

SH 130 Tollway Safety Improvements

April 4, 2025

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Presentation Goals

- Overview of SH 130 Concession Company
 - Limits of 41-mile Corridor
 - Traffic Operations and Safety Reviews
- Examples of Safety Improvements
 - (No) Parking in front of Pilot Travel Center
 - Overview of Three Interchanges
 - Signalization at US 183/FR & FM 1185
 - Signalization at SH142 & FR
 - All-Way Stop Control at FM 2001



SH 130 Toll Concession Facility



Segments 5 & 6

- 41 miles from SE Austin to Seguin
- 17 miles of frontage road with 10 crossing streets and highways
- 12 miles of frontage road is US 183
- Predominantly Rural, but
 Development is Accelerating
 - Several Residential and Mixeduse Developments recently completed and more on the way
 - Collaborating with private developers and government agencies
 - To improve freight parking
 - To increase access and promote a variety of developments



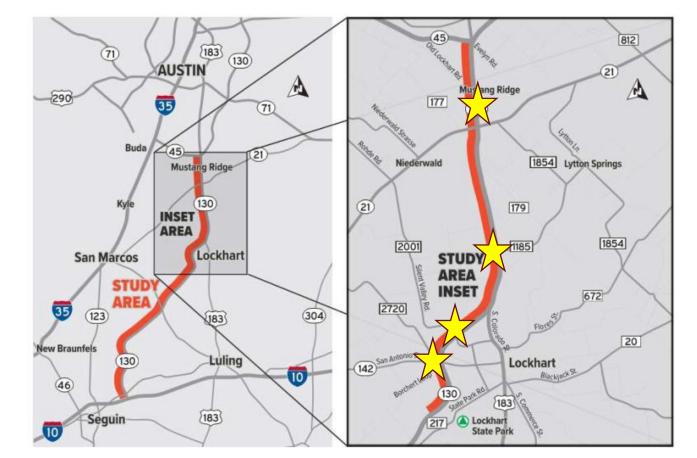
About SH 130 Concession Company

SH 130 Concession Company was contracted by TxDOT to finance, design, construct, operate, and maintain the southern 41 miles of the SH130 toll road across Travis, Caldwell, and Guadalupe counties.

The 50-year operating term began in November 2012. Highest posted speed limit in the US: 85 MPH.

Operation includes:

- 24-hour Traffic Management Center monitoring 29 CCTV cameras
- Incident Response support to First Responders
- Courtesy Patrol





Traffic Operations and Safety Reviews

- Consistent Review of Crash Data
 - Ticketing system records all incidents detected/responded to
 - Access to Crash Records Information System provides for close review of crash details
 - Monthly review of crashes to identify areas of concern
- Coordination Among Stakeholders Critical
 - TxDOT support and oversight
 - AUS and SAT
 - Alternative Delivery Division
 - Area and Maintenance Offices
 - Relationships with counties, cities, law enforcement
 - Travis, Caldwell, Guadalupe
 - Mustang Ridge, Lockhart, Seguin
 - DPS, County Sheriffs, Municipal PDs



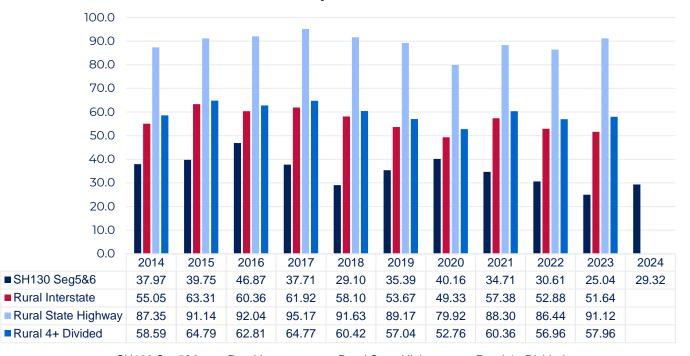
SH 130 Mainline and Frontage Roads

Segments 5 & 6 Mainline

- The main lanes enjoy a relatively low rate of crashes per VMT, despite the 85 MPH speed limit and ever-growing traffic
- 80% of ML incidents in last 5 years involved single vehicles; injury rate of 20%

Frontage Roads, Cross-streets and Intersections

- Around 2/3 injuries, fatalities and vehicles involved in crashes on the Facility, occurred off the ML
- This difference is largely attributable to greater speed differentials and movement conflicts at intersections and driveways



