

NCTCOG TRANSPORTATION DEPARTMENT

Rockwall County Outer Loop Alternate Routes

Rockwall County Consortium Meeting
October 15, 2025

Regional Outer Loop Alternate Alignments

Rockwall County (South)

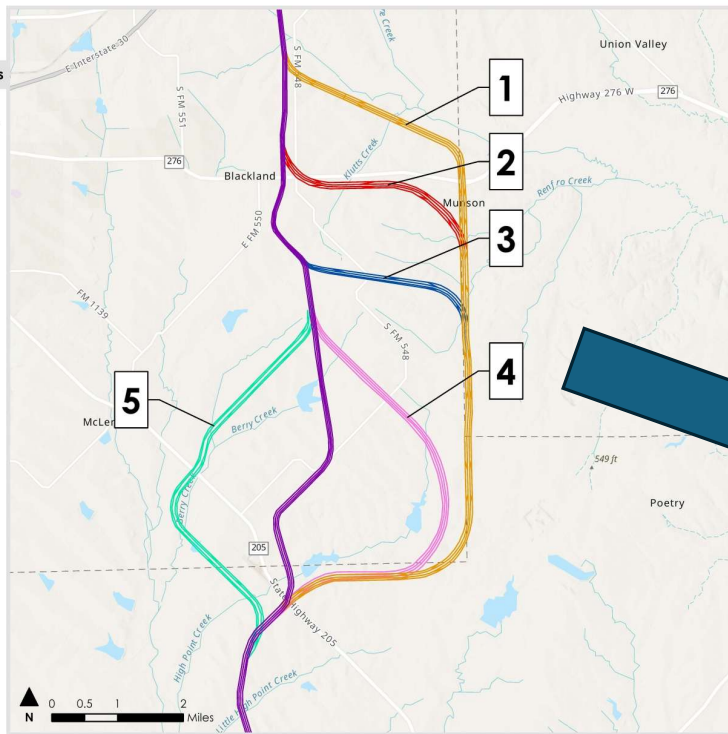
ROCKWALL COUNTY OUTER LOOP

Outer Loop Alternate Alignments

Proposed alternate alignments for the Outer Loop in Rockwall County.

Legend

- Mobility 2050 Alignment
- 1. Orange Alignment
- 2. Red-Orange Alignment
- 3. Blue-Orange Alignment
- 4. Pink Alignment
- 5. Aqua Alignment



Hunt County (West)

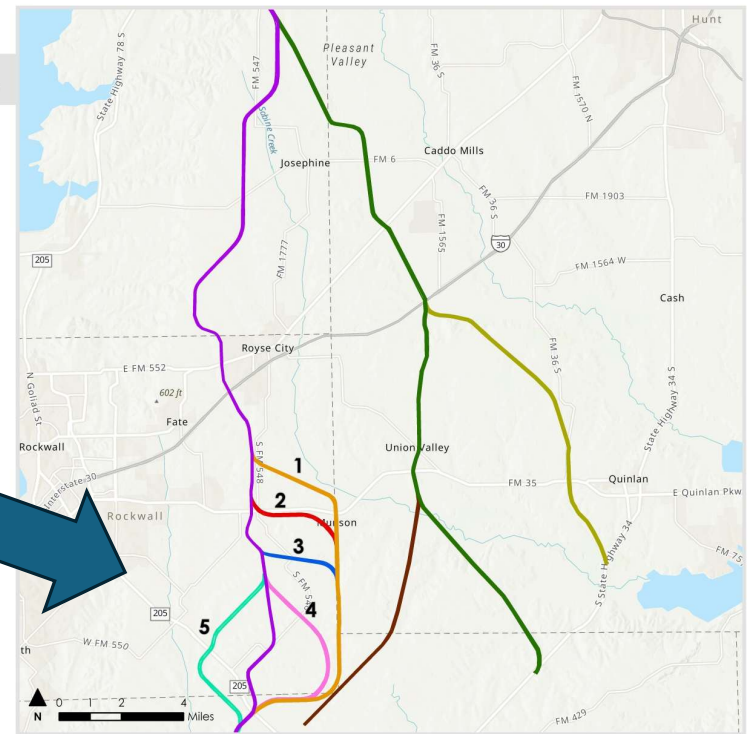
ROCKWALL COUNTY OUTER LOOP

Outer Loop Alignments Suggested by Rockwall County

Alternate Outer Loop alignments through Hunt County, as suggested by Rockwall County.

Legend

- Mobility 2050 Alignment
- 1. Orange Alignment
- 2. Red-Orange Alignment
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- 5. Aqua Alignment
- Suggested Alternate #1
- Suggested Alternate #2
- Suggested Alternate #3



Orange Alignment – Rockwall County (South)

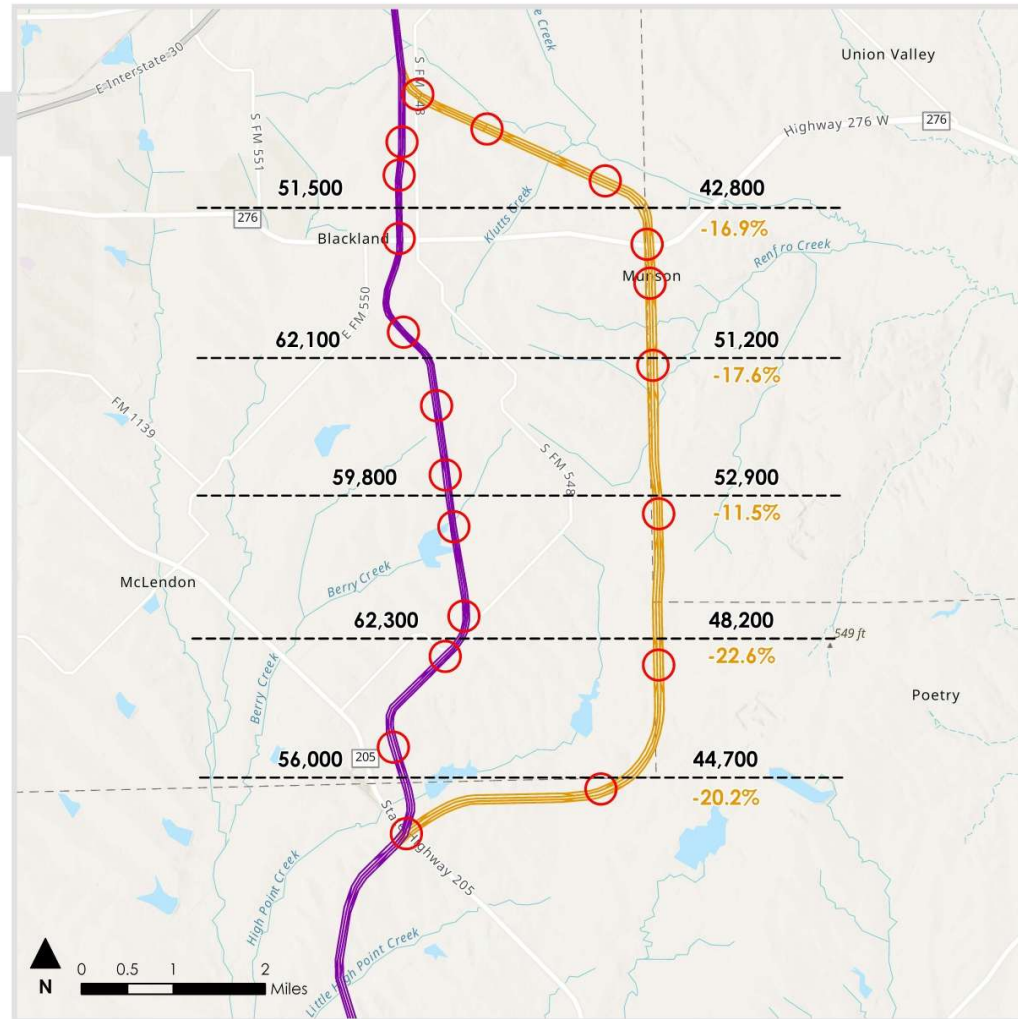
ROCKWALL COUNTY OUTER LOOP

Mobility 2050 vs. Orange Alignment Average Volumes

Main lane total average traffic volumes and percent difference for Mobility 2050 and alternate (orange) alignments.

