



Feasibility Study

Origin and Destination Traffic Data

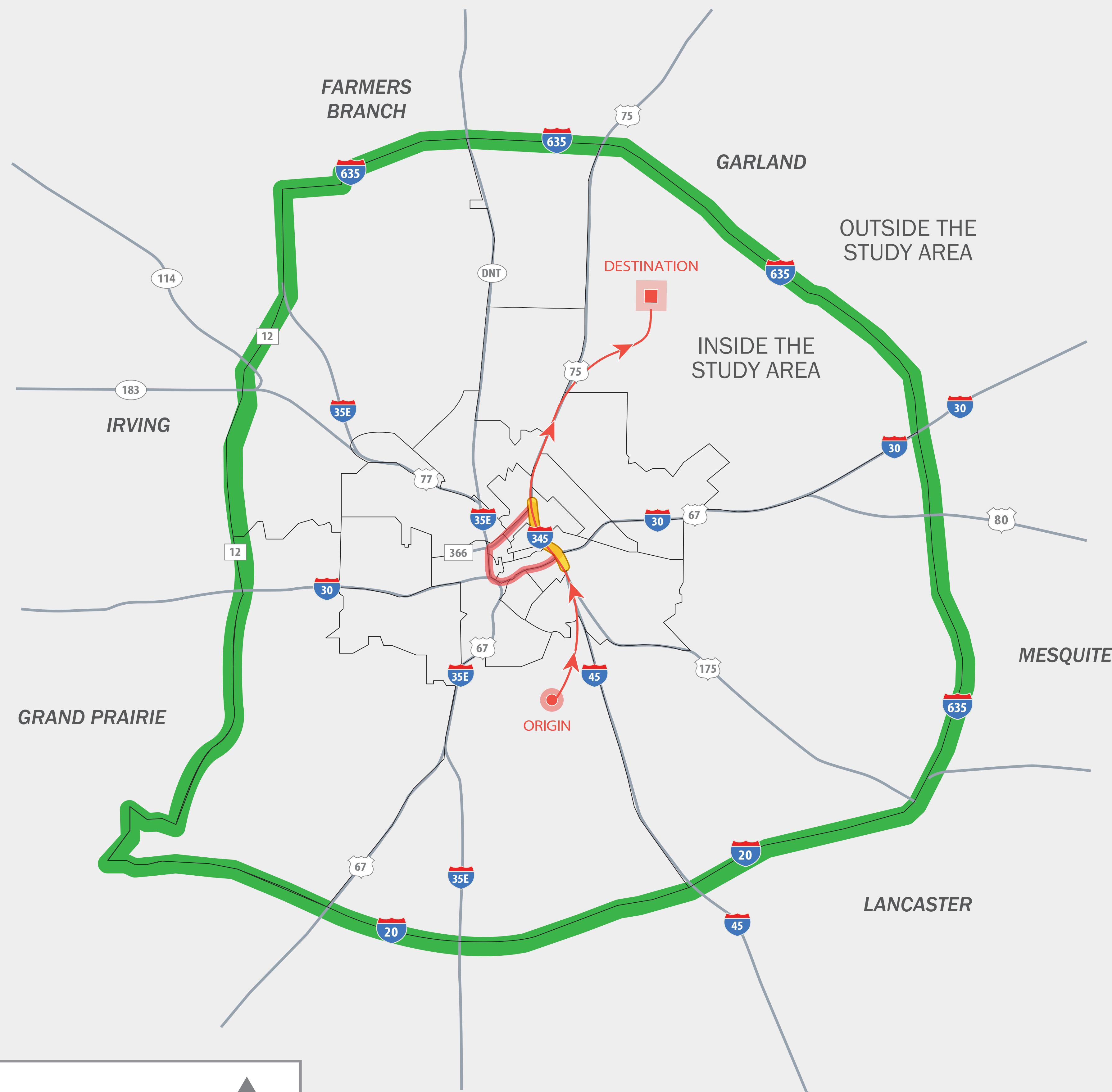


Feasibility Study

Origin and Destination Traffic Data Introduction



Example Origin and Destination Route



LEGEND

Study Area

Study Limits

Downtown Area

Project details not to scale

WHAT?

What is Origin-Destination data?

Origin and destination data represents movement through a geographic space, from an origin (starting point) to a destination (ending point). Origin and 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. TxDOT respects the privacy of the traveling public.

WHO?

Who collected this data?

TxDOT purchased the data from a company called StreetLight that collected and analyzed the data. An interactive dashboard was developed to visualize the data.

WHERE?

