



City of Denton

City Hall
215 E. McKinney St.
Denton, Texas 76201
www.cityofdenton.com

Meeting Agenda Mobility Committee

Wednesday, October 30, 2024

10:00 AM

Council Work Session Room

After determining that a quorum is present, the Mobility Committee of the City of Denton, Texas will convene in a Regular Meeting on Wednesday, October 30, 2024 at 10:00 a.m. in the Council Work Session Room at City Hall, 215 E. McKinney Street, Denton, Texas at which the following items will be considered:

1. CITIZEN COMMENTS ON AGENDA ITEMS

This section of the agenda allows citizens to speak on any individual consideration item on the agenda. Individuals are only able to comment one time per agenda item. Each speaker will be given a total of three (3) minutes per agenda item. A Request to Speak Card must be completed and returned to the Staff Liaison before the Committee considers the item.

2. ITEMS FOR INDIVIDUAL CONSIDERATION

- A. [MC24-033](#) Consider approval of the minutes of September 25, 2024.
Attachments: [Exhibit 1 - Minutes](#)

- B. [MC24-034](#) Receive a report and hold a discussion regarding the City of Denton Transportation/Mobility Project Status Report.
[Estimated Presentation Time: 45 minutes]
Attachments: [Exhibit 1 - Agenda Information Sheet](#)
[Exhibit 2 - City of Denton Transportation Mobility Project Status Report](#)

- C. [MC24-035](#) Receive a report and hold a discussion regarding the Denton County Outer Loop.
[Estimated Presentation Time: 30 minutes]
Attachments: [Exhibit 1 - Agenda Information Sheet](#)
[Exhibit 2 - Presentation](#)

- D. [MC24-036](#) Receive a report and hold a discussion regarding Lowering Barriers to Bike Racks with a Focus on Infill Locations.
[Estimated Presentation Time: 30 minutes]
Attachments: [Exhibit 1 - Agenda Information Sheet](#)
[Exhibit 2 - Presentation](#)

- E. [MC24-037](#) Staff Memorandum
Clarification on 2019 Street Reconstruction Bond Completion Numbers
Quality Control on Construction Projects
Temporary Improvements for McKinney Sidewalk
McKinney Sidewalks Project
Traffic Calming Measures
TRiP Fund Usage

Attachments: [Exhibit 1 - Staff Memorandum](#)
 [Exhibit 2 - A Brief Overview on Traffic Calming Measures](#)
 [Exhibit 3 - Future Items for Mobility Committee Meeting for 2024](#)

3. CONCLUDING ITEMS

A. Under Section 551.042 of the Texas Open Meetings Act, respond to inquiries from the Mobility Committee or the public with specific factual information or recitation of policy, or accept a proposal to place the matter on the agenda for an upcoming meeting AND Under Section 551.0415 of the Texas Open Meetings Act, provide reports about items of community interest regarding which no action will be taken, to include: expressions of thanks, congratulations, or condolence; information regarding holiday schedules; an honorary or salutary recognition of a public official, public employee, or other citizen; a reminder about an upcoming event organized or sponsored by the governing body; information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; or an announcement involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda.

CERTIFICATE

I certify that the above notice of meeting was posted on the official website (<https://tx-denton.civicplus.com/242/Public-Meetings-Agendas>) and bulletin board at City Hall, 215 E. McKinney Street, Denton, Texas, on October 25, 2024 in advance of the 72-hour posting deadline, as applicable, and in accordance with Chapter 551 of the Texas Government Code.

OFFICE OF THE CITY SECRETARY

NOTE: THE CITY OF DENTON'S DESIGNATED PUBLIC MEETING FACILITIES ARE ACCESSIBLE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY WILL PROVIDE ACCOMMODATION, SUCH AS SIGN LANGUAGE INTERPRETERS FOR THE HEARING IMPAIRED, IF REQUESTED AT LEAST 48 HOURS IN ADVANCE OF THE SCHEDULED MEETING. PLEASE CALL THE CITY SECRETARY'S OFFICE AT 940-349-8309 OR USE TELECOMMUNICATIONS DEVICES FOR THE DEAF (TDD) BY CALLING 1-800-RELAY-TX SO THAT REASONABLE ACCOMMODATION CAN BE ARRANGED.



City of Denton

City Hall
215 E. McKinney St.
Denton, Texas 76201
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Legislation Text

File #: MC24-033, **Version:** 1

AGENDA CAPTION

Consider approval of the minutes of September 25, 2024.



City of Denton
MINUTES
MOBILITY COMMITTEE MEETING
OF THE DENTON CITY COUNCIL

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

Wednesday, September 25, 2024

10:00 AM

City Council Chambers

After determining that a quorum was present, the Mobility Committee of the City of Denton, Texas convened in a Regular Meeting on Wednesday, September 25, 2024, at 10:00 AM in the City Council Work Session Room, 215 E. McKinney St., Denton, Texas.

Committee Members: Chair, Council Member Byrd, Vice-Chair, Council Member Beck, Council Member Holland, Kristine Bray, and Suzanne Rumohr participated in the meeting.

REGULAR MEETING

1. Public Comment Section

No citizens requested to speak.

2. Individual Consideration

A. MC24-029 Consider approval of the minutes of August 28, 2024.

Council Member Holland motioned to approve the minutes as presented; seconded by Vice-Chair, Council Member Beck; motion carried.

Ayes: (5) Chair, Council Member Byrd, Vice-Chair, Council Member Beck, Council Member Holland, Kristine Bray and Suzanne Rumohr.

Nays: (0)

B. MC24-030 Receive a report and hold a discussion regarding the Downtown Parking Study summary findings.

Josh Peterman, shared updates regarding the Downtown Parking Study summary findings, and discussion followed. No direction was provided as the item was for informational purposes only.

C. MC24-031 Receive a report and hold a discussion regarding 5-year Capital Improvement Program Budgets and Fiscal Year 2024 year-to-date Projects.

Dr. Farhan Butt and Trevor Crain shared updates regarding the 5-year Capital Improvement Program Budgets and Fiscal Year 2024 year-to-date Projects, and discussion followed. No direction was provided as the item was for informational purposes only.

D. MC24-032 Staff Memorandum

1. Bicycle Friendly Community Designation
2. Bike Path and Pedestrian Coordination for Newton Rayzor Bike Bus
3. Road Crossing Light on Morse and Woodrow for Safety
4. Quarterly Construction Report
5. Quarterly Transportation Report
6. 5-year CIP Presentation Email Questions and Answers

CONCLUDING ITEMS

Future Items to Bring Forward:

1. Clarification on 2019 Reconstruction Bond Numbers
2. Concerns for Bicyclist & Pedestrian Safety on North and South Austin
3. Crossing Concerns between Ryan High and Dollar General
4. Citywide/Downtown Parking Study
5. Equipment Boxes Location Wrap
6. Growing the Bike Bus Programs
7. Increasing Sensitivity for Bicycle Sensors
8. Lowering Barriers to Bike Rack Adoption
9. Quality Control on Construction Projects
10. Quarterly Construction Report
11. Quarterly Transportation Services Report
12. Temporary Improvements for McKinney Sidewalk
13. Traffic Calming Measures
14. TRiP Fund Usage
15. Wrapped Equipment Box Locations

A. Under Section 551.042 of the Texas Open Meetings Act, respond to inquiries from the Public Utilities Board or the public with specific factual information or recitation of policy, or accept a proposal to place the matter on the agenda for an upcoming meeting AND Under Section 551.0415 of the Texas Open Meetings Act, provide reports about items of community interest regarding which no action will be taken, to include: expressions of thanks, congratulations, or condolence; information regarding holiday schedules; an honorary or salutary recognition of a public official, public employee, or other citizen; a reminder about an upcoming event organized or sponsored by the governing body; information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; or an announcement involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda.

Adjournment: 11:39 AM

APPROVED

Council Member Byrd
Chair

Jazmyn Robles
Management Analyst

Approved on: _____



City of Denton

City Hall
215 E. McKinney St.
Denton, Texas 76201
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Legislation Text

File #: MC24-034, **Version:** 1

AGENDA CAPTION

Receive a report and hold a discussion regarding the City of Denton Transportation/Mobility Project Status Report.

[Estimated Presentation Time: 45 minutes]



City of Denton

City Hall
215 E. McKinney Street
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AGENDA INFORMATION SHEET

DEPARTMENT: Capital Projects

ACM: Cassey Ogden

DATE: October 30, 2024

SUBJECT

Receive a report and hold a discussion regarding the City of Denton Transportation/Mobility Project Status Report.

BACKGROUND

The Texas Department of Transportation (TxDOT) City of Denton Transportation/Mobility Project Status Report has been attached as (**Exhibit 2**) for your review. This report is updated by Innovative Transportation Solutions (ITS) staff on a quarterly basis and provides current status regarding on-system projects that may impact mobility in the Denton area. John Polster, President of ITS, will facilitate the discussion on this report.

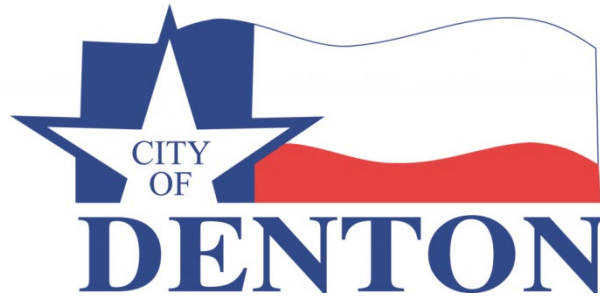
EXHIBITS

Exhibit 1 - Agenda Information Sheet

Exhibit 2 - City of Denton Transportation/Mobility Project Status Report

Respectfully submitted:
Trevor Crain, PMP
Director of Capital Projects

Prepared by:
Jazmyn Robles
Management Analyst



City of Denton Transportation/Mobility Project Status Report

Prepared by ITS

October 2024

PROJECTS

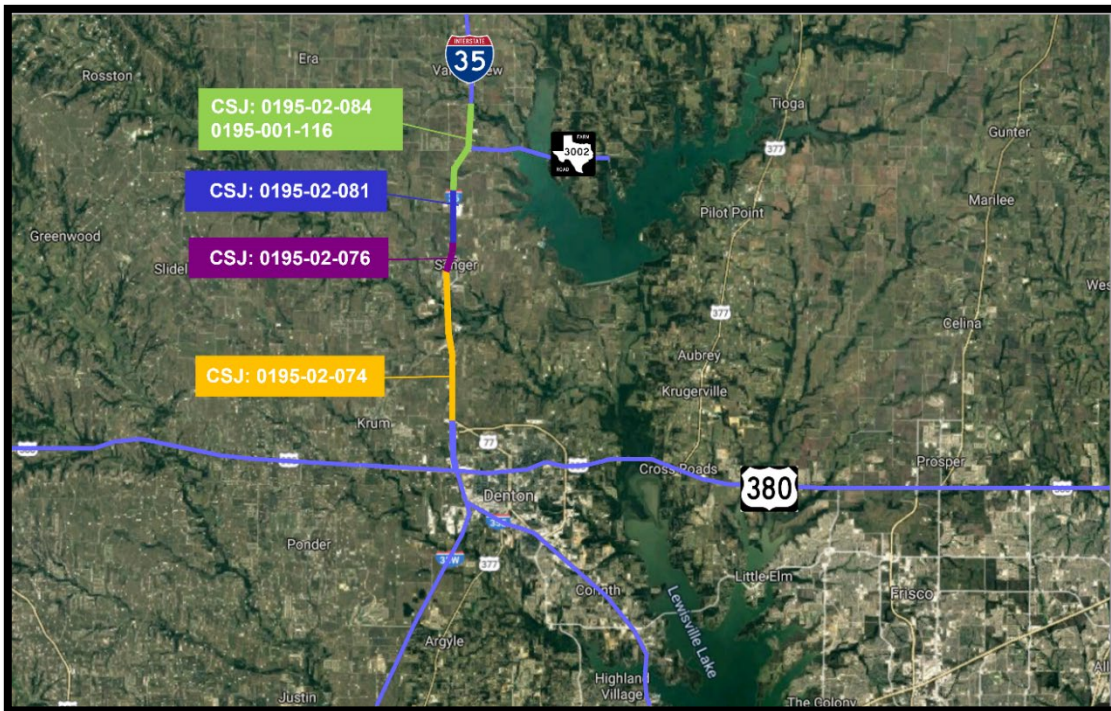
- Project Summary page 2
- I-35 North page 3
- I-35/35E/35W Merge..... page 5
- I-35E/Mayhill page 7
- I-35W Frontage Roads Middle..... page 8
- Loop 288 West Frontage Roads page 9
- Loop 288 East-US 380 Connector..... page 10
- Bonnie Brae Segment 7 page 11
- FM 1515 page 12
- FM 1173 page 13
- Outer Loop..... page 14
- Elm and Locust..... page 15
- Glossary of Acronyms..... page 17
- TxDOT Funding Categories page 18
- Denton City Limits page 19

PROJECT SUMMARY

PROJECT	LET DATE	CONTRACTOR/ ENGINEER	CONSTRUCTION COST
I-35 North	Various	Stantec	\$897,796,423
I-35/35E/35W Merge	04-2024	Sema Construction	\$588,780,841
I-35E/Mayhill	06-2025	LTRA	\$139,130,349
I-35W Frontage Roads Middle	09-2028	WSP	\$446,891,327
Loop 288 West Frontage Roads	09-2028	CP&Y	\$227,423,354
Loop 288 East-US 380 Connector	*	Westwood	\$922,000,000
Bonnie Brae Segment 7	*	Westwood	*
FM 1515	*	LTRA	\$69,484,709
FM 1173	*	Halff	\$125,852,145
Outer Loop	*	LJA	\$1,547,212,128
Elm and Locust	02-02-2024	Jagoe Public	\$3,803,760
TOTAL			\$4,968,375,036

I-35 North

CSJ:	0195-02-074; 0195-02-076; 0195-02-081; 0195-01-116; 0195-02-084	Schematic Approval:	January 31, 2019
Limits:	From US 77 to FM 3002 (Cooke County line)	Environmental Approval:	October 7, 2019
Length:	12.4 miles	ROW Acquisition Complete:	July 2023
Description:	Reconstruct and widen 4- to 6-lane rural freeway with ramp modifications and reconstruct 4- to 4/6-lane frontage roads	Utility Relocations Complete:	-074: May 2025 -081: December 2024 -116: October 2025 -084: October 2025
Est. Construction Cost:	\$897,796,423 -074: \$495,359,007 -081: \$175,274,676 -116: \$110,895,970 -084: \$116,266,771	100% Plans:	-074: October 2024 -081: January 2025 -116: November 2024 -084: November 2024
Funding:	\$801,507,230 CAT 4: \$220,966,122 CAT 11: \$2,574,631 CAT 12: \$577,966,477	Ready to Let Date:	-074: May 2025 -081: January 2025 -116: October 2025 -084: October 2025
Firm & Key Contact:	Stantec	Let Date:	-074: July 2026 -081: April 2025 -116: December 2029 -084: December 2029
TxDOT PM:	Dawit Abraham		



Current Activity:

- **PS&E:** Work on the 100% PS&E plan set for the -074 CSJ is underway with updates to 2024 TxDOT Specifications. Work on the 100% PS&E plan set for the -081 CSJ is underway with updates to 2024 TxDOT Specifications; TxDOT is revising scope to ensure that the project scope fits within the available funds. Work on the 100% PS&E plan set for -084 CSJ is underway with updates to the 2024 TxDOT Specifications; some scope being shifted to -081 CSJ.

- **Utilities:** Status of utilities in conflict is listed below by CSJ/Segment.

IH-35 from US 77 to South of FM 455; CSJ: 0195-02-074

- **Utilities that are clear of construction:** City of Denton, OneOK.
- **Atmos Distribution:** Relocations underway. Anticipate clearance in October 2024.
- **AT&T:** Design approved. Pending utility agreement. Anticipate start of construction in November 2024.
- **Bolivar Water:** Anticipate start of construction in September 2024. Anticipate clearance in December 2024.
- **Brazos Electric:** Construction underway. Anticipate clearance in November 2024.
- **CenturyLink/Brightspeed:** Design approved. Utility agreement pending. Construction start pending CoServ overhead electric.
- **CoServ Electric:** Construction underway. Anticipate clearance in November 2024.
- **Frontier:** Construction underway. Anticipate clearance in October 2024.
- **Lumen/Level 3:** Design approved. Utility agreement pending. Anticipate start of construction in October 2024. Anticipate clearance in December 2024.
- **MCI/Verizon:** Design pending. Utility agreement pending. Anticipate start of construction in October 2024.
- **Nortex:** Construction complete, pending splicing.
- **Sanger Electric:** Relocations underway. Demolition of parcel 59 is hindering completion. **Anticipate clearance in October 2024.**
- **Sanger Water/Wastewater:** Relocations underway. Anticipate clearance in March 2025.
- **Suddenlink/Altice:** Design and utility agreement pending.
- **UTRWD:** Design and utility agreement finalized. Pending UTRWD contractor. Anticipate clearance in May 2025.
- **Zayo:** Design pending. Utility agreement pending. **Anticipate start of construction in October 2024 and clearance in January 2025.**

IH-35 from North of FM 455 to View Road; CSJ: 0195-02-081

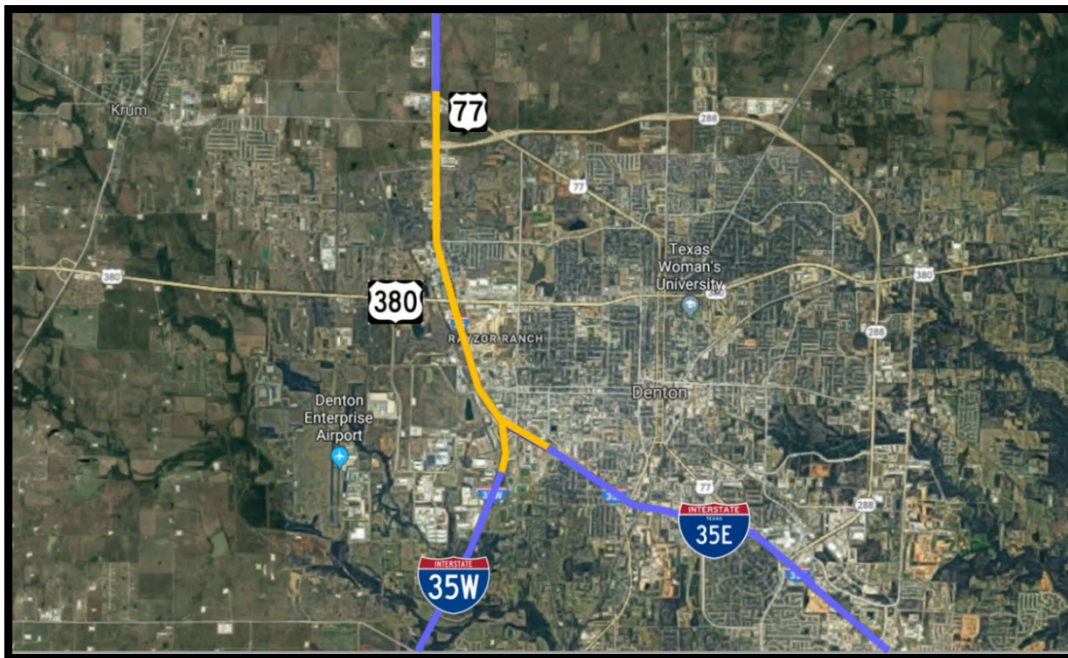
- **AT&T:** Design approved. Utility agreement finalized. Construction underway. **Anticipate clearance in October 2024.**
- **Bolivar Water:** Design approved. Utility agreement finalized. **Anticipate start of construction in October 2024 and completion in December 2024.**
- **Brightspeed/Centurylink:** Design and utility agreement finalized. Construction underway. Anticipate clearance in October 2024.
- **Lumen/Level 3:** Construction underway. Anticipate clearance in October 2024.
- **MCI/Verizon:** Design approved. Utility agreement pending. Anticipate clearance in December 2024.
- **Nortex:** Construction underway. Anticipate clearance in October 2024.
- **Sanger Electric:** Install complete; wreck-out pending.
- **Sanger Water/Wastewater:** Relocations underway. Anticipate clearance in October 2024.
- **Zayo:** Design finalized. Utility agreement finalized. Anticipate start of construction in November 2024.

IH-35 from View Road to Cooke County Line (FM 3002); CSJ: 0195-02-084

- **AT&T:** Install complete; pending splicing.
- **Bolivar WSC:** **Anticipate start of construction in October 2024 and completion in December 2024.**
- **CoServ Electric:** Construction underway. Anticipate clearance in October 2024.
- **Level 3/Lumen:** Construction underway. Anticipate clearance in November 2024.
- **MCI/Verizon:** Design and utility agreement pending.
- **Nortex:** Install complete; pending splicing.
- **Oncor:** Design pending. Utility agreement pending. Anticipate start of construction in October 2024. Anticipate clearance in January 2025.
- **Zayo:** Design pending. Utility agreements pending. **Anticipate start of construction in October 2024.** Anticipate clearance in December 2024.

I-35/35E/35W Merge

CSJ:	0195-03-099 (N Texas Blvd to I-35E/W) 0195-03-090 (I-35E/W to US 380) 0195-03-087 (US 380 to US 77)	Schematic Approval:	-090: August 2011 -087: January 31, 2019
Limits:	From North Texas Blvd to US 77 north of Denton	Environmental Approval:	-090: June 2017 -087: October 7, 2019
Length:	5.073 miles	ROW Acquisition Completed:	May 2022
Description:	Reconstruct interchange and existing frontage roads; reconstruct and widen to 6/8-lane rural freeway with ramp modifications	Utility Relocations Complete:	December 2024
Est. Construction Cost:	\$588,780,841	City of Denton Utility Relocations Complete:	October 2024
Funding:	\$588,780,841 CAT 2: \$65,978,054 CAT 3: \$1,452,495 CAT 4: \$75,042,004 CAT 11: \$106,973,305 CAT 12 (Strategic Priority): \$219,334,983 CAT 12 (Texas Clear Lanes): \$120,000,000	100% Plans:	January 2024
Firm & Key Contact:	AECOM (-090); Stantec (-087)	Let Date:	April 4, 2024
TxDOT PM:	John Rich	Construction Start:	January 2025



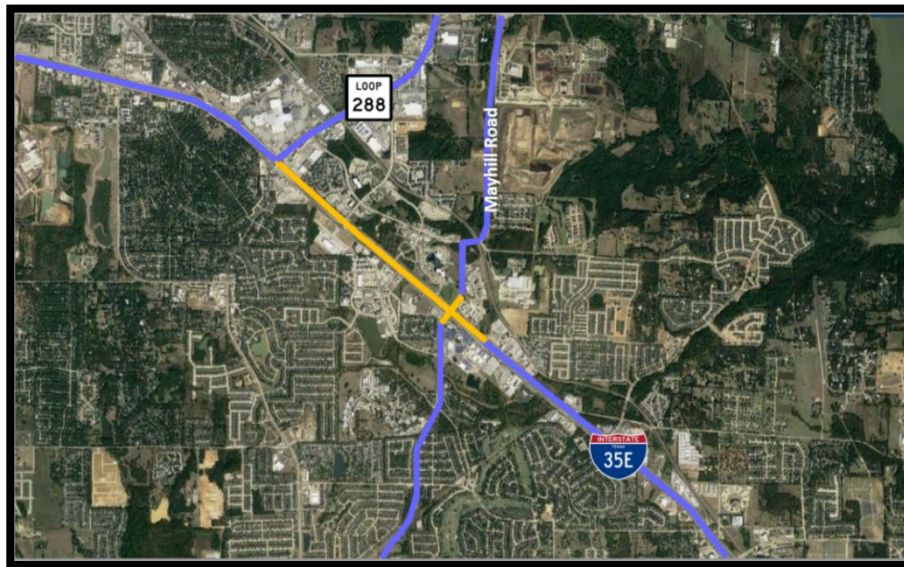
Current Activity:

- **Construction:** The project let for construction on April 4, 2024. Low bidder is Sema Construction with a low bid of \$588,780,840.70, at 18% above engineer's estimate. There are 1,356 working days and 56 months of barricades. **Pre-construction meeting was held on October 2, 2024. Anticipate start of construction in January 2025.**
- **Utilities:** Utilities that are clear of construction: AT&T, Atmos Distribution, Atmos Transmission, Brazos Valley Electric, CoServ Electric, DME Transmission, and UPN.
- Status of utilities in conflict is listed below.

