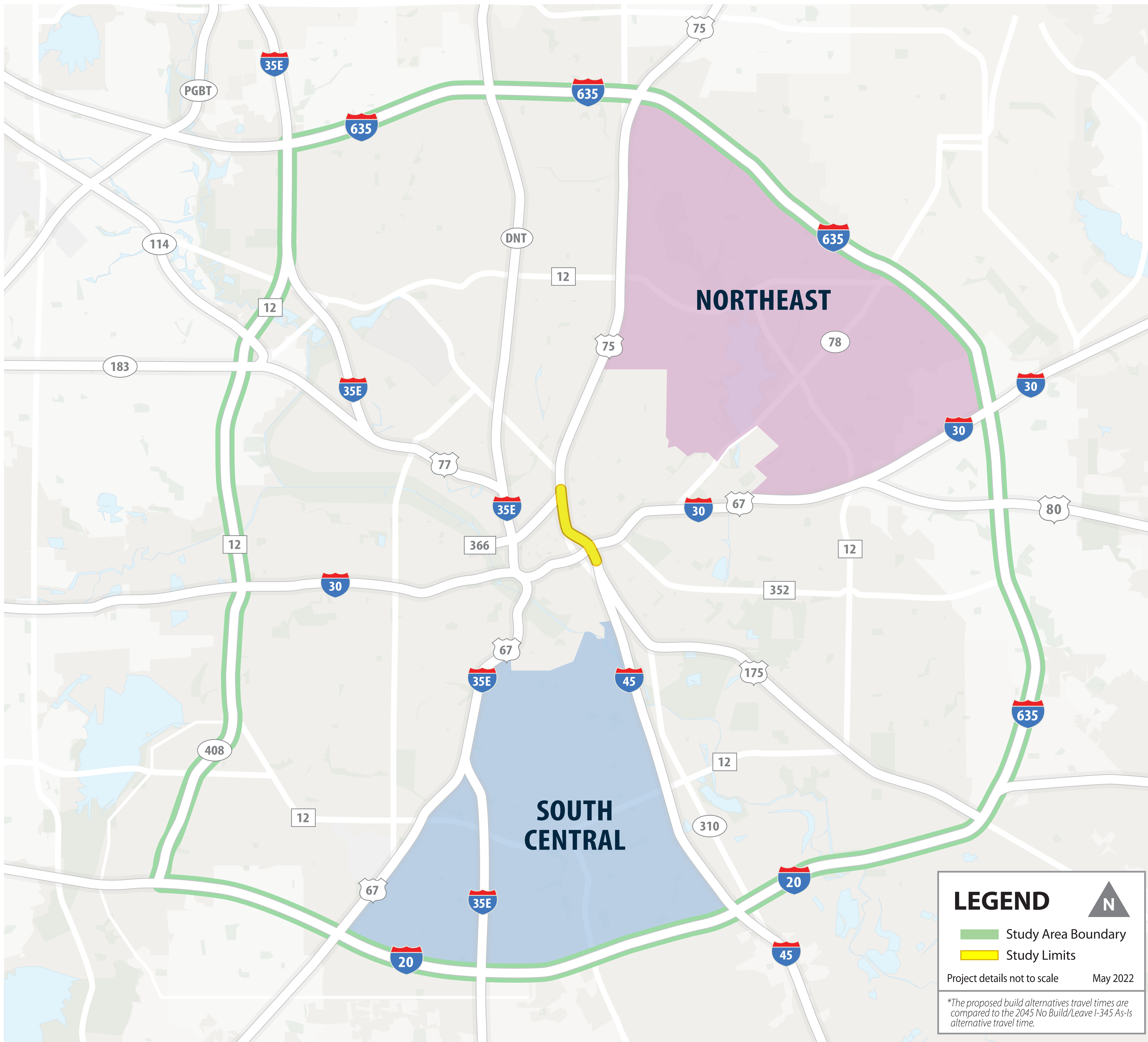
Percent Increase in Travel Time (3:00-6:30PM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



Feasibility Study

Round Trip between South Central and Northeast 2045 Travel Times



LEGEND

- Study Area Boundary
- Study Limits

Project details not to scale May 2022

*The proposed build alternatives travel times are compared to the 2045 No Build/Leave I-345 As-Is alternative travel time.

