

The background of the slide features a large, faint, circular seal of the City of North Richland Hills, Texas. The seal contains a five-pointed star in the center, surrounded by a wreath. The words "NORTH RICHLAND HILLS" are written in a circle around the star, and "TEXAS" is at the bottom. The entire slide has a blue gradient background with a subtle geometric pattern.

North Richland Hills City Council Work Session Meeting

September 9, 2024

Traffic Discussion North College Circle


City Council Work Session
September 9, 2024





North College Circle: Brief History

Circa 1963

 North College Circle (Platted 1959/60: Smithfield)

 Fort Worth Christian Campus (Est. 1958)

 College Hills Neighborhood

 Early Connections to FM 1938 Davis
Boulevard & Future Holiday Lane



North College Circle - Overview

Designation:

Minor Collector

Length: 2,850 LF

Width: +/- 36'

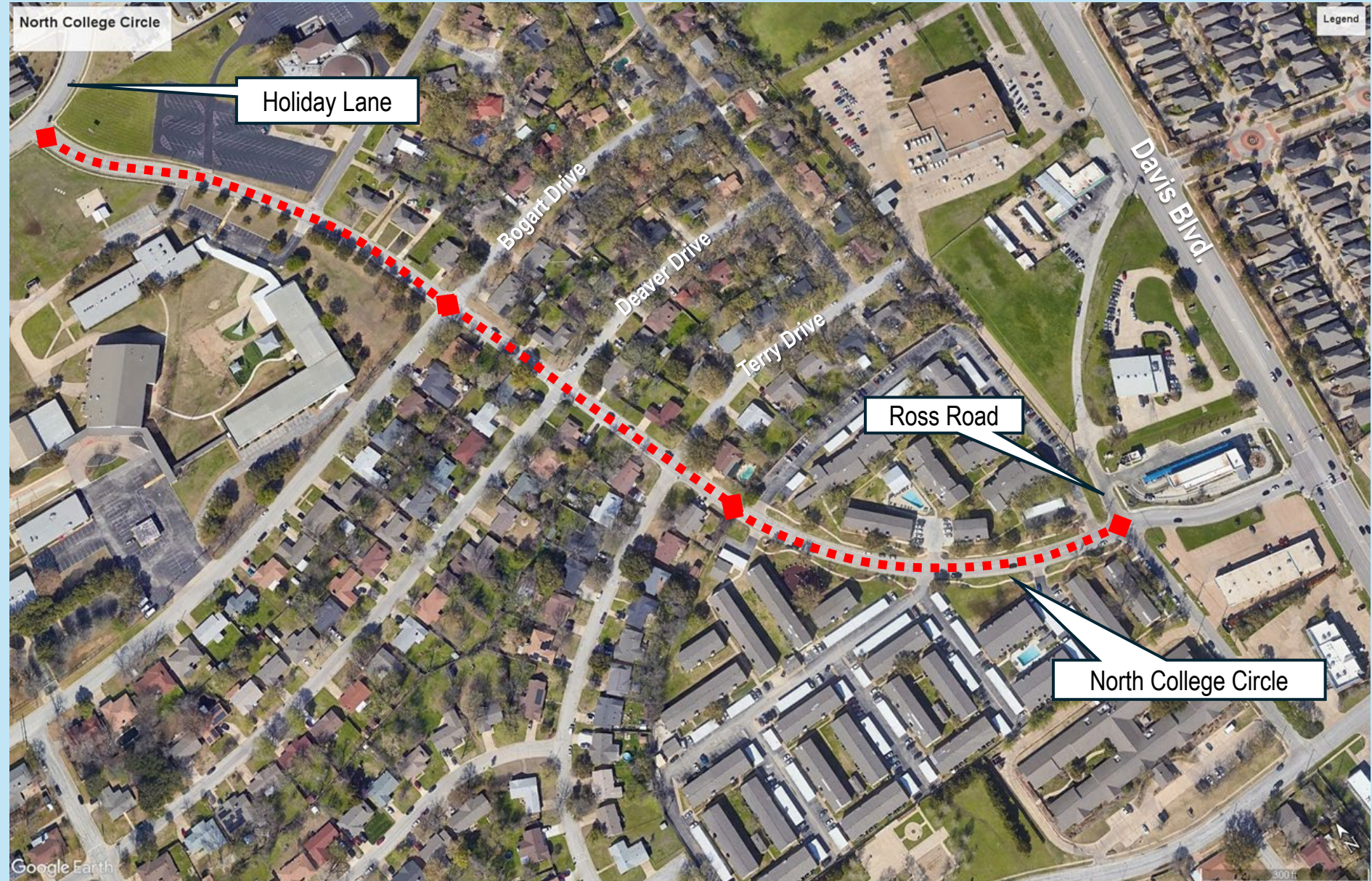
Segment includes:

5 Intersections; 2 of which are controlled by multiway stops and 22 private driveways

Traffic Types: School(s), Churches, Car Wash, Neighborhood, Shopping Center, Apartment and Post Office