Legend

- Mobility 2050 Alignment
- Orange Alignment
- Grade Separation



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Rockwall County
Outer Loop

Esri, NASA, NOAA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAD, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Orange Alignment Volume Difference

ROCKWALL COUNTY OUTER LOOP

Arterial Volume Difference

Year 2050 traffic volumes for arterial network around the Outer Loop alternate (orange) alignment.

Legend

Volume Increase

- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000

Volume Decrease

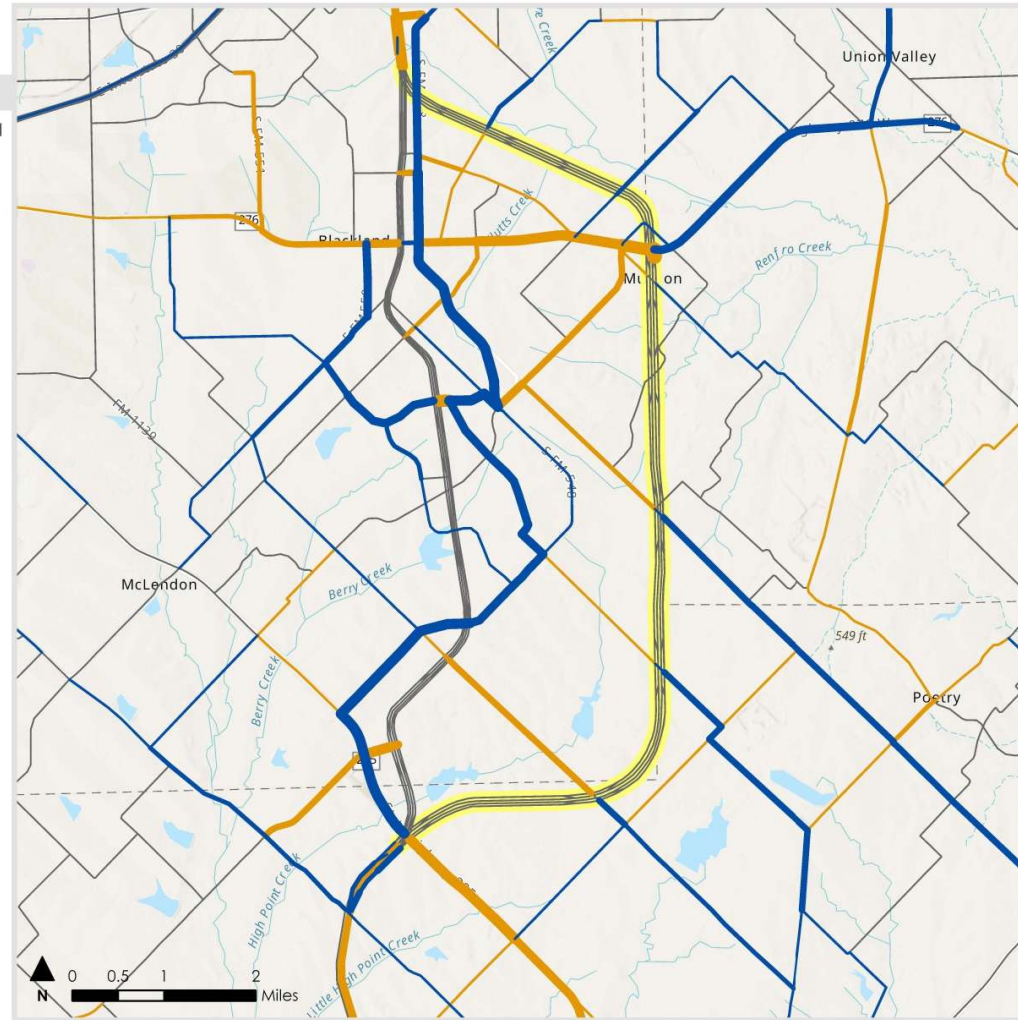
- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000
- 12,000 - 20,000
- 20,000 - 31,000

— Mobility 2050 Alignment

— Orange Alignment



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Est. NASA, NOAA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAD, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Orange Alignment Recommendation

- Estimated Project Cost : \$967,400,000
- Cost Difference: \$109,900,000 higher (*Mobility 2050 alignment*)
- Annual Benefits : -\$47,000,000
- Kaufman County Connection: No
- Recommendation : Should be dropped

Red-Orange Alignment – Rockwall County (South)

