



# *Connections 2035* *The Waco Metropolitan* *Transportation Plan*

Adopted by the Waco MPO Policy Board: February 3, 2010

Prepared by the Waco Metropolitan Planning Organization in cooperation with  
the Federal Highway Administration, Federal Transit Administration,  
and the Texas Department of Transportation.



# Preface

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The Waco Metropolitan Planning Organization has prepared this plan in compliance with the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). 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, Federal Transit Administration or the Texas Department of Transportation.

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# Section 1: Introduction

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## 1.1 Background

### 1.1.1 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 involving local governments in 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 reflects the region anticipated to be urbanized within the next 25 years or areas 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 1.1 for the Waco MPA and census defined urbanized area.

The Waco MPO is governed by the MPO Policy Board which consists of 18 members representing McLennan County, the various incorporated cities within McLennan County and TxDOT. See Appendix A for the list of Policy Board members for FY 2009. The Policy Board is the decision-making component of the MPO and their duties include adopting metropolitan transportation policy and determining regional transportation priorities.

In addition to the Policy Board, the MPO has a Technical Committee composed of engineering, planning, and other technical professionals from member governments, transit authorities, TxDOT engineers, MPO staff, and other transportation interests. The Technical Committee, along with the MPO Staff, provide the Policy Board with the technical assistance necessary for the decision making process. Please refer to the Preface for a list of Policy Board, Technical Committee and MPO staff members as of FY 2009.

## **1.1.2 What is the Metropolitan Transportation Plan?**

Connections 2035: 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.

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. Before proceeding to construction or implementation, 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 also be constrained against realistic estimates of funding.

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 member governments of the MPO.

## **1.1.3 Relationship between the MTP & Transportation Improvement Program**

The Transportation Improvement Program, also known as the TIP, is a fiscally constrained, program of projects to be implemented during the next 4 fiscal years. All projects using either federal highway or transit funds must be included within the TIP prior to the execution of any contracts or the commencement of work.

In order to be included within the TIP, a project must first be identified within the 'Funded Recommendations' section of the MTP. In addition, projects must also have existing commitments to provide all necessary funding for completion. Construction projects must also have all necessary engineering and environmental studies complete in addition to all necessary right of way acquired.

## 1.2 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 21<sup>st</sup> 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 TEA-21, the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

As of the development of this plan, SAFETEA-LU has been extended by Congress beyond the original termination date of September 30, 2009. 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 SAFETEA-LU.

### 1.3 Overview of SAFETEA-LU

SAFETEA-LU was signed into Law in August of 2005. This legislation authorizes highway, highway safety, transit and other surface transportation programs for fiscal years 2003 through 2009. As mentioned previously, SAFETEA-LU has been extended by Congress through fiscal year 2009.

The five key features of SAFETEA-LU are:

- **Investing In Our Future:** Highway and transit programs are guaranteed a minimum level of spending tied to actual Highway Trust Fund (HTF) Highway Account receipts and selected fixed amounts (for transit funding). The minimum guarantee specifies that each state's apportionment for specified programs is at least 90.5% of its percentage share of contributions to the Highway Account.
- **Improving Safety:** Non-construction highway safety programs, excluding motor carrier safety, are continued and expanded. These programs include driver and vehicle safety programs, infrastructure safety, motor carrier safety, recreational boating safety, and one-call notification programs for construction.
- **Rebuilding America's Infrastructure:** A commitment to improve the conditions and performance of the transportation system is reaffirmed with solid investments in people, highway construction, transit, and other special programs.
- **Protecting Our Environment:** Proven strategies for a cleaner environment are strengthened. Safety, quality of life, and environmental issues come together in programs such as Congestion Mitigation and Air Quality Improvement (CMAQ), Transportation Enhancements (TE), Bicycle Transportation and Pedestrian Walkways, Recreation Trail Program, National Scenic Byways Program, Transportation and Community and System Preservation Pilot Program (TCSP), and Ozone and Particulate Matter Standards.



- **Advancing Research and Technology:** Establishing a strategic planning process is foremost in determining national research and technology development priorities, competitive merit review procedures, performance measurement procedures, and model procurement procedures.



## 1.4 Federal Planning Considerations

The 7 planning factors of SAFETEA-LU's predecessor, TEA-21, remain largely unchanged under SAFETEA-LU with the exception that safety and security have been separated into separate planning considerations. This change reflects the increased emphasis on protecting the public from threats to the transportation system.

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase the accessibility and mobility options available to people and for freight;
5. Protect and enhance the environment, promote energy conservation, and improve quality of life;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation; and
8. Emphasize the preservation of the existing transportation system.

## 1.5 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. The Waco Metropolitan Area is considered to be in attainment for all air pollutants by the EPA.

 Waco Metropolitan Area  
 Waco Urbanized Area



September, 2009

**Map 1.1  
Waco Urbanized & Metropolitan Areas**



# Section 2: Guiding Principles

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The MTP must be financially constrained to available resources and unfortunately the Waco Region does not have enough resources to fund all mobility needs by 2035. 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:

1. **Maintain existing transportation facilities**
2. **Address serious safety and security problems**
3. **Maximize the use of existing transportation facilities**
4. **Preserve the region's air quality and environment**
5. **Support the region's economic development efforts**

## 2.1 Performance Objectives

The Waco MPO has adopted several 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 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 1990.
- 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: Provide safe, well lit shelters along Waco Transit's fixed route system.

**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 TxDOT access management standards.

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

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

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

Objective 4-2: Increase total annual boardings for public transportation within the region to 1.5 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.

# Section 3: Geography & Demographics

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## 3.1 Geography

Located midway between Dallas and Austin on IH-35, Waco is centrally located in the region known as the “Heart of Texas.” The Waco Urbanized Area, as identified by the US Census Bureau, encompasses 70 square miles and an estimated population of 157,573 as of the year 2006.

In order to account for future growth and activities that impact mobility within the urbanized area, the MPO studies a much larger area when developing the Metropolitan Transportation Plan. This area is referred to as the Waco Metropolitan Area and it is coextensive with McLennan County, Texas. The Waco Metropolitan Area encompasses 1,060 square miles and in 2007 had an estimated population of 228,123. Map 3.1 shows both the Waco Urbanized Area and the Waco Metropolitan Area.

### 3.1.1 Physical Geography

The Waco Metropolitan Area is located at the confluence of the Brazos and Bosque Rivers. The Brazos River roughly bisects McLennan County into two equal parts. The North, Middle and South Bosque Rivers enter the Metropolitan Area from the north, northwest and west respectively and flow into Lake Waco and then form the Bosque River. These rivers create significant natural barriers across the Waco Metropolitan Area.

The Waco Metropolitan Area is relatively flat and without much change in relief despite being bisected by the Balcones Fault system. The highest point within the region is 962 feet above sea level at a point northwest of Crawford and the lowest point is 349 feet above sea level along the Brazos River at the McLennan / Falls County Line. Elevation and severe slopes generally do not create significant natural barriers within the Waco Metropolitan Area.

Most of the Waco Metropolitan Area lies within the Blackland Prairie region of Texas. Broad grasslands within fertile soils containing a large amount of clay characterize this region. Although this clay is beneficial for agriculture, it is problematic for road construction as these clays will experience a significant amount of swelling when wet and will shrink significantly when dry. The resulting shrinking and swelling often significantly reduce the useful life of pavements within the metropolitan area.

### 3.1.2 Climate

The climate of Waco can best be described as moderate. Winters are generally mild with temperatures occasionally dropping below freezing and rarely experiencing ice or snow. Summers are warm to hot with high temperatures often rising above 100 degrees Fahrenheit. Rainfall typically is concentrated during the spring with much drier conditions during summer and early fall.

Since snow and ice are rare occurrences, there is little need for the use of salt to de-ice roads. The result is less wear and tear on pavement surfaces and bridge structures as compared to areas with significant icing. This also results in a somewhat older motor vehicle fleet as vehicle bodies are less prone to rust and corrosion. This has potentially negative consequences for air quality and carbon emissions as is discussed in more detail in section 3.3.5.

The mild climate also makes bicycle and pedestrian travel modes more appealing to a larger segment of the population. Although the summers can be quite hot, the uncomfortable temperatures usually occur between 12:00 noon and 7:00 PM, which does not impose significant restrictions on these modes of travel.

**Table 3.1 Waco 30 Year Climatological Data**

	Winter (Jan to Mar)	Spring (Apr to Jun)	Summer (Jul to Sep)	Fall (Oct to Dec)	Mean
High Temperature*	62.2	84.8	94.6	69.4	77.8
Low Temperature*	39.7	63.7	70.8	46.9	46.7
Precipitation**	6.1	11.1	7.2	7.6	32.0

\*Mean temperatures.

\*\*Measured in inches.

### 3.1.3 Existing Land Use

Much of the Waco Metropolitan Area can be described as rural in character with much of the urbanized uses concentrated in a relatively small area in the center of the region. In 2005, nearly 82% of land in McLennan County was used for either agricultural purposes or was considered forested. Of the 8% of land considered 'developed', most was devoted to residential uses.

**Table 3.2 – 2005 Land Use Percentages**

<b>Category</b>	<b>Acres</b>	<b>Percent of County</b>
Agricultural	490,493	72.3%
Forested / Wooded	64,485	9.5%
Residential	37,600	5.5%
Highway Right of Way	26,771	3.9%
Water	18,022	2.7%
Vacant / Undeveloped	11,365	1.7%
Surface Mining	7,343	1.1%
Parks / Recreational Areas	5,655	0.8%
Industrial	5,283	0.8%
Commercial	2,549	0.4%
Other Development	8,834	1.3%

**Table 3.3 – 2005 Developed Land Uses**

<b>Category</b>	<b>Percent of Developed Uses</b>
Residential	69.3%
Industrial	9.7%
Commercial	4.7%
Office	0.5%
All other development	15.8%

The relatively flat and well-drained soils that promote agriculture, however, are also very easy to develop into residential subdivisions. This, when combined with a favorable property tax structure, the perception of better schools and lower crime, and relatively little traffic congestion have contributed to significant levels of urban sprawl. Between 1995 and 2005, developed land uses increased by 21.6%, whereas population increased only 11.1% during the same time period.



**Table 3.4 – Increases in Developed Land Uses 1995 to 2005**

Category	New Acreage	Percent Increase 1995 to 2005
Commercial	539	26.8%
Residential	7,923	26.7%
Office	44	19.0%
Industrial	578	12.3%
Other Development	539	6.7%
Right of Way	4,744	21.6%
Total All Developed Uses	14,367	21.6%
Population	22,247	11.1%

Developments constructed during this time period utilized nearly twice the land to support each person as compared to all previous developments. The result is that the Waco Metropolitan Area uses more developed land to support each person that nearly every other metropolitan area in the United States.

**Table 3.5 – Change in Developed Acres per Person**

1995	2005	Percent Change	Acres per Person for New Development
0.331	0.362	+9.4%	0.646

Of greater concern than the density of new developments is the location. Nearly three out of four acres of new residential development is found in areas considered rural in 1995. Commercial developments, however, were exactly the opposite whereas all other development, including industrial, was evenly divided between urban and rural. These new developments further exacerbate the existing disconnect between where the regions residents live and where they work, go to school, shop and perform all other activities of life. The resulting distances between various land-uses forces residents of these new developments to use an automobile to perform any task. In addition, many of the developments furthest from the urban core also have the highest average age, many from retiring baby-boomers. The concern is that as these retirees age, their ability to utilize an automobile declines resulting in a significant increase in demand for very limited rural demand response public transportation services. Section 3.3.4 describes in greater detail the distribution of elderly citizens within the Waco Region.

**Table 3.6 – Location of New Developments since 1995**

Geography	Percent of New Residential	Percent of New Commercial	Percent of New Industrial	Percent of Other New Development	Percent of All New Development
City of Waco	13.2%	46.6%	47.1%	35.5%	18.5%
Remainder of Waco Urbanized Area	14.7%	27.1%	7.1%	13.6%	14.8%
Rural	72.1%	26.3%	45.8%	50.9%	66.7%

### 3.1.4 Forecasted Land Use

The Waco MPO contracted with Wilbur Smith Associates (WSA) to identify future land uses patterns for the Waco Region should no significant changes in land-use or transportation policies, schools, tax structure, or economics occur during the MTP planning period. In addition, WSA was tasked with identifying at least 2 alternative scenarios that could reasonably be accomplished by 2035 which would result in minimizing the need for new transportation and other municipal infrastructure and services. In addition, another goal of the alternative scenarios was to minimize the regions fuel consumption thus reducing the emission of ozone precursors (nitrogen oxides and volatile organic compounds) and reducing the regions carbon footprint.

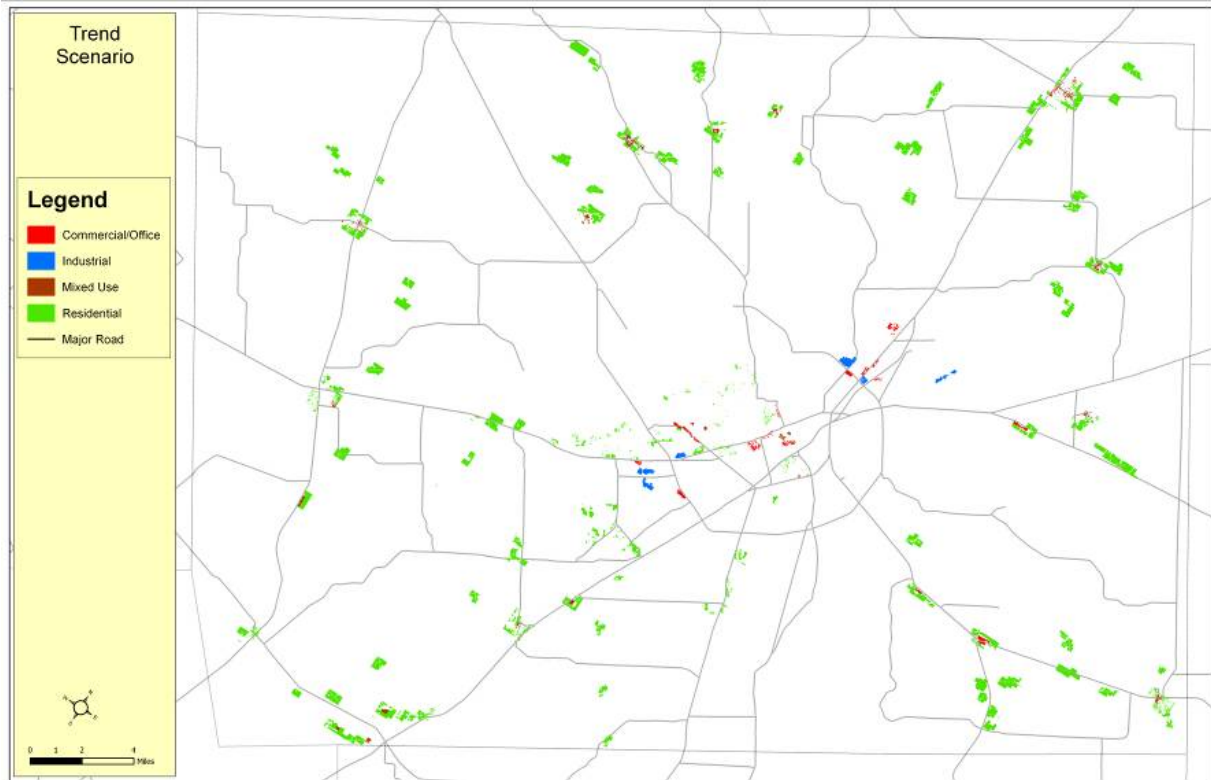
The land use forecast estimated where residential, commercial and industrial uses would be located in the year 2030 assuming 56,000 new residents and 21,800 new jobs. The complete report with methodologies, results and recommendations can be found in the document titled “Future Land Use Study for McLennan County”.

#### Trend Scenario

In their analysis, WSA projected that without significant change in policy or economics, development patterns through 2035 should be similar to the patterns observed since 1995, although at a lower population density and further dispersed. In the trend scenario, nearly all new residential development would occur in very low density developments in areas currently classified as rural. The average distance from each projected residential development and Downtown Waco is estimated to be 16 miles. The projected population density of most new development is estimated to be between 1 and 2 persons per acre, too low for any one development to support even modest commercial development by itself.

As a result of the projected low population densities, most commercial, industrial and office developments are projected to be concentrated within the existing urban core,

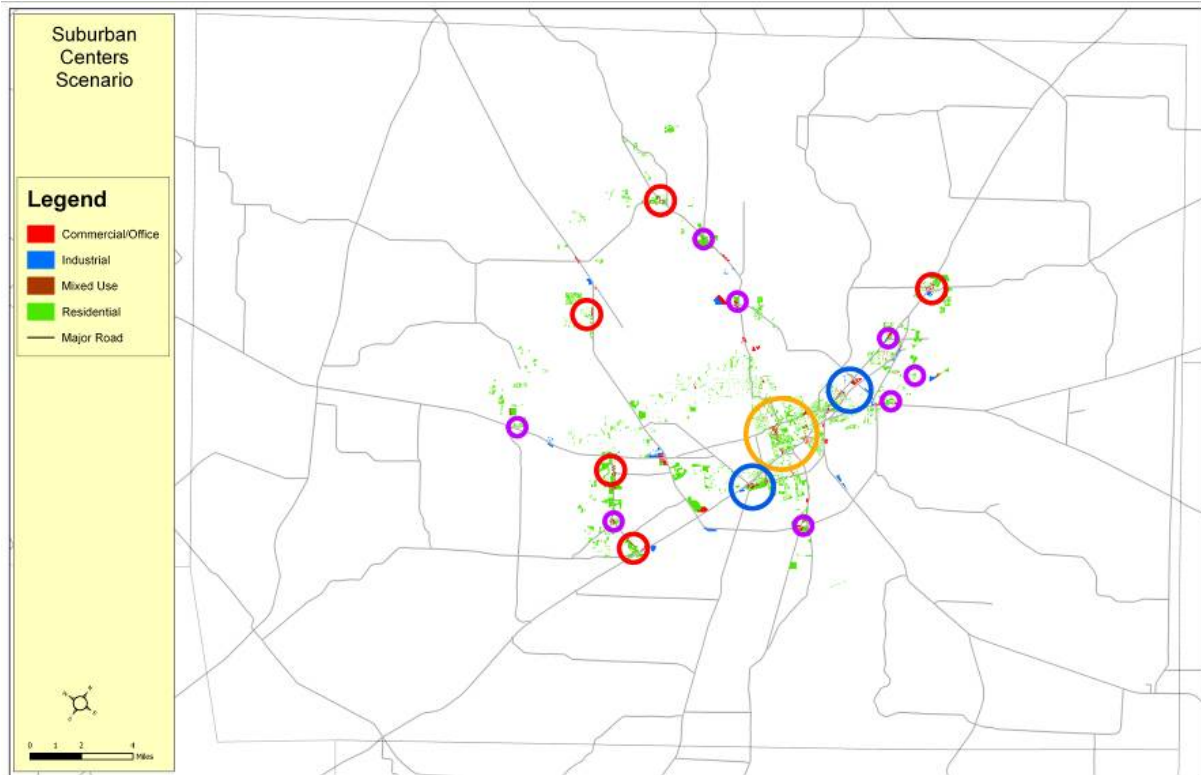
generally adjacent to or in close proximity of existing expressway or principal arterials roadways.



The MPO staff used the trend scenario to estimate 2035 population and employment projections for development of the regional travel demand forecast model (section 5.1.2). This represents the 'worst case' scenario in terms of automobile travel demand. The alternative scenarios described below represent preferred scenarios for future land use distribution. Project recommendations found in Chapter 7 are intended to use the limited transportation resources projected to be regionally available to encourage a more efficient land use pattern.

### **Alternate Scenario 1 – Suburban Centers**

The 'Suburban Centers' scenario assigns nearly all future population and employment growth to the existing urbanized area and as little as 5% is assigned to areas beyond. This alternative produces the most efficient transportation network but requires significant investment in public transportation, bicycle and pedestrian modes. Nevertheless, the reduced need for additional highway capacity more than offsets this increase. This scenario was preferred by persons identifying a thriving natural environment as the most important emphasis. This scenario also produces the least farmland impacts of the 3 scenarios.



### Alternate Scenario 2 – Urban Center

The 'Urban Center' scenario is similar to the first alternative in that most future population and employment growth is assigned to the existing urbanized area. The primary difference, however, is that as much as 20% of the future growth is assigned to cities and towns outside of the urbanized area. This scenario acknowledges the presence of existing developments and is considered more politically realistic in that it does not assume the relocation of existing residents or jobs. This scenario was preferred by persons identifying transportation for all as the most important emphasis.

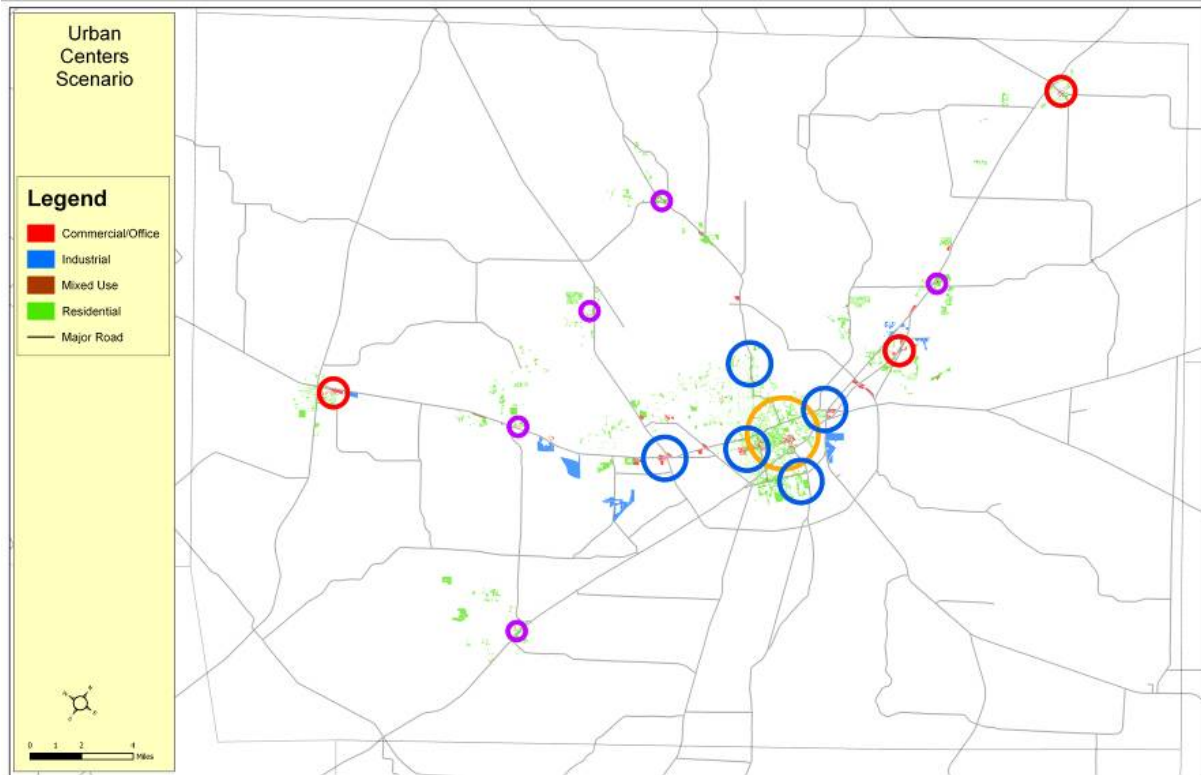


Table 3.7 provides a comparison of the 3 land use alternatives in several important metrics. In general, there are only small differences between the 2 alternatives, but significant positive differences between the alternatives and the trend.

**Table 3.7 Comparison of 3 Land Use Scenarios**

Metric	Trend	Alternative 1	Alternative 2
Acres of New Development	9,977	6,913	6,672
Daily Vehicles Miles of Travel	11.2 million	9.9 million	10.0 million
Annual Fuel Usage at 18 mph	227,100,000 gallons	200,800,000 gallons	202,700,000 gallons
Carbon Dioxide Emissions*	4.85 billion lbs	4.06 billion lbs	4.10 billion lbs
Arterial & Collector 2030 Network Speed	31.7 mph	35.9 mph	35.8 mph

\*Estimated 10% of VMT due to heavy trucks at 6 mpg. Automobile & light trucks estimated at 23 mpg. Estimated CO2 emissions: 19.4 lbs per gallon of gasoline, 22.2 lbs per gallon of diesel. Source: US EPA.

## 3.2 Demographics

### 3.2.1 Current Population

Estimates from the Texas Data Center indicate that the Waco Metropolitan Area experienced a 5.2% increase in population between 2000 and 2005. This trend is slightly below the rate of change experienced between 1990 and 2000. The City of Waco contains the majority of the population of the MPO Study Area with 53.6 percent in 2005. The fastest growing communities within the Metropolitan Area are Hewitt, Lorena, and Robinson, which have all had an estimated double-digit growth rate since 2005. Mart has also shown a double-digit growth rate; however, much of this is due to the opening of the McLennan Youth Facility by the Texas Youth Commission. Table 3.8 shows the population trends for the Waco Metropolitan Area. Map 3.5 shows the population changes between 2000 and 2005 within the Waco Metropolitan Area.

**Table 3.8 Population Trends for the Waco Metropolitan Area: 2000 to 2005**

Geography	2000 Population	2005 Population***	Change	Percent Change	Percent of Metropolitan Growth
City of Waco	113,726	117,213	3,487	3.1%	31.3%
Suburban Cities*	50,914	55,224	4,310	8.5%	38.7%
Rural Cities**	11,536	11,716	180	1.6%	1.6%
Unincorporated Areas	37,341	40,515	3,174	8.5%	28.5%
McLennan County	213,517	224,668	11,151	5.2%	100.0%

\*Includes the Cities of Bellmead, Beverly Hills, Hewitt, Lacy-Lakeview, Lorena, McGregor, Robinson and Woodway.

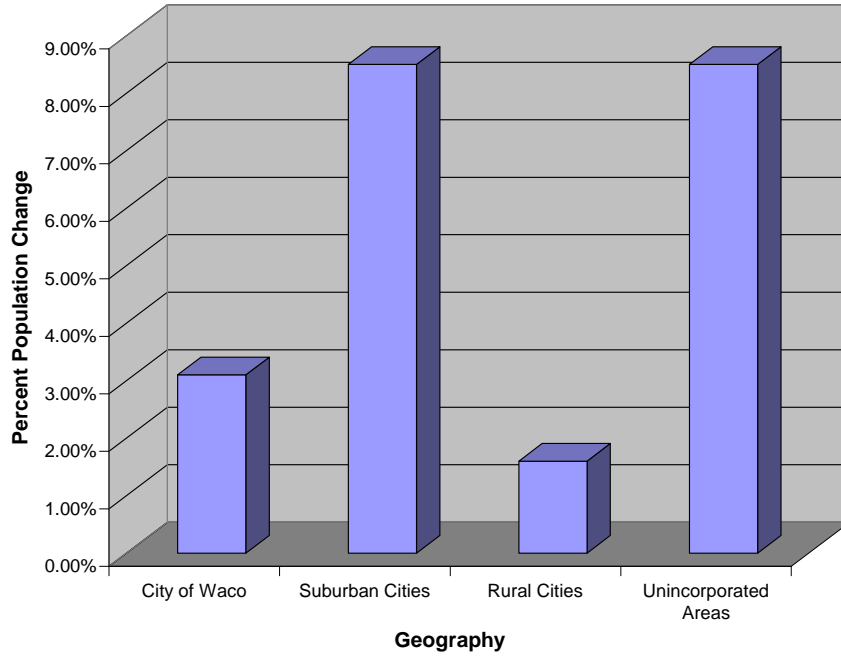
\*\*Includes the Cities of Bruceville-Eddy, Crawford, Gholson, Hallsburg, Leroy, Mart, Moody, Riesel, Ross and West.

\*\*\*Estimated by MPO staff from 2005 aerial photography.

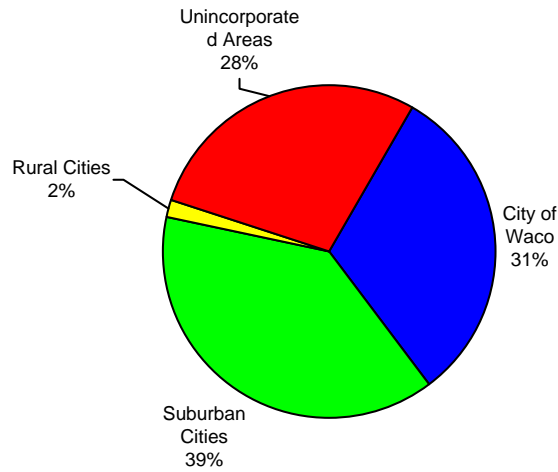
A trend of concern is the rapid growth of unincorporated areas. These areas, which are primarily rural, have few development restrictions and lower taxes but also have an inadequate highway infrastructure to accommodate this growth. Additionally, these areas are also developed at very low densities (1 to 2 housing units per acre or less) resulting in greater centerline mile requirements for the highway infrastructure and also makes these areas unfeasible for transit service. Conversely, many areas within the urban core have excess highway capacity and housing unit densities appropriate for mass transit. These areas, however, continue the trend of losing population. One of the

goals of this plan is to utilize the underutilized highway infrastructure and mass transit in the urban core to encourage redevelopment in these areas.

**Chart 3.1 Population Change: 2000 to 2005**



**Chart 3.2 Percent of Metropolitan Growth: 2005**



### 3.2.2 Population Forecasts

McLennan County is forecasted to experience moderate growth during the period between 2005 and 2035 with an increase of 52,319 persons or 23.3%. This is less than half of the expected growth for the State of Texas projected during the same period. Projections for municipal populations were made under the assumption that no significant annexations would occur during the planning period. Additionally it is also assumed that no significant changes will occur regarding land-use restrictions, minimum lot sizes or property tax structures. Under these assumptions, the trend of significant population growth within unincorporated areas is anticipated to continue along with the trend of a declining share of population for Waco. Waco's population share of McLennan County is expected to decrease to 50.5% in 2035 as compared with 53.6% in 2005.

The anticipated impact to the transportation network is to create more demand for highway infrastructure within the suburban and unincorporated areas. Suburban areas are generally developed with single-family dwellings on lot sizes of at least 0.25 acres. Within the unincorporated areas, residential lots generally do not have access to municipal sewers and thus require the use of septic systems. Lots developed with septic systems are required to have a minimum lot size of 0.5 acres according to requirements set by McLennan County. Depending upon soil type and depth, lot sizes may need to be greater than 0.5 acres. The result is that development within the suburban and unincorporated areas are at densities that make transit service unfeasible.

**Table 3.9 Population Forecasts for the Waco Metropolitan Area: 2005 to 2035**

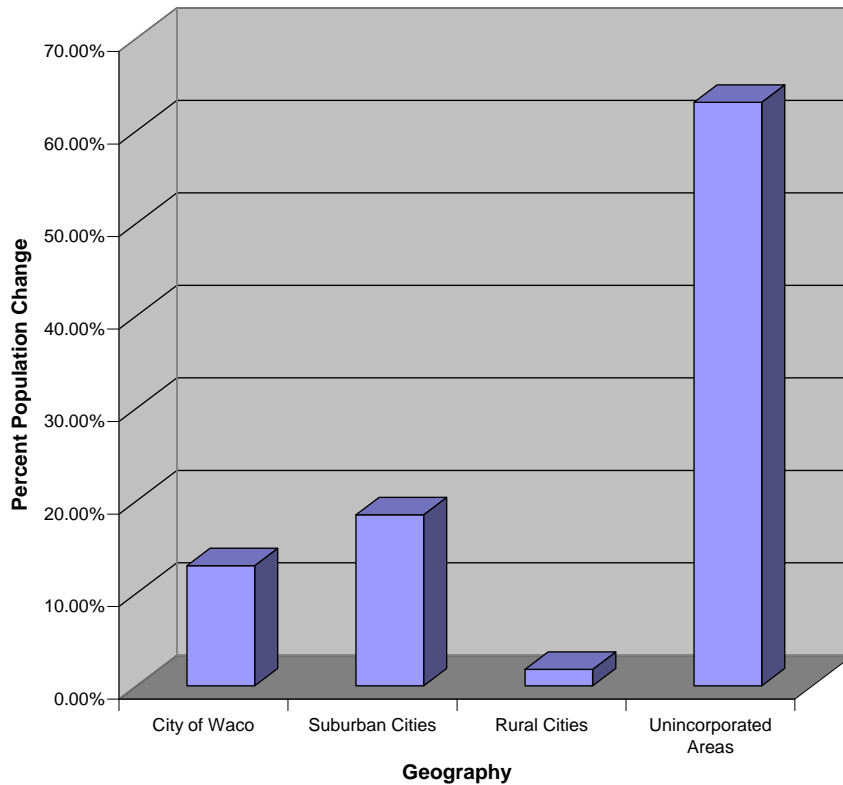
Geography	2005 Population	2035 Population	Change	Percent Change	Percent of Metropolitan Growth
City of Waco	117,213	132,397	15,184	13.0%	29.0%
Suburban Cities*	55,224	65,422	10,198	18.5%	19.5%
Rural Cities**	11,716	13,099	1,383	11.8%	2.6%
Unincorporated Areas	40,515	66,069	25,554	63.1%	48.8%
McLennan County	224,668	276,987	52,319	23.3%	100.0%

\*Includes the Cities of Bellmead, Beverly Hills, Hewitt, Lacy-Lakeview, Lorena, McGregor, Robinson and Woodway.

\*\*Includes the Cities of Bruceville-Eddy, Crawford, Gholson, Hallsburg, Leroy, Mart, Moody, Riesel, Ross and West.



**Chart 3.3 Projected Population Change: 2005 to 2035**



### 3.2.3 Current Employment

The estimated total labor force for 2005 within the Waco Metropolitan Area was 101,578. Most employment, similar to population, is concentrated within the City of Waco; however, it tends to be clustered in certain areas. There are 6 primary clusters of employment activity, which employs nearly half of the workforce within McLennan County. A 7<sup>th</sup> cluster is included which was identified as a significant cluster of employment, but due to recent changes is less significant. Map 3.7 shows the distribution of employment within the MPO Study Area.

#### **Cluster 1 – Downtown Waco / Baylor University**

Downtown Waco, once the center of economic activity for the metropolitan area, is still a major center of employment. The declines of the period from 1960 to 1990 have been reversed by development along Mary Avenue and with the relocation of the Veterans Administration administrative offices. Baylor University, with 13,000 students and 1,400 employees, lies just east of IH-35 and significantly contributes to the activity within downtown.

Land use within downtown has, since the 1960's, been dominated by office uses such as finance, government, law offices or accounting firms. Areas near the Baylor campus,

especially along IH-35, have been primarily restaurants catering to students and motorists along the interstate. The recent trend of increased retail and restaurant activity within downtown has somewhat offset some of the employment declines since 2000. Most new activity, however, has been clustered around the City Hall / Heritage Square complex and the 800 block of Austin Ave. The continued trend of loft apartment construction has slightly increased the permanent residential population of downtown although not significantly enough to bring in new commercial services as of 2005.

## **Cluster 2 – Texas State Technical College**

The TSTC campus, located approximately seven miles north of downtown Waco, is the location of many aviation-related industries. The largest of these, which is also the largest employer within the MPO Study Area, is L-3 Communications with approximately 1,700 employees. Several large apartment complexes exist just south and west of the campus primarily serving TSTC students. Access to the campus has been considered a problem by surrounding communities.

## **Cluster 3 – Bellmead / Lacy-Lakeview**

The intersection of IH-35 and Loop 340 / Lake Shore Drive continues to attract a significant amount of new retail and commercial development. The most significant new development is the addition of Home Depot just north of the intersection.

## **Cluster 4 – Richland Mall / North Valley Mills Drive**

Valley Mills Drive has, since the late 1950s, been a strong cluster of retail and commercial activity. This activity has continued a slow decline from recent years with the opening of new retail centers along State Highway 6 and Hewitt Drive. This cluster, however, still represents a significant center of commercial development.

## **Cluster 5 - Hillcrest Dr at MacArthur Dr**

Hillcrest Medical Center, a former tenant of this cluster, moved in early 2009 to the intersection of SH 6 / Loop 340 and IH-35, significantly decreasing the activity in this cluster. Some activity continues in the former complex, mostly related to medical training, however most activity in 2009 was related to future uses anticipated by 2015 (see section 3.3.3 – forecasted employment).

## **Cluster 6 – Texas Central Industrial Park**

The Texas Central Industrial Park is located southwest of the IH-35 interchange with State Highway 6 and represents the largest area devoted to industrial development within the Waco Urban Area. When combined with the adjacent Clusters 4 and 7, these areas employ nearly 1 out of every 3 persons within the McLennan County workforce.

## **Cluster 7 – IH-35 at West Loop 340**

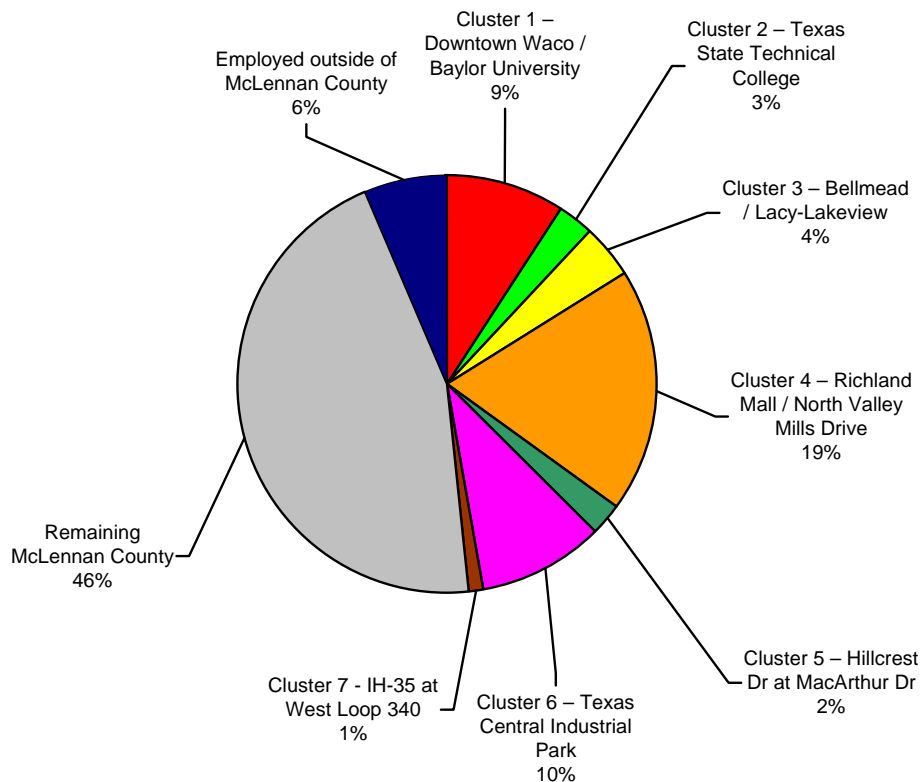
This intersection has, since 2000, become a major center of retail and medical activity with the opening of the Central Texas Marketplace in 2003 and the relocation of the Hillcrest Medical Center in 2009.

**Table 3.10 Workforce Employment Location by Clusters – 2005**

Geography	Total Employment	Percent of Workforce	Change from 2000
Cluster 1 – Downtown Waco / Baylor University	9,946	9.2%	-20.0%
Cluster 2 – Texas State Technical College	2,994	2.8%	-3.1%
Cluster 3 – Bellmead / Lacy-Lakeview	4,582	4.2%	+30.4%
Cluster 4 – Richland Mall / North Valley Mills Drive	20,655	19.0%	+13.8%
Cluster 5 – Hillcrest Dr at MacArthur Dr	2,725	2.5%	-10.1%
Cluster 6 – Texas Central Industrial Park	10,436	9.6%	+21.9%
Cluster 7 – IH-35 at West Loop 340	1,255	1.2%	+400.2%
Total All Clusters	52,317	48.2%	+7.4%
Remaining McLennan County	49,261	45.4%	+5.4%
Total McLennan County	101,578	93.7%	+6.4%
Employed outside of McLennan County	6,860	6.3%	+5.2%
Total Workforce	108,438	100.0%	+6.3%

Source: Texas Workforce Commission

**Chart 3.4 Employment by Clusters - 2005**



### 3.2.4 Forecasted Employment

Total employment is anticipated to grow at a rate less than the growth of population during the planning period. This is due primarily due two factors: first the aging of the population resulting in an increase in persons of retirement age and second an increase in student population, both at the elementary / secondary and college / university levels.

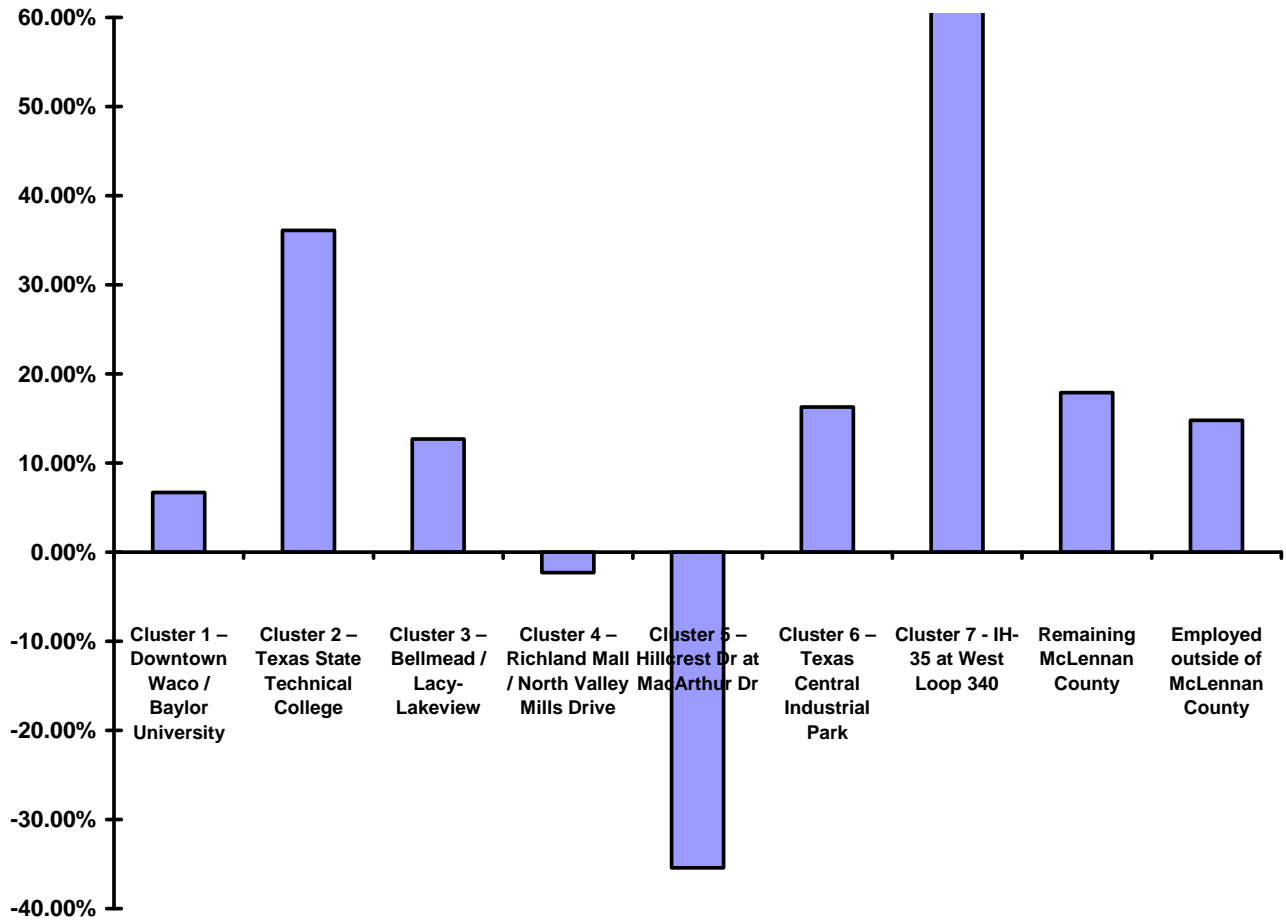
Employment location is expected to closely follow the patterns of population growth, a trend observed nationally. The employment clusters identified in section 3.2.3 are projected to slightly increase their percentage of the county workforce during the planning period. Three clusters are projected to experience significant increases in employment for differing reasons. Downtown Waco is projected to increase due to increases in service sector employment, i.e. attorneys, accountants and other professionals. Bellmead / Lacy-Lakeview is projected to significantly increase employment in the industrial and retail sectors. The Texas Central Industrial Park, although projected to experience increases in industrial employment, will also see increases due to new retail development anticipated at the intersection of IH-35 and SH 6 / Loop 340. Elsewhere, significant increases in industrial employment are anticipated in the McGregor area.

One area of concern is the projected explosive growth in retail employment within suburban areas. This growth is not anticipated to add employment opportunities, rather relocate them to areas outside of the urban core. This relocation of employment is expected to significantly strain public transportation resources by moving many jobs further away from persons requiring public transit for journeys to and from work. In addition these developments will likely strain the ability of the highway network to accommodate the anticipated increase in automobile traffic.

**Table 3.11 Projected Workforce Employment Location by Clusters – 2035**

<b>Geography</b>	<b>Total Employment</b>	<b>Percent of Workforce</b>	<b>Percent Change from 2005</b>
Cluster 1 – Downtown Waco / Baylor University	10,608	8.5%	+6.7%
Cluster 2 – Texas State Technical College	4,075	3.3%	+36.1%
Cluster 3 – Bellmead / Lacy-Lakeview	5,165	4.1%	+12.7%
Cluster 4 – Richland Mall / North Valley Mills Drive	20,186	16.2%	-2.3%
Cluster 5 – Hillcrest Dr at MacArthur Dr	1,583	1.3%	-35.4%
Cluster 6 – Texas Central Industrial Park	12,139	9.7%	+16.3%
Cluster 7 – IH-35 at West Loop 340	4,838	3.9%	+285.5%
Total All Clusters	58,594	47.1%	+12.0%
Remaining McLennan County	58,056	46.6%	+17.9%
Total McLennan County	116,650	93.7%	+14.8%
Employed outside of McLennan County	7,877	6.3%	+14.8%
Total Workforce	124,527	100.0%	+14.8%

Chart 3.5 Percent Change in Employment by Clusters 2005 to 2035



### 3.3 Title VI Analysis

A primary goal of the Waco MPO is to ensure that the transportation needs of all people are met and that no one population group must endure a disproportional share of the burdens in meeting those needs. In order to accomplish this goal, the Waco MPO performs an analysis of its plans and programs in order to assess the mobility of traditionally underrepresented groups and to provide an assessment of the impacts of proposed projects upon these groups. The following sections of this chapter quantify the traditionally underrepresented groups and describe their distribution within the Waco Metropolitan Area. Specific analysis regarding the mobility of these groups and plan recommendations to improve their mobility can be found within the chapters dealing with each transportation mode.