- Charter-Spectrum: Relocations underway.
- City of Denton Water/Wastewater: Relocations are underway. Anticipate completion in October 2024.
- DME Distribution: Relocations underway. Anticipate completion in December 2024.
- Fiberlight (Joint Duct): Install complete; anticipate splicing in October 2024.
- Frontier: Construction underway.
- Level 3/Lumen (Joint Duct Bank): Construction underway from US 380 to US 77. Anticipate splicing in October 2024. Construction from Bonnie Brae to US 380 underway. Anticipate splicing in October 2024.
- MCI/Verizon: Stand-alone construction and Zayo joint duct ongoing. Lumen joint duct ongoing.
- Zayo: Install complete. Splicing expected in October 2024.

I-35E/Mayhill

CSJ:	0196-01-109	Schematic Approval:	February 2011
Limits:	I-35E intersection with Mayhill from Pockrus Page Rd to Loop 288	Environmental Clearance:	January 31, 2012
Length:	1.912 miles	ROW Acquisition Completed:	November 2022
Description:	Reconstruct interchange at Mayhill and I-35E and existing 4-lane frontage roads	Utility Relocations Complete:	November 2024
Est. Construction Cost:	\$139,130,349	City of Denton Utility Relocations Completed:	February 2024
Funding:	\$139,130,349 CAT 2: \$129,130,349 CAT 4: \$10,000,000	100% Plans:	October 2024
Firm & Key Contact:	LTRA, Tyler Martin	Ready to Let Date:	November 2024
TxDOT Project Manager:	Jahor Roy	Let Date:	June 2025

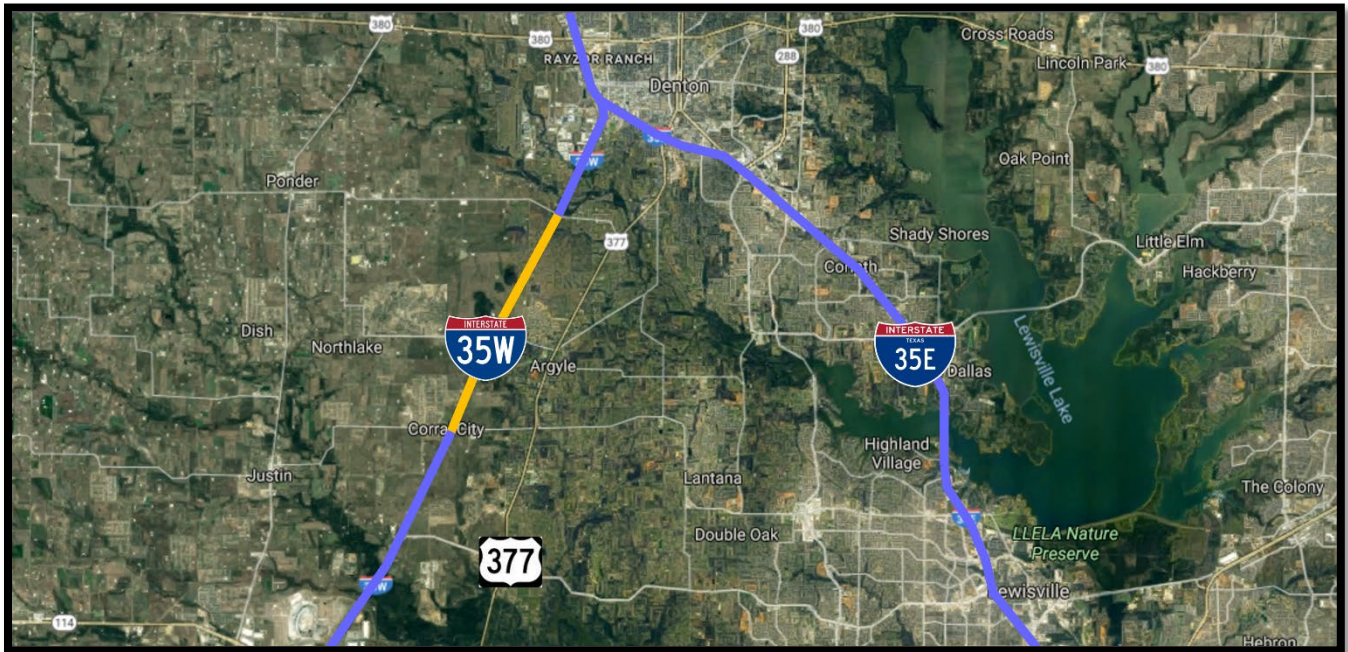


Current Activity:

- **PS&E:** LTRA is updating the plan set to the 2024 TxDOT Specifications.
- **Utilities:** Utilities currently clear of construction: CoServ Gas, City of Denton, City of Denton Wastewater, NGG, Oncor, and United Private Networks.
 - Astound (formerly Grande): Construction underway. Anticipate splicing in October 2024.
 - Atmos Gas (Distribution): Install complete; pending wreck-out. Anticipate completion in October 2024.
 - AT&T: Construction and splicing complete. Wreck out underway.
 - CenturyLink/Brightspeed: Construction underway. Completion dependent on southbound frontage road joint duct.
 - Charter/Spectrum: Utility agreement pending. Anticipate start of construction in October 2024. Anticipate clearance in November 2024.
 - DME: Relocations underway. Anticipate clearance in November 2024.
 - DISD: Utility agreement pending. Anticipate start of construction in October 2024.
 - Frontier: Northbound frontage road clear. Anticipate completion for southbound frontage road in November 2024.
 - Level 3/Lumen: Construction underway. Completion dependent on southbound frontage road joint duct.
 - Zayo: Construction underway. Completion dependent on southbound frontage road joint duct.

I-35W Frontage Roads Middle

CSJ:	0081-13-071	Schematic Approval:	March 20, 2020
Limits:	From 0.7 miles south of FM 407 to FM 2449	Environmental Clearance:	June 30, 2020
Length:	6.76 miles		
Project Description:	Construct frontage roads	ROW Acquisition Complete:	January 2025
Est. Construction Cost:	\$446,891,327	Utility Relocations Complete:	March 2026
Funding:	\$213,024,000 CAT 2: \$24,537,247 CAT 12: \$188,486,753	100% Plans:	March 2025
Firm:	WSP	Ready to Let Date:	March 2026
TxDOT Contact:	Gutema Gebriel	Let Date:	*



Current Activity:

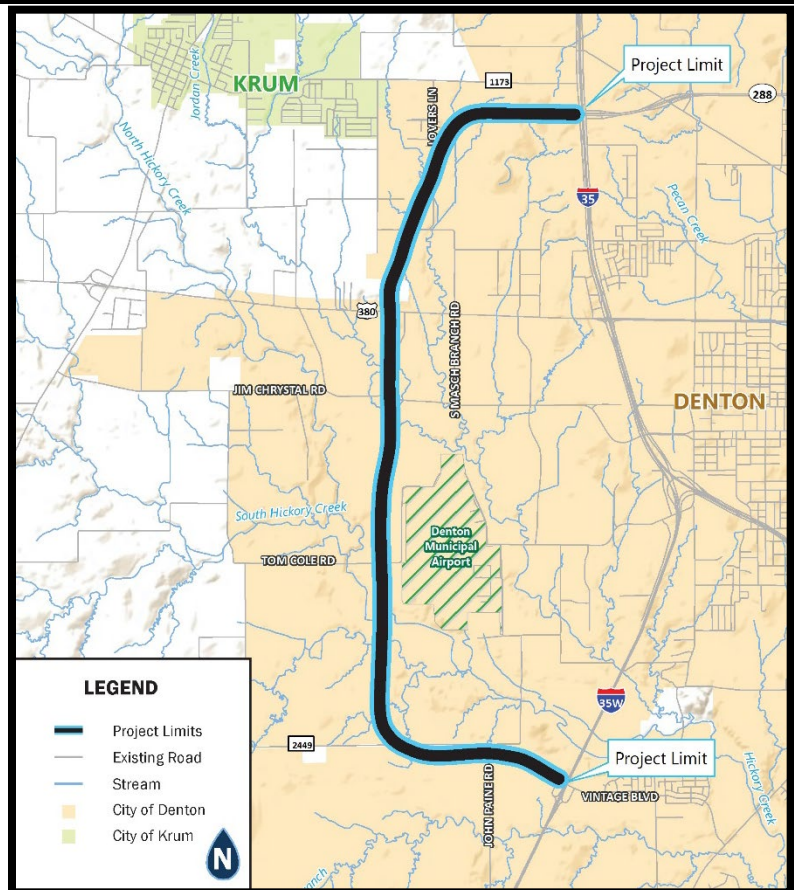
- **PS&E:** WSP continues addressing TxDOT comments to 95% plan set and is working toward completion of final plan set.
- **ROW:** There are 58 parcels to acquire. There are: 5 parcels in ED and 53 parcels acquired.
- **Utilities:** Status of utilities in conflict is listed below.
 - Astound (Grande): Design pending. Utility agreement pending. Construction schedule pending CoServ design.
 - Atmos: Design pending. Utility agreement pending. Construction schedule pending temporary work easements.
 - Charter/Spectrum: Design pending. Utility agreement pending. Construction schedule pending CoServ design.
 - CoServ Electric: Design pending. Utility agreement pending.
 - DME Transmission: Joint use agreement pending. Facility to stay in place; not in conflict.
 - DME Distribution: Design pending. Utility agreement pending.
 - Fiberlight: Agreement pending. Anticipate start of relocations in October 2024 and clearance in November 2024.
 - Lumen/Level 3: Preliminary design pending. Utility agreement pending.
 - Trinity River Authority: Projected to be clear pending changes to TxDOT plans.
 - Zayo: Design pending. Utility agreement pending. Anticipate start of relocations in October 2024.

Loop 288 West Frontage Roads

CSJ:	2250-00-013 (from I-35 to US 380) 2250-00-032 (from US 380 to I-35W)	Schematic Approval:	March 20, 2020
Limits:	From I-35 to I-35W	Environmental Clearance:	September 28, 2020
Length:	9.0 miles		
Description:	Construct frontage roads	ROW Acquisition Complete:	December 2024
Estimated Construction Cost:	\$227,423,354 -013: \$95,315,990 -032: \$132,107,364	Utility Relocations Complete:	April 2026
Funding:	\$3,000,000 CAT 3 \$1,000,000 CAT 7	100% Plans:	December 2024
Firm & Key Contact:	CP&Y, Tom Cochill & Jacob Roberts	Ready to Let Date:	April 2026
TxDOT Project Manager:	Gutema Gebriel	Let Date:	*

Current Status:

- **ROW:** For RCSJ 2250-02-023, there are 19 parcels to acquire. There are: 2 parcels in ED and 17 parcels in possession. For RCSJ 2250-02-024, there are 20 parcels to acquire. There are: 5 parcels in negotiations and 15 parcels in possession.
- **ROW acquisition efforts are on hold due to District budgetary constraints.**
- **PS&E:** CP&Y updated PBLR for final submittal.
- **CP&Y updated Exhibit A and made final submittal on September 30, 2024.**
- **CP&Y coordinated with Dallas District and Environmental regarding USACE application.**
- CP&Y submitted pavement report on August 9, 2024.
- **CP&Y continued drainage efforts.**
- **Geotechnical retaining wall report submitted on September 27, 2024.**
- **Geotechnical bridge report submitted on September 20, 2024.**
- CP&Y continued efforts toward completion of 95% PS&E plan set. The 95% PS&E plan set submittal was made on August 30, 2024. **The 95% plan set is under review, with comment resolution meeting to be held.**
- CP&Y coordinated with property owners for upcoming SUE field work.
- **Bi-weekly coordination meetings underway.**



Loop 288 East-US 380 Connector

CSJ:	2250-02-025; 0135-10-066	Schematic Approval:	January 2025
Limits:	from I-35 to US 380 east of Geesling Road	Environmental Clearance:	July 2025
Length:	8 miles	ROW Acquisition Completion:	*
Project Description:	Construct Loop 288 frontage roads and grade separations and an improved connector to US 380	Utility Relocations Completion:	*
Estimated Const. Cost:	\$922M	100% Plans:	*
Funding:	*	Ready to Let Date:	*
Firm & Key Contact:	Westwood, Mark Schluter, Mark Zoellner	Let Date:	*
TxDOT PM:	Nelson Underwood		

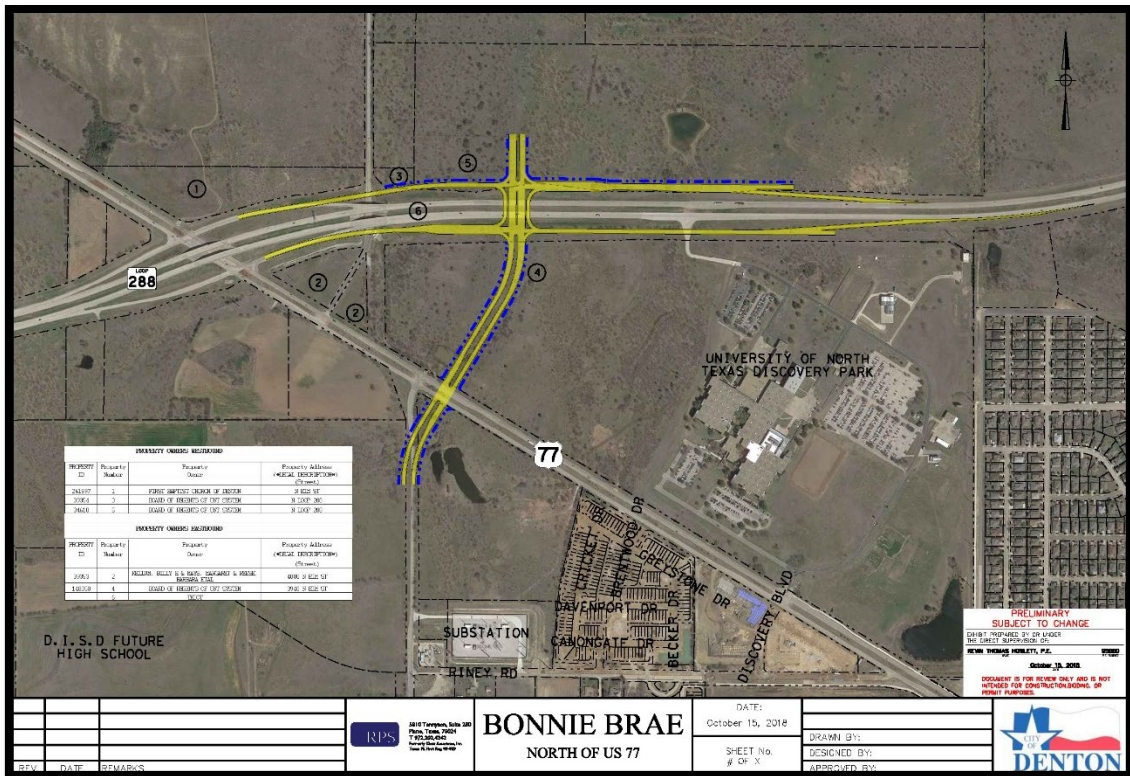


Current Activity:

- **PS&E:** Westwood continues addressing TxDOT comments from the 60% schematic and from the Value Engineering study and moving toward completion of the 90% schematic.
- Westwood has completed updating revised centerline alignment to account for accommodation of future 8-lane freeway between Locust and Sherman and redesign of section between Sherman and Kings Row.
- Westwood has completed connector profiles with adjustments at Cooper Creek intersection, adjustments to match west segment, and ramps/additional turn lanes at Geesling.
- The third round of right-of-entry letters to be sent out in October 2024.
- Westwood met with TxDOT Area Office on October 2, 2024, to discuss proposed emergency access from Kings Way development to Loop 288.
- Westwood met with City of Denton on October 3, 2024.
- Westwood working to set final right-of-way footprint.
- SUE efforts expected in November 2024 pending latest right-of-entry notices.

Bonnie Brae Segment 7

CSJ:	*	Schematic Approval:	January 2025
Limits:	From US 77 to Loop 288	Environmental Clearance:	July 2025
Length:	0.2 miles	ROW Acquisition Complete:	*
Description:	Extension of Bonnie Brae north of US 77	Utility Relocations Complete:	*
Est. Construction Cost:	*	100% Plans:	*
Funding:	*	Ready to Let Date:	*
Firm & Key Contact:	Westwood, Mark Schluter, Mark Zoellner	Let Date:	*
TxDOT Project Manager:	Nelson Underwood	Construction Start:	*

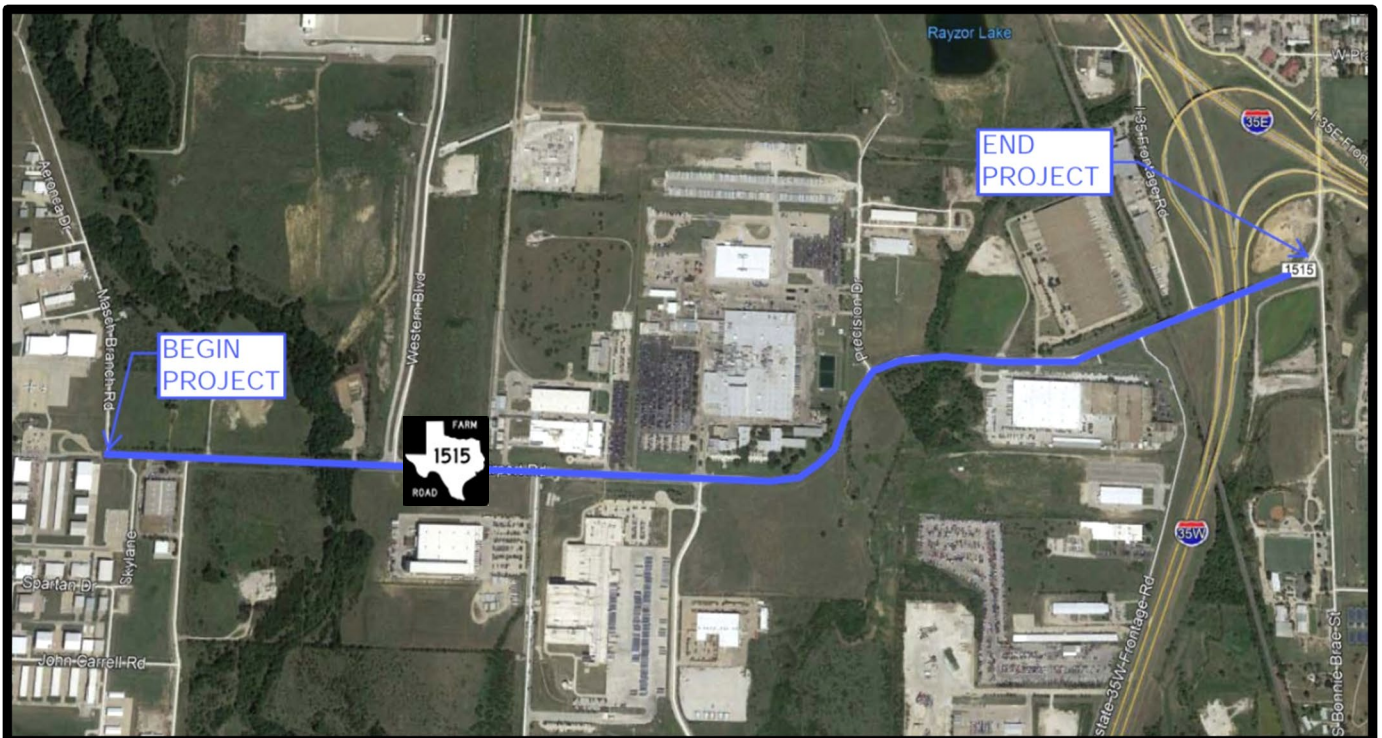


Current Activity:

- **PS&E:** The segment between US 77 and Loop 288 has been added to Loop 288 East contract with Westwood.

FM 1515

CSJ:	1951-01-011	Schematic Re-approval:	October 13, 2021
Limits:	From Bonnie Brae to Masch Branch Road	Environmental Approval:	August 4, 2020
Length:	2.096 miles	Environmental Re-eval:	March 15, 2022
Description:	Widen existing 2-lane rural section to a six-lane divided urban roadway	ROW Acquisition Complete:	July 2023
Est. Construction Cost:	\$69,484,709	Utility Relocations Complete:	November 2025
Funding:	\$500,000 CAT 7	100% Plans:	June 2024
Firm & Key Contact:	LTRA, Tyler Martin	Ready to Let Date:	November 2025
TxDOT Project Manager:	Bryan Esmaili-Doki	Let Date:	*



Current Activity:

- **PS&E:** LTRA updated plans to the 2024 TxDOT Specifications and submitted the final plan set on June 28, 2024. **Plans have been shelved until letting.**
- **Exhibit A:** LTRA submitted new Exhibit A for CPKC approval.
- **Utilities:** Status of utilities in conflict:
 - Atmos: Final design pending TxDOT review. Construction schedule pending.
 - Brightspeed/CenturyLink: Design pending Oncor final design.
 - Charter/Spectrum: Design dependent on Oncor design.
 - City of Denton Water/Wastewater: Design reviewed. Construction schedule pending.
 - Denton Municipal Electric: Preliminary design pending. Utility agreement pending.
 - Frontier: Design pending.
 - MCI/Verizon: Design pending.
 - Oncor: Design pending.
 - Unite Private Networks: Design pending.

FM 1173

CSJ:	1059-01-047; 1059-02-002	Schematic Approval:	March 20, 2020
Limits:	From I-35E to FM 156	Environmental Clearance:	August 26, 2021
Length:	3.613 miles		
Description:	Widen and realign to 4/6-lane divided urban road	ROW Acquisition Completed:	September 2023
Est. Construction Cost:	\$125,852,145 -047: \$62,892,803 -002: \$62,959,342	Utility Relocations Complete:	August 2025
Funding:	*	100% Plans:	January 2025
Firm & Key Contact:	Halff Associates, Aimee Jones	Ready to Let Date:	August 2025
TxDOT PM:	Kwan Lam	Let Date:	*

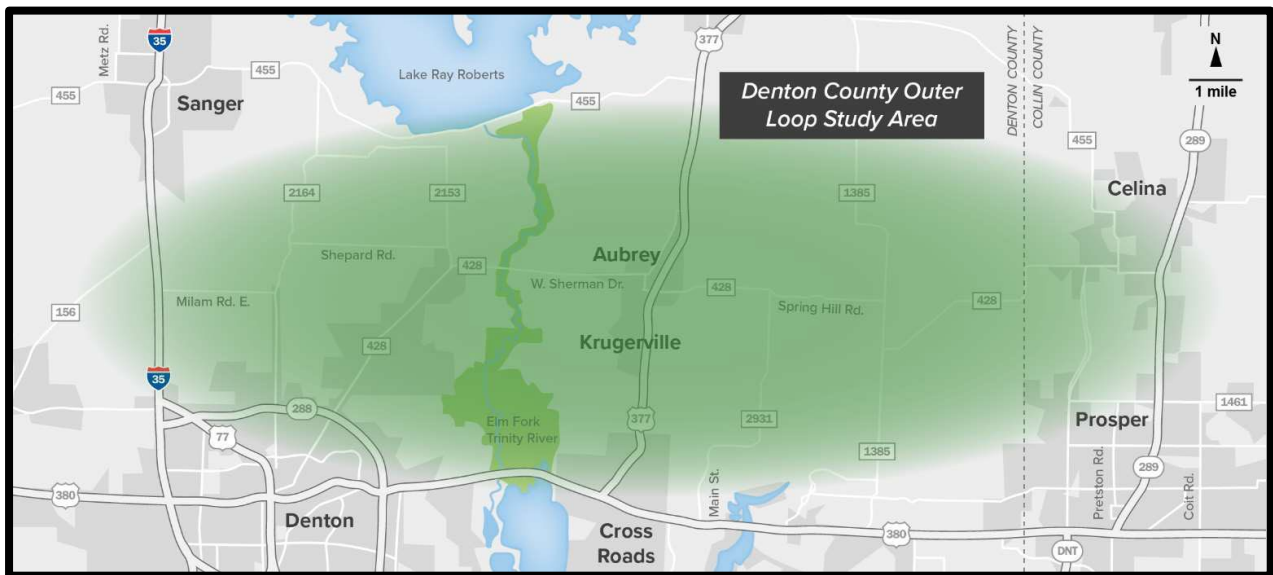


Current Activity:

- **PS&E:** Halff received TxDOT comments on the 95% plan set and is responding. Work on the 100% plan set is underway.
- Halff submitted BNSF Exhibit A on September 24, 2024.
- **Utilities:** Final SUE test hole surveyed. Status of utilities in conflict:
 - Altice-Suddenlink: Prioritizing I-35 designs.
 - AT&T: Design to be revised; dependent on Oncor and CoServ.
 - Atmos Gas: Preliminary design underway.
 - Brightspeed/CenturyLink: Initial design review completed; awaiting Oncor design for overhead.
 - City of Denton: Design under review.
 - CoServ: Initial design review completed. Final design to be completed upon completion of 95% PS&E.
 - Fiberlight: Design dependent upon Oncor and CoServ.
 - City of Krum: Preliminary design underway. Current long lead relocate.
 - Oncor: Partial preliminary design complete; awaiting revisions.
 - Zayo: Design revisions pending.