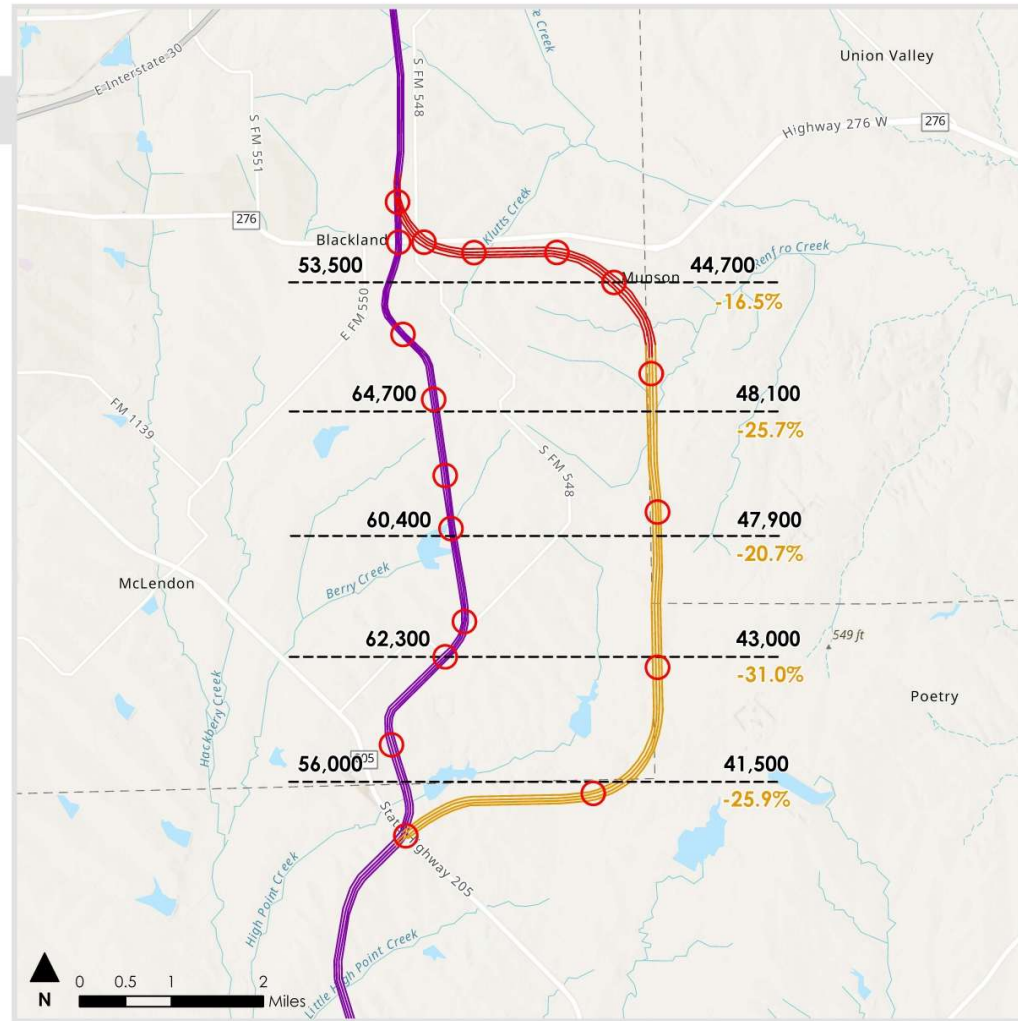
ROCKWALL COUNTY OUTER LOOP

Mobility 2050 vs. Red-Orange Alignment Average Volumes

Main lane total average traffic volumes and percent difference for Mobility 2050 and alternate (red-orange) alignments.

Legend

- Red-Orange Alignment
- Mobility 2050 Alignment
- Grade Separation



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Red-Orange Alignment Volume Difference

ROCKWALL COUNTY OUTER LOOP

Arterial Volume Difference

Year 2050 traffic volumes for arterial network around the Outer Loop alternate (red-orange) alignment.

Legend

Volume Increase

- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000
- 12,000 - 14,000

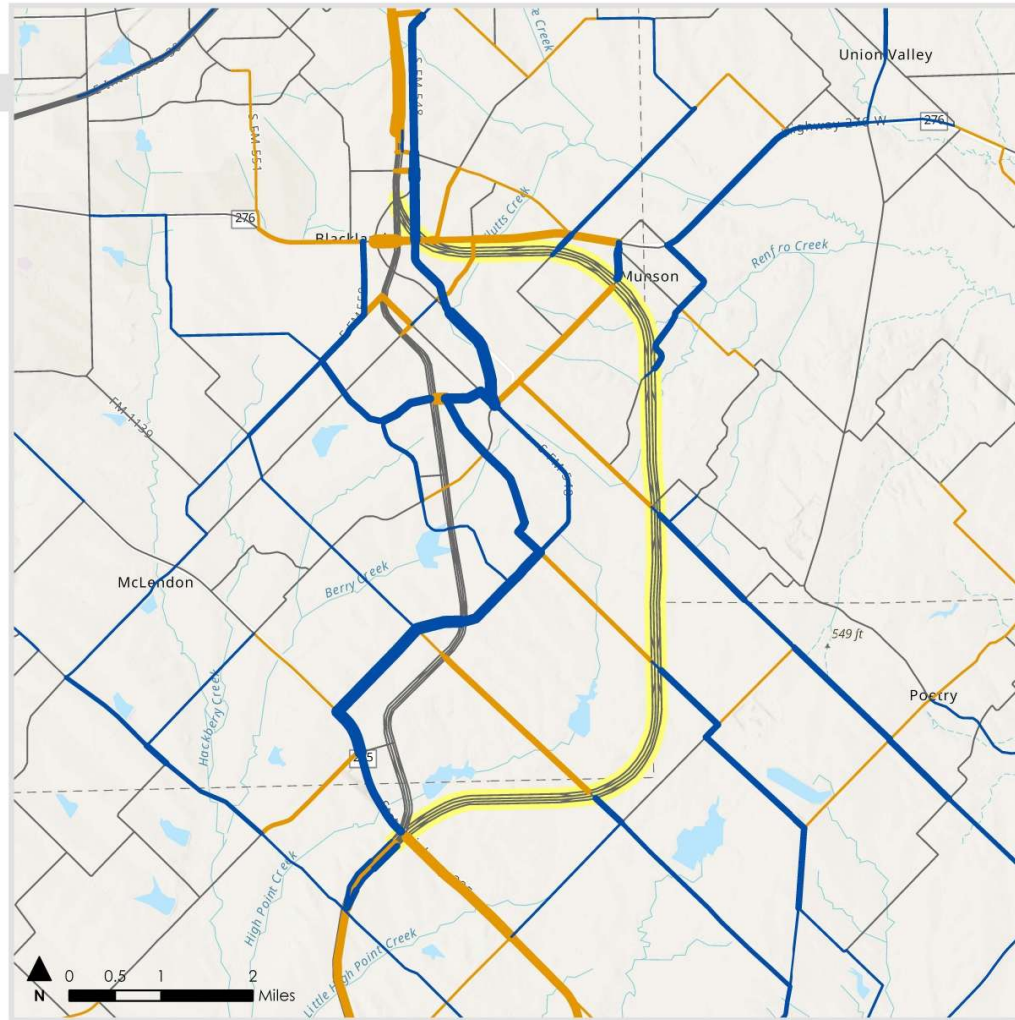
Volume Decrease

- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000
- 12,000 - 15,000
- 15,000 - 21,000

- Mobility 2050 Alignment
- Red-Orange Alignment



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Red-Orange Alignment Recommendation

- Estimated Project Cost : \$1,021,300,000
- Cost Difference: \$163,800,000 higher (*Mobility 2050 alignment*)
- Annual Benefits : -\$67,200,000
- Kaufman County Connection: No
- Recommendation : Should be dropped

Blue-Orange Alignment – Rockwall County (South)