ML Crash Rates per 100 Million VMT

■ SH130 Seg5&6 ■ Rural Interstate

Rural State Highway
Rural 4+ Divided



Pilot Travel Center – Overflow Truck Parking

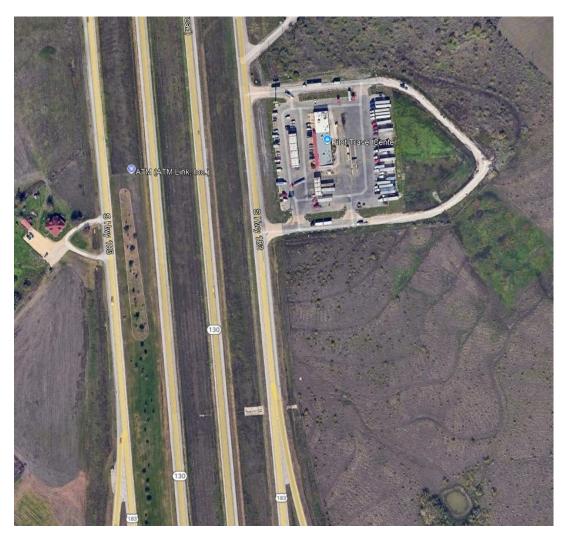
- Between closely spaced connectors (1/3-mile b/w gores)
- Limited on-site truck parking available
- Trucks parking along NB US183 (NBFR) disrupting sightlines to/from driveways
- Relatively uneventful until March 2022





Pilot Travel Center – Truck Parking

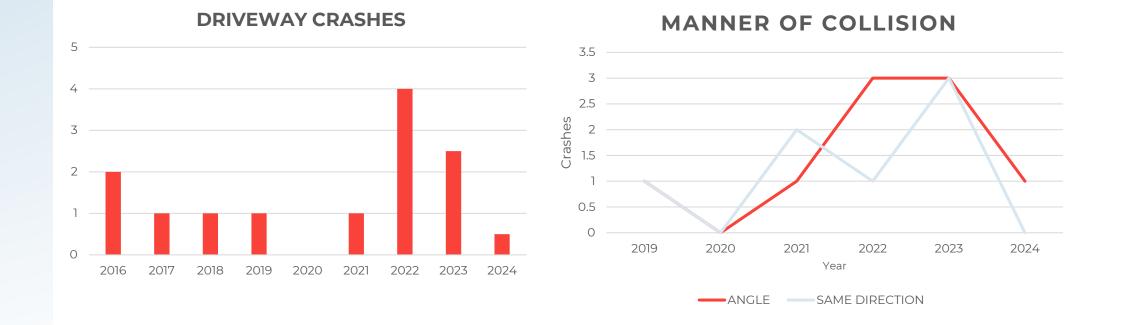
- Rapid Response to Crash Freq Spike
 - Few crashes in vicinity prior to 2022
 - 3 crashes in Mar, May, and Aug 2022
 - Coordinated with municipality securing no parking ordinance as of Oct 2022
 - Implementation in Apr 2023





Pilot Travel Center – Truck Parking

- Coordination Efforts
 - Collaborated with City of Mustang Ridge No Parking Ordinance
 - Design/Review/Approval Process with TxDOT
 - Signs Installed April 29, 2023



SH 130 * STATE HIGHWAY 130

- Two-Way Stop Controlled, FM1185 stops
- Great majority of crashes at NBFR intersection
- Inadequate gaps in US183/NBFR traffic
- Difficulty evaluating gaps due to rural environment, high speeds
- Crash Experience Warrant met in 2019
- Converted to Full Signal Control in Oct 2020



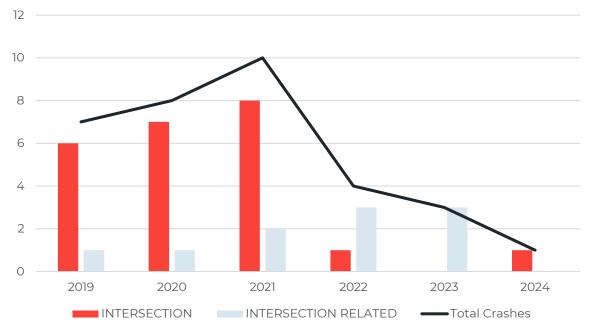


- Pre-existing signals had been flashing yellow and red supplementing STOP signs
- Replaced the signal controller
- Added pedestrian detection
- Replaced video vehicle detection with radar
- Added SIGNAL AHEAD with BE PREPARED TO STOP plaque and flashing beacons along FR approaches





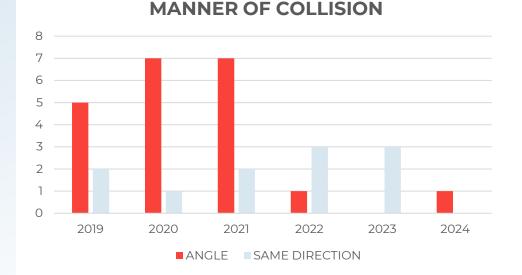
- Road users struggled with compliance during the first year of operation
- Overall reduction in crashes since 2022

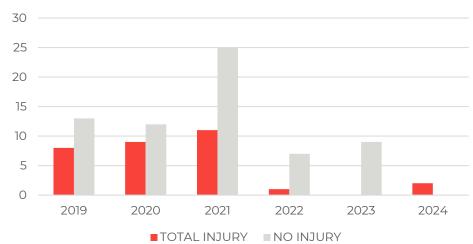


INTERSECTION RELATED CRASHES



- Major reduction in angle collisions
- Some increase in same direction collisions
- Substantial decrease in number and severity of injuries