#### 3.3.1 Race & Ethnicity

Minority populations within the Waco Metropolitan Area are primarily represented by two people groups: Blacks and Hispanics with 15.0% and 17.9% of the population respectively. These groups are generally concentrated within the urban core. Blacks reside predominantly east of Downtown Waco and within Bellmead and Lacy-Lakeview. Hispanics reside predominantly south of Downtown Waco. An area bounded by the Brazos River, Waco Dr (US 84), New Rd and Herring Ave has a greater than average concentration of both minorities. In addition to these, there exists a higher than average concentration of Blacks in the Mart area and a higher than average concentration of Hispanics in the McGregor area.

These two people groups have traditionally been underrepresented in the transportation planning process. Chapter 8 outlines the MPO public involvement procedures and how the MPO involved these two minorities.

**Table 3.12 Minority Population - 2000**

Geography	Percent Non-Hispanic White	Percent Non-Hispanic Black	Percent Non-Hispanic Other	Percent Hispanic
City of Waco	51.7%	22.8%	1.9%	23.6%
Suburban Cities*	75.2%	8.4%	1.7%	14.7%
Rural Cities**	82.8%	8.7%	<0.1%	8.4%
Unincorporated Areas	87.3%	4.0%	1.0%	7.7%
McLennan County	65.2%	15.3%	1.6%	17.9%

\*Includes the Cities of Bellmead, Beverly Hills, Hewitt, Lacy-Lakeview, Lorena, McGregor, Robinson and Woodway.

\*\*Includes the Cities of Bruceville-Eddy, Crawford, Gholson, Hallsburg, Leroy, Mart, Moody, Riesel, Ross and West.

## Travel Time Analysis

In order to estimate whether the existing transportation system meets the goals of Title VI of the Civil Rights Act, the MPO staff performed an analysis of travel times by traffic analysis zones to estimate access to the most basic necessary services. The analysis compared average travel times using the MPO travel demand model between both 'Protected' and 'Non-Protected' TAZs and the closest grocery stores, retail centers and medical facilities. For purposes of this analysis 'Protected' zones consisted of TAZs with either Non-Hispanic Black or Hispanic populations greater than the McLennan County average. Map 3.9 identifies the protected zones used within this analysis.

Although each of the protected populations use public transportation in greater percentages than the non-protected populations, according to 2000 Census data the protected populations within the Waco Metropolitan Area still overwhelmingly use the automobile for basic transportation. Therefore the MPO chose to perform the travel time analysis using only automobile travel times.

Table 3.6 identifies the results of the travel time analysis. In general, the protected populations have lower travel times to the 3 basic services evaluated than the non-protected populations.

**Table 3.13 Automobile Travel Time in Minutes to selected destinations for Protected Populations - 2007**

Destination	Non-Hispanic Black	Hispanic	Non-Protected	All Persons
Nearest Grocery Store	3.96	3.45	8.17	6.36
Nearest Retail Center	9.57	10.10	12.19	11.21
Nearest Medical Facility	4.98	4.56	8.56	6.97
McLennan County Courthouse	10.05	10.98	18.73	16.46

### 3.3.2 Persons Living in Poverty

McLennan County is slightly above the state average for persons living below the census defined poverty level. Most portions of the County have poverty rates well below the state average, however the City of Waco has a significantly greater poverty rate with nearly 1 in 4 persons living below the poverty level. Within Waco, several areas have extreme poverty rates with some block groups in the East Waco and South Waco areas exceeding 60% below poverty level.



The extreme poverty areas generally correlate well with a lack of access to automobiles (see section 3.3.3). As income decreases, the ability to afford an automobile also decreases. The result is that these areas are more heavily dependant upon public transportation and bicycle / pedestrian facilities than other segments of the population.

**Table 3.14 Poverty & Income Statistics - 2000**

Geography	Per Capita Income	Percent Living in Poverty
City of Waco	\$14,584	24.5%
Suburban Cities*	\$20,731	8.5%
Rural Cities**	\$15,538	13.7%
Unincorporated Areas	\$20,717	5.9%
McLennan County	\$17,174	16.8%
State of Texas	\$19,617	15.4%

\*Includes the Cities of Bellmead, Beverly Hills, Hewitt, Lacy-Lakeview, Lorena, McGregor, Robinson and Woodway.

\*\*Includes the Cities of Bruceville-Eddy, Crawford, Gholson, Hallsburg, Leroy, Mart, Moody, Riesel, Ross and West.

### 3.3.3 Average Travel Time to Work & Automobile Availability

Travel times to work for McLennan County generally follow the expected pattern of the shortest travel times near the center of the urban core and increasing travel times as distance from the urban core increases. The best travel times to work can be found in the vicinity of Baylor University with one-way travel times of less than 10 minutes. The worst travel times, however, can be found only 2 miles away in East Waco with average one-way travel times of 35.7 minutes. Table 3.16 shows that there are several other areas near the center of the urban core with poor travel times.

These East Waco block groups also have high levels of poverty and low access to automobiles. The dependence on public transportation greatly increases the one-way travel times due to the one-hour headways with which each fixed route operates. In addition, many of the employment opportunities are moving further away from East Waco (see section 3.2.4). The result is a need to not only improve service by reducing headways, but also to realign routes such that travel paths between employment centers and East Waco are more direct.

**Table 3.15 Average Travel Time to Work & Occupied Housing Units with No Automobiles - 2000**

Geography	Average Travel Time to Work (minutes)***	Percent of Occupied Housing Units with No Automobiles
City of Waco	17.2	11.7%
Suburban Cities*	18.8	4.1%
Rural Cities**	26.1	7.1%
Unincorporated Areas	24.1	3.5%
McLennan County	19.5	8.3%

\*Includes the Cities of Bellmead, Beverly Hills, Hewitt, Lacy-Lakeview, Lorena, McGregor, Robinson and Woodway.

\*\*Includes the Cities of Bruceville-Eddy, Crawford, Gholson, Hallsburg, Leroy, Mart, Moody, Riesel, Ross and West.

\*\*\*For persons 16 years or older.

**Table 3.16 Block Groups with One-way Travel Times to Work in Excess of 30 Minutes - 2000**

Block Group	Geographic Area	Average Travel Time to Work (minutes)*
Tract 14, BG 2	Waco Dr at Gholson Rd	35.7
Tract 15, BG 1	Elm Ave at Forrest St	30.4
Tract 15, BG 7	Elm Ave at Dallas St	32.1
Tract 35, BG 3	Elk Community	33.3

\*For persons 16 years or older.

### 3.3.4 Elderly Population & Mobility Disabilities

The largest concentration of elderly within the metropolitan area is found in West Waco along the shores of Lake Waco. Two block groups in this area have in excess of 40% of the population older than 65 years of age and most other block groups in the vicinity exceeding the county average for elderly. These areas are generally at the county average for automobile availability (map 3.12), greatly below the county average for persons in poverty (map 3.10) but are also either beyond or on the periphery of Waco Transit's ¾ mile service area (map 4.4). Currently, transit service is concentrated towards serving persons with limited access to an automobile. As the population ages, however, increasing transit service to these areas may become more of a priority, as their ability to drive may increasingly be limited.

Persons with a mobility or self-care disability are more dispersed throughout the metropolitan area, but greater concentrations exist in areas with a higher percentage

of persons in poverty (map 3.10) and at the VA Regional Medical Center. Waco Transit's demand response service serves each of the high mobility & self-care disability percentage areas and are also served by the demand response services provided by the Central Texas Senior Ministry.

**Table 3.17 Elderly Population & Persons with Disabilities - 2000**

<b>Geography</b>	<b>Percent Over Age 65</b>	<b>Percent with a Self-Care or Mobility Disability</b>
City of Waco	13.7%	10.9%
Suburban Cities*	12.4%	9.0%
Rural Cities**	17.6%	10.2%
Unincorporated Areas	9.4%	7.1%
McLennan County	12.9%	9.8%
State of Texas	9.9%	8.9%

\*Includes the Cities of Bellmead, Beverly Hills, Hewitt, Lacy-Lakeview, Lorena, McGregor, Robinson and Woodway.

\*\*Includes the Cities of Bruceville-Eddy, Crawford, Gholson, Hallsburg, Leroy, Mart, Moody, Riesel, Ross and West.

### 3.3.5 Environmental Mitigation Activities

SAFETEA-LU included in its requirements an accounting of potential environmental mitigation activities which may be necessary as a result of impacts imposed by the transportation system upon the environment. Specific activities are usually identified as part of the development of an Environmental Impact Statement, typically performed during the design phase of a project. Congress, however, has consistently stated that a consideration of potential environmental impacts needs to be made during the planning process. This consideration would have a two-fold effect: 1.) Projects with significant environmental impacts would be identified sooner, allowing policy makers to better weigh the benefits of the project against these impacts as well as the anticipated delays from potential mitigation of these impacts, and 2.) Projects with little or no significant impacts can develop more quickly as an accounting of these impacts has been made prior to the design phase.

Analysis by the MPO focused on 3 general categories: 1.) Hazardous Material storage areas or generation facilities, 2.) Lands identified as part of Section 4(F) of the 1966 Transportation Act, and 3.) Land use takings. Generally speaking, recommended alignments or proposed right of way boundaries have not been identified at the long range planning level, thus the MPO staff has chosen to evaluate projects based upon the chance that mitigation for one or more factors may be necessary as the project develops.

A “likely” chance is defined as a feature being located within 250 feet of the centerline of an existing highway and for new construction on a new alignment, a “likely” chance is defined as a feature being located within 500 feet of the center of the corridor. A “somewhat likely” chance is applied when it appears that a design alternative could be implemented which completely avoids impacting a feature within the 250 or 500 foot “likely” zone. Such an instance would be where a project could avoid a feature by acquiring right of way completely from one side of the existing right of way. A “not likely” chance is defined as no features exists within the 250 or 500 foot “likely” zone.

## **Hazardous Materials**

The Texas Commission on Environmental Quality issues permits for businesses or individuals that generate, store or transport materials that could be hazardous to human health. These locations do not necessarily represent places with soil or ground water contamination; however the acquisition of these sites may require special procedures that would significantly increase the right of way and site preparation costs for proposed projects.

## **4F Lands**

4F refers to section 4(f) of the Federal Transportation Act of 1966 which identifies several land uses that federal aid transportation projects must avoid impacting unless no other feasible alternative exists. If a significant impact were necessary upon one or more 4F lands, a mitigation of those impacts would be necessary to offset any impacts, usually at a very high cost. Lands included within section 4(f) are wetlands (as classified by the US Army Corps of Engineers), wildlife & waterfowl refuges, historic or religious sites and park or recreation areas.

In McLennan County, the only areas officially classified as a wetland are lakes or other permanent water features. However, the 100 year flood plain does represent riparian habitats in McLennan County that provide unique habitats for wildlife and waterfowl not found elsewhere in the County

This is in large part due to the fact that most other lands in the County are devoted to either developed or agricultural land uses. Therefore, the MPO has decided to use the 100 year flood plain, as defined by the Federal Emergency Management Agency, as a substitute for wetlands in our analysis of potential environmental mitigation activities. All officially defined wetlands within McLennan County are included within the 100 year flood plain.

There are no officially designated wildlife or waterfowl refuges located within McLennan County. With that said, however, several endangered or threatened species have been identified within the County and potential habitats for these species exist throughout the county. One of the challenges with this form of analysis is that the Texas Parks & Wildlife Department usually does not reveal specific locations of endangered or threatened species habitats within a public forum for fear of some type

of disturbance or destruction by humans. Therefore, the MPO has chosen to identify all highway projects requiring additional right of way and with a rural component as having a “somewhat likely” impact on endangered or threatened species habitat.

## **Land Use Takings**

Although partly accounted for within the right of way costs, this analysis provides some information regarding potential impacts to the built or human environment. One part of the analysis is the identification of the number of residential or commercial / industrial structures within the 250 or 500 foot “likely” zone. This provides some approximate quantification of impacts to the built environment.

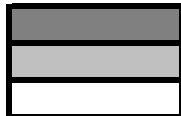
## **Analysis**

Tables 3.18, 3.19 and 3.20 review the potential for mitigation for highway project recommendations identified in Chapter 7. As a general rule, most projects will require some review of underground storage tank location and floodplain / wetlands impacts as most projects of any length will encounter these features. With the possible exception of IH-35 projects, which will require more significant reviews due to it’s length and significant development adjacent to the corridor, most other projects will generally avoid significant environmental impacts.

**Table 3.18 Potential Environmental Mitigation for Highway Expansion Projects - Waco Metropolitan Transportation Plan**

Project Description			Hazardous Materials		
Project ID	Facility & Project Extent	ROW Needed?	Underground Storage Tanks	Generator	Transporter
S-022 Part 1	IH-35: Falls County Line to SH 6 / W LP 340	Yes			
S-022 Part 2	IH-35: N LP 340 to Hill County Line	Yes			
S-022 Part 3	IH-35: SH 6 / W LP 340 to N LP 340	Yes			
S-022 Part 4	IH-35 Toll Lanes: SH 6 / W LP 340 to FM 308	No			
S-025	Valley Mills Dr: Cobbs Dr to Bagby Ave	No			
S-004	Hewitt Dr: US 84 to FM 2063	Yes			
S-034	SH 6 / W Lp 340: US 84 to IH-35	Yes			
S-036A	SH 6 / S LP 340: Brazos River to SP 484 / SH 6	Yes			
S-037	SH 6: Roadrunner Trail to Falls County Line	No			
S-035	SH 6 / S Lp 340: IH-35 to US 77	No			
S-003	FM 1637: FM 3051 to FM 185	Yes			
S-005	Hewitt Dr: FM 2063 to Ritchie Rd	Yes			
S-018	FM 3476: Tx Central Pkwy to FM 2063	No			
S-026	Lp 574: IH-35 to SH 6 / E Lp 340	Yes			
S-046	US 84: Ritchie Rd to Harris Creek Rd	Yes			
S-039A	Franklin Ave: New Rd to Lake Air Dr	No			

Chance that mitigation activities may be necessary



Likely

Somewhat Likely depending upon the alternative chosen

Unlikely

**Table 3.19 Potential Environmental Mitigation for Highway Expansion Projects - Waco Metropolitan Transportation Plan**

Project Description			4F Lands					
Project ID	Facility & Project Extent	ROW Needed?	Parks / Recreation Areas	National / Local Historic Register	Cemeteries	Religious Sites	100 Year Flood Zone	Endangered or Threatened Species Habitat
S-022 Part 1	IH-35: Falls County Line to SH 6 / W LP 340	Yes						
S-022 Part 2	IH-35: N LP 340 to Hill County Line	Yes						
S-022 Part 3	IH-35: SH 6 / W LP 340 to N LP 340	Yes						
S-022 Part 4	IH-35 Toll Lanes: SH 6 / W LP 340 to FM 308	No						
S-025	Valley Mills Dr: Cobbs Dr to Bagby Ave	No						
S-004	Hewitt Dr: US 84 to FM 2063	Yes						
S-034	SH 6 / W Lp 340: US 84 to IH-35	Yes						
S-036A	SH 6 / S LP 340: Brazos River to SP 484 / SH 6	Yes						
S-037	SH 6: Roadrunner Trail to Falls County Line	No						
S-035	SH 6 / S Lp 340: IH-35 to US 77	No						
S-003	FM 1637: FM 3051 to FM 185	Yes						
S-005	Hewitt Dr: FM 2063 to Ritchie Rd	Yes						
S-018	FM 3476: Tx Central Pkwy to FM 2063	No						
S-026	Lp 574: IH-35 to SH 6 / E Lp 340	Yes						
S-046	US 84: Ritchie Rd to Harris Creek Rd	Yes						
S-039A	Franklin Ave: New Rd to Lake Air Dr	No						

Chance that mitigation activities may be necessary

	Likely
	Somewhat Likely depending upon the alternative chosen
	Unlikely

**Table 3.20 Potential Environmental Mitigation for Highway Expansion Projects - Waco Metropolitan Transportation Plan**

Project Description			Landuse Acquisition				
Project ID	Facility & Project Extent	ROW Needed?	Residential	Structures	Commercial / Industrial	Structures	Agricultural
S-022 Part 1	IH-35: Falls County Line to FM 2063 / FM 2113	Yes		20		89	
S-022 Part 2	IH-35: N LP 340 to Hill County Line	Yes		73		84	
S-022 Part 3	IH-35: SH 6 / W LP 340 to N LP 340	Yes		59		81	
S-022 Part 4	IH-35 Toll Lanes: SH 6 / W LP 340 to FM 308	No		0		0	
S-025	Valley Mills Dr: Cobbs Dr to Bagby Ave	No		0		0	
S-004	Hewitt Dr: US 84 to FM 2063	Yes		0		5	
S-034	SH 6 / W Lp 340: US 84 to IH-35	Yes		0		7	
S-036A	SH 6 / S LP 340: Brazos River to SP 484 / SH 6	Yes		2		0	
S-037	SH 6: Roadrunner Trail to Falls County Line	No		0		0	
S-035	SH 6 / S Lp 340: IH-35 to US 77	No		0		0	
S-003	FM 1637: FM 3051 to FM 185	Yes		71		18	
S-005	Hewitt Dr: FM 2063 to Ritchie Rd	Yes		0		3	
S-018	FM 3476: Tx Central Pkwy to FM 2063	No		0		0	
S-026	Lp 574: IH-35 to SH 6 / E Lp 340	Yes		0		2	
S-046	US 84: Ritchie Rd to Harris Creek Rd	Yes		26		3	
S-039A	Franklin Ave: New Rd to Lake Air Dr	No		0		0	

Chance that mitigation activities may be necessary

	Likely
	Somewhat Likely depending upon the alternative chosen
	Unlikely

IMPORTANT! - Structures indicated do not necessarily equal takings!



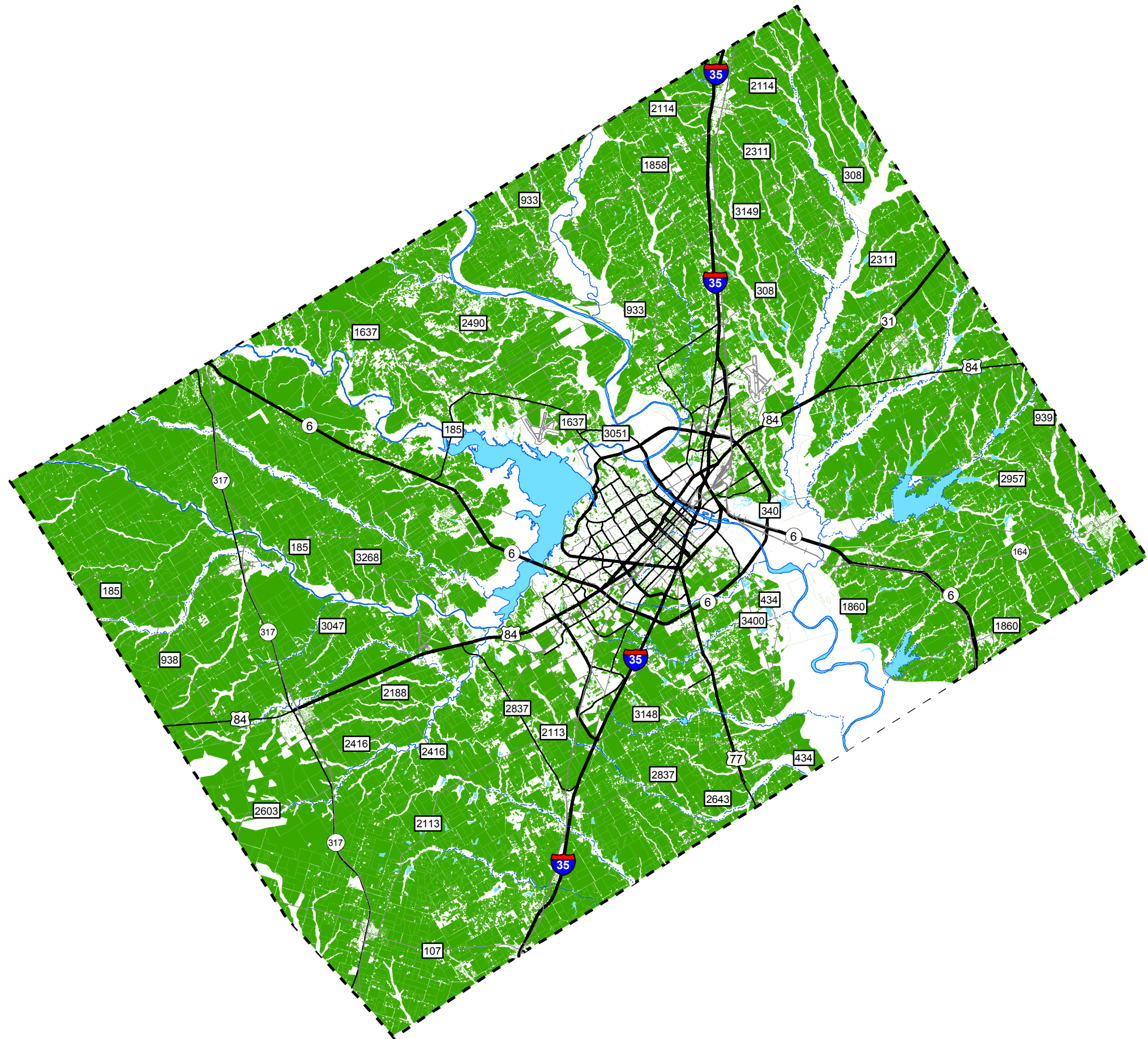


Waco Metropolitan Area  
Developable Land

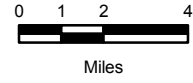


September, 2009

### Map 3.3 Land without Development Constraints - 2005

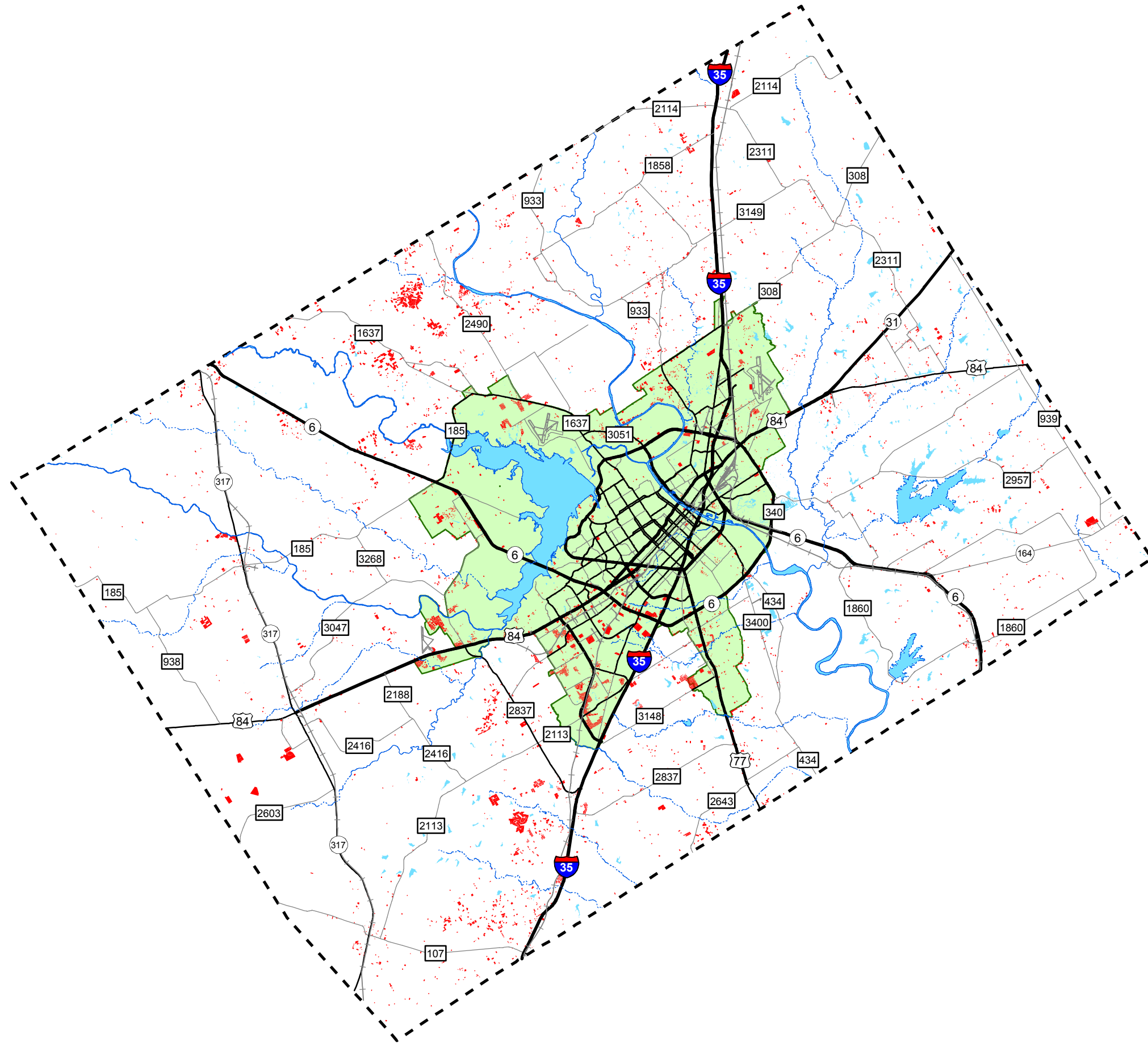


- New Development since 1995
- Adjusted Urbanized Area
- Waco Metropolitan Area











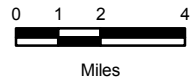
September, 2009

**Map 3.4  
Change in Developed Land Uses  
1995 to 2005**



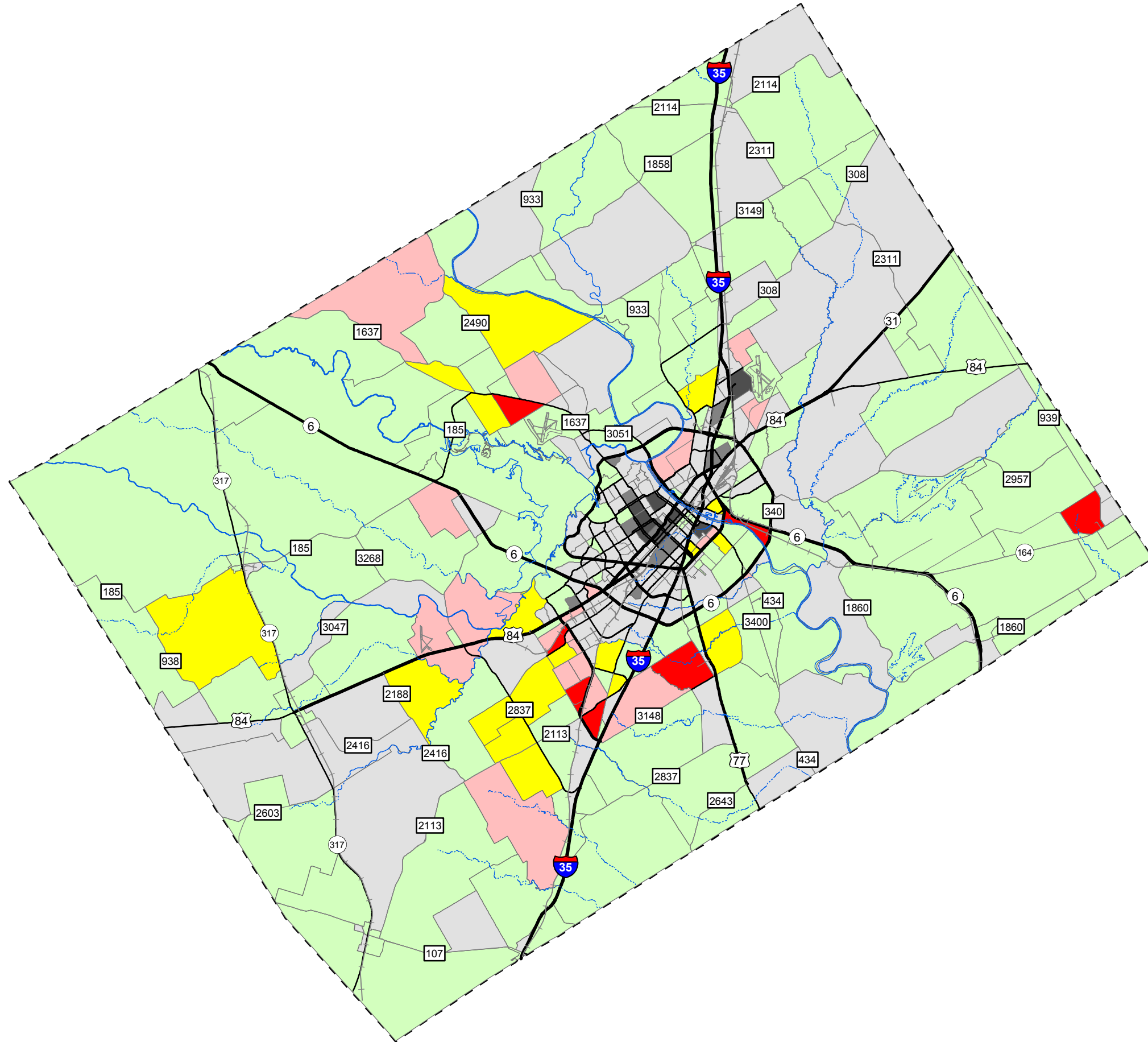
**Population Change**

-  Loss Greater than -200
-  -199 to -100
-  -99 to No Change
-  1 to 100
-  101 to 200
-  201 to 500
-  Gain Greater than 500
-  Waco Metropolitan Area



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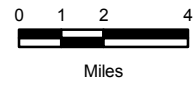
**Map 3.5  
Estimated Population Change - 1995 to 2005  
by Traffic Analysis Zone - 1995 to 2005**





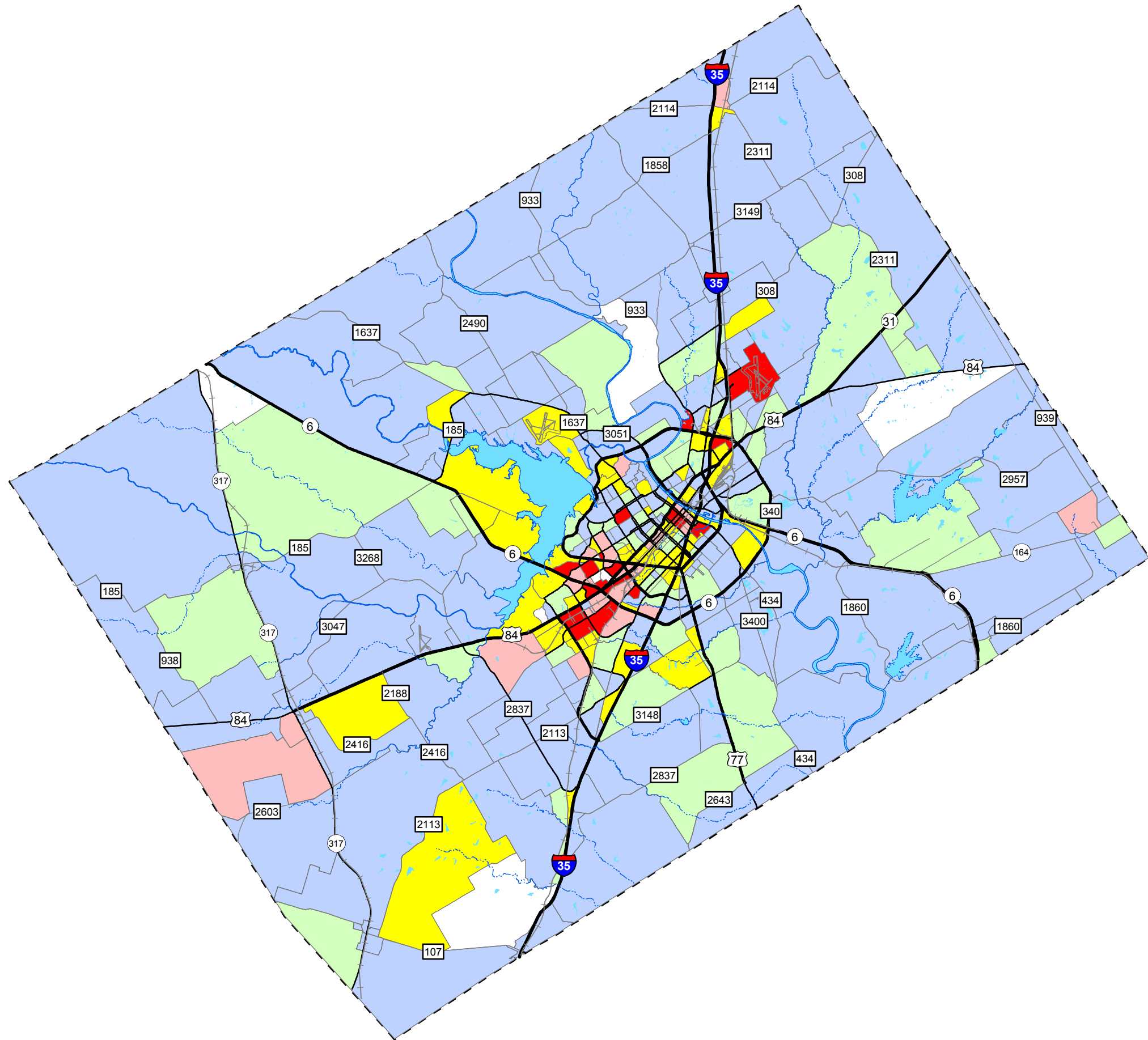
**Total Employees**

- 0 - 100
- 101 - 200
- 201 - 500
- 501 - 1000
- 1001 - 3440
- Waco Metropolitan Area



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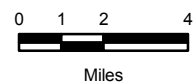
**Map 3.7  
Total Employment  
by Traffic Analysis Zone - 2005**





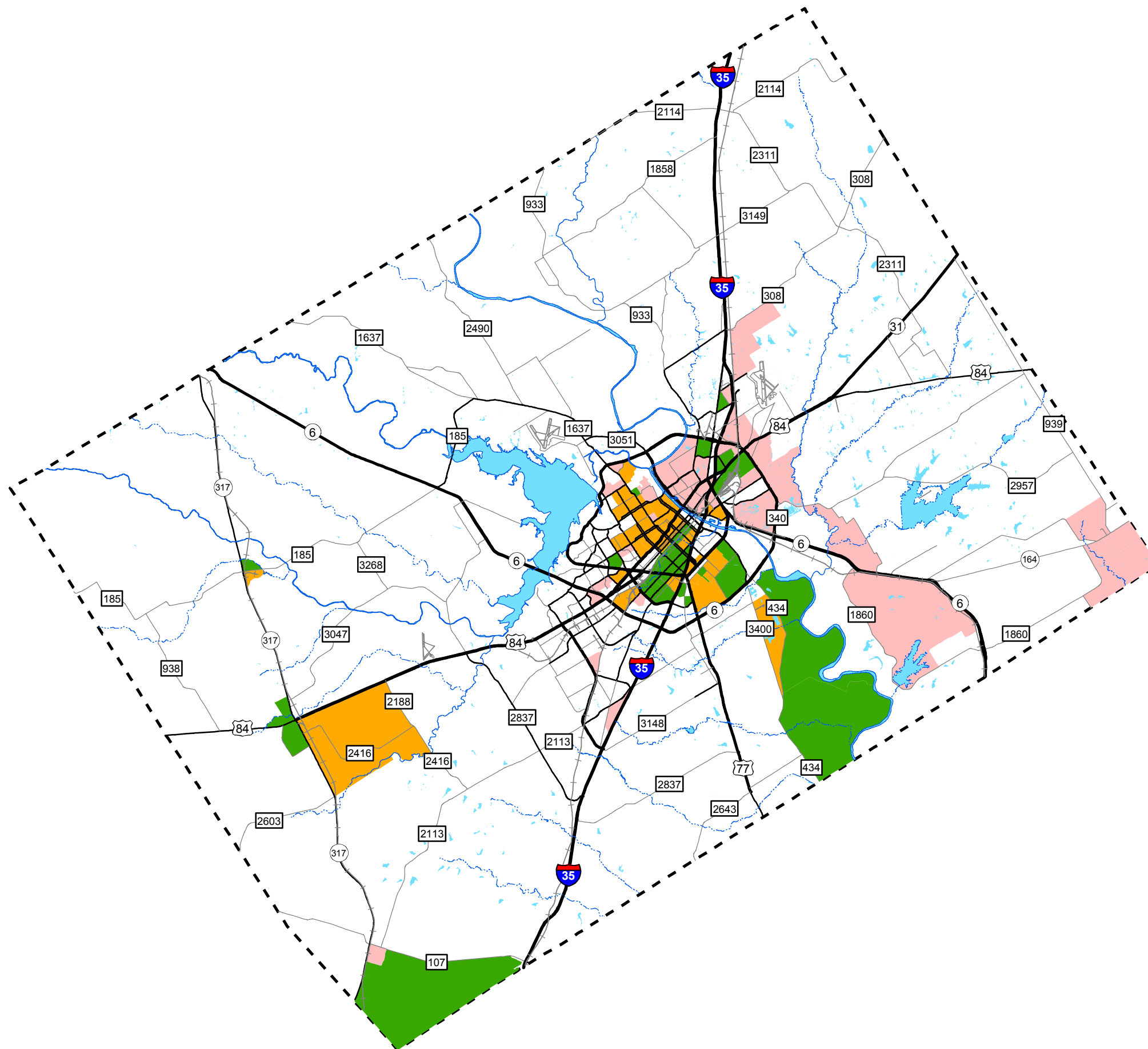
**Protected Zones**

- Black
- Hispanic
- Black & Hispanic
- Waco Metropolitan Area



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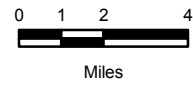
**Map 3.9  
Black & Hispanic  
Protected Zones**





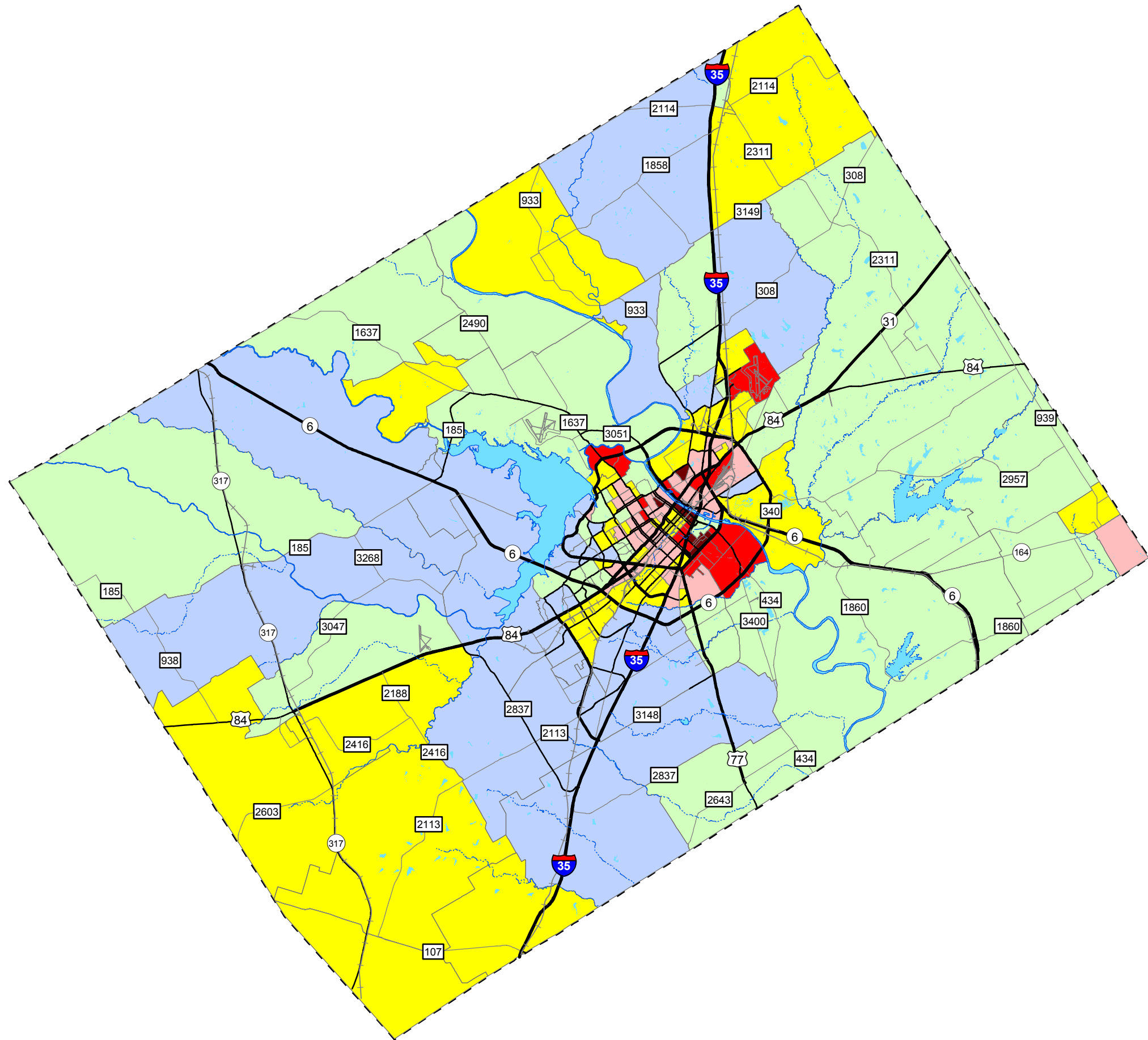
**Percent in Poverty**

- Less than 5.00%
- 5.01% to 10.00%
- 10.01% to 20.00%
- 20.01% to 40.00%
- 40.01% to 60.00%
- Greater than 60.00%
- Waco Metropolitan Area

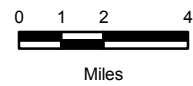
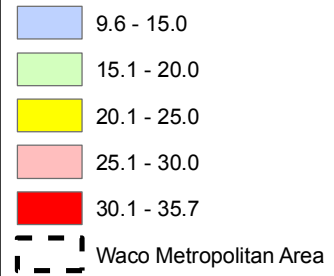


September, 2009

**Map 3.10  
Percent of Persons Living in Poverty  
by Census Block Group**

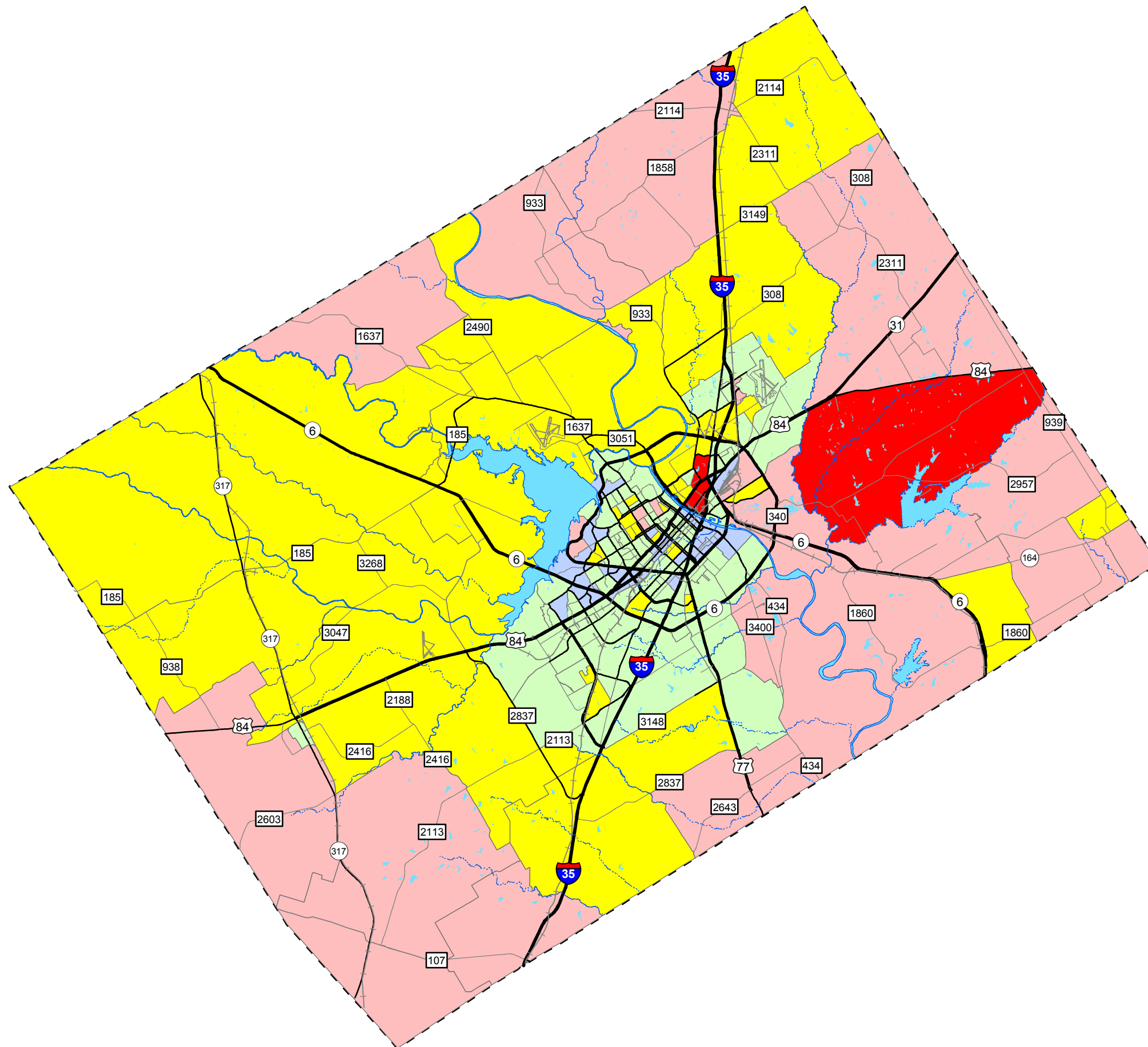


**Travel Time in Minutes**



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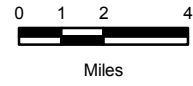
**Map 3.11  
Average One-Way Travel Time  
to Work or School - 2000  
by Census Block Group**