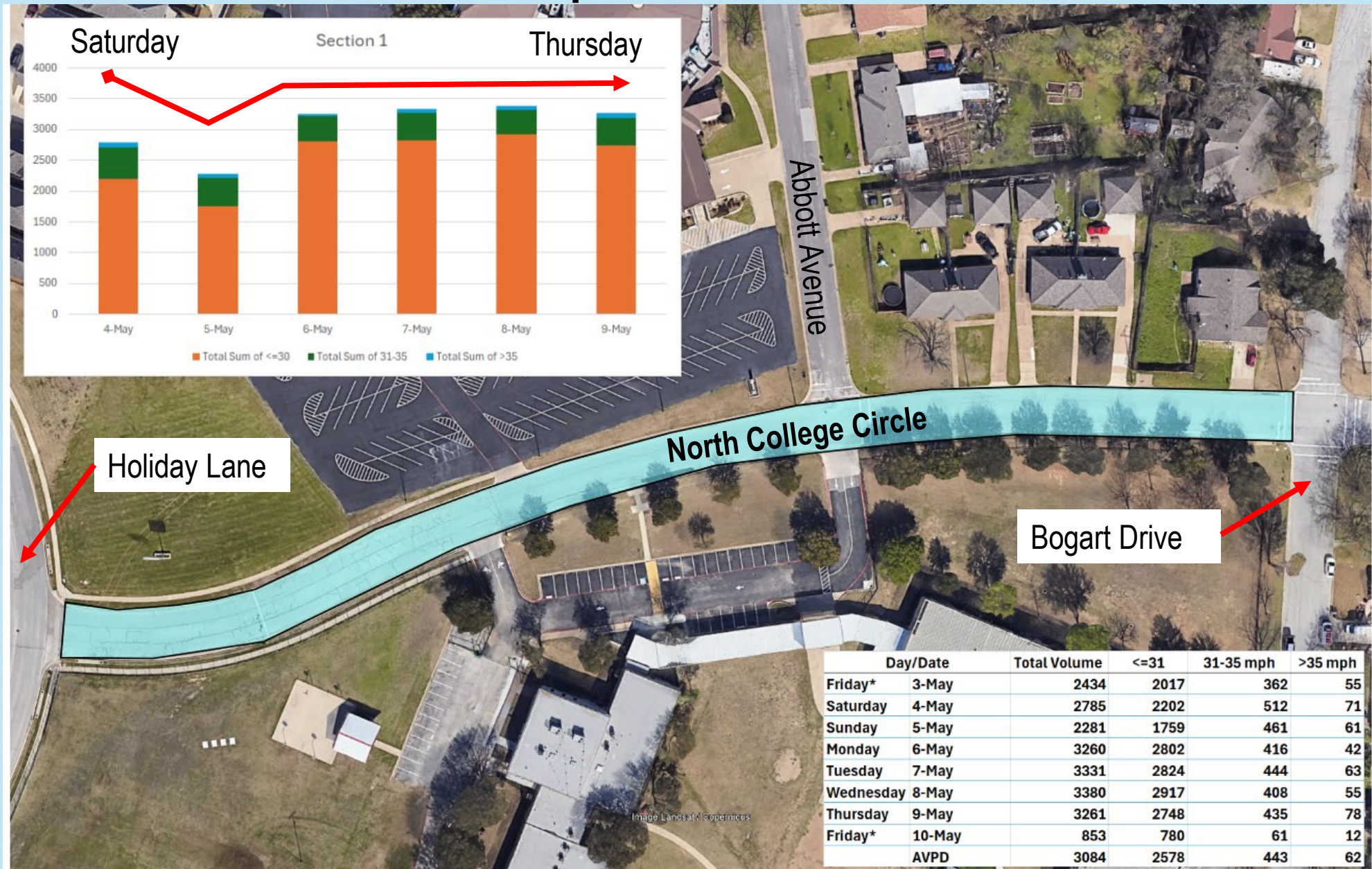
North College Circle: Volume & Speed Study



Study Sections:

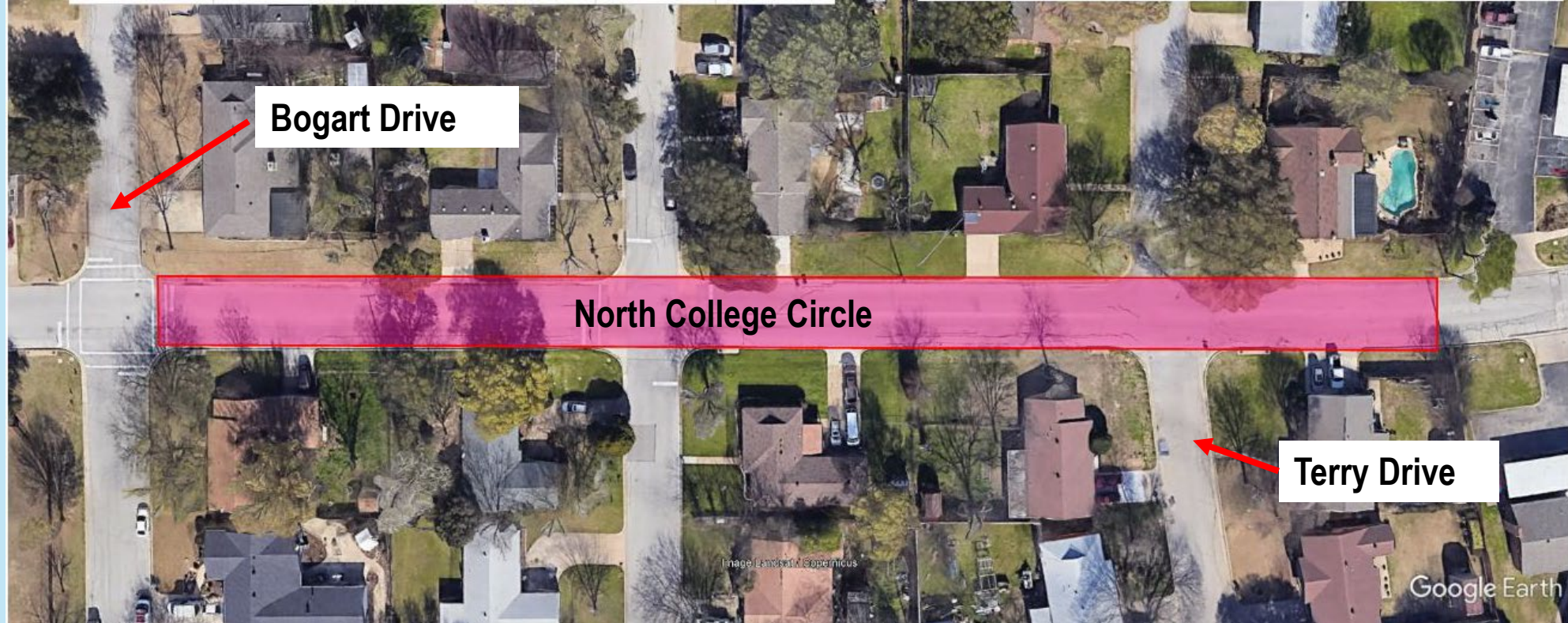
- Section 1:
 - Holiday Lane to Bogart Drive
- Section 2:
 - Bogart Drive to South of Terry Drive
- Section 3:
 - Ross Road to South of Terry Drive
- Data collected May 2024

