

# Connections 2045: The Waco Metropolitan Transportation Plan Amendment 4



Developed by the Waco Metropolitan Planning Organization  
in cooperation with the following agencies:



Adopted by the Waco MPO Policy Board: September 21, 2023

# amendment 4: September 2023

## purpose and need for amendment

The Carbon Reduction Program (CRP) was established by the 2021 Bipartisan Infrastructure Bill with the goal of reducing transportation emissions nationwide. Over the course of five years, the Waco MPO expects to have approximately \$4.5 million available to entities within the MPO planning area for obligation through CRP Calls for Proposals.

A 2023 CRP Call for Proposals makes \$2.1 million available for obligation in fiscal year 2024. This amendment identifies modifications to include this Call for Proposals and the applicable funding source to ensure consistency with FHWA actions, the Texas Transportation Commission (Commission) actions, and project programming within the 2023–2026 Transportation Improvement Program.

In May 2023, MPO staff was informed by the Transportation Planning and Programming Division of the Texas Department of Transportation (TxDOT) that TxDOT’s Financial Management Division estimates revenue will be available to TxDOT to begin construction of Project 4C Waco South (IH-35 4C) in 2026. This amendment identifies modifications to align this project with the priorities of the Commission, to ensure consistency with FHWA actions, Commission actions, and project programming within the 2023–2026 Transportation Improvement Program.

The Federal Transit Administration (FTA) awarded funding to a bus purchase project application submitted by the City of Waco on behalf of the Waco Transit System under the Low or No Emission Vehicle Program in April 2023. As a result of this funding commitment, this amendment adds Project T-5U to the Metropolitan Transportation Plan as a funded recommendation within Strategy 6: Provide Equal Access and Benefits to ensure consistency with FTA actions, Commission actions, and project programming within the 2023–2026 Transportation Improvement Program. This project is intended to advance efforts to maintain a state of good repair for transit rolling stock.

Occasionally during the schematic development or environmental study phase of a transportation project, changes to the scope of work, project limits or costs are identified which are significant enough to warrant an amendment. These changes are often because the planning process often cannot anticipate all possible circumstances constraining a project or determining where logical termini ought to be located. This amendment aligns scopes of work, project limits and revised project costs with those being identified within the engineering design phase.

### Revision to Short-Term Priorities in Strategy 2

The estimated project cost for Project ID: S-022G (Priority 2) has been revised to reflect the refined project design. The purpose of the project is to construct an overpass on SH 31 over FM 2311 (Heritage Pkwy) to reduce fatal and life-threatening injury crashes.

The project extent, scope of work, and cost for Project ID: S-048E (Priority 4) has been revised to reflect the refined project design. The purpose of the project is to shift storage of traffic backing up from intersections from main lanes of US 84 (Woodway Dr) to frontage roads between FM 1695 (Hewitt Dr) to Spur 298 (Franklin Ave) which have slower speeds and should reduce possibility of rear-end crashes.

A companion ramp project to Project S-048E is included as Project S-048F (Priority 4A) as requested by the Waco District of TxDOT. During the project design phase of S-048E, TxDOT determined additional work is required to accomplish the ultimate goal of S-048E. The purpose of this project is to realign ramps on US 84 (Franklin Ave) near Lake Air Dr. Together, Projects S-48E and S-48F reflect the refined project design.

### Revision to Short-Term Priorities in Strategy 4

A formal commitment for federal funding through the Federal Highway Administration’s (FHWA) Carbon Reduction Program was approved by the Commission through Minute Order 116522 approved on August 16, 2023.

A 2023 Call for Proposals awards \$2.1 million in Carbon Reduction Program funds to entities within the MPO planning area for obligation in fiscal year 2024 detailed in Table A4-1.

table A4-1 – carbon reduction (CRP) funding awards for FY 2024

Funding Category	FY 2024 Funds
Carbon Reduction Funds Allocated to Waco MPO	\$2,100,523
Non-Federal Local Match	\$699,326
Total	\$2,799,849

Source: *Draft Planning Targets for the 2024 Unified Transportation Program*, February 3 Memo from Humberto “Tito” Gonzalez Jr., Director, Transportation Planning and Programming Division, TxDOT. A formal commitment for funding was approved by the Commission through Minute Order 116522 approved on August 16, 2023.