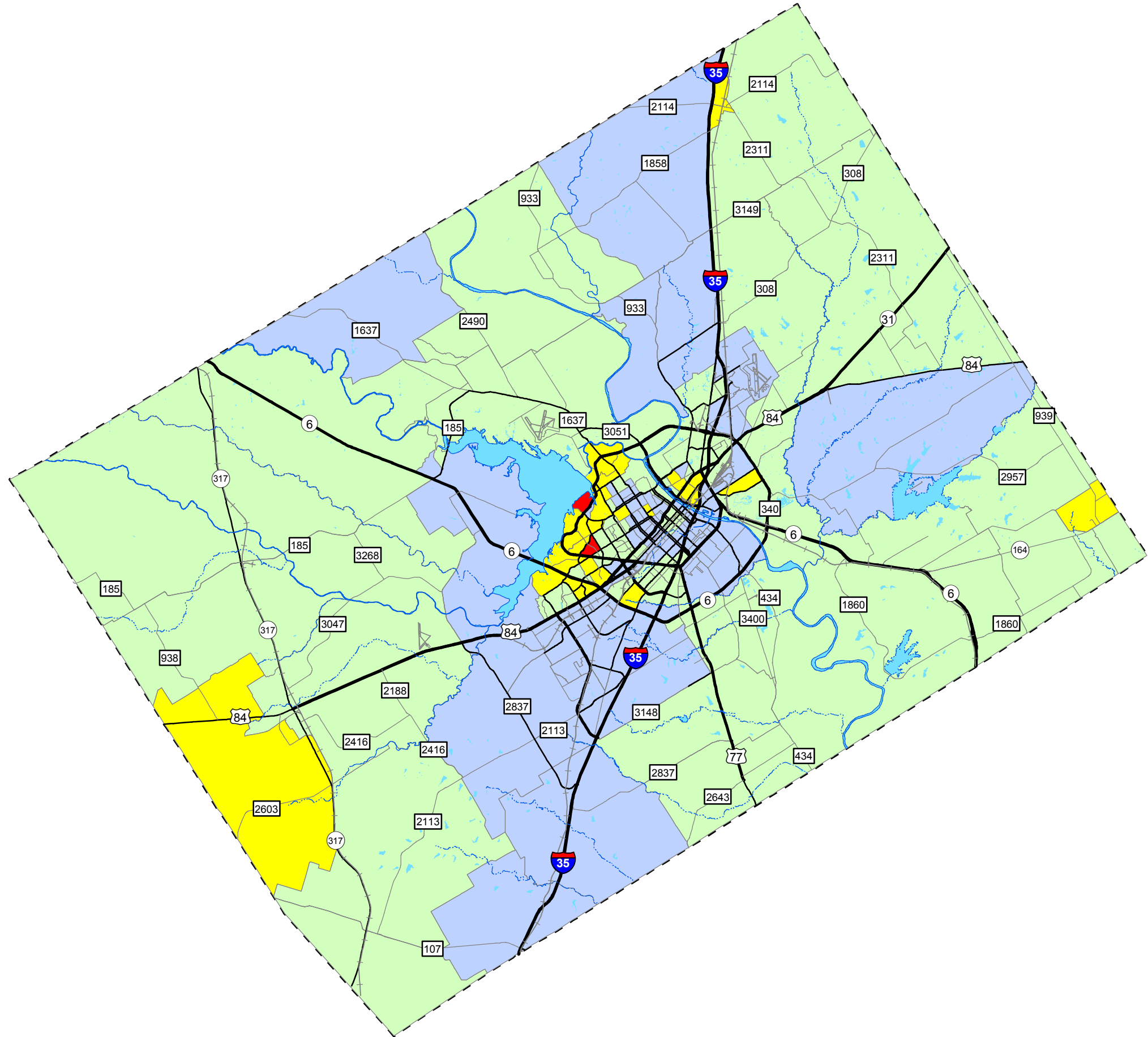
**Percent over Age 65**

- Less than 10%
- 11% to 20%
- 21% to 40%
- 41% to 59%
- Waco Metropolitan Area



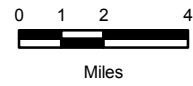
September, 2009

**Map 3.13  
Percent of Persons Over Age 65  
by Census Block Group**



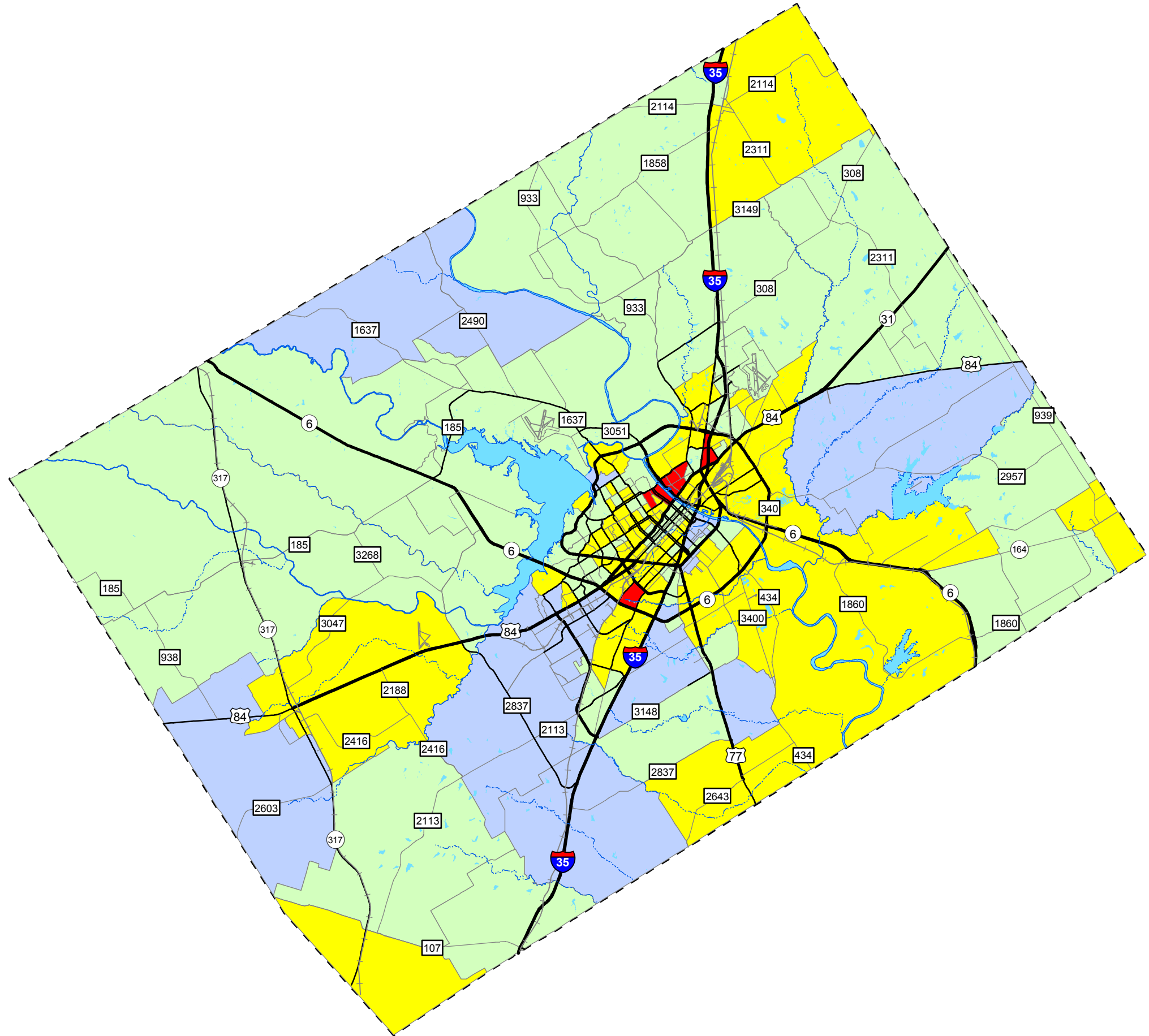
**Percent with a Disability**

- Less than 5%
- 6% to 10%
- 11% to 20%
- 21% to 32%
- Waco Metropolitan Area



September, 2009

**Map 3.14  
Percent of Persons with a Self-Care or  
Mobility Disability by Census Block Group**



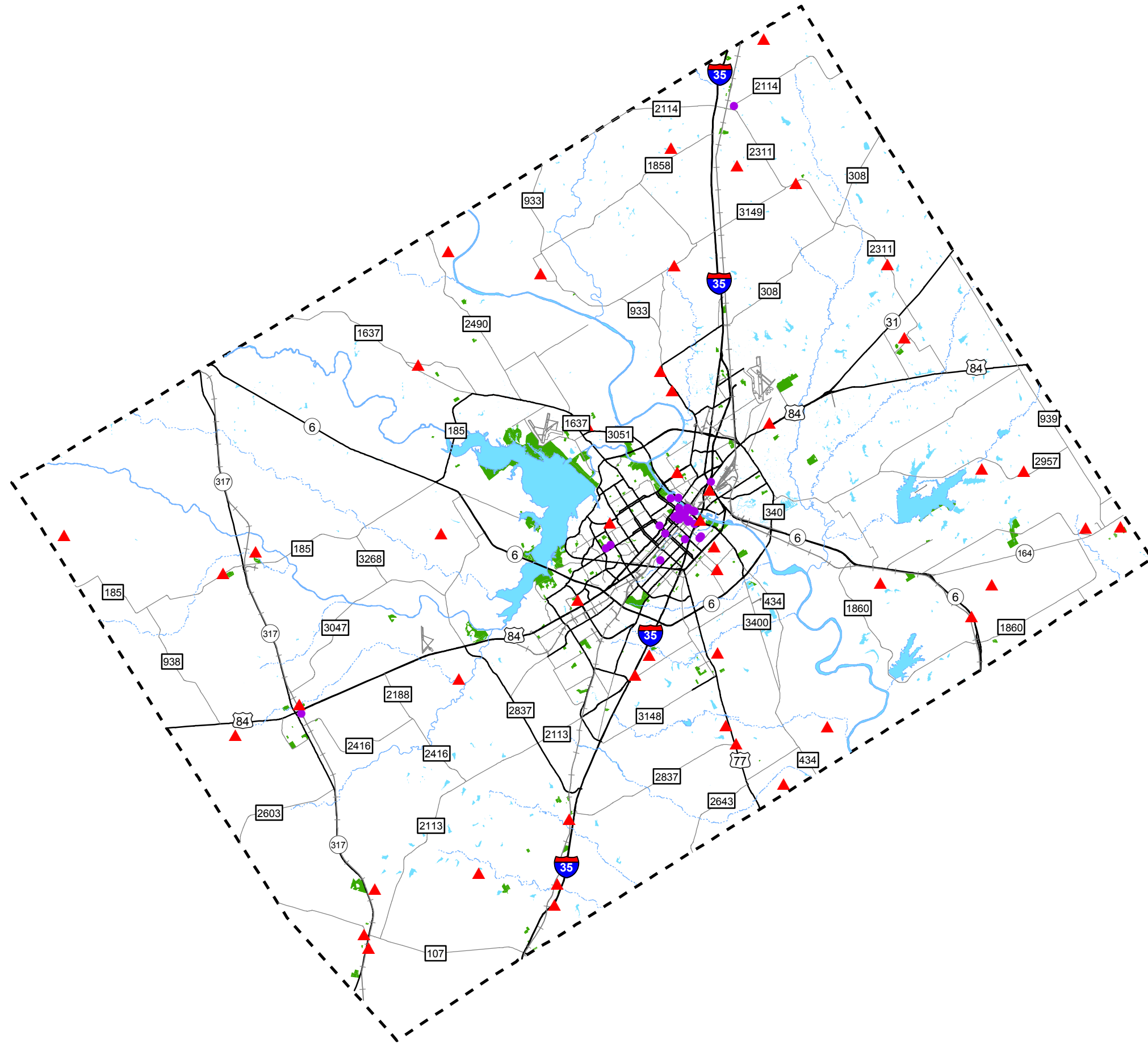


- ▲ Cemeteries
- Historic Landmarks
- Park & Recreational Areas
- Waco Metropolitan Area

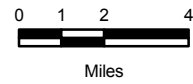


December, 2009

## Map 3.16 Cemeteries, Parks & Historic Sites

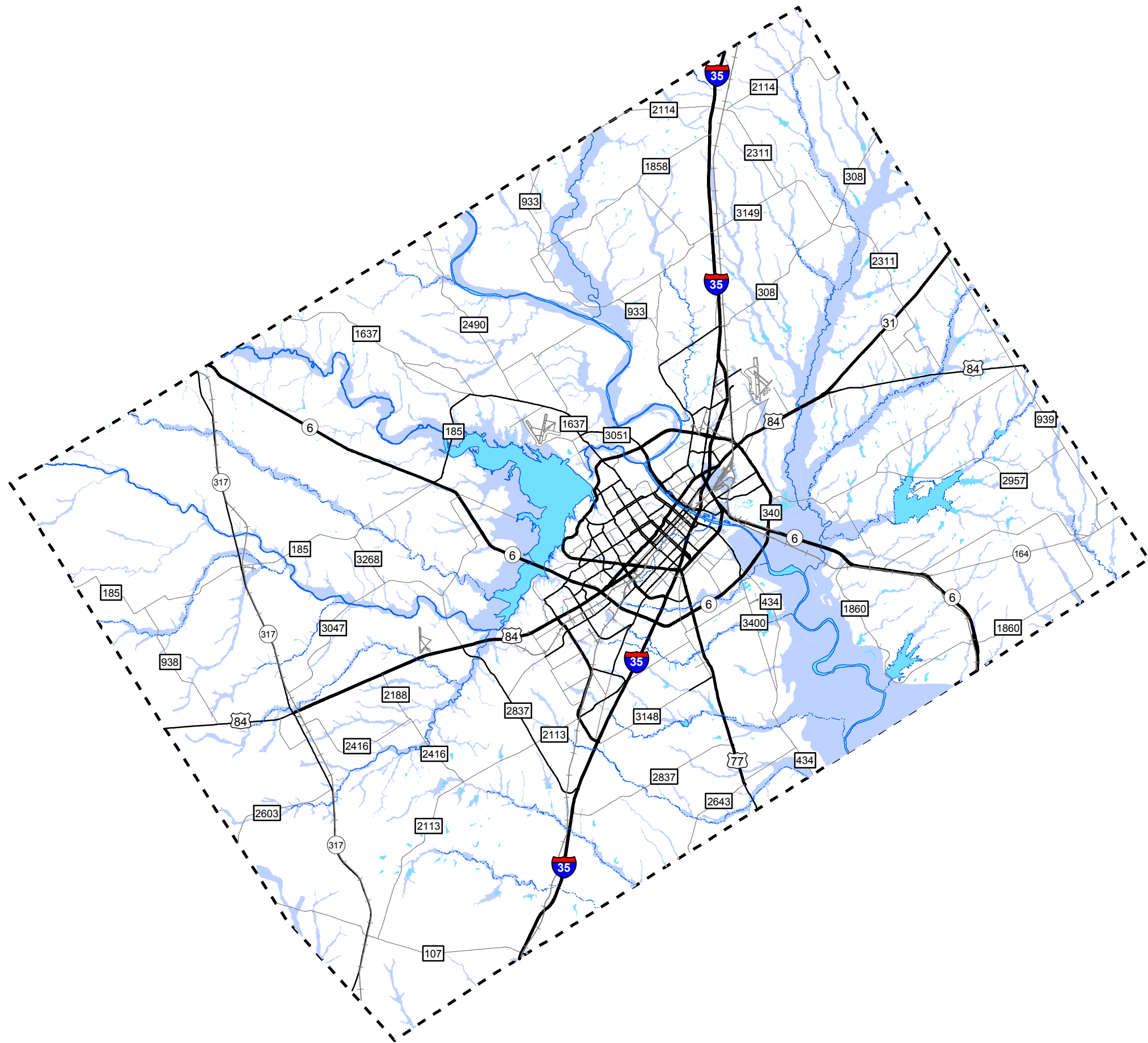


Flood Zone  
Waco Metropolitan Area



December, 2009

# Map 3.17 Flood Zones





# Section 4: Modal Inventory

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## 4.1 Highways and Bridges

The Waco Metropolitan Area contains 6,853.0 lane miles of public roadways. Of this amount, the State of Texas maintains 1,631.8 lane miles or 23.8% and either Municipal Governments or McLennan County maintains 5,221.2 lane miles or 76.2%. Despite the preponderance of lane miles being maintained by local or county governments, 81.9% of the daily vehicle miles traveled occur on the State Highway system. Of this amount, nearly half of the daily VMT or nearly 40% of the total daily VMT for all of McLennan County occurs on Interstate 35.

Each public roadway within McLennan County is classified under the Highway Functional Classification System based upon how each roadway is utilized. The system is defined in section 3.1.1 which also details how the roadway system in McLennan County is classified.

### 4.1.1 Functional Classification System

The roadway network utilized for the MTP comprises those streets functionally classified in 2005 and those subsequently added to the functionally classified system through new construction. A functionally classified roadway system allows streets to be grouped according to their purpose and function within the transportation network of the urbanized area. Streets within urban areas serve two primary functions: traffic movement or mobility, and accessibility. The functional classification system describes the amount of mobility and land access that facilities possess within the transportation network. The transportation planning process uses functional classification to ensure that development issues are evaluated as a component in the determination of existing and future transportation needs.

A summary of the characteristics of each functional class is provided in Table 4.1. Interstates and freeways provide the highest movement of vehicles, but limit the extent of land access available. Arterials have less mobility than freeways, but a higher degree of land access to major traffic generators. The primary function of collectors is the provision of land access and connectivity with larger facilities. All remaining public roadways are classified as local roads with the function of providing land access. Essentially, each class serves a collection and distribution function for each above, culminating with the mobility dominant function of the interstate or freeway.

**Table 4.1 Functional Classification Characteristics**

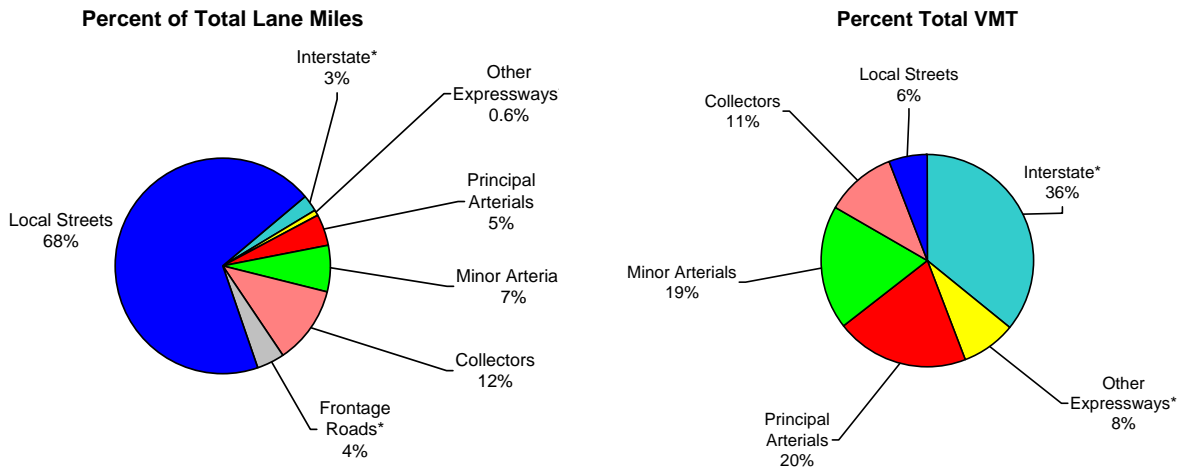
<b>Classification</b>	<b>Level of Mobility</b>	<b>Level of Accessibility</b>	<b>System Relationships</b>
<b>Interstate or Expressways</b>	Connects urban and rural service, connects urban subregions, connects urban areas	No direct land access unless frontage roads are provided. Used for long trips at high speed. (Note frontage roads are classified as collectors.)	Other Interstates or Expressways, principal arterials.
<b>Principal Arterials</b>	Connects two or more subregions, compliments expressways in high volume corridors	No direct land access except for major traffic generators. Used for medium to long distance trips at moderately high speeds. Access is subordinate to traffic movement.	Expressways, other principal arterials and high volume minor arterials and collectors.
<b>Minor Arterials</b>	Connects adjacent subregions, connects activity centers within a subregion, provides intra-community continuity. Ideally does not penetrate into neighborhoods.	Land access restricted to major and minor traffic generators in industrial and commercial uses. Used for moderate to short length trips at moderate speed.	Limited expressway interaction, principal arterials, other minor arterials, facilities that place more emphasis on land access than higher classifications.
<b>Collectors</b>	Connects neighborhoods and connects land uses with the arterial system.	Unrestricted land access to residential neighborhoods, commercial and industrial areas. Used for collection and distribution to arterial facilities at moderate to low speeds.	Arterials, other collectors, local streets and private driveways providing direct land access.
<b>Local Streets</b>	Connects facilities within neighborhoods, connects land uses within transportation facilities.	Unrestricted land access. Used for collection and distribution to collector facilities at low speeds.	Collectors, other local facilities and private driveways providing direct land access.

**Table 4.2 Functional Classification Lane Miles and VMT - 2007**

Classification	Lane-Miles	Percent of Total	Daily Vehicle Miles of Travel	Percent of Total
Interstate (Main Lanes Only)	181.3	2.6%	2,543,900*	35.7%
Other Expressways (Main Lanes only)	46.6	0.7%	597,400*	8.4%
Principal Arterials	420.7	6.0%	1,441,200	20.2%
Minor Arterials	500.9	7.1%	1,342,300	18.9%
Collectors	819.2	11.6%	779,300	10.9%
Frontage Roads	293.7	4.2%	N/A*	N/A
Local Streets	4,800.2	68.0%	413,456	5.8%
Total	7062.6	100.0%	7,117,556	100.0%

\*Traffic counts for the Interstate and Expressway Systems include the main lanes and frontage roads added together. Therefore it is not possible to separate daily VMT between main lanes and frontage roads.

**Chart 4.1 2007 Percentage of Lane Miles & Vehicle Miles Traveled by Functional Classification**



\*Traffic counts for the Interstate and Expressway Systems include the main lanes and frontage roads added together. Therefore it is not possible to separate daily VMT between main lanes and frontage roads.

## 4.1.2 Bridges

Every 2 years the Texas Department of Transportation evaluates the structural condition of every public use bridge within Texas to help in determining priorities for bridge rehabilitation and reconstruction. Each bridge receives a score based on a maximum of 100 points with scores of 50 or below an indication of structural deficiency. Bridges scoring below 50 points are eligible for replacement using federal funds.

The results show that most bridges significantly exceed minimum standards for structural integrity. Of the 645 public use bridges in McLennan County, only 28 or 4.3% were considered structurally deficient. Of the structurally deficient bridges, 25 or 89.3% were maintained either by McLennan County or a local municipality. Map 5.4 identifies the structurally deficient and functionally obsolete bridges.

In addition to bridges, there are 17 low water crossings within McLennan County. These are crossings where instead of a bridge being built over the water feature, the road uses the creek bed for the crossing. Low water crossings are used in locations where traffic volumes are generally low and the creeks are dry most of the time. Low water crossings are not used as extensively as in other parts of Texas due primarily to the amount of rainfall received within McLennan County. Despite the fact that these crossings are usually dry, they do occasionally flood due to excessive rainfall.

**Table 4.3 2007 Bridge Sufficiency Ratings by Functional Classification**

<b>Classification</b>	<b>Bridges</b>	<b>Average Rating</b>	<b>Percent Structurally Deficient</b>
Interstate	110	80.0	0.9%
Other Expressways	58	79.4	0.0%
Principal Arterials	81	84.9	0.0%
Minor Arterials	78	83.5	1.5%
Collectors	133	85.4	0.7%
Local	185	69.6	13.5%
Total	645	79.1	4.3%

### 4.1.3 Highway Operations

Traffic operations within the Waco Metropolitan Area are generally controlled through traffic signals or flashing beacons at high volume intersections. Within the region there are 241 traffic signals. The City of Waco operates 197 signals with the remainder operated by the Texas Department of Transportation. As a general rule, the City of Waco operates signals between 6:00 AM and 2:00 AM, 7 days a week except for high volume intersections, such as Waco Dr at Valley Mills Dr, where the signals operate 24 hours per day. Signals operated by the Texas Department of Transportation operate 24 hours per day, 7 days a week. Map 4.3 shows the location of traffic signals within the region.

Most signals within the region are controlled by loop detectors located within the pavement to detect vehicles. Both the City of Waco and TxDOT are gradually switching to infrared camera detectors which can better detect motorcycles and do not need to be adjusted after seal coats or pavement rehabilitation.

Signals along some major corridors have been timed in order to permit vehicles to travel a consistent speed with minimal stoppages. These corridors are generally high volume corridors with numerous signals within a short distance and timing adjustments have proven to significantly improve corridor travel times. Table 4.4 identifies those corridors where signal timing has been adjusted.

**Table 4.4 Traffic Signal Adjustment Corridors**

Corridor	From	To	Signals
Waco Dr (US 84)	Centerpoint Shopping Center	Gholson Rd (FM 933)	22
17 <sup>th</sup> / 18 <sup>th</sup> / 19 <sup>th</sup> Streets	Lake Shore Dr	LaSalle Ave (US Business 77)	33
Valley Mills Dr (Lp 396)	Bosque Blvd	Waco Dr (US 84)	6
Franklin Ave (one-way)	18 <sup>th</sup> Street	M L King Jr Dr	12
Washington Ave (one-way)	4 <sup>th</sup> Street	18 <sup>th</sup> Street	9
Hewitt Dr (FM 1695)	US 84	Panther Way	8
Bosque Blvd	34 <sup>th</sup> Street	Valley Mills Dr (Lp 396)	6

### Intelligent Transportation Systems

The Texas Department of Transportation, in cooperation with the Waco MPO, McLennan County and cities within the region, has developed a regional architecture for intelligent transportation systems. The regional architecture has been approved by

the Waco MPO Policy Board but as of the date of this document, has not been adopted by TxDOT. As a result, deployment of ITS infrastructure has been limited to 2 dynamic message signs along Interstate 35 in the vicinity of the Hilltop Rd / Old Dallas Rd intersection north of Elm Mott. The City of Waco is currently in the process of installing equipment to communicate with traffic signals remotely along high volume corridors, generally the same corridors identified in table 4.4. It is anticipated that these upgrades will be completed between 2011 and 2012.

## 4.2 Public Transportation

Public transportation within the Waco Urbanized Area is characterized by two types of service: fixed routes providing regularly scheduled service on published routes and demand response where individual riders who cannot utilize the fixed route service are provided door to door service. These services are provided for the segment of the population that does not have access to an automobile or who have a physical disability which limits their mobility.

### 4.2.1 Urban Services

Fixed route service is provided by the City of Waco owned Waco Transit System which is operated under management contract with McDonald Transit Associates. Waco Transit presently operates an active fleet of 22 revenue vehicles. This fleet consists of thirteen 35-passenger coaches, six 12-passenger vans, and three rubber-tired trolleys. All revenue vehicles are wheelchair lift equipped.

Waco Transit operates bus, van, and trolley services. The bus service operates with nine fixed bus routes throughout the City of Waco (See Map 4.4). Nine of the routes operate under a hub and spoke system with routes originating from the Intermodal Transit Center in Downtown Waco and radiating out to various parts of Waco. Route 6 is the exception and it circulates between Valley Mills Drive and the Texas Central Industrial Park. Each route operates with a one hour headway. All routes generally operate between 6:00 AM and 7:00 PM Monday through Saturday. Waco Transit does not operate on Sundays.

One-way fares are \$1.50 for adults, \$1.00 for students and \$0.50 for senior citizens and persons with a mobility impairment. Daily passes are \$3.00 and permit the passholder to ride an unlimited number of times for the duration of the calendar day. Monthly passes are \$40 for adults and \$30 for students and permit the passholder to ride an unlimited number of times for 31 days after the first use.

Public van service for persons with disabilities began in 1993 in Waco. This service provides door-to-door service for those unable to use the fixed route service due to a mobility or self-care disability. Patronage on the van service has increased from 250 in the first month of operation in January 1993 to current ridership of approximately 1800

persons per month. A continuing increase in demand for the service per month is anticipated for the foreseeable future. The fare for the van service is \$3.00 per trip.

Waco Transit also provides service to the Baylor University campus. Rubber-tired trolleys circulate along 3 routes through the campus providing access between remote parking areas and off-campus housing to the central portion of the campus. This service also connects to the Fixed Route service via Route 9 – South Terrace. Additional connections may be made via Route 9 at the Intermodal Transit Center. This service is free of charge to all riders.

Waco Transit's office and maintenance facility is located adjacent to the Intermodal Transit Center at 301 South 8<sup>th</sup> Street in downtown Waco. The facility contains all of Waco Transit's office, bus repair, fueling, cleaning, and bus parking operations.

**Table 4.5 Total Boardings - Waco Transit – Fiscal Year 2008**

Fixed Route	Demand Response	Baylor Trolley	Special Services	Total
570,908	30,978	109,526	83,183	794,595

#### 4.2.2 Rural & Social Service Public Transportation

Funding under the Federal Transit Administration (FTA) section 5310 and 5311 provides capital grants to the state of Texas to help make available mass transportation service that is planned, designed, and carried out to meet the special needs of elderly individuals and individuals with disabilities throughout the state. Funds are available to private non-profit organizations and other public for-profit entities that certify to the governor that there are no existing non-profit corporations or associations in their area that already provide transportation service. Local stakeholder forums or committees plan and design the service for their local community and existing rural and/or urban transit service providers operate the service as designed by the committees. These funds are awarded directly to the transit operator who may use the funds for eligible capital expenses including acquiring transportation service from other transportation providers in the local area. Eligible capital expenses include but are not limited to buses, vans, or other paratransit vehicles, radios and communication equipment, vehicle shelters, and wheelchair lifts and restraints. Other options, with the concurrence of TxDOT Public Transportation Division, are lease of equipment, the acquisition of transportation services under a contract lease, and preventive maintenance service or parts associated with preventive maintenance service.

The Heart of Texas Rural Transit District (HOTRTD) using a demand response system serves Hill County, Falls County, Limestone County, Freestone County, Bosque County and the rural portions of McLennan County. HOTRTD coordinates rural transportation services

through the use of subcontractors. Central Texas Senior Ministry (CTSM) provides transportation services in rural McLennan, Falls, and Hill counties. Bosque, Freestone, and Limestone County Senior Services provide transportation in their respective areas. Each county provides its own dispatch and scheduling and reports to the Heart of Texas Council of Governments who oversees the entire operation.

Each subcontractor for the HOTRTD provides service into the Waco Metropolitan Area for various purposes. The primary purpose is for medical transportation to & from Hillcrest & Providence Medical Centers and the VA Hospital. In addition, Waco Transit currently operates the '6 to Success' service funded by the Jobs Access Reverse Commute Program between Waco and Marlin in Falls County. '6 to Success' provides access to jobs, the Texas State Technical College and McLennan Community College for residents of Falls County.

**Table 4.6 Regional Section 5310 & 5311 Providers and Fleet Information**

Subcontractor	Service Area	Vehicles	Fuel	Wheelchair Accessible
Central Texas Senior Ministries	Falls & Hill Counties, Rural McLennan County	35	32 – Gasoline 3 - Propane	62.9%
Bosque County Transit	Bosque County	7	6 – Gasoline 1 - Propane	87.5%
Freestone County Transit	Freestone County	9	8 – Gasoline 1 - Propane	66.7%
Limestone County Transit	Limestone County	14	11 – Gasoline 3 - Propane	57.1%

### 4.2.3 Medicaid Transportation

Waco Transit provides non-emergency medical transportation through the Medicaid Title XIX program. Medicaid transportation is provided for trips originating in the six-county Heart of Texas region Monday thru Saturday 8 AM to 6 PM. This region includes the Waco Metropolitan Area. After hour service is also available for return trips. Waco Transit coordinates Medicaid transportation through the use of subcontractors. CTSM serves McLennan, Hill, and Falls counties. Bosque, Limestone, and Freestone County Senior Services serve their respective counties. Waco Transit only performs trips when the participating subcontractors cannot handle them.



## 4.2.4 Intercity Bus Service / Taxi and Limousine Service

Greyhound Bus Lines provides intercity bus service through the Intermodal Transit Center at South 8<sup>th</sup> Street and Mary Avenue. Approximately 14 buses are dispatched daily from the transit center with the primary destinations of Austin, Dallas, Houston, Laredo, and San Antonio. Connections to most destinations within the US can be made in Dallas, Houston or San Antonio.

The Waco Metropolitan Area is served by one taxi service: Yellow Cab, which offers 7-day, 24-hour local service with a total of 15 cabs. Five limousine services serve the Waco Metropolitan Area: Accent Limousine, Limousine Ltd., Limousine West, Waco Limousine, and Waco Streak Limousine. Another service, the Waco Streak provides service between the Waco Urbanized Area and the Dallas / Fort Worth International Airport. 3 daily round trips are made and the service is only to provide access to DFW Airport. No other taxi services are available within the Heart of Texas Region.

## 4.3 Bicycle and Pedestrian

### 4.3.1 Bicycle Facilities

Despite the presence of three institutions of higher education within the Waco Metropolitan Area, bicycling is not a significant mode of transportation. According to the 2000 Census, only 0.3 percent of all workers over age 16 use a bicycle as their primary mode of travel to school or work. A preponderance of these users resided either within or in close proximity to Baylor University.

Part of the problem can be attributed to a lack of bicycle facilities within the region. Currently only 2 non-recreational facilities exist, a facility across the Lake Waco Dam and the Brazos Riverwalk, a multipurpose trail between Cameron Park and the Baylor University Ferrell Center. A third facility, the McGregor Road Trail which will run between Harris Creek Rd and Bush Dr in Woodway, will be under construction during 2010. An unimproved facility exists through Cameron Park along the Brazos and Bosque Rivers which effectively provides another facility connecting McLennan Community College to the Brazos Riverwalk. This facility, due to it being unpaved, is subject to being unusable during heavy rainfall.

Several barriers also exist which limit bicycle movements from one-side of town to the other. The main barriers are IH-35, the Brazos River, Valley Mills Dr and Lake Waco. Map 4.7 identifies the existing facilities.

In addition to a lack of facilities, bicycle parking outside of the Baylor University Campus is virtually non-existent. There is currently one public bicycle parking facility within the Waco Metropolitan Area at the Waco Transit Intermodal Center. Waco Transit does provide bicycle racks on all fixed route buses.

## Bicycle Suitability

Since dedicated non-recreational bicycle facilities are rare, the MPO staff evaluated the existing arterial and collector network for bicycle suitability. The staff scored each facility based upon an estimated level of comfort for a novice rider. The scoring system is modified from a system first developed by the US Department of Transportation. Table 4.6 identifies the criteria used in scoring bicycle suitability. Table 4.7 identifies the scores used to define the levels of comfort for novice bicyclists.

**Table 4.6 Bicycle Suitability Criteria**

Criteria	Add / Subtract from Beginning Score	Score
Beginning Score	n/a	3.67
Presence of 15' Curb Lane	Subtract	Speed Score*
Curb Lane Width	Subtract	Width x Speed Score
Curb Lane Volume	Subtract	Volume x 0.002
Other Lane Volume	Subtract	Volume x 0.004
Per Hour Truck Volumes	Add	< 10 = 0 10 to 19 = 0.1 20 to 29 = 0.2 30 to 59 = 0.3 60 to 119 = 0.4 >120 = 0.5
Speed Limits**	Add	Posted Speed x 0.22
Presence of On-Street Parking	Add	0.506
Parking Type	Add	Parallel = 0.2 Angle = 0.6
Rural / Residential / Undeveloped Land Use	Add	0.264
Driveway & Street Intersections per Mile	Add	<20 = 0 >20 = 0.1 every 10 per mile
Railroad Crossing	Add	0.2
Steep Slope	Add	0.3

\*Speed Score: Less than 50 mph = 0.966, 51 to 55 mph = 0.8, 56 to 60 mph = 0.6, Greater than 60 mph = 0.4

\*\*Facilities with posted speed limits of 70 mph were automatically given a comfort level of "Not Recommended".

**Table 4.7 Comfort Level Score**

<b>Score</b>	<b>Comfort Level</b>
Less than 2.5	Easy
2.51 to 5.00	Moderate
5.01 to 10.00	Difficult
Greater than 10.00	Not Recommended

Map 4.7 shows the bicycle suitability scores for the Waco Urbanized Area. Scores outside of the urbanized area were generally either 'Easy' if the posted speed limit was below 70 mph or 'Not Recommended' if above 70 mph. Main lanes of IH-35 and other expressways prohibit bicycles by state law and frontage road use, although permitted, is generally discouraged due to the high number of merging movements, speed and high number of driveway access points.

Sections 7.1.7 and 7.2.6 identify recommended bicycle projects for the Waco region. Corridors identified as 'Easy' were recommended as bicycle routes requiring only signage and minimal other improvements. Corridors identified as either 'Moderate' or 'Difficult' were recommended as either requiring a combination of striped bicycle lanes, curb lane widening or the elimination of on-street parking.

### **4.3.2 Pedestrian Facilities**

Walking as a mode choice to work or school is used significantly more often than bicycling within the Waco Metropolitan Area. Even so, only 1 out of 40 commuters use this mode as their preference. As a general rule, this mode is used primarily by persons residing in close proximity to either Downtown Waco or Baylor University where the sidewalk network is more complete and where basic services are in closer proximity to residential areas.

Pedestrian facilities are generally only found in areas developed prior to 1950, mostly Downtown Waco and the Baylor University campus. Beyond these areas the sidewalk network is scattered and basic services are generally well beyond 0.25 miles from residential areas. This distance is one that surveys indicate are the maximum distance most persons are willing to walk. The City of Waco has adopted an ordinance requiring the construction of sidewalks for new commercial development or reconstruction of certain developments depending upon specific criteria. New residential developments are also required to install sidewalks along collector streets either identified by the City's sidewalk plan or by the Department of Traffic Services. Although this has served to increase the coverage of sidewalks beyond Downtown Waco and Baylor, the network remains patchy at best. To date, only the City of Hewitt has identified pedestrian facilities in a formally adopted plan. None of the facilities identified in the Hewitt

Comprehensive Plan has been constructed as of the adoption of the MTP. Map 4.8 identifies the existing sidewalk facilities within the Waco Metropolitan Area.

## 4.4 Rail

### 4.4.1 Freight Rail

Two railroad companies serve the Waco Metropolitan Area: Union Pacific Corporation and the Burlington Northern Santa Fe Corporation (BNSF). Union Pacific has two primary lines through Waco. One line provides freight service between Fort Worth and Temple and is the main UP line between Fort Worth and Mexico via Laredo. The other line provides freight service from the Bellmead Yards south through Bryan / College Station and then to Houston. The remaining lines are spurs providing freight service to individual industries within McLennan County. BNSF provides freight service connections to Temple and Fort Worth through Moody, McGregor and Crawford. The BNSF line is the primary connection between the Port of Houston and Fort Worth.

**Table 4.8 Rail Line Statistics – McLennan County**

Line	Company	Daily Trains	Grade Separated Intersections	At Grade Intersections	Proposed Grade Separations	Percent Grade Separated*
Bellmead to Fort Worth	Union Pacific	24	3	18	0	14.2%
Bellmead to Temple	Union Pacific	14**	10	30	3	25.0%
Bellmead to Hearne	Union Pacific	12	3	14	0	17.6%
Temple to Fort Worth	BNSF	20	1	17	0	5.5%
Waco to Lehigh Cement	Union Pacific	1	3	6	0	33.3%
Lacy-Lakeview to Cargill	Union Pacific	2	2	7	2	22.2%
UP Main Line to Lipsitz	Union Pacific	Less than 1	0	2	0	0.0%
UP Main Line to M&M Mars	Union Pacific	8	0	1	0	0.0%
	Total	15.8***	22	95	5	18.8%

Source: Federal Railroad Administration

\*Does not include proposed grade separations.

\*\*Does not include 8 local trains that run between the Bellmead yards and the Texas Central Industrial Park.

\*\*\*Represents the average number of trains per intersection in McLennan County.

## 4.4.2 Passenger Rail

Passenger rail service provided by Amtrak stops at McGregor on the BNSF tracks. The station is located approximately 20 minutes west of Downtown Waco off of SH 317. The Texas Eagle provides daily service to Dallas / Fort Worth, Austin and San Antonio. Passengers may continue to Chicago on the Texas Eagle via Fort Worth. Three times a week the Texas Eagle continues west from San Antonio to Los Angeles. Connections to New Orleans may be made on the Sunset Limited in San Antonio. Passengers may also continue to Oklahoma City by connecting to the Heartland Flyer in Fort Worth. In 2007, departures and arrivals at the McGregor Station totaled 4,800.

## 4.5 Aviation

Four public use airports service the Waco Metropolitan Area, Waco Regional Airport, Texas State Technical College Airport (formerly James Connally Air Force Base), the McGregor Executive Airport and the Valley Mills Municipal Airport. In addition to these there are several small, private landing strips with mostly unimproved surfaces that are available for emergency use.

### 4.5.1 Waco Regional Airport (ACT)

Waco Regional Airport (ACT) is located northwest of downtown Waco with an approximate vehicle travel time of 12 minutes. WRA is a fully certified Federal Aviation Administration airport and has an FAA tower, 24-hour NOAA weather service, and 24-hour fuel service. The tower operates between the hours of 6:00 AM and 12:00 PM. The airport is equipped with two all-weather runways: Runway 1-19 is 6,600 feet in length and 150 feet in width, and lighted with an ILS (Instrument Landing System) approach to Runway 19; runway 14-32 is 5,900 feet in length and 100 feet in width, and lighted with nonprecision approaches to both runway approaches. Waco Regional Airport is currently constructing 1,000 foot runway safety areas at the approach end of each runway.

Commercial air service is currently provided by two carriers: American Eagle with four flights daily to Dallas / Fort Worth International Airport (DFW), and Colgan Air operating as Continental Express with four flights daily to Houston George Bush Intercontinental Airport (IAH). American Eagle provides connection service through American Airlines and Colgan Air provides connection service through Continental Airlines.

**Table 4.9 Passenger Enplanements – Waco Regional Airport**

2004	2007	Change	Percent Change
65,213	76,410	+11,197	+17.2%

Currently American Eagle uses 68 passenger ATR-72 aircraft and Colgan Air uses 34 passenger Saab 340B aircraft. The result is a total of 148,512 yearly one-way passenger seat capacity and 408 daily one-way passenger seat capacity. According to 2007 statistics, commercial aircraft at WRA are operating at an average of 51.4 percent of capacity, compared to the national average of 67.5 percent (Federal Aviation Administration).

For general aviation, ACT is a full service airport providing 24 hour refueling and tiedown services, 18 executive hangars, 50 light aircraft hangars, major airframe and powerplant maintenance and repair services.

**Table 4.10 Aircraft Operations – Waco Metropolitan Area 2008**

Airport	ID	General Aviation	Military	Commercial	Other	Total
Waco Regional	ACT	21,080	2,489	123	7,983	31,675
TSTC	CNW	22,489	10,106	11	307	32,913
McGregor Executive	PWG	44,100	100	0	900	45,100
Valley Mills Municipal	9F1	30	0	0	0	30
	Total Metro Area	133,949	24,160	215	19,779	178,103

Source: Federal Aviation Administration

#### 4.5.2 Texas State Technical College Airport (CNW)

Texas State Technical College (CNW) currently maintains and operates the former James Connally Air Force Base and provides training facilities at the airport. The airport is located just off of IH-35 approximately 7 miles north of downtown Waco, with an approximate drive time of 12 minutes. The airport has two runways, 1R-19L which is 8,600 feet in length and 200 feet in width, lighted with an ILS approach to Runway 19L. Runway 1L-19R is 6,400 feet in length and 150 feet in width. The airport has a non-federal control tower that operates from 8:00 AM to sunset, Mondays through Fridays. CNW is home to several aviation related industries, including L-3 Communications, which primarily refurbishes and rewires military aircraft, while also working on some civilian aircraft. There are currently only limited general aviation services at CNW primarily providing refueling services during daylight hours.

#### 4.5.3 McGregor Executive Airport (PWG) & Valley Mills Municipal Airport (9F1)

The McGregor Executive Airport (PWG) provides general aviation service approximately 15 miles west of downtown Waco off of US 84. The airport has two runways: Runway 18-

36 is 5,100 feet in length and 100 feet in width with pilot controlled lighting; and runway 4-22 is 3,400 feet in length and 60 feet in width with no runway lighting. The airport does not have a control tower. There are currently no precision approaches for PWG.

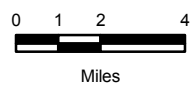
PWG is a full service general aviation airport providing 24 hour refueling and tiedown services, and major airframe and powerplant maintenance and repair services. UPS currently uses PWG for limited regional air freight service.

The Valley Mills Municipal Airport (9F1) is an unattended field providing general aviation service to the northwestern portion of McLennan County. The airport has two runways: Runway 6-24 is 3,028 feet in length and 40 feet in width and runway 14-32 is 2,788 feet in length and 40 feet in width. Both runways have unimproved surfaces. 9F1 does not provide any general aviation services.

