

connections 2040

the waco metropolitan transportation plan



developed by the waco metropolitan planning organization
in cooperation with the following agencies:



adopted by the waco MPO policy board: january 27, 2015

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section 1: preface

The Waco Metropolitan Planning Organization has prepared this plan in compliance with the Moving Ahead for Progress in the 21st Century Act (MAP-21). The preparation of this plan has been funded in part through grants by the Federal Highway Administration, the Federal Transit Administration and the Texas Department of Transportation.

The contents of this report reflect the views and opinions of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of the Federal Highway Administration, the Federal Transit Administration and the Texas Department of Transportation.

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mpo governance

mpo policy board

The Waco MPO is governed by a 20 member Policy Board representing McLennan County, the municipalities within McLennan County and the various modal interests within the Waco Metropolitan Area. The MPO Policy Board establishes regional transportation policy, identifies regional project priorities and adopts all plans and programs produced by the MPO. A list of Policy Board members may be found in Appendix A.

mpo technical committee

The MPO Policy Board receives advice and recommendations regarding project-level considerations from the MPO Technical Advisory Committee (TAC). The TAC is composed of professional planners, engineers and staff from various modal interests, member governments and transportation stakeholders. The primary roles of the TAC are to 1.) Review reports and analysis performed by the MPO staff and/or private sector consultants working for the MPO and 2.) To provide recommendations regarding the priorities of proposed transportation investments. A list of Technical Committee members may be found within Appendix A.

mpo staff

The Waco MPO is administered by professional staff that performs necessary technical analysis and evaluations, produce federally required plans and programs and provide project recommendations to address regional transportation needs. The following is the list of MPO staff for fiscal year 2015:

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section 2: introduction

2.1 – what is the metropolitan planning organization?

The US Census Bureau has identified over 400 regions throughout the United States that they consider to be urbanized. Urban Areas, by definition, contain a population greater than 50,000. Federal law mandates the creation of a Metropolitan Planning Organization (MPO) for each census defined urbanized area, with the purpose of providing local government input into transportation decisions involving federal highway or transit funds.

To achieve this, the City of Waco has been designated by the Governor of Texas as the MPO responsible for transportation planning in the Waco Urbanized Area. The City of Waco Planning Staff organizes, researches, and coordinates activities between the Texas Department of Transportation, Waco Transit and the Waco MPO Policy Board.

Although federal law mandates the creation of an MPO for each census defined urbanized area, federal law also requires that the MPO plan for a larger area that at a minimum reflects the region anticipated to be urbanized within the next 25 years. The MPO may also plan for areas beyond this region which are anticipated to significantly influence transportation activities within the forecasted urbanized area. This area is referred to as the Metropolitan Planning Area or MPA and is determined by an agreement between the MPO Policy Board and the Governor of Texas. The MPA for Waco is coextensive with McLennan County. Please refer to Map 2.1 for the Waco MPA and census defined urbanized area.

2.2 – what is the metropolitan transportation plan?

Connections 2040: The Waco Metropolitan Transportation Plan, also known as the MTP, is the 25-year plan that outlines the mobility needs for the Waco Metropolitan Area. The MTP serves as the blueprint from which future mobility projects are developed and reflect the policies and priorities of the Waco MPO Policy Board. The MTP is required by federal law to include all projects which intend to utilize federal highway or transit dollars during the 25-year

planning period as well as all other regionally significant transportation projects, regardless of their source of funding. The MTP, however, must also be constrained against a realistic estimate of available resources. Only those projects that can be realistically funded during the 25-year planning period may be included in the MTP.

The MTP is the final product of several years of research through the continuing, comprehensive, cooperative effort of the MPO Staff, MPO Policy Board, MPO Technical Committee, Texas Department of Transportation (TxDOT), Waco Transit and the various municipal and county governments within the MPO planning area.

2.3 – relationship between the metropolitan transportation plan & transportation improvement program

Once identified within the MTP, a project is then eligible for federal highway or transit dollars for study, design, right of way acquisition or construction activities. Prior to any of these phases of work proceeding, however, the project must first be included in the Transportation Improvement Program (TIP). The TIP identifies those projects that the MPO agrees should either be implemented or constructed within the next 4 fiscal years. Similar to the MTP, the TIP must be constrained against funding which has been formally committed during the timeframe of the TIP.

In addition to the necessary funding commitments, projects must also have all necessary engineering and environmental studies complete in addition to the acquisition of all necessary right of way. The TIP is updated minimally once every 2 years to account for changes in project limits, scope of work or cost. The TIP in effect as of the time of publication covers fiscal years 2015 through 2018 and is scheduled to be updated in Spring of 2016.