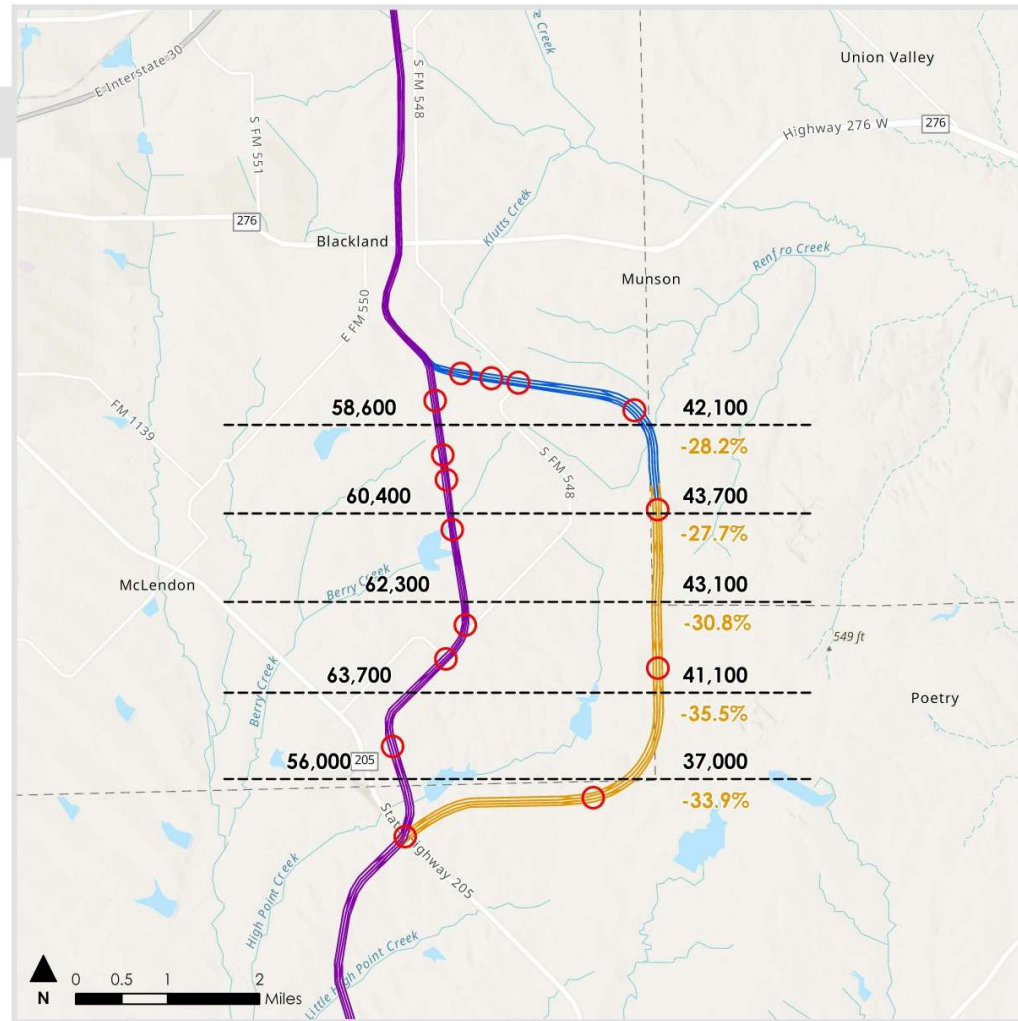
ROCKWALL COUNTY OUTER LOOP

Mobility 2050 vs. Blue-Orange Alignment Average Volumes

Main lane total average traffic volumes and percent difference for Mobility 2050 and alternate (blue-orange) alignments.

Legend

- Blue-Orange Alignment
- Mobility 2050 Alignment
- Grade Separation



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Blue-Orange Alignment Volume Difference

ROCKWALL COUNTY OUTER LOOP

Arterial Volume Difference

Year 2050 traffic volumes for arterial network around the Outer Loop alternate (blue-orange) alignment.

Legend

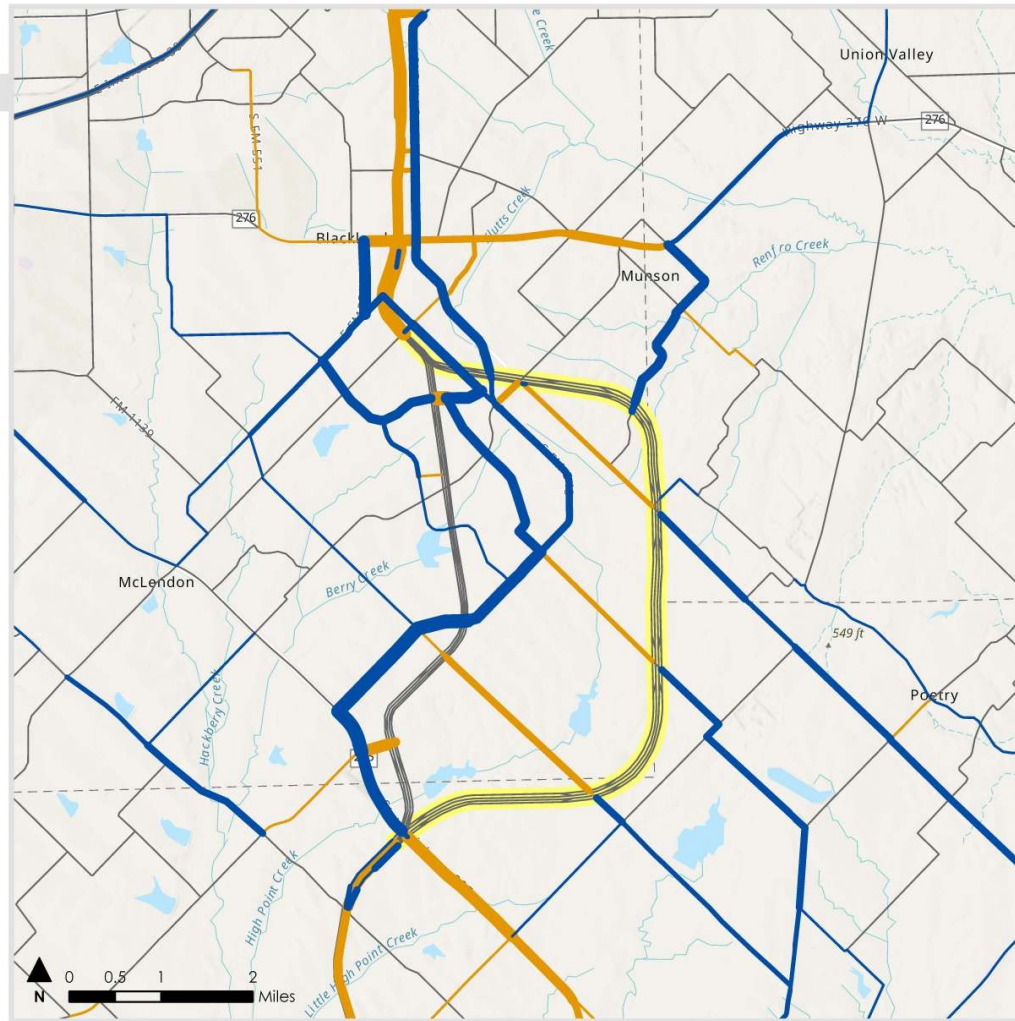
Volume Increase

- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000
- 12,000 - 16,000

Volume Decrease

- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000
- 12,000 - 15,000

- Mobility 2050 Alignment
- Blue-Orange Alignment



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Blue-Orange Alignment Recommendation

- Estimated Project Cost : \$917,400,000
- Cost Difference: \$59,900,000 higher (*Mobility 2050 alignment*)
- Annual Benefits : -\$66,900,000
- Kaufman County Connection: No
- Recommendation : Should be dropped

Pink Alignment – Rockwall County (South)