Where was this data collected?

The data was collected within the study area (see the green outline in the graphic to the left). It was collected at points throughout the area along mainlanes, ramps, and cross streets. Data was collected on major freeways and arterials within the study area, not just for the limits of the I-345 Feasibility Study.

WHEN?

When was this data collected?

Data was collected over a six-month period from fall 2017 to spring 2018. The data includes weekday and weekend data, as well as daily, mid-day, morning and evening peak periods.

WHY?

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 study limits could potentially impact other freeways and arterials within the study area. It is important to understand where people are coming from and going to as the study progresses.

With the calibrated study area, TxDOT can analyze, visualize and compare the travel patterns in the study area. There are many points and zones within the data that can provide valuable trip information to aid the study in understanding how the public is using I-345.

Following this introduction are representative examples of the data that can be sourced from the dashboard tool. TxDOT is only presenting three selection points at this public meeting; however the study has access to hundreds of data points.



Feasibility Study

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



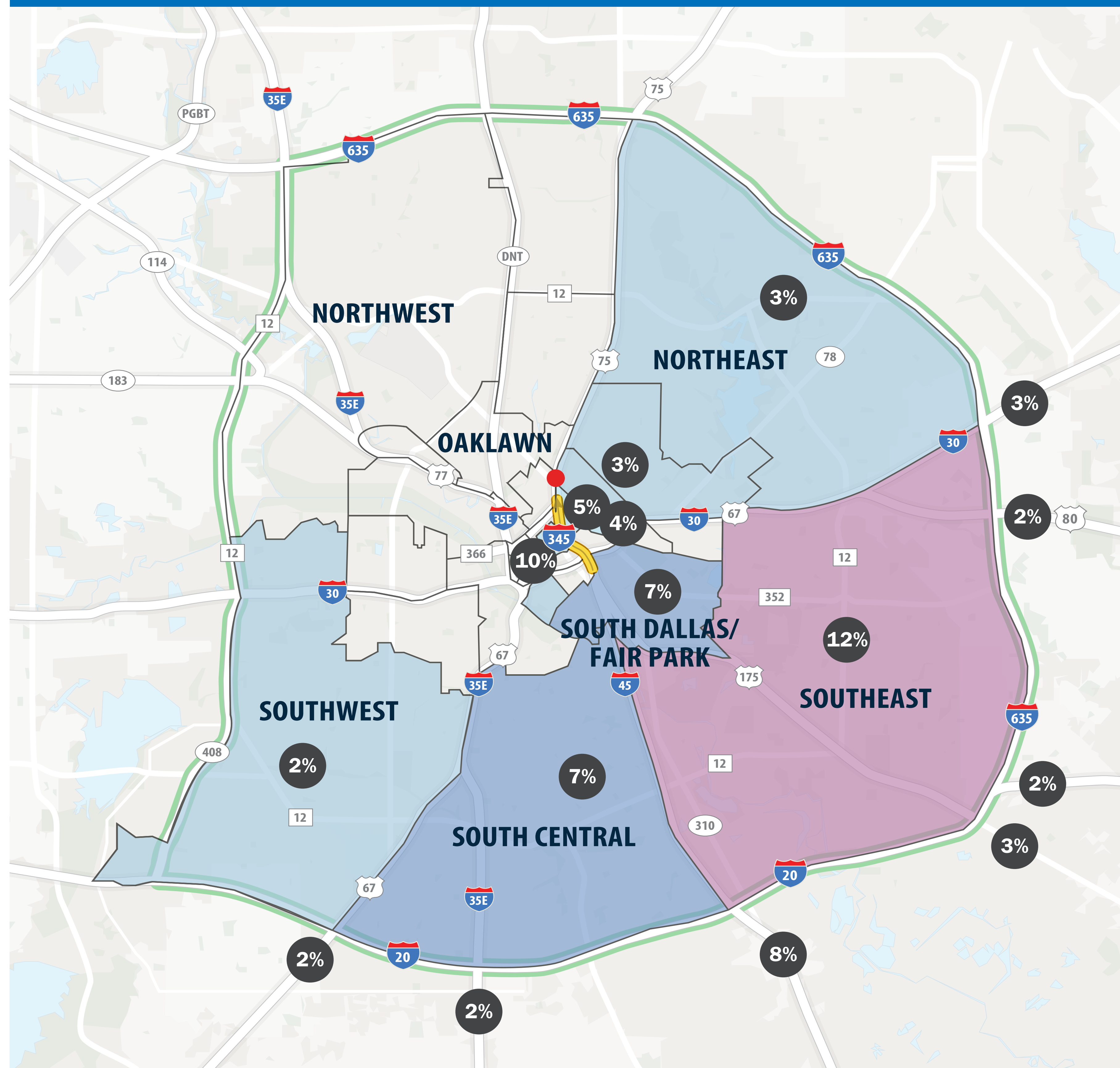
Key Takeaway

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

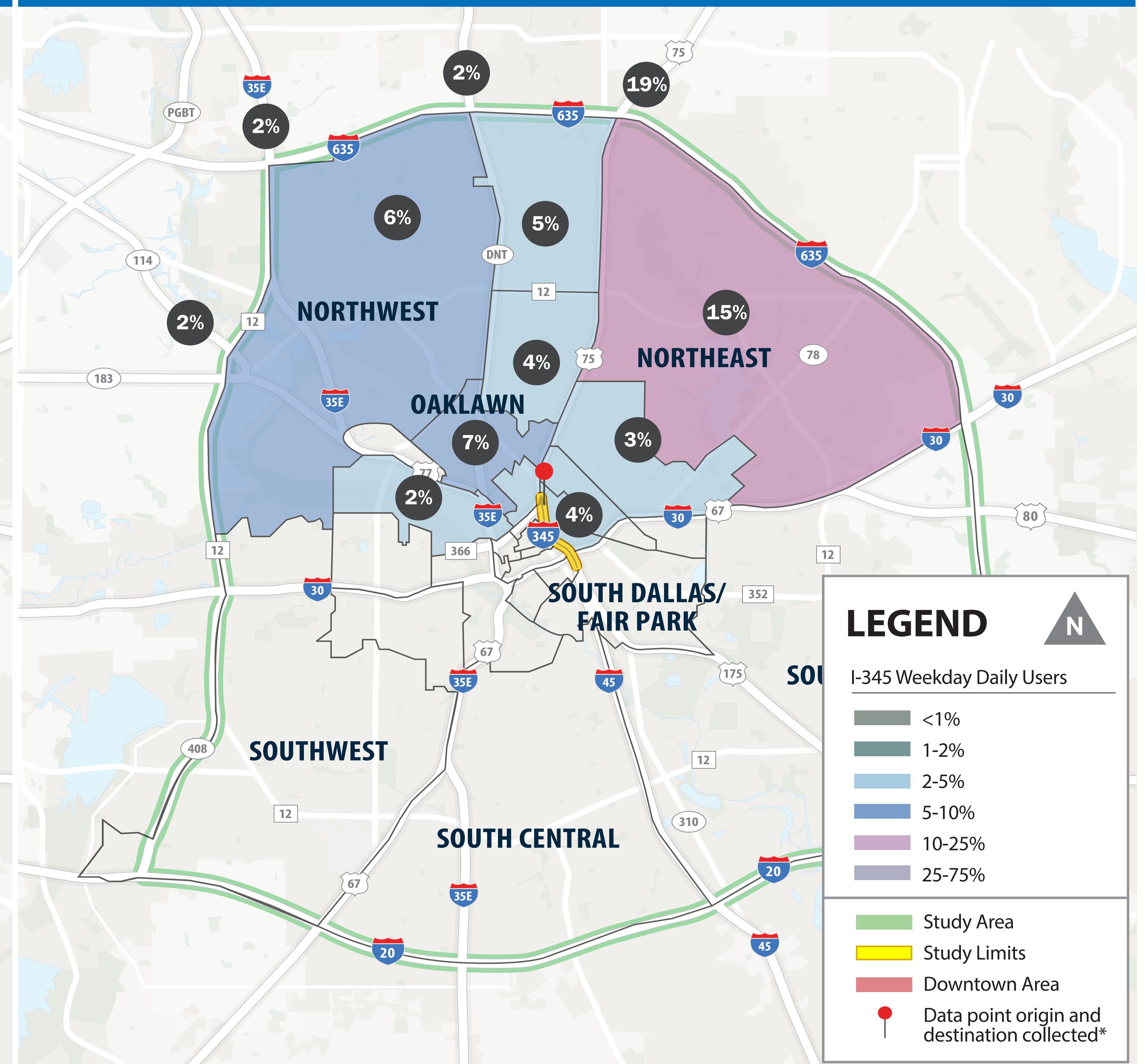
The distribution shown is approximately 75% of the daily traffic traveling northbound on I-345. Approximately 7% of the remaining traffic originates within the study area in multiple zones with small distributions. Approximately 18% of the traffic originates outside the study area through other roadways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