2.4 – federal legislation

The Waco MPO is the result of a long history of transportation planning legislation. In 1962, Congress passed the Federal Highway

Act (FHWA) which focused on the needs for transportation planning in urbanized areas. The Act specifically states:

The Secretary [of Transportation] shall not approve...any projects in any urban area of more than 50,000 population unless he finds that such projects are based on a CONTINUING, COMPREHENSIVE transportation planning process carried on COOPERATIVELY by the States and Local Communities.

The FHWA of 1962 became the catalyst for many later federal actions. When Congress passed the Federal Highway Act of 1970 they added:

...no highway project may be constructed in any urban area of 50,000 population or more unless the responsible public officials of such urban area in which the project is located have been consulted and their views considered.

In compliance with this Act, the Cities of Waco, Bellmead, Beverly Hills, Hewitt, Lacy-Lakeview, Northcrest, Robinson, Woodway, McLennan County and the Texas Highway Department (now known as TxDOT) formed the Waco MPO in 1974.

In 1975, Congress implemented the FHWA/Urban Mass Transportation Administration (UMTA) Joint Regulation. This directed Governors to designate Metropolitan Planning Organizations that develop:

- Unified Planning Work Program (UPWP)
- Metropolitan Transportation Plan (MTP)
- Transportation Improvement Program (TIP)

The Intermodal Surface Transportation Efficiency Act of 1991, known as ISTEA, included measures that have affected transportation planning in a more significant manner than any previous legislation. ISTEA included for the first time an emphasis on public involvement, multi-modal considerations, and better highway design. Although not as significant in the Waco area as in larger MPOs, the inclusion of the Clean Air Act provisions in ISTEA highlighted the growing importance of issues beyond fast and convenient transportation.

The Transportation Equity Act for the 21st Century, known as TEA-21, was the reauthorization of ISTEA. TEA-21 further emphasized the importance of planning in the development of transportation projects and strengthened several core requirements within the transportation planning process.

All of these federal actions had a profound effect on the history, formation, and role of the Waco MPO. However, the most recent federal legislation that affects the organization and function of the Waco MPO is the reauthorization of SAFETEA-LU, the Moving Ahead for Progress in the 21st Century Act (MAP-21).

As of the development of this plan, MAP-21 was extended by the Congress from the original expiration date of September 30, 2014 to March 31, 2015. Congress is currently considering several different reauthorization proposals which will likely significantly impact the MPO and regional transportation decisions, once adopted. Until that time, however, the transportation planning process will continue to be governed by MAP-21.

2.5 – overview of map-21

Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law in 2012 and replaces the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). MAP-21 provides the authorization and funds for Federal transportation programs through March 31, 2015 as extended by Congress.

MAP-21 provides the statutory language for a streamlined, performance-based, and multimodal program to address the national transportation priorities identified by Congress. These priorities include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. MAP-21 builds on and refines many of the highway, transit, bike, and pedestrian programs and policies carried over from SAFETEA-LU.

MAP-21 identifies the following priorities for the Federal transportation program:

- *Strengthen America's highways*

MAP-21 expands the National Highway System (NHS) to incorporate principal arterials not previously included. Investment targets the enhanced NHS, with more than half of highway funding going to the new program devoted to preserving and improving the most important highways – the National Highway Performance Program.

- *Establish a performance-based program.*

Under MAP-21, performance management is intended to transform Federal highway programs and provide a means to more efficient investment of Federal transportation funds by focusing on national transportation goals, increasing the accountability and transparency of the Federal highway programs, and improving transportation investment decision-making through performance-based planning and programming.

- *Create jobs and support economic growth*

MAP-21 authorizes \$82 billion in Federal funding for FYs 2013 and 2014 for road, bridge, bicycling, and walking improvements. In addition, MAP-21 enhances innovative financing and encourages private sector investment through a substantial increase in funding for the TIFIA program. It also includes a number of provisions designed to improve freight movement in support of national goals.

- *Support the Department of Transportation's (DOT) safety agenda*

MAP-21 continues the Highway Safety Improvement Program, doubling funding for infrastructure safety, strengthening the linkage among modal safety programs, and making progress in reducing highway fatalities. It also continues to build on other safety efforts, including the Department's fight against distracted driving and its push to improve transit and motor carrier safety.

- *Streamline Federal highway transportation programs.*

The complex array of existing programs is simplified, substantially consolidating the program structure into a smaller number of broader core programs. Many smaller programs are eliminated, including most discretionary programs, with the eligibilities generally continuing under core programs.

- *Accelerate project delivery and promotes innovation.*

MAP-21 incorporates a host of changes aimed at ensuring the timely delivery of transportation projects. Changes are intended to improve innovation and efficiency in the development of projects, through the planning and environmental review process and to project delivery.

As of the publication of the MTP, the US Department of Transportation is promulgating rules to incorporate changes mandated by Congress through MAP-21. As a result, the planning process changes mandated by Congress will not take effect until after adoption of this MTP. Nevertheless, the intent of the MTP is to address the priorities identified by Congress within MAP-21 and to begin the process of identifying appropriate transportation performance targets and measuring progress towards those targets.