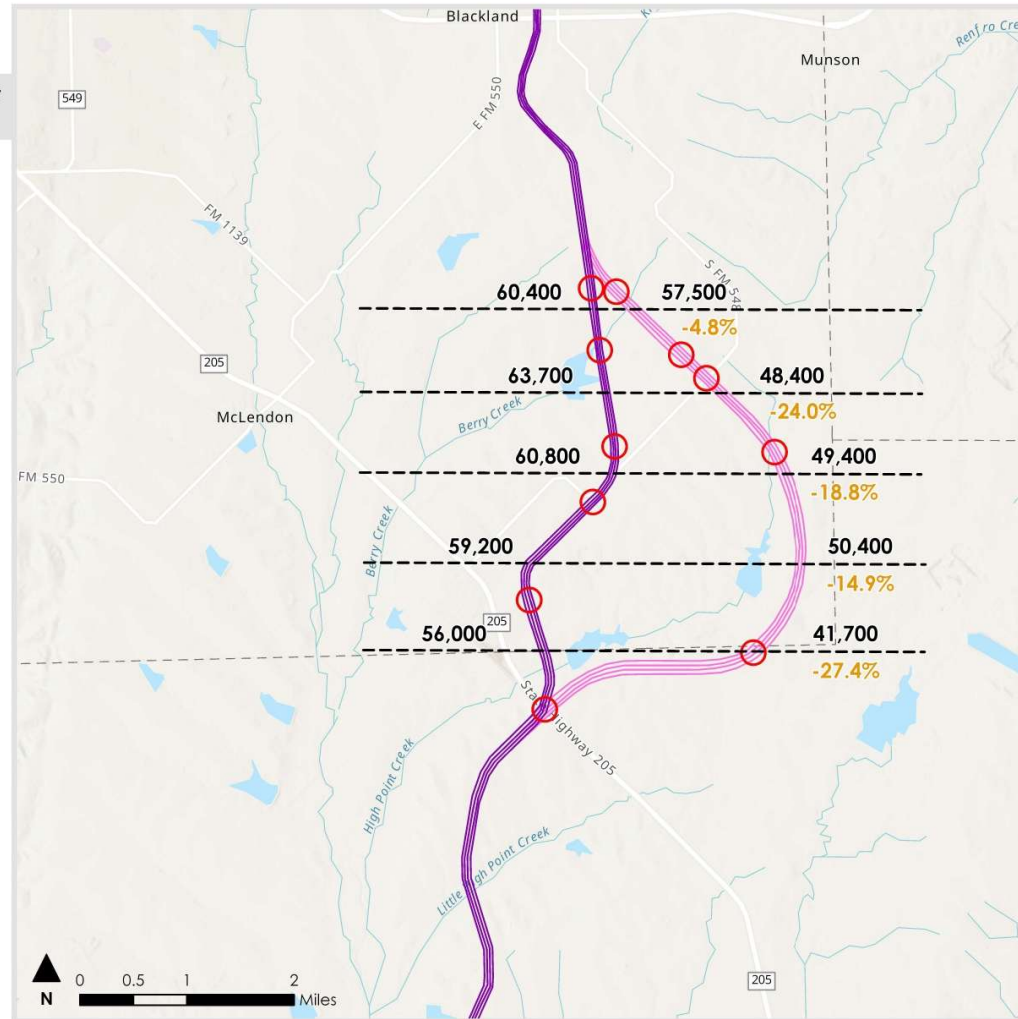
ROCKWALL COUNTY OUTER LOOP

Mobility 2050 vs. Pink Alignment Average Volumes

Main lane total average traffic volumes and percent difference for Mobility 2050 and alternate (pink) alignments.

Legend

- Pink Alignment
- Mobility 2050 Alignment
- Grade Separation



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Pink Alignment Volume Difference

ROCKWALL COUNTY OUTER LOOP

Arterial Volume Difference

Year 2050 traffic volumes for arterial network around the Outer Loop alternate (pink) alignment.

Legend

Volume Increase

- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000
- 12,000 - 14,000

Volume Decrease

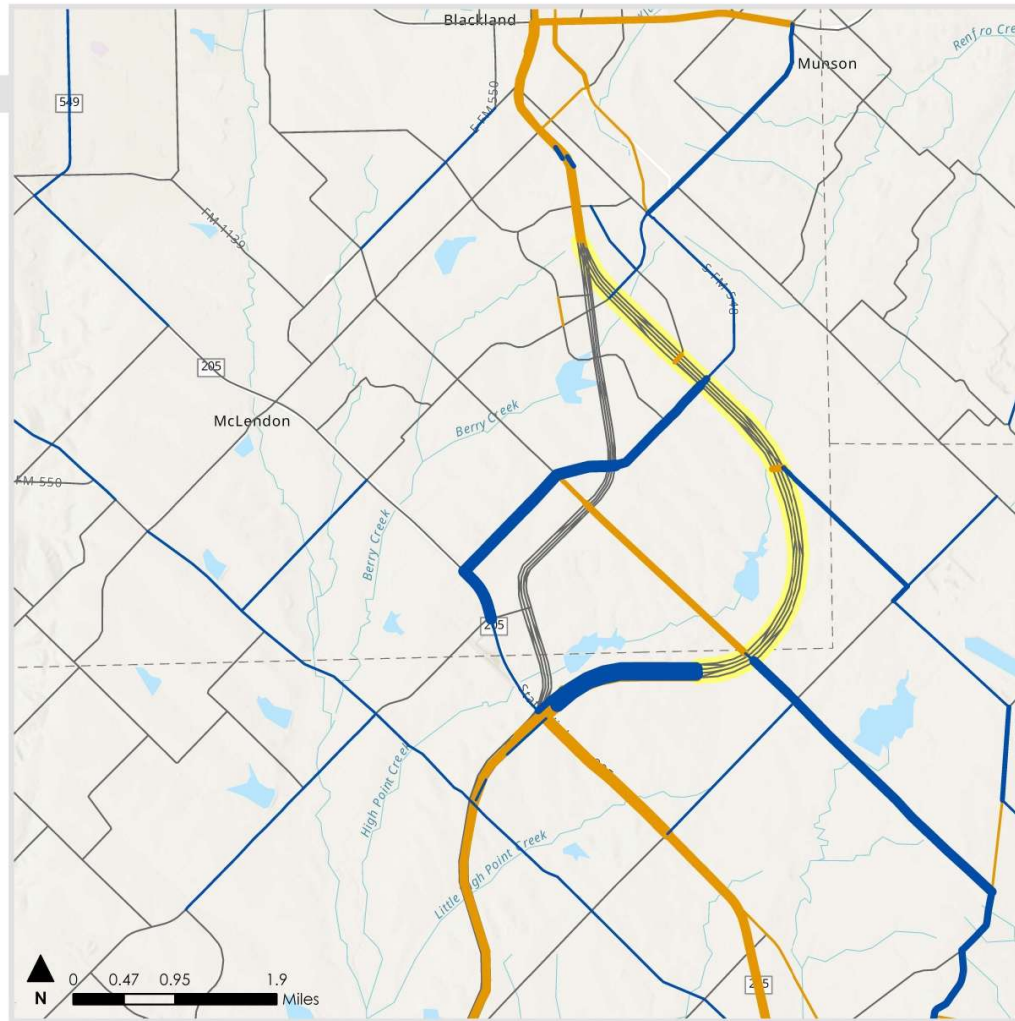
- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 10,000

— Mobility 2050 Alignment

— Pink Alignment



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Pink Alignment Recommendation

- Estimated Project Cost : \$909,900,000
- Cost Difference: \$52,400,000 higher (*Mobility 2050 alignment*)
- Annual Benefits : -\$42,600,000
- Kaufman County Connection: No
- Recommendation : Should be dropped

Aqua Alignment – Rockwall County (South)