The distribution shown is approximately 70% of the daily traffic traveling northbound on I-345. Approximately 15% 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

- <1%
- 1-2%
- 2-5%
- 5-10%
- 10-25%
- 25-75%

- Study Area
- Study Limits
- Downtown Area
- Data point origin and destination collected*

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

INTERSTATE 345 (I-345)
From I-30 to Woodall Rodgers Freeway (Spur 366)

June 2021
CSJ: 0092-14-094



Feasibility Study

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



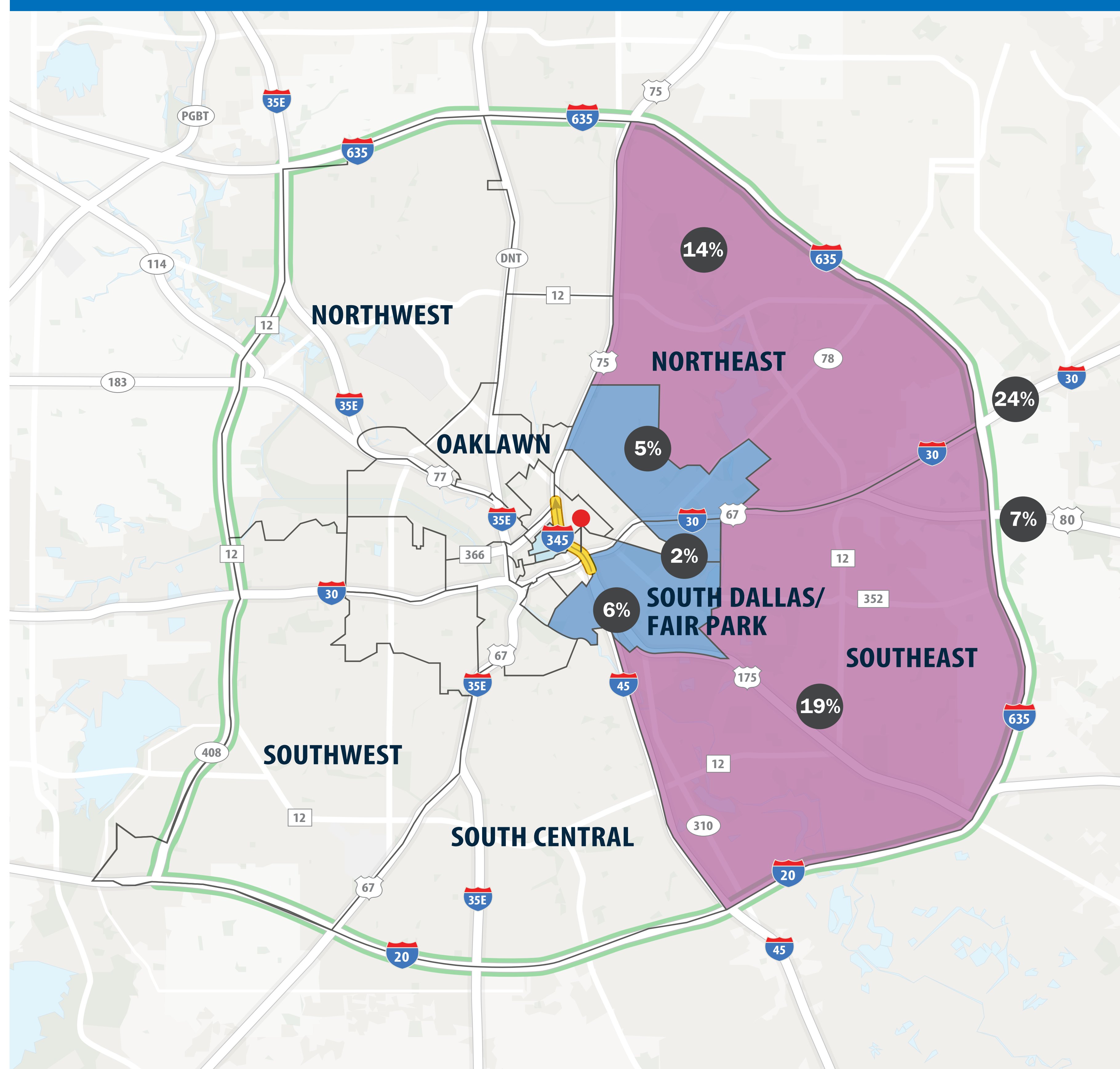
Key Takeaway

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.