Volume and Speed Data – Section 1

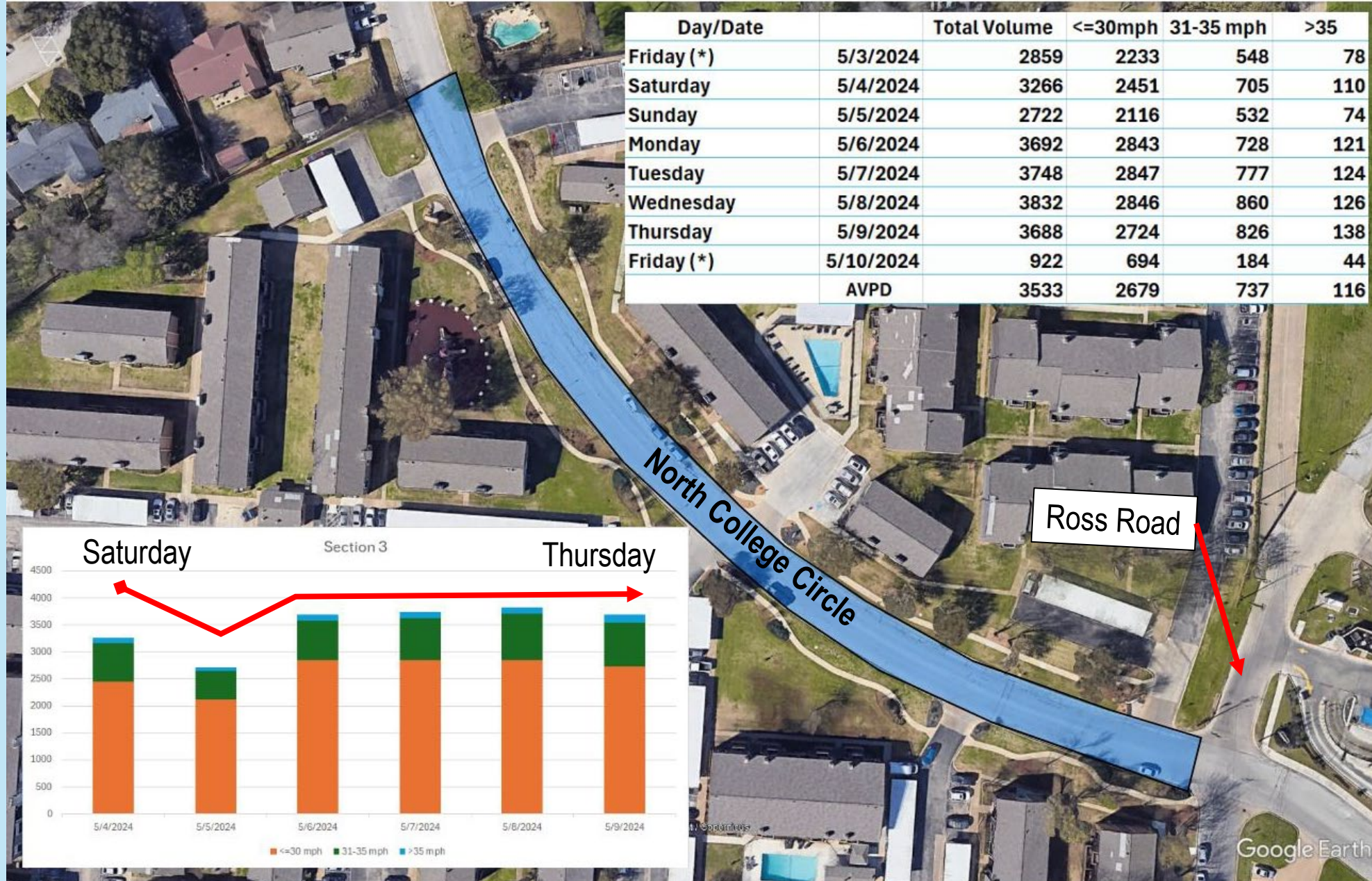


Volume and Speed Data- Section 2

| Days | | Total Volume | <=30 mph | 31-35 mph | >35mph |
|-----------|-----------|--------------|----------|-----------|--------|
| Friday* | 5/3/2024 | 2317 | 1970 | 300 | 27 |
| Saturday | 5/4/2024 | 2646 | 2216 | 345 | 50 |
| Sunday | 5/5/2024 | 2154 | 1813 | 277 | 38 |
| Monday | 5/6/2024 | 3050 | 2550 | 420 | 53 |
| Tuesday | 5/7/2024 | 3061 | 2560 | 410 | 55 |
| Wednesday | 5/8/2024 | 3166 | 2632 | 444 | 52 |
| Thursday | 5/9/2024 | 3012 | 2508 | 407 | 66 |
| Friday* | 5/10/2024 | 800 | 680 | 98 | 14 |
| AVPD | | 2887 | 2418 | 386 | 51 |