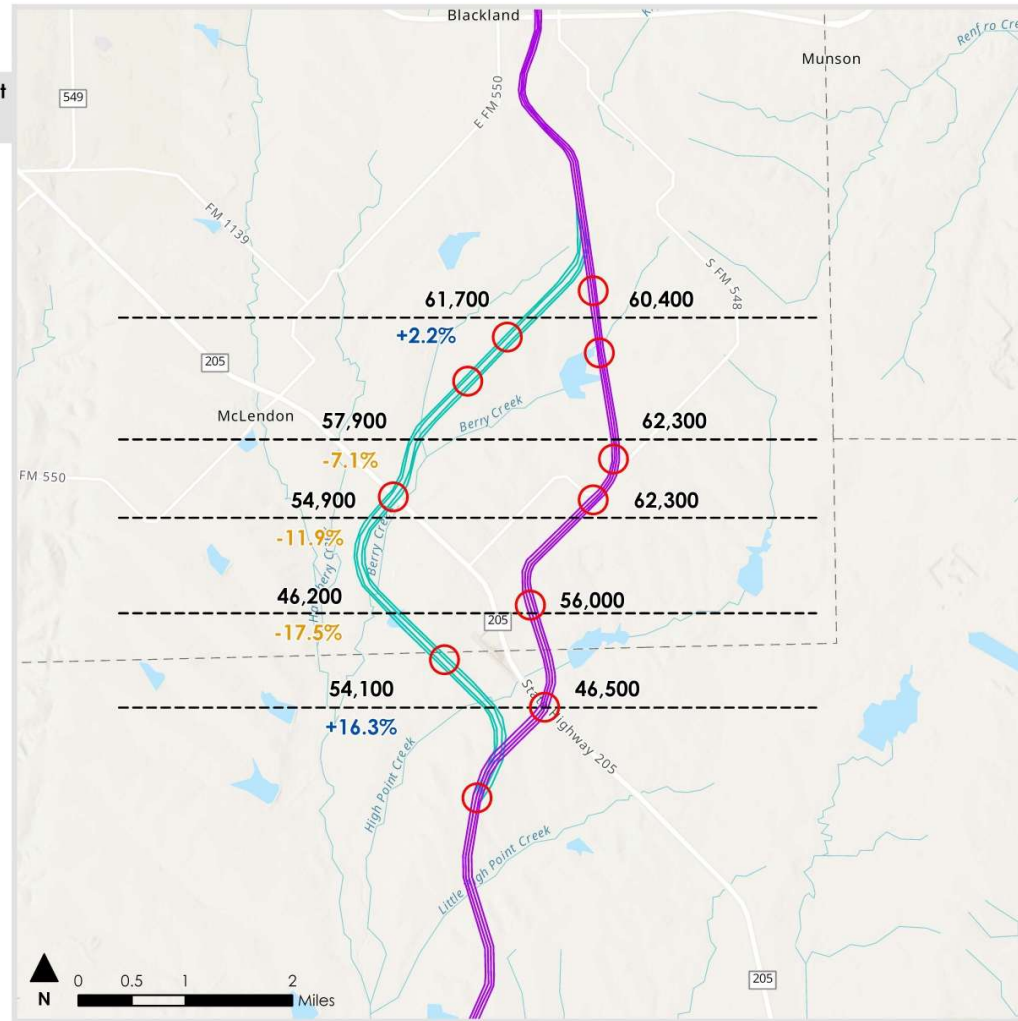
ROCKWALL COUNTY OUTER LOOP

Mobility 2050 vs. Aqua Alignment Average Volumes

Main lane total average traffic volumes and percent difference for Mobility 2050 and alternate (aqua) alignments.

Legend

- Mobility 2050 Alignment
- Aqua Alignment
- Grade Separation



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Rockwall County
Outer Loop

Aqua Alignment Volume Difference

ROCKWALL COUNTY OUTER LOOP

Arterial Volume Difference

Year 2050 traffic volumes for arterial network around the Outer Loop alternate (Aqua) alignment.

Legend

Volume Increase

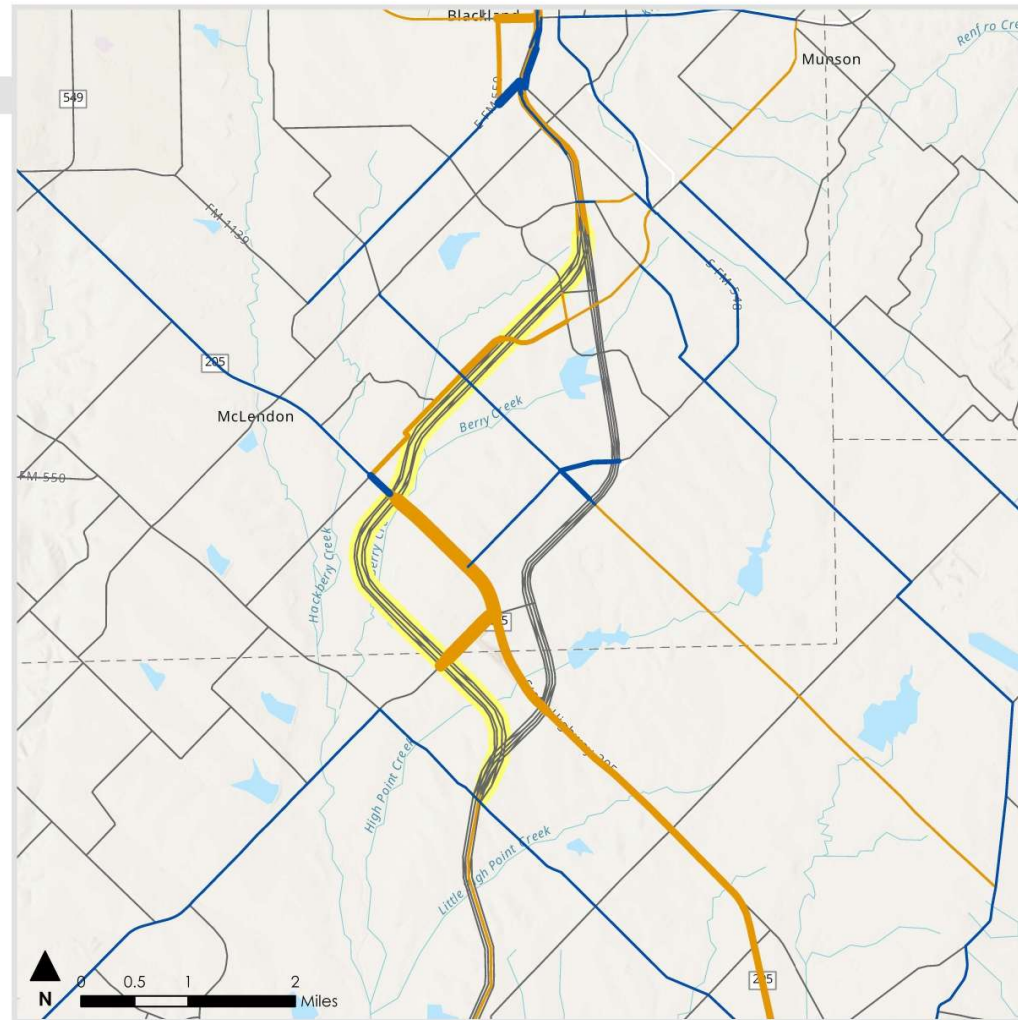
- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 6,000

Volume Decrease

- 500 - 1,500
- 1,500 - 2,500
- 2,500 - 5,000
- 5,000 - 8,000
- 8,000 - 12,000
- 12,000 - 19,000

— Mobility 2050 Alignment

— Aqua Alignment



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Rockwall County
Outer Loop

Aqua Alignment Recommendation

- Estimated Project Cost : \$954,200,000
- Cost Difference: \$96,700,000 higher (*Mobility 2050 alignment*)
- Annual Benefits : -\$19,800,000
- Kaufman County Connection: Close
- Recommendation : Could be considered
 - Lowest in lost annual benefits
 - Moving west captures travel demand
 - Close to Kaufman County connection