2.6 – federal planning emphasis areas

In addition to those priorities identified by the Congress, the US Department of Transportation identifies several additional priorities with which federally funded planning processes are to address. The following are priorities identified by USDOT during fiscal year 2014:

- MAP-21 Implementation and transitioning to performance based planning and programming.
- Promote cooperation and coordination across MPO boundaries and across state boundaries where appropriate to ensure a regional approach to transportation planning.
- Identify gaps in access to essential services, such as housing, employment, health care, education, etc., and further identify solutions to address those gaps.

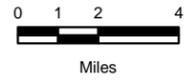
The intent of the MTP is to address these priorities, where appropriate.

2.7 – air quality considerations

The Clean Air Act Amendments of 1990 requires all metropolitan areas to meet the National Ambient Air Quality Standards established by the Environmental Protection Agency (EPA) for numerous pollutants, including ozone, nitrous oxides, and particulate matter. Metropolitan areas that meet these standards are considered to be in attainment and are not required to establish control measures to improve air quality.

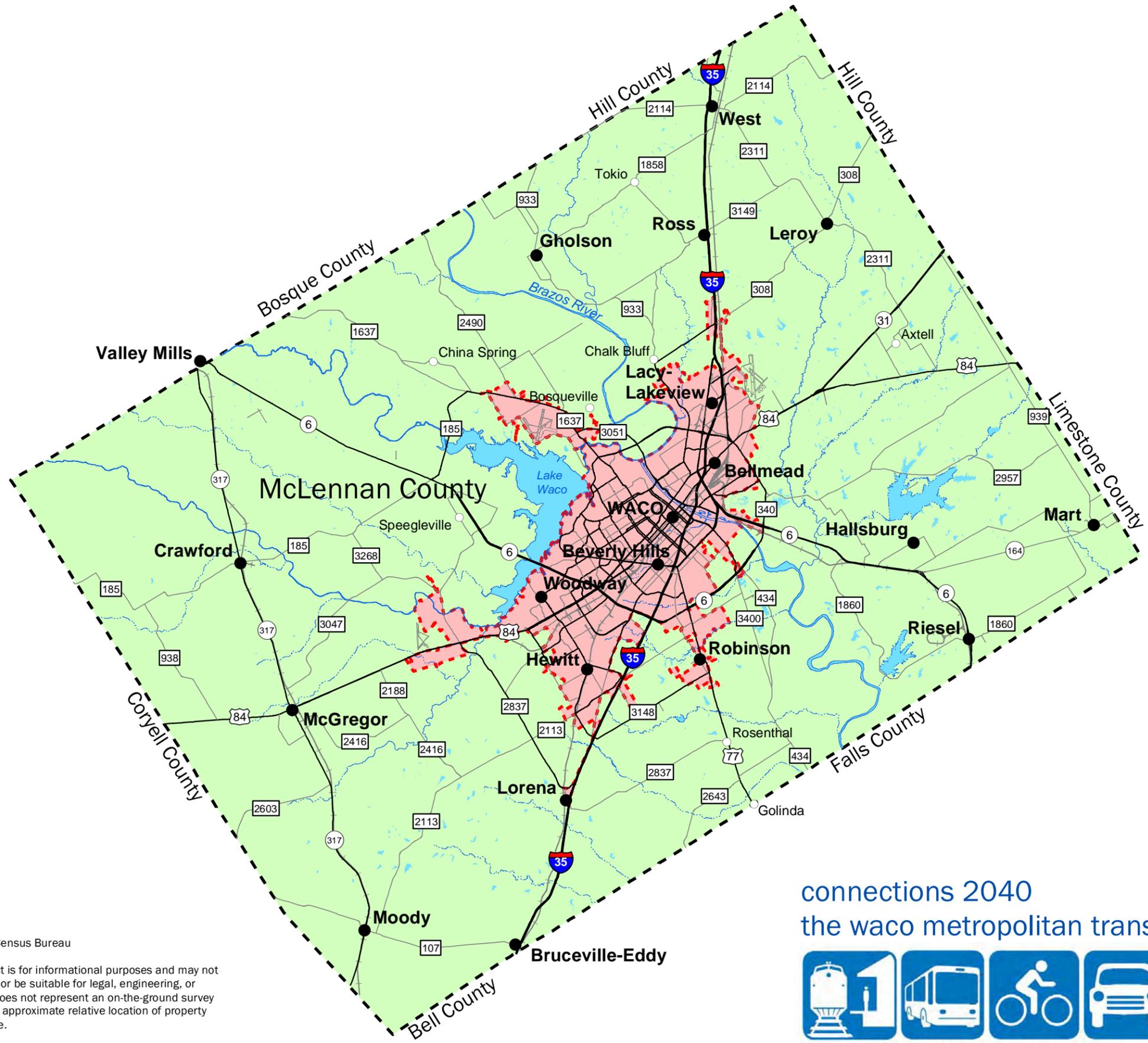
As of calendar year 2014, the Waco Metropolitan Area is considered to be in attainment for all air pollutants by the EPA. Nevertheless, the monitor located within the Waco Metropolitan Area has been recording ozone levels within 5 parts per billion of the maximum allowable EPA standard. Section 3, Principle 4 provides a more detailed analysis of air quality for the region and identifies the estimated transportation sector contributions to regional ozone levels. Although no project level air quality analysis is yet being performed, recommendations that are anticipated to assist in reducing regional ozone levels are identified within Section 8.