### Revisions to Short-Term Priorities in Strategy 5

The recommended IH-35 4C highway project, Project ID: S-022G, is reprioritized from long-term Priority 9 in strategy 5 to the highest short-term priority in strategy 5 and in alignment with the priorities of the Commission. A formal commitment for funding was approved by the Commission through Minute Order 116522 approved on August 16, 2023. The purpose of this project is to reconstruct the facility to current TxDOT design standards for Interstates and State Freight Corridors and address unacceptable traffic conditions forecasted for 2045.

The project extent, scope of work, and cost for Project ID: S-039A-2 (Priority 3) has been modified to reflect the refined project design. The purpose of the project is to address unacceptable traffic conditions forecasted for 2045 for both Spur 298 (Franklin Ave.) and New Road.

### Revisions to Long-Term Priorities in Strategy 5

The IH-35 4C project (Project ID: S-022G) which was originally included as long-term Priority 9 has been removed due to a change in priority to short-term Priority 1A.

### Revision to Short-Term Priorities in Strategy 6 (Funding Award)

On June 26, 2023, federal funds were awarded to the Waco Transit System under the Federal Transit Administration (FTA) Section 5339(c) Low or No Emission Vehicle Program in fiscal year 2023. Waco Transit will receive funding to buy 4 battery-electric buses and install 4 chargers to replace aging diesel buses. The project will reduce carbon emissions in neighborhoods with high levels of

diesel-based pollution while improving the reliability of transit service and helping residents access jobs, schools, and essential services.

The vehicle purchase project identified within this amendment received a formal commitment for funding through the Federal Transit Administration on July 3, 2023 (88 FR 2023-14193). The capital fund award to Waco Transit is detailed in Table A4-2.

**table A4-2 – FTA capital funding awards made in FY 2023**

Funding Category	Total Funds
FTA Section 5339(c) Award	\$3,133,129
Non-Federal Local Match	\$546,343
Total	\$3,679,472

revisions to project recommendations

strategy 2: improve safety and security

short term priorities (2020 to 2030)

**Priority 2**

**Project ID: S-066**

Note: This is a modification of the project cost for a previously identified priority within the original adopted MTP. The priority and scoring for this project have not changed.

Facility: SH 31

Extent: Intersection at FM 2311 (Heritage Pkwy)

Current: At grade intersection

Scope of Work: Construct main lane overpass for SH 31

Purpose and Need: Reduce fatal and life-threatening injury crashes

Project Scoring: Good Repair: 0  
Safety: 20  
Efficiency: -25  
Livability: -15  
Freight / Econ Dev: 85

Equity: -20  
Total Score: 45

Fiscal Constraint: Mobility: \$5.0  
Safety: \$7.2

Work Phase	Cost*
Engineering	\$1.0**
Right of Way	\$0.0
Construction	\$11.2
Total	\$12.2

\*In millions / \*\*Phase complete or underway

**Priority 4A**

**Project ID: S-048E**

Note: This is a modification of the project extent, scope of work, and cost for a previously identified priority within the original adopted MTP. The priority for this project is changed to 4A. Scoring has not changed.

Facility: US 84 (Woodway Dr)

Extent: FM 1695 (Hewitt Dr) to SS 298

Current: 4 lane freeway with continuous frontage roads

Scope of Work: 1) Reconstruct main lanes, frontage roads, ramps, and interchanges  
2) Add direct connects

Purpose and Need: Shift storage of traffic backing up from intersections from main lanes to frontage roads which have slower speeds and should reduce possibility of rear-end crashes.

Project Scoring: Good Repair: 10  
Safety: 0\*  
Efficiency: -25  
Livability: 13  
Freight / Econ Dev: 75  
Equity: -20  
Total Score: 53

\*Insufficient research has been conducted regarding quantifying the impact of changing ramp configurations on reducing crashes. Anecdotal evidence from similar projects within larger metro areas does suggest some reduction in both total crashes and severity for congested corridors.