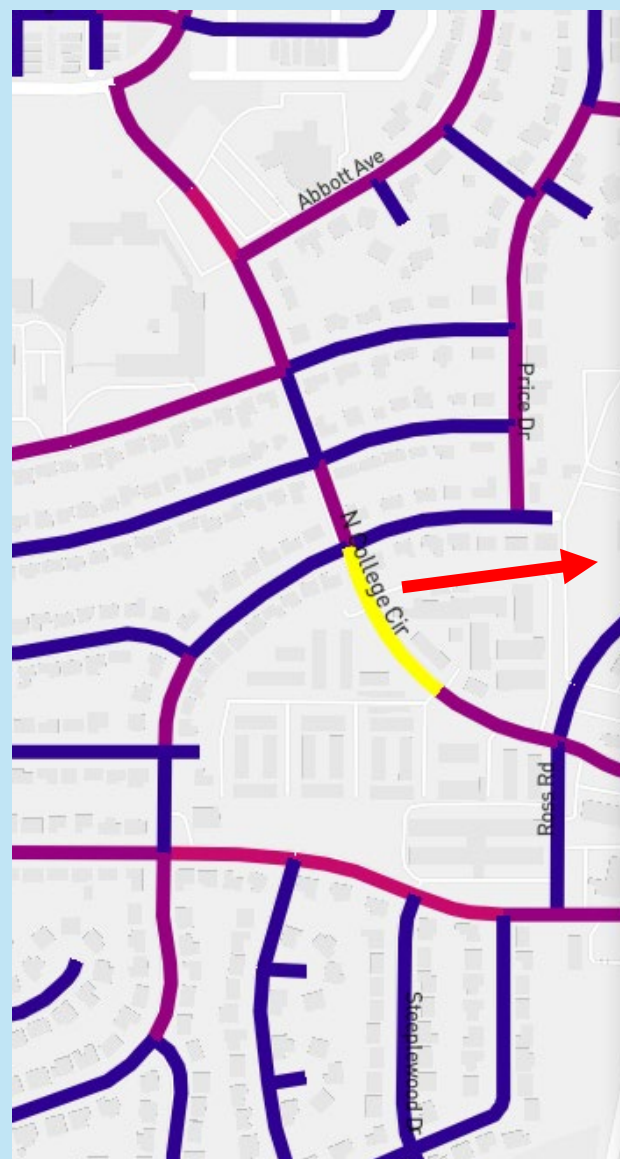
Volume and Speed Data- Section 3



Alternative Speed Data Collection

Urban SDK:

- Connected Vehicle Data
 - Information gathered by vehicles that have internet connectivity and sensors like GPS systems
- Telematics Data
 - In-Car Electronic components and technology that collects, processes, and transmits vehicle data
- Quick Monthly Snapshot of the City with regards to speeds.