Outer Loop

CSJ:	0918-46-341	Schematic Approval:	December 2025
Limits:	From I-35 to the DNT at the Denton County Line	Environmental Clearance:	Summer 2026
Length:	23 miles	ROW Acquisition Complete:	*
Description:	Construct a six-lane controlled access freeway with continuous frontage roads	Utility Relocations Complete:	*
Est. Construction Cost:	\$1,547,212,128	100% Plans:	*
Funding:	*	Ready to Let Date:	*
Firm & Key Contact:	LJA, Tony Kimmey	Let Date:	*
TxDOT Project Manager:	Liang Ding	Construction Start:	*



Current Activity:

- **Design:** LJA submitted schematic concept for blue alignment and is addressing preliminary comments. LJA is updating schematic concept plan per TxDOT comments and is preparing 30% schematic.
- LJA continues coordination with NCTCOG, TxDOT, USACE, and other agencies.
- LJA continues identifying developments adjacent to proposed Outer Loop alignment.
- Ongoing field work in areas where right-of-entry has been obtained.
- **Utilities:** LJA continues evaluating transmission level utilities within study area and gathering information near refined alignments and coordinating with entities. LJA is developing Level D map.
- **Other:** Project website is available: www.DentonCountyOuterLoop.com.
- **Public Involvement:** An agency scoping meeting was held on September 4, 2024, to kick off the Environmental Impact Statement (EIS) process with local, state, and federal agencies.
- Public Scoping Meetings to be held on October 29, 2024, from 5:30 to 7:30 p.m. at Midway Church, 9540 US 377, Pilot Point, TX 76258 and on October 30, 2024, from 5:30 to 7:30 p.m. at Denton Convention Center (Embassy Suites), 3100 Town Center Trail, Denton, TX 76201. Virtual meeting materials will be posted online from October 29 through November 14, 2024, at www.DentonCountyOuterLoop.com. Both meetings will provide an overview of the EIS scope, establish the two-build alignments that will proceed through the EIS process, along with the no-build alternative, and detail the criteria upon which the alternatives will be evaluated.

Elm and Locust

CSJ:	0196-01-117	100% Plans:	December 2023
Limits:	from Eagle Drive to McKinney Street	ROW Acquisition Complete:	NA
Description:	Rehabilitate and repair pavement	Utility Relocations Complete:	Included with construction
Est. Construction Cost:	\$3,803,760	Let Date:	February 2, 2024
Funding:	CAT 1: \$3,803,760	Construction Start:	May 2024
TxDOT Project Manager:	Branden Barnett	Construction Completion:	October 2024



Current Activity:

- Construction:** Project let for construction on February 2, 2024. Project was awarded to Jagoe Public, with a low bid of \$3,803,760.40, at 7.91% above engineer’s estimate. There are 118 working days and 8 months of barricades. Construction began on May 6, 2024. **See attached TxDOT construction report.**

TxDOT Monthly Project Report
Date of Report: October 11, 2024
Report Prepared by: Branden Barnett

Project: **C 196-1-117**
Control: **0196-01-117**
Highway: **US 77**
Limits: From: Eagle Dr
To: McKinney St
Contractor: **Jagoe Public**

TxDOT Project manager: Branden Barnett
Contractor's Project Manager: Mark Seidcheck
Contractor's Superintendent: Ramiro Rangel

Phone: (214) 392-1791

Date Work Began: May 6, 2024
Anticipated Completion Date: October 2024

Current Activities:

Current activities include: None. Project complete.

Narrative description of last month's activities: Project was substantially completed on September 13, 2024.

Narrative description of activities planned for next month: Record close-out.

Traffic issues: None

Plans for changes in traffic patterns: None

Item(s) of work currently controlling project completion: Record close-out.

Other items of significance: None

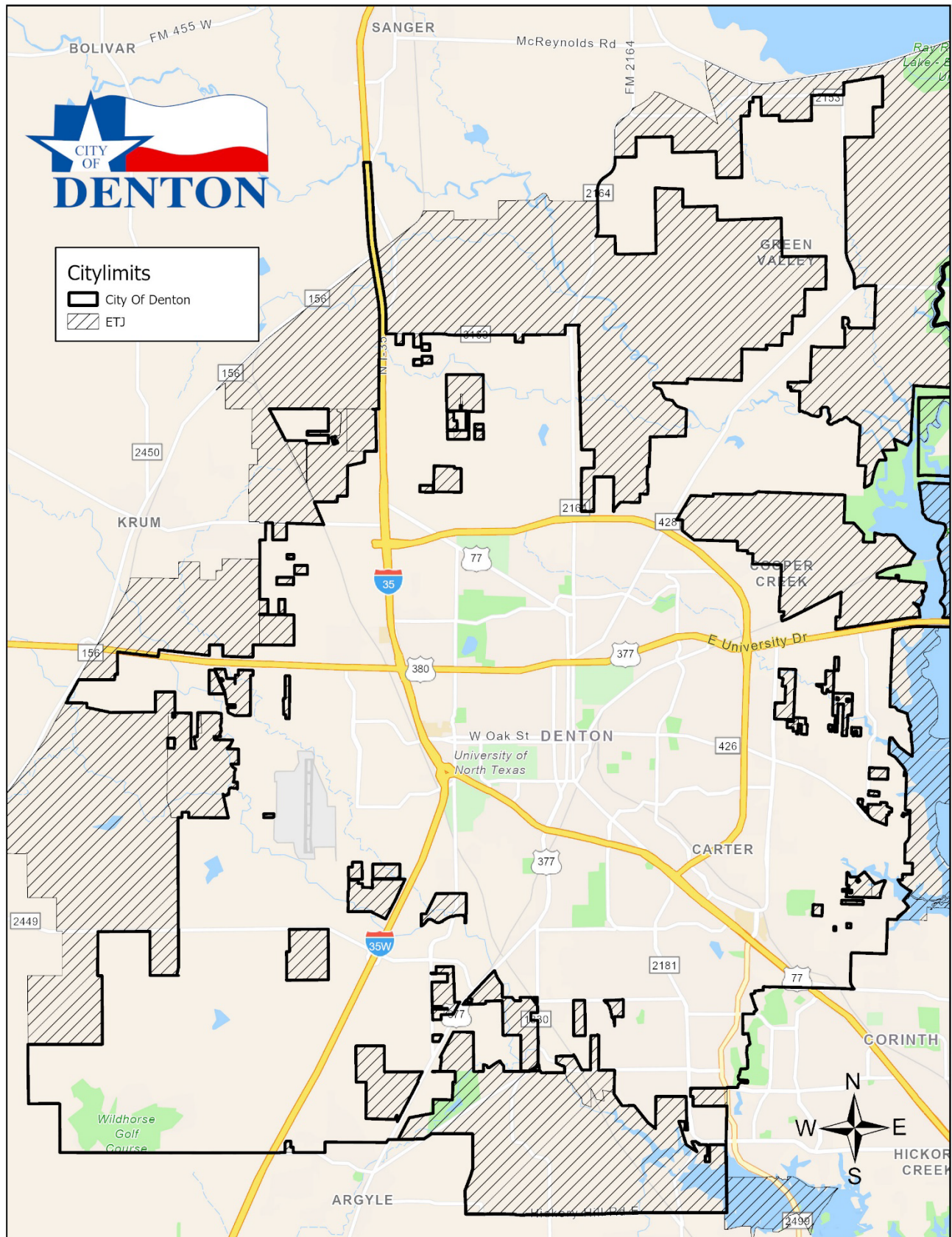
Glossary of Acronyms

- AADT – Annual Average Daily Traffic
- AFA – Advanced Funding Agreement
- ARPA – Archeological Resources Protection Act
- CE – Categorical Exclusion (environmental clearance process for projects that do not involve significant environmental impacts)
- CLOMR – (FEMA’s) Conditional Letter of Map Revision
- Conformity – Federal requirement in nonattainment areas to conduct air quality analysis on projects, programs, and policies identified in transportation plans, transportation improvement programs, federally funded projects, or projects requiring federal approval
- CSJ – (TxDOT’s) Control Section Job Number
- DCC – Design Concept Conference
- EA – Environmental Assessment
- ED – Eminent Domain
- EIS – Environmental Impact Statement
- EPIC – Environmental Permits, Issues, and Commitments
- ESAL – Equivalent Single Axle Load (TxDOT design calculation)
- FONSI – Finding of No Significant Impact
- IAJR – Interstate Access Justification Request
- ICA – Interlocal Cooperative Agreement
- IFP – Initial Financial Plan
- Let – Official date of receipt and opening of bids
- MAPO – Meeting with Affected Property Owners
- MPO – Metropolitan Planning Organization
- MTP – Metropolitan Transportation Plan
- NCTCOG – North Central Texas Council of Governments
- NEPA – National Environmental Policy Act
- NOPC – Notice of Proposed Construction
- NTTA – North Texas Toll Authority
- PBLR – Preliminary Bridge Layout Review
- PS&E – Plans Specifications and Estimate
- PUA – Possession and Use Agreement
- ROW – Right-of-Way
- RTC – Regional Transportation Council
- RTL – Ready to Let (date project is clear for construction but lacks funding for actual let)
- RTR – Regional Toll Revenue (funds resulting from certain toll/managed lane projects in DFW region)
- RULIS – Right-of-Way, Utilities, Leasing, and Information System
- STBG – Surface Transportation Block Grant
- STIP – Statewide Transportation Improvement Program
- SUE – Subsurface Utility Engineering
- SW3P – Storm Water Pollution Prevention Plan
- TCP – Traffic Control Plan
- TIA – Time Impact Analysis
- TPP – Transportation Planning and Programming
- TPWD – Texas Parks & Wildlife Department
- TTC – Texas Transportation Commission
- TxDOT – Texas Department of Transportation
- UTP – Unified Transportation Program
- VE – Value Engineering

TxDOT Funding Categories

- CAT 1: Preventive Maintenance and Rehabilitation
- CAT 2: Metro and Urban Area Corridor Projects / NCTCOG
- CAT 3: Non-Traditionally Funded Transportation Projects
- CAT 4: Statewide Connectivity Corridor Projects
- CAT 5: Congestion Mitigation and Air Quality Improvement / NCTCOG
- CAT 6: Structures Replacement and Rehabilitation (Bridge)
- CAT 7: Metropolitan Mobility and Rehabilitation / NCTCOG
- CAT 8: Safety Projects
- CAT 9: Transportation Alternatives
- CAT 10: Supplemental Transportation Projects
- CAT 11: District Discretionary
- CAT 12: Strategic Priority

Denton City Limits





City of Denton

City Hall
215 E. McKinney St.
Denton, Texas 76201
www.cityofdenton.com

Legislation Text

File #: MC24-035, **Version:** 1

AGENDA CAPTION

Receive a report and hold a discussion regarding the Denton County Outer Loop.

[Estimated Presentation Time: 30 minutes]



City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Capital Projects

ACM: Cassey Ogden

DATE: October 30, 2024

SUBJECT

Receive a report and hold a discussion regarding the Denton County Outer Loop.

BACKGROUND

The Mobility Committee has requested additional information on the Outer Loop. Tony Kimmey and Madeline Shepherd from LJA Engineering; and John Polster, President of ITS, will present on the Denton County Outer Loop – Schematic Design & Environmental Study.

EXHIBITS

Exhibit 1 - Agenda Information Sheet

Exhibit 2 - Presentation

Respectfully submitted:
Trevor Crain, PMP
Director of Capital Projects



★ REGIONAL ★
OUTER LOOP
IN DENTON COUNTY

Denton County Outer Loop

**Schematic Design &
Environmental Study**

Denton Mobility Committee

**October 30, 2024
MC24-035**



1 Introduction

2 Background and Study Purpose & Need

3 Study Tasks & Environmental Impact Statement Process

4 Alternatives Under Consideration

5 Questions & Discussion

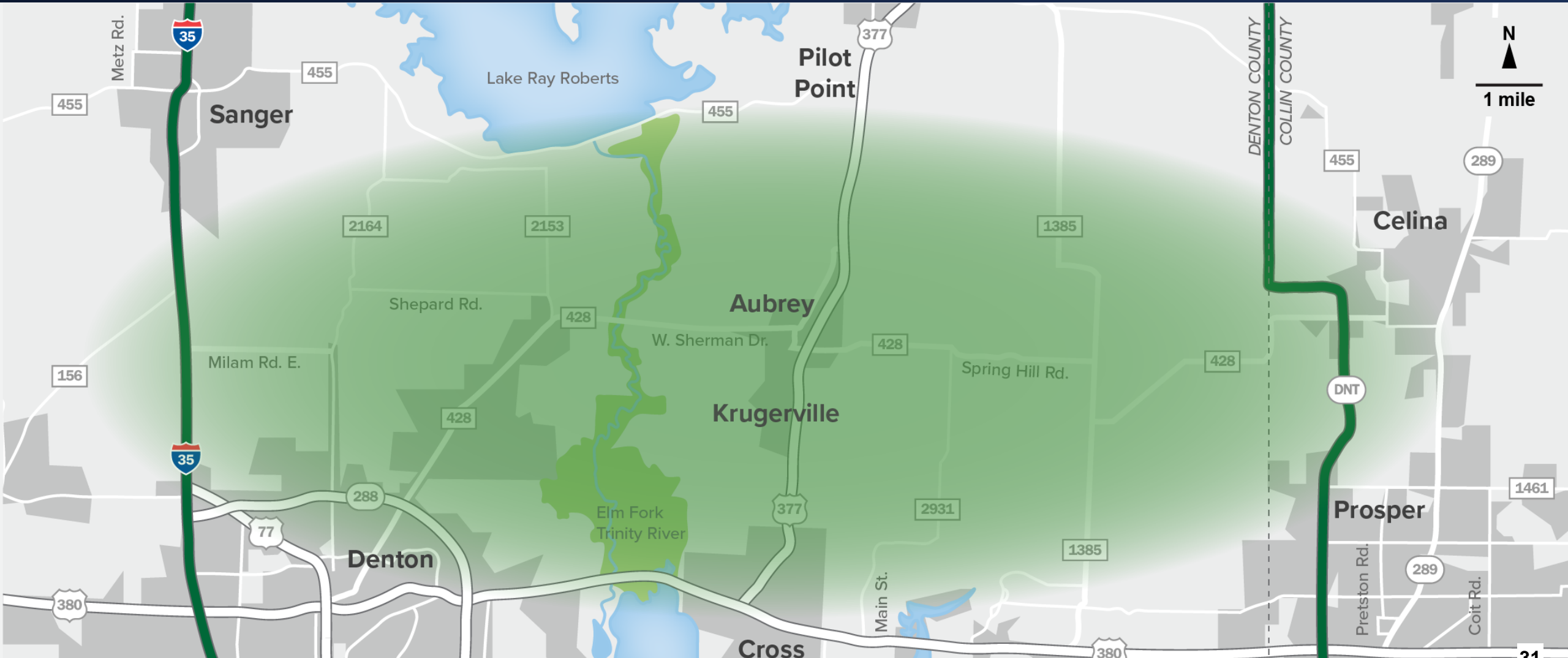


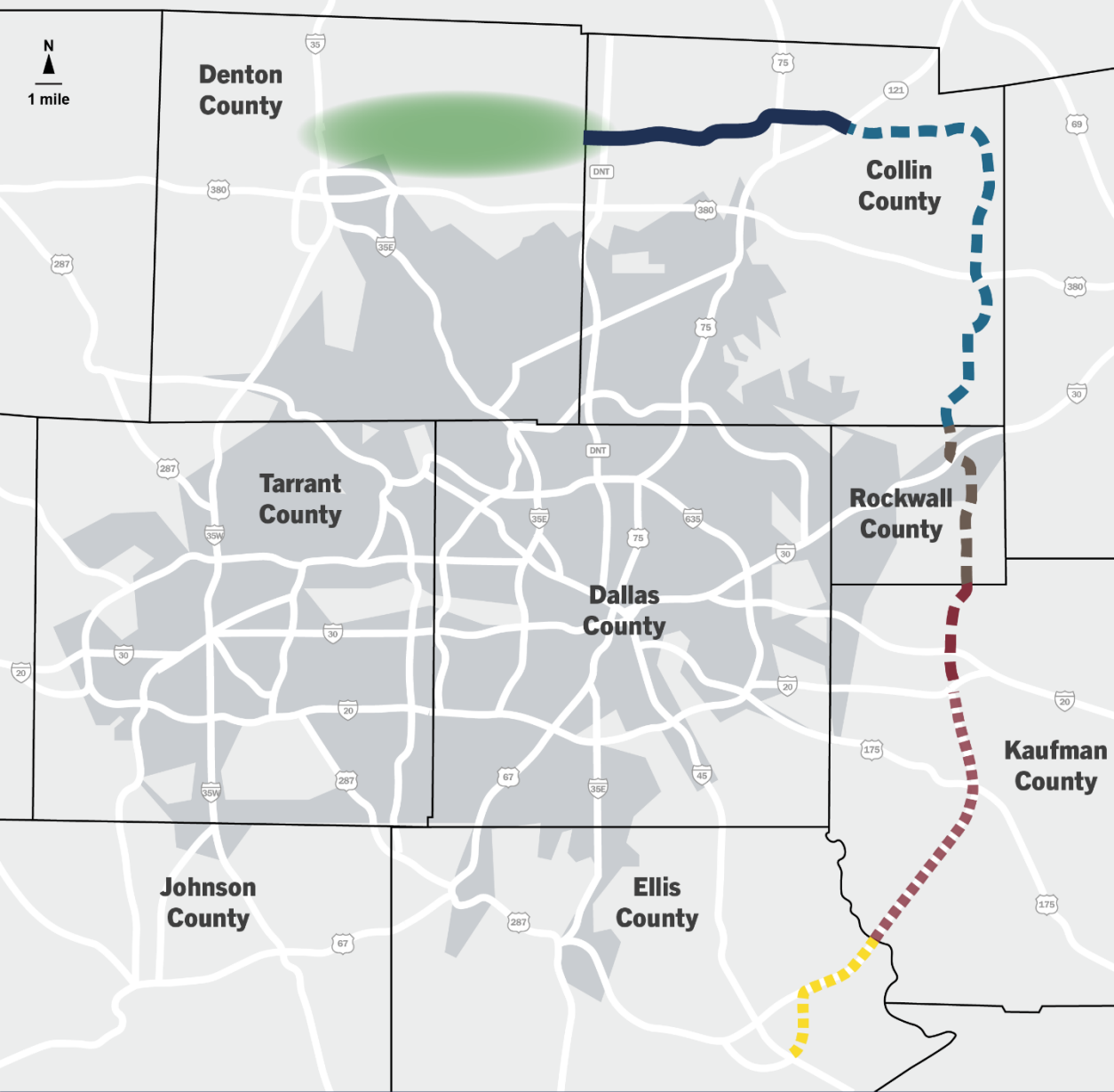
STUDY AREA

Schematic Design & Environmental Study

Study Limits:

- FM 455 to Loop 288
 - I-35 (Denton Co.) to Dallas North Tollway (DNT) (Collin Co.)*
- *Defined as logical termini. Determination made through consultation with Denton and Collin Counties.*





THE REGIONAL OUTER LOOP VISION

The Regional Outer Loop is envisioned to extend from Denton County, across Collin County, and then south through Rockwall, Kaufman, and possibly Ellis Counties.

Project Contacts:

- *Denton County Outer Loop* – Tony Kimmey, info@dentoncountyouterloop.com
- *Collin County Outer Loop* – Clarence Daugherty, cdaugherty@co.collin.tx.us
- *Rockwall County Outer Loop* – Matt Craig, RCOL@half.com
- *Kaufman County Outer Loop* – Brian Swindell, connect@kaufmanouterloop.com

LEGEND

- Proposed Denton County Outer Loop
- County Boundary
- Freeways and US Highways
- Urban Area
- Existing Regional Outer Loop
- Proposed - Under Evaluation
- Possible Extension for Future Evaluation

DRAFT PURPOSE & NEED

Purpose and Need is the factual foundation to screen and compare design alternatives and demonstrate – through measurable and quantifiable metrics – where improvements are needed.