KEY TAKEAWAY

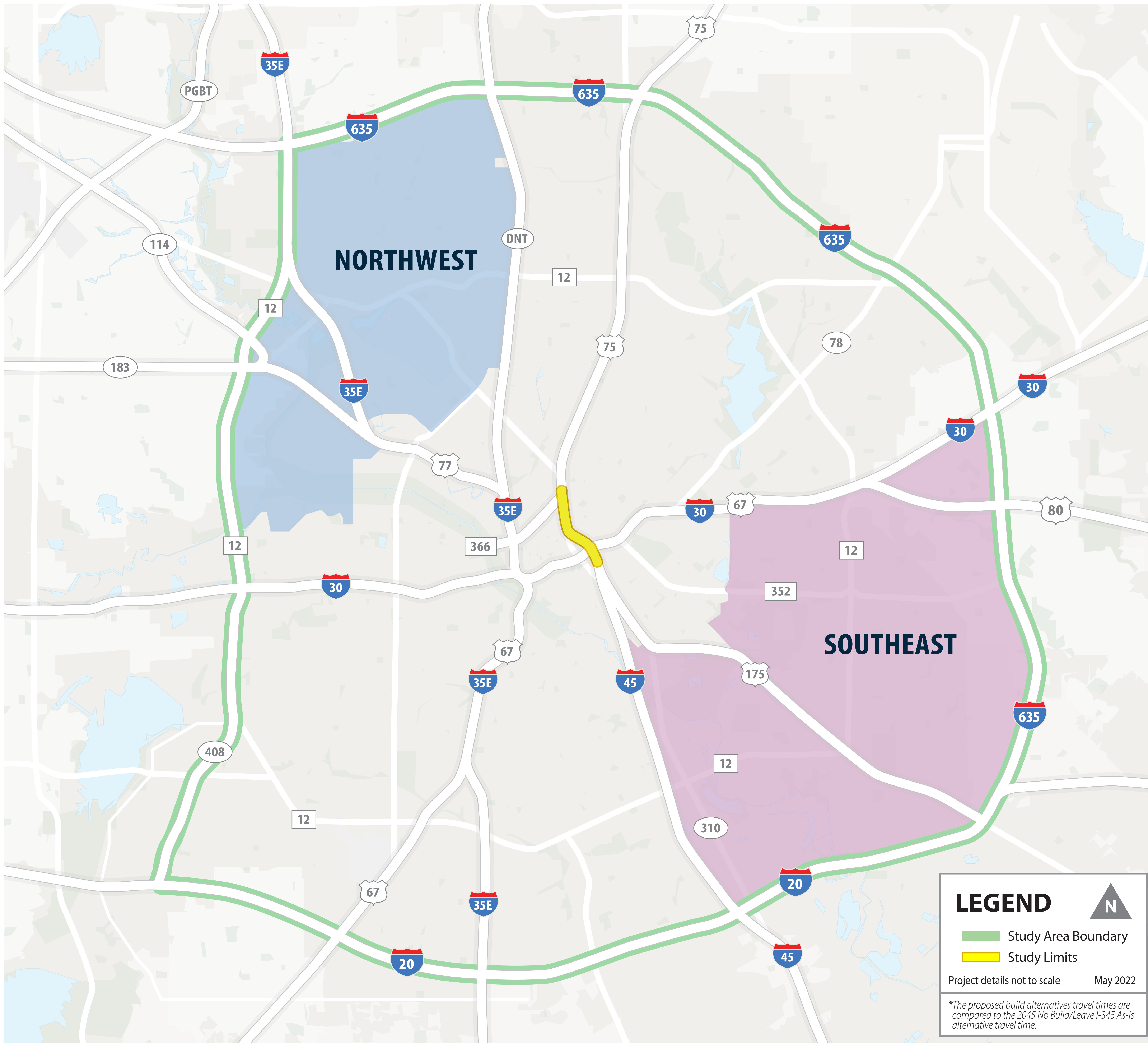
The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the south central and northeast zones. Impacts to 2045 travel times between the south central and northeast zones are significantly impacted with the Removal alternative.

South Central to Northeast						
Percent Increase in Travel Time (6:30-9:00AM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						
Northeast to South Central						
Percent Increase in Travel Time (3:00-6:30PM)						
	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



Feasibility Study

Round Trip between Southeast and Northwest 2045 Travel Times



KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the southeast and northwest zones. Impacts to 2045 travel times between the southeast and northwest zones are significantly impacted with the Removal alternative.