Fiscal Constraint: Mobility: \$25.3  
Maintenance: \$0.0  
Safety: \$0.0  
Connectivity: \$198.0

Work Phase	Cost*
Engineering	\$9.0
Right of Way	\$0.0
Construction	\$214.3**
Total	\$223.3

\*In millions / \*\*TXDOT Waco District is authorized to let between 2028 and 2033 but not yet attributed to a Funding Category.

**Priority 4B**

**Project ID: S-048F**

Note: This project is added as a companion project to Project S-048E (Priority 4) as determined through project design.

Facility: US 84 (Franklin Ave)

Extent: SS 298 to Lake Air Dr

Current: 4 lane freeway with continuous frontage roads

Scope of Work: 1) Reconstruct roadway  
2) Realign ramps

Purpose and Need: Companion ramp project to Project S-048E requested by TxDOT

Project Scoring: Unscored

Fiscal Constraint: Connectivity: \$9.0

Work Phase	Cost*
Engineering	\$1.0
Right of Way	\$0.0
Construction	\$8.0**
Total	\$9.0

\*In millions / \*\*TXDOT Waco District is authorized to let between 2028 and 2033 but not yet attributed to a Funding Category.

**strategy 4: improve regional livability**

**short term priorities (2020 to 2030)**

Carbon Reduction Program (CRP) funds present an opportunity for the implementation of low-cost, high-impact projects in the Waco MPO planning area which reduce transportation emissions while benefiting local communities.

CRP project prioritization criteria developed by the MPO is designed to encourage communities to think systemically about the impact of their projects while also keeping in mind the Federal Highway Administration’s (FHWA) priorities of safety, transit flex, transferability between FHWA programs, ADA, equity, climate change and sustainability, labor and workforce, and truck parking. Projects are scored across the fields of Reduction in Transportation Emissions, Equity, Impact on Future Generations, and Land Use Considerations. This ensures selected project address regional livability, air quality and environmental concerns.

The scale of projects feasible within the anticipated funding level increases the potential of cities of all sizes and resource levels to contribute the required 20% funding match. CRP funds are available for obligation for a period of 3 years after the last day of the fiscal year for which the funds are authorized, up to 4 years.

The 2023 Call for Proposals makes \$2.1 million available for to entities within the MPO planning area for obligation in fiscal year 2024. Table A4-3 estimates the carbon reduction program resources that will be awarded through the 2023 Call for Proposals.

**table A4-3 – carbon reduction program funds available for obligation**

Mode	Project ID	Short-Term Cost	Long-Term Cost	Total Cost*
Carbon Reduction Priorities	CR-001-CR-020	\$2.1	\$0.0	\$2.1
Total		\$2.1	\$0.0	\$2.1

\*In Millions

**strategy 5: address demand for future mobility**

**short term priorities (2020 to 2030)**

**Priority 1A**

**Project ID: S-022G**

Note: This is a modification of the project priority and cost for a previously identified priority within the original adopted MTP, in alignment with the priorities of the Texas Transportation Commission. The extent and scoring for this project have not changed.

Facility: Interstate Highway 35  
 Extent: South 12<sup>th</sup> Street to SH 6 / West Loop 340  
 Current: 6 lane expressway with discontinuous frontage roads  
 Scope of Work: 1) Reconstruct all bridges and pavements  
 2) Widen main lanes from 6 to 8  
 3) Reconstruct and realign ramps and frontage roads  
 Purpose and Need: 1) Address unacceptable traffic conditions forecasted for 2045.  
 2) Address high number of total and severe crashes  
 3) Reconstruct facility to current design standards for Interstates and State Freight Corridors.  
 Project Scoring: Good Repair: 48  
 Safety: 48  
 Efficiency: -25  
 Livability: 11  
 Freight / Econ Dev: 100  
 Equity: 60  
 Total Score: 241  
 Fiscal Constraint: Mobility: \$55.0  
 Connectivity: \$125.7  
 State Priority: \$131.3

Work Phase	Cost*
Engineering	\$20.0**
Right of Way	\$30.0**

Construction	\$225.0
Total	\$275.0

\*In millions / \*\*Phase complete or underway

**Priority 3**

**Project ID: S-039A-2**

Note: This is a modification of the project extent, scope of work, and cost for a previously identified priority within the original adopted MTP. The priority and scoring for this project have not changed.