NEED FOR THE PROJECT

The need for the proposed project was identified and refined through background research, traffic modeling, and stakeholder and public engagement throughout the Feasibility Phase of the study. The need is driven by:



RAPID CURRENT AND PROJECTED POPULATION AND TRAFFIC GROWTH



HIGHER CRASH RATES THAN THE STATEWIDE AVERAGE



LIMITED MOBILITY DUE TO LACK OF CONTIGUOUS EAST-WEST ARTERIALS

PURPOSE FOR THE PROJECT

The purpose of the proposed project within the project limits is to:



ADDRESS POPULATION AND TRAFFIC GROWTH



SUPPORT SAFE AND RESILIENT EAST-WEST MOBILITY AND CONNECTIVITY

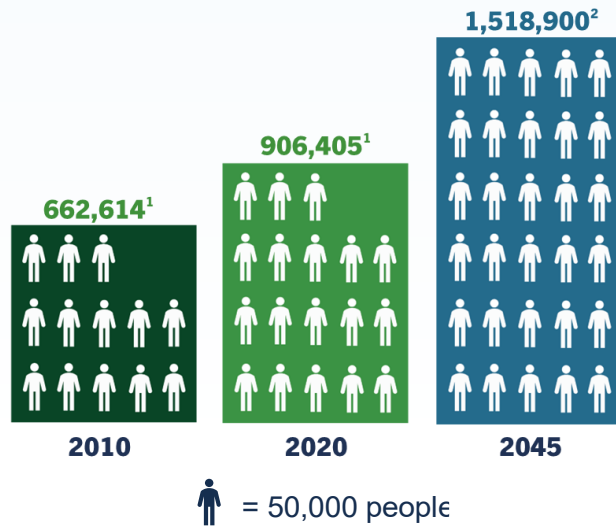


View the Purpose and Need Memorandum at www.DentonCountyOuterLoop.com

DRAFT PURPOSE & NEED



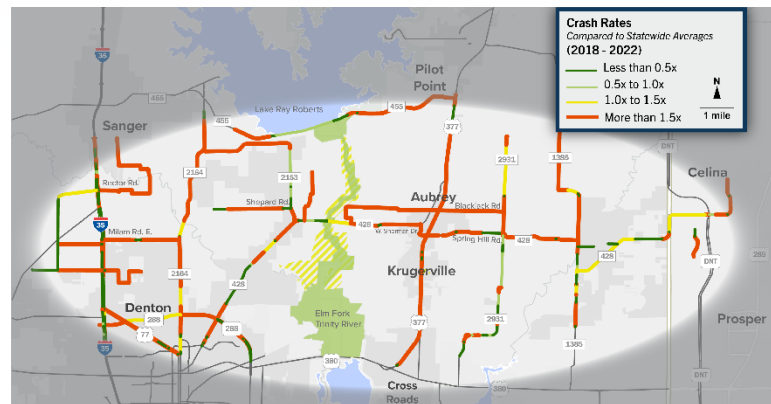
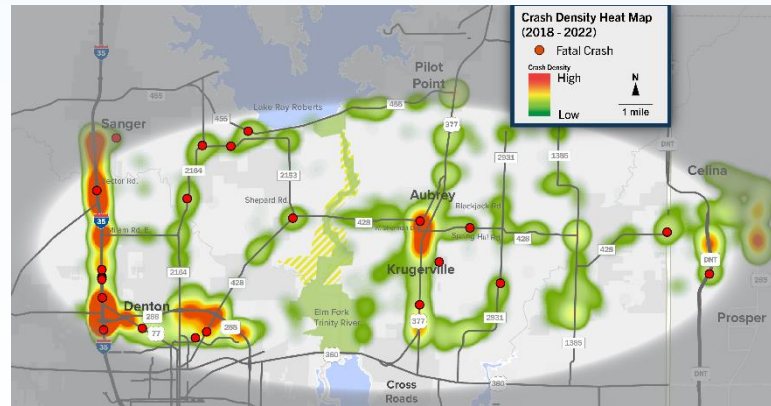
RAPID CURRENT AND PROJECTED POPULATION AND TRAFFIC GROWTH



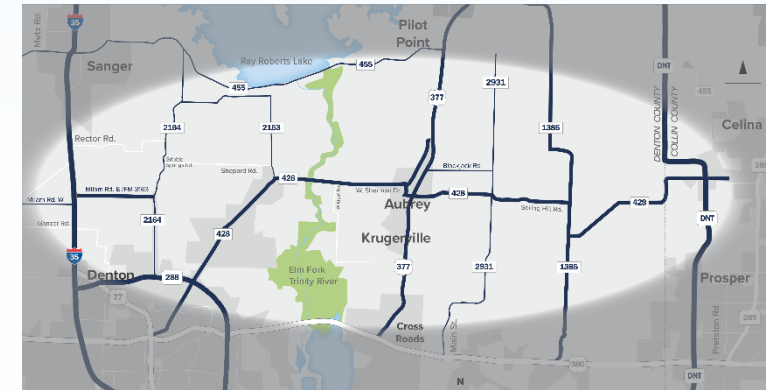
¹ Source: 2010 and 2020 US Decennial Census
² Source: North Central Texas Council of Governments 2045 Demographic Forecasts (2022)



HIGHER CRASH RATES THAN THE STATEWIDE AVERAGE



LIMITED MOBILITY DUE TO LACK OF CONTIGUOUS EAST-WEST ARTERIALS



Review more detailed information on the Purpose & Need on the exhibit boards and at:

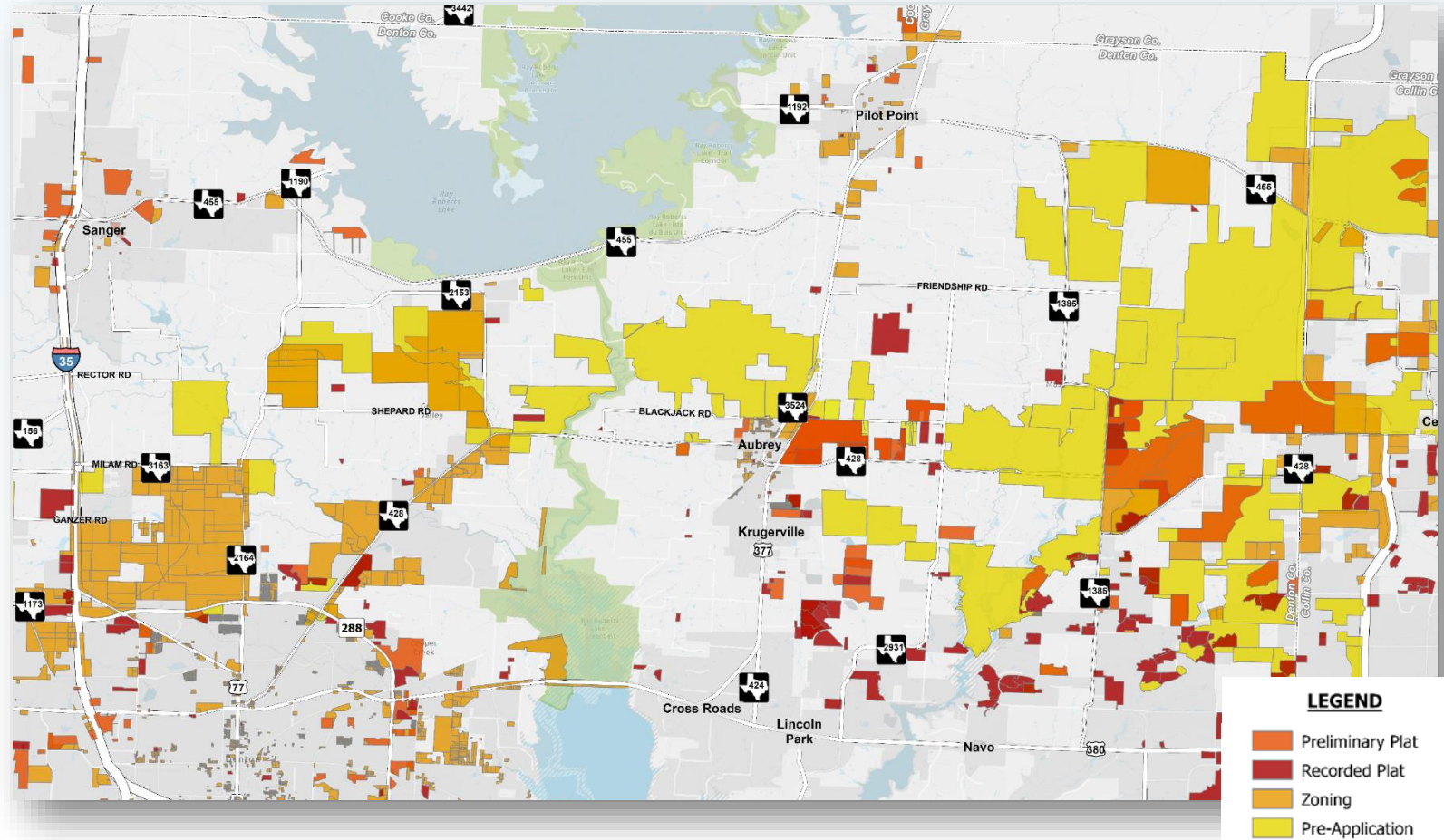
www.DentonCountyOuterLoop.com



LAND IS BEING DEVELOPED QUICKLY

Between 2015 & 2021, **more than 20,000*** acres of farm, ranch, timber, and vacant land have been converted to single family or commercial use in Denton County.

Land Development



Almost **5,000** acres of additional land within the study area are planned for development.

*Source: US 380 Denton County Feasibility Study (2020)



BACKGROUND

Building off previous efforts

2007 - 2011

A **Feasibility Study for a Regional Outer Loop** around the DFW metroplex was conducted. It found that an east-west route in Denton County may be warranted based on expected growth.

2016 & 2021

NCTCOG recommended the **Denton County Outer Loop** as an eventual six-lane freeway in Mobility 2040 and again in Mobility 2045, the region's long-range transportation plan.

2019

The **Denton Greenbelt Corridor Feasibility Study** identified the viability of the Outer Loop across northeast Denton County. It determined the Outer Loop is warranted.

2013

The Outer Loop was added to the **Denton County 2013 Thoroughfare Plan** update, which identifies long-range county transportation vision and direction.

2017

The **Denton County 2017 Thoroughfare Plan** included additional analysis that validated the need for US 380 and the Outer Loop as higher-capacity east-west connectors.

OVERVIEW OF STUDY TASKS



▶ Conduct Environmental Studies

Field Studies and Development of an Environmental Impact Statement (EIS) document.



▶ Develop the Schematic Design of Alternatives

Develop and analyze roadway alignments and perform preliminary engineering tasks.

ENVIRONMENTAL IMPACT STATEMENT (EIS)

National Environmental Policy Act (NEPA)

- ▶ **The National Environmental Policy Act (NEPA)** requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. If a project is to receive federal funding, it must adhere to NEPA.
- ▶ **An Environmental Impact Statement (EIS)** is the most rigorous level of environmental review under NEPA and is prepared when it is anticipated a proposed project could significantly affect the quality of the **human and natural environment**.
- ▶ Denton County intends to **obtain environmental clearance** for the project from TxDOT through the NEPA process in order to use federal funds to construct the proposed roadway.
- ▶ Based on the NEPA process, TxDOT determined that the project will now be classified and prepared as an EIS that will **evaluate a range of build and a no-build alternative**.

SCOPING AND THE EIS PROCESS

FEASIBILITY PHASE



FEASIBILITY PHASE

- Began in 2022
- Identified feasible alignments for further study
- Concluded in Spring 2024

EIS DEVELOPMENT



SCOPING

- Host Agency and Public Scoping meetings
- Present and gather input on Scoping documents
- Issue Notice of Intent (NOI)



ANALYSIS & PUBLIC MEETING

- Analyze alternatives for potential impacts
- Further develop schematic design
- Host public meeting to present analysis of alternatives



DRAFT EIS & PUBLIC HEARING

- Identify Preferred Alternative
- Further develop schematic design
- Host public hearing to gather input on Draft EIS document



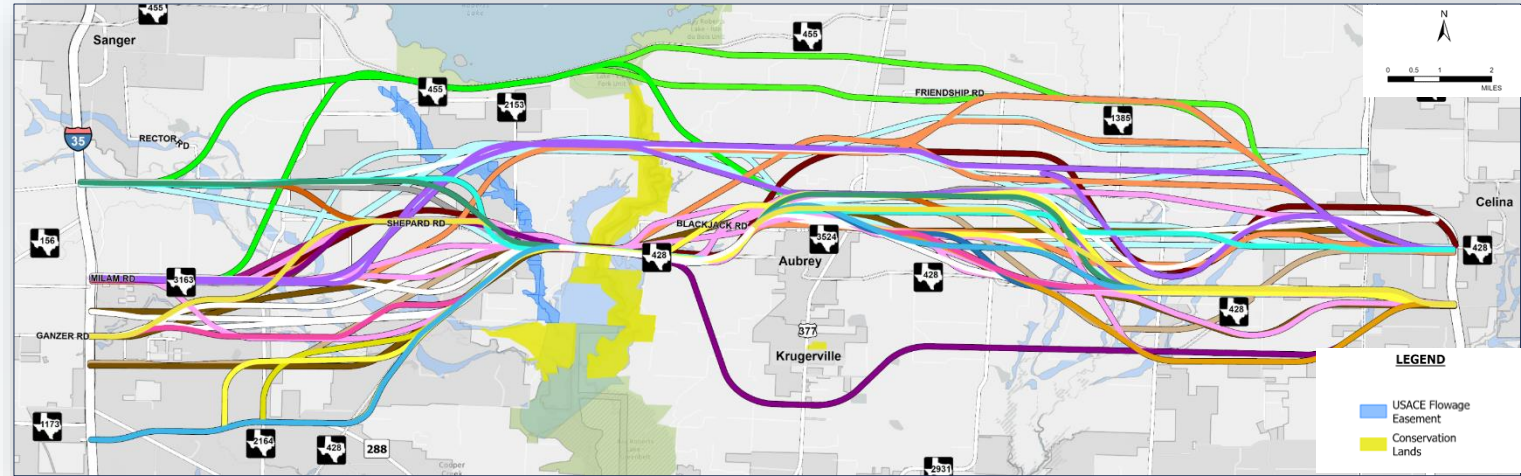
FINAL EIS & RECORD OF DECISION

- Respond to comments on the draft EIS
- Finalize EIS
- Issue Record of Decision

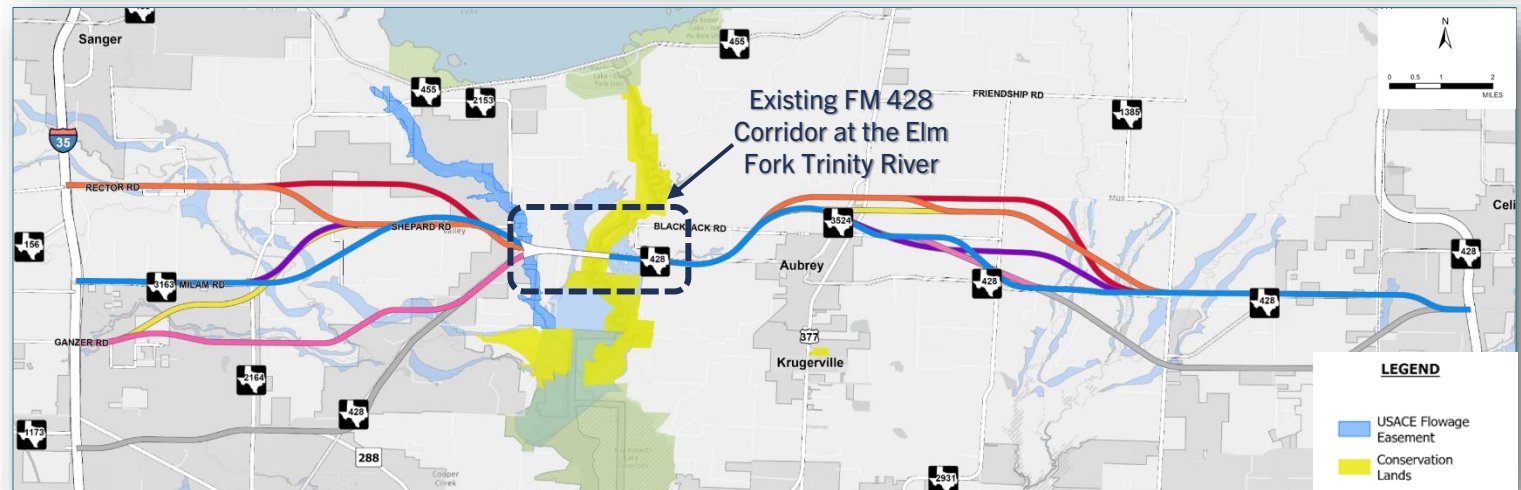
FEASIBILITY STUDY HIGHLIGHTS

JANUARY 2023 Conceptual Alignments

*Including alignments
 identified in previous studies*



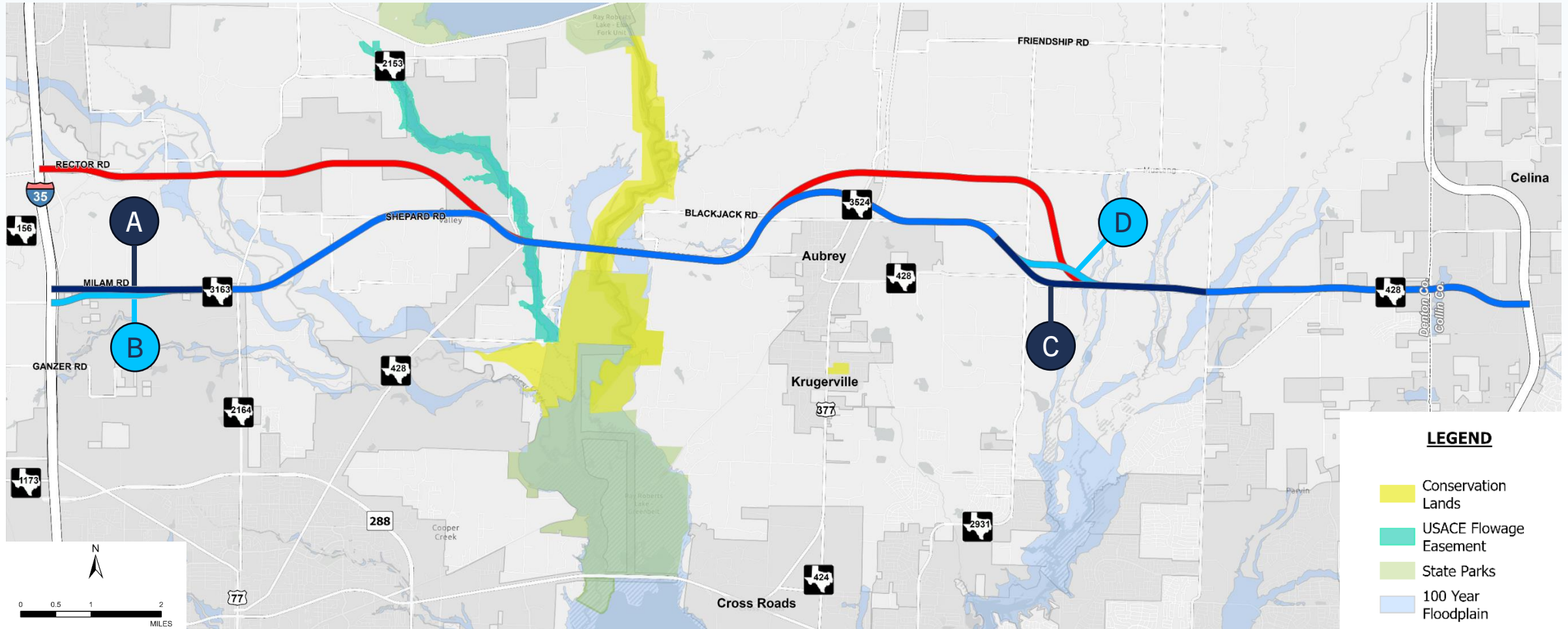
MAY 2023 Public Meeting #1 Alignments after initial screening



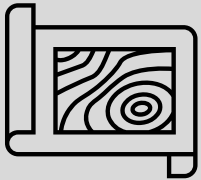
FEASIBILITY STUDY

ALIGNMENTS RECOMMENDED FOR FURTHER STUDY

Alignments were evaluated based on a set of high-level criteria (presented in Nov. 2023).



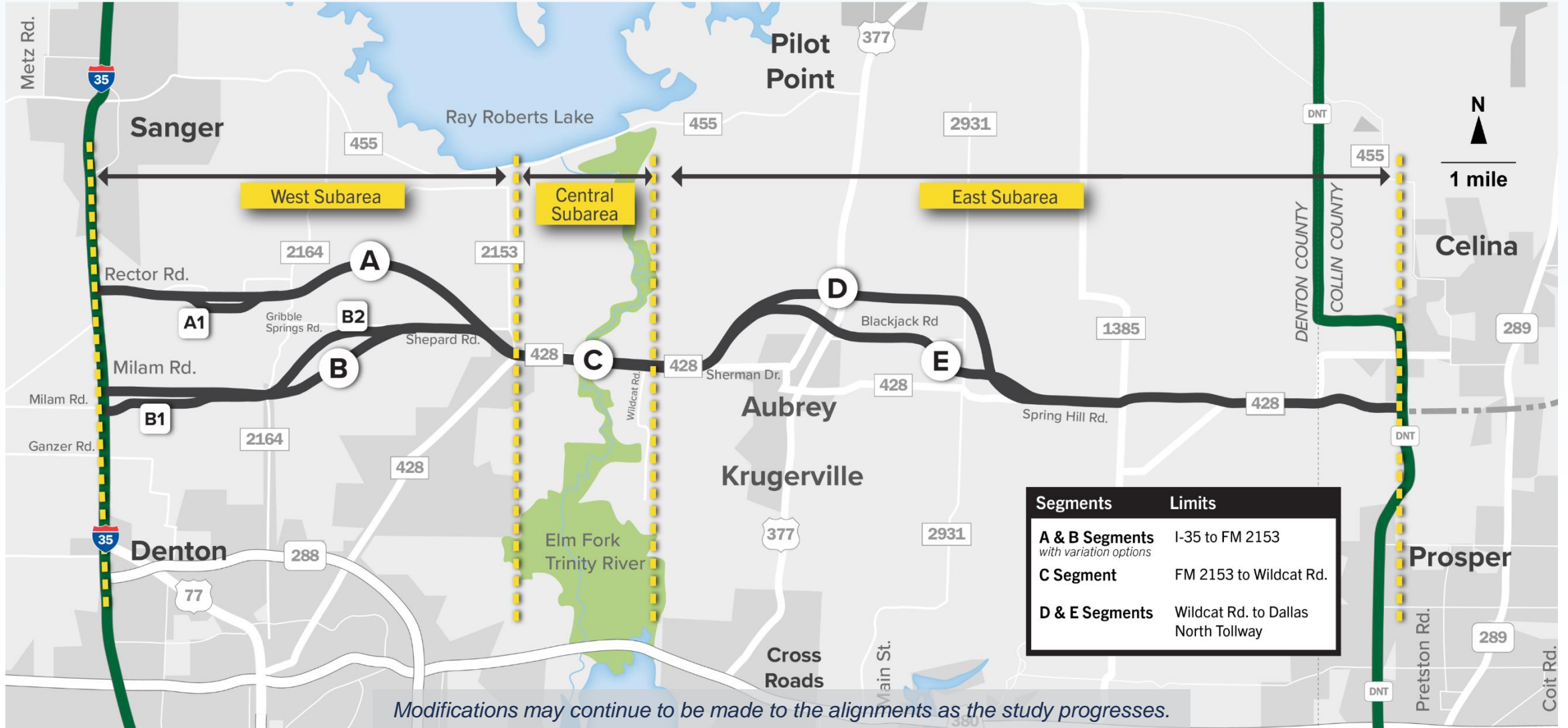
Study Task: **IDENTIFY REASONABLE ALTERNATIVES**



Denton County and TxDOT have identified the reasonable alternatives to evaluate during this phase of project development:

- ✓ Denton County and TxDOT must identify an alternative that would best accomplish the project's Purpose & Need.
- ✓ The **“Build” Alternative Segments** shown on the next slide are based on the data collected during the Feasibility Phase of the study and the alignments recommended for further study.
- ✓ Combinations of these segments make up **four end-to-end “Build” Alternatives** to be evaluated in the EIS process.
- ✓ Evaluation of a **“No Build” Alternative** will look at the impact of what will happen if no freeway is built, but projected population and traffic continue to grow. It will also account for other roadway improvements in the study area.
- ✓ **Modifications may continue to be made** to the alternatives as the study progresses.

EIS BUILD ALTERNATIVE SEGMENTS



FOUR BUILD ALTERNATIVES



Modifications may continue to be made to the alignments as the study progresses.

METHODOLOGY TO ANALYZE ALTERNATIVES

An initial analysis of the alternatives using the criteria below will be presented for public comment at a public meeting expected to be held in Summer 2025.