#### **4.5.4 Navigational Aids**

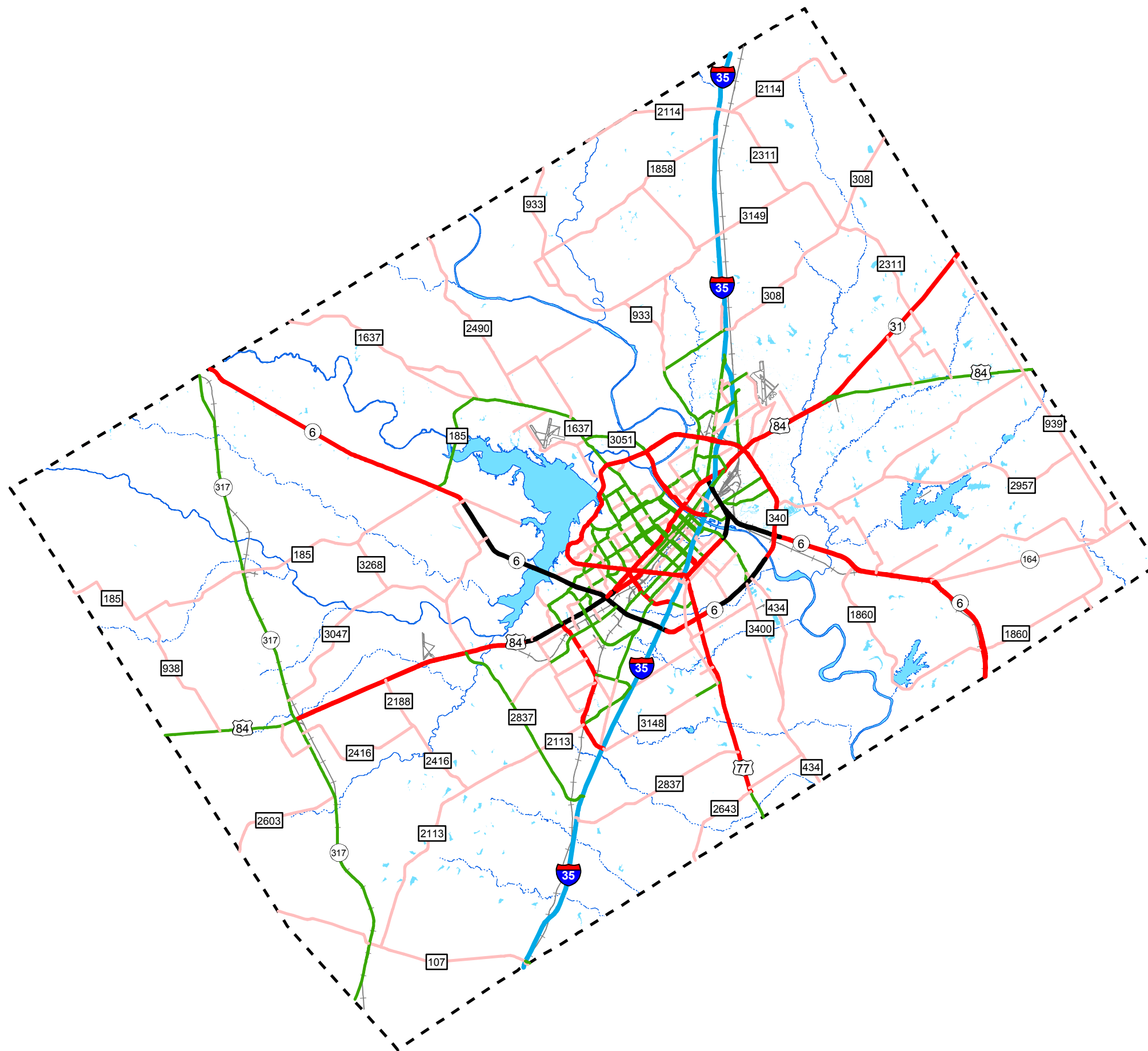
The FAA maintains two radio aids to navigation within the Waco MPO Area. The Waco VOR (Very high frequency Omni Range) transmitter is located off of FM 2490 approximately 4 miles northeast of the Waco Regional Airport and provides direction and distance information to commercial and military aircraft during periods of inclement weather. The Waco VOR is monitored by the Fort Worth Flight Service Station to ensure continuous operation. The other radio aid to navigation is the Robinson NDB (Non-Directional Beacon) which provides aircraft direction information to and from the facility. The Robinson NDB is located off of FM 434 south of Loop 340.

- Interstates
- Other Expressways
- Principal Arterials
- Minor Arterials
- Collectors
- Waco Metropolitan Area



September, 2009

## Map 4.1 Functionally Classified Roads



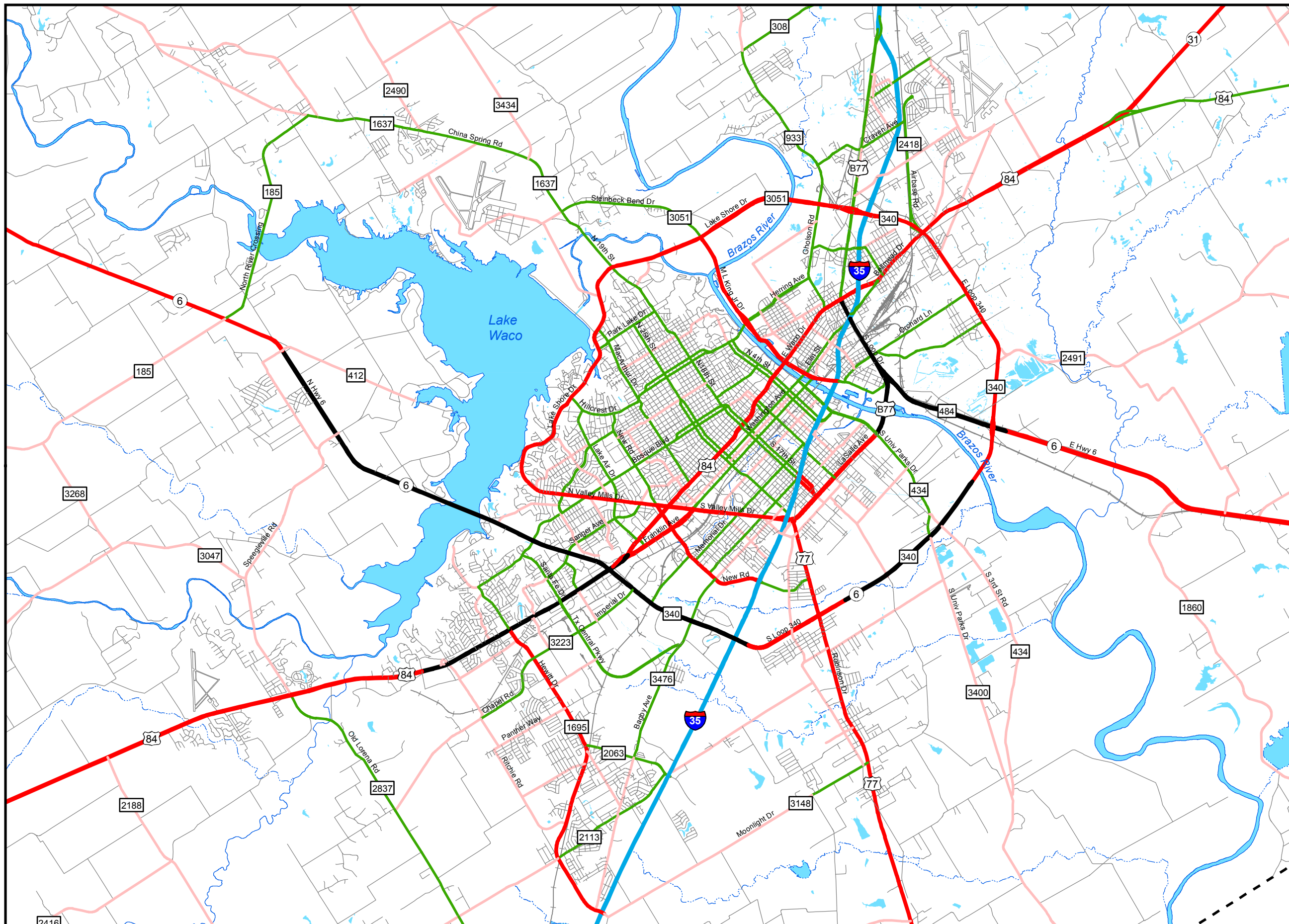


- Interstates
- Other Expressways
- Principal Arterials
- Minor Arterials
- Collectors
- Local Roads



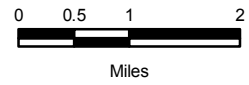
September, 2009

## Map 5.2 2007 Level of Service - Downtown



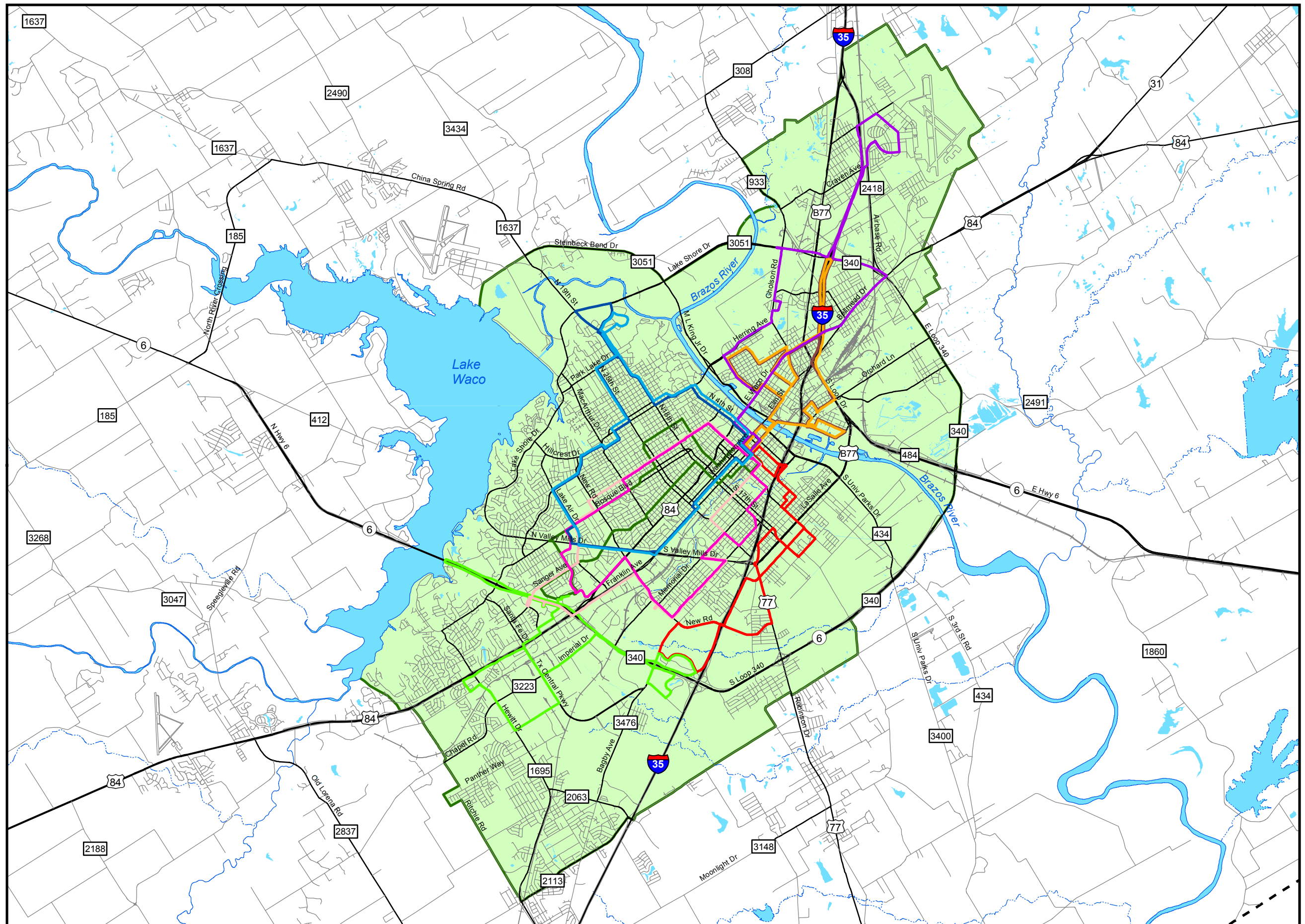







- Route 1 - MCC / Valley Mills
- Route 2 - Valley Mills / MCC
- Route 3 - VA / Colcord
- Route 4 - Colcord / VA
- Route 5 - TSTC / Bellmead
- Route 6 - Hwy 6 Loop
- Route 7 - East Waco (Even Hours)
- Route 7 - East Waco (Odd Hours)
- Route 8 - Bosque / Sanger
- Route 9 - South Terrace
- Demand Response Area

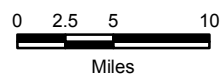


September, 2009

# Map 4.4 Waco Transit Fixed Route System

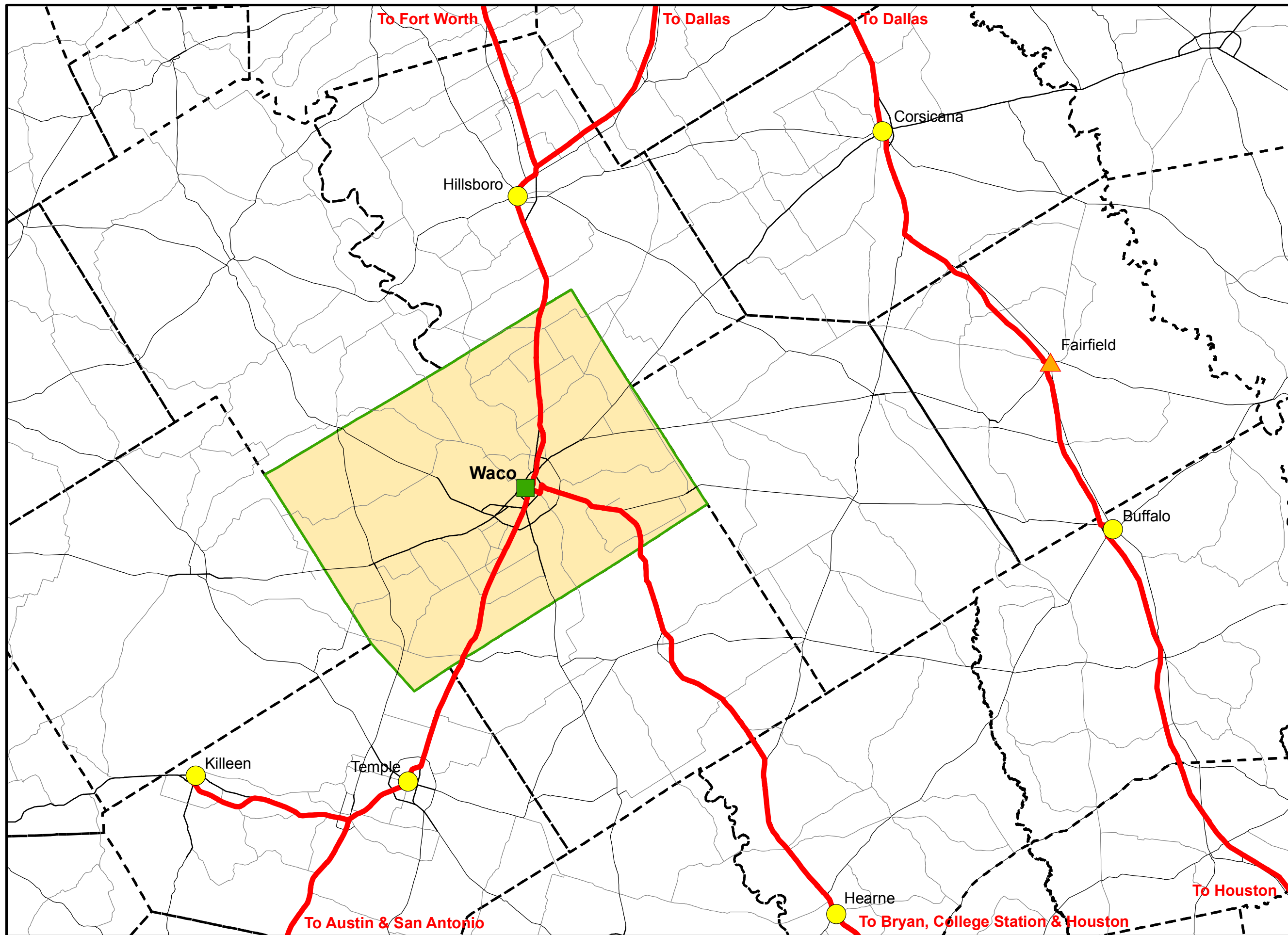


-  Greyhound Routes
- Facility Type**
-  Transfer
-  Pickup & Drop-Off
-  Drop-Off Only
-  Waco Metropolitan Area



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## Map 4.5 Intercity Bus Service & Facilities



**Bicycle Rating**

- Comfortable
- Moderate
- Difficult
- Not Recommended
- Bicycles Prohibited
- Under Construction
- Not Rated

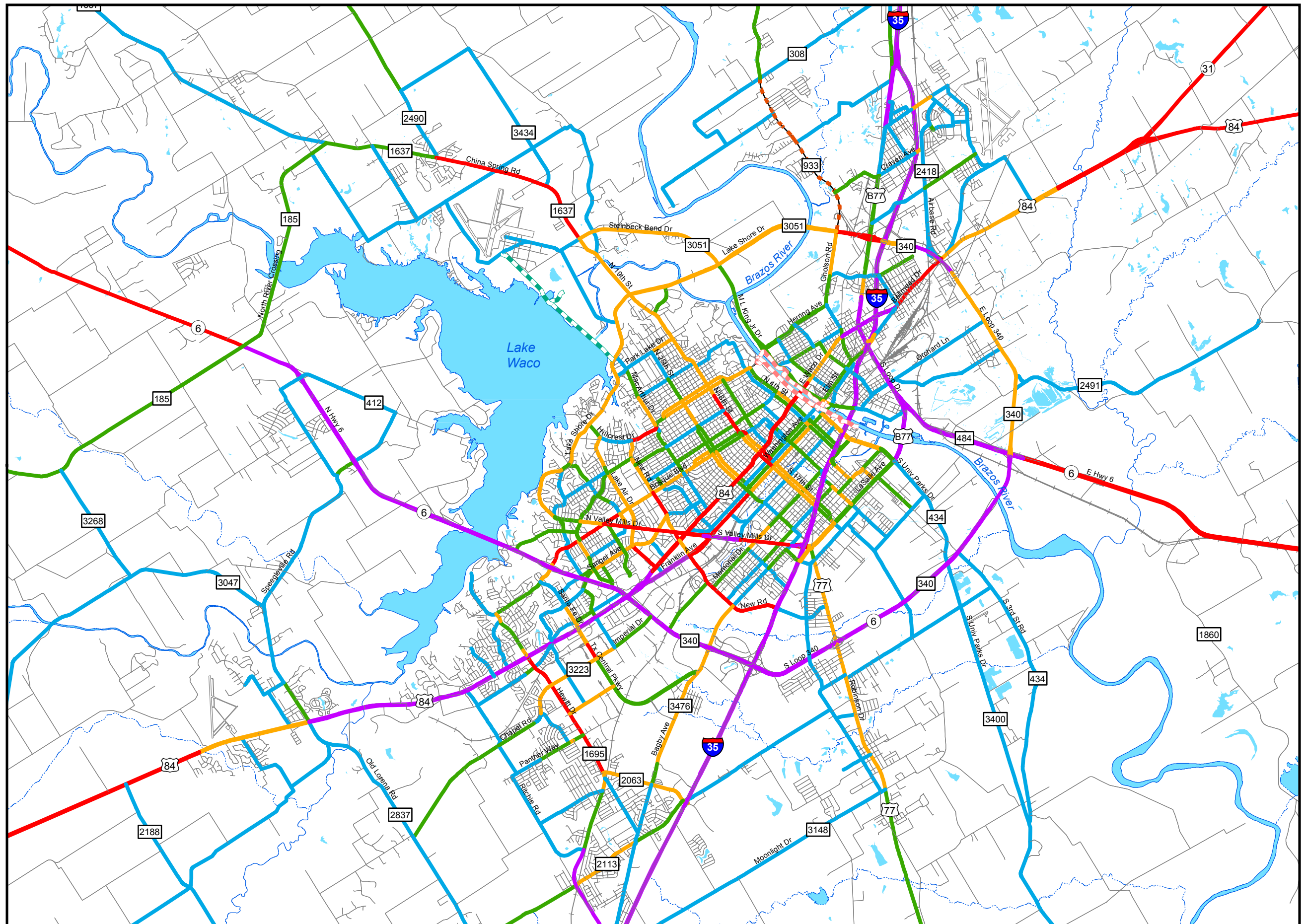
**Bike and Ped Only Facilities**

- Lake Waco Dam Trail
- Brazos Riverwalk



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**Map 4.6  
Bicycle Suitability Index - 2007**



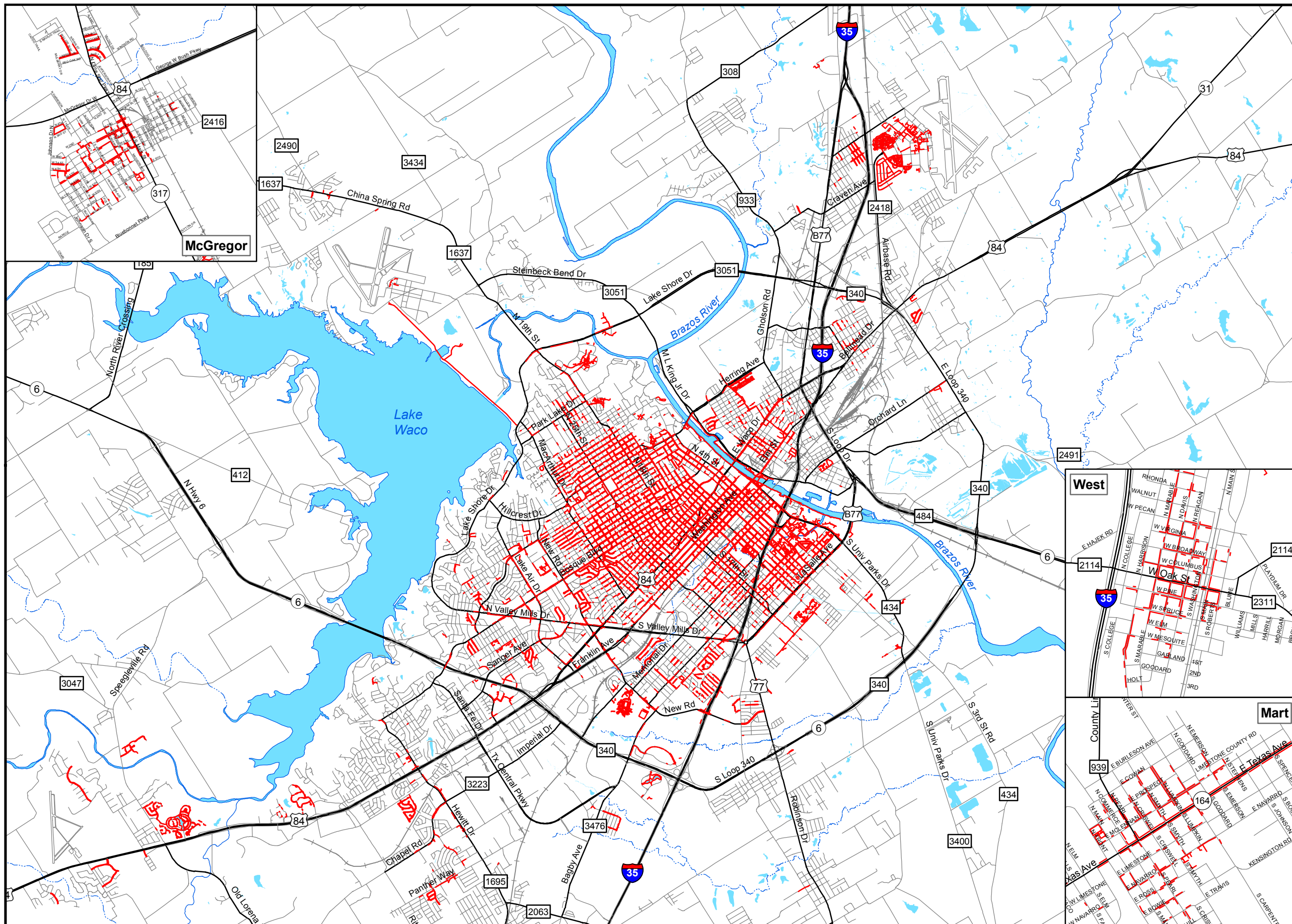
Existing Sidewalks







0 0.5 1 2  
Miles

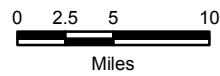
September, 2009

# Map 4.7 Existing Sidewalks



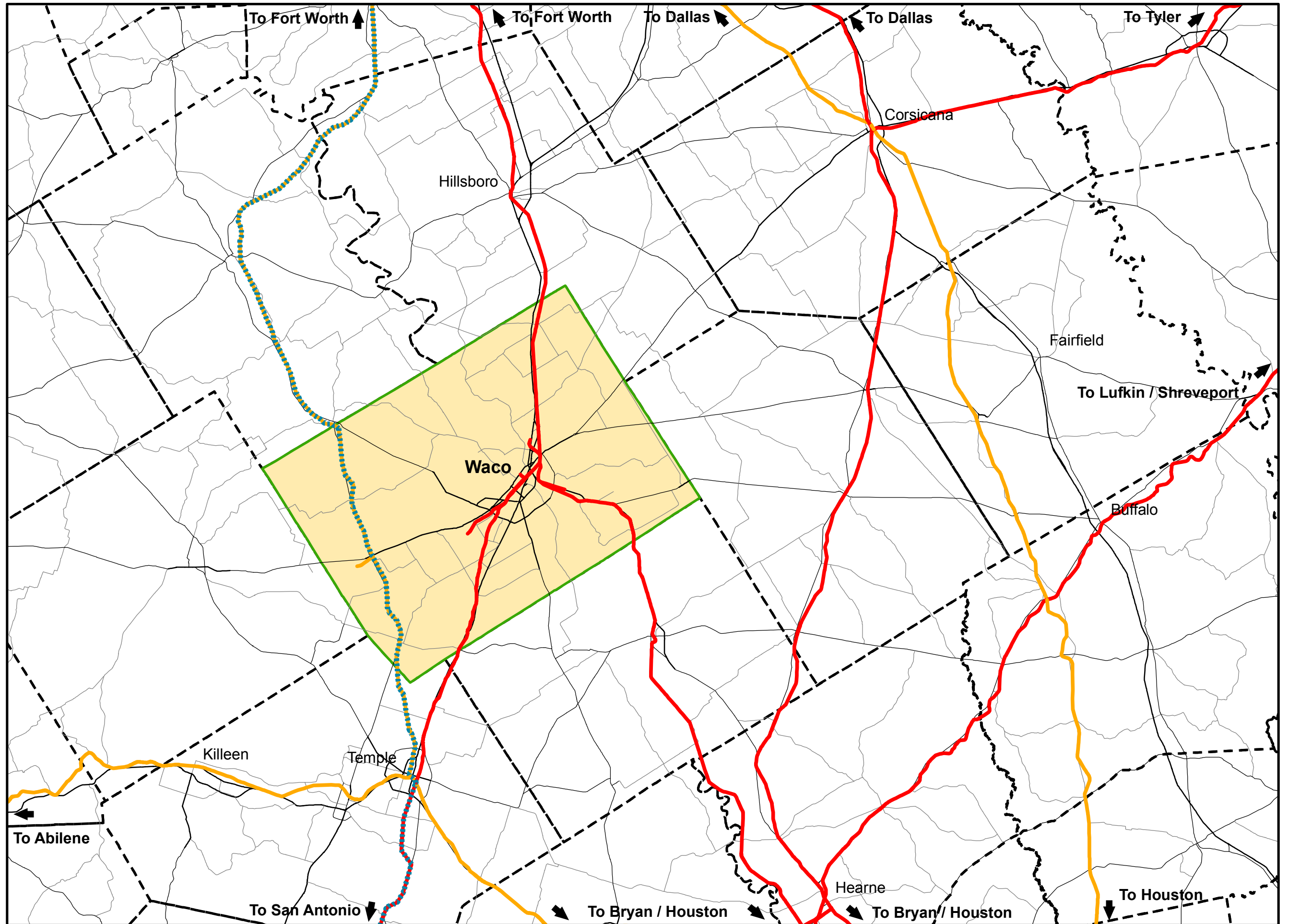
**Rail Company**

-  BNSF
-  UP
-  Amtrak
-  Waco Metropolitan Area



September, 2009

**Map 4.8  
Freight & Passenger Rail Facilities**



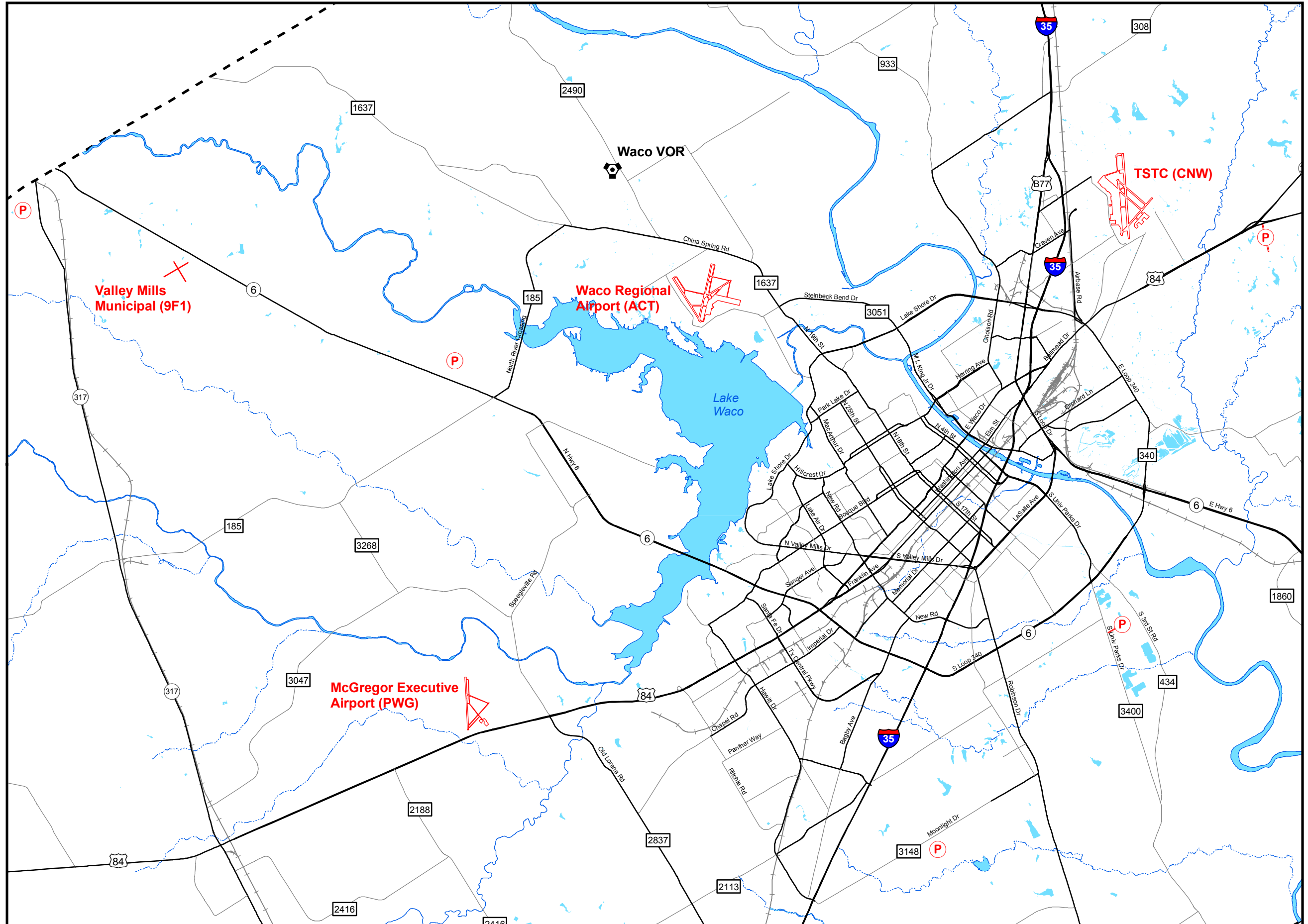
**P** Private Airfield  
--- Waco Metropolitan Area



0 1 2  
Miles

September, 2009

# Map 4.9 Aviation Facilities





# Section 5: Needs and Gap Analysis

## 5.1 Highways and Bridges

### Highway Capacity and Relationship to Level of Service

Capacity refers to the maximum rate of flow that can be accommodated on a roadway segment under prevailing conditions. Congestion occurs when demand exceeds the capacity of a roadway resulting in a reduction of the rate of flow. *The Highway Capacity Manual (HCM)*, published by the Transportation Research Board, defines the relationship between congestion and service characteristics through the use of level of service (LOS) measurements. Roadways are described in terms that represent reasonable ranges in three dimensions: average travel speed, density, and flow rate. LOS measures are used to identify existing problem areas, to measure the effects of increased travel demand, to determine the number of lanes needed to achieve efficient movement, and to compare alternatives between proposed projects. Table 3.3 provides a definition of Level of Service and its relationship with congestion.

**Table 5.1 Level of Service (LOS) Definition**

Level of Service	Estimated Maximum Volume to Capacity Ratio			Relationship to Congestion
	Collectors & 2 Lane Arterials	Multi-Lane Arterials	Expressways & Interstates	
A	0.10	0.35	0.35	Free Flow
B	0.25	0.50	0.50	Light Traffic
C	0.40	0.65	0.70	Moderate Traffic
D	0.60	0.80	0.85	Heavy Traffic
E	1.00	1.00	1.00	Congested
F	>1.00	>1.00	>1.00	Heavily Congested

#### 5.1.1 2007 Highway Level of Service

As a general rule, the functionally classified highway system is operating at an acceptable level of service. Collectors and Minor Arterials are functioning well with 3

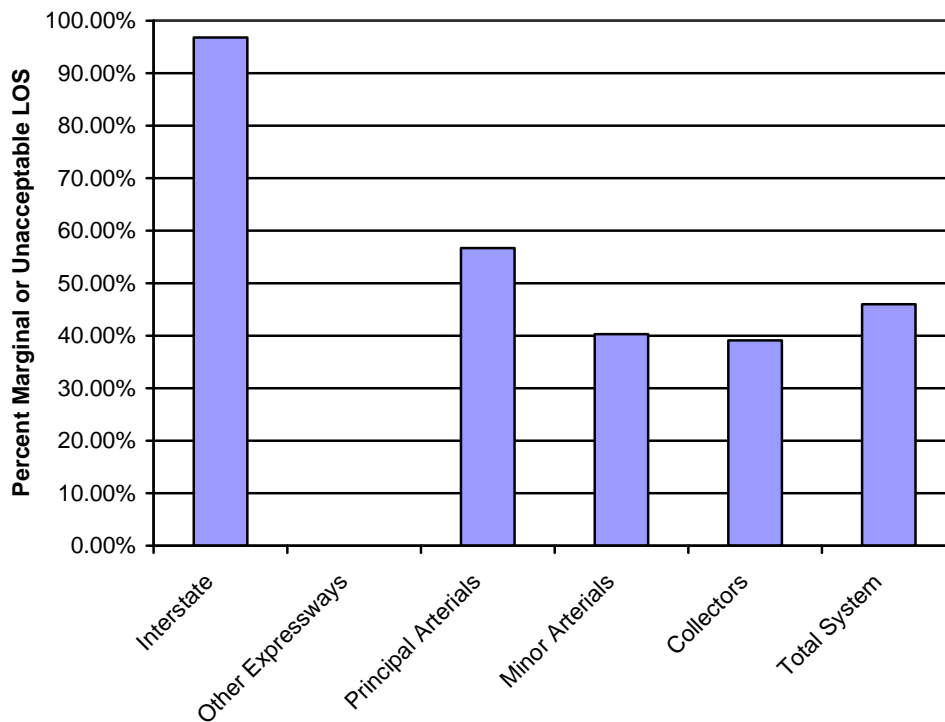
out of 5 miles operating at a level of service “C” or better. Interstate 35 and the Principal Arterial system are not functioning as well with the majority of miles operating at marginal levels of service. Table 3.4 outlines the level of service characteristics for the functionally classified highway system.

Generally only 1 out of 20 miles of the functionally classified highway system is operating at an unacceptable level of service. Those that are at a level of service “F” do tend to be concentrated within the suburban areas. Table 3.5 identifies those highway segments that have the worst congestion levels within the Metropolitan Area.

**Table 5.2 Level of Service (LOS) per Classification – Existing Network**

Classification	Acceptable LOS A to C	Marginal LOS D & E	Unacceptable LOS F	Average LOS
Interstate	3.8%	87.4%	9.4%	E
Other Expressways	100.0%	0.0%	0.0%	B
Principal Arterials	43.3%	53.3%	3.4%	D
Minor Arterials	59.7%	32.5%	7.8%	C
Collectors	61.0%	35.9%	3.2%	D
Total System	54.0%	41.3%	4.7%	C

**Chart 5.1 Percent Marginal or Unacceptable Level of Service by Functional Classification - 2007**



**Table 5.3 Top 10 Most Congested Roads - 2007**

Road	From	To	Volume to Capacity Ratio
China Spring Rd (FM 1637)	FM 3434	Steinbeck Bend Rd (FM 3051)	1.61
Gholson Rd (FM 933)	Spring Lake Rd	FM 308	1.60
Lake Shore Dr (FM 3051)	Gholson Rd (FM 933)	US Business 77	1.38
China Spring Rd (FM 1637)	Wortham Bend Rd (FM 2490)	FM 3434	1.38
S 8 <sup>th</sup> St	IH-35	Speight Ave	1.35
Gholson Rd (FM 933)	Lake Shore Dr (FM 3051)	Spring Lake Rd	1.30
Waco Dr (US 84)	Valley Mills Dr	N 36 <sup>th</sup> St	1.25
Bagby Ave	S 8 <sup>th</sup> St	University Parks Dr (FM 434)	1.24
Hewitt Dr (FM 1695)	Imperial Dr (FM 3223) / Chapel Rd	US 84	1.23
Texas Central Pkwy	Imperial Dr (FM 3223)	US 84	1.17

Several expressways in East Waco have a great amount of excess capacity. US Business 77 and US 84 (East Waco Dr), only portions of which are expressway standards, can accommodate 68,000 to 106,000 additional vehicles per day beyond the current volumes. Much of this can be attributed to the closure of several major industries within the area, as well as the development of Interstate 35, which opened several decades after these facilities were constructed. With the useful life of the bridge structures ending, the need for these facilities to remain as an expressway is questionable. In addition, property access within East Waco has been very poor and has contributed to declining economic opportunities. A recommendation from the MPO is that when bridge structures need to be replaced on these facilities, that these facilities be converted to standard 4 lane principal arterials with at-grade intersections.

**Table 5.4 The Bottom 10 – Roads with the Greatest Excess Capacity - 2007**

Road	From	To	Excess Capacity (Vehicles per Day)
US Business 77 (LaSalle Ave)	S University Parks Dr	Spur 484 (Marlin Hwy)	106,280
E Waco Dr (US 84)	US Business 77 (N Loop Dr)	IH-35	75,000
E Waco Dr (US 84)	Gholson Rd (FM 933)	US Business 77 (N Loop Dr)	71,900
US Business 77 (S Loop Dr)	Spur 484 (Marlin Hwy)	Orchard Ln	70,320
US Business 77 (S Loop Dr)	Orchard Ln	IH-35	69,570
US Business 77 (N Loop Dr)	IH-35	E Waco Dr (US 84)	68,160
Spur 484 (Marlin Hwy)	E Loop 340	US Business 77 (LaSalle Ave)	60,980
SH 6	Bosque Blvd	Fish Pond Rd	57,490
SH 6	Speegleville Rd	Dosher Ln / Spur 412	54,890
SH 6	Fish Pond Rd	Speegleville Rd	52,350

### 5.1.2 Projected 2035 Highway Level of Service

The Waco MPO utilizes a travel demand forecast model to estimate future level of service for the functionally classified highway system. Section 3.3.1 provides a complete description of the development of the Waco model. The results of this analysis represent a “no build” scenario in which only those roads completed or under construction since 2002 are added to the 2002 highway network.

The travel demand model was developed prior to the expansion of the Metropolitan Area Boundary in 2003. Therefore areas within McLennan County but outside of the former boundary are not included within the model forecasts (see map 3.3A).

### Travel Demand Forecast Model Development

Travel Demand Modeling is the process used to determine street facility needs in the future. The Travel Demand Model is developed by the Texas Department of Transportation with assistance from the MPO staff using TRANSCAD modeling software. This Plan Update is based on an updated model. The Waco MPO staff provided TxDOT

with 2005 base year data and highway network and 2035 forecast of population, income, employment and dwelling units by Traffic Analysis Zone to be used by TxDOT in the development of the model.

Travel demand modeling utilizes the following four step process:

1. Trip Generation
2. Trip Distribution
3. Mode Choice
4. Traffic Assignment

The Waco Urban Area, due to its size and relatively low utilization of modes other than automobiles, does not utilize Mode Choice in the modeling process.

Modeling utilizes socioeconomic data (population, income, dwelling units and employment by Standard Industrial Code) to forecast the number of trips from one given destination to another. This data is collected in small study areas called Traffic Analysis Zones (TAZ's). The Waco MPO Study Area was originally delineated into 206 analysis zones for the 1964 Plan. Since that time the analysis zones have been revised several times as the arterial network and study area have changed. In 1998 the MPO expanded the Study Area to include Lorena and McGregor and unincorporated areas in between. For this Plan Update, the model uses the 251 TAZ's delineated in 1998.

### **Trip Generation**

Trip generation is the process by which socioeconomic variables (population, income, number of dwelling units, employment, land use and special generators) are translated into numbers of trips. Based on the relationships mentioned above, this process determines the number of trips each traffic zone will produce and the number of trips each traffic zone will attract.

Detailed analyses of household trip making characteristics, stratified by income, provides the basis for the development of zonal trip production rates. Trip attraction rates are based primarily on employment data in each zone, but also look at special generators and land use acreage found within each zone.

### **Trip Distribution**

Trip distribution is the process by which the model determines where the trips produced in each traffic zone will go. In other words it determines how the trips produced in each zone will be allotted among all the other zones in the area. In general, this model takes into account the relative attractiveness (based on employment, land use and special generators) and accessibility (based on trip lengths in minutes and socioeconomic and topographical barriers) of all zones in the area.

Once trip distribution is completed, the model is calibrated. Calibration is necessary to ensure the transportation network will have a balanced number of productions and attractions.

### **Traffic Assignment**

After determining the number of trips between each TAZ (trip distribution), the next step in the modeling process is traffic assignment. Traffic assignment determines how the trips will get from the production TAZ to the attraction TAZ. Assignment is the process of assigning trips to the street network based upon the most likely route of travel between the trip's origin and destination. Trips are assigned to the available routes using a mathematical algorithm which determines the amount of traffic to allocate to each route. The traffic allocation is generally based on the relative time it takes to travel along each available path, and the design capacity of each street link.

One important step in the traffic assignment process is validation. Model validation establishes the credibility of the model by demonstrating its ability to replicate actual travel patterns. Validation is accomplished by comparing traffic volumes estimated by the model to actual base year ground counts. Traffic estimated by the model is typically compared to actual traffic counts at points where streets cross barriers called cordon lines, screenlines and cutlines. Various model parameters are adjusted until the model satisfactorily replicates the ground counts. The Waco MPO model was validated using 2005 ground counts.

Once validation is completed, the model is used to assess the performance of the existing transportation system. The final traffic assignment is run on the existing network to produce a base year benchmark. The validated model is then provided to the MPO Staff to forecast future traffic conditions and to evaluate the effectiveness of proposed improvements.

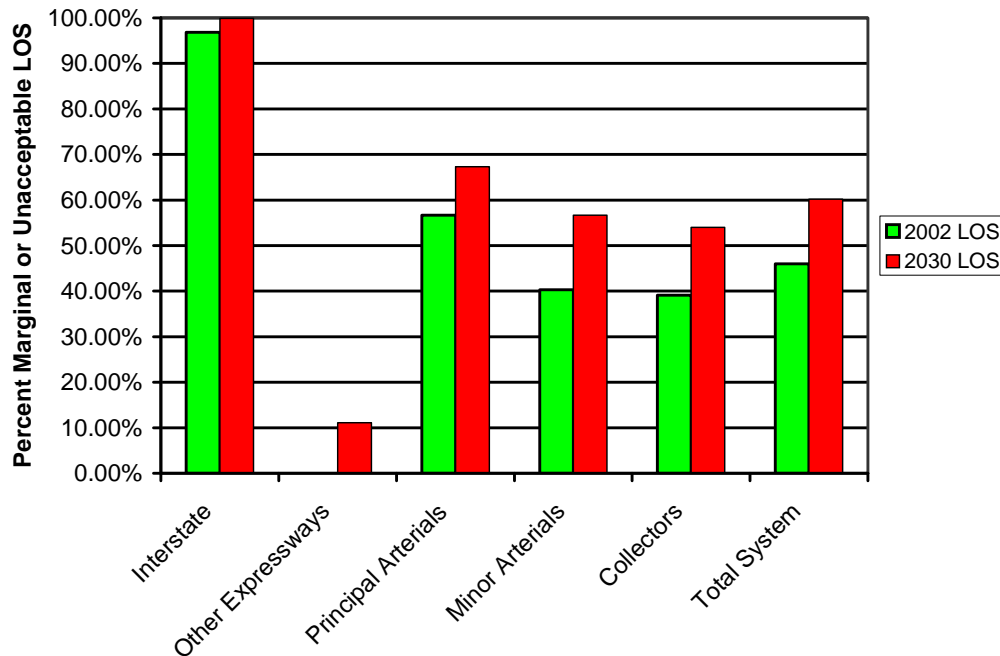
### **Year 2035 No-Build Traffic Projections**

Without substantial capacity increases, the functionally classified highway network is projected to be operating at a marginal level of service during the year 2035. Over 60% of the system is projected to be operating at a marginal or unacceptable level of service, an increase of over 30% compared to 2007. Despite this, less than two in five miles of the system is projected to have an unacceptable level of service.