CRASH INJURIES



SH 142 Interchange

- Two-Way Stop Controlled Since 2013; FR stops
- Crash frequency increased dramatically in 2020, but volumes did not meet Crash Experience Warrant
- 2022 Annual Signal Warrants demonstrated
 - Warrant 1B at SBFR
 - Warrant 2 at NBFR
- Converted to Full Signal Control in August 2023





SH 142 Interchange

- Pre-existing signals had been flashing yellow and red supplementing STOP signs
- Replaced the signal controller
- Added pedestrian detection
- Replaced video vehicle detection with radar
- Added SIGNAL AHEAD with BE PREPARED TO STOP plaque and flashing beacons along SH 142 approaches





SH 142 Interchange

- Following activation in Aug '23, occurrence of collisions in the intersections fell dramatically
- However, intersection-related crashes have increased, and
- The number and severity of injuries have decreased



INTERSECTION CRASHES



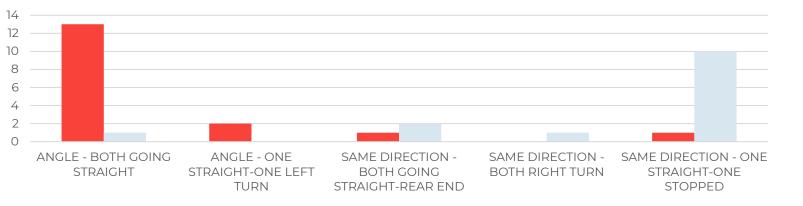
INTERSECTION CRASH INJURIES

STATE HIGHWAY 130

SH 130

SH 142 Interchange – 18 Mos. Before/After Signalization

• Angular crashes decreased significantly



MANNER OF COLLISION

■18 mos. Before ■18 mos. After

• Injury severity has also decreased



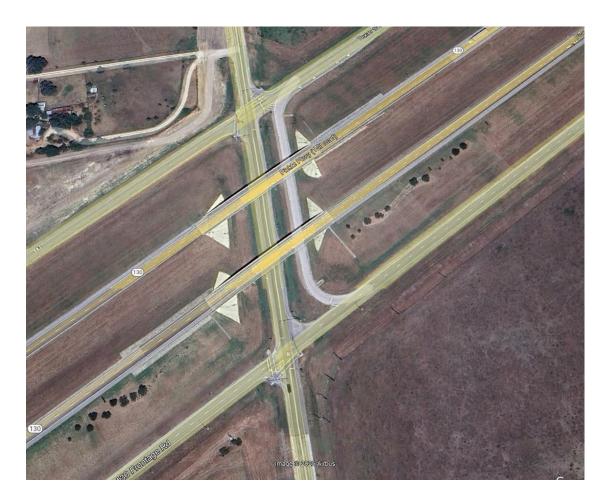
INJURY SEVERITY

■ 18 mos. Before ■ 18 mos. After



FM 2001 Interchange

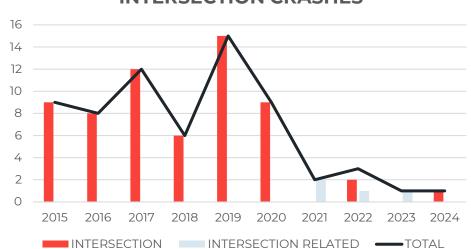
- Two-Way Stop Controlled, FR stops
- Approximately 1,000 vpd each approach
- Relatively high number of crashes and injuries
- Most crashes involved conflicting approaches with 60°-angle
- Converted to All-Way Stop Controlled in Jan 2021

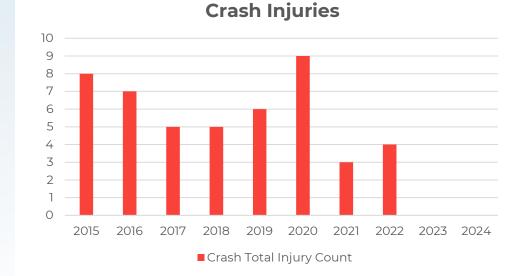




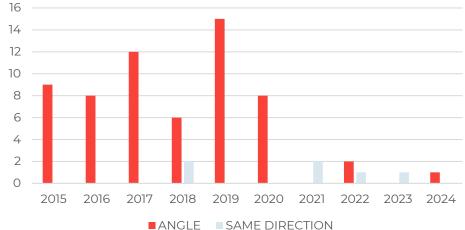
FM 2001 Interchange

- 83% reduction in all crashes
- 93% reduction in angled collisions
- 72% reduction in injuries





MANNER OF COLLISION



INTERSECTION CRASHES



Summary

- Consistent Review of Crash Data
 - Identify trends and recommended Proven Countermeasures
- Coordination Among Stakeholders Critical
 - TxDOT, Cities, Business Owners
- Testament to Safety Analysis Process
 - What we Do Does Make a Difference
 - Share Success Stories





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