24 MPH

Average Speed

Insights

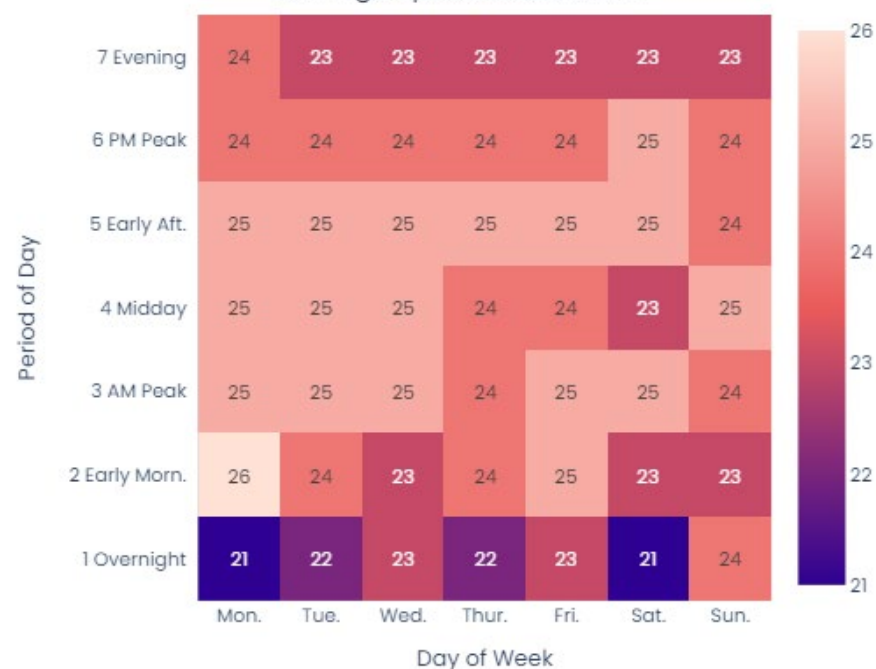
85% ①

28 MPH

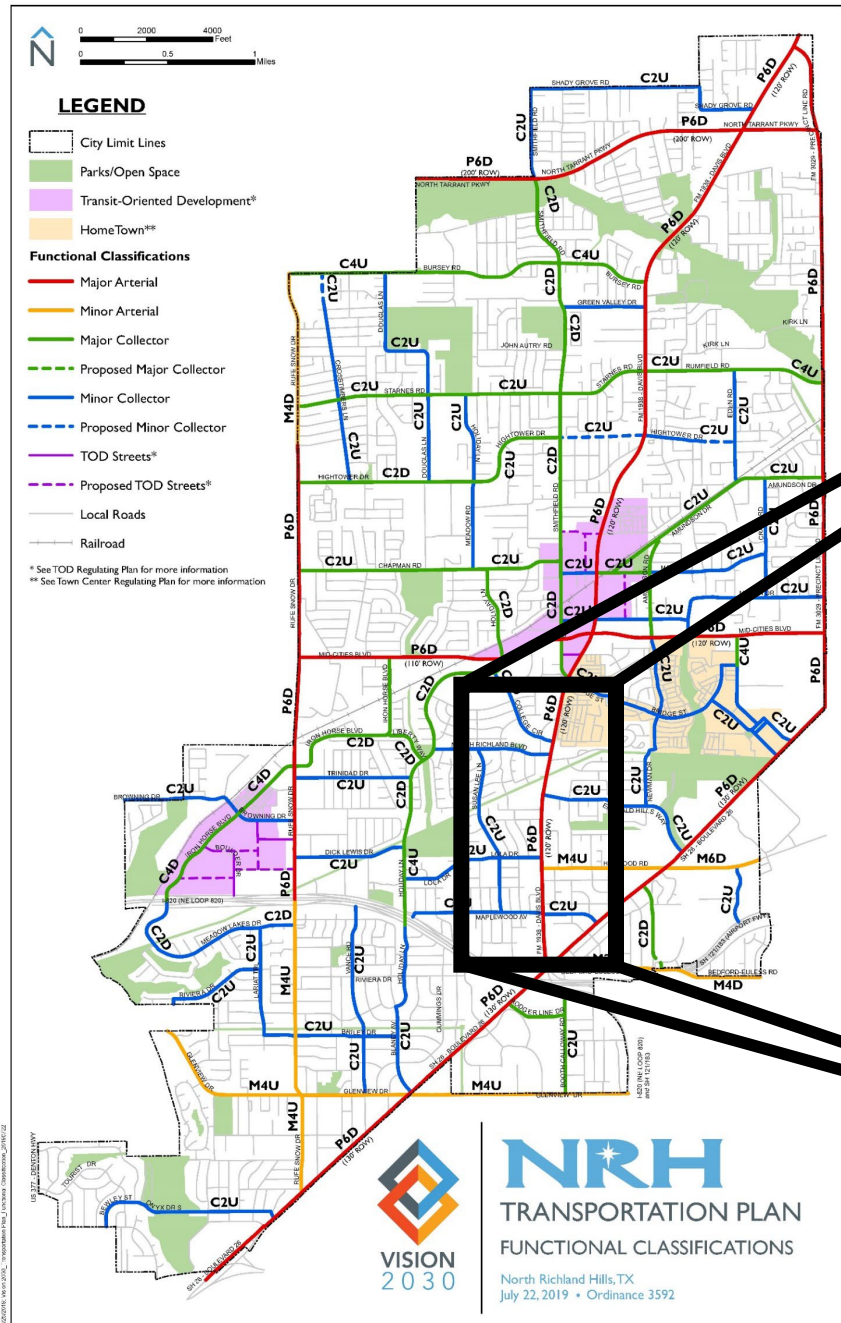
95% ①

30 MPH

Average Speed Breakdown



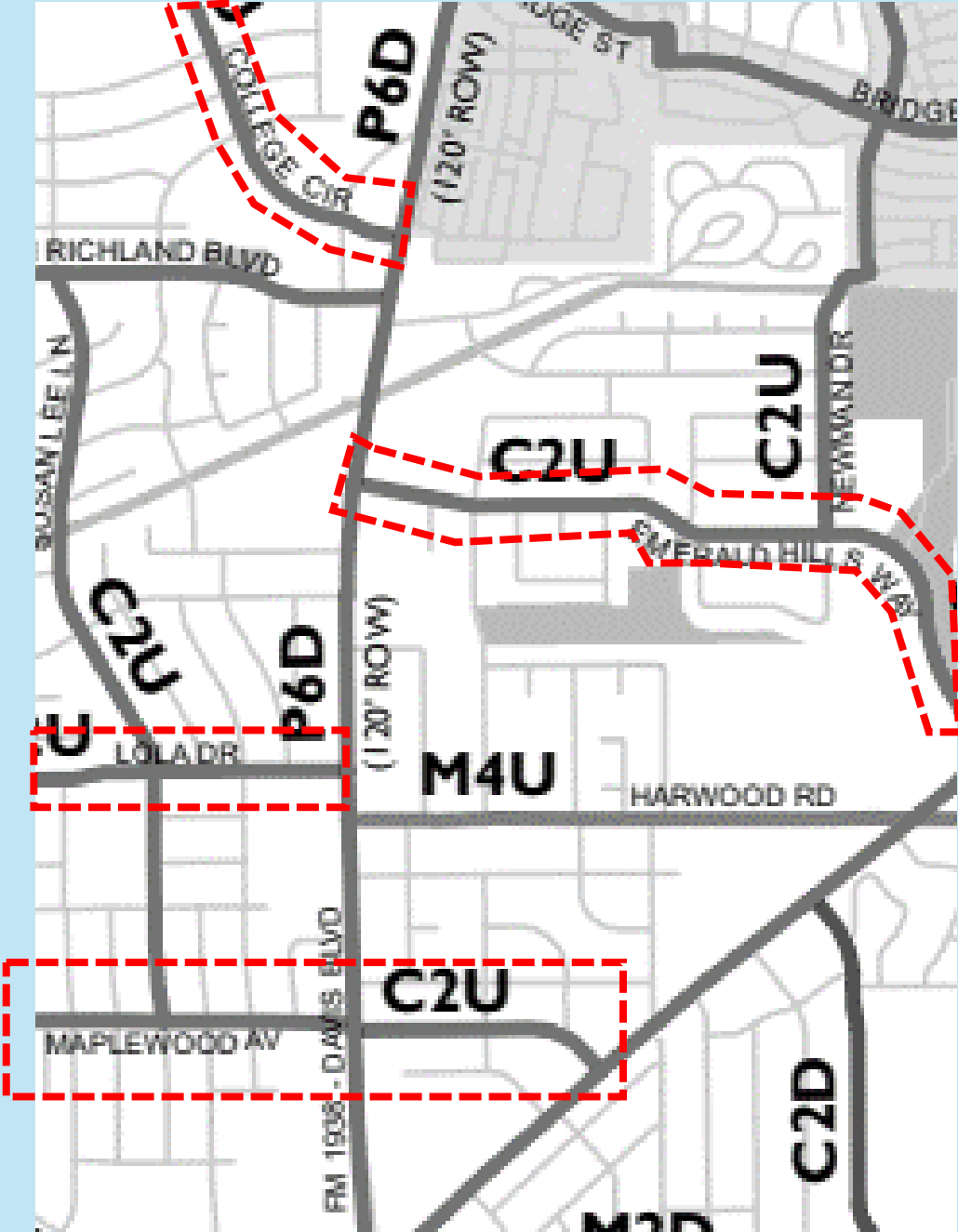
Corridor Comparisons



Intersection Comparisons

| Comparable Intersection: Davis Blvd @ | Traffic Volume* | % of N. College Circle | Designation |
|--|-----------------|------------------------|-----------------|
| Maplewood Drive | 6105 EB/day | +123% | Minor Collector |
| | 3982 WB/day | +45% | |
| Lola Drive | 5197 EB/day | +90% | Minor Collector |
| Emerald Hills | 7831 WB/day | +186% | Minor Collector |
| N. College Circle | 2733 EB/day | | Minor Collector |