PURPOSE & NEED

HOW WELL DOES ALTERNATIVE ADDRESS IDENTIFIED NEED

- RAPID CURRENT AND PROJECTED POPULATION AND TRAFFIC GROWTH
- HIGHER CRASH RATES THAN THE STATEWIDE AVERAGE
- LIMITED MOBILITY DUE TO THE LACK OF CONTIGUOUS EAST-WEST ARTERIALS

PUBLIC INPUT

- PUBLIC AND STAKEHOLDER INPUT, COMMENTS, FEEDBACK, AND ACCEPTANCE

ENGINEERING

- TOTAL LENGTH ALONG CENTERLINE (I-35 TO DNT)
- MAJOR UTILITY CONFLICTS
- ESTIMATED CONSTRUCTION COST - PER MILE (INSTALLED FACILITY)
- ESTIMATED CONSTRUCTION COST (INSTALLED FACILITY, ROW, UTILITY RELOCATIONS, ETC.)
- TOTAL LENGTH OF ELEVATED STRUCTURES (E.G., BRIDGES, DECKED ROADWAYS)
- NUMBER OF NEW GRADE-SEPARATED INTERCHANGES

ENVIRONMENTAL

- RESIDENTIAL DISPLACEMENTS
- BUSINESS DISPLACEMENTS
- LAND USE
- FARMLAND IMPACTS
- FARMLAND IMPACTS (SEPARATION OF FARMLAND FROM HOMESTEAD)
- COMMUNITY DEMOGRAPHICS AND SERVICES (ENVIRONMENTAL JUSTICE [EJ], LIMITED ENGLISH PROFICIENCY [LEP], TITLE VI CONSIDERATIONS)
- BICYCLE AND PEDESTRIAN FACILITIES
- SECTION 303(D) IMPAIRED WATERS
- FLOODPLAINS (100-YEAR) AND FLOODWAYS
- IMPACTS TO VEGETATION/HABITAT
- IMPACTS TO WILDLIFE
- THREATENED, ENDANGERED, OR CANDIDATE SPECIES
- STATE SPECIES OF GREATEST CONSERVATION NEED (SGCN)
- AIR QUALITY
- HISTORIC PROPERTIES
- PROTECTED LANDS (SECTION 4(F), SECTION 6(F), CHAPTER 26 PROPERTIES, CONSERVATION EASEMENTS)
- WATERS OF THE US - STREAMS AND RIVERS
- WATERS OF THE US - WETLANDS
- INDIRECT AND CUMULATIVE EFFECTS
- INDUCED GROWTH
- VISUAL/AESTHETIC IMPACTS

- COMMUNITY FACILITIES (SCHOOLS, PLACES OF WORSHIP, LIBRARIES, ETC.)
- ARCHAEOLOGICAL SITES AND CEMETERIES
- HAZARDOUS MATERIALS
- TRAFFIC NOISE

The full Methodology and Level of Detail for Analyzing the Alternatives can be viewed at:



www.DentonCountyOuterLoop.com

Study Task: **MORE DETAILED DESIGN**

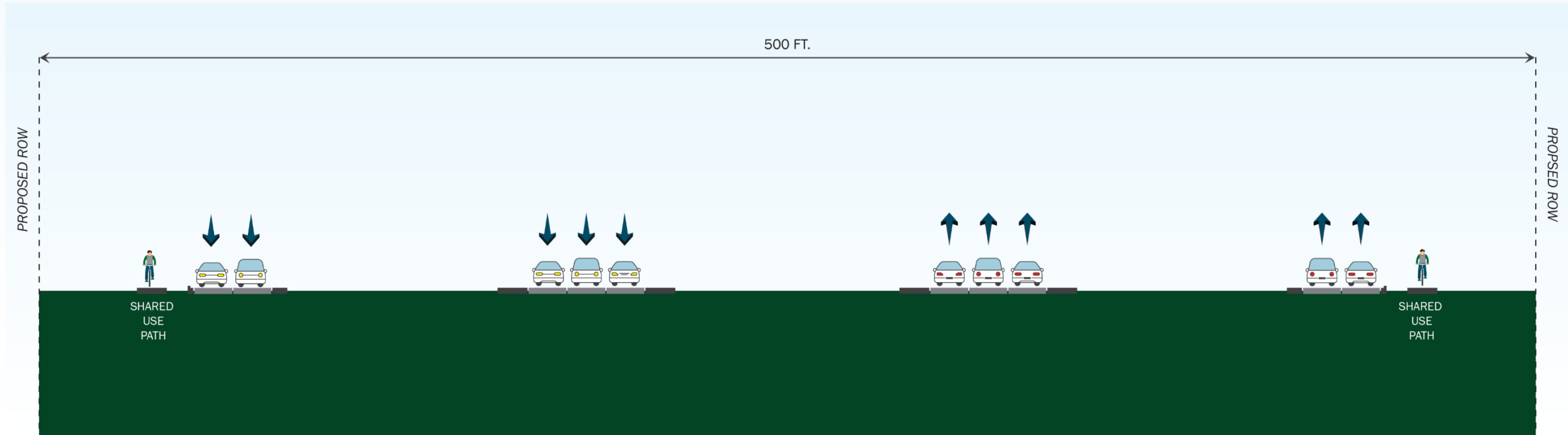


Denton County and TxDOT will complete a more detailed schematic design of the roadway during this phase of project development. Preliminary engineering tasks include:

- ✓ Determining how much right-of-way is needed.
- ✓ Refining typical sections for specific locations along the project corridor.
- ✓ Developing ramp locations and interchange configurations.
- ✓ Determining the constructability of the project.
- ✓ Calculating a more detailed cost estimate.
- ✓ Completing drainage design.
- ✓ Considering and designing bicycle and pedestrian accommodations and connections.

PROPOSED TYPICAL SECTION

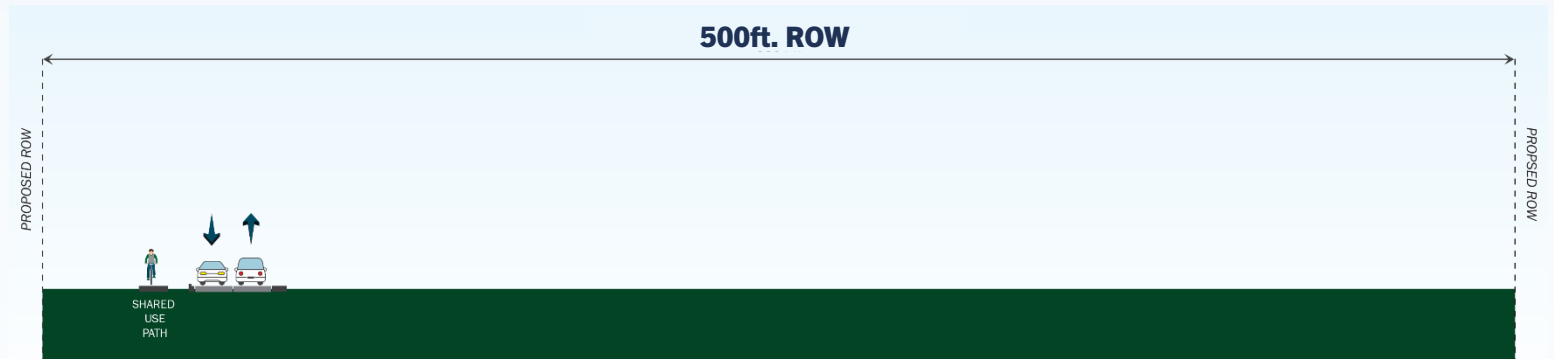
500-foot-wide ROW



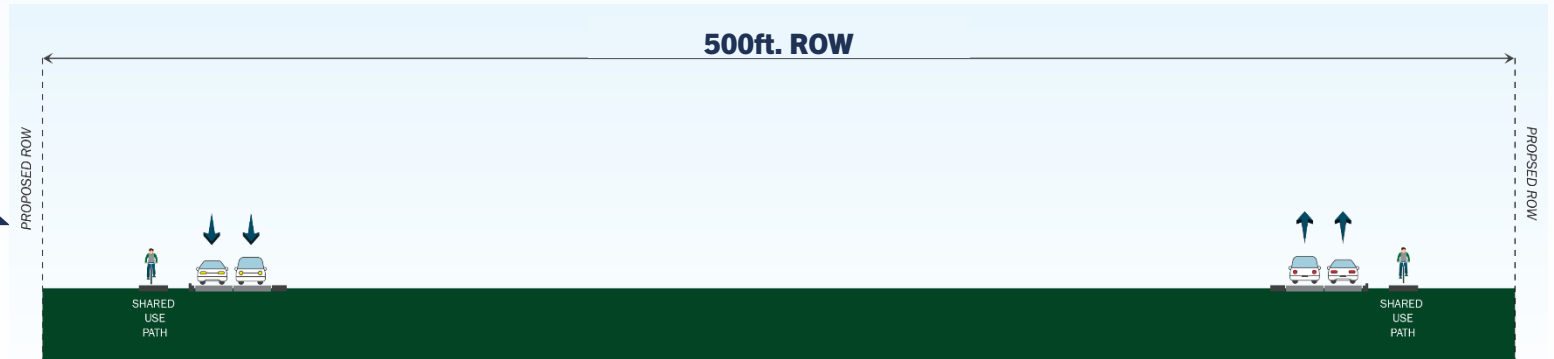
Modifications may continue to be made to the alignments as the study progresses.

PHASED PROJECT CONSTRUCTION

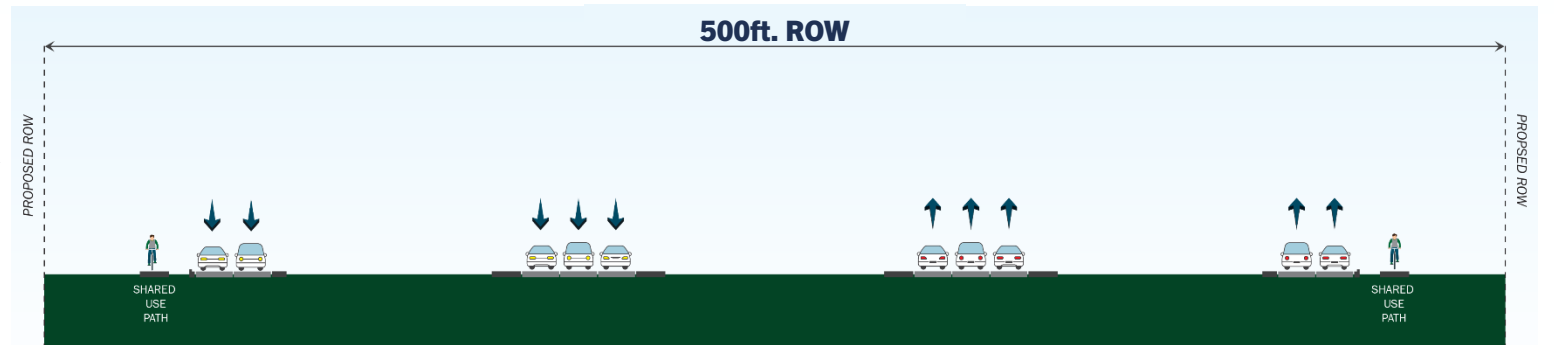
Phase 1 – Construction of frontage road along one side



Phase 2 – Construction of frontage road along the other side



Phase 3 – Construction of the main lanes



Modifications may continue to be made to the alignments as the study progresses.

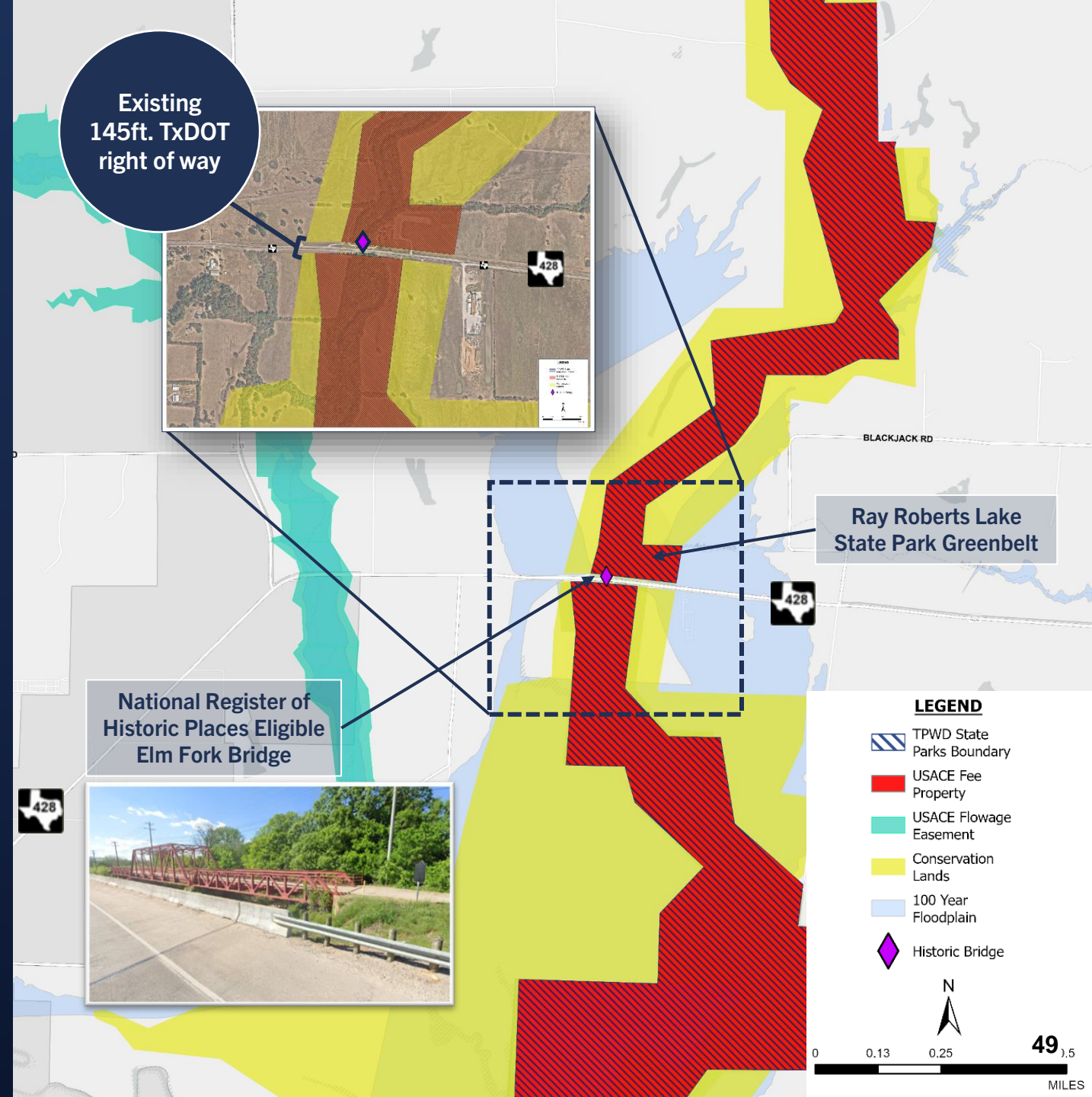
GREENBELT AREA IN FOCUS

High-Risk Constraints

Several high-risk constraints exist in the Greenbelt Corridor area.

- Federal Conservation Easements
- USACE Owned Property
- Historic Bridge
- Ray Roberts Lake State Park Greenbelt Trails
- USACE Flowage Easements, Regulatory Floodways, and Floodplains

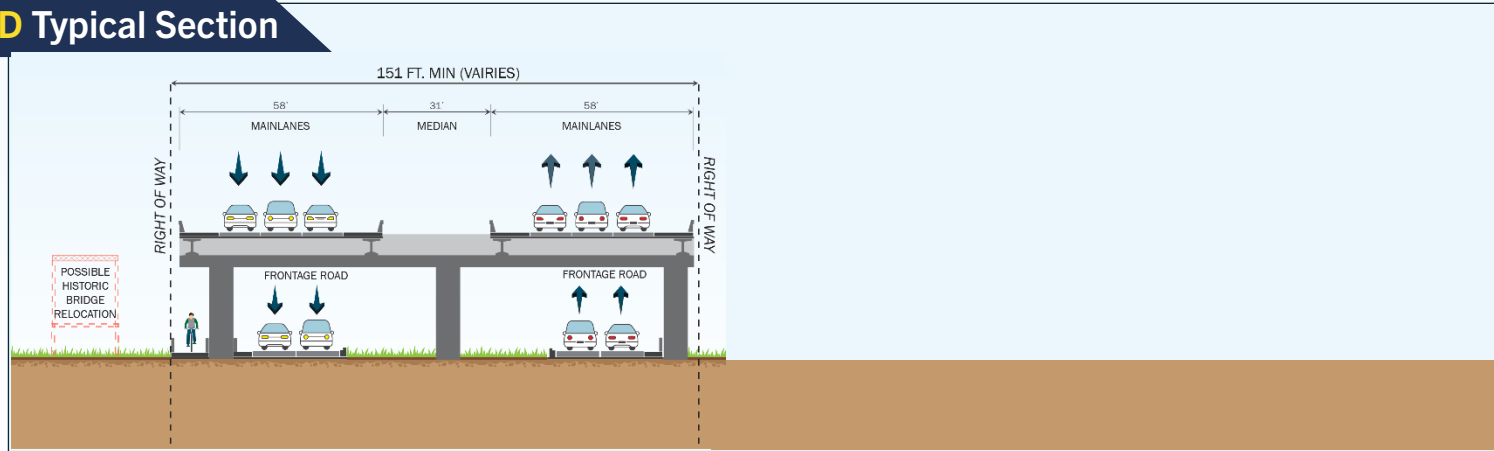
An alignment along FM 428 was initially identified as the most feasible location to cross the Greenbelt Corridor because it would utilize existing TxDOT right of way and minimize impacts to the identified constraints.



GREENEBELT CROSSING

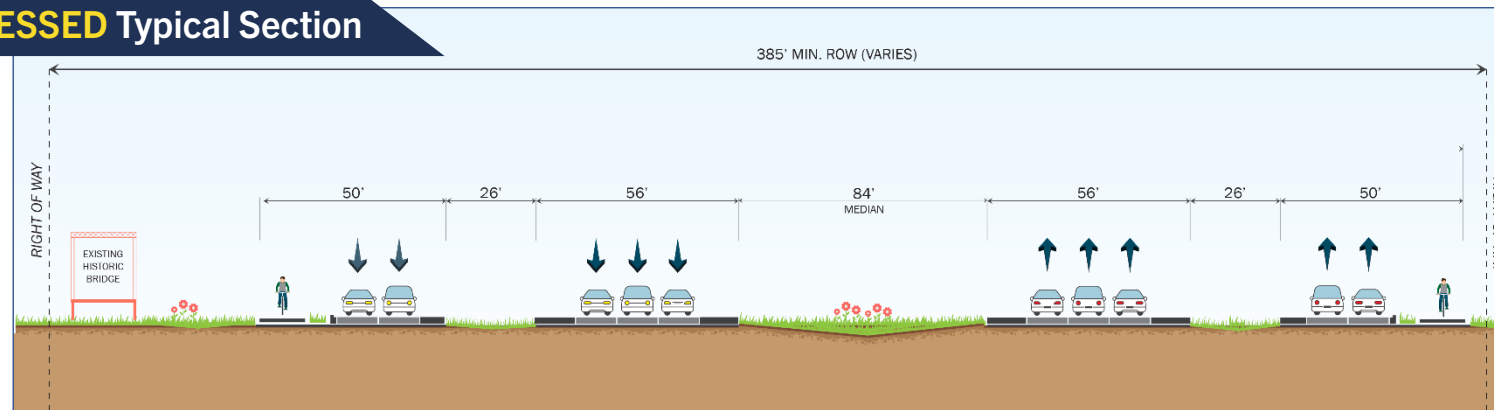
Due to the challenging constraints at the FM 428 crossing of the Greenbelt Corridor, compressed and stacked typical sections are being developed and assessed to minimize impacts.

STACKED Typical Section



- Multi-level bridge with frontage roads underneath main freeway lanes and incorporates possible shared-use path.
- Utilizes existing TxDOT right-of-way along FM 428 to minimize impacts at the current crossing. Federal Conservation Easements are not impacted by this option.
- Future location of the historic Elm Fork Bridge to be evaluated.

COMPRESSED Typical Section

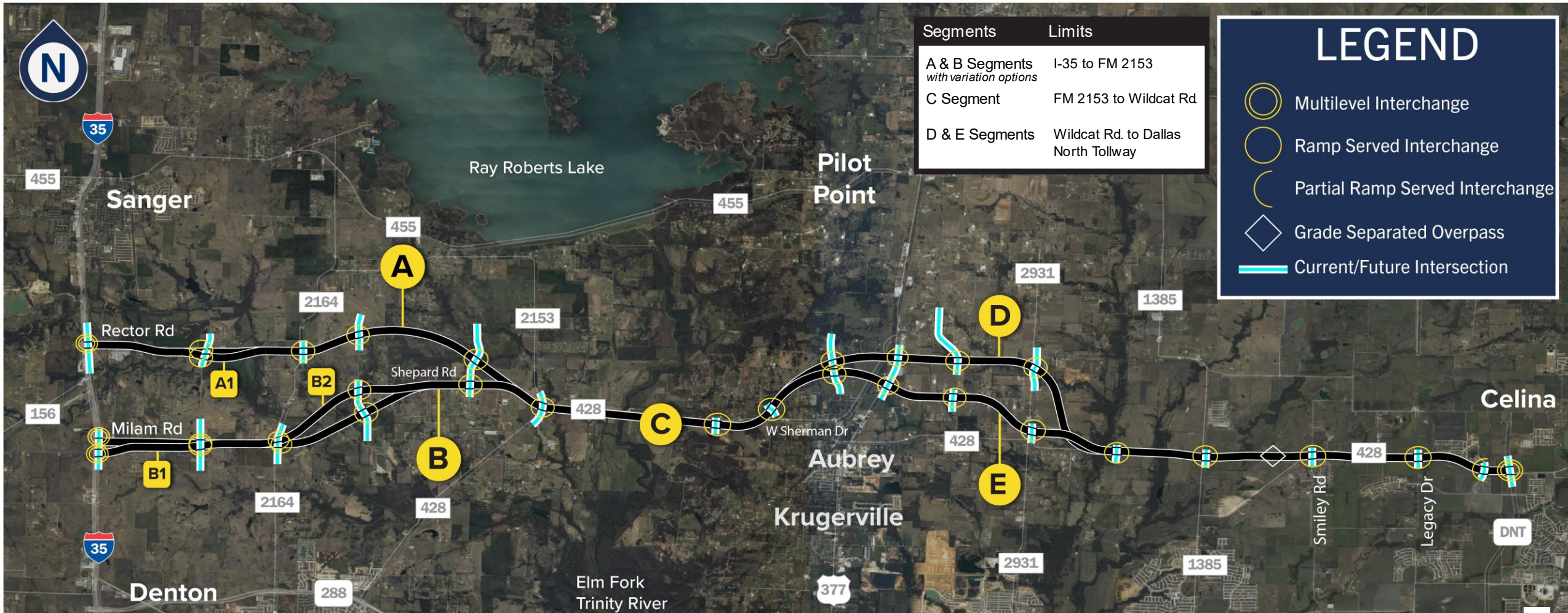


- Generally utilizes 385 ft. right-of-way width.
- Consists of continuous outside frontage roads, shared use path and main freeway lanes at-grade.
- Impacts USACE Property, State Park and Federal Conservation Easements.

Diagrams are **for illustration purposes only** and do not represent the final design or lane configuration for the roadway. Modifications to the lane configuration and ROW width may occur as the study progresses.