**Table 5.5 Projected 2035 Level of Service (LOS) per Classification – Existing Network**

Classification	Acceptable LOS A to C	Marginal LOS D & E	Unacceptable LOS F	Percent Change in Marginal or Unacceptable LOS	Average LOS
Interstate	0.0%	44.3%	55.6%	+3.3%	E
Other Expressways	88.9%	11.1%	0.0%	Infinite	B
Principal Arterials	32.7%	48.7%	18.6%	+18.7%	D
Minor Arterials	43.3%	38.3%	18.4%	+40.7%	C
Collectors	46.0%	48.8%	5.2%	+38.1%	D
Total System	39.8%	42.3%	17.9%	+30.9%	D

**Chart 5.2 Projected 2035 Percent Marginal or Unacceptable Level of Service by Functional Classification**



Interstate 35 is projected to have the worst performance with the entire system operating worse than level of service "C" and better than half of the system operating at unacceptable levels. All other facility types show a significant increase in mileage at

a marginal or unacceptable level of service with Minor Arterials showing the largest increase. In terms of location, nearly all of the facilities with significantly worse levels of service were found in the suburban areas such as Hewitt, Woodway, West Waco or China Spring. These are also the regions expected to experience the greatest growth in population and employment during the planning period.

**Table 5.6 Projected Top 10 Most Congested Roads - 2035**

Road	From	To	Volume to Capacity Ratio	Percent Change in Traffic from 2007
China Spring Rd (FM 1637)	FM 3434	Steinbeck Bend Rd (FM 3051)	2.02	+25.1%
Texas Central Pkwy	Imperial Dr (FM 3223)	US 84	1.71	+46.7%
China Spring Rd (FM 1637)	Wortham Bend Rd (FM 2490)	FM 3434	1.58	+14.4%
SH 6	Spur 412 / Doshier Ln	FM 185	1.52	+64.0%
IH-35	US Business 77	FM 308	1.32	+22.5%
Wortham Bend Rd (FM 2490)	China Spring Rd (FM 1637)	N Rock Creek Rd	1.30	+51.4%
SH 6	E Loop 340	FM 1860	1.30	+28.6%
US 84	Cotton Belt Pkwy (FM 2188)	Speegleville Rd / FM 2837	1.30	+22.4%
Waco Dr (US 84)	Valley Mills Dr	N 36 <sup>th</sup> St	1.25	+0.1%
US 84	SH 317	Cotton Belt Pkwy (FM 2188)	1.24	+37.2%

### 5.1.3 Highway Surface Conditions

Proper maintenance will keep a road or bridge in good operating condition for many years beyond a normal useful life of 40 years. Even with proper maintenance, at some point the road or structure will deteriorate to the level of requiring reconstruction. This section reviews the condition of the functionally classified system to help determine which facilities are in need of reconstruction.

The MPO staff conducted a visual survey of the surface condition of the functionally classified highway system during early 2004. The survey consisted of observing the presence or absence of the following conditions: travel path cracking, patching, weathering, potholes and edge cracking. Each condition was scored based on 2 points for no visible problems, 1 point for visible problems that did not significantly



impact ride quality and 0 points for visible problems that significantly impacted ride quality.

The results showed that as a general rule, the functionally classified network has an acceptable pavement surface condition. Only 5 highways were found to have a surface condition rating equal to zero (see table 3.8) and only 6% of all functionally classified facilities were found to have a surface condition rating below 5.

Of concern was the relatively high number of urban collectors rating below 5. These facilities are generally maintained by McLennan County or a municipal government and may point to a need for additional resources for highway maintenance at the county or municipal level. Another point of concern was the relatively low average scores for Interstate 35. It should be noted, however, that at the time of publication, resurfacing work was being conducted for a significant portion of the lowest scoring segments of IH-35.

**Table 5.7 Road Surface Condition by Functional Classification\***

Classification	Average Condition Rating	Percent with Rating Below 5
Interstate	6.8	0.0%
Other Expressways	9.0	8.5%
Principal Arterials	9.4	1.9%
Minor Arterials	8.7	5.4%
Urban Collectors	6.8	27.8%
Rural Collectors	8.6	3.4%
Total**	8.4	6.0%

\*20.4 centerline miles of roads were not evaluated due to the facility being under construction.

\*\*Roads classified as local were not evaluated.

**Table 5.8 Facilities with Surface Condition of Zero**

Road	From	To	Classification	Traffic Count
Craven Ave	FM 933 (Gholson Rd)	Business 77	Minor Arterial	475
Williams Rd	US 84	Concord Rd	Collector	2,545
Walnut St	Crest Dr	Craven Ave	Collector	510

## 5.1.4 Bridge Conditions

Every 2 years the Texas Department of Transportation evaluates the structural condition of every public use bridge within Texas to help in determining priorities for bridge rehabilitation and reconstruction. Each bridge receives a score based on a maximum of 100 points with scores of 50 or below an indication of structural deficiency. Bridges scoring below 50 points are eligible for replacement using federal funds.

The results show that most bridges significantly exceed minimum standards for structural integrity. Of the 659 public use bridges in McLennan County, only 51 or 7.7% were considered structurally deficient. Of the structurally deficient bridges, 43 or 84.3% were maintained either by McLennan County or a local municipality.

In addition to bridges, there are 17 low water crossings within McLennan County. These are crossings where instead of a bridge being built over the water feature, the road uses the creek bed for the crossing. Low water crossings are used in locations where traffic volumes are generally low and the creeks are dry most of the time. Low water crossings are not used as extensively as in other parts of Texas due primarily to the amount of rainfall received within McLennan County. Despite the fact that these crossings are usually dry, they do occasionally flood due to excessive rainfall.

**Table 5.9 2007 Bridge Sufficiency Ratings by Functional Classification**

<b>Classification</b>	<b>Bridges</b>	<b>Average Rating</b>	<b>Percent Structurally Deficient</b>
Interstate	110	82.3	0.0%
Other Expressways	58	77.7	1.7%
Principal Arterials	75	84.3	1.3%
Minor Arterials	78	85.4	2.6%
Collectors	126	87.9	3.2%
Local	207	72.2	20.8%
Total	659	81.2	7.7%

### 5.1.5 Highway Crash Analysis

An important area of emphasis identified in SAFETEA-LU was ensuring the safety and security of the transportation system. To perform an analysis of crashes, the MPO staff collected crash data from the Texas Department of Transportation and the Cities of Waco, Bellmead, Beverly Hills, Hewitt and Lacy-Lakeview for the year 2008.

The total number of crashes evaluated by the MPO staff equaled 3,896. In order to compare highways with substantially different traffic volumes and mileages, the MPO staff used the statistic of crashes per million vehicle miles traveled which holds both variables constant. Urban Collectors had the highest rate of crashes per million VMT and Interstate 35 had the lowest. It should be noted that although IH-35 had the lowest crash rate, it had almost twice the crashes of the urban collectors.

Of the crashes evaluated, 12 involved a fatality and 578 involved a serious injury. Rural collectors had the highest percentage of injury or fatal crashes but urban collectors had the lowest percentage. Speed is the primary difference between the facility types with the average posted speed for rural collectors being 60 miles per hour and urban collectors with an average posted speed of 30 miles per hour.

**Table 5.10 Highway Crash Rate and Severity by Functional Classification**

Classification	Crashes per Million Vehicle Miles Traveled	Percent Injury or Fatality*
Interstate	0.607	21.7%
Other Expressways	1.147	27.4%
Principal Arterials	2.246	24.3%
Minor Arterials	3.125	26.6%
Urban Collectors	4.480	19.6%
Rural Collectors	0.956	34.4%
Total**	1.180	26.8%

\*Crashes occurring at the intersection of differing classification types were counted in both classifications.

\*\*Total for crashes occurring on functionally classified facilities.

### Problem Areas

Even one crash is unacceptable. With nearly 3,900 crashes in one year and considering that most crashes are the result of driver behavior, it is impossible for a fiscally constrained transportation plan to eliminate all possible crash scenarios. Instead, the MPO staff has identified the 40 worst locations within the Metropolitan Area for crashes with the goal of reducing the crashes at these locations.

In identifying the worst crash locations, the MPO staff separated locations into highway segments and intersections. Then the worst locations for each were identified by the absolute number of crashes and then by crashes per million vehicle miles traveled for highway segments and crashes per million vehicles for intersections. This analysis is used in order to compare highways and intersections with differing traffic volumes and segment lengths. Further analysis provided details about the manner of collisions for each segment or intersection thus providing insights on possible corrective actions to reduce the number of crashes at these locations.

**Table 5.11 Worst 10 Highway Segments – Crashes per Million Vehicle Miles Traveled - 2008\***

Street	From	To	Total Crashes	Crashes per Million VMT	Fatal & Serious Injury Crashes
Bosque Blvd**	N 34 <sup>th</sup> St	N 18 <sup>th</sup> St	29	31.37	8
N 26 <sup>th</sup> St**	Waco Dr	Franklin Ave	16	31.33	5
Franklin Ave**	S 18 <sup>th</sup> St	S 11 <sup>th</sup> St	27	29.24	4
N 17 <sup>th</sup> St**	Franklin Ave	Waco Dr	42	25.92	5
N 18 <sup>th</sup> St**	Waco Dr	Franklin Ave	41	25.30	9
S 12 <sup>th</sup> St	Speight Ave	LaSalle Ave	22	20.10	1
Valley Mills Dr	Wooded Acres Dr	Lake Air Dr	26	19.92	2
Dutton Ave	S 11 <sup>th</sup> St	S 18 <sup>th</sup> St	13	19.86	3
Homan Ave**	N 18 <sup>th</sup> St	N 26 <sup>th</sup> St	18	19.79	2
S 26 <sup>th</sup> St	Franklin Ave	Dutton Ave	20	17.99	4

\*Minimum 10 crashes

\*\*One-Way streets

**Table 5.12 Worst 10 Highway Segments – Total Crashes - 2008**

Street	From	To	Total Crashes	Fatal & Serious Injury Crashes
SH 6 / W Lp 340*	US 84	IH-35	82	15
IH-35*	S 5 <sup>th</sup> St	S 18 <sup>th</sup> St	74	12
North Lp 340	IH-35	US 84	59	3
IH-35*	M L King Jr Dr	US Business 77	48	10
IH-35*	Valley Mills Dr	S 18 <sup>th</sup> St	43	8
N 17 <sup>th</sup> St**	Franklin Ave	Waco Dr	42	5
N 18 <sup>th</sup> St**	Waco Dr	Franklin Ave	41	9
Hewitt Dr	US 84	Chapel Rd / Imperial Dr	41	5
LaSalle Ave	S 18 <sup>th</sup> St	Waco Traffic Circle	39	4
Valley Mills Dr	Bosque Blvd	Wooded Acres Dr	36	5

\*Expressway section – includes frontage road crashes.

\*\*One-Way streets

Reviewing the highway segment analysis, the highways with the greatest number of crashes, in addition to the greatest number of serious injury & fatal crashes are generally expressway or interstate sections. These facilities, however, also have the greatest traffic volumes, thus when taking into account vehicle miles of travel (VMT), these facilities have some of the lower values (<2.0 crashes per million VMT). When taking into account VMT, many of the worst highway segments are the one-way pairs within Waco.

When reviewing the contributing factors, there is not a clear pattern as to why the one-way pairs have significantly higher crash rates other than the signalized intersections along these facilities have significant numbers of red-light running crashes (see tables 5.13 & 5.14). These red-light running crashes are not necessarily related to the operations of the one-way pairs and would not necessarily have been prevented by conversion to two-way streets. In 2009, the City of Waco did convert the 11<sup>th</sup> / 12<sup>th</sup> street pair from one-way to two-way operations. The MPO will monitor crash rates along these facilities to assess whether such a conversion would have an impact on crash rates for similar facilities.

Another facility type, highways with continuous left turn lanes, appears to have significantly higher numbers of crashes in addition to higher crash rates per million VMT. One facility in particular, Valley Mills Drive, appears to be particularly problematic, especially between Bosque Blvd and Lake Air Drive. One of the significant issues are vehicles either turning left from the center turn lane into a place of business or vehicles turning left from a place of business into the flow of traffic. These maneuvers are

resulting in a large number of front to side-impact collisions, which are also the manner of collision most likely to result in either a serious injury or fatality when speed is not a significant factor. Another similar facility with a similar crash experience is Hewitt Dr. This corridor is becoming a concern due to the significant growth in both population and retail activity recently experienced in the corridor and projected during the planning period.

Other trends of concern are the high number of crashes occurring at merge locations along the expressway and interstate systems where high speed traffic is mixing with relatively lower speed traffic merging from the frontage roads. TxDOT is current reviewing designs for such facilities to reduce the number of on-ramps and to reconfigure these ramps to an 'X' configuration which switches many of the merging activities from the main lanes of such facilities to the lower speed frontage roads.

**Table 5.13 Worst 10 Intersections – Crashes Per Million Vehicles – 2008\***

Primary Street	Secondary Street	Total Crashes	Crashes per Million Vehicles	Fatal & Serious Injury Crashes
N 17 <sup>th</sup> St**	Austin Ave	19	3.28	2
LaSalle Ave	Waco Traffic Circle	24	2.87	1
Bosque Blvd**	N 26 <sup>th</sup> St**	10	2.25	6
N 18 <sup>th</sup> St**	Franklin Ave	13	1.90	1
N 17 <sup>th</sup> St**	Franklin Ave	10	1.82	1
N 18 <sup>th</sup> St**	Austin Ave	10	1.73	2
US Business 77	N Lp 340 / Industrial Dr (FM 3051)	18	1.37	3
M L King Jr Dr	E Herring Ave	10	1.31	3
Lyle Ave**	N 18 <sup>th</sup> St	11	1.21	1
Valley Mills Dr	Waco Dr	23	0.95	4

\*Minimum 10 crashes

\*\*One-Way street

**Table 5.14 Worst 10 Intersections – Total Crashes - 2008**

Primary Street	Secondary Street	Total Crashes	Fatal & Serious Injury Crashes
LaSalle Ave	Waco Traffic Circle	24	1
Valley Mills Dr	Waco Dr	23	4
N 17 <sup>th</sup> St*	Austin Ave	19	2
US Business 77	N Lp 340 / Industrial Dr (FM 3051)	18	3
Franklin Ave	N New Rd	14	4
Valley Mills Dr	N New Rd	13	2
N 18 <sup>th</sup> St*	Franklin Ave	13	1
Valley Mills Dr	Bagby Ave	12	3
Waco Dr	N 4 <sup>th</sup> St*	11	3
Waco Dr	N New Rd	11	2

\*One-Way street

In the staff review of intersection related crashes, the primary factor identified is one or more vehicles intending to run a red signal or failing to yield at either a stop or yield sign. Of the worst intersections, all but one, LaSalle Ave at the Waco Traffic Circle, are controlled by a traffic signal. As mentioned with the highway segment analysis, signalized intersections along the one-way pair system experienced significant numbers of red-light running crashes, thus contributing to the high crash rates per million VMT for those facilities. The 17<sup>th</sup> and 18<sup>th</sup> street corridors between Washington and Franklin Avenues and the intersections between Bosque / Homan / 25<sup>th</sup> / 26<sup>th</sup> Streets are some of the more problematic in terms of red-light running. The City of Waco is currently evaluating these are several other intersections with similar problems for red-light camera enforcement to reduce these types of crashes. The City and MPO staff are also reviewing some intersections, such as Franklin Ave at New Rd, for different design treatments such as the possibility of a traffic circle where space permits.

Another problematic intersection is where LaSalle Ave intersects the Waco Traffic Circle. Review by TxDOT and the City of Waco indicated that the primary problem is the close proximity of the Circle Drive intersection which does not permit LaSalle Ave traffic to safely merge into the traffic circle. TxDOT and Waco are currently reviewing design treatments for this portion of the circle to determine a low-cost alternative that preserves traffic flow onto Circle Drive.

## 5.2 Public Transportation

In this section, the demand for public transportation is estimated to compare to current services and identify existing gaps in coverage. Important destination points are also identified and mapped to analyze the efficiency and completeness of existing services. The results from this section will be used in Chapter 5 to identify future projects to eliminate gaps in service and to ensure adequate service to those areas with the greatest estimated demand.

### 5.2.1 Transit Need Index

All areas have some degree of need for public transportation. In order to estimate this demand, an index was used to quantify and locate areas of greatest need for the six county region. Transit need indices have been widely used within urbanized areas, but generally have a significant emphasis on population density for the provision of urban fixed route services. For this plan, the transit need index has been modified to estimate overall need regardless of population density. The MTP uses the transit need index used to estimate need for the 6 county Heart of Texas region in the Regional Public Transportation Coordination Plan.

### Methodology

To estimate need, several characteristics were identified for persons for whom use of a motor vehicle is either a financial burden or a physical impossibility. Each population characteristic was identified at the US Census Block Group level, the smallest level of geography for which this data were available. The primary characteristics included the following:

- Median Household Income
- Persons in Poverty
- Persons Age 65 and Above
- Persons with a Self-Care or Stay at Home Disability

Although not a population characteristic, occupied housing units with no automobiles was also used to estimate those households that have no access to a motor vehicle. Even though high transit usage by minorities is generally related to overall lower household incomes or higher poverty rates for minorities, minority population was also utilized within the index primarily because there was not a direct relationship between minority population and low income or high poverty. Some block groups within the region had relatively high minority populations but relatively high household incomes or relatively low poverty rates and vice-versa. Minority population was not emphasized within the index, however, and was weighted accordingly.



Each population characteristic was weighted within the index to reflect its relative importance or unimportance. Table 4.1 identifies the relative weights for each characteristic.

**Table 5.14 – Population Characteristics & Weights**

<b>Population Characteristic</b>	<b>Weight</b>
Median Household Income	1.0
Persons in Poverty	2.0
Persons Age 65 or Over	2.0
Persons with a Self-Care or Stay at Home Disability	1.5
Occupied Housing Units with No Automobiles	1.5
Minority Population	1.0
Population Density	0.5

While the goal of the transit need index is to identify places where the population may have a greater need for transit, regardless of the size of the population, the quantity of service would be greater for areas with a high need index and high population densities. For this reason, population size classes were used within the index to provide a slightly higher score for those areas with greater population. Table 4.2 identifies the population size classes used within the index.

**Table 5.15 – Population Size Classes**

<b>Population Density (Persons per Square Mile)</b>	<b>Size Class</b>
0 to 500	1
500.1 to 1000	2
1000.1 to 3000	3
3000.1 to 6000	4
Over 6000	5

In constructing the transit need index, each population characteristic for each block group was compared to the averages for the entire region. The average for the Heart of Texas region was indexed at 1.0. Scores for individual block groups were based on a percentage of the regional average. For instance, the regional average for percent of persons in poverty is 16.37%. A block group with a percentage of 32.74% (double the regional average) would achieve a score of 2.0 for this population characteristic. For population density, the size class would be the score for the block group. Once a score

is determined, the score is multiplied by the weight for that population characteristic to determine the final, weighted score. The weighted scores are then added together to calculate the transit need index. Table 4.3 identifies the regional averages for the Heart of Texas Region.

**Table 5.16 – Regional Averages and Weighted Scores**

Population Characteristic	Regional Average	Initial Score	Weighted Score
Median Household Income	\$32,606	1.0	1.0
Percent of Persons in Poverty	16.37%	1.0	2.0
Percent of Persons Age 65 or Over	14.47%	1.0	2.0
Percent of Persons with a Self-Care or Stay at Home Disability	10.16%	1.0	1.5
Percent of Occupied Housing Units with No Automobiles	7.87%	1.0	2.0
Percent Minority Population	16.2%	1.0	1.0
Population Density	0.5	1	0.5
Regional Score:			10.0

After the index scores had been determined for each block groups, the relative demand for transit was then determined based upon their score. Table 4.4 identifies the score classifications. Map 4.1 shows the final transit need classifications for the Heart of Texas Region.

**Table 5.17 – Transit Need Classifications**

Classification	Very High	High	Above Average	Average	Below Average	Low
Index Score	Over 22.50	17.50 to 22.49	12.50 to 17.49	10.00 to 12.49	7.50 to 9.99	Below 7.50

## Analysis

In order to achieve an index classification of “High” or “Very High”, a block group must have high scores for each of the population characteristics used within the transit need index. Conversely, to achieve a classification of “Low”, a block group must have low scores for each population characteristic. A mix of high and low scores generally results in a classification of “Average”.

According to the transit need index, the most significant concentration of transit demand exists near Downtown Waco, East Waco and portions of South Waco (See Map 5.10). These areas are characterized by low incomes and high poverty rates, high percentages of persons with disabilities and relatively low automobile accessibility. Other areas within the region with high demand can be found in the vicinity of McLennan Community College, TSTC and along the Sanger Ave corridor between Lake Air Dr and Valley Mills Dr. Most other areas were generally classified as having "Average" or less transit need. The lowest scores were found in Woodway, which had the highest incomes and the lowest poverty rates. Low scores were also found in Hewitt, Robinson and the China Spring Areas. Map 5.6 shows the transit need index scores for the Waco Urbanized Area.

Transit need only measures half of the equation for determining the location and type of public transportation service. Locating primary destination points (large employers, retail shopping center, doctors offices, etc.) and how to connect these to the high demand areas is the other half of the equation. Section 5.2.2 identifies the most important destinations within the region and provides this analysis.

## **5.2.2 Destination Analysis**

The MPO staff analyzed the Waco Transit Fixed Route system to determine its effectiveness in reaching primary destination points within McLennan County. The MPO identified 1,318 locations that are likely attractors of riders from the system. Of these destinations, 174 (13.2%) were located outside of the Waco Urbanized Area. Of the destinations within the urbanized area, the MPO determined that 72.8% of the destinations within the Waco Urbanized Area were within a reasonable walking distance of one of the fixed routes (defined as  $\frac{1}{4}$  mile without significant barriers to cross).

Of all destination classes, three stand out for being underserved by the fixed route service: Industrial / Manufacturing, Nursing Home / Assisted Living and Parks / Recreation / Tourism. In each case less than 70% of the destinations are within walking distance, although only Nursing Home / Assisted Living had less than 70% of destinations within the  $\frac{3}{4}$  mile distance of one or more fixed routes.

**Table 5.21 – Destination Analysis for Waco Transit Fixed Routes: Waco Urbanized Area**

Destination	Total in Urban Area	Percent within ¼ Mile	Percent within ¾ Mile
Apartment Complexes	123	73.2%	91.1%
Banks / Financial	59	78.0%	88.1%
Child Day Care	79	72.2%	82.3%
Government / Public Assistance	91	83.5%	89.0%
Hotels / Motels	49	93.9%	98.0%
Industrial / Manufacturing	103	58.3%	79.6%
Medical / Dental	105	83.8%	89.5%
Nursing Home / Assisted Living	15	66.7%	66.7%
Parks / Recreation / Tourism	104	51.9%	71.1%
Retail / Office Centers	135	85.9%	90.4%
All Others	281	67.7%	81.9%
All Destinations	1,144	72.8%	85.5%

Public transportation services from the surrounding rural counties make daily trips into the Waco Metropolitan Area primarily for medical or school trips. As these services are primarily demand response services, providing curb to curb service, access to other destinations within the Waco Metropolitan Area can only be accomplished through a transfer to one of the fixed routes for Waco Transit. Below is a discussion of the medical and educational services which serve as the primary destination points for these rural services and connectivity to the Waco Transit fixed route system.

### **Hospitals / Medical Offices / Kidney Dialysis**

The Waco Metropolitan Area is served by 3 hospitals, Providence Medical Center and Hillcrest Baptist Medical Center both of which are located along SH 6 / Loop 340 and the VA Medical Center located on New Rd near Beverly Hills. Although each rural county has some medical services available, specialized treatments within the 6 county Heart of Texas region are generally only found in Waco. Medical treatments are generally not optional and for those older than age 65 or with serious medical conditions and regular visits to medical professionals can be a matter of life or death. For this reason, medical appointments dominate the trip purposes for rural public

transportation within the Heart of Texas region with between 45 and 75 percent of all current trips being medically related. A significant percentage of these trips are related to kidney dialysis, trips that must be made on a regular basis. The following are the more important medical destinations within the region, all of which are served by one or more Waco Transit fixed routes.

- VA Medical Center, Waco
- Hillcrest Baptist Medical Center, Waco
- Providence Medical Center, Waco
- Brazos Kidney Disease Center, Waco
- Bellmead Kidney Disease Center, Bellmead

## **Education**

Three institutions of higher education exist within the Waco region. Baylor University in Waco is the only four-year university within the region. Texas State Technical College (TSTC) provides two-year degrees focusing on technical trades. McLennan Community College provides two-year associate degrees in a number of disciplines as well as the City College program which permits students to earn 4-year and graduate degrees through Tarleton State University and the University of Texas at Arlington. Waco Transit serves Baylor with a shuttle service that circulates through the campus and immediate vicinity. The Waco Transit Fixed Route Service serves all three schools with one or more fixed routes.

### **5.2.3 Security of the System**

Ever since the terrorist attacks of September 11<sup>th</sup>, ensuring adequate security of the transportation system has been a top priority of the US Government. To emphasize this, SAFETEA-LU separated security into a stand alone planning consideration. In Waco, the public transportation system is the most obvious first line of defense in securing the transportation system, as this is the mode with the largest concentration of travelers in one place at one time. It is not terrorism, however, but crimes such as robbery, theft or assault that pose the most realistic, although uncommon, threat to users of Waco Transit. It is important to note, however, that due to the very nature of topic, some details regarding the security of the system cannot be discussed in a public forum. Both Waco Transit and the Heart of Texas Council of Governments (rural and elderly & disabled programs) coordinate with local first responders and McLennan County Emergency Management to minimize potential threats to their respective systems. The details provided below are such that a public discussion does not jeopardize their effectiveness in minimizing threats to the users of the system.

The first line of defense for users of Waco Transit are the buses themselves. In late 2007, Waco Transit began accepting delivery of new buses to replace the existing fleet (See project T-2). These new buses are equipped with an audio / video surveillance system to record all activities inside and outside of the bus as well as all sound inside the bus.

This system can be monitored remotely in real time should the driver declare an emergency or a threat be made against the system. The buses also include Geographical Positioning System (GPS) technology which allows Waco Transit to track every movement the bus makes. Finally each bus is equipped with an emergency switch that can be activated by the driver that automatically sends an emergency signal to the Waco Police department and Waco Transit and activates an emergency indicator on the bus for easy identification.

The next line of defense are the facilities maintained by Waco Transit, including the Intermodal Center and the Maintenance & Administration Facility. Both facilities have video surveillance to monitor activities in and around these buildings. In addition, electronic door locks have been installed to restrict access to certain areas of each facility. Access to restricted areas can only be provided through magnetic ID cards which records the employees name, date, time, and area of the facility the employee is accessing. This system can also be programmed to restrict the access of employees to only those areas within each facility where access is necessary for their position.

Bus shelters (See project T-1) are another area being targeted by Waco Transit for additional security measures. During the winter months, Waco Transit fixed route operations begin and end during darkness. To provide a level of comfort for system users, future shelters are proposed to be lit with solar powered lights. In addition to these measures, emergency call boxes are proposed for installation at each shelter. Once activated by a user being threatened, video and audio surveillance of the shelter would begin and then would connect to E-911 and to local first responders.

## **5.2.4 Coordination of Public Transportation Services**

In November of 2006, the Heart of Texas Council of Governments (HOTCOG), in cooperation with the Waco MPO, Waco Transit, TxDOT, and Central Texas Senior Ministries, developed a the Coordinated Regional Public Transportation Plan. This plan, which covers the 6 county region served by HOTCOG, identifies the long term public transportation needs for the region and strategies the region's governments intend to implement to provide more service with the same resources. The Waco MPO Policy Board adopted and supported this plan in November, 2006 and by this reference incorporates the recommendations of this plan into the MTP.

## **5.3 Bicycle and Pedestrian**

### **5.3.1 Bicycle Needs**

Wilbur Smith Associates identified several corridors appropriate for bicycle facilities within the Waco Urbanized Area in a draft document submitted in 2005. The MPO staff reviewed these corridors and made appropriate changes and prioritized the corridors in

order of importance. Sections 7.17 and 7.26 identify the top priorities identified by the staff and Map 7.9 identifies all corridors and priorities within the Waco Urbanized Area.

### **5.3.2 Pedestrian Needs**

The City of Waco has produced a sidewalk plan to identify corridors where the construction or reconstruction of sidewalks are required when plans are submitted for new commercial or residential construction. This plan also serves as a guide for the construction of new sidewalks as city funds become available. The MPO staff used the Waco plan as a starting point for the development of a regional sidewalk network and to prioritize corridors for project recommendations identified in sections 7.17 and 7.26. Corridors identified by the staff would construct a sidewalk on one side of the roadway, unless otherwise noted, and would provide all other necessary infrastructure such as wheelchair ramps, etc.

The MPO staff identified 3 levels of priority for pedestrian corridors. The top priorities were to connect elementary and some secondary schools to nearby neighborhoods, correct a safety problem or complete a short gap in the existing system. Second priorities extend the system to connect to retail corridor and remaining secondary schools. Third priorities were to make final connections necessary to support an expanded public transportation network and to support the Alternative 2 land use scenario identified in section 3.1.4. The MPO staff did not identify all corridors identified within the Waco plan and focused on the most important connections. Maps 7.7 and 7.8 identify the priorities identified by the MPO staff.

## **5.4 Rail**

The population of the Dallas / Houston / San Antonio triangle is anticipated to nearly double during the MTP planning period putting significant strains on the highway and aviation systems. It is anticipated that even with a wider IH-35, a separate toll road, and larger airplanes that these systems will not be able to accommodate the mobility demands of the triangle. Two proposals have been made to introduce high speed rail into the modal mix in an attempt to meet these mobility needs.

### **Future Passenger Rail**

Commuter rail uses self-propelled cars on existing freight rail tracks with travel speeds less than 60 mph. These systems are generally far less expensive than other forms of passenger rail and also make numerous stops. Commuter rail only been discussed as a possibility by governments in the Heart of Texas and North Central Texas Regions. Mobility 2035, the Metropolitan Transportation Plan for the Dallas / Fort Worth region identifies potential future extensions of commuter rail southward from the Fort Worth Intermodal Center into Cleburne and further south. Additional service is also identified southward from Union Station in Dallas to Waxahatchie and could provide another possible southward connection. Conceptually a commuter rail line would run

approximately parallel to IH-35 and connect to Austin and San Antonio via Waco. Such a system would compliment any high-speed system (see below) by providing stops to smaller communities which could not be feasibly served by the high-speed system. It is envisioned that Waco would be a connection point between the two systems. Currently there are no substantive plans for development of such a system and no funding has been authorized.

High-speed passenger rail refers to any such equipment that has a normal operating speed in excess of 150 mph. Due to their speed, these facilities are completely grade separated from other transportation facilities and make far fewer stops than other forms of rail transportation. The current proposed high speed rail concept is referred to as the "Texas T-Bone". This concept would create 2 high speed lines: the first line running from the Dallas / Fort Worth International Airport to San Antonio, the second line running from Houston and intersecting the first line in Temple. The Texas T-Bone is currently only conceptual and does not have funding for any phase of study.

### **Future Freight Concepts**

The Texas Transportation Institute is currently developing a system to transport short to medium haul freights via a fully automated monorail based system. Called the 'Freight Shuttle', the system would use individual carriers to transport a single 40 foot container distances of up to 500 miles. The system would be fully elevated, travel at speeds of 60 mph and use electricity at least partly generated by solar power. Due to the relatively low speeds, existing expressway right of way could be utilized thus keeping potential costs relatively low. The intent of the Freight Shuttle is to provide an energy efficient, low emission and cost effective means of transporting goods which Class I railroads such as BNSF or Union Pacific cannot transport cost-effectively and to minimize the amount of freight being transported long-distances by truck. A conceptual model of the Freight Shuttle is currently being developed by TTI and could be implemented by as early as 2020. The IH-35 corridor has been discussed as one of the first lines on the system should the concept prove to be reliable and cost-effective. If implemented, freight transfer stations would have to be developed and located to deliver freights from the shuttle to businesses and industries within the region.

## **5.5 Aviation**

US Airlines are in the process of phasing out turbo-prop aircraft for their short distance and low volume routes in favor of regional jets. Regional jets are generally larger than the turboprops they are replacing with seating capacities in the range of 50 to 70. As a result they require more terminal space to accommodate the larger number of passengers and the larger aircraft require greater runway distances for takeoff and landing. ACT is capable of handling regional jets both in terms of terminal space and runway length.

General aviation is also moving towards a greater usage of corporate jets as they are capable of traveling greater distances before refueling and are faster than the

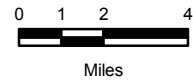


turboprop aircraft. These aircraft also require greater runway distances than their turboprop cousins for takeoff and landing. ACT, CNW and PWG all currently accommodate corporate jets with sufficient runway length, parking aprons, refueling and powerplant services.

An opportunity to greatly expand aviation related industries at CNW has generated a proposal to construct a 6500' x 150' taxiway extending eastward from the end of runway 35R into property owned by the Waco Industrial Foundation. This taxiway will effectively force traffic accessing the L-3 plant at CNW to use Aviation Pkwy instead of Williams Road, which most plant traffic currently uses. Williams Road and Concord Road will both be closed to traffic at the point where the taxiway crosses. The resulting traffic increase at the intersection of Aviation Pkwy and US 84 will likely require the installation of a traffic signal short term and perhaps the construction of a grade separation long term.