Facility: Spur 298 (Franklin Ave)  
 Extent: US-84 to SL 396 (Valley Mills Dr)  
 Current: 4 lane hybrid arterial with frontage roads  
 Scope of Work: 1) Widen to six lanes divided  
 2) Relocate main lanes to frontage roads  
 3) Construct dual left turn lanes  
 Purpose and Need: Address unacceptable traffic conditions forecasted for 2045 for both Spur 298 and New Rd.

Project Scoring: Good Repair: 10  
 Safety: 0  
 Efficiency: 25  
 Livability: 56  
 Freight / Econ Dev: 65  
 Equity: 40  
 Total Score: 196

Fiscal Constraint: Mobility: \$38.1

Work Phase	Cost*
Engineering	\$1.7**
Right of Way	\$0.6**
Construction	\$37.7
Total	\$40.0

\*In millions / \*\*Phase complete or underway

long term priorities (2031 to 2045)

strategy 6: provide equal access and benefits

short term priorities (2020 – 2030)

Project T-5U identifies the capital costs the Waco Transit System, Inc. will incur for the purchase of transit vehicles to replace vehicles currently in operation past their recommended lifespan detailed in Table A4-4. Waco Transit will buy four battery-electric buses and install four chargers to replace aging diesel buses. These federal funds remain available for obligation for four fiscal years, including the fiscal year in which the amount is appropriated plus three additional years.

table A4-4 – public transportation vehicle purchases

Project ID	System	Project Cost
T-5U	Urban	\$3,679,472
Total		\$3,679,472

summary of recommendations

The follow summary tables have been updated to reflect the changes made in this amendment.

table A4-5 – changes to total costs of plan recommendations by strategy

Strategy	Short Term Cost*	Long Term Cost*	Percent of Amendment
1 – State of Good Repair	\$0.0	\$0.0	0.00%
2 - Safety	\$227.3	\$0.0	44.5%
3 – Efficiency	\$0.0	\$0.0	0.0%
4 - Livability	\$2.8	\$0.0	0.6%
5 - Mobility	\$276.9	(\$250.0)	54.2%
6 – Equity	\$3.7	\$0.0	0.7%

\*In Millions  
 Note: Reduction in Long Term Costs because of the reprioritization of IH-35 4C from a long-term priority to a short-term priority

table A4-6 – changes to total costs of plan recommendations by transportation mode

Mode	Short Term Cost*	Long Term Cost*	Percent of Amendment
Highway	\$507.0	(\$250.0)	99.3%
Public Transportation	\$3.7	\$0.0	0.7%
Bicycle	\$0.0	\$0.0	0.0%
Pedestrian	\$0.0	\$0.0	0.0%
Passenger Rail	\$0.0	\$0.0	0.0%
Total Plan	\$510.7	(\$250.0)	100.00%

\*In Millions  
 Note: Reduction in Long Term Costs because of the reprioritization of IH-35 4C from a long-term priority to a short-term priority

table A4-7 – total costs of plan recommendations by strategy after amendment

Strategy	Short-Term Cost*	Long-Term Cost*	Total Cost*	Percent of Plan
1 – State of Good Repair	\$467.1	\$771.9	\$1,239.0	50.5%
2 - Safety	\$265.7	\$20.7	\$286.4	11.7%
3 – Efficiency	\$33.5	\$64.1	\$97.6	4.0%
4 - Livability	\$47.0	\$7.4	\$54.4	2.2%
5 - Mobility	\$426.0	\$106.3	\$532.3	21.7%
6 – Equity	\$93.3	\$148.8	\$242.1	9.9%
Total Plan	\$1,332.6	\$1,119.2	\$2,451.8	100.0%

\*In Millions