PRELIMINARY INTERCHANGE LOCATIONS

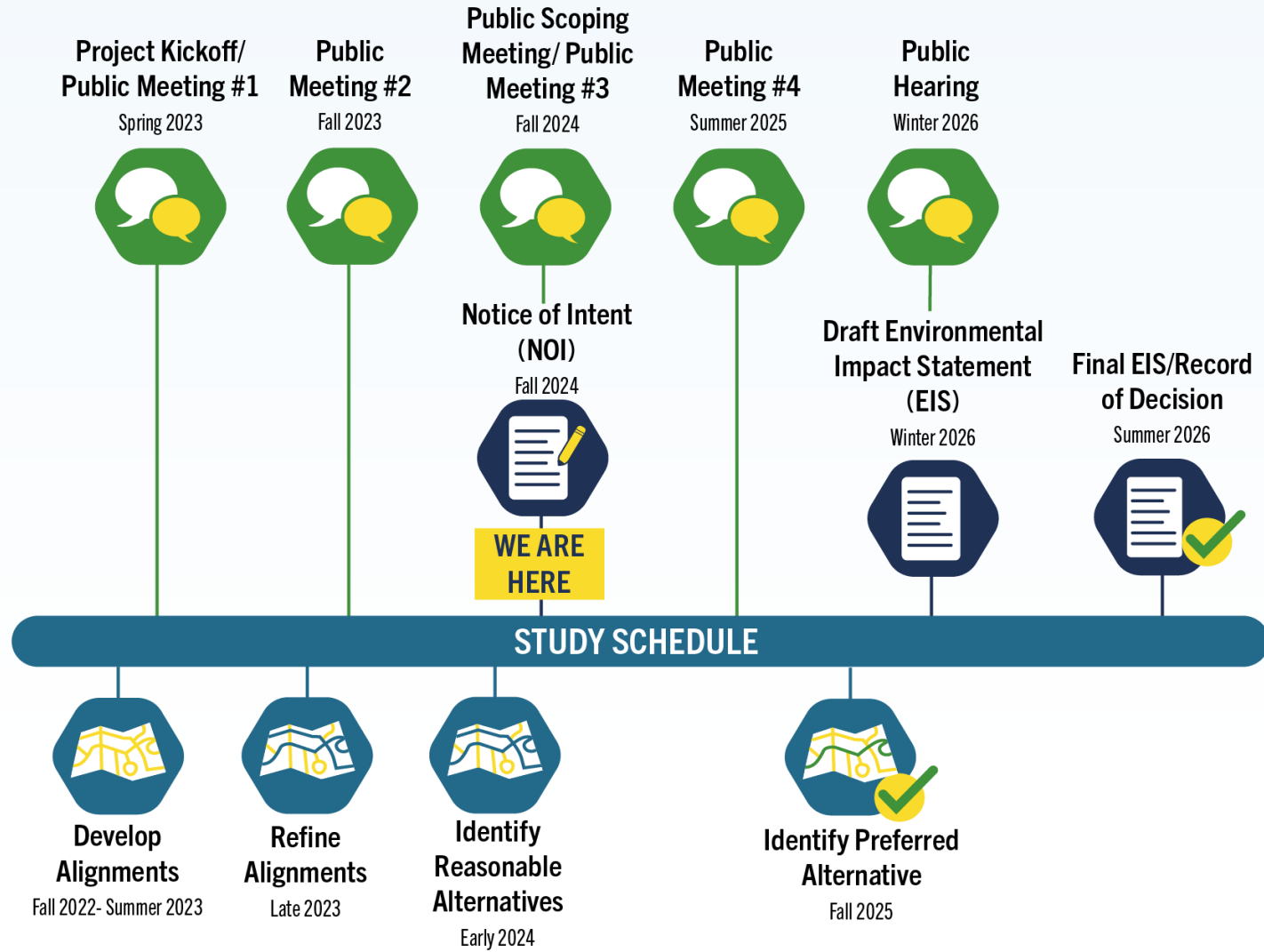
Preliminary interchange locations are proposed at key intersections. In some cases, these interchanges are located at crossings with future roads that do not yet exist but are identified in local thoroughfare plans for future construction.



PROJECT DEVELOPMENT PROCESS



NEXT STEPS



*All dates are subject to change



PUBLIC SCOPING MEETINGS

The purpose of these meeting is to:

- **Update** the public about the Denton County Outer Loop study
- **Present** Public Scoping Documents as part of the EIS development
- **Share** information about the alternatives under consideration
- **Invite** the public to provide comment



Tuesday, Oct 29
5:30 p.m. - 7:30 p.m.

AUBREY/ PILOT POINT

Midway Church (Gymnasium)

9540 US 377
Pilot Point, TX 76258

October 30, 2024



Wednesday, Oct 30
5:30 p.m. - 7:30 p.m.

DENTON

Denton Convention Center
(Embassy Suites)

3100 Town Center Trail
Denton, TX 76201

MC 24-035



Oct 29 - Nov 29, 2024

VIRTUAL

DentonCountyOuterLoop.com

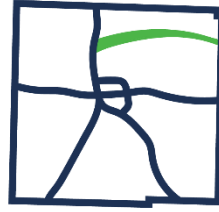
Materials posted Oct 29 at
8 a.m. through Nov 29

**Not a live event*

26



DISCUSSION & QUESTIONS



★ REGIONAL ★
OUTER LOOP
IN DENTON COUNTY

THANK YOU

Project Contacts

Tony Kimmey – *Project Manager*, LJA Engineering
214-802-7662, tkimmey@lja.com

Madeline Shepherd – *Outreach Lead*, Burns & McDonnell
469-294-4502, info@dentoncountyyouterloop.com

For more information and project updates:
www.DentonCountyOuterLoop.com



City of Denton

City Hall
215 E. McKinney St.
Denton, Texas 76201
www.cityofdenton.com

Legislation Text

File #: MC24-036, **Version:** 1

AGENDA CAPTION

Receive a report and hold a discussion regarding Lowering Barriers to Bike Racks with a Focus on Infill Locations.

[Estimated Presentation Time: 30 minutes]



City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Development Services

ACM: Cassey Ogden

DATE: October 30, 2024

SUBJECT

Receive a report and hold a discussion regarding Lowering Barriers to Bike Racks with a Focus on Infill Locations.

BACKGROUND

The City of Denton requires bicycle racks in new commercial developments to make it easier to bike and convenient for users. As an outcome of the September Mobility Committee, staff was requested to provide a strategy to improve bike rack accommodations. The discussion included observations that much of the city, including downtown and the areas around the universities lack sufficient bicycle racks. These areas were largely developed prior to the current bike rack/multimodal requirements.

EXHIBITS

Exhibit 1 - Agenda Information Sheet

Exhibit 2 - Presentation

Respectfully submitted:
Greg Scott, RSP1, AICP, PMP.
Senior Transportation Planner

Mobility Committee

Lowering Barriers to Bike Racks With a Focus on Infill Locations

October 30, 2024

MC24-036

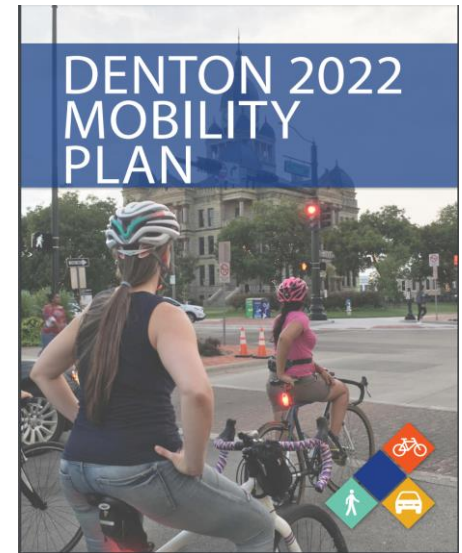


Outline

- Recap: “Accommodating Bike Racks” Presentation
- A Deeper Look:
 - Environmental & Economic Benefits
 - Use of Sight Triangles
- Strategy and Recommendations
- Q&A

Connection to City Goals and Strategies

- Goal 8: ‘Promote a Friendly Active Transportation System...’
- Objective 8B: “Provide end-of-trip facilities that [support biking]”
- Strategy 8.17: “Provide bike parking...at public facilities”
- Goal 4: ‘Prioritize transportation alternatives to the car...’



Recap:

Biking Can Have Big Benefits

Health

MIND
HEART
LUNGS
IMMUNE SYSTEM
MUSCLES

<https://transportation.ucla.edu/blog/biking-your-way-better-health>

Community

<https://bikeeastbay.org/community-agreement/>

Local Business

Transit Utilization

8748

<https://www.sfmta.com/blog/bigger-bike-racks-billy-muni-routes>

Environmental

DALLAS

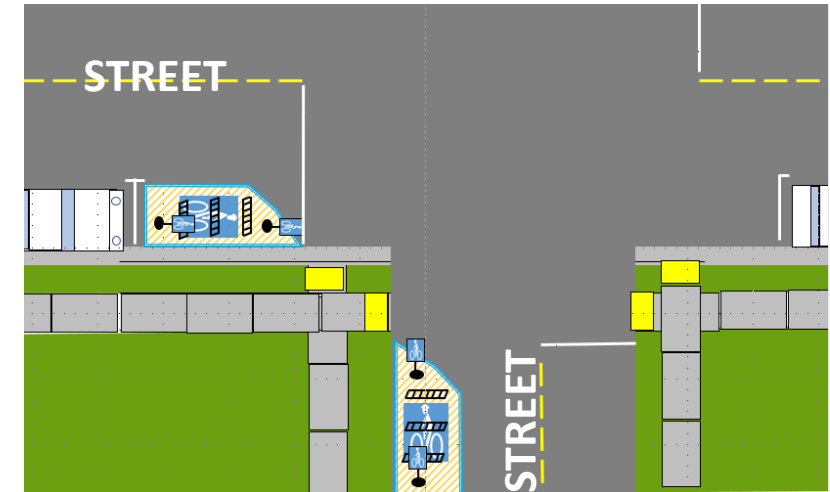
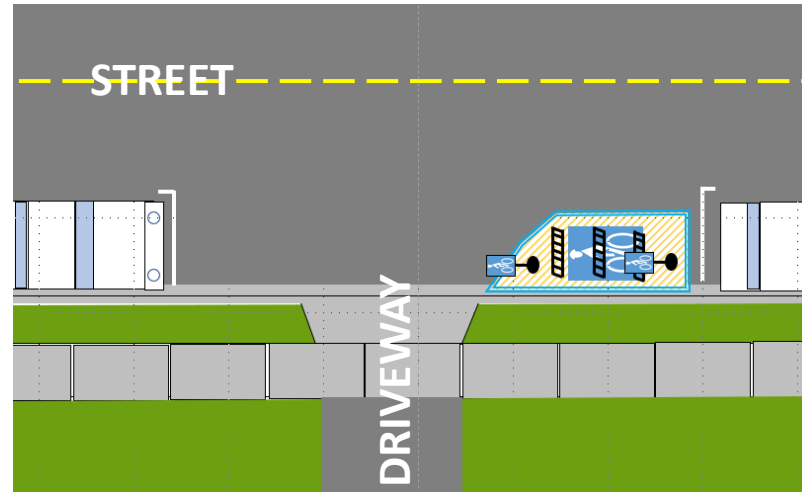
Economic Growth

Environment + Energy
LEADER
TOP PROJECT
2024
Environmental Impact

Recap:

Two Recommendations

1. Use Street & Driveway Corners (Sight Triangles)



2. Cyclehoop (or like)



A Deeper Look:

Air Quality & The Economy



Situation

- Denton's (DFW) smog¹ is now approaching Severe Category
- Damaged lungs-prone to infection-aggravate disease
- Twice the rate of lung disease in children – High Medical Costs
- Threatens Fed funding in 2027 – Limiting the economic growth

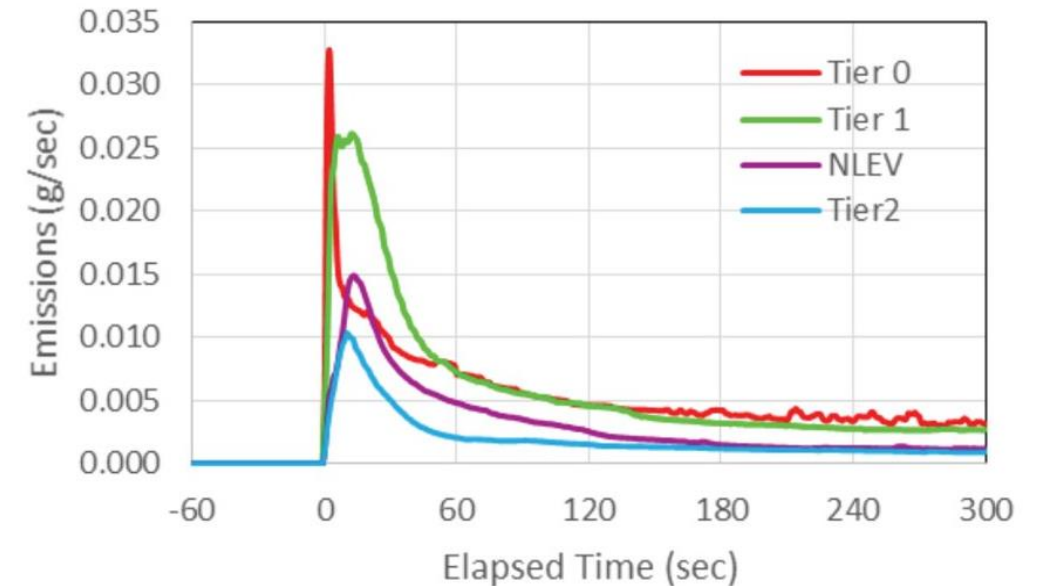
Task

- Plan for Biking - Denton must eliminate vehicle “Cold Starts”
- Up to 95% of smog emissions in first 60 sec.¹
- Reducing auto-idling only is not helpful

Key Benefits of Bikes

- No “Cold Starts”
- 28% of all trips are < 1 mile
- 52% of all trips are <3 miles

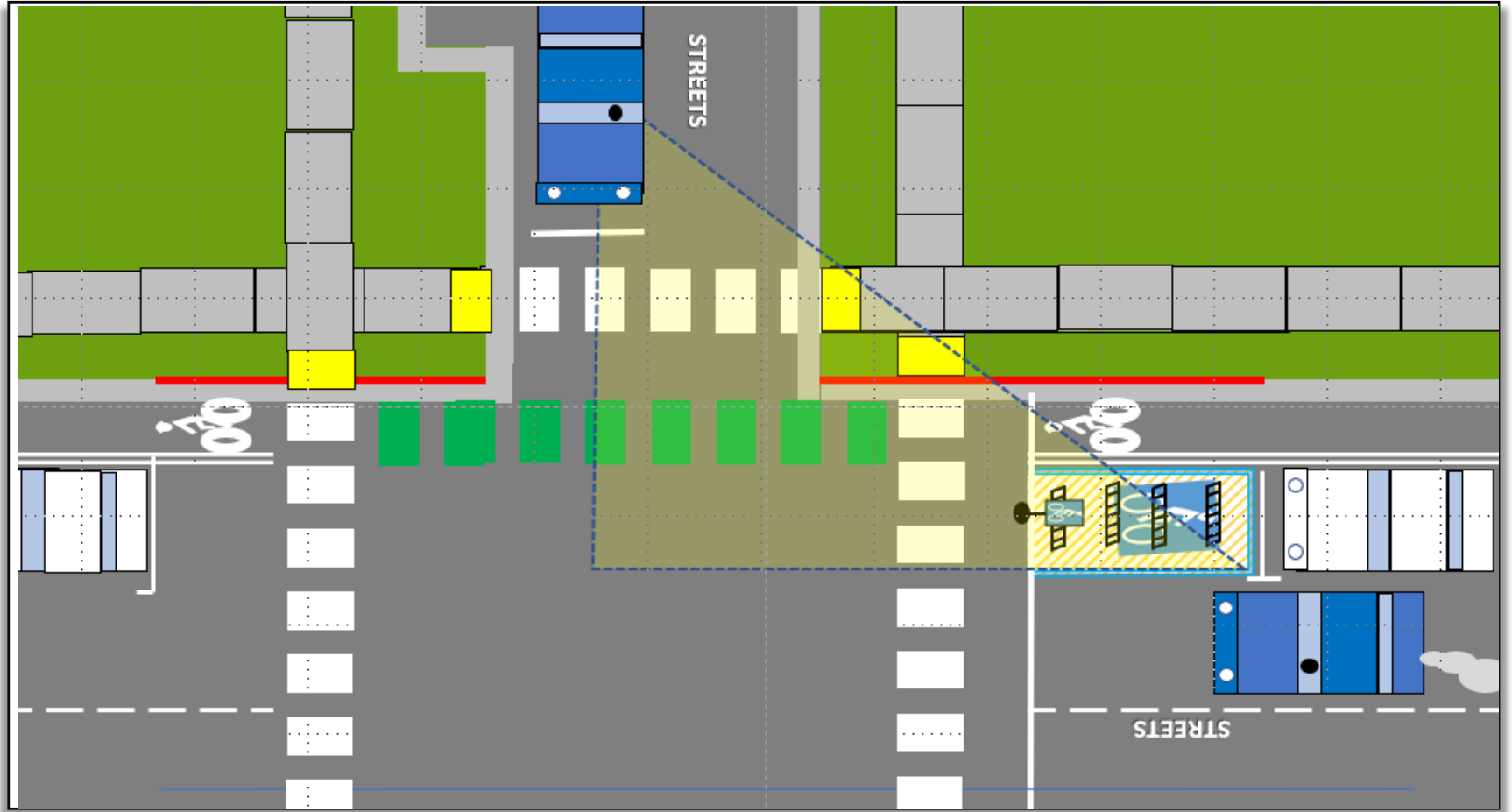
Cold Start Average HC



¹Smog is Hydrocarbon & Volatile Organic Compounds converted by sunshine

A Deeper Look:

Driveway/Street Sight Triangles



The Strategy

PILOT

PERMIT

PROMOTE

PRAISE

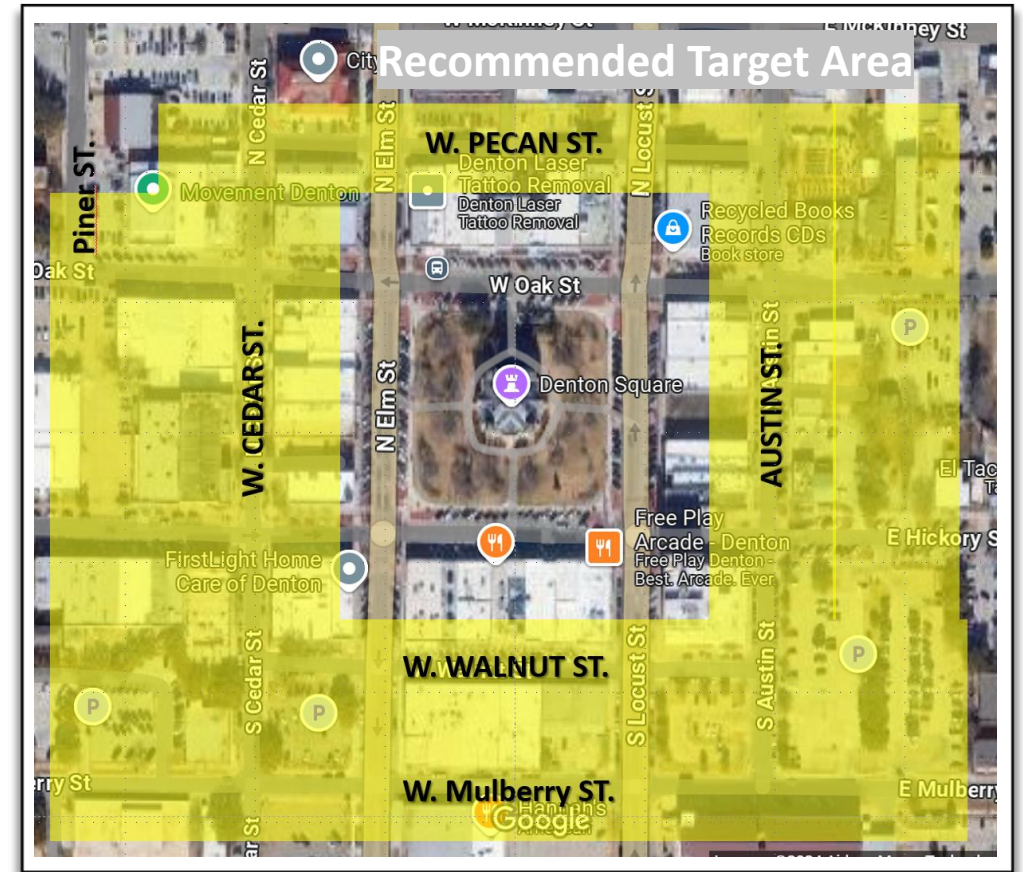
“Pilot” Recommendation

Focused Improvements:

- Big improvements/small area
- Just beyond Denton Square ("no biking on sidewalk zone")
- Test via mobile racks
- Track results



Mobile Racks



The Strategy

PILOT

PERMIT

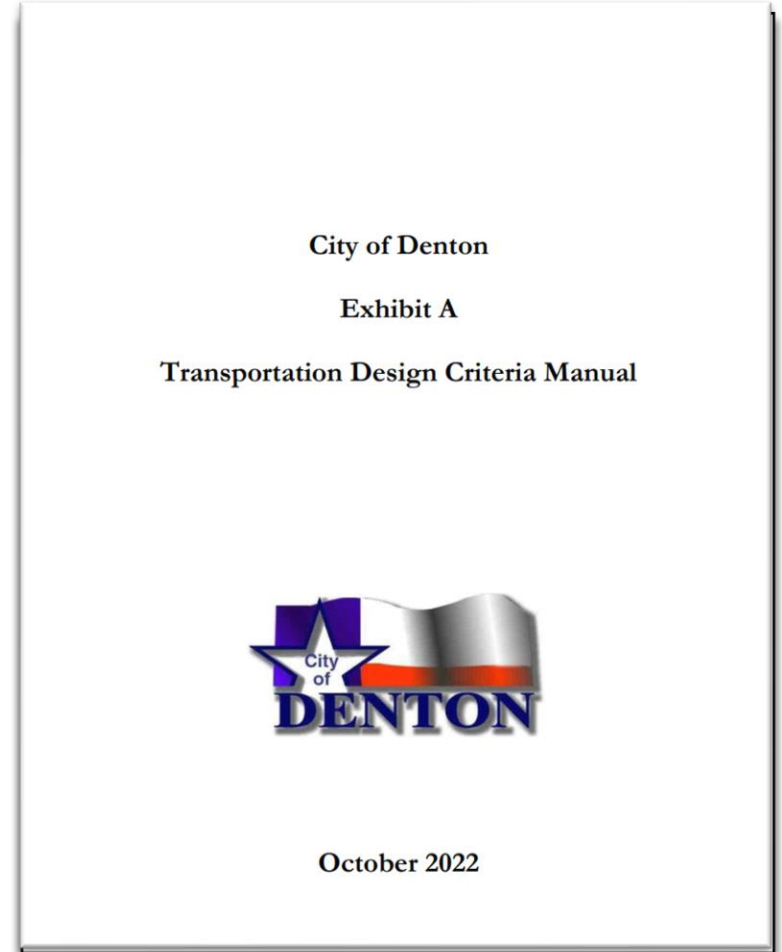
PROMOTE

PRAISE

“Permit” Recommendations

Modify Ordinances

- Simplicity & Flexibility
- Transportation Criteria
- Development Code for retrofit
- Denton Municipal Electric
- Brochure Style Bike Rack Instructions



The Strategy

PILOT

PERMIT

PROMOTE

PRAISE

“Promote” Recommendation

Promotion Partnerships

- Chamber of Commerce
- Downtown Stakeholders
- Non-profits/Volunteers
- Consolidated Purchasing by City



The Strategy

PILOT

PERMIT

PROMOTE

PRAISE

“Praise” Recommendation

“Bike Friendly” Designation

- Prioritize during Planning Studies
- Placard for window
- Press Releases for Bike Friendly
- Branding





City of Denton

City Hall
215 E. McKinney St.
Denton, Texas 76201
www.cityofdenton.com

Legislation Text

File #: MC24-037, **Version:** 1

AGENDA CAPTION

Staff Memorandum

- Clarification on 2019 Street Reconstruction Bond Completion Numbers
- Quality Control on Construction Projects
- Temporary Improvements for McKinney Sidewalk
- McKinney Sidewalks Project
- Traffic Calming Measures
- TRiP Fund Usage



MEMORANDUM

DATE: October 30, 2024
TO: Mobility Committee
FROM: Cassey Ogden, Assistant City Manager
SUBJECT: Committee Requested Project Updates

This memo provides information and updates from staff relating to updates to the Committee on items of interest discussed in past meetings. The following is a listing and brief staff response to the matters brought forward.

Clarification on 2019 Street Reconstruction Bond Numbers:

During the September meeting, Committee Member Kristine Bray requested the dollar amount allocated for street reconstruction from the 2019 Bond. Proposition 1 in the 2019 Bond included \$154 million, \$70 million of which was allocated to street reconstruction.

Quality Control on Construction Projects:

Staff take multiple steps to ensure quality work in the City's construction projects. Beginning with an extensive specification manual that details the types of products accepted by the city; how those products are to be installed; and how the work itself will be tested for accuracy. Each product submitted by the contractor for use on the project is verified by a design consultant, a project manager, and an inspector. The contractor is responsible for providing a testing lab to perform the required tests on the products being installed; these tests are often witnessed by onsite inspectors. Testing reports are then checked for accuracy and compliance. The City also employs a third-party vendor that can perform additional testing to verify accuracy. In addition, prior to a project's acceptance, the project limits are inspected by Capital Projects, Inspections, and other city department staff to ensure compliance with standards and specifications. Finally, prior to the expiration of the two-year warranty, inspection staff conduct a warranty inspection and provide a list of any necessary repairs to the contractor.