 waco urbanized area*
 waco metropolitan area



june, 2014

map 2.1
waco urbanized & metropolitan areas



*As defined by the US Census Bureau

Disclaimer: This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries, if applicable.

connections 2040
the waco metropolitan transportation plan



Waco MPO: Metropolitan Transportation Plan 2040

section 3: guiding principles

The MTP must be financially constrained to those resources realistically anticipated to be available during the planning horizon. Section 7 provides details regarding the financial forecasts to be used for the development of this plan. Unfortunately, the forecast identified in Section 7 anticipates that resources will be insufficient to fund many of the regional mobility needs by 2040. As a result many important needs cannot be included in this plan unless a significant change in available resources occurs. Since resources are limited, the MPO Policy Board uses the following principles to allocate funds to the most important regional priorities:

- **Maintain existing transportation facilities**
- **Address serious safety and security problems**
- **Maximize the use of existing transportation facilities**
- **Preserve the region's air quality and environment**
- **Support the region's economic development efforts**

3.1 – plan objectives

The Waco MPO has adopted several aspirational objectives to measure the success of the MTP in meeting the guiding principles of the Policy Board. The intent of these objectives is to develop a multi-modal transportation system that provides better service than is currently present. The extent to which these objectives can realistically be met, however, will be determined by the availability of adequate resources, which are often beyond the control of the Policy Board. It should be noted that several of the objectives identified below will require resources that are not currently forecasted to exist.

Principle 1: Maintain existing transportation facilities

Objective 1-1: Rehabilitate all roadways rated with a condition of 'poor' or were constructed / reconstructed prior to 1995.

Objective 1-2: Perform adequate preventative maintenance on all other roadways.

Objective 1-3: Replace or rehabilitate all structurally deficient or functionally obsolete bridges.

Objective 1-4: Replace public transportation rolling stock every 10 years.

Objective 1-5: Reconstruct all sidewalks which cannot accommodate wheelchairs

Principle 2: Address serious safety and security problems

Objective 2-1: Reduce total crashes by 10%.

Objective 2-2: Reduce red light running crashes by 25%.

Objective 2-3: Reduce fatal, incapacitating and non-incapacitating injury crashes by 10%.

Objective 2-4: Provide safe pedestrian connections between all elementary, intermediate and middle schools and residential neighborhoods within 1 mile.

Objective 2-5: Convert the Waco Transit fixed route system from a 'flag stop' system to a system with clearly marked stops that are ADA accessible.

Principle 3: Maximize the use of existing transportation facilities

Objective 3-1: Improve Level of Service for all arterials and expressways to "E" or better.

Objective 3-2: Improve incident clearing time on expressways and arterials to an average of 30 minutes or less.

Objective 3-3: Retrofit all arterial highways to meet design standards identified within the Regional Thoroughfare Plan.

Objective 3-4: Adopt regional ITS architecture and deploy ITS systems on regional freeways, principal arterials and selected minor arterials.

Objective 3-5: Retrofit all arterial and collector highways to provide appropriate pedestrian and bicycle facilities as identified within the Regional Thoroughfare Plan.

Principle 4: Preserve the region's air quality and environment

Objective 4-1: Increase percent of region's workers walking or bicycling to work or school to 7%.

Objective 4-2: Increase total annual boardings for public transportation within the region to 2.0 million.

Objective 4-3: Develop interregional passenger rail services as an alternative to IH-35.

Principle 5: Support the region's economic development efforts

Objective 5-1: Employers with more than 100 employees should have direct access to a minor arterial or larger facility and the level of service for that facility should be equal to or better than "E".

Objective 5-2: Waco Transit's fixed route system should provide walking access* to 80% of employers with more than 100 employees.

Objective 5-3: Employers with more than 100 employees should have pedestrian infrastructure connecting their location with the Waco Transit fixed route system.

Objective 5-4: Waco's transportation system should be developed in such a way to encourage most future development to occur within existing nodes of development and provide walking access between new residential development and most basic municipal and commercial services.

*Walking access defined as access within 0.25 miles with sidewalk connections.