Southeast to Northwest

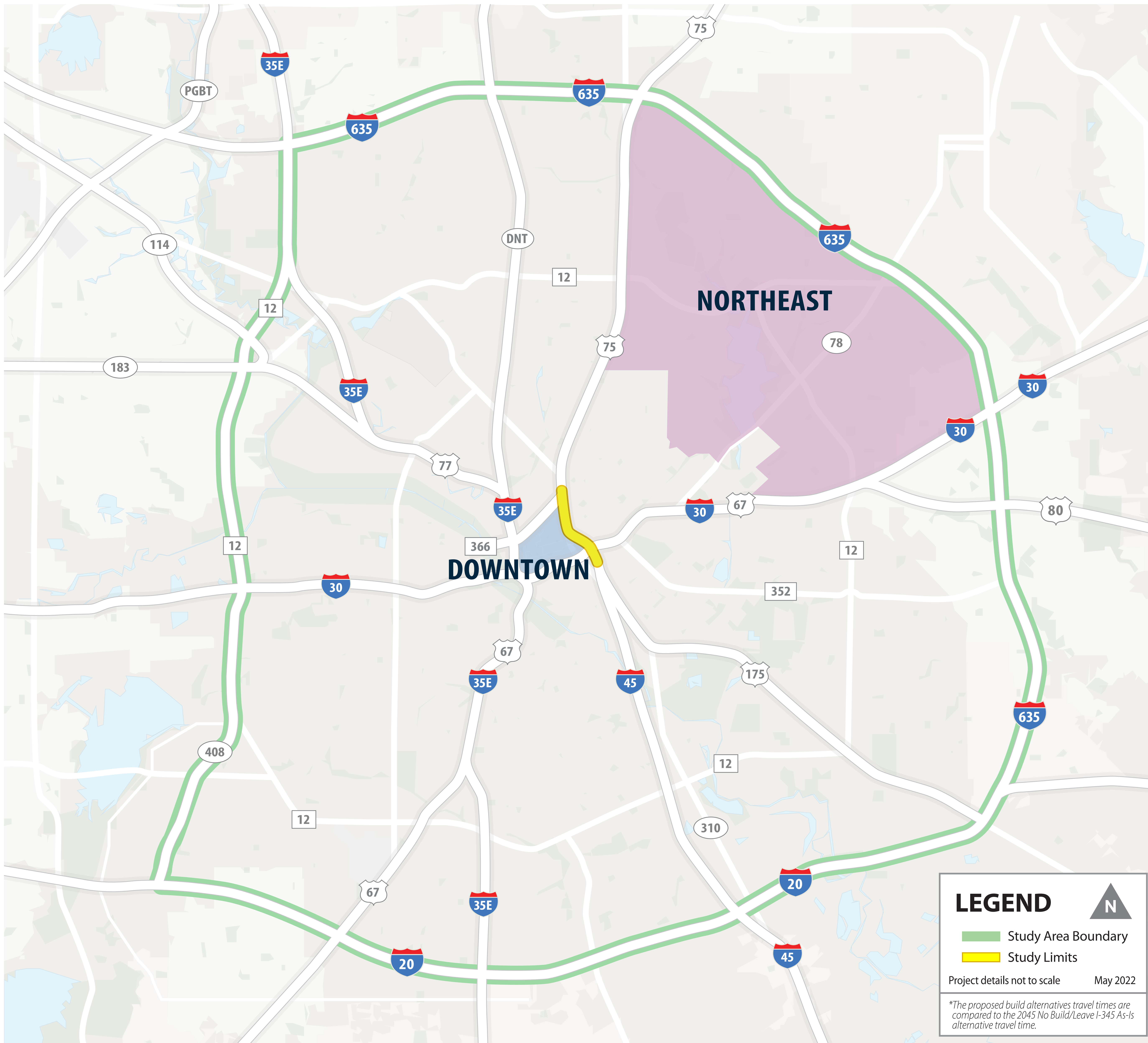
Percent Increase in Travel Time (6:30-9:00AM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						

Northwest to Southeast

Percent Increase in Travel Time (3:00-6:30PM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						



KEY TAKEAWAY

The Depressed, Elevated and Hybrid alternatives have negligible impacts to travel times between the northeast and downtown zones. Impacts to 2045 travel times between the northeast and downtown zones are significantly impacted with the Removal alternative.

Northeast to Downtown

Percent Increase in Travel Time (6:30-9:00AM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						

Downtown to Northeast

Percent Increase in Travel Time (3:00-6:30PM)

	Negligible Impacts	6%-15%	16%-30%	31%-40%	41%-50%	51%-60%
Depressed						
Removal						
Elevated						
Hybrid						