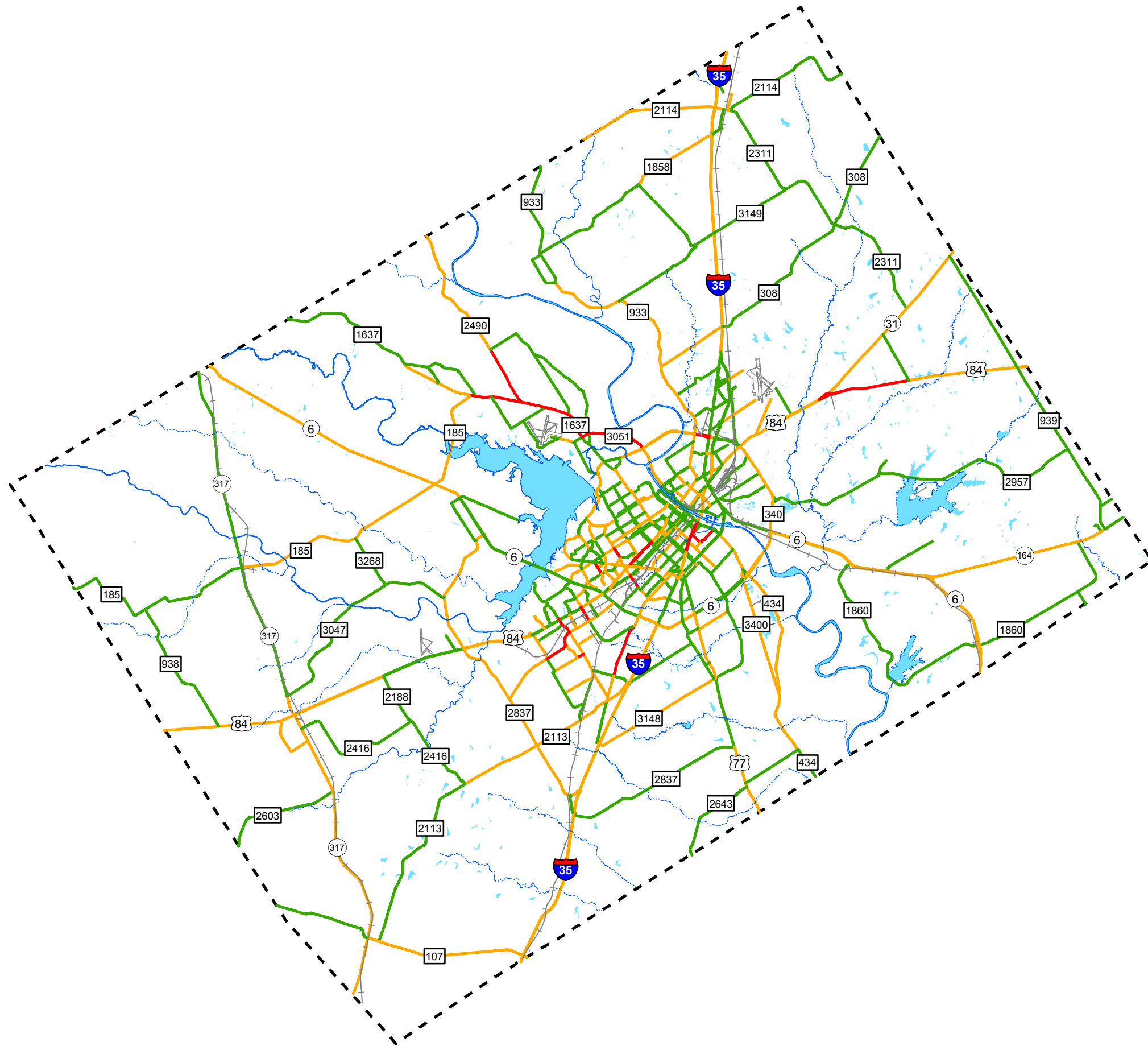
**2007 Level of Service**

- Acceptable
- Marginal
- Unacceptable
- Waco Metropolitan Area



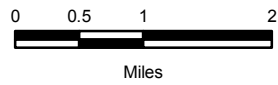
September, 2009

**Map 5.1  
2007 Level of Service**



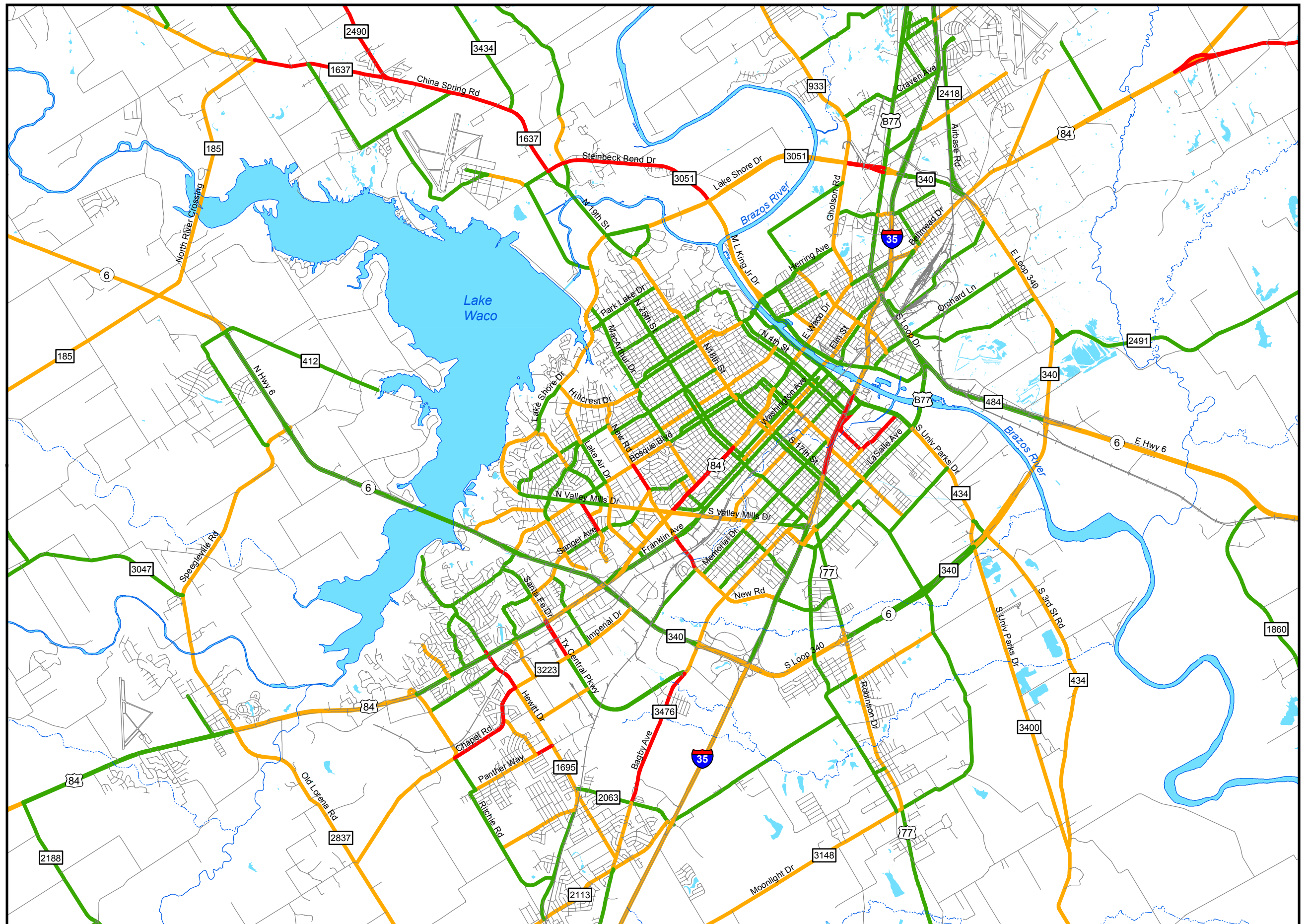
**2007 Level of Service**

- No Data
- Acceptable
- Marginal
- Unacceptable
- Waco Metropolitan Area



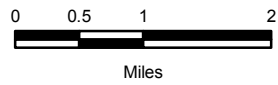
September, 2009

**Map 5.2  
2007 Level of Service - Downtown**



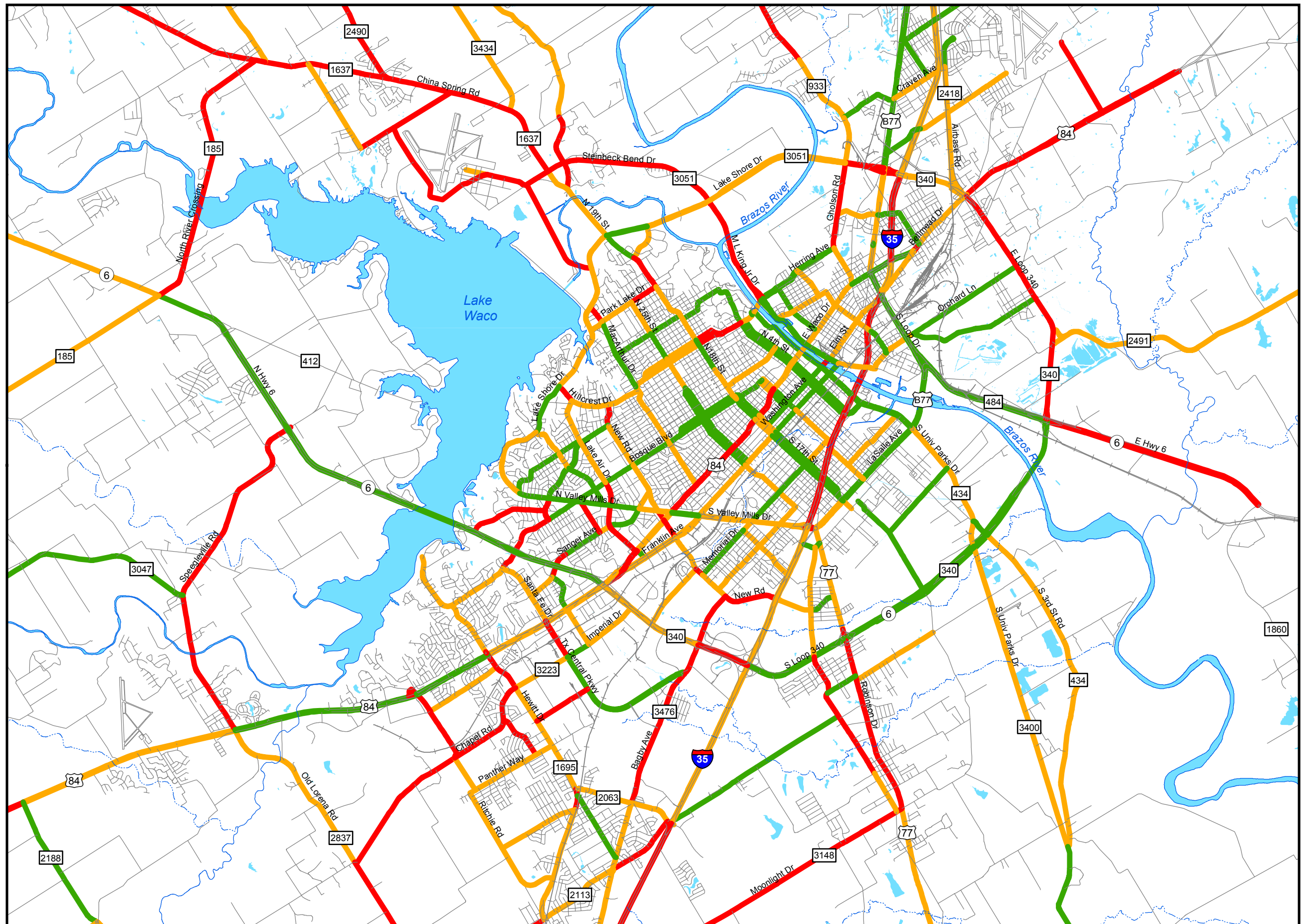
**2035 Level of Service**

- No Data
- Acceptable
- Marginal
- Unacceptable
- Waco Metropolitan Area



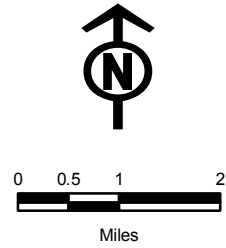
September, 2009

**Map 5.3  
2035 No Build Level of Service**



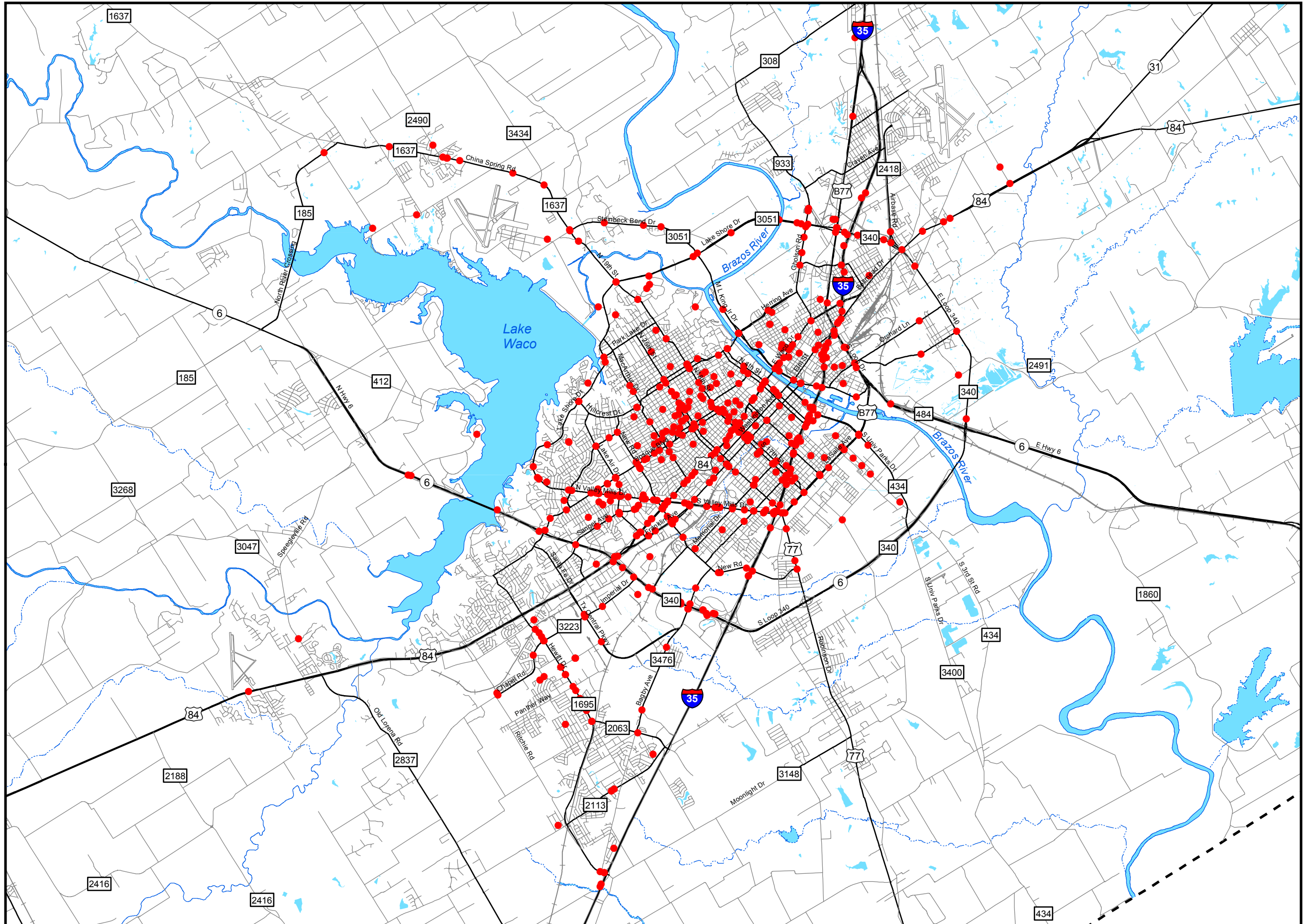


● Fatal & Serious Injuries



September, 2009

# Map 5.5 Fatal & Serious Injury Crashes Year 2008



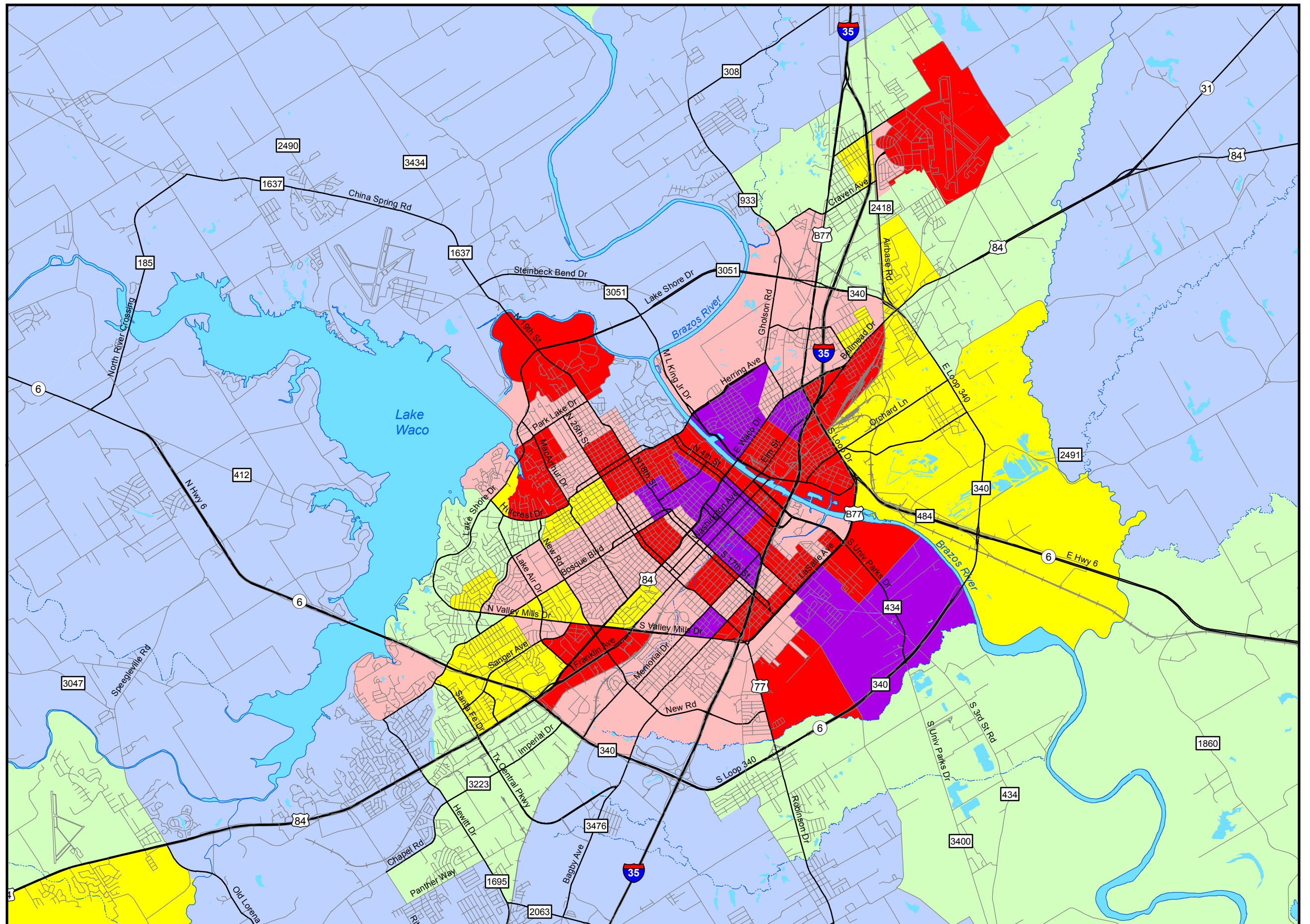
**Transit Need Index**

- Low
- Below Average
- Average
- Above Average
- High
- Very High



September, 2009

**Map 5.6  
Transit Need Index**



# Section 6: Revenue Forecasts

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Federal law requires projects identified within the Metropolitan Transportation Plan to be constrained by a reasonable projection of funds governments within McLennan County anticipate receiving during the planning period. Project costs beyond the anticipated revenues are unfunded and cannot be identified as a recommended priority within the MTP. This section outlines the anticipated revenues for the Waco Metropolitan Area through the year 2035.

## 6.1 Highways and Bridges

### 6.1.1 Federal and State Revenue Projections

The State of Texas divides its federal and state highway dollars into 12 separate categories of funding. Each category contains both state and federal dollars. Table 6.1 identifies each category and their intended use. The Waco Metropolitan Area is not eligible to receive funds from categories 2, 5 or 7. The Waco District of TxDOT receives funds from seven of the remaining categories based on allocation formulas adopted by the Texas Transportation Commission. Category 3 funds are allocated specifically for the Waco Metropolitan Area. Category 4 funds are project specific and are determined by the Texas Transportation Commission. Category 10 includes all federal earmarks as well as funds for landscaping projects.

In 2009, TxDOT and the Texas Association of MPOs developed a model to estimate future state & federal highway revenues based upon user defined assumptions. The model, called 'TRENDS' (Transportation Revenue Estimation and Needs Determination System), forecasts revenues by TxDOT funding categories and by year through the year 2035. In addition to requiring the user to estimate the magnitude and timing of various tax and revenue changes, the model also requires users to estimate possible population growth and fuel economy scenarios. To estimate revenues available for the Waco Metropolitan Area through the MTP planning period, the MPO utilized this model and identified 5 possible funding scenarios: Baseline, Low, Low Medium, Medium and High. The baseline scenario assumes no changes in tax rates or revenues through 2035 and is provided as a point of comparison. Similarly, the high scenario identifies the tax rates and revenues required to fully fund all priorities identified within the MTP regardless of political reality. As such, the high scenario is intended only to provide a point of comparison. The 'Low', 'Low Medium' and 'Medium' scenarios provide the most politically realistic estimates of future revenues. The assumptions for each scenario are identified in table 6.2.



**Table 6.1 – TxDOT Highway Funding Categories**

<b>Category</b>	<b>Purpose</b>	<b>Waco MPO Eligibility</b>
1	Preventative Maintenance & Rehabilitation	Yes
2	Metropolitan Mobility Projects (Urban Pop > 200,000)	No
3	Urban Mobility Projects (Urban Pop between 50,000 and 200,000)	Yes
4	Statewide Mobility Projects	Conditional*
5	Congestion Mitigation & Air Quality (Air Quality Non-Attainment Areas)	No
6	Structures Replacement & Rehabilitation	Yes
7	Surface Transportation Program Metropolitan Mobility & Rehabilitation	No
8	Surface Transportation Program – Safety	Yes
9	Transportation Enhancements	Yes
10	Miscellaneous, Congressional Earmarks and Landscaping	Yes
11	District Discretionary	Yes
12	State Strategic Priority	Conditional*

\*Conditional based upon project specific approval from the Texas Transportation Commission.

**Table 6.2 – TRENDS Revenue Model Assumptions by Scenario**

	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
State Population Growth Rate*	Low	Low	Low	Medium	Medium High
Fuel Efficiency Scenario**	High	High	High	Medium	Low
State Gas Tax	No Increases	\$0.05 increase in 2012	+\$0.07 in 2012 and +\$.05 in 2025	\$0.10 increase in 2012 and 2025	\$0.25 increase in 2012
State Diesel Tax	No Increases	\$0.05 increase in 2012	+\$0.07 in 2012 and +\$.05 in 2025	\$0.10 increase in 2012 and 2025	\$0.25 increase in 2012
Federal Gas Tax	No Increases	\$0.10 increase in 2011	+\$0.10 in 2011 and +\$.05 in 2025	\$0.10 increase in 2011 and 2025	\$0.25 increase in 2012
Federal Diesel Tax	No Increases	\$0.10 increase in 2011	+\$0.10 in 2011 and +\$.05 in 2025	\$0.10 increase in 2011 and 2025	\$0.25 increase in 2012
Texas Rate of Return on Federal Funds	85%	85%	87%	90%	93%
Indexing State Gas Tax	No	No	No	2020	2012
Percent of State Gas Tax Increase to Transportation	74%	74%	74%	74%	100%
Vehicle Registration Fees	No Increases	10% increase in 2014	+10% in 2014 and +15% in 2025	+20% in 2014, +30% in 2025	50% increase in 2014 and 2025
State Vehicle Mile Traveled Tax	No	No	No	\$0.01 per mile in 2030	\$0.015 per mile in 2025
Eliminate Gas Tax	No	No	No	2035	2030
Eliminate State Gas Tax Diversions	None eliminated	50% eliminated by 2018	75% eliminated by 2018	75% eliminated by 2014	100% eliminated by 2012
Prop 12 Bonds***	None	\$2 billion over 3 years	\$2 billion over 3 years	\$4 billion over 5 years	\$10 billion over 10 years
Prop 14 Bonds****	None	\$3 billion over 5 years	\$3 billion over 5 years	\$5 billion over 5 years	\$10 billion over 10 years
Local Option Gas Tax	No	No	\$0.03 increase in 2012	\$0.05 increase in 2012	\$0.10 increase in 2012
Local Option Diesel Tax	No	No	\$0.03 increase in 2012	\$0.05 increase in 2012	\$0.10 increase in 2012
Local Option Vehicle Registration Fee	No	No	\$10 per vehicle	\$10 per vehicle	\$20 per vehicle
Local Option Vehicle Mile Traveled Tax	No	No	No	No	\$0.0025 per mile in 2030

\*Follows the following projections from the Texas Data Center: UT San Antonio – Low equals “0.5 scenario”, Medium equals “2000 to 2004 scenario”, Medium High equals “2000 to 2007 scenario”.

\*\*Follows estimates generated by Cambridge Systematics in study titled “Accounting for Fuel Efficiency in Texas Fuel Tax Revenue Estimations” – January, 2007

\*\*\*Payback through State General Fund. Assumes availability beginning in 2012.

\*\*\*\*Payback through future transportation revenues. Assumes availability beginning in 2020 and payback beginning in 2021.

## Revenue Distribution Assumptions

The TRENDS model provides revenue estimates for the State of Texas by TxDOT Funding Category and local option revenues by County. To estimate state and federal funds for the Waco Metropolitan Area, the MPO needed to make several assumptions on how funds would be distributed to Waco.

Maintenance, bridge replacement and safety funds (categories 1, 6 and 8 respectively) are generally distributed based upon need. Since it is impossible to estimate the precise location of need for the entire state over a 25 year period, the MPO made the assumption that over time, the amount of funds received by a region will generally equal the amount if distributed based upon population. For the period of 2010 to 2020, the population of McLennan County was estimated to be 0.93944% of the state population. Thus the Waco Metropolitan Area is estimated to receive this percentage of the estimated statewide total for categories 1 and 6. As the state population is estimated to grow at a much faster rate than the population of McLennan County, it is estimated that this percentage will decrease to 0.65482% for the period of 2021 to 2035.

To estimate mobility funds, the MPO first subtracted funds which are committed to Categories 5, 7, 9 10 and 12 which are statutorily determined by formulas or distributions from either the State Legislature or Congress. The MPO assumed that these amounts would increase each year by the standard inflation rate accepted for the MTP, 4% per year. The MPO also assumed that each district would continue to receive \$2.5 million per year from Category 11 and that this amount would not change. The MPO assumed that the remaining funds (if any) would be distributed to Categories 2, 3 and 4 based upon previously accepted formulas: 65% to category 2, 10% to category 3 and 25% to category 4.

Of the 3 mobility categories (2, 3 and 4) Waco receives distributions of mobility funds only through category 3. The Texas Transportation Commission has adopted a formula which generally provides the Waco Region approximately 9.5% of category 3 funds. Although this level may fluctuate some based upon traffic and population levels, the MPO assumed that the average distribution would remain relatively constant near the 9.5% level.

Table 6.3 identifies the estimate revenues by scenario the Waco region can expect during the MTP planning period.

**Table 6.3 – Estimated Highway Revenues by Scenario in Millions**

<b>Short Range Revenues (2010 to 2020)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Maintenance	\$380.4	\$380.4	\$380.4	\$380.4	\$380.4
Mobility	\$39.4	\$99.3	\$121.2	\$253.7	\$841.1
Local Option	\$0.0	\$0.0	\$61.7	\$103.4	\$172.3
<b>Total</b>	<b>\$419.8</b>	<b>\$479.7</b>	<b>\$563.3</b>	<b>\$737.5</b>	<b>\$1,393.8</b>
<b>Long Range Revenues (2021 to 2035)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Maintenance	\$30.6	\$104.0	\$416.8	\$670.1	\$670.1
Mobility	\$0.0	\$0.0	\$0	\$51.5	\$1,342.3
Local Option	\$0.0	\$0.0	\$88.3	\$135.9	\$430.6
<b>Total</b>	<b>\$30.6</b>	<b>\$104.0</b>	<b>\$505.1</b>	<b>\$857.5</b>	<b>\$2,443.0</b>
<b>Total (2010 to 2035)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Maintenance	\$411.0	\$484.4	\$797.2	\$1,050.5	\$1050.5
Mobility	\$39.4	\$99.3	\$121.2	\$305.2	\$2,183.4
Local Option	\$0.0	\$0.0	\$150.0	\$239.3	\$602.9
<b>Total</b>	<b>\$450.4</b>	<b>\$583.7</b>	<b>\$1,068.4</b>	<b>\$1,595.0</b>	<b>\$3,836.8</b>

The MPO Technical Committee determined that the most reasonable financial scenario for the Waco Region would be the ‘Low Medium’ scenario. When compared to previous inflation-adjusted spending, this scenario produces a somewhat lower level of spending for highways than the historical trend.

### **Congressional Earmarks**

The Waco Metropolitan Area has been the recipient of federal earmarks in the past in order to construct / improve highways such as Loop 574, FM 1637 or Ritchie Rd. As with other earmarks, the amount was only a fraction of the amount necessary to complete these projects. It is expected that even with the anticipated increase in Congressional earmarks that these projects will by and large remain unfunded through the year 2035 unless funds from another source are identified. As a result of the increase in earmarking, it is anticipated that the Waco area will be the recipient of additional earmarks to partially fund important projects. The MPO estimates that this increase will

be between 100% to 200% of the amount seen previously. It is anticipated that earmarks in the future will be provided for projects that have identified funds from other sources, thus reducing the potential of tying funds to projects with little or no chance of being constructed.

**Table 6.4 – Current Federal Highway Earmarks – Waco Metropolitan Area**

Project	Extent	Scope of Work	Earmark	Total Cost*	Earmark Percentage
FM 1637**	FM 185 to FM 3051	Widen to 4 lanes divided	\$1,600,000	\$28,300,000	5.7%
Ritchie Rd	US 84 to FM 1695	Widen to 4 lanes divided	\$2,400,000	\$19,000,000	12.6%
Loop 574	IH-35 to BU 77	Construct 4 lane divided highway	\$1,600,000	\$24,300,000	6.6%
		Total	\$5,600,000	\$71,600,000	7.8%

\*Includes all phases of work – Engineering, Utility Relocation, Right of Way and Construction.

## 6.1.2 Local Revenue Projections

Most local revenue for highway construction and significant rehabilitation projects come from the various capital improvement programs (CIP) of the individual cities and McLennan County. Some cities do dedicate general fund revenues primarily for highway maintenance purposes. In instances where local governments must provide local match for state or federal highway projects, the local governments usually provide funds from one of these two sources to meet the match requirements

At the time of publication, no major bond measures for highway construction were being considered by the MPO member cities or McLennan County. It is anticipated that only revenues through the CIP programs, general funds, or revenues to meet local match requirements for state or federal projects will be available for local highway projects.

Spending by local governments on transportation has been consistently flat or with extremely modest increases over the past decade. The City of Waco and many suburban cities have increased their spending at a rate fractionally higher than that of other municipal governments or McLennan County. For forecasting future revenues, an annual inflation rate of 1.0% has been used for spending by the City of Waco and suburban cities. For all other government entities, an annual rate of 0.5% per year has been used. The estimated revenues local and county governments are projected to spend for highway maintenance can be found in Sections 7.1.1 and 7.2.1.

### **6.1.3 Engineering & Right of Way Costs**

Statewide, engineering costs for any given highway project are typically between 8% and 12% of the construction cost. For budgeting purposes, TxDOT typically uses 10% of the construction cost to estimate engineering costs. Actual engineering costs for highway projects let within the past 10 years within the Waco District are reasonably close to this estimate. In addition, TxDOT has typically only funded engineering costs for projects which have sufficient funds for construction. For these reasons, the MPO has estimated engineering costs to be 10% of the construction cost and that if sufficient funds exist for construction, then sufficient funds will exist to provide for the engineering costs.

Right of way costs, unlike engineering costs, are highly variable and dependent upon factors such as land usage, location, accessibility, and zoning. Statewide, right of way costs average 12% of the construction costs. This figure, however varies from no right of way costs for certain projects to as much as 100% or more of the construction cost for projects in the Dallas or Houston districts. Similar to engineering costs, however, TxDOT has typically only funded right of way costs for projects which have sufficient funds for construction. For these reasons, the MPO has assumed that for federally and state funded projects, if sufficient funds exist for construction, then sufficient funds will exist to provide for the right of way costs. For locally funded projects, however, the total available revenues must also cover all necessary right of way & engineering costs.

### **6.1.5 Toll Revenue**

In an effort to increase the funding for highway mobility, in 2003 the Texas Legislature passed House Bill 3588 which permits the State and Local areas to exercise the option of tolling certain highways. Individual counties, with the permission of the Texas Transportation Commission, may form Regional Mobility Authorities (RMA) to construct, operate and maintain toll facilities within their specific county. In order to form an RMA, at least one toll feasible corridor must be identified. Feasibility has been defined as a facility that can at least fund through toll revenue the annual cost of operating and maintaining the facility and preferable at least one-third of the construction cost plus interest. In addition to HB 3588, the Texas Transportation Commission also implemented rules stating that all expressway projects adding capacity as well as certain other types of added capacity projects must be studied for toll feasibility. This requirement impacts 5 corridors within the Waco Metropolitan Area which are listed within table 6.6.

**Table 6.6 - Corridors for Which Toll Feasibility must be studied**

Corridor	From	To
US 84	SH 317	SH 6 / Loop 340
SH 6 / Loop 340	FM 185	IH-35
Loop 574	IH-35	Spur 484
FM 185 Extension	SH 6	IH-35
IH-35	Falls County	Hill County

## 6.2 – Public Transportation

### 6.2.1 Projected Urban Public Transportation Revenues

The 'TRENDS' model, which the MPO used to estimate future highway revenues, also provides an estimate of federal funds available to the State of Texas for Public Transportation. These funds are distributed to the various urban transit operators by formula. The MPO assumed that this formula would remain unchanged during the MTP planning period. Table 6.8 identifies the assumptions used to estimate future revenues by scenario for Waco Transit.

**Table 6.8 – Urban Public Transportation Revenue Assumptions by Scenario**

	Baseline	Low	Low Medium	Medium	High
'TRENDS' estimate of Federal Transit Funds to TX (\$Billions)*	\$1.73	\$2.37	\$2.43	\$3.19	\$5.04
Federal Gas / Use Taxes Dedicated to Transit	Same as current	Same as current	Same as current	10% increase to transit	30% increase to transit
Year of Gas / Use Taxes Increases to Transit	N/A	N/A	N/A	2015	2011
Increase in State Transit Funds	None	None	1% per year	1% per year	4% per year
Farebox Revenues	Change at same percentage change of combined federal / state / local revenues				
Local Revenues	4% per year	4% per year	4% per year	4% per year	4 % per year plus increase to meet additional match obligations
Earmarks	\$6.2 million short range, \$5.0 long range (\$11.2 million total)				

\*Does not include any changes to the percentage of federal gas / use taxes dedicated to transit. See table 6.2 for assumptions used within the 'TRENDS' model.

Similar to highway scenarios, the MPO identified 5 possible funding scenarios: Baseline, Low, Low Medium, Medium and High. The baseline scenario assumes no changes in tax rates or revenues through 2035 and is provided as a point of comparison. Similarly, the high scenario identifies the tax rates and revenues required to fully fund all priorities identified within the MTP regardless of political reality. As such, the high scenario is intended only to provide a point of comparison. The most politically realistic scenarios are the 'Low', 'Low Medium' and 'Medium' scenarios.

**Table 6.9 – Estimated Urban Public Transportation Revenues by Scenario in Millions**

<b>Short Range Revenues (2010 to 2020)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Federal	\$27.8	\$31.3	\$32.1	\$36.2	\$67.5
State	\$3.3	\$3.3	\$3.5	\$3.5	\$4.0
Farebox	\$5.2	\$5.7	\$6.9	\$7.7	\$11.4
Local	\$9.1	\$9.1	\$9.1	\$9.1	\$18.1
Total	\$45.4	\$49.4	\$51.6	\$56.5	\$101.0
<b>Long Range Revenues (2021 to 2035)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Federal	\$25.1	\$36.5	\$43.9	\$67.4	\$133.6
State	\$4.5	\$4.5	\$5.4	\$5.4	\$9.3
Farebox	\$6.9	\$8.7	\$9.7	\$14.2	\$24.3
Local	\$20.7	\$20.7	\$20.7	\$20.7	\$36.6
Total	\$57.2	\$70.4	\$79.7	\$106.3	\$203.8
<b>Total (2010 to 2035)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Federal	\$52.9	\$67.8	\$76.0	\$103.6	\$201.1
State	\$7.8	\$7.8	\$8.9	\$8.9	\$13.3
Farebox	\$12.1	\$14.4	\$16.6	\$21.9	\$35.7
Local	\$29.8	\$29.8	\$29.8	\$29.8	\$54.7
Total	\$102.6	\$119.8	\$131.3	\$164.2	\$304.8



Similar to highway revenues, the MPO Technical Committee selected the 'Low Medium' scenario as the most reasonable future financial scenario for public transportation. Table 6.10 identifies the spending necessary by Waco Transit to maintain the same level of service provided during FY 2009 through the MTP planning period. When compared to the 'Low Medium' scenario of revenues, it is apparent that future state and federal revenues will be insufficient to maintain FY 2009 levels of service beyond 2020. Section 7.2.4 discusses the MPO recommendations to offset these projected shortfalls in revenues in order to maintain existing levels of service for Waco Transit.

**Table 6.10 – Public Transportation Operating Expenses to maintain 2009 service levels (millions)**

	Preventative Maintenance	ADA Expenses	Operating	Planning	Total
Short Range (2010 to 2020)	\$9.4	\$3.4	\$29.7	\$1.4	\$43.9
Long Range (2011 to 2035)	\$21.6	\$7.7	\$67.8	\$3.1	\$100.2
Total	\$31.0	\$11.1	\$97.5	\$4.5	\$144.1

**Table 6.11 – Funding Gap: Urban Expenses vs. Revenues by Scenario (Millions)\***

	Baseline	Low	Low Medium	Medium	High
Short Range (2010 to 2020)	-\$4.7	-\$0.7	+\$1.5	+\$6.1	+\$50.9
Long Range (2011 to 2035)	-\$48.0	-\$35.0	-\$25.7	+\$1.1	+\$98.6
Total	-\$52.7	-\$35.7	-\$24.2	+\$7.2	+\$149.5

\*Revenues do not include Congressional earmarks which are assumed to be used only for capital expenses (see Table 6.4).

## 6.2.2 Projected Rural Public Transportation Revenues

The same scenarios used for urban public transportation were also used to estimate revenues for the rural public transportation services. As with their urban counterparts, the revenues for rural services identified with the 'Low Medium' scenario are projected to fall short of the amounts necessary to maintain FY 2009 levels of service beyond 2020. Section 7.2.4 discusses the MPO recommendations to offset these projected shortfalls in revenues in order to maintain existing levels of service for Waco Transit.

**Table 6.8 – Estimated Rural Public Transportation Revenues by Scenario**

<b>Short Range Revenues (2010 to 2020)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Section 5310	\$464,000	\$540,000	\$690,000	\$778,000	\$1,318,000
Section 5311	\$611,000	\$711,000	\$909,000	\$1,025,000	\$1,738,000
<b>Total</b>	<b>\$1,075,000</b>	<b>\$1,251,000</b>	<b>\$1,599,000</b>	<b>\$1,803,000</b>	<b>\$3,056,000</b>
<b>Long Range Revenues (2021 to 2035)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Section 5310	\$433,000	\$678,000	\$943,000	\$1,448,000	\$2,763,000
Section 5311	\$570,000	\$893,000	\$1,244,000	\$1,908,000	\$3,642,000
<b>Total</b>	<b>\$1,003,000</b>	<b>\$1,571,000</b>	<b>\$2,187,000</b>	<b>\$3,356,000</b>	<b>\$6,405,000</b>
<b>Total (2010 to 2035)</b>					
<b>Category</b>	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Section 5310	\$897,000	\$1,218,000	\$1,633,000	\$2,226,000	\$4,081,000
Section 5311	\$1,181,000	\$1,604,000	\$2,153,000	\$2,933,000	\$5,380,000
<b>Total</b>	<b>\$2,078,000</b>	<b>\$2,822,000</b>	<b>\$3,786,000</b>	<b>\$5,159,000</b>	<b>\$9,461,000</b>

**Table 6.9 – Funding Gap: Rural Expenses vs. Revenues by Scenario\***

	<b>Baseline</b>	<b>Low</b>	<b>Low Medium</b>	<b>Medium</b>	<b>High</b>
Short Range (2010 to 2020)	-\$328,000	-\$152,000	+\$197,000	+\$400,000	+\$1,653,000
Long Range (2011 to 2035)	-\$2,203,000	-\$1,635,000	-\$1,019,000	+\$150,000	+\$3,200,000
<b>Total</b>	<b>-\$2,531,000</b>	<b>-\$1,787,000</b>	<b>-\$822,000</b>	<b>+\$550,000</b>	<b>+\$4,853,000</b>

\*Combined Sections 5310 and 5311

## 6.3 Rail Transportation

The State of Texas has little to no history in providing public funding for either passenger or freight rail services outside of the large metropolitan areas such as Dallas / Fort Worth or Houston. Additionally, the federal government has traditionally provided few resources for the rail mode outside of 'Amtrak', the national passenger rail service. Although recent discussions have proposed to provide substantial revenues to fund

various passenger rail services, at the time of publication of this document it is unclear as to what funding levels, if any, are realistic for passenger rail beyond the normal appropriations for Amtrak. As a result, the MPO has chosen to identify rail projects as unfunded needs until a more clearly defined state and national role for passenger rail is identified.

# Section 7: Project Recommendations

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This chapter contains those projects considered important in meeting the regional goals outlined in Chapter 2 and can be funded through the sources of funding identified via the “Medium Low” scenario of projected revenues through the year 2035. Federal funds may be used to develop each of these projects. Projects within this chapter are ranked in order of priority.

## 7.1 Short Term Priorities: 2010 through 2020

### 7.1.1 Categorical Highway Projects

These projects cover scopes of work dealing with the maintenance and operation of the highway system through the year 2020. These projects ensure continued satisfactory operation of the highway system and are thus the top priority for the Waco Metropolitan Area. As with other projects identified in this plan, categorical projects have been adjusted for inflation.

Project ID: S-PMR-S  
Project: State Highway System Preventative Maintenance & Rehabilitation  
Extent: State Highway System  
Costs:  
    Engineering: \$28,100,000  
    Right of Way: None required  
    Construction: \$252,900,000  
    Total Project Cost: \$281,000,000

Project ID: S-BRI-S  
Project: Bridge & Structure Replacement or Rehabilitation  
Extent: Structurally Deficient or Functionally Obsolete Bridges  
Costs:  
    Engineering: \$5,800,000  
    Right of Way: \$6,900,000  
    Construction: \$45,100,000  
    Total Project Cost: \$57,800,000

Project ID: S-STY-S  
Project: Highway Safety Projects  
Extent: Expressway, Arterial, Urban Collector or Rural Major Collector Roads  
Costs:  
Engineering: \$3,800,000  
Right of Way: \$4,500,000  
Construction: \$29,200,000  
Total Project Cost: \$37,500,000

Project ID: S-LDS-S  
Project: State Highway System Landscape Development  
Extent: State Highway System  
Costs:  
Engineering: \$400,000  
Right of Way: \$0  
Construction: \$3,800,000  
Total Project Cost: \$4,200,000

Project ID: L-PMR-S  
Project: Local & County Highway Preventative Maintenance & Rehabilitation  
Extent: Local or County Roads  
Costs:  
Engineering: \$10,200,000  
Right of Way: \$0  
Construction: \$101,200,000  
Total Project Cost: \$111,400,000

### 7.1.2 Highway Mobility Projects

Projects identified in this section identify highways which will require additional capacity to either meet existing or projected traffic volumes. Reconstruction of existing lanes on these projects are assumed unless otherwise noted. Unless otherwise noted, all short term priority projects use the following years for determining year of expenditure costs: Engineering – 2014, Right of Way – 2015, Construction – 2017.

## Priority 1

### Project S-022 (Parts 1 & 2)

Highway: Interstate 35  
Extent: Falls County Line to FM 2063 / FM 2113  
North Loop 340 to Hill County Line  
Current: 4 main lanes and two-way frontage roads  
Scope of Work: Widen main lanes to 6 lanes, Convert frontage roads to one-way, reconstruct to existing Interstate standards

#### Costs:

Engineering:	\$30,100,000	Year: 2010
Right of Way:	\$81,500,000	Year: varies 2010 to 2012
Construction:	\$550,000,000	Year: varies 2011 to 2013
Total Cost:	\$661,600,000	

Note: Project funded through Proposition 12 bonds authorized by Texas Transportation Commission minute order 112036.

## Priority 2

### Project S-022 (Part 3)

Highway: Interstate 35  
Extent: SH 6 / West Loop 340 to North Loop 340  
Current: 6 main lanes and discontinuous one-way frontage roads  
Scope of Work: Reconstruct and widen main lanes to 8 lanes, reconstruct Frontage Roads, extend frontage roads where discontinuous, and realign on & off ramps.

#### Costs:

Engineering:	\$18,800,000	Year: 2011
Right of Way:	\$48,400,000	Year: 2012
Construction:	\$260,000,000	Year: 2015
Total Cost:	\$327,200,000	

Funding Source: Category 4 funds - \$296,200,000  
Category 3 and / or local option - \$31,000,000

## Priority 3

### Project S-004

Highway: FM 1695 (Hewitt Dr)  
Extent: US 84 to FM 2063 (Sun Valley Rd)  
Current: 4 lanes with continuous center left turn lane  
Scope of Work: Widen to 6 lanes

#### Costs:

Engineering:	\$1,200,000
Right of Way:	\$0
Construction:	\$11,200,000
Total Cost:	\$12,400,000

## Priority 4

### Project S-034

Highway: SH 6 / West Loop 340  
Extent: US 84 to IH-35  
Current: 4 lanes expressway with discontinuous one-way frontage roads  
Scope of Work: Widen to 6 lanes, extend frontage roads where discontinuous and realign on & off ramps

#### Costs:

Engineering:	\$3,100,000
Right of Way:	\$1,300,000
Construction:	\$34,000,000
Total Cost:	\$38,400,000

## Priority 5

### Project S-036A

Highway: SH 6 / South Loop 340  
Extent: Brazos River to SH 6 / Loop 484  
Current: 2 lane Principal Arterial  
Scope of Work: Widen to 4 lanes divided

#### Costs:

Engineering:	\$1,100,000
Right of Way:	\$0
Construction:	\$11,900,000
Total Cost:	\$13,000,000

## Priority 6

### Project S-035

Highway: SH 6 / South Loop 340  
Extent: IH-35 to US 77 (Robinson Dr)  
Current: 4 lane Principal Arterial  
Scope of Work: Extend frontage roads and construct overpass at Old Robinson Rd

#### Costs:

Engineering:	Complete
Right of Way:	\$0
Construction:	\$18,400,000 Year: 2015
Total Cost:	\$18,400,000

Note: Engineering work was completed at an approximate cost of \$750,000 prior to adoption of the MTP.

## Priority 7

### Project S-003

Highway: FM 1637 (China Spring Rd)  
Extent: FM 185 (North River Crossing) to FM 3051 (Steinbeck Bend Dr)  
Current: 2 lane rural FM Road  
Scope of Work: Widen to 4 lanes divided arterial  
Costs:

Engineering:	\$1,300,000	Year: To be completed in 2010
Right of Way:	\$13,700,000	
Construction:	\$33,900,000	
Total Cost:	\$48,900,000	

Note: \$1,600,000 of cost is funded through a Congressional earmark.

## Priority 8

### Project S-005

Highway: FM 1695 (Hewitt Dr)  
Extent: Ritchie Rd to FM 2063 (Sun Valley Rd)  
Current: 2 lane Principal Arterial  
Scope of Work: Widen to 4 lanes divided  
Costs:

Engineering:	Complete	
Right of Way:	\$2,000,000	Year: 2010
Construction:	\$5,000,000	Year: 2010
Total Cost:	\$7,000,000	

Note: Engineering work was completed at an approximate cost of \$260,000 prior to adoption of the MTP.

## Priority 9

### Project S-018

Highway: FM 3476 (Bagby Ave)  
Extent: Texas Central Pkwy to FM 2063 (Sun Valley Rd)  
Current: 2 lane Minor Arterial  
Scope of Work: Widen to 4 lanes divided  
Costs:

Engineering:	Complete	
Right of Way:	\$0	
Construction:	\$3,700,000	Year: 2010
Total Cost:	\$3,700,000	

Note: Engineering work was completed at an approximate cost of \$900,000 prior to adoption of the MTP.



## Priority 10

### Project S-026

Highway: Loop 574  
Extent: IH-35 to East Loop 340  
Current: IH-35 to LaSalle Ave (US Bus 77): 2 lane Collector  
LaSalle Ave (US Bus 77) to UP RR: No Existing Facility  
UP RR to East Loop 340: 4 lane expressway  
Scope of Work: Construct 4 lane divided facility, demolish interchange of Loop 484 & US Bus 77, construct new interchange at Loop 574 & LaSalle Ave

#### Costs:

Engineering:	\$1,000,000*
Right of Way:	\$2,400,000
Construction:	\$23,700,000
Total Cost:	\$27,100,000

\*Note: Engineering work was substantially completed in 2000. The estimated cost includes work necessary to update environmental studies. Additionally \$1,600,000 of cost is funded through a Congressional earmark.

## Priority 11

### Project S-046

Highway: US 84 (George W. Bush Pkwy)  
Extent: Ritchie Rd to Harris Creek Rd  
Current: 4 lane divided arterial with discontinuous frontage roads  
Scope of Work: Construct overpass at Speegleville Rd / Old Lorena Rd (FM 2837) interchange and extend frontage roads

#### Costs:

Engineering:	Underway
Right of Way:	\$13,100,000 Year: 2011
Construction:	\$19,606,800 Year: 2013
Total Cost:	\$32,706,800

## 7.1.3 Intelligent Transportation System Projects

These projects identify ITS project priorities through 2020. Unless otherwise noted, projects identified in this section are funded through local option funds identified in Table 6.3.

## Priority 1

### Project S-022-IS

Highway: Interstate 35  
Extent: Falls County Line to Hill County Line  
Scope of Work: Install 3 Dynamic Message Signs  
Total Cost: \$920,000  
Year: 2015

## Priority 2

### Project S-061S

Project: McLennan County Traffic Information Radio  
Scope of Work: Establish and Operate low powered AM radio station providing real-time traveler information for primary state highways within McLennan County

Costs:  
Capital: \$150,000  
Operations: \$400,000  
Total Cost: \$550,000  
Year: 2015

### 7.1.4 Highway Mobility Projects – Engineering Phases Only

The following projects are studies for corridors for which funds are not anticipated to be available for all phases of construction during the MTP planning period. Funds are, however, available for these studies with the hope that additional construction funds will be available in the near future.

**Project: US 84**  
Project ID: SES-046  
Extent: Ritchie Rd to SH 317 in McGregor  
Scope of Study: Widen to 4 lane expressway with frontage roads  
Estimated Cost: \$4,000,000  
Study Status: Underway  
Funding Source: TxDOT state funds

**Project: SH 6**  
Project ID: SES-031  
Extent: Spur 412 to Compton Rd  
Scope of Study: Widen to 4 lane divided arterial with grade separation and exit / entrance ramps at FM 185  
Estimated Cost: \$3,000,000  
Study Status: Underway  
Funding Source: TxDOT state funds

**Project: Memorial Dr**  
Project ID: LES-015  
Extent: South Valley Mills Dr to South New Rd  
Scope of Study: Reconstruct road  
Estimated Cost: \$350,000  
Study Status: Underway  
Funding Source: Federal earmarks

**Project: FM 2837**  
Project ID: SES-014  
Extent: Pilgrim Ln to IH-35  
Scope of Study: Study the realignment of FM 2837 and construction of railroad grade separation at Union Pacific RR crossing  
Estimated Cost: \$335,000  
Study Status: Start estimated in 2012  
Funding Source: TxDOT state funds

**Project: FM 2837**  
Project ID: SES-015  
Extent: IH-35 to Bullhide Creek  
Scope of Study: Study the realignment of FM 2837  
Estimated Cost: \$460,000  
Study Status: Start estimated in 2012  
Funding Source: TxDOT state funds

**Project: Managed Lane Study**  
Project ID: S-100  
Scope of Study: Review possibility of constructing 4-lane toll facility through or around Waco Urbanized Area to relieve IH-35 traffic  
Estimated Cost: \$5,000,000  
Study Status: Start estimated in 2020  
Funding Source: TxDOT state funds

## 7.1.5 Categorical Public Transportation Projects

These projects cover scopes of work dealing with maintenance and operations for Waco Transit for the period from 2010 through 2020. As these projects are necessary for the day to day operations of Waco Transit and the rural transportation program administered by the Heart of Texas Council of Governments, these projects are funded first. Other projects are funded only if funds remain after the categorical, 5310 & 5311 projects have been funded.

### Project CT-1S

Scope of Work: Waco Transit Preventative Maintenance Expenses  
Estimated Cost: \$9,400,000  
Funding Source: FTA Section 5307 funds

### Project CT-2S

Scope of Work: Waco Transit ADA Related Expenses  
Estimated Cost: \$3,400,000  
Funding Source: FTA Section 5307 funds

**Project CT-3S**

Scope of Work: Waco Transit Operating Expenses

Estimated Cost: \$29,700,000

Funding Source: FTA Section 5307 funds

**Project CT-4S**

Scope of Work: Waco Transit Short Range Transportation Planning

Estimated Cost: \$1,400,000

Funding Source: FTA Section 5307 funds

**Project CT-5S**

Scope of Work: Elderly / Disabled Transportation Program

Estimated Cost: \$690,000

Funding Source: FTA Section 5310

**Project CT-6S**

Scope of Work: Rural Transportation Program

Estimated Cost: \$909,000

Funding Source: FTA Section 5311

## 7.1.6 Public Transportation Capital / Service Expansion Projects

### Priority 1

**Project T-1**

Facility / Service: Improvement of Passenger Amenities

Extent: Waco Urbanized Area

Scope of Work: Installation of bus cutouts, bus shelters and information centers at various locations along the fixed route service.

Estimated Cost: \$1,500,000

Funding Source: FTA Section 5307 funds

### Priority 2

**Project T-2**

Facility / Service: Replacement of Waco Transit Bus Fleet

Scope of Work: Replace bus fleet for the fixed route service.

Estimated Cost: \$6,200,000

Funding Source: 80% - Federal Earmarks  
20% - Toll Credits or Local Funds

### Priority 3

**Project T-5**

Facility / Service: Replacement of Demand Response Vehicles

Scope of Work: Replace vehicles for ADA demand response system.

Estimated Cost: \$1,425,000

Funding Source: FTA Section 5307 funds (American Recovery & Reinvestment Act)

## **Priority 4**

### **Project T-14**

Facility / Service: Purchase ADA paratransit & Medicaid scheduling software and related hardware

Scope of Work: Purchase computer systems to provide more efficient scheduling of ADA paratransit and Medicaid trips

Estimated Cost: \$155,000

Funding Source: FTA Section 5307 funds (American Recovery & Reinvestment Act)

## **Priority 5**

### **Project T-15**

Facility / Service: Purchase mobile data terminal system

Scope of Work: Purchase MDTs and related software for fixed route buses

Estimated Cost: \$100,000

Funding Source: FTA Section 5307 funds (American Recovery & Reinvestment Act)

## **7.1.7 Bicycle and Pedestrian Projects**

These projects identify bicycle and pedestrian project priorities through 2020. Unless otherwise noted, projects identified in this section are funded through local option funds identified in Table 6.3.

## **Priority 1**

### **Project SWK-S**

Program: Metropolitan Area Sidewalk Program

Extent: Priority One Corridors (see maps 7.7 & 7.8)

Scope of Work: Construct sidewalks on one side of identified facility where none exist. Reconstruct sidewalks where necessary to accommodate wheelchair access.

Costs:

Engineering: \$260,000 Year: 2012

Right of Way: \$0

Construction: \$2,400,000 Year: 2013

Total Cost: \$2,660,000

Note: Project priorities will be determined at later date through future study.

## Priority 2

### Project BRW-1

Facility: Brazos Riverwalk  
Extent: Baylor Ferrell Activities Center to Baylor Intramural Fields  
Current: No existing facility  
Scope of Work: Construct multi-purpose trail  
Costs:  
    Engineering: \$50,000      Year: 2010  
    Right of Way: Acquired  
    Construction: \$750,000      Year: 2011  
    Total Cost: \$800,000

Funding Source: Transportation Enhancement Program

## Priority 3

### Project BRW-2

Facility: Brazos Riverwalk  
Extent: Herring Ave to Brazos Park East  
Current: No existing facility  
Scope of Work: Construct multi-purpose trail  
Costs:  
    Engineering: \$250,000      Year: 2010  
    Right of Way: Acquired  
    Construction: \$2,500,000      Year: 2012  
    Total Cost: \$2,750,000

Funding Source: Transportation Enhancement Program

## Priority 4

### Project BRW-3

Facility: Brazos Riverwalk  
Extent: Brazos Park East to Riverbend Park  
Current: No existing facility  
Scope of Work: Construct multi-purpose trail  
Costs:  
    Engineering: \$250,000      Year: 2012  
    Right of Way: \$250,000      Year: 2013  
    Construction: \$5,000,000      Year: 2014  
    Total Cost: \$5,500,000

Funding Source: Transportation Enhancement Program

## 7.2 Long Term Priorities: 2021 through 2035

### 7.2.1 Categorical Highway Projects

These projects cover scopes of work dealing with the maintenance and operation of the highway system through the year 2035. These projects ensure continued satisfactory operation of the highway system and are thus the top priority for the Waco Metropolitan Area. As with other projects identified in this plan, categorical projects have been adjusted for inflation.