Temporary Improvements for McKinney Sidewalks

On June 27, 2023, Council gave Staff direction to move forward with the permanent sidewalk project on McKinney from Loop 288 to Woodrow. While temporary improvements were considered, the permanent option was ultimately favored by City Council. Should staff receive additional direction from Council, the feasibility of temporary measures could be reconsidered.

OUR CORE VALUES

Inclusion • Collaboration • Quality Service • Strategic Focus • Fiscal Responsibility

McKinney Sidewalks Project

The permanent sidewalk project is currently at 30% completion due to design challenges arising from unforeseen obstacles. Staff is seeking direction on three potential options:

Option 1: Continue Design on South Side of McKinney This option involves acquiring additional right-of-way and relocating utilities, which could be time-consuming processes.

Option 2: Conduct Feasibility Study on North Side of McKinney A feasibility study would assess the suitability of the north side for sidewalk construction. While this option could potentially identify a more efficient route, it carries risks such as a study cost of roughly \$25,000, project delays, and the possibility that the north side may not be a viable alternative.

Option 3: Utilize Existing Right-of-Way and Sidewalk This option would involve completing the sidewalk connection from Woodrow to Loop 288 by utilizing existing infrastructure. While this would result in a sidewalk that varies in width, it offers the advantages of a shorter construction timeline and significant cost savings.

Recommendation Staff recommend proceeding with **Option 3** as it presents a practical and cost-effective solution for connecting the sidewalk from Woodrow to Loop 288. While the sidewalk width may not be uniform, this option offers the most immediate benefits to the community.

Traffic Calming Measures:

The Mobility Committee requested information on traffic calming. Since traffic calming is a large topic with many facets, staff recommends starting with a brief overview (**Exhibit 2**) and progressively addressing the finer points with future presentations focused on the Mobility Committee queries as needed. This overview will:

- Broadly define traffic calming
- Explain why traffic calming works
- Cite its key advantages
- Describe its best practices
- Provide links to select traffic calming resources, and
- Cite examples of how it has been shown to reduce crashes.

TRiP Fund Usage:

Historically, The City of Denton has utilized TRiP funds to support existing projects that align with the program's goals of enhancing pedestrian and multi-modal facilities. These funds have been strategically allocated to projects that meet the established criteria for contributing to the overall infrastructure improvement for walking, biking, and other alternative transportation modes within the city.

EXHIBITS

Exhibit 1 – Staff Memorandum

Exhibit 2 – A Brief Overview of Traffic Calming Measures

Exhibit 3 – Future Items for Mobility Committee Meeting for 2024

A Brief Overview of Traffic Calming

Connection to City Goals, Objectives and Strategies

Traffic Calming relates to the following *City Mobility Plan* Goals, Objectives and Strategies:

- Goal 1, Objective 1A: ‘Safety is the number one priority transportation infrastructure design’
- Goal 1, Strategy 1.2: ‘Evaluate and design for safe speeds.’
- Goal 7, Strategy 7.9: “Implement traffic calming measures that discourage speeding and cut-through traffic on residential streets.”

Introduction

The Mobility Committee has requested information on traffic calming. Since traffic calming is a large topic with many facets, staff recommends starting with a brief overview and progressively addressing the finer points with future presentations focused on the Mobility Committee queries as needed.

This overview will:

- Broadly define traffic calming
- Explain why traffic calming works
- Cite its key advantages
- Describe its best practices
- Provide links to select traffic calming resources, and
- Cite examples of how it has been shown to reduce crashes.

Traffic Calming Defined

Traffic calming uses street design to communicate proper driving behavior to road users. Technically, traffic calming is for local streets, and speed management is for collector streets and arterials. For this memo, traffic-calming and speed management will be addressed as simply traffic-calming.

Why Traffic Calming Works

Driving involves a high degree of automation, and speed seems to be one of the most automated aspects. The speeds we are comfortable with come from the environmental cues in the road designs we are used to. This is true whether the road designer intended it or not. The more a road looks like a freeway, the more we tend to drive it like a freeway regardless of its speed limit.

Traffic calming uses environmental cues to continually communicate appropriate behavior to the driver. Traffic calming designs can be conscious or unconscious; they can gently nudge towards awareness of proper behavior or jolt the driver to slow down as needed. Traffic calming can help implement context-sensitive solutions by minimizing vehicle travel's negative effects and improving street users' safety and mobility. A major component of context-sensitive solutions is a transportation facility that fits its settings.

Key Advantages

Traffic calming works. Unlike law enforcement and education, which are primarily intervention-driven, traffic calming is effective year-round. It doesn't require a continuing investment of expensive manpower, so its costs are relatively low once implemented. Many traffic calming measures can be built

quickly and inexpensively as temporary pilot projects or become permanent. For example, San Antonio, Texas, relies almost exclusively upon ‘Quick Build’ projects to achieve its Vision Zero Traffic Calming goals.

Best Practices

- Traffic calming works best when complementary traffic calming measures are used together.
- Traffic calming can change driving culture when applied throughout the community rather than as a spot treatment. Implementing traffic calming throughout a community within a short period can reinforce this effect.
- Traffic calming at community entryways signals to drivers that they are entering areas where different norms are expected. This can be especially important near freeway ramps, as drivers are more attuned to freeway speeds.

Resources & References

- The U.S. Federal Highway Administration has a [Traffic Calming Primer online \[Hyper Link\]](#), covering basic traffic calming measures. Among other things, the primer addresses the applicability and acceptability of individual measures, the effects of traffic calming measures on Motor Vehicle Speed and Volume, the impact on non-motorized users and emergency vehicles, and costs.
- The FHWA has published [Proven Safety Countermeasures \[Hyper Link\]](#) summarizing the safety benefits, application and considerations of 23 roadway treatments aimed at reducing crashes on a range of roadways. Some, like in the Roadway Departure grouping, are less applicable to Denton Streets.
- The FHWA also runs the [Crash Modification Factor \(CMF\) Clearinghouse \[Hyper Link\]](#). The Clearinghouse gathers, judges, and publishes studies measuring the impact of various roadway changes on crashes. The appendix of this memo lists and summarizes the findings of some of the many CMF Clearinghouse-published studies for traffic calming techniques.
- As alluded to earlier, the potential for “Quick Build” traffic calming projects is a distinct advantage for traffic calming. The Association of Bay Area Governments has an [online library of quick-build resources \[Hyper Link\]](#).

Staff is happy to expand on any subtopics listed above as a blurb or presentation.

Respectfully Prepared by
Greg Scott, PMP, AICP, RSP1
Senior Transportation Planner, Bicycle, Pedestrian, and ADA
Transportation Services Division

SELECTED TRAFFIC CALMING TREATMENT EXAMPLES
[PUBLISHED IN THE FHWA CMF¹ CLEARINGHOUSE]

For Midblock Locations on Collectors and Arterials

1. Add street crossing markings to reduce pedestrian involved crashes of all severities by 18%. [CMF ID 11181]
2. Create a 4-way stop at the intersection of a **Minor Arterial** and **local street** to reduce all injury crashes by 14%. [CMF ID 10534]
3. Create a 4-way stop at the intersection of a **Collector** and **local street** to reduce all injury crashes by 44%. [CMF ID 10528]
4. Create a 4-way stop at the intersection of a **Minor Arterial** and **Collector** to reduce all injury crashes by 68%. [CMF ID 10530]
5. Narrow the width of lanes from 12' to 9' on Minor Arterials and Collectors to reduce all injury crashes by 43%. [CMF ID 8163]
6. Adopt National Association of City Traffic Officials (NACTO) right turn radius standards to reduce pedestrian injuries by 23%. [CMF ID 11216]
7. Convert a 4-lane undivided road to 2-lanes plus a center turning lane reduces injury crashes of all types by 44 percent at unsignalized intersections, by 59 percent at signalized intersections, and by 74 percent between intersections. [CMF IDs 11134, 11129, 11136]
8. Add a raised center median to a Minor Arterial reduce all injury crashes by 29% and all pedestrian involved crashes by 46%. [CMF IDs 9014, 9016, & 175]
9. Install a pedestrian hybrid beacon with advanced yield or stop markings and signs to reduce all pedestrian involved crashes by 57%. [CMF ID 9021]

For Midblock locations on Local streets

10. Drop posted speed from 30 to 25 mph in residential areas to reduce injury crashes by 50%. [CMF ID 8077]
11. Create a 4-way stop at the intersection of two local streets to reduce all injury crashes by 60%. [CMF ID 10532]
12. Adopt National Association of City Traffic Officials (NACTO) corner right turn radius standards to reduce pedestrian injuries at that corner by 15%. [CMF ID 11216]
13. Install transverse rumble strips to reduce all injury crashes by 36%. [CMF ID 139]
14. Install "speed humps" to reduce all injury crashes by 50%. [CMF ID 132]
15. Add a raised cross-walk to a mid-block crossing to reduce all pedestrian injury crashes by 45% and all injury crashes by 30-36%. [CMF ID 135, 136, 137]

For Signalized Intersections on Collectors and Arterials

16. Install a pedestrian hybrid beacon to reduce all pedestrian involved crashes by 37% in an urban or suburban area. [CMF ID 10599]
17. Add a raised center median to reduce all pedestrian involved crashes by 46% in an urban or suburban area. [CMF ID 175]

COMMON TRAFFIC CALMING PRACTICES

#	NAME
---	------

SELECTED TRAFFIC CALMING EXAMPLES
(from 10/2024 Mobility Committee white paper)

1	Street Crossing Markings
2	4-way stop @ Minor Arterials and Local Streets
3	4-way stop @ Collectors and Local Streets
4	4-way stop @ Minor Arterials and Collectors
5	Narrow Lanes from 12' to 9'
6 & 12	NACTO right turn radius standards
7	4 lane to 3 lane road restriping
8	Raised center median on Minor Arterials
9 & 16	Pedestrian hybrid beacon with advanced markings @ signalized and unsignalized Collectors/Arterials
10	Posted speed of 25 mph in residential areas
11	4-way stop at two local streets
13	Transverse rumble strips
14	Install Speed Humps
15	Raised cross-walk at mid-block crossings

SELECT FHWA "PROVEN SAFETY COUNTERMEASURES"
(for suburban/urban crashes & not otherwise above)

	Speed Safety Cameras
	Variable Speed Limits
	Bicycle Lanes
	Crosswalk Visibility Engancements
	Leading Pedestrian Interval
	Pedestrian Refuge Islands
	Rectangular Rapid Flashing Beacons
	Sidewalks
	Paved/painted shoulders used as a walkways
	Right-turn Deceleration Lanes
	Modern Roundabouts
	Pedestrian Lighting @ Crossings
	Multiple Low-Cost Countermeasures at Stop-Controlled Intersections
	Road Safety Audit
	Elimination of Free-right turn - ramp - "porkchop"

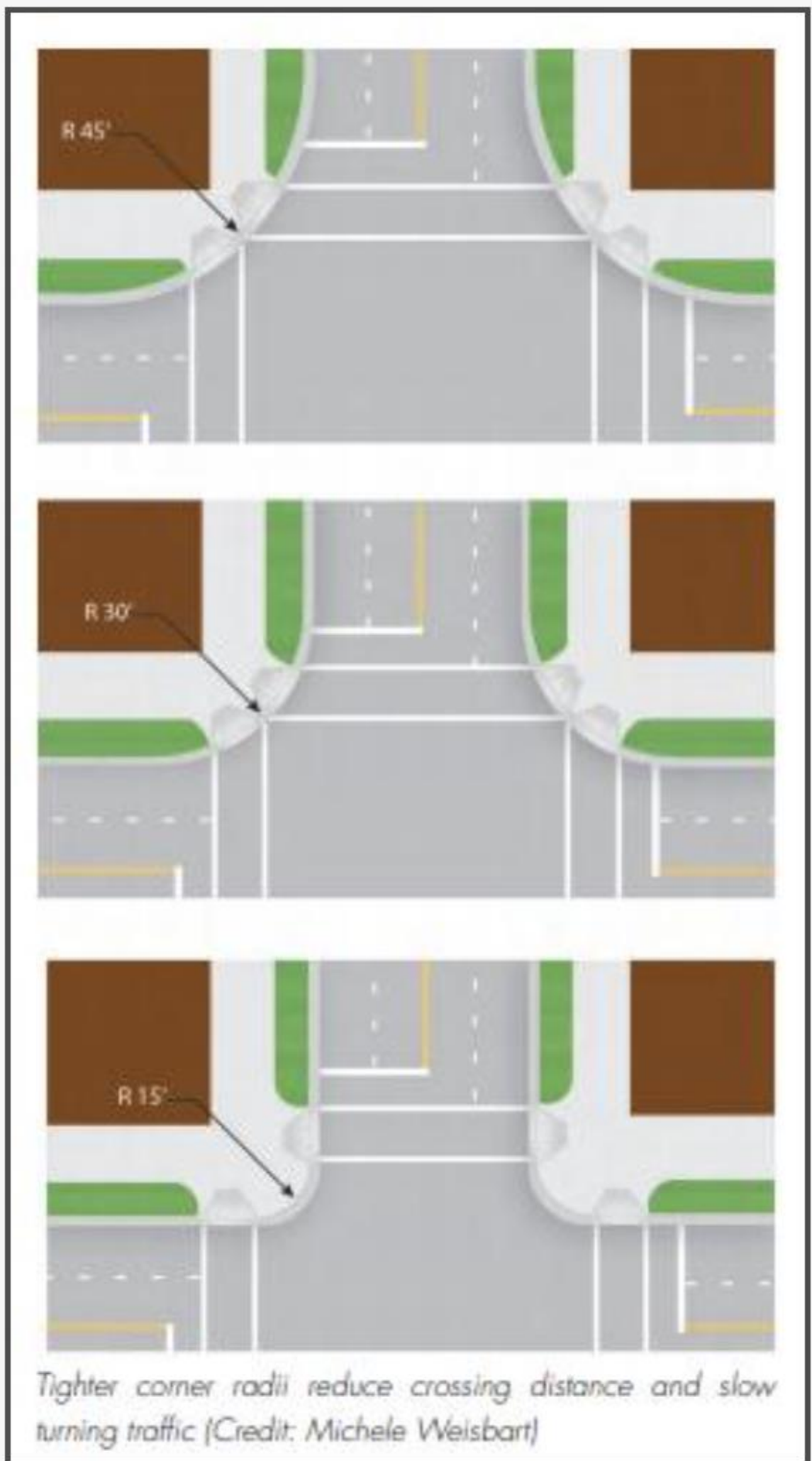
OTHER COMMON TRAFFIC CALMING EXAMPLES

	Speed Cushions
	Diagonal Street-side Parking
	Chokers - Neckdowns
	Chicanes
	Traffic Circles - Mini roundabouts
	Diverters - Greenway Treatments
	Living Streets - Woonerf
	Street Trees
	Raised Intersections
	10' Lane Widths

1. Street Crossing Markings

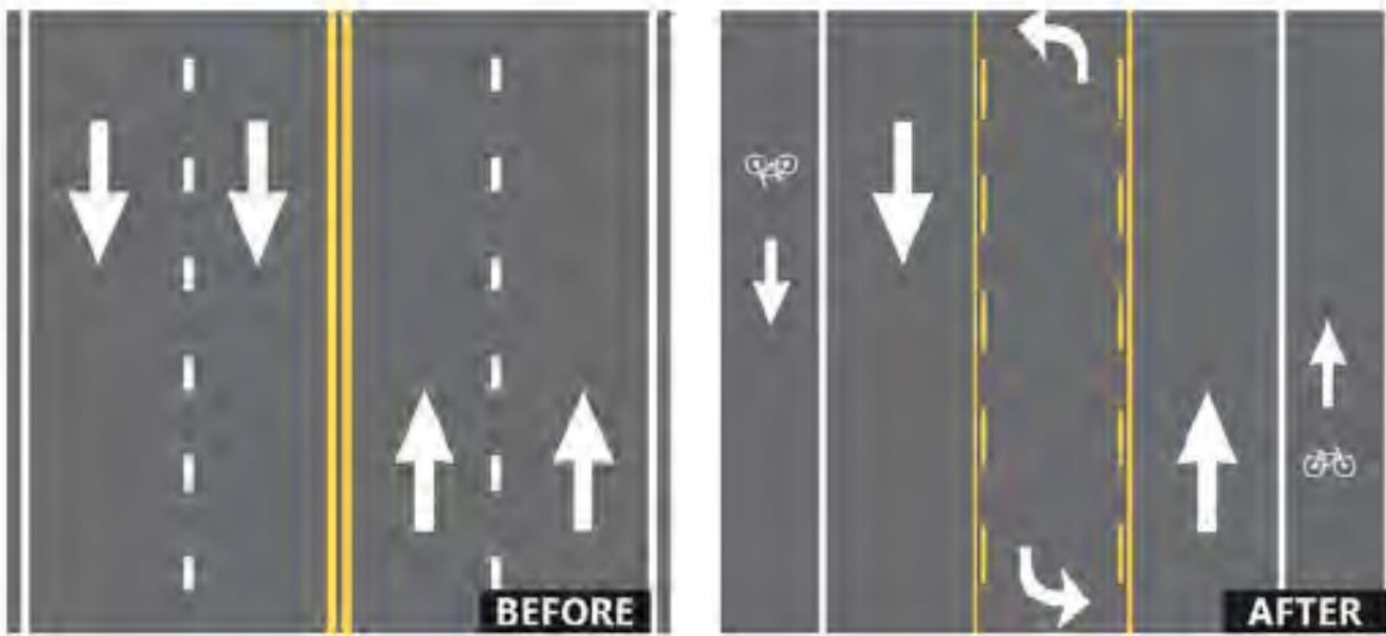


6 & 12. NACTO Right-Turn Radii



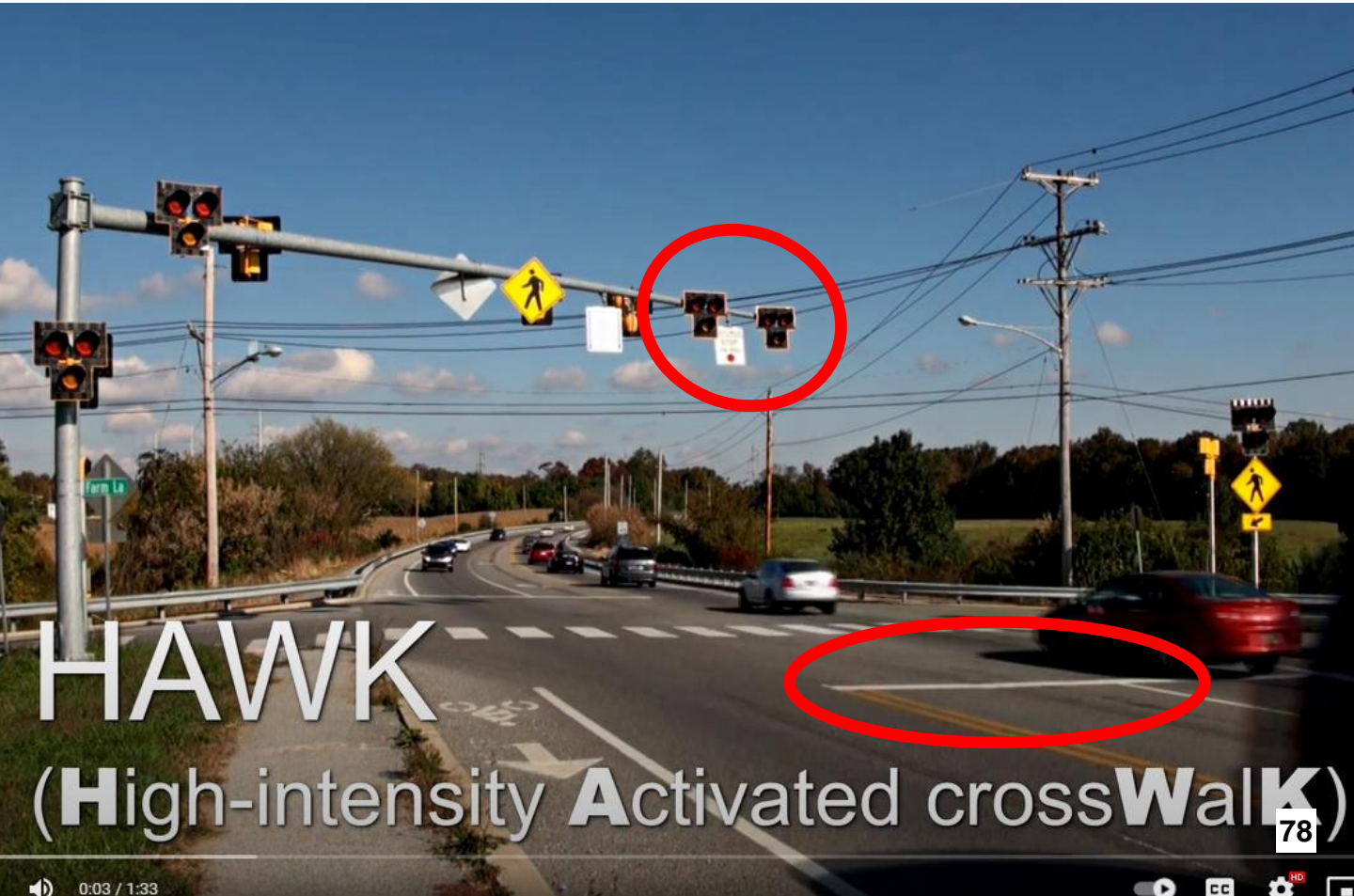
7. 4-lane to 3-lane Restriping

4-3 Conversion



24 DESIGN DOWNTOWN DENTON












9 & 16. Pedestrian Hybrid Beacon (HAWK) with advanced markings @ signalized and unsignalized intersections



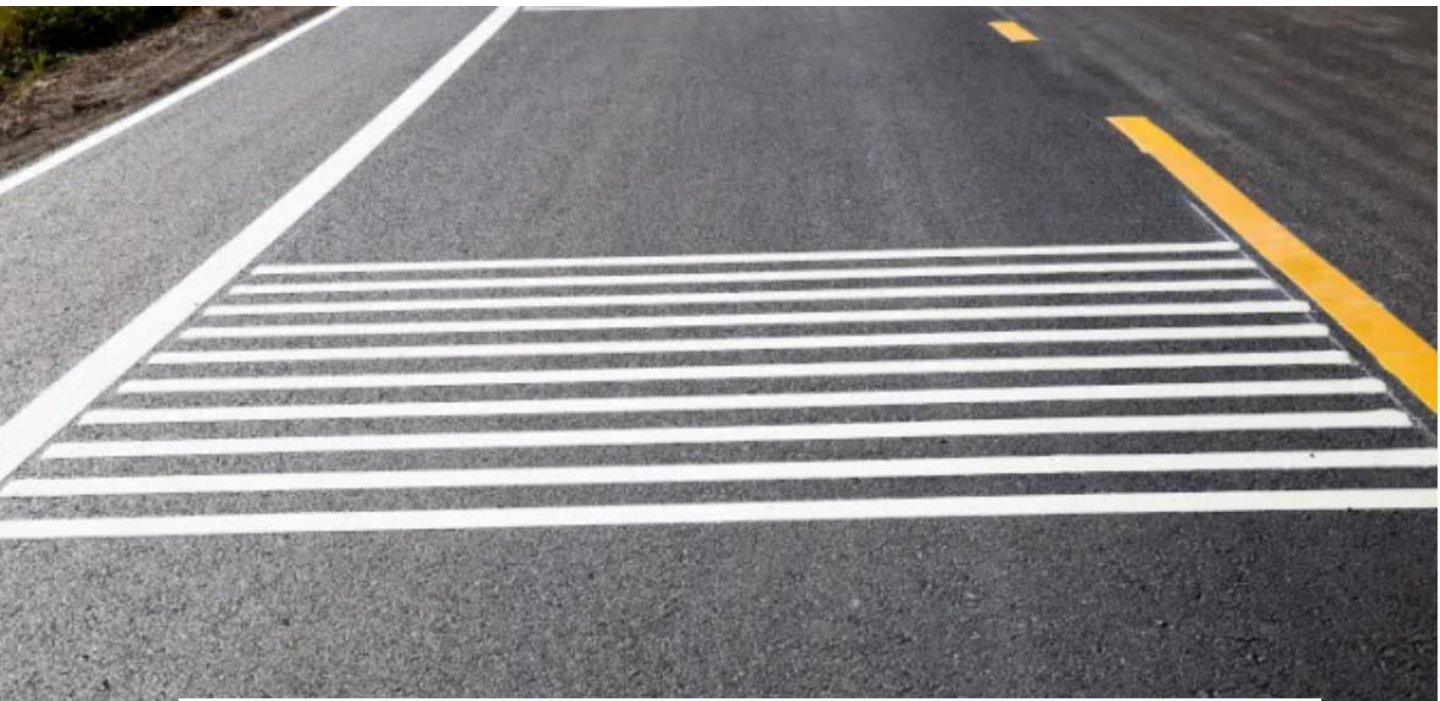
9 & 16. Pedestrian Hybrid Beacon (HAWK) with advanced markings @ signalized and unsignalized intersections