Summary of Alternative Alignment Recommendations

- Orange Alignment – Should be dropped
- Red-Orange Alignment – Should be dropped
- Blue-Orange Alignment – Should be dropped
- Pink Alignment – Should be dropped
- Aqua Alignment – Could be considered

Hunt County (West) Alternate Routes

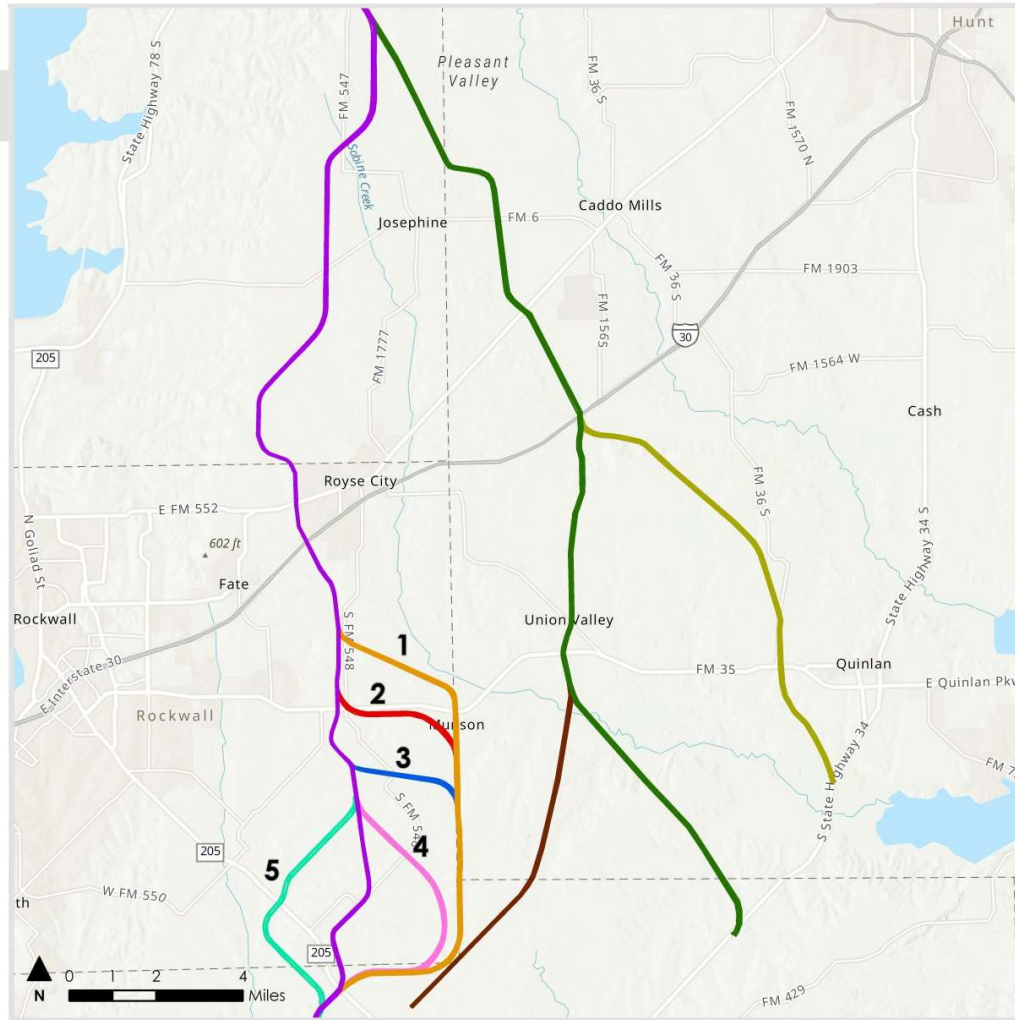
ROCKWALL COUNTY OUTER LOOP

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Alternate Outer Loop alignments
through Hunt County, as
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Hunt County Alternate Routes – Study Considerations

- Significant departures from locally/technically preferred Outer Loop routes in Rockwall County (*established in 2007*) and Collin County (*established in 2010*), as well as TxDOT's IH 30 interchange location (*established in 2019*).
- Hunt County travel demand simulation (*year 2035*) from NCTCOG's 2011 Regional Outer Loop Corridor Feasibility Study resulted in volumes not sufficient for freeways (*see dark green alignment – previous page*).
- Future local thoroughfare system without the Outer Loop would operate at poor levels of service (*LOS*).
- Project delays from studying additional alignments could allow developers/property owners to construct new structures within all forms of zoning/land use types, increasing the number of impacts and displacements.
- Delayed right-of-way (*ROW*) preservation would result in increased costs for engineering, land acquisition, utility relocation, and construction.
- Shifting the alignment could result in loss of the economic generator provided by a freeway.
- Hunt County would not support a route that does not meet traffic objectives per letter from June 3, 2025.

Regional Outer Loop – Staging and Proposed Typical Sections

Full ROW Acquisition & Construction of Two-Way Frontage Road

≤ 500 ft (Varies)



Example:
Loop 9 (Dallas County)
IH 35E to IH 45

Stage 1

Construction of 2nd Frontage Road & Conversion to One-Way Traffic

≤ 500 ft (Varies)

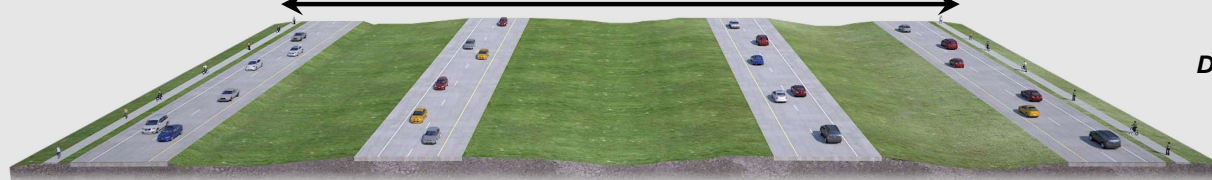


Example:
Collin County Outer Loop
Dallas Pkwy to Choate Pkwy

Stage 2

Construction of General Purpose Lanes

≤ 500 ft (Varies)