Project ID: S-PMR-S  
Project: State Highway System Preventative Maintenance & Rehabilitation  
Extent: State Highway System  
Costs:  
Engineering: \$30,800,000  
Right of Way: None required  
Construction: \$277,100,000  
Total Project Cost: \$307,900,000

Project ID: S-BRI-S  
Project: Bridge & Structure Replacement or Rehabilitation  
Extent: Structurally Deficient or Functionally Obsolete Bridges  
Costs:  
Engineering: \$6,400,000  
Right of Way: \$7,600,000  
Construction: \$49,400,000  
Total Project Cost: \$63,400,000

Project ID: S-STY-S  
Project: Highway Safety Projects  
Extent: Expressway, Arterial, Urban Collector or Rural Major Collector Roads  
Costs:  
Engineering: \$4,100,000  
Right of Way: \$4,900,000  
Construction: \$32,100,000  
Total Project Cost: \$41,100,000

Project ID: S-LDS-S  
 Project: State Highway System Landscape Development  
 Extent: State Highway System  
 Costs:  
     Engineering: \$460,000  
     Right of Way: \$0  
     Construction: \$4,140,000  
     Total Project Cost: \$4,600,000

Project ID: L-PMR-S  
 Project: Local & County Highway Preventative Maintenance & Rehabilitation  
 Extent: Local or County Roads  
 Costs:  
     Engineering: \$26,400,000  
     Right of Way: \$0  
     Construction: \$264,200,000  
     Total Project Cost: \$290,600,000

## 7.2.2 Highway Mobility Projects

Projects identified in this section identify highways which will require additional capacity to either meet existing or projected traffic volumes. Reconstruction of existing lanes on these projects are assumed unless otherwise noted. Unless otherwise noted, all long term priority projects use the following years for determining year of expenditure costs: Engineering – 2024, Right of Way – 2025, Construction – 2027.

### Priority 12

#### Project S-039A

Highway: Franklin Ave (Spur 298)  
 Extent: Lake Air Dr to New Rd  
 Current: 4 lane divided arterial with frontage roads  
 Scope of Work: Relocate main lanes to frontage roads, widen to 6 lanes divided, construct dual left turn lanes for both Franklin Ave and New Rd and construct u-turn lanes for Franklin Ave at New Rd.

Costs:  
     Engineering: \$700,000  
     Right of Way: \$0  
     Construction: \$6,600,000  
     Total Cost: \$7,300,000



### 7.2.3 Intelligent Transportation System Projects

These projects identify ITS project priorities through 2035. Unless otherwise noted, projects identified in this section are funded through local option funds identified in Table 6.3.

#### Priority 3

##### Project L-TMC

Facility: McLennan County Traffic Management Center  
Scope of Work: Construct and operate TMC to monitor traffic conditions on priority 1 ITS corridors and deploy resources for incident management  
Costs:  
Capital: \$1,300,000  
Operations: \$8,750,000  
Total Cost: \$10,050,000  
Year: 2021

#### Priority 4

##### Project S-061L

Project: McLennan County Traffic Information Radio  
Scope of Work: Operate low powered AM radio station providing real-time traveler information for primary state highways within McLennan County  
Costs:  
Operations: \$1,600,000  
Total Cost: \$1,600,000  
Year: 2021 through 2035

#### Priority 5

##### Project S-022-IL

Highway: Interstate 35  
Extent: Falls County Line to Hill County Line  
Scope of Work: Install 9 CCTV Cameras  
Total Cost: \$800,000  
Year: 2021

#### Priority 6

##### Project S-034-IL

Highway: SH 6  
Extent: Speegleville Rd to IH-35  
Scope of Work: Install 2 CCTV Cameras and 2 Dynamic Message Signs  
Total Cost: \$920,000  
Year: 2021

## **Priority 7**

### **Project S-036-IL**

Highway: Loop 340  
Extent: IH-35 in Bellmead to IH-35 in Robinson  
Scope of Work: Install 1 CCTV Camera, 2 Dynamic Message Signs and remote signal control for 2 traffic signals  
Total Cost: \$850,000  
Year: 2021

## **Priority 8**

### **Project S-036-IL**

Highway: US 84 (Waco Dr)  
Extent: Speegleville Rd to IH-35  
Scope of Work: Install 3 CCTV Cameras, 1 Dynamic Message Sign and remote signal control for 24 traffic signals  
Total Cost: \$900,000  
Year: 2021

## **7.2.4 Categorical Public Transportation Projects**

These projects cover scopes of work dealing with maintenance and operations for Waco Transit for the period from 2021 through 2035. As these projects are necessary for the day to day operations of Waco Transit and the rural transportation program administered by the Heart of Texas Council of Governments, these projects are funded first. Other projects are funded only if funds remain after the categorical, 5310 & 5311 projects have been funded. It is important to note that revenues projections estimated in Tables 6.5 and 6.8 are insufficient to maintain existing urban and rural services. The recommendation of this plan is to use local option funds, projected in Table 6.3 to offset the projected shortfalls in federal revenues to maintain basic urban and rural public transportation services.

### **Project CT-1S**

Scope of Work: Waco Transit Preventative Maintenance Expenses  
Estimated Cost: \$21,600,000  
Funding Source: FTA Section 5307 funds

### **Project CT-2S**

Scope of Work: Waco Transit ADA Related Expenses  
Estimated Cost: \$7,700,000  
Funding Source: FTA Section 5307 funds

### **Project CT-3S**

Scope of Work: Waco Transit Operating Expenses  
Estimated Cost: \$67,800,000  
Funding Source: FTA Section 5307 funds

**Project CT-4S**

Scope of Work: Waco Transit Short Range Transportation Planning

Estimated Cost: \$3,100,000

Funding Source: FTA Section 5307 funds

**Project CT-5S**

Scope of Work: Elderly / Disabled Transportation Program

Estimated Cost: \$940,000

Funding Source: FTA Section 5310

**Project CT-6S**

Scope of Work: Rural Transportation Program

Estimated Cost: \$1,250,000

Funding Source: FTA Section 5311

**7.2.5 Public Transportation Capital / Service Expansion Projects****Priority 6****Project T-8**

Facility / Service: Replacement of Waco Transit Bus Fleet

Scope of Work: Replace bus fleet for the fixed route service.

Estimated Cost: \$5,000,000

Funding Source: 80% - Federal Earmarks

20% - Toll Credits or Local Funds

**Priority 7****Project T-9**

Facility / Service: 30 minute service

Scope of Work: Provide 30 minute peak-hour service for 3 fixed routes

Costs:

Capital: \$2,100,000

Operating: \$23,700,000

Total Cost: \$25,800,000

Year: 2021 through 2035

Funding Source: Local option revenues (Table 6.3)

**7.2.6 Bicycle and Pedestrian Projects**

These projects identify bicycle and pedestrian project priorities through 2035. Unless otherwise noted, projects identified in this section are funded through local option funds identified in Table 6.3. Unless otherwise noted, all long term priority projects use the following years for determining year of expenditure costs: Engineering – 2024, Right of Way – 2025, Construction – 2027.

## Priority 5

### Project SWK-L

Program: Metropolitan Area Sidewalk Program  
Extent: Priority One Corridors (see maps 7.7 & 7.8)  
Scope of Work: Construct sidewalks on one side of identified facility where none exist.  
Reconstruct sidewalks where necessary to accommodate wheelchair access.

#### Costs:

Engineering:	\$940,000	Year: 2024
Right of Way:	\$0	
Construction:	\$8,400,000	Year: 2027
Total Cost:	\$9,340,000	

Note: Project priorities will be determined at later date through future study.

## Priority 6

### Project BP-6

Facility: 4<sup>th</sup> & 5<sup>th</sup> Streets  
Extent: Herring Ave to Dutton Ave  
Current: 4 lane arterial with on-street parking  
Scope of Work: Restripe and sign road to include bicycle lanes

#### Costs:

Engineering:	\$25,000	Year: 2021
Right of Way:	\$0	
Construction:	\$245,000	Year: 2021
Total Cost:	\$270,000	

## Priority 7

### Project BP-11

Facility: Austin Ave  
Extent: 4<sup>th</sup> Street to 38<sup>th</sup> Street  
Current: 2 & 4 lane collector with on-street parking  
Scope of Work: Sign road as bicycle route

#### Costs:

Engineering:	\$0	
Right of Way:	\$0	
Construction:	\$20,000	Year: 2021
Total Cost:	\$20,000	

## Priority 8

### Project BP-20A

Facility: East Herring Ave  
Extent: J J Flewellen St to M L King Jr Dr  
Current: 4 lane divided arterial  
Scope of Work: Restripe and sign road to include bicycle lanes  
Costs:  
Engineering: \$6,000  
Right of Way: \$0  
Construction: \$49,000  
Total Cost: \$55,000

## Priority 9

### Project BP-20B

Facility: Herring / Lyle Avenues  
Extent: 4<sup>th</sup> Street to 30<sup>th</sup> Street  
Current: 4 lane divided one-way pairs  
Scope of Work: Restripe and sign road to include bicycle lanes  
Costs:  
Engineering: \$20,000  
Right of Way: \$0  
Construction: \$180,000  
Total Cost: \$200,000

## Priority 10

### Project BP-23

Facility: University Parks Dr (FM 434)  
Extent: IH-35 to Gurley Ln  
Current:  
IH-35 to LaSalle Ave (US Bus 77): 6 lane divided arterial  
LaSalle Ave (US Bus 77) to Gurley Ln: 2 lane undivided arterial  
Scope of Work: Restripe and sign road to include bicycle lanes  
Costs:  
Engineering: \$21,000  
Right of Way: \$0  
Construction: \$184,000  
Total Cost: \$205,000

## Priority 11

### Project BP-17

Facility: Clifton St / Elm Ave / Washington Ave  
Extent: US 84 (East Waco Dr) to 5<sup>th</sup> St  
Current: 2 lane undivided arterial  
Scope of Work: Restripe and sign road to include bicycle lanes  
Costs:  
    Engineering: \$13,000  
    Right of Way: \$0  
    Construction: \$117,000  
    Total Cost: \$130,000

## Priority 12

### Project BP-7

Facility: 11<sup>th</sup> & 12<sup>th</sup> Streets  
Extent: Austin Ave to Primrose Dr  
Current: 2 lane undivided arterial  
Scope of Work: Restripe and sign road to include bicycle lanes  
Costs:  
    Engineering: \$27,000  
    Right of Way: \$0  
    Construction: \$243,000  
    Total Cost: \$270,000

## Priority 13

### Project BP-12

Facility: Bagby Ave  
Extent: University Parks Dr (FM 434) to 17<sup>th</sup> St (US 77)  
Current:  
    Univ Parks Dr to 12<sup>th</sup> St: 2 lane arterial with center left turn lane  
    12<sup>th</sup> St to 17<sup>th</sup> St: 2 lane undivided collector  
Scope of Work: Widen, restripe and sign road to include bicycle lanes  
Costs:  
    Engineering: \$240,000  
    Right of Way: \$0  
    Construction: \$2,400,000  
    Total Cost: \$2,640,000

## Priority 14

### Project BP-21

Facility: 30<sup>th</sup> Street / Pine Ave / MacArthur Dr / Leland Ave

Extent: Lyle Ave to Cobbs Dr

Current: 2 lane local streets

Scope of Work: Sign road as bicycle route

Costs:

Engineering: \$0

Right of Way: \$0

Construction: \$12,000

Total Cost: \$12,000

## Priority 15

### Project BP-13

Facility: Cobbs Dr

Extent: Leland Ave to Fish Pond Rd

Current:

Leland Ave to New Rd: 2 lane local street

New Rd to Fish Pond Rd: 4 lane arterial with center left turn lane

Scope of Work: Restripe and sign road to eliminate center left turn lane and include bicycle lanes

Costs:

Engineering: \$13,000

Right of Way: \$0

Construction: \$117,000

Total Cost: \$130,000

## Priority 16

### Project BP-18

Facility: M L King Jr Dr / Orchard Ln / Forrest St

Extent: IH-35 to Elm Ave

Current: 2 lane undivided arterials

Scope of Work: Sign road as bicycle route

Costs:

Engineering: \$0

Right of Way: \$0

Construction: \$11,000

Total Cost: \$11,000

## Priority 17

### Project BP-19

Facility: Garrison St / Faulkner Ln / J J Flewellen Street

Extent: Elm Ave to Herring Ave

Current: 2 lane undivided collectors

Scope of Work: Sign road as bicycle route

Costs:

Engineering: \$0

Right of Way: \$0

Construction: \$14,000

Total Cost: \$14,000

## Priority 18

### Project BP-10

Facility: 39<sup>th</sup> St / Sunset Blvd / 38<sup>th</sup> St

Extent: Leland Ave to Austin Ave

Current: 2 lane undivided collectors

Scope of Work: Sign road as bicycle route

Costs:

Engineering: \$0

Right of Way: \$0

Construction: \$21,000

Total Cost: \$21,000

## Priority 19

### Project BP-22

Facility: Park Lake Dr / MacArthur Dr

Extent: 19<sup>th</sup> St (FM 1637) to Lake Shore Dr

Current: 2 lane undivided arterial

Scope of Work: Restripe and sign road to include bicycle lanes

Costs:

Engineering: \$10,000

Right of Way: \$0

Construction: \$86,000

Total Cost: \$96,000



## Priority 20

### Project BP-8

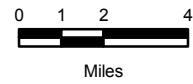
Facility: 15A Street / Clark Ave  
Extent: Lyle Ave to 19<sup>th</sup> Street (FM 1637)  
Current: 2 lane local streets  
Scope of Work: Sign road as bicycle route  
Costs:  
    Engineering: \$0  
    Right of Way: \$0  
    Construction: \$11,000  
    Total Cost: \$11,000

## Priority 21

### Project BP-9A

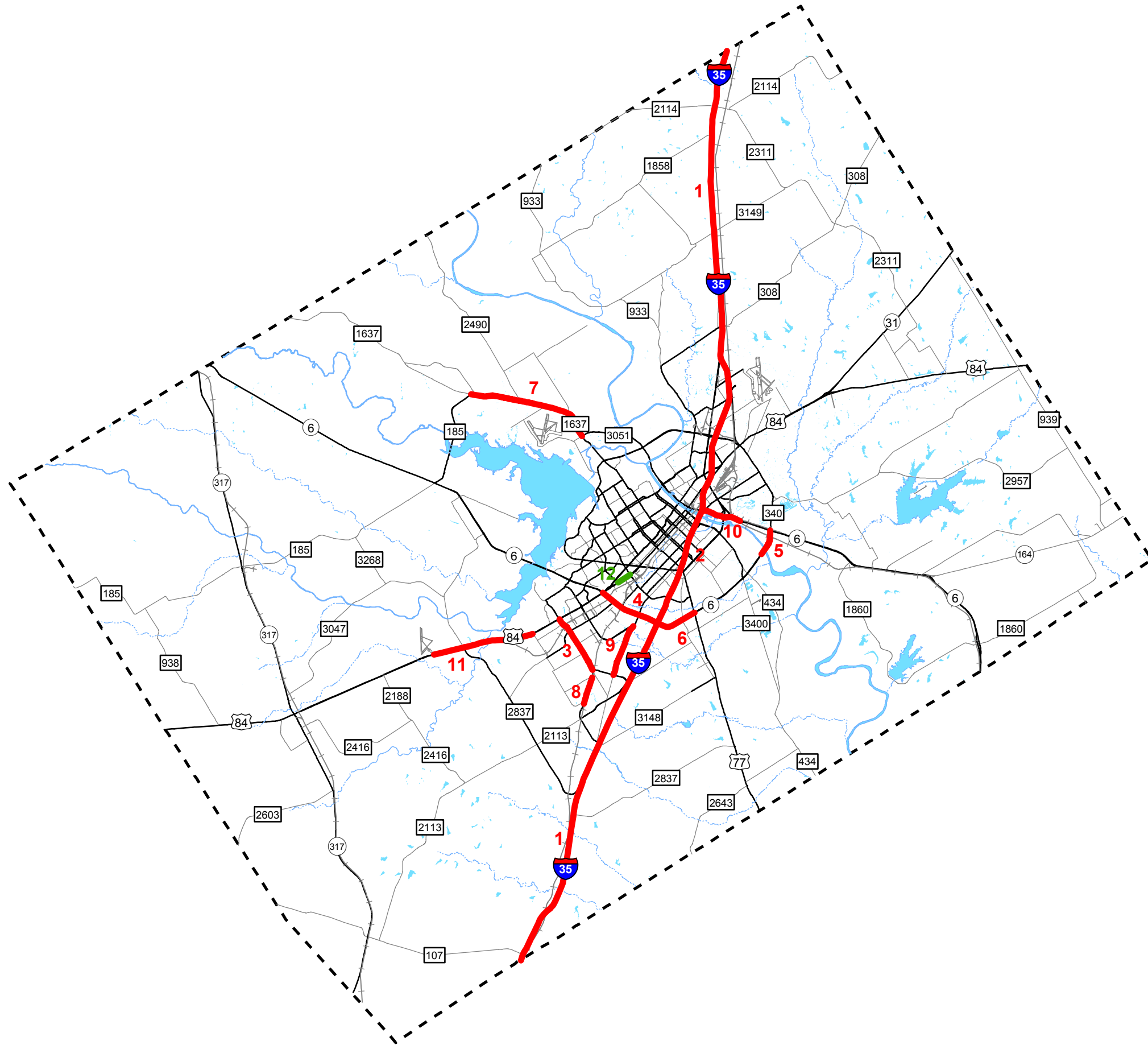
Facility: 19<sup>th</sup> Street (FM 1637)  
Extent: Clark Ave to Park Lake Dr  
Current: 4 lane divided arterial with center turn lane  
Scope of Work: Widen, restripe and sign road to include bicycle lanes  
Costs:  
    Engineering: \$60,000  
    Right of Way: \$0  
    Construction: \$620,000  
    Total Cost: \$680,000

- Short Range Plan
- Long Range Plan
- Short & Long Range
- Waco Metropolitan Area
- 12 Project Priority

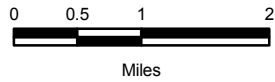


February, 2010

# Map 7.1 Highway Project Recommendations

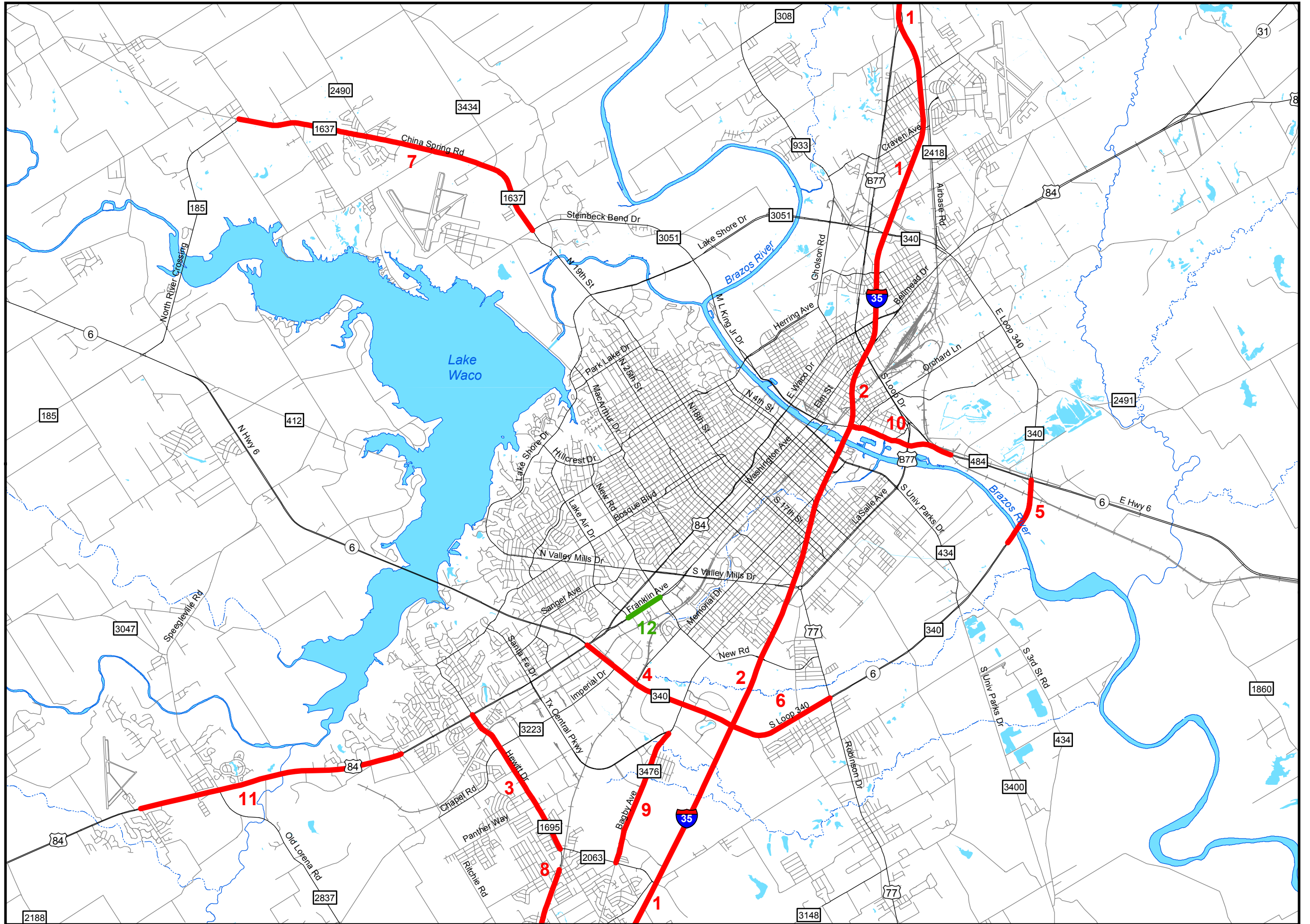


- Short Range Plan
- Long Range Plan
- Short & Long Range
- 12 Project Priority

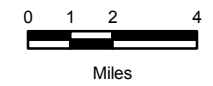


February, 2010

## Map 7.2 Highway Project Recommendations Downtown Inset

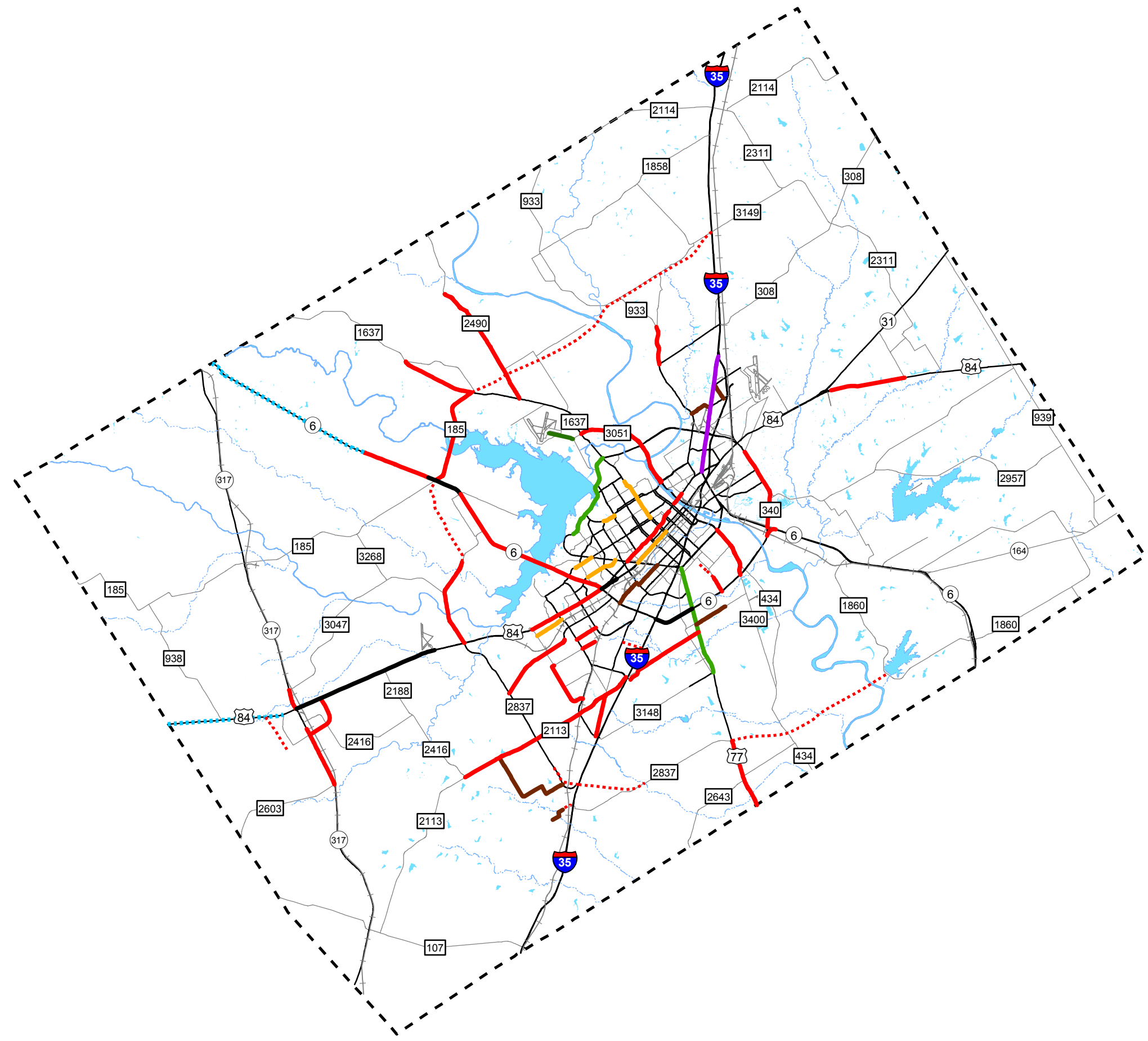


-  Add center turn lane
-  Add restrictive median
-  Add travel lanes
-  Congestion relief
-  Extend / add passing lanes
-  Landscaping
-  New highway
-  Pavement rehab
-  Remove frontage roads
-  Upgrade to fwy
-  Waco Metropolitan Area



December, 2009

# Map 7.3 Unfunded Highway Needs



**Bus Pullouts**

- Priority 1
- Priority 2

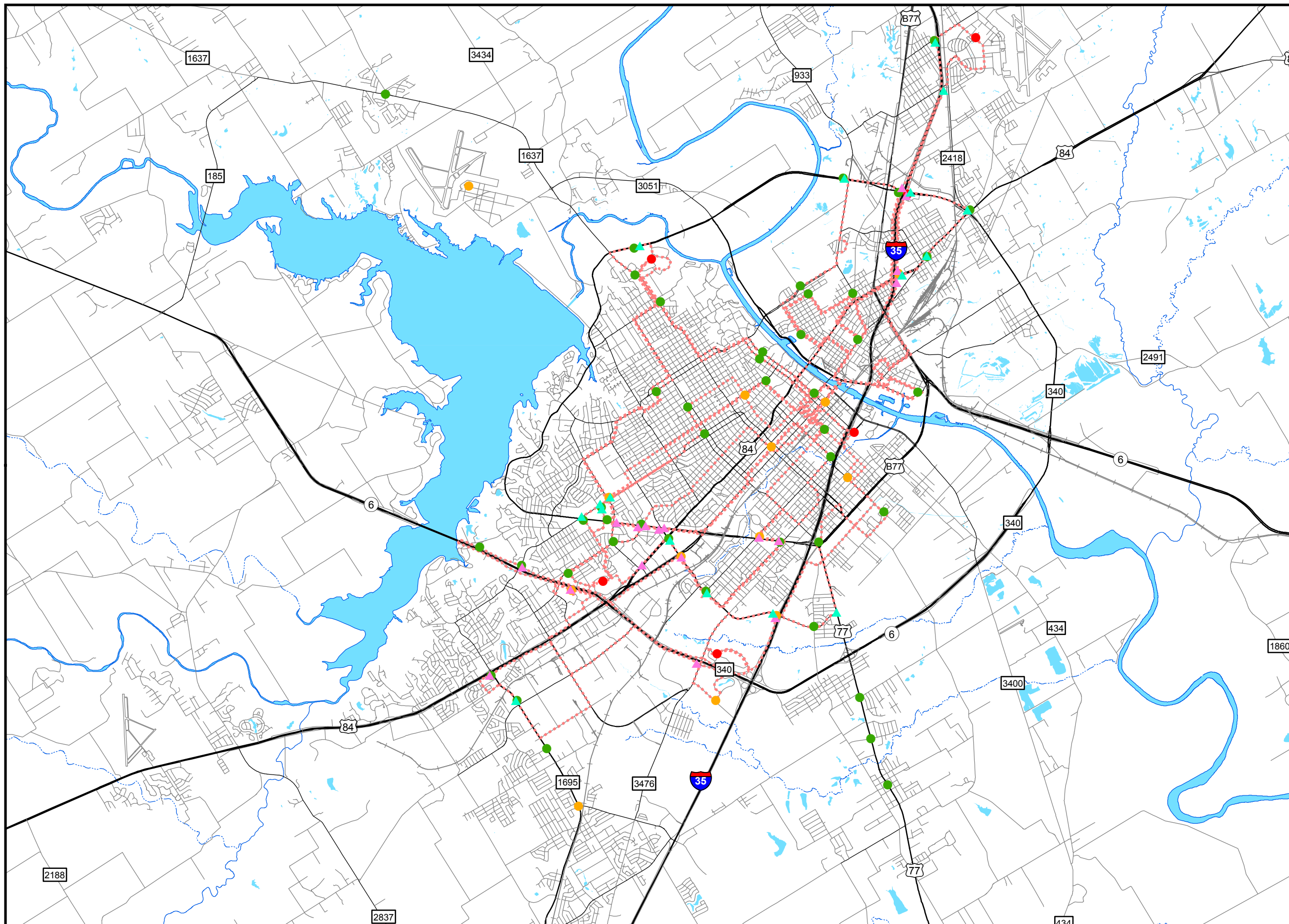
**Transit Kiosks / Shelters**

- Automated Kiosks
- Priority 1 Shelters
- Priority 2 & 3 Shelters
- Existing Fixed Routes
- Waco Metropolitan Area



September, 2009

**Map 7.4 - Bus Pullouts and Shelters / Kiosks**





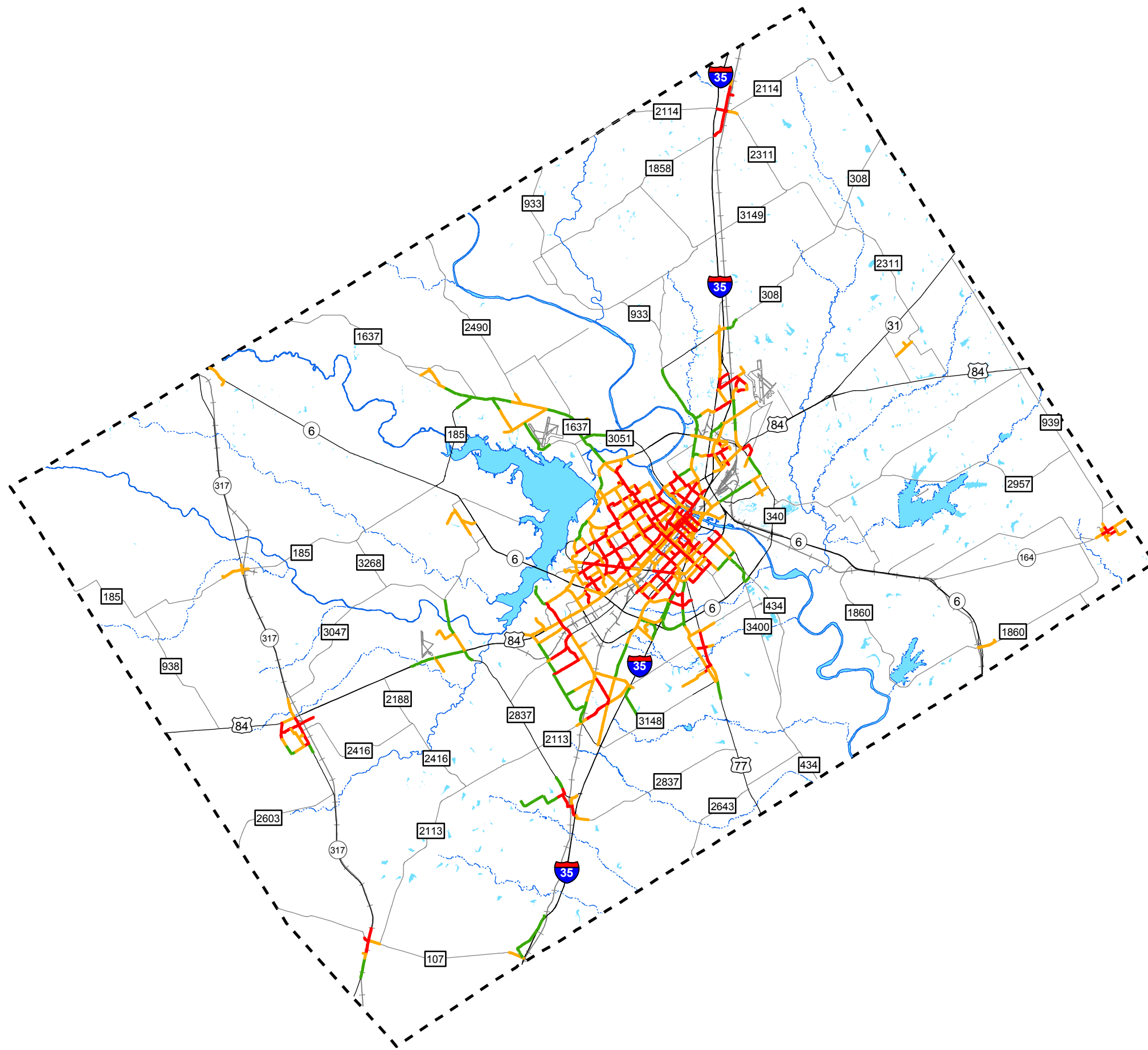
**Corridor Priority**

- 1
- 2
- 3
- Waco Metropolitan Area



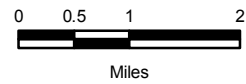
December, 2009

**Map 7.7  
Priority Pedestrian Corridors**



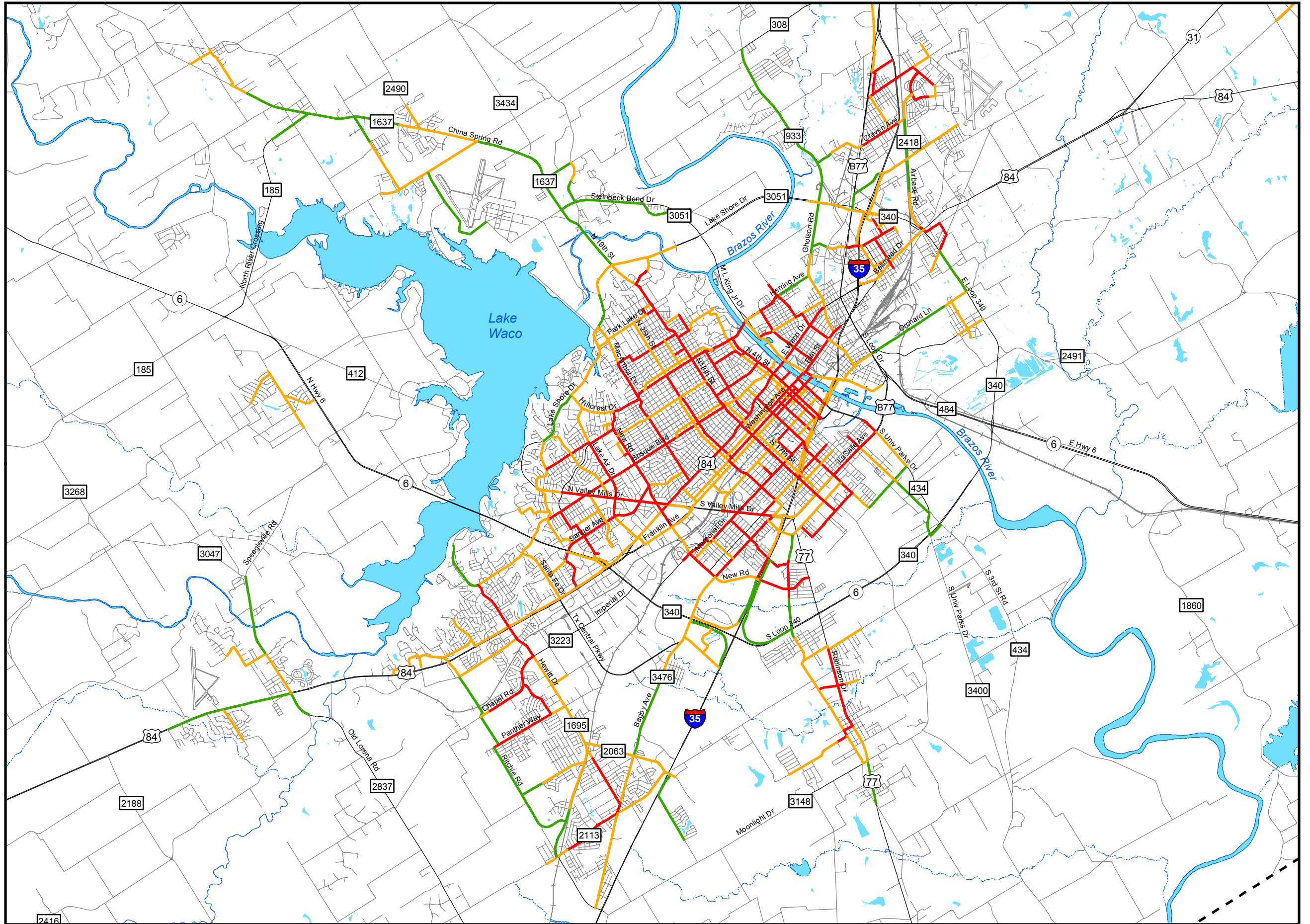
**Corridor Priority**

- 1
- 2
- 3



December, 2009

**Map 7.8  
Priority Pedestrian Corridors - Downtown**







# Section 8: Public Involvement

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This chapter identifies the efforts the Waco MPO undertook to solicit citizen input into the identification of goals, needs and priorities for the Metropolitan Transportation Plan.

## 8.1 Land Use – Identification of Preferred Scenarios

The MPO began the development of the MTP through a study to estimate the impacts of future landuse trends on the transportation network and vice-versa. The MPO conducted 3 workshops to solicit input on alternative landuse patterns for the MPO to consider when identifying future priorities. 2 initial workshops were conducted in 2006 to identify possible alternatives. These workshops were conducted on September 25, 2006 and December 6, 2006 at the Waco Transit Administration Building and the Heart of Texas Builders Association Offices respectively. The first meeting focused on participation from community leaders and interested citizens and had 21 participants. The second meeting focused on participation from the business and development interests within McLennan County and had 86 participants.

The MPO conducted 2 workshops on September 6, 2007 to provide the results and consultant recommendations regarding preferred alternatives. The first workshop was conducted at 2:00 PM in the Waco Convention Center and had 13 participants. The second workshop was conducted at 6:00 PM at the Waco Transit Administration Building and had 15 participants. Each of the landuse workshops were advertised and noticed in accordance to procedures identified within the Waco MPO public participation plan.

## 8.2 Presentations to Boards, Commissions, Civic Interests

Upon receipt of the final landuse study report from Wilbur Smith Associates, the MPO began addressing interested parties on discussions regarding several topics related to the development of a draft MTP. Once a draft MTP was developed and released to the public, the MPO staff conducted additional presentations to interested groups to highlight the recommended priorities and to solicit input. Table 8.1 identifies the presentations made and the topics covered.

**Table 8.1 – Presentations**

<b>Group</b>	<b>Date</b>	<b>Topic</b>
Waco Transit Advisory Board	July 31, 2008	Passenger Rail, Public Transportation
Rotary Club of Waco	August 11, 2008	Future growth, impacts to future mobility and cost
City of Waco Water Dept	September 24, 2008	Future growth, impacts to future mobility and cost
West Kiwanis Club	May 6, 2009	Future mobility needs, passenger rail
Waco Visioning Committee	September 22, 2009	Future growth, impacts to future mobility and cost
Waco Transit Advisory Board	October 1, 2009	Future Public Transportation Needs and Priorities
Heart of Texas Regional Transportation Coordination Council	October 6, 2009	Future Public Transportation Needs and Priorities
HOTCOG Executive Committee	January 26, 2010	Future growth, MTP project priorities

In addition to the presentations, the MPO staff also participated in two media events to provide information to the public on several issues related to the development of the MTP and to solicit input on those issues. The first event was an online question and answer session with the Waco Tribune-Herald conducted on March 2, 2009. This event was moderated by Tribune-Herald staff and permitted interested persons to submit questions. The MPO staff would then respond to those questions in real time. In addition to the questions from the public, the staff of the Tribune-Herald also submitted questions. An edited version of the Q&A session was then published in the Tribune-Herald on March 8, 2009.

The second event was an interview with the City of Waco office of Municipal Information conducted on September 23, 2009. The interview primarily covered passenger rail but also covered fiscal issues related to the development of the MTP. The interview was broadcasted on the Clear Channel operated radio stations within Waco on Sunday, September 27, 2009 and the City of Waco cable channel at various times for two weeks after the interview.

### **8.3 MPO Technical Committee Discussions and Recommendations**

The MPO staff presented all analysis used in developing the MTP and identifying project priority recommendations to the MPO Technical Committee for their review and recommendations. The MPO Technical Committee also provided recommendations on

certain policy decisions, as requested by the MPO Policy Board, as well as project priorities. Table 8.2 identifies the MPO Technical Committee meetings where aspects of the development of the MTP were discussed or where recommendations were made. All MPO Technical Committee meetings were advertised and announced in accordance with the MPO Public Participation Plan.

**Table 8.2 – Technical Committee Meetings & Discussions**

Date	Topic
February 16, 2007	Revisions to Highway Project Evaluation Criteria
October 24, 2007	Socio-Economic Forecasts
June 10, 2008	Bicycle Suitability Index
July 8, 2008	Public Transportation Needs
September 9, 2008	Review of Crash Patterns
January 13, 2009	Highway & Public Transportation Project Proposals
February 10, 2009	Highway project evaluation
March 10, 2009	Highway project evaluation
June 9, 2009	Financial Forecasts
September 1, 2009	Highway project evaluation
October 1, 2009	Public Transportation project evaluation
December 8, 2009	Financial Forecasts and Fiscal Constraint Determination
December 17, 2009	Technical Committee Project Priority Recommendations

## 8.4 MPO Policy Board Discussions

The MPO Policy Board makes all decisions regarding transportation policies and adopts all plans and programs developed by the MPO. During the development of the MTP, several policy decisions were required. Table 8.3 identifies the decisions and discussions performed by the MPO Policy Board during the development of the MTP. All MPO Policy Board meetings were advertised and announced in accordance with the MPO Public Participation Plan.

**Table 8.3 – Policy Board Meetings & Discussions**

<b>Date</b>	<b>Topic</b>
September 30, 2008	Selection of MTP Guiding Principles
October 27, 2008	Bicycle Suitability Index
September 22, 2009	Review of Draft Highway Projects for Consideration
October 19, 2009	Review of Draft Public Transportation Projects for Consideration
January 6, 2009	Review of Project Priority Recommendations
January 15, 2009	Review of Project Priority Recommendations

## 8.5 MTP Adoption Process

The process of formally adopting the MTP began with the completion of the draft MTP in December, 2009. The MPO made the draft of the MTP publicly available via the MPO website and 6 locations where paper copies were available. Table 8.4 identifies these locations. A formal public comment period commenced on December 18, 2009 and was advertised and announced in accordance with the MPO Public Participation Plan. The comment period ended at 5:00 PM on February 1, 2010. The MPO staff received 6 formal comments regarding project recommendations which were forwarded to the MPO Policy Board prior to adoption of the MTP. Appendix H contains copies of the comments received.

**Table 8.4 – Locations for Paper Copies of Draft MTP**

<b>Location</b>	<b>Physical Address</b>	<b>City</b>
MPO Offices	401 Franklin Ave	Waco
TxDOT – Waco District	100 South Loop Dr	Waco / Bellmead
Waco Transit	301 South 8 <sup>th</sup> St	Waco
Hewitt City Hall	105 Tampico	Hewitt
Robinson City Hall	111 West Lyndale St	Robinson
West City Hall	110 North Reagan St	West

The MPO conducted 5 public information meetings to give interested persons an opportunity to review the draft MTP, ask questions of staff and to submit comments or concerns regarding project recommendations. All meetings were advertised and announced in accordance with the MPO Public Participation Plan. Table 8.5 identifies the time and locations of these meetings.

**Table 8.5 – Public Information Meeting Locations**

<b>Date</b>	<b>Time</b>	<b>Location</b>	<b>City</b>	<b>Attendance</b>
January 19, 2010	6:30 PM	Waco Transit Administration Building	Waco	12
January 21, 2010	6:30 PM	Lacy-Lakeview Community Center	Lacy-Lakeview	4
January 25, 2010	6:30 PM	Hewitt Community Center	Hewitt	7
January 26, 2010	12:00 PM	City of Waco Multi-Purpose Center	Waco	6
January 28, 2010	6:30 PM	West Community Center	West	6

A formal public hearing was conducted at the February 3, 2010 meeting of the Waco MPO Policy Board to receive comments regarding the draft MTP and project recommendations. The public hearing was advertised and announced in accordance with the MPO Public Participation Plan. A total of 8 persons addressed the Policy Board during the public hearing. Appendix H contains a transcript of the comments received during the public hearing.

# Appendix A: Glossary of Terms

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**THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA):** A federal law mandating sweeping changes in building codes, transportation, and hiring practices to prevent discrimination against persons with disabilities, not just in projects involving federal dollars, but all new public places, conveyances and employers. The significance of ADA in transportation is mainly felt in terms of transit operations, capital improvements and hiring.

**ARTERIAL:** A street classification for roadways serving major traffic volumes other than highways.

**ATTAINMENT AREA:** An area considered to have air quality at least as good as the U.S. Environmental Protection Agency (EPA) health standards used in the Clean Air Act. An area may be an Attainment Area for one pollutant and a Non-Attainment Area for others.

**AVERAGE DAILY TRAFFIC (ADT):** The average number of vehicles passing a fixed point in a 24-hour time frame. A convention for measuring traffic volume.