*Volumes are from Tuesday 8/27/2024 12am to Wednesday 8/28/2024 11:59pm



Accident History

| Year | Private Property | TxDOT Roadway | City Street |
|----------|------------------|---------------|-------------|
| 2021 | 1 | 3 | 2 |
| 2022 | 2 | 4 | 1 |
| 2023 | 3 | 5 | 1 |
| 2024 YTD | 0 | 1 | 3 |
| Totals | 6 | 13 | 7 |

City Street Accident Information:

- 7 accidents in 3 ½ Years
- 2 of which are damage to parked vehicles
- 2 of which occurred at the intersection of Ross, unsafe speed and failed to yield ROW.
- 1 accident involving a pedestrian
- 2 accidents involving vehicles turning onto College Circle either from a parking lot or Holiday Lane



Parking Locations

No Parking



Parking Allowed

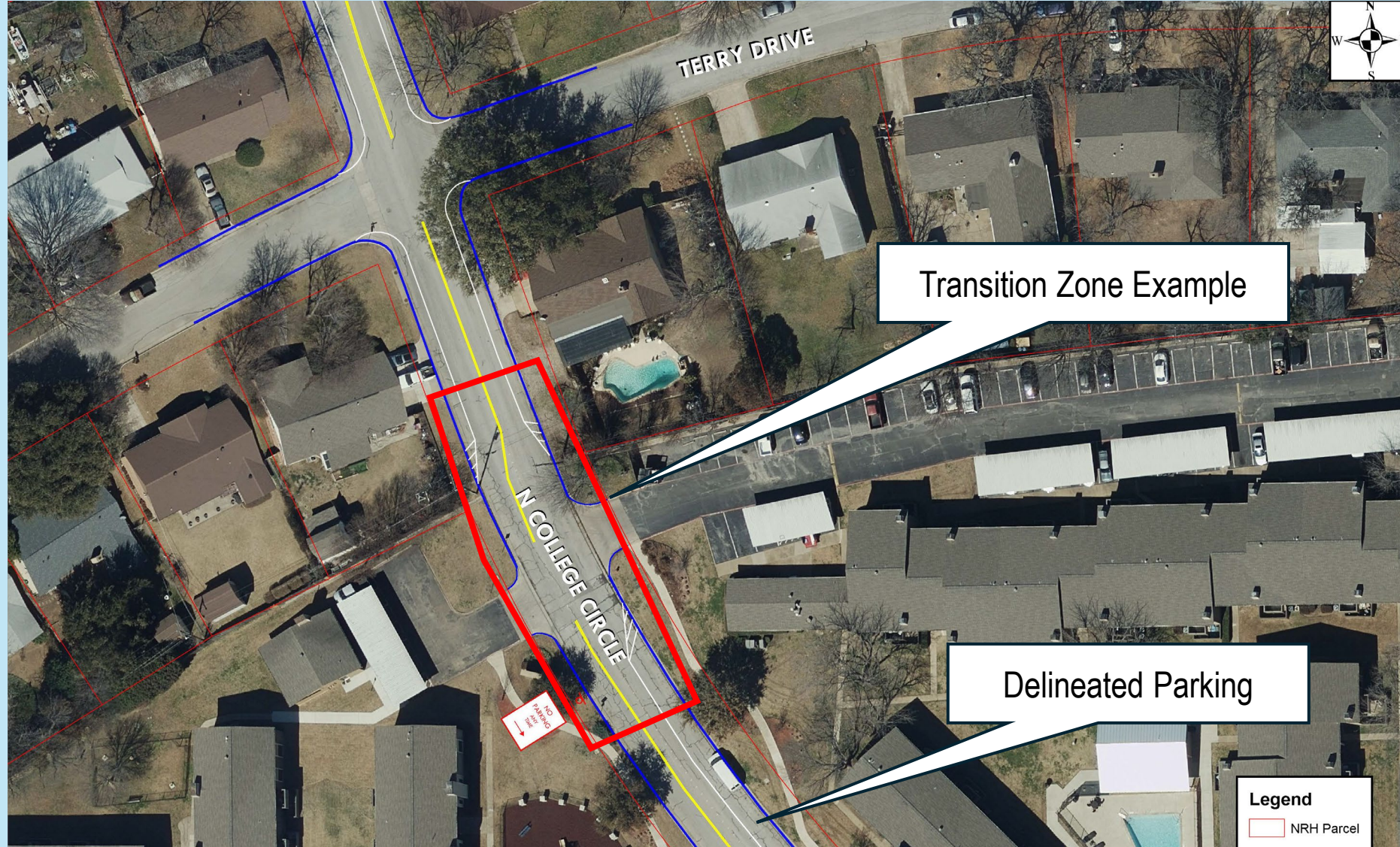


- Parking and Travel Lane Widths Vary
- Lane Delineations are Faded



In-Design: Pavement Marking Plan

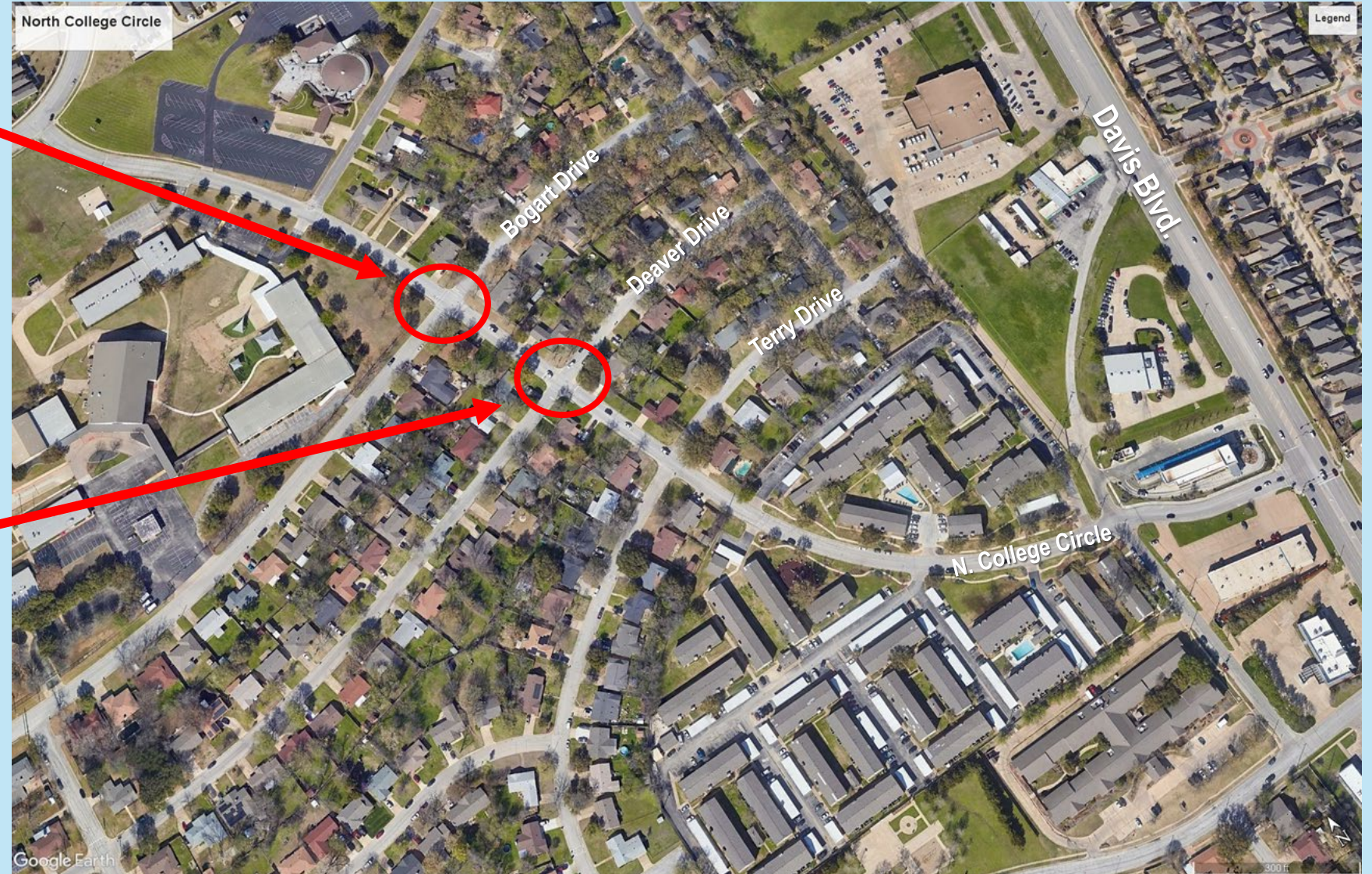
- Currently working on an in-house marking plan that incorporates consistent lane widths in parking areas.
- (2) 12' Travel Lanes
- (1) 12' Parking Lane
- Retains the on-street parking component to provide the friction that keeps travel speeds lower.



Multi-Way Stop Controlled Intersections

Intersections:

- College Circle Drive and Bogart Drive
- College Circle Drive and Deaver Drive
 - Installed as an unwarranted multiway stop control
 - Early 1990s
 - Ordinance No. 1847



Multi-Way Stop Sign Warrant Study Locations

Intersections:

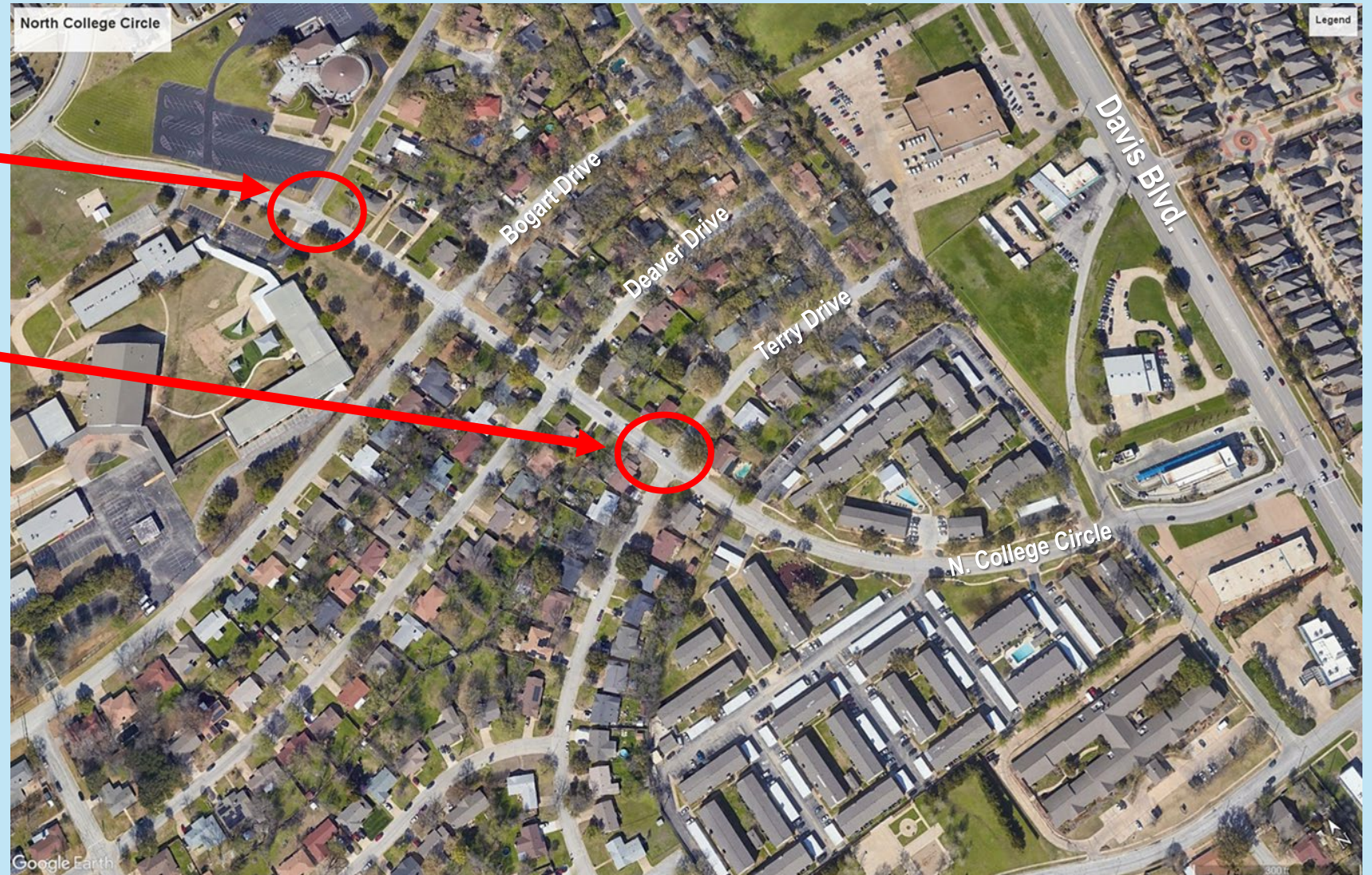
North College Circle @ Abbot Avenue

North College Circle @ Terry Drive

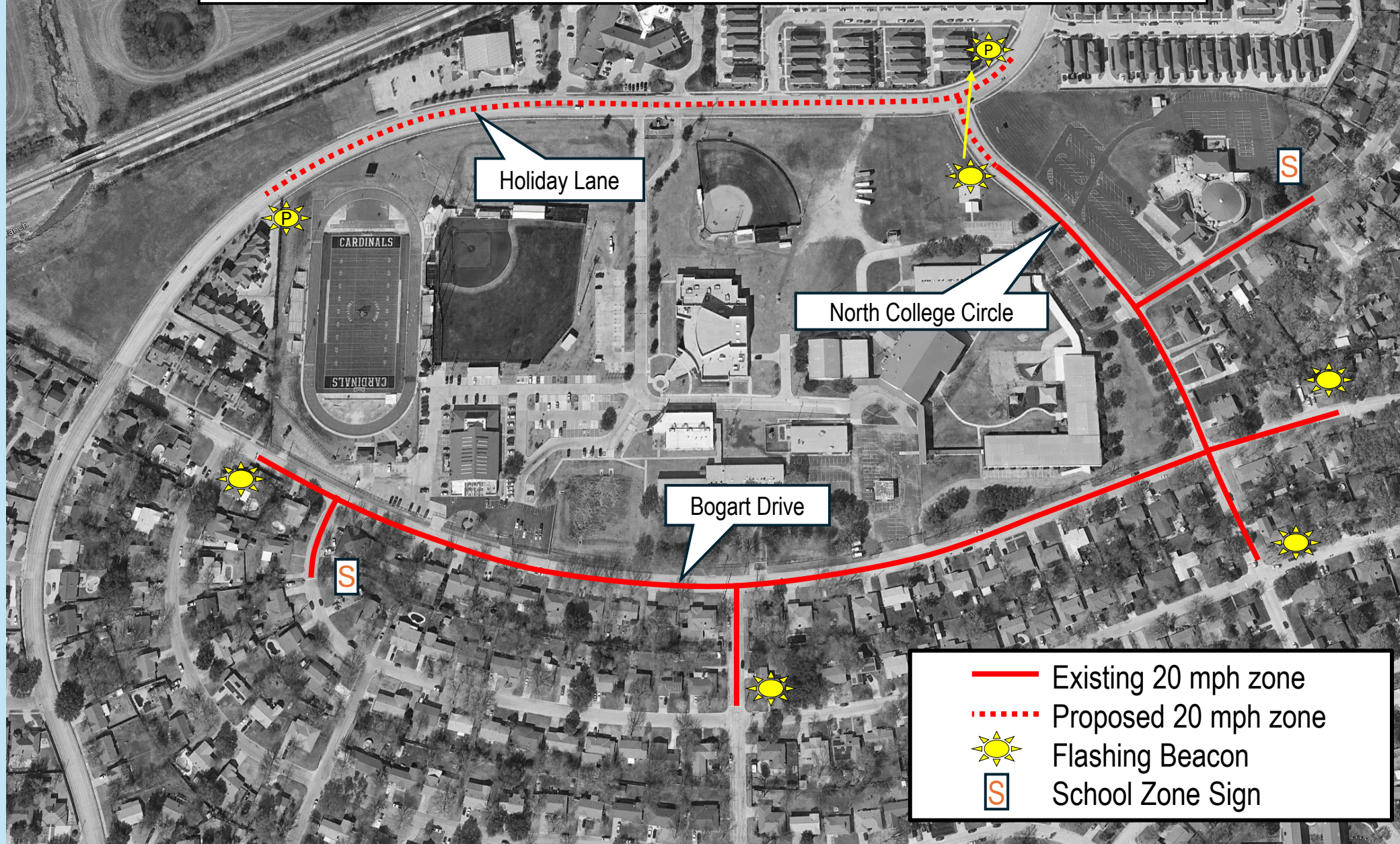
Multi-Way Stop Warrants:

- Traffic Volume
- Accident Experience
- Interim Measure

One Pager: "Stop Sign FAQs"



Local School Zones : Fort Worth Christian Campus



Next Steps:

- Origination/Destination (O/D) Equipment & Study
- Complete In-House Marking Design & Plan for Construction

In-Summary:

- History, Geometry, Types of Traffic and Role of North College Circle
- Volume and Speed Data is Consistent with Types of Traffic on a Minor Collector
- 3 ½ Years of Accident Experience
- On-Road Parking Marking Update
- Future Expansion of the Existing School Zone along Holiday Lane