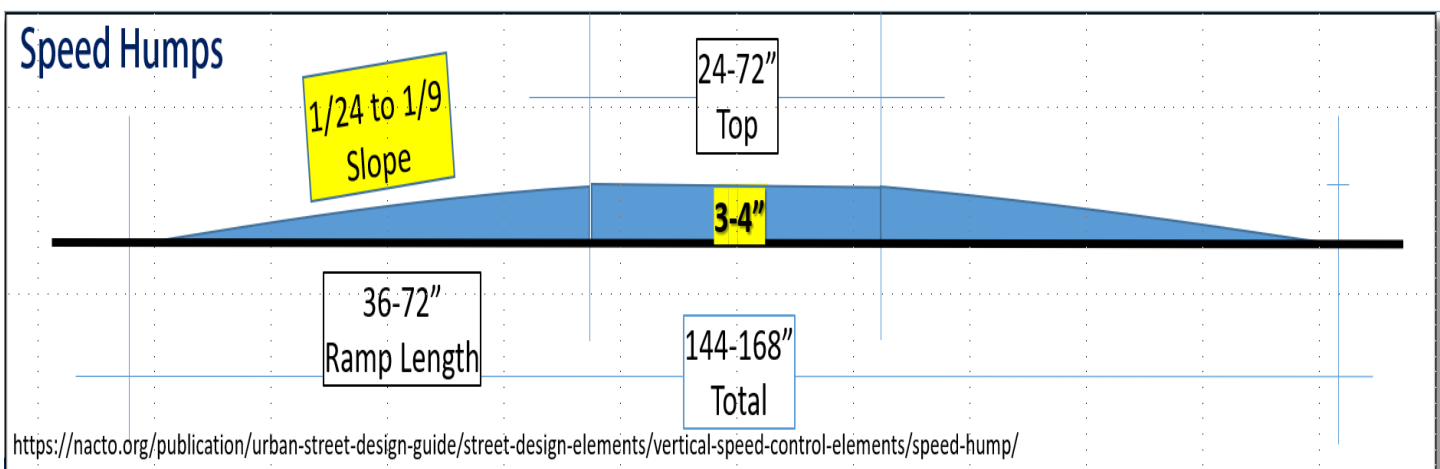
How to use the HAWK High Intensity Activated CrossWalk

PEDESTRIANS 		DRIVERS 	
SEE THIS	DO THIS	SEE THIS	DO THIS
	PUSH THE BUTTON		DRIVE ALWAYS LOOK FOR PEOPLE WHO PLAN TO CROSS.
	STOP & WAIT FOR THE WALK SIGNAL.	 FLASHING	SLOW DOWN A PERSON HAS ACTIVATED THE PUSH BUTTON.
	START CROSSING ALWAYS WATCH FOR CARS.		PREPARE TO STOP
	FINISH CROSSING		STOP FOR PEDESTRIAN. (As with any signal RED means STOP)
		 FLASHING	STOP FIRST PROCEED WITH CAUTION IF NO PEOPLE ARE PRESENT.

13. Transverse Rumble Strips



14. Speed Humps



Variable Speed Limits



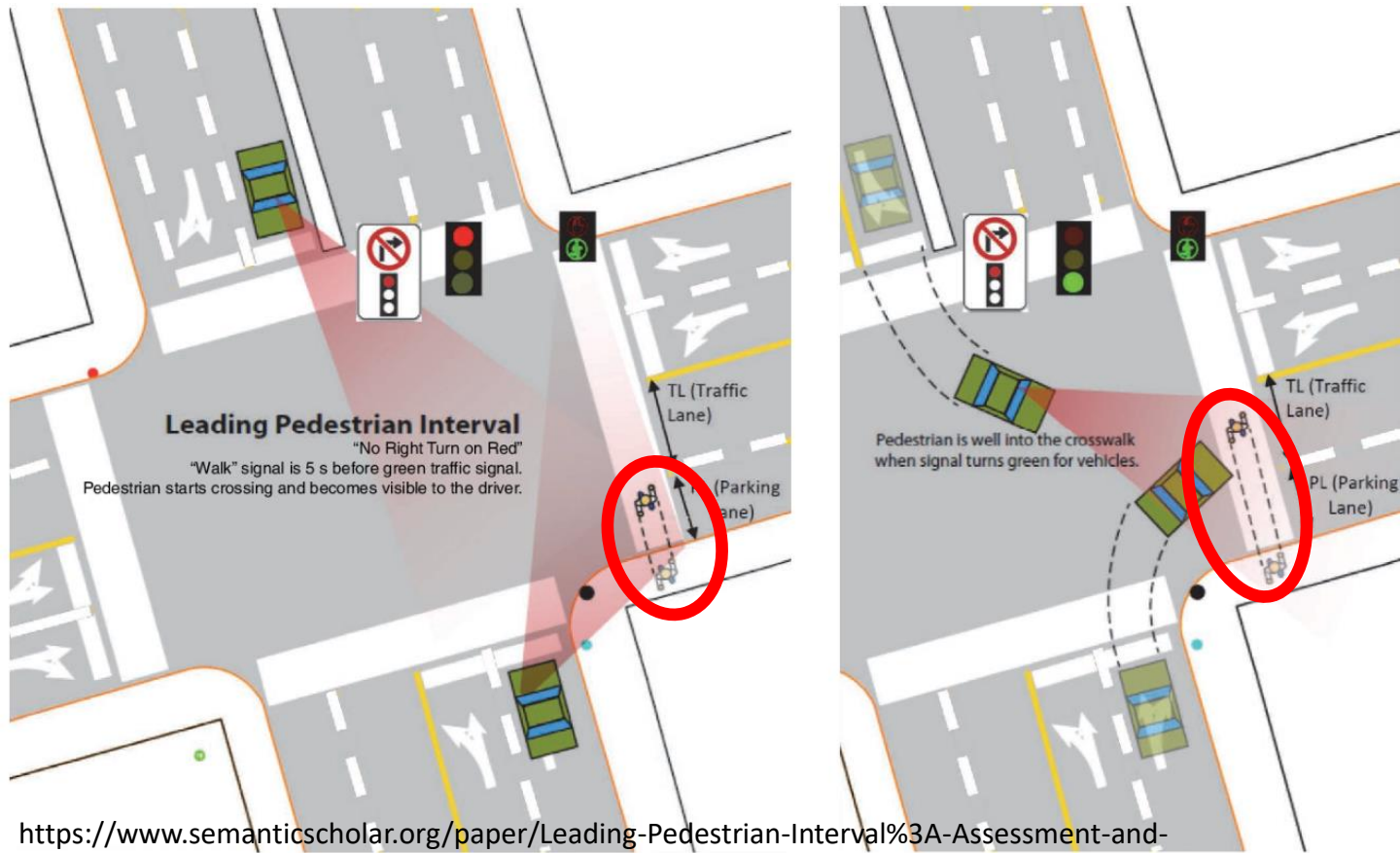
Bike Lanes



Crosswalk Visibility Enhancements



Leading Pedestrian Interval



<https://www.semanticscholar.org/paper/Leading-Pedestrian-Interval%3A-Assessment-and-Saneinejad-Lo/03100233a1411341cafb538a9d0fbfcb5752ce1b/figure/0>

Pedestrian Refuge Island



Rectangular Rapid Flashing Beacons

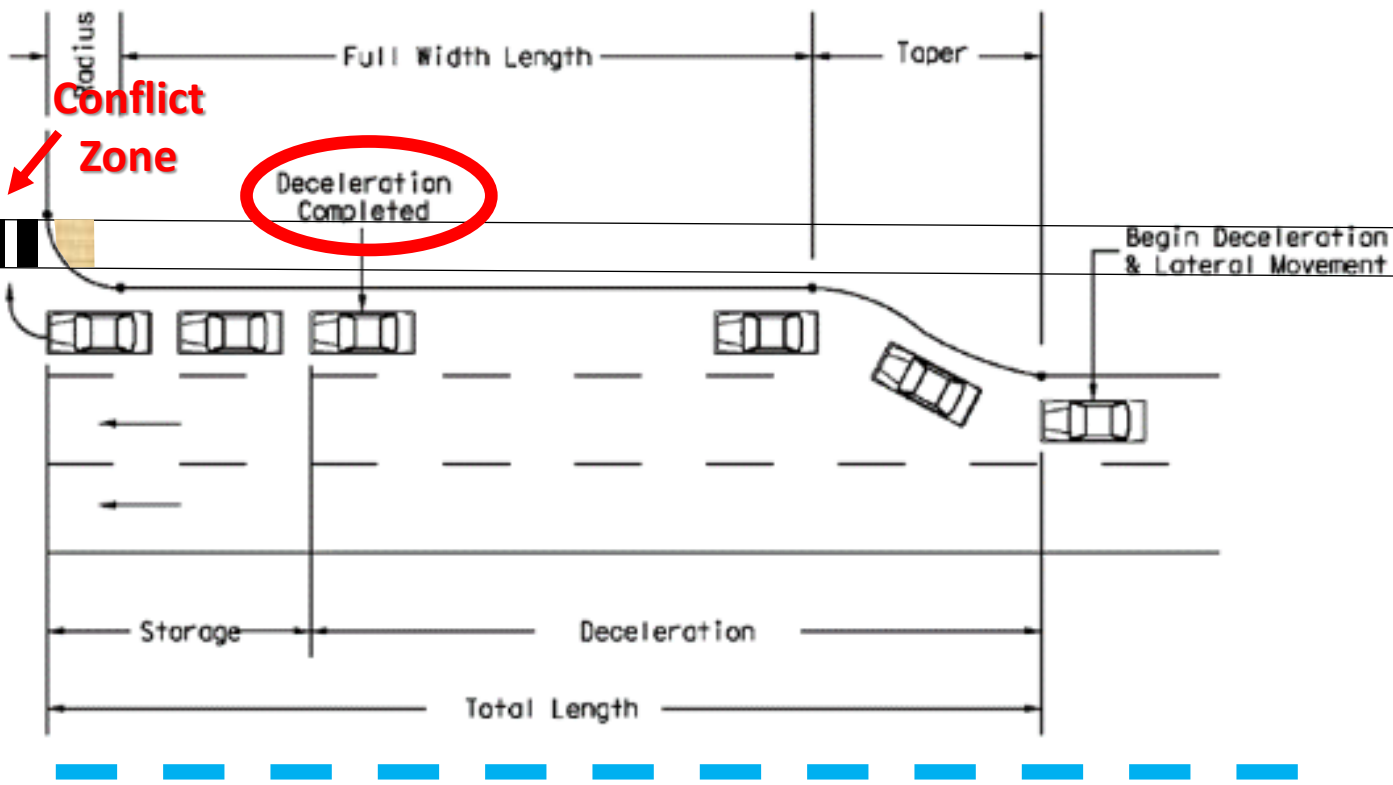


Paved/painted Shoulders used as a Walkways



Paved shoulder used as a walkway. Source: pedbikeimages.org / Burden

Right-turn Deceleration Lanes



Modern Roundabout

How is a Traffic Circle Different from a Roundabout?

These drawings show how an identical set of roads would intersect as a traffic circle versus a roundabout. Both involve vehicles moving around a circular island and both follow normal traffic laws, but they work very differently.

Red lines show movements that must stop or yield to crossing traffic, shown by green arrows.

Locally, a *traffic circle* can be found in the Tamarack Village shopping center in Woodbury.

Roundabouts can be found at Radio Drive & Bailey Road in Woodbury and on Jamaica Ave at US Highway 10-61 in Cottage Grove.

Traffic Circle	Modern Roundabout
A traffic circle is a series of "T intersections" with a circular road. Each "T" intersection may be controlled differently.	A roundabout is a series of "crossing intersections" where traffic entering the roundabout is controlled by yield signs.
The circle is striped concentrically, like a bulls-eye. The inside lane must change lanes to the outside lane before turning out of the traffic circle.	A multi-lane roundabout is striped as a spiral. Never change lanes in a roundabout. Always choose the correct lane before entering, just like at a standard intersection.
Exiting the circle is always a "turn" movement. Drivers may continue to circulate regardless of which lane they are in.	Exiting the roundabout is always a "straight ahead" movement. Staying in the circle is a series of left turns.
It is legal, although risky, to enter a traffic circle when traffic is circulating in the inside lane, just like making a right turn onto a multi-lane road when traffic is flowing in the left lane.	Entering traffic must always yield to ALL traffic in the roundabout, regardless of which lane they are in, just like crossing a one-way road where cross traffic does not stop.
A traffic circle may be very large, and circulating speeds are rarely less than 30 mph, with much lower entry speeds.	A roundabout is generally small. Entry and circulating speeds are roughly equal and are rarely more than 25 mph.
Traffic circles have low capacity and are inefficient. Traffic circles are used primarily for visual appeal.	Roundabouts are able to handle large volumes of traffic and are used for efficiency and safety.
Approaches to a traffic circle are usually controlled by stop signs, but sometimes by yield signs or no signs at all.	Approaches to a roundabout are controlled by yield signs for maximum efficiency.
The central island may have a park or businesses.	Never cross to the center island of a roundabout.

How can I tell the difference?

Look for signs that say "ROUNDABOUT" as you approach.

Always obey any lane use signs as you approach.

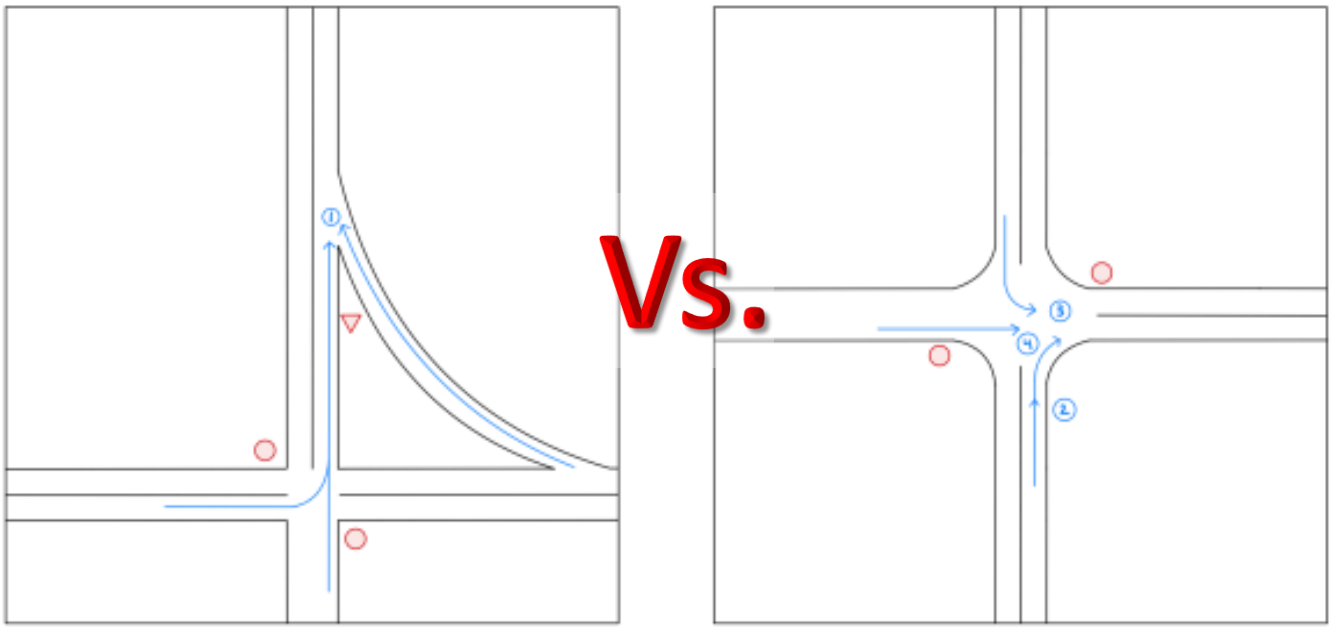
Look for if the striping leads out of the circle, or around it.

When in doubt, yield to ALL traffic in the circle, including any traffic on the inside lane.

For More Information
 Contact the Washington County Public Works Department at (651)-430-4300
 Or learn more on the web at www.roundabout-u.info

Washington County Roundabout U

Elimination of Free-Right Turn - Ramp

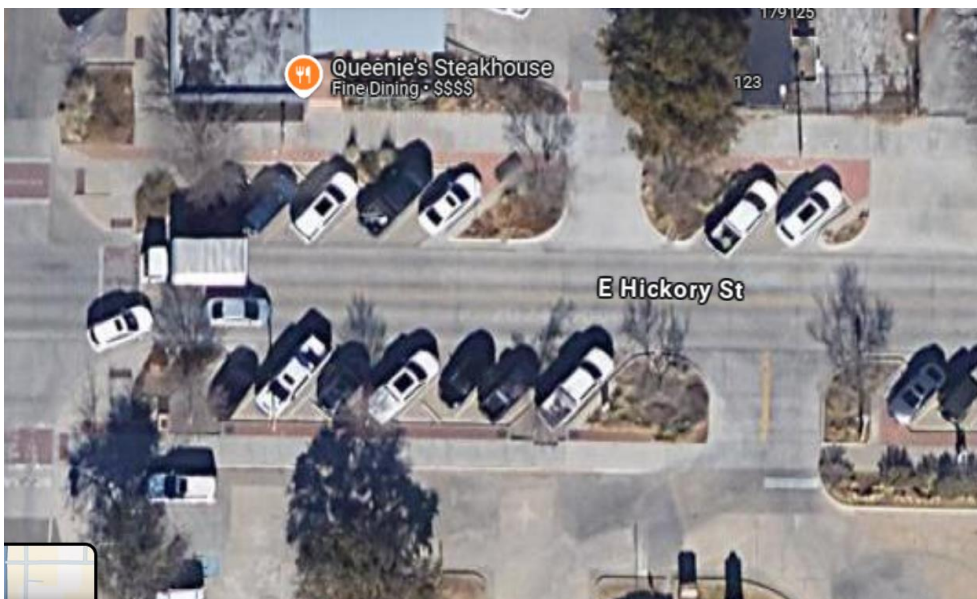


Speed Cushion

Speed Hump with channels for Large



Diagonal Street-Side Parking



Chokers - Neckdowns



Choker in a residential neighborhood. Source: [City of An Arbor](#),

Chicanes



Chicane on a residential street. Source: [NACTO](#)

Traffic Circles



Mini roundabout in a residential neighborhood. Source: [City of Vancouver](#)

<https://www.smatstraffic.com/2021/08/30/traffic-calming/>

Living Street – Woonerf – Shared Street

On these streets users are mixed and must watch for each other (parking lot like)



Bell Creek Park shared street, Seattle, Washington.

Seattle



Denver 16th Street Mall <https://www.denver.org/things-to-do/attractions/16th-street-mall/>



Warf Street Washington DC

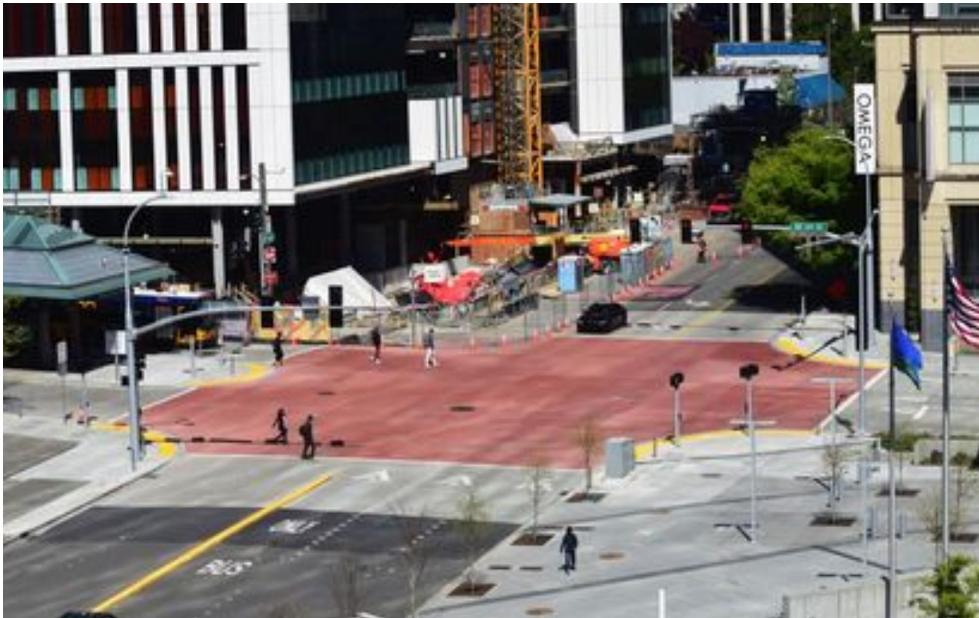
<https://www.cnu.org/publicsquare/2017/12/08/radical-mixing-cars-and-people-works-planned>

Raised Intersection



Hennepin Ave., MN

<https://streets.mn/2016/05/04/hennepin-avenue-reconstruct-ii-even-better/>



Bellevue, WA

<https://bellevuewa.gov/city-government/departments/transportation/projects/transportation-capital-projects/bellevue-transit-center-raised-intersections>



Design Downtown Denton

Mobility Committee Meeting
Identified Items of Interest for Future Staff Report Updates or Agenda Item Presentation

NO.	DATE REQUESTED	REQUESTOR	ITEM / RESOLUTION	LAST UPDATE	STAFF COMMENTS	REQUEST TO REMOVE
1	September 25, 2024	Committee	Clarification on 2019 Street Reconstruction Bond Completion Numbers	October 30, 2024	Update provided on October 30, 2024.	Yes
2	August 28, 2024	Committee	Concerns for Bicyclist & Pedestrian Safety on North and South Austin		Update will be provided when available.	
3	February 28, 2024	Committee	Crossing Concerns between Ryan High and Dollar General	April 24, 2024	Update will be provided on November 27, 2024.	
4	July 26, 2023	Committee	Citywide/Downtown Parking Study	September 25, 2024	Update provided on September 25, 2024.	
5	September 25, 2024	Committee	Growing the Bike Bus Programs		Update will be provided when available.	
6	September 25, 2024	Committee	Increasing Sensitivity for Bicycle Sensors		Update will be provided when available.	
7	June 26, 2024	Committee	Lowering Barriers to Bike Rack Adoption		Update will be provided when available.	
8	September 25, 2024	Committee	Quality Control on Construction Projects	October 30, 2024	Update provided in the Staff Memo on October 30, 2024.	Yes
9	December 20, 2023	Committee	Quarterly Construction Report	September 25, 2024	Update provided in the Staff Memo on September 25, 2024.	
10	November 14, 2023	CMO	Quarterly Transportation Services Report	September 25, 2024	Update provided in the Staff Memo on September 25, 2024.	
11	September 25, 2024	Committee	Temporary Improvements for McKinney Sidewalks	October 30, 2024	Update provided on October 30, 2024.	Yes
12	March 27, 2024	Committee	Traffic Calming Measures	October 30, 2024	Update provided in the Staff Memo on October 30, 2024.	Yes
13	September 25, 2024	Committee	TRiP Fund Usage	October 30, 2024	Update provided on October 30, 2024.	Yes