Example:
Dallas North Tollway (DNT)
FM 428 to US 380

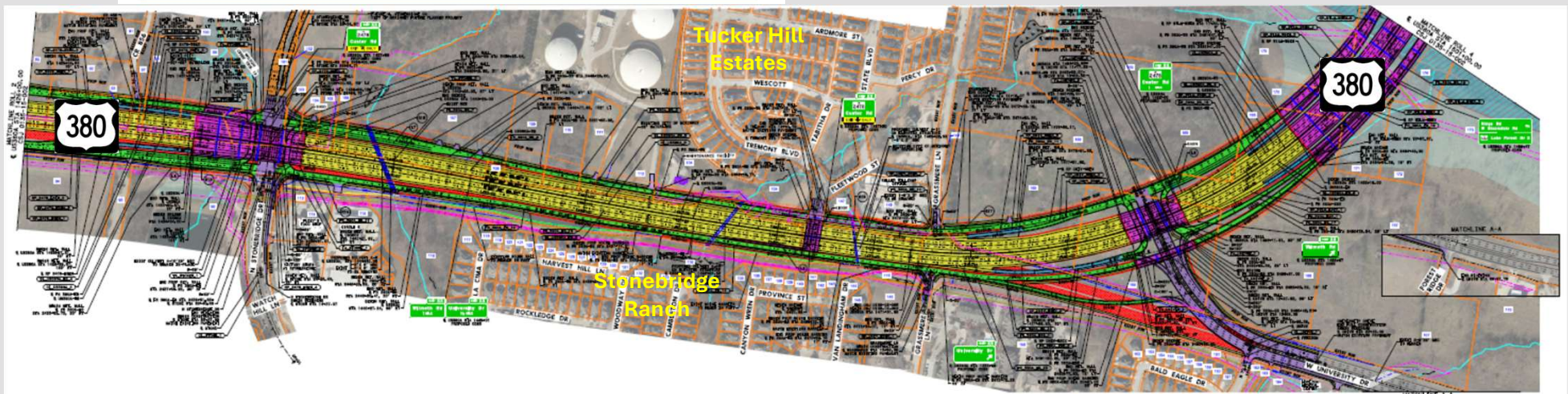
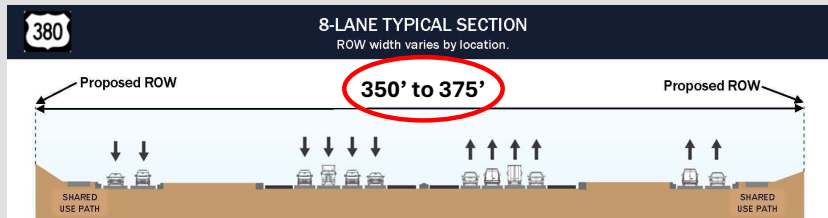
Stage 3

How/When Are Potential Impacts Addressed?

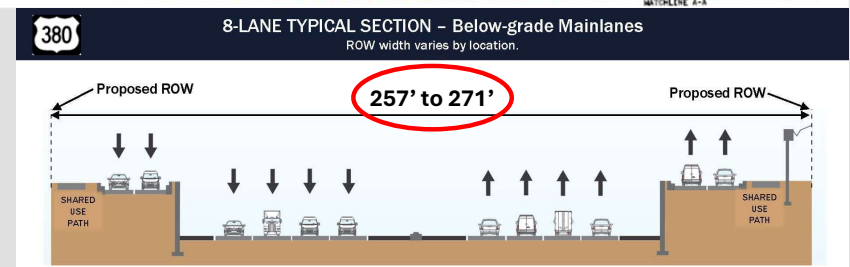
ACTION	PURPOSE	APPROACH	HIERARCHY	TIMING	OBLIGATION
Avoid	To prevent a negative impact entirely.	Eliminate the source of the problem.	1st <i>(effective <u>only</u> if costs/ benefits not affected)</i>	Environmental	TxDOT
Minimize	To reduce severity of an impact.	Limit the extent or degree of action.	2nd	Environmental	TxDOT
Mitigate	To compensate for unavoidable loss or damage.	Repair or replace what was lost or damaged.	3rd	Environmental & Final Design	TxDOT & affected parties
Enhance	To create a net positive gain.	Improve the condition beyond its original state.	Separate from negative mitigation <i>(can be offset)</i>	Final Design	Affected parties/partners, then engage TxDOT
Land Use Team Partnership	Create system resulting in city development rules guiding development.	Partnership impacting positive land use results.	All the above	Environmental	Cities & counties

MINIMIZE: Proposed US 380 Freeway – McKinney

Residents of Tucker Hill Estates & Stonebridge Ranch voiced concerns over noise, visual, air pollution, community cohesion, & quality of life impacts from proposed construction of the US 380 freeway. TxDOT **minimized** these potential impacts by:



- Reducing ROW width substantially (~100 feet)
- Depressing general purpose lanes (~25 feet)
- Adding retaining walls & sound barriers
- Providing local street crossing (*Tremont Blvd*)
- Relocating entrance/exit ramps



SOURCE: TxDOT (2023) – US 380 Environmental Assessment (Coit Road to FM 1827)

MITIGATE: Proposed US 380 Freeway – Princeton

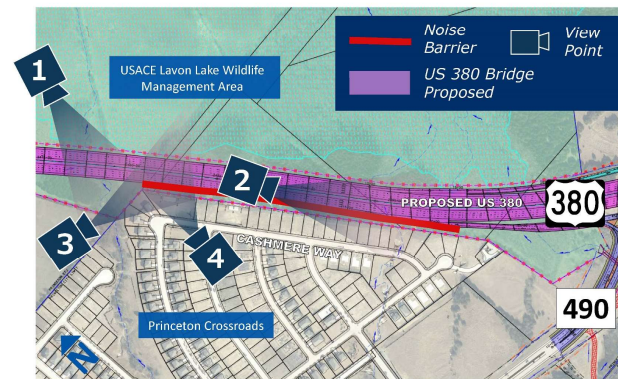
The Princeton Crossroads neighborhood quickly developed during TxDOT's US 380 study in an area bordered by the Lavon Lake Wildlife Management Area (WMA), owned & operated by the US Army Corps of Engineers (USACE). With the new US 380 freeway setting a new border between the land uses, TxDOT **mitigated** impacts by:

- **Eliminating continuous frontage roads** between FM 1377 – CR 490 to shrink WMA easement acquisition (23 acres) & limit intrusion between land uses
- **Committing to vegetation planting & habitat restoration** for offset WMA acreage via Compensatory Mitigation Plan (CMP)
- **Adding neighborhood noise barriers**

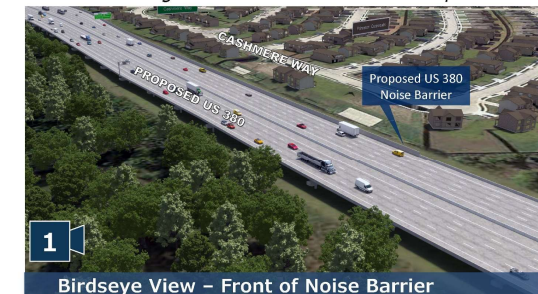
US 380 Conceptual Rendering – Noise Barrier

Noise barrier views from Proposed US 380 and Cashmere Way

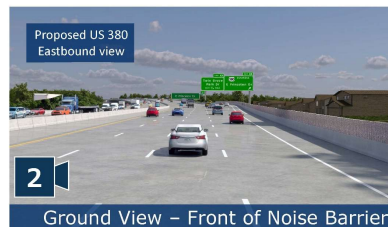
Note: See schematic roll for design details



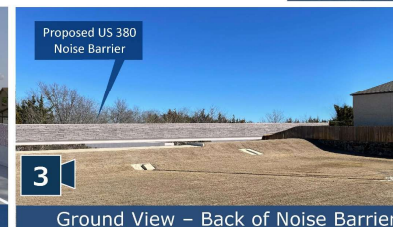
Note: These potential noise barrier renderings are conceptual. The exact location and aesthetics of any potential noise barrier will be further refined and voted on during future noise barrier workshops.



Birdseye View – Front of Noise Barrier



Ground View – Front of Noise Barrier



Ground View – Back of Noise Barrier



Ground View – Back of Noise Barrier

The renderings are not to-scale and shown for illustration purposes only. Actual views are subject to change.

US 380 Princeton Public Hearing | CSJs: 0135-04-036, 0135-03-056, 0135-16-002



SOURCE: TxDOT (2024) – US 380 Environmental Assessment (FM 1827 to CR 560)

ENHANCE: Some Examples Among Many



Gateway Signs



Decorative Retaining Walls



Landscaping/Screening



Decorative Sound Walls



Public Art Displays



Bridge/Path Rails & Fences

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