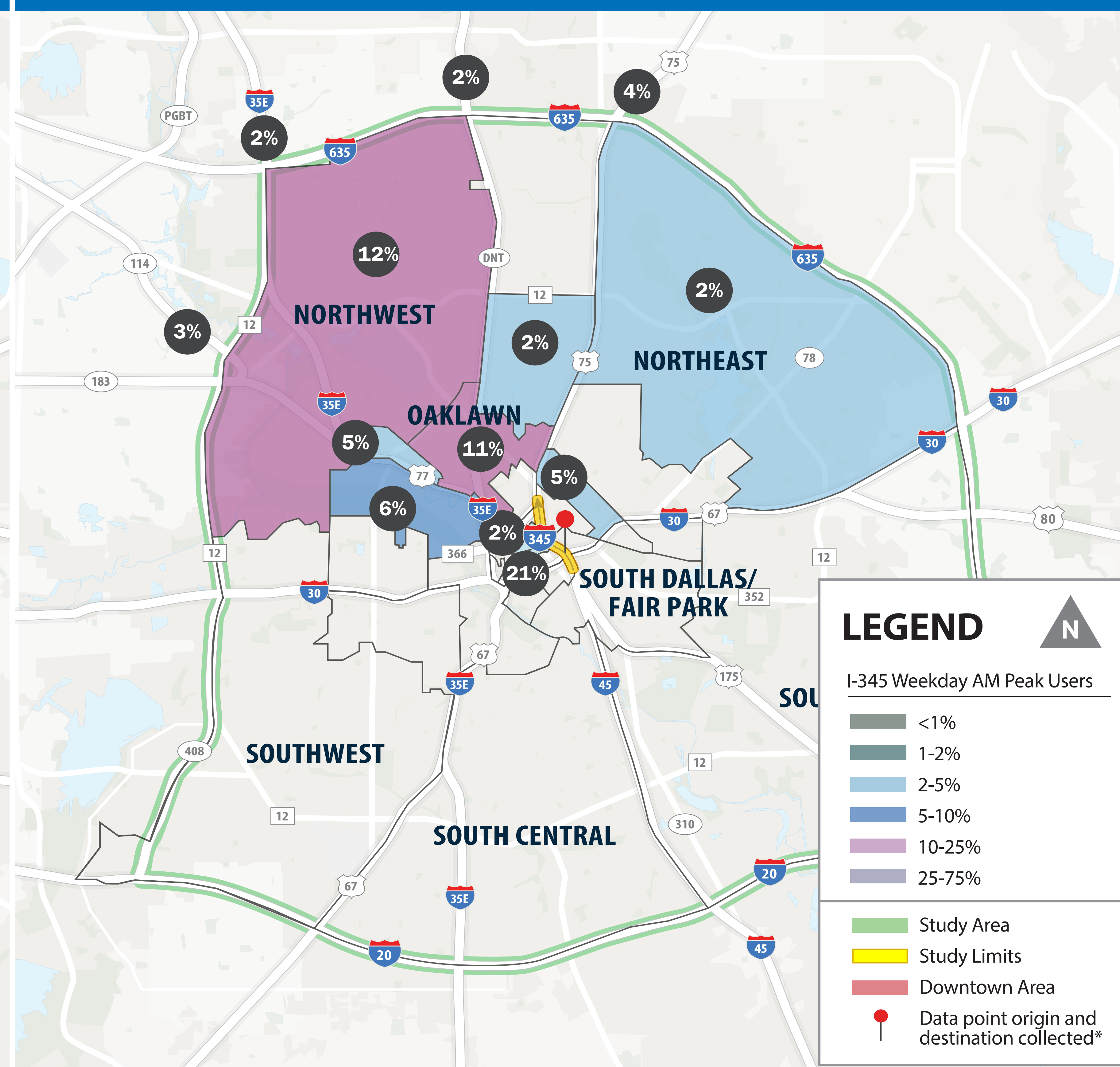
The distribution shown is approximately 77% of the AM Peak Period ramp traffic. Approximately 4% of the remaining traffic originates within the study area in multiple zones with small distributions. Approximately 19% of the traffic originates outside the study area through other roadways (minor arterials) 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



DESTINATION MAP



LEGEND

I-345 Weekday AM Peak Users

- <1%
- 1-2%
- 2-5%
- 5-10%
- 10-25%
- 25-75%

- Study Area
- Study Limits
- Downtown Area
- Data point origin and destination collected*

*Volume at the data point is approximately 8.9k on the ramp in the AM peak period (6-10 AM)

INTERSTATE 345 (I-345)
From I-30 to Woodall Rodgers Freeway (Spur 366)

June 2021
CSJ: 0092-14-094