**BASE YEAR:** An analysis or study's baseline or lead off year. The year to which other years are compared.

**BIKEWAY:** A facility intended to accommodate bicycle travel for recreational or commuting purposes. Bikeways are not necessarily separate facilities ; they may be designed and operated to be shared with other travel modes.

**CENSUS BLOCK GROUP:** Block groups are subdivisions of census tracts containing between 400 and 2,000 persons.

**CENSUS TRACT:** Census tracts are small, relatively permanent subdivisions of a county which are delineated for all metropolitan areas and other densely populated counties by local census statistical area committees. Each census tract contains between 1,000 and 8,000 persons with an average of about 2,000 persons.

**CENTRAL BUSINESS DISTRICT (CBD):** The most intensely commercial sector of a city.

**THE CLEAN AIR ACT AMENDMENTS OF 1990 (CAAA):** Amendments which identify "mobile sources" (vehicles) as primary sources of pollution and call for stringent new requirements in metropolitan areas and states where attainment of National Ambient Air Quality Standards (NAAQS) is or could be a problem.

**COLLECTOR/DISTRIBUTOR STREET:** A road which collects traffic from local streets and distributes it to arterials or expressways. A collector may also parallel an expressway to collect and distribute traffic at access points to the expressway involving through lanes.

**CRASH:** A collision of one vehicle with another object or two or more vehicles with each other or another object which results in damage to one or more vehicles. Formerly referred to as accidents.

**DEMAND RESPONSE SERVICE:** Term for a service type, usually considered para-transit, in which a user can access transportation services that can be variably routed and timed to meet changing needs on a semi-daily basis. Frequently used to serve elderly and handicapped persons. Compare with Fixed Route Service.

**DEMOGRAPHY:** Characteristics of a total population. Characteristics can include, but are not restricted to: ethnic makeup, age distribution, education levels, and occupation patterns.

**DEPARTMENT OF TRANSPORTATION (DOT):** Can refer to U.S. DOT or to a state DOT.

EISENHOWER INTERSTATE SYSTEM: See INTERSTATE SYSTEM.

EMPLOYER TRIP REDUCTION (ETR) PROGRAM: An employer designed program which minimizes employee commuting levels. These programs are federally required in non-attainment areas.

EMPLOYMENT DENSITY: The number of jobs within a defined geographical area.

ENHANCEMENT ACTIVITIES: Refers to activities conducted in relationship to a particular transportation project which "enhance" the existing or proposed project. Examples of such activities include provision of facilities for pedestrians or cyclists, landscaping other scenic beautification projects, historic preservation, control and removal of outdoor advertising, archeological planning and research, and mitigation of water pollution due to highway runoff.

ENVIRONMENTAL IMPACT STATEMENT (EIS) Report which details any adverse economic, social and environmental effects of a proposed transportation project for which federal funding is being sought. Adverse effects could include air, water, or noise pollution; destruction or disruption of natural resources; adverse employment effects; injurious displacement of people or businesses; or disruption of desirable community or regional growth.

ENVIRONMENTAL PROTECTION AGENCY (EPA): EPA is the source agency of air quality control regulations affecting transportation.

EXPRESSWAY: A divided limited access highway for through traffic with controlled access, the intersections of which are usually separated from other roadways by differing grades.

FEDERAL FUNCTIONAL CLASSIFICATION SYSTEM: Federal classification of streets and highways into functional operating characteristics.

FEDERAL HIGHWAY ADMINISTRATION (FHWA): The agency of U.S. DOT with jurisdiction over highways.

FEDERAL TRANSIT ADMINISTRATION (FTA): The agency of U.S. DOT administration with jurisdiction over transit. Formerly the Urban Mass Transit Administration.

FIXED ROUTE SERVICE: Term applied to transit service which is regularly scheduled and operates over a set route.

FREEWAY: Antiquated term referring to a highway that is free of at-grade intersections and traffic signals. See expressway.

HEADWAYS: Public Transportation term referring to the frequency of service for a fixed transit route.

HIGH SPEED RAIL: Rail facilities where travel exceeds 150 miles per hour.

HIGHWAY: Term applies to roads, streets, and parkways, and also includes rights-of-way, bridges, railroad crossings, drainage tunnels, drainage structures, signs, guard rails, and protective structures in connection with highways.

HOME-BASED WORK TRIP: A trip for the purpose of one's employment with the trip end being one's home.

HOUSEHOLD DENSITY: The number of households within a defined geographical area.

INCENTIVE ZONING: Flexible zoning techniques that give the municipality more control over the details of land development than zoning regulations usually allow through allocation of incentives such as tax breaks, etc.



**INFILL DEVELOPMENT:** The process of building homes, businesses, and public facilities on unused and underutilized lands within existing urban areas. The primary goal of infill development is to keep resources where people already live and allow rebuilding to occur.

**INFRASTRUCTURE:** A term connoting the physical underpinnings of society at large, including, but not limited to, roads, bridges, transit, waste system, public housing, sidewalks, utility installations parks, public buildings, and communication networks.

**INTERMODAL:** Refers to the connections between transportation modes.

**INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA):** A federal mandate signed into law December 18, 1991, ISTEA proposed broad changes to the way transportation decisions are made by emphasizing diversity and balance of modes and preservation of existing systems over construction of new facilities, especially roads, and by proposing a series of social, environmental and energy factors which must be considered in transportation planning, programming and project selection.

**INTERSTATE SYSTEM:** That system of highways which connects the principal metropolitan areas, cities, and industrial centers of the United States. The interstate system also connects at suitable border points with routes of continental importance in Canada and Mexico. The routes of the interstate system were selected by joint action of the state highway department of each state and the adjoining states, subject to the approval of the U.S. Secretary of Transportation.

**JOB-HOUSING BALANCE:** The development of a land use pattern offering a balance of jobs to housing opportunities.

**LAND USE:** The way in which specific portions of land or structures on them are used, i.e., commercial, residential, retail, industrial, and so on.

**LOCAL STREET:** A street intended solely for access to properties contiguous to it.

**LONG-RANGE:** Refers in transportation planning to a time span of more than five years. The Transportation Improvement Program (TIP), which is three years in scope, is typically regarded as a short-range program.

**MAJOR INVESTMENT STUDIES:** A planning tool to provide the regional multimodal planning effort with more in-depth technical analysis of various sub-area or corridor options.

**METROPOLITAN PLANNING ORGANIZATION (MPO):** The agency designated by the Governor (or Governors in multi-state areas) to administer the federally required transportation planning process in the metropolitan area. An MPO must be in place in every urbanized area over 50,000 population. The MPO is responsible for the 25-year long-range plan and the transportation improvement program. The official name for an MPO may also be Council of Governments, Planning Association, Planning Authority, Regional or Area Planning Council, Regional or Area Planning Commission.

**METROPOLITAN STATISTICAL AREA (MSA & CMSA):** The Census classifications for areas having a population over 50,000. The MSA may contain several urbanized areas, but contains one or more central city or cities. The MSA also does not subdivide counties. For example the Waco MSA is the same as McLennan County. When the commuting patterns of two MSAs have caused them to merge, the result is a Consolidated Metropolitan Statistical Area (CMSA).

**METROPOLITAN TRANSPORTATION PLAN:** A document, formerly known as the Long-Range Transportation Plan, which identifies existing and future transportation deficiencies and needs, as well as network improvements needed to meet mobility requirements over at least a twenty five year time period. To receive federal funding, a transportation project must be included in the MTP and the TIP.

**MOBILITY:** The ease with which desired destinations can be reached.

**MODEL:** A mathematical and geometric projection of activity and the interactions in the transportation system in an area. This projection must be able to be evaluated according to a given set of criteria which typically include criteria pertaining to land use, economics, social values, and travel patterns.

**MULTIMODAL:** Refers to the diversity of options for the same trip; an approach to transportation planning or programming which acknowledges the existence of or need for transportation options.

**NATIONAL AMBIENT AIR QUALITY STANDARD (NAAQS):** Federally mandated maximum levels (i.e., federal health standards) for air pollutants such as ozone, carbon dioxide, particulate matter, sulfur dioxide, nitrous oxide, and lead.

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA):** Federal act requiring a study on any environmental impact a federally funded or permitted project might cause.

**NATIONAL HIGHWAY SYSTEM (NHS):** A classification of roads authorized by ISTEA which are comprised of Interstate Highways and roads designated as important for interstate travel, national defense, intermodal connections, and intermodal commerce. Federal funds are designated for projects on the NHS system.

**NEO-TRADITIONAL NEIGHBORHOOD DESIGN (NTND):** Neighborhoods characterized by an interconnecting street network, mixture of land uses, bike and pedestrian paths, grid pattern of land use, and resemblance to those areas developed in America before World War II.

**NETWORK:** A graphic and/or mathematical representation of multimodal paths in a transportation system.

**NITROGEN OXIDES (Nox):** A pollutant produced during fossil fuel combustion which contributes to ground-level ozone.

**NON-ATTAINMENT AREA:** A designation by the Environmental Protection Agency of any place in the United States failing to meet national air quality standards (NAAQS).

**ORIGIN:** The point or locale where a trip begins.

**ORIGIN-DESTINATION SURVEY (O-D Survey):** A survey of travelers (motorists or transit passengers) typically undertaken to identify travel patterns, habits, and needs.

**OZONE:** A gas which in excess quantities at ground-level is a pollutant and irritant. Ozone is created when nitrogen oxides (Nox) react with volatile organic compounds (VOCs) in sunlight, also known as smog.

**PARA-TRANSIT:** Alternatively known as special transportation when applied to social services systems. Applies to a variety of smaller, often flexibly scheduled and routed non-profit oriented transportation services using low capacity vehicles to operate within normal urban transit corridors or rural areas. These services usually serve the needs of persons whom standard mass transit services would serve with difficulty or not at all. Common patrons are the elderly and persons with disabilities.

**PARA-TRANSIT VAN:** A van specially modified to carry disabled passengers.

**PASS THROUGH TOLLS:** A funding mechanism where an entity such as a City, County or private corporation pays for the initial construction of a transportation facility. That entity is then repaid from the State of Texas based on the usage of that facility.

**PEAK HOUR:** The sixty minute period in the a.m. or p.m. in which the largest volume of travel is experienced.

PEDESTRIAN-ORIENTED DEVELOPMENT (POD): Similar to a Neo-Traditional Neighborhood Design, except that it often incorporates higher densities and is designed to encourage the walkability of the surrounding neighborhood.

PERSON-TRIP: A trip made by one person from one origin to one destination.

PHASE: Project Phase for Federal Funding (E = Preliminary Engineering, R = Right of Way Acquisition, and C = Construction).

PLANNER: In the transportation field, a title likely having to do with the management and analysis of data which directly supports qualitatively oriented, strategic, or "macro" decision making.

PRIVATIZATION: Concept having to do with for-profit business supplying goods and services for government, public programs or systems, with intent of enhancing cost efficiency.

PROJECT IDENTIFICATION (Project ID): Code assigned by the MPO for local tracking and identification. Used to relate projects to the MTP.

PROVIDER: An agency that causes clients to be transported, as opposed to an agency whose role is limited to funding programs.

PUBLIC INVOLVEMENT: The active involvement of the public in the development of transportation plans and improvements program. ISTEA requires that state departments of transportation and MPOs "shall provide citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation agency employees, private providers of transportation, and other interested parties with a reasonable opportunity to comment on the development of the long-range plan and the TIP.

PUBLIC ROAD: Any road or street under jurisdiction of and maintained by a public authority and open to public traffic.

REVERSE COMMUTE: Travel from home to work or from work to home against the main directions of traffic.

RIGHT OF WAY (ROW): Priority paths for the construction and operation of highways, light and heavy rail, railroads, etc.

SAFE ACCOUNTABLE FLEXIBLE EFFICIENT TRANSPORTATION EQUITY ACT: A LEGACY FOR USERS (SAFETEA-LU): The federal reauthorization act for TEA-21 designed to support transportation across the nation.

SURFACE TRANSPORTATION PROGRAM (STP): One of the key capital programs in Title I of ISTEA. It provides flexibility in expenditures of "roads" funds for non-motorized and transit modes and for a category of activities known as transportation enhancements, which broaden the definition of eligible transportation activities to include bicycle and pedestrian facilities and enhance community and environmental quality through ten categories of activity.

TELECOMMUTING: Using a home computer or a neighborhood work center for work, effectively eliminating the need to travel to a conventional workplace.

TELECONFERENCING: Using audio, video, and/or computer connections among sites for meetings. Eliminating any need to travel to the meeting site.

TEMPORARY ASSISTANCE FOR NEEDY FAMILIES (TANF): A state-administered block grant program apportioned to each state on a formula basis from the federal government. The funding is temporary in that recipients will have no more than sixty months total (some states have chosen shorter periods) to find employment. After sixty months of support, TANF benefits end.

TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT): State agency responsible for construction and maintenance of all Interstate, U.S., and State Highways; and Farm-to-Market (FM) Roads within the state.

TEXAS T-BONE: A proposal by the Texas High Speed Rail and Transportation Corporation to construct high speed rail lines between the cities of Dallas and San Antonio and then Houston and Fort Hood.

TRAFFIC ANALYSIS ZONE: The smallest geographically designated area for analysis of transportation activity such as data collection and travel movements within, into, and out of the urban area. A zone can be one to 10 square miles in area.

TRAFFIC DISTRICT: A geographic unit comprised of several serial zones which may be used for the same purposes as traffic analysis zones.

TRANSIT: Transportation mode which moves larger numbers of people than does a single automobile. Generally renders to passenger service provided to the general public along established routes with fixed or variable schedules at published fares.

TRANSIT-ORIENTED DEVELOPMENT (TOD): Similar to a Neo-Traditional Neighborhood Design, except that it incorporates higher densities and possesses a distinct focus toward transit.

TRANSIT DEPENDENT: Persons who must rely on public transit or para-transit services for most of their transportation. Typically refers to individuals without access to personal vehicles.

TRANSPORTATION: The act of getting persons or things from here to there, through personal or communal means. An integral and vital human need, behavior, and/or service.

TRANSPORTATION CONTROL MEASURE (TCM): Any measure designed to reduce congestion, emissions, and other traffic problems.

TRANSPORTATION DEMAND MANAGEMENT (TDM): Strategies for easing or reducing transportation demand, specifically aimed at diverting people from driving alone. Programs used to improve air quality and congestion by decreasing vehicle miles traveled and vehicle trips.

TRANSPORTATION EFFICIENCY ACT FOR THE 21<sup>ST</sup> CENTURY (TEA-21): The reauthorization bill for ISTEA designed to support transportation across the nation.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP): A three year transportation investment strategy, required at the metropolitan level, and a two year program at the state level, which addresses the goals of the long-range plans and lists priority projects and activities for the region.

TRANSPORTATION MANAGEMENT AREAS (TMA): Areas subject to special requirements under ISTEA and in some cases benefiting from preferential treatment with regard to air quality needs, and local authority to select transportation projects. Any area over 200,000 population is automatically a transportation management area, which subjects it to additional planning requirements, but also entitles it to earmarked funds for large urbanized areas under the Surface Transportation Program. Additional areas may be designated TMAs if the Governor and the MPO or affected local officials request designation. Such a designation would entitle them to greater local project selection authority through their MPOs, but would not, according to interim guidance issued by U.S. DOT, entitle them to the earmarked STP funds for large urban areas.

TRANSPORTATION SYSTEM MANAGEMENT (TSM): That element of the TIP which proposes non-capital-intensive steps toward the improvement of a transportation system, such as refinement of system and traffic management, the use of bus priority or reserved lanes, and parking strategies. It includes actions to reduce vehicle use, facilitate traffic flow, and improve internal transit management.

TRANS TEXAS CORRIDOR: A proposal by the Governor of Texas to create a network of corridors throughout Texas to provide rapid mobility options for through traffic. These corridors are proposed to include toll expressways, separate truck lanes, high speed rail facilities, freight rail facilities and a corridor for various utilities. User fees are anticipated to pay for most of the costs associated with construction.

TRAVEL TIME: Customarily calculated as the time it takes to travel from "door-to-door." For transit service measures of travel time include time spent accessing, waiting, and transferring between vehicles, as well as that time spent on board.

TRIP: A one-direction movement from an origin to destination.

TRIP END: Origin or destination of a trip.

TRIP PURPOSE: Reason for a trip.

TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT): Agency responsible for construction and maintenance of state highway facilities and also oversees the distribution and regulation of planning funds to the MPO's.

UNIFIED PLANNING WORK PROGRAM (UPWP): Annual report or budget document prepared by the Waco MPO describing transportation planning activities which will be performed by the MPO staff.

UNITED STATES DEPARTMENT OF TRANSPORTATION (US DOT): Principal federal funding and regulating agency for transportation facilities. FHWA and FTA are agencies within US DOT.

URBANIZED AREA (UZA): A census classification for area having a population of 50,000 or more which meet certain population density requirements. The 1990 Census identified thirty-five UZAs that newly qualify to have designated MPOs.

VEHICLE MILES TRAVELED (VMT): Term used for describing the total number of miles traveled by a vehicle in a given time. Most conventional VMT calculation is to multiply average length of trip by the total number of trips.

WELFARE TO WORK (WTW): This program shares the same overall objectives of TANF, especially making welfare receipt temporary and changing the culture of welfare from one of cash benefits to one of work and self-sufficiency. The funding is intended to help states and localities meet their welfare reform objectives and the goals set forth under PRWORA by providing federal resources above and beyond the TANF block grant to move the least employable TANF recipients and non-custodial fathers of TANF children into long-term unsubsidized employment

# Appendix B: Highway Project Evaluation Criteria

## I. Reduction of Congestion (Existing Facilities Only)

### A. Evaluation Factor: Present Level of Service

Score: -10 points if Level of Service is equal to "A"  
-5 points if Level of Service is equal to "B"  
0 points if Level of Service is equal to "C"  
+10 points if Level of Service is between "D" and "E"  
+20 points if Level of Service is equal to "F"

### B. Evaluation Factor: Future Level of Service (No Build)

Score: -10 points if Level of Service is equal to "A"  
-5 points if Level of Service is equal to "B"  
0 points if Level of Service is equal to "C"  
+10 points if Level of Service is between "D" and "E"  
+20 points if Level of Service is equal to "F"

### C. Evaluation Factor: Change in Future Level of Service (Build vs. No Build)

Score: 0 points if no change in Level of Service  
+10 points if Level of Service decreases by one letter  
+20 points if Level of Service decreases by more than one letter

Maximum Points for Category: 60 (24% of total)

## II. Projected Traffic Volumes / Time Savings (New Highways on New Alignments Only)

### A. Evaluation Factor: 25 year Level of Service

Score: 0 points if future\* Level of Service is "B" or less  
+30 points if future\* Level of Service is "E" or greater  
+45 points if future\* Level of Service is equal to "D"  
+60 points if future\* Level of Service is equal to "C"

**B. Evaluation Factor: Difference in forecast year travel time from one end of the project to the other vs. using existing highway network**

- Score: -5 points if forecast year travel time is greater than with the existing network  
0 points if forecast year travel time reduction is less than 10 minutes  
+10 points if forecast year travel time reduction is between 10 and 20 minutes  
+15 points if forecast year travel time reduction is 20 minutes or greater

Maximum Points for Category: 75 (23% of total)

**III. Existing Structural Condition  
(Existing Facilities Only)**

**Evaluation Factor: Construction date or years since last reconstruction**

Score: 0 points if all highway segments or all bridges age is less than 45 years by the forecast year

+ 10 points if one of the following conditions exist:

At least one highway segment was constructed or reconstructed 46 to 60 years prior to the forecast year

At least one bridge has a sufficiency score between 50.1 and 75.0

+ 15 points if one of the following conditions exist:

At least one highway segment was constructed or reconstructed greater than 60 years prior to the forecast year

At least one bridge has a sufficiency score of 50.0 or less

Maximum Points for Category: 15 (4.6% of total)

## IV. Future Impact on Adjacent Roads

### A: Future Impact on Adjacent Roads

#### Evaluation Factor: Positive Level of Service Impacts

Score: 0 points if Level of Service remains the same for all roads within one mile of the proposed project  
+10 points if Level of Service decreases by one or more letters for one road within one mile of the proposed project  
+15 points if Level of Service decreases by one or more letters for two or more roads within one mile of the proposed project

#### Evaluation Factor: Negative Level of Service Impacts

Score: -5 points if Level of Service increases by one or more letters for one road within one mile of the proposed project  
-10 points if Level of Service increases by one or more letters for two or more roads within one mile of the proposed project

An Additional 5 points will be subtracted if any of the above negative impacts occur on a road classified as a collector

\*NOTE: Impacts will be evaluated only for functionally classified roads within one mile of the proposed project.

Maximum Points for Category: 15 (4.6% of total)

## V. Benefits to Metropolitan Area



**A. Evaluation Factor: Regional Connectivity**

Score: 0 points if project is entirely within one incorporated city or entirely within unincorporated portions of McLennan County  
+5 points if project connects two or more incorporated cities  
+10 points if project completes a 4 lane divided or greater facility connecting the Waco Urbanized Area to another city with a population greater than 50,000

**B. Evaluation Factor: Metropolitan Transportation Plan (MTP) Priority**

Score: 0 points if project is not currently included in the MTP  
+5 points if project is currently included in the MTP

**C. Evaluation Factor: EIS underway or Complete**

Score: +25 points if work producing an Environmental Impact Statement is either underway or complete.

**D. Evaluation Factor: Multi-modal Benefits**

Score: +5 points if one or more of the following are provided:

Upgrading Railroad Crossing (Includes installation of signals or 4-quad gates, channelization, or grade separation)

Road, Intersection, or Bridge provides or improves primary access to an intermodal facility (airports, bus terminals, motor freight terminal, railroad passenger terminals, or railroad freight facilities)

Road, Intersection, or Bridge provides or improves primary access to an existing or committed employer, industrial park or shopping center with greater than 1,000 employees

0 points if none of the above situations are applicable

**E. Evaluation Factor: Bicycle and Pedestrian Considerations**

Score: -5 points if project includes no provision for bicycles or pedestrians and a portion of the project is less than ½ mile from a public or private elementary or secondary school.

0 points if project includes no provision for bicycles or pedestrians

+5 points if provisions are made for bicycles or pedestrians. Work may include bike paths / lanes, sidewalks, pedestrian overpasses, wheelchair ramps (with connecting sidewalks) or signalized crosswalks.

+10 points if crosswalk or wheelchair ramp construction is combined with the construction of a raised median or intersection lane width reduction.

**F. Evaluation Factor: Landscaping Provisions**

Score: 0 points if no provisions for landscaping are made

+5 points if at least 1% of the project construction cost is devoted to landscaping

Maximum Points for Category: 60 (18.5% of total)

**VI. Cost Factors**

**A. Evaluation Factor: Local Commitment**

Score: 0 points if the minimum local share of the project cost is allocated by local sponsor(s)

+1 point for each percent of the project cost above the minimum necessary allocated by the local sponsor(s) (Maximum of 20 points)

+15 points additional if either pass through financing or the state infrastructure bank used to finance at least 50% of total project cost.

**B. Evaluation Factor: Total Project Cost**

Score: +20 points if 100% of the total project cost is funded through a federal earmark, public / private partnership, tolls, or other state financing program or local funds

If project funding is not provided through above mechanism then the following applies:

-20 points if the total project cost is greater than 30% of total federal construction funds available within TxDOT Categories 3 & 11

-10 points if the total project cost is between 20% and 29.9% of total federal construction funds available within TxDOT Categories 3 & 11

0 points if the total project cost of project is between 15% and 19.9% of total federal construction funds available within TxDOT Categories 3 & 11

+ 1 point for each 0.5% below 15% of total funds available within TxDOT Categories 3 & 11 (Maximum of 20 points)

Note: for projects where only a portion of the total cost is funded outside of Categories 3 & 11, that portion is subtracted from the total project cost and then reevaluated using the new cost.

Maximum Points for Category: 40 (12.3% of total)

## VII. Classification System

### A. Evaluation Factor: Functional Classification of Road

Score: 0 points for a collector or local road  
+10 points for a minor arterial  
+30 points for a principal arterial, freeway, expressway  
or tollway

### B. Evaluation Factor: State System or Non-State System

Score: -10 points for non-state system facilities  
+5 points for state system facilities

Maximum Points for Category: 35 (10.8% of total)

## VIII. Safety

### A. Highway Segments

(Does not apply to intersections or new highways on new alignments)

#### Evaluation Factor: Crashes per million vehicle miles traveled

Score: 0 points if crash rate is below the following rates  
+15 points if crash rate exceeds the following rates

Expressways: 0.7  
Principal Arterials: 2.2  
Minor Arterials: 3.1  
Urban Collectors: 4.5  
Rural Collectors: 1.0

### B. Intersections

(Does not apply to highway segments or new highways on new alignments)

#### Evaluation Factor: Crashes per million vehicles entering intersection

Score: 0 points if crash rate is below 0.9 crashes per million vehicles  
+15 points if crash rate exceeds 0.9 crashes per million  
vehicles

**C. High Crash Locations**  
(Does not apply to new highways on new alignments)

**Evaluation Factor: Total Crashes on highway segment or in intersection**

Score: 0 points if total crashes are less than 50 within a year  
+10 points if total crashes exceed 50 within a year

**D. New Highways on New Alignments**

All new highways on new alignments will automatically receive +25 points from parts A & B as a result that they will be built to existing safety standards.

**E. Project Effectiveness\***

**Evaluation Factor: Estimated Crash Reduction Factors\*\***

Score: 0 points if estimated crash reduction less than 10  
+5 points if estimated crash reduction is 10 or greater but less than 20  
+10 points if estimated crash reduction 20 or greater but less than 40  
+25 points if estimated crash reduction is 40 or greater

\*New Highways on New Alignments will be evaluated based upon the estimated impact they might have on the facilities they will relieve.

\*\*Reduction if improvements were made in 2001

**F. Fatal or Serious Injury Crashes\***

**Evaluation Factor: Total crashes involving a fatality or serious injury**

Score: +5 points for every crash involving a fatality  
+1 point for every crash involving either an incapacitating injury or non-incapacitating injury

Maximum Points for Category: 85 (26.2% of total)

**Maximum Total Points: 325**

## Appendix C - 2000 Census Data by Block Group

Tract	Block Group	Population	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Hispanic	Percent Black	Percent Hispanic	Per Capita Income	Persons in Poverty	Percent in Poverty
1.00	2	672	532	34	31	75	5.1%	11.2%	\$5,132	528	78.57%
1.00	6	1,795	771	524	15	485	29.2%	27.0%	\$12,692	247	13.76%
2.00	1	1,117	788	69	87	173	6.2%	15.5%	\$10,083	584	52.28%
2.00	4	1,040	751	83	112	94	8.0%	9.0%	\$8,457	706	67.88%
3.00	1	3,510	2,684	234	318	274	6.7%	7.8%	\$3,660	285	8.12%
4.00	1	659	159	177	26	297	26.9%	45.1%	\$7,168	273	41.43%
4.00	2	1,644	1,287	93	136	128	5.7%	7.8%	\$5,046	1,068	64.96%
4.00	3	2,049	1,555	99	172	223	4.8%	10.9%	\$4,738	1,562	76.23%
4.00	4	806	516	104	40	146	12.9%	18.1%	\$8,657	461	57.20%
4.00	6	1,385	135	352	15	883	25.4%	63.8%	\$8,165	628	45.34%
5.98	1	1,920	193	52	14	1,661	2.7%	86.5%	\$8,258	556	28.96%
5.98	2	1,463	236	89	20	1,118	6.1%	76.4%	\$9,398	448	30.62%
5.98	5	807	100	198	14	495	24.5%	61.3%	\$8,966	156	19.33%
5.98	6	720	119	49	3	549	6.8%	76.3%	\$8,200	263	36.53%
5.98	8	982	170	59	16	737	6.0%	75.1%	\$8,337	232	23.63%
7.00	1	524	161	165	22	176	31.5%	33.6%	\$9,685	101	19.27%
7.00	2	791	199	256	27	309	32.4%	39.1%	\$9,405	305	38.56%
7.00	3	1,283	280	308	19	676	24.0%	52.7%	\$7,222	492	38.35%
7.00	4	902	520	125	30	227	13.9%	25.2%	\$20,104	238	26.39%
8.00	1	1,072	275	307	30	460	28.6%	42.9%	\$11,393	218	20.34%
8.00	3	1,867	838	371	48	610	19.9%	32.7%	\$11,006	572	30.64%
9.00	1	1,187	387	364	27	409	30.7%	34.5%	\$11,469	269	22.66%
9.00	2	1,298	854	163	24	257	12.6%	19.8%	\$17,265	70	5.39%
9.00	3	1,048	381	217	18	432	20.7%	41.2%	\$15,315	269	25.67%
9.00	4	761	408	126	17	210	16.6%	27.6%	\$13,575	98	12.88%
9.00	6	773	446	164	9	154	21.2%	19.9%	\$14,530	131	16.95%
10.00	1	899	229	378	11	281	42.0%	31.3%	\$18,032	229	25.47%
10.00	2	937	175	352	18	392	37.6%	41.8%	\$7,630	484	51.65%
10.00	3	1,262	356	331	34	541	26.2%	42.9%	\$11,256	274	21.71%
11.00	3	727	85	309	5	328	42.5%	45.1%	\$6,519	309	42.50%
11.00	4	1,440	276	527	31	606	36.6%	42.1%	\$8,117	344	23.89%
11.00	5	799	198	305	22	274	38.2%	34.3%	\$7,720	299	37.42%
11.00	6	922	199	280	11	432	30.4%	46.9%	\$9,918	256	27.77%
11.00	7	1,423	569	352	32	470	24.7%	33.0%	\$10,437	384	26.99%
11.00	8	716	326	133	10	247	18.6%	34.5%	\$10,761	73	10.20%
12.00	1	1,137	46	735	4	352	64.6%	31.0%	\$9,860	330	29.02%

Tract	Block Group	Population	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Hispanic	Percent Black	Percent Hispanic	Per Capita Income	Persons in Poverty	Percent in Poverty
12.00	2	719	9	485	8	217	67.5%	30.2%	\$4,219	590	82.06%
12.00	3	1,801	94	1,095	12	600	60.8%	33.3%	\$8,078	649	36.04%
13.00	2	828	568	136	16	108	16.4%	13.0%	\$13,037	50	6.04%
13.00	3	497	35	304	7	151	61.2%	30.4%	\$13,100	106	21.33%
13.00	5	1,045	343	204	9	489	19.5%	46.8%	\$9,587	156	14.93%
14.00	1	1,635	710	703	24	198	43.0%	12.1%	\$11,671	323	19.76%
14.00	2	1,488	459	836	16	177	56.2%	11.9%	\$8,836	358	24.06%
14.00	4	1,022	49	818	19	136	80.0%	13.3%	\$4,919	668	65.36%
14.00	5	1,200	222	917	26	35	76.4%	2.9%	\$9,240	644	53.67%
14.00	7	1,460	13	1,400	13	34	95.9%	2.3%	\$10,768	316	21.64%
15.00	1	853	7	816	1	29	95.7%	3.4%	\$7,555	399	46.78%
15.00	3	1,362	199	888	39	236	65.2%	17.3%	\$8,109	392	28.78%
15.00	7	818	26	724	7	61	88.5%	7.5%	\$12,698	176	21.52%
16.00	1	1,753	1,079	317	55	302	18.1%	17.2%	\$15,617	204	11.64%
16.00	2	936	555	101	32	248	10.8%	26.5%	\$13,991	189	20.19%
16.00	3	1,239	773	68	20	378	5.5%	30.5%	\$15,184	170	13.72%
16.00	4	885	407	153	17	308	17.3%	34.8%	\$8,453	433	48.93%
16.00	6	796	479	49	26	242	6.2%	30.4%	\$12,362	205	25.75%
17.00	1	847	671	59	16	101	7.0%	11.9%	\$13,272	133	15.70%
17.00	2	1,367	669	458	18	222	33.5%	16.2%	\$14,354	197	14.41%
17.00	3	1,610	1,073	315	25	197	19.6%	12.2%	\$15,098	102	6.34%
17.00	4	1,308	722	176	28	382	13.5%	29.2%	\$12,157	282	21.56%
18.00	1	732	549	60	9	114	8.2%	15.6%	\$23,173	25	3.42%
18.00	4	763	531	122	12	98	16.0%	12.8%	\$13,951	97	12.71%
19.00	1	1,261	684	226	122	229	17.9%	18.2%	\$7,802	805	63.84%
19.00	2	1,656	303	751	27	575	45.4%	34.7%	\$8,311	803	48.49%
20.00	2	1,192	1,055	15	13	109	1.3%	9.1%	\$23,996	68	5.70%
20.00	4	1,954	1,684	27	39	204	1.4%	10.4%	\$22,738	104	5.32%
21.00	1	817	430	118	39	230	14.4%	28.2%	\$9,141	334	40.88%
21.00	2	1,704	459	769	35	441	45.1%	25.9%	\$11,396	513	30.11%
21.00	3	722	399	87	24	212	12.0%	29.4%	\$12,694	181	25.07%
21.00	4	1,395	822	177	33	363	12.7%	26.0%	\$13,355	255	18.28%
22.00	1	965	483	60	18	404	6.2%	41.9%	\$12,462	148	15.34%
22.00	9	326	213	64	3	46	19.6%	14.1%	\$10,806	34	10.43%
23.01	1	1,403	488	229	15	671	16.3%	47.8%	\$10,324	356	25.37%
23.01	2	1,595	695	185	18	697	11.6%	43.7%	\$10,795	188	11.79%
23.01	3	900	363	49	24	464	5.4%	51.6%	\$11,419	92	10.22%
23.01	5	1,665	792	230	34	609	13.8%	36.6%	\$13,046	194	11.65%

Tract	Block Group	Population	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Hispanic	Percent Black	Percent Hispanic	Per Capita Income	Persons in Poverty	Percent in Poverty
23.02	1	1,473	926	243	72	232	16.5%	15.8%	\$17,185	209	14.19%
23.02	2	1,792	795	486	83	428	27.1%	23.9%	\$12,264	696	38.84%
23.02	4	1,757	1,110	311	67	269	17.7%	15.3%	\$20,782	108	6.15%
24.98	1	844	575	138	17	114	16.4%	13.5%	\$18,755	76	9.00%
24.98	2	1,258	713	165	24	356	13.1%	28.3%	\$15,554	53	4.21%
24.98	3	1,619	1,118	148	47	306	9.1%	18.9%	\$15,398	86	5.31%
24.98	5	1,020	761	91	28	140	8.9%	13.7%	\$29,109	115	11.27%
25.01	1	1,562	1,120	178	39	225	11.4%	14.4%	\$16,297	121	7.75%
25.01	2	1,809	1,291	259	36	223	14.3%	12.3%	\$19,863	131	7.24%
25.01	3	1,141	988	29	42	82	2.5%	7.2%	\$39,515	47	4.12%
25.03	1	1,530	1,371	60	33	66	3.9%	4.3%	\$22,024	145	9.48%
25.03	2	1,370	1,148	97	44	81	7.1%	5.9%	\$22,467	94	6.86%
25.03	3	1,504	1,414	10	39	41	0.7%	2.7%	\$42,270	31	2.06%
25.03	4	1,207	1,092	35	32	48	2.9%	4.0%	\$42,685	12	0.99%
25.04	1	1,099	1,011	24	22	42	2.2%	3.8%	\$24,612	0	0.00%
25.04	2	2,178	2,014	41	59	64	1.9%	2.9%	\$39,811	18	0.83%
26.00	1	770	640	57	14	59	7.4%	7.7%	\$23,782	22	2.86%
26.00	3	1,068	996	31	15	26	2.9%	2.4%	\$28,917	41	3.84%
26.00	4	1,070	972	36	5	57	3.4%	5.3%	\$23,391	9	0.84%
26.00	5	1,398	1,327	12	22	37	0.9%	2.6%	\$40,128	27	1.93%
26.00	6	1,077	1,000	2	11	64	0.2%	5.9%	\$37,894	103	9.56%
27.00	1	1,340	822	191	51	276	14.3%	20.6%	\$14,178	218	16.27%
27.00	3	1,208	579	254	19	356	21.0%	29.5%	\$14,438	241	19.95%
27.00	4	1,112	605	205	26	276	18.4%	24.8%	\$12,825	211	18.97%
28.00	2	1,850	1,571	119	21	139	6.4%	7.5%	\$30,204	117	6.32%
28.00	3	971	932	17	5	17	1.8%	1.8%	\$56,075	6	0.62%
28.00	4	1,066	849	92	45	80	8.6%	7.5%	\$25,191	285	26.74%
29.00	1	2,327	2,088	37	14	188	1.6%	8.1%	\$20,987	40	1.72%
30.00	1	1,585	1,245	162	48	130	10.2%	8.2%	\$20,298	273	17.22%
30.00	2	1,285	950	179	23	133	13.9%	10.4%	\$24,101	206	16.03%
30.00	3	1,061	520	394	11	136	37.1%	12.8%	\$9,188	484	45.62%
32.00	1	1,283	813	276	37	157	21.5%	12.2%	\$12,978	226	17.61%
32.00	2	1,057	683	209	26	139	19.8%	13.2%	\$16,321	80	7.57%
32.00	3	1,546	1,062	143	37	304	9.2%	19.7%	\$16,705	71	4.59%
33.00	3	2,343	1,647	295	109	292	12.6%	12.5%	\$4,862	1,087	46.39%
33.00	4	1,101	714	205	31	151	18.6%	13.7%	\$8,661	488	44.32%
34.00	1	2,929	2,591	74	66	198	2.5%	6.8%	\$18,612	230	7.85%
34.00	2	1,632	1,398	126	28	80	7.7%	4.9%	\$21,121	80	4.90%



Tract	Block Group	Population	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Hispanic	Percent Black	Percent Hispanic	Per Capita Income	Persons in Poverty	Percent in Poverty
34.00	3	1,450	1,255	76	27	92	5.2%	6.3%	\$23,379	64	4.41%
35.00	1	1,320	1,202	24	8	86	1.8%	6.5%	\$21,021	103	7.80%
35.00	2	1,227	1,117	45	12	53	3.7%	4.3%	\$15,690	73	5.95%
35.00	3	1,325	1,155	50	34	86	3.8%	6.5%	\$18,971	80	6.04%
36.01	1	745	661	53	9	22	7.1%	3.0%	\$20,693	72	9.66%
36.01	2	1,245	838	313	11	83	25.1%	6.7%	\$13,179	163	13.09%
36.01	3	1,101	731	296	15	59	26.9%	5.4%	\$13,850	254	23.07%
36.02	1	1,693	1,396	178	32	87	10.5%	5.1%	\$16,802	161	9.51%
36.02	2	988	886	13	11	78	1.3%	7.9%	\$15,407	97	9.82%
37.01	1	1,639	1,164	237	9	229	14.5%	14.0%	\$22,331	106	6.47%
37.01	2	1,264	1,104	44	23	93	3.5%	7.4%	\$24,218	51	4.03%
37.03	1	929	799	23	21	86	2.5%	9.3%	\$19,298	18	1.94%
37.03	2	1,054	922	10	9	113	0.9%	10.7%	\$20,057	2	0.19%
37.03	3	1,065	940	14	13	98	1.3%	9.2%	\$18,594	47	4.41%
37.06	1	1,638	1,413	42	56	127	2.6%	7.8%	\$22,483	23	1.40%
37.06	2	1,203	1,013	56	50	84	4.7%	7.0%	\$22,186	32	2.66%
37.06	3	1,652	1,344	128	46	134	7.7%	8.1%	\$25,023	13	0.79%
37.06	4	1,728	1,424	108	64	132	6.3%	7.6%	\$23,044	61	3.53%
37.07	1	1,257	924	159	47	127	12.6%	10.1%	\$22,603	164	13.05%
37.07	2	2,299	2,021	53	101	124	2.3%	5.4%	\$35,937	42	1.83%
37.07	3	3,426	2,378	371	193	484	10.8%	14.1%	\$20,285	113	3.30%
37.08	2	1,561	1,336	82	40	103	5.3%	6.6%	\$26,826	23	1.47%
37.08	3	2,471	1,886	207	113	265	8.4%	10.7%	\$20,313	82	3.32%
37.08	4	1,304	1,014	97	44	149	7.4%	11.4%	\$19,556	29	2.22%
38.01	1	2,384	2,204	18	18	144	0.8%	6.0%	\$24,637	54	2.27%
38.01	2	3,148	2,845	27	54	222	0.9%	7.1%	\$18,564	112	3.56%
38.02	1	1,319	1,088	27	13	191	2.0%	14.5%	\$14,456	185	14.03%
38.02	2	2,996	2,467	21	47	461	0.7%	15.4%	\$15,800	313	10.45%
38.02	3	1,213	941	125	20	127	10.3%	10.5%	\$15,401	134	11.05%
39.00	1	2,318	1,715	106	48	449	4.6%	19.4%	\$24,123	140	6.04%
39.00	2	1,496	813	336	37	310	22.5%	20.7%	\$27,449	170	11.36%
39.00	4	1,715	1,416	103	9	187	6.0%	10.9%	\$16,378	178	10.38%
39.00	5	1,320	804	29	25	462	2.2%	35.0%	\$24,050	239	18.11%
40.00	1	2,009	1,801	60	41	107	3.0%	5.3%	\$24,949	38	1.89%
40.00	2	847	774	2	12	59	0.2%	7.0%	\$16,270	59	6.97%
40.00	3	1,474	1,295	46	18	115	3.1%	7.8%	\$24,468	63	4.27%
41.01	1	3,267	2,951	89	26	201	2.7%	6.2%	\$20,639	179	5.48%
41.02	1	1,248	1,099	20	14	115	1.6%	9.2%	\$17,162	156	12.50%

Tract	Block Group	Population	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Other	Hispanic	Percent Black	Percent Hispanic	Per Capita Income	Persons in Poverty	Percent in Poverty
41.02	2	1,537	1,466	10	15	46	0.7%	3.0%	\$22,771	26	1.69%
41.02	3	1,302	1,199	10	13	80	0.8%	6.1%	\$22,875	98	7.53%
42.01	1	1,344	1,212	27	22	83	2.0%	6.2%	\$17,149	227	16.89%
42.01	2	1,410	1,288	41	14	67	2.9%	4.8%	\$16,362	122	8.65%
42.01	3	1,094	916	59	12	107	5.4%	9.8%	\$13,995	188	17.18%
42.02	1	1,935	1,825	3	16	91	0.2%	4.7%	\$20,333	93	4.81%
42.02	2	1,459	1,198	121	35	105	8.3%	7.2%	\$14,734	162	11.10%
Total Metro Area:		213,517	138,007	32,065	5,212	38,233	15.0%	17.9%	\$17,174	35,977	16.85%

## Appendix C -

Tract	Block Group	Average Travel Time to Work (minutes)	Occupied Housing Units	HU with No Vehicle:	Percent with No Vehicle:	Persons Over Age 65	Percent Over Age 65	Persons with a Self-Care or Mobility Disability
1.00	2	11.0	331	21	6.3%	8	1.2%	38
1.00	6	16.4	255	117	45.9%	338	18.8%	112
2.00	1	13.5	530	121	22.8%	59	5.3%	78
2.00	4	14.6	446	19	4.3%	7	0.7%	27
3.00	1	12.0	146	31	21.2%	32	0.9%	6
4.00	1	16.4	220	23	10.5%	53	8.0%	74
4.00	2	12.3	800	120	15.0%	18	1.1%	51
4.00	3	9.6	861	90	10.5%	26	1.3%	15
4.00	4	12.2	361	20	5.5%	38	4.7%	0
4.00	6	18.1	507	199	39.3%	107	7.7%	153
5.98	1	22.6	509	98	19.3%	137	7.1%	369
5.98	2	14.5	412	25	6.1%	119	8.1%	87
5.98	5	19.8	258	45	17.4%	107	13.3%	85
5.98	6	18.3	197	47	23.9%	79	11.0%	91
5.98	8	15.5	344	35	10.2%	78	7.9%	107
7.00	1	16.3	180	28	15.6%	30	5.7%	70
7.00	2	20.8	229	40	17.5%	39	4.9%	66
7.00	3	13.9	367	28	7.6%	86	6.7%	215
7.00	4	12.3	423	36	8.5%	80	8.9%	83
8.00	1	19.6	332	46	13.9%	62	5.8%	113
8.00	3	18.8	662	40	6.0%	180	9.6%	291
9.00	1	15.5	386	35	9.1%	98	8.3%	92
9.00	2	22.5	351	13	3.7%	362	27.9%	146
9.00	3	20.2	316	36	11.4%	89	8.5%	163
9.00	4	21.5	271	24	8.9%	88	11.6%	107
9.00	6	20.8	295	32	10.8%	90	11.6%	88
10.00	1	16.5	254	45	17.7%	249	27.7%	154
10.00	2	17.1	288	63	21.9%	47	5.0%	82
10.00	3	27.9	397	48	12.1%	78	6.2%	139
11.00	3	15.2	215	46	21.4%	54	7.4%	61
11.00	4	27.0	431	83	19.3%	112	7.8%	116
11.00	5	17.7	240	19	7.9%	54	6.8%	89
11.00	6	20.9	286	61	21.3%	55	6.0%	148
11.00	7	19.1	501	28	5.6%	156	11.0%	92
11.00	8	17.9	226	9	4.0%	69	9.6%	129
12.00	1	25.9	341	45	13.2%	106	9.3%	266

Tract	Block Group	Average Travel Time to Work (minutes)	Occupied Housing Units	HU with No Vehicle:	Percent with No Vehicle:	Persons Over Age 65	Percent Over Age 65	Persons with a Self-Care or Mobility Disability
12.00	2	21.2	222	124	55.9%	37	5.1%	95
12.00	3	18.8	616	263	42.7%	127	7.1%	295
13.00	2	16.5	225	0	0.0%	118	14.3%	56
13.00	3	15.8	179	14	7.8%	64	12.9%	112
13.00	5	18.6	331	50	15.1%	105	10.0%	93
14.00	1	20.2	582	96	16.5%	272	16.6%	245
14.00	2	35.7	455	48	10.5%	264	17.7%	142
14.00	4	15.3	415	243	58.6%	70	6.8%	220
14.00	5	22.0	533	98	18.4%	171	14.3%	381
14.00	7	20.7	613	151	24.6%	351	24.0%	387
15.00	1	30.4	335	99	29.6%	176	20.6%	124
15.00	3	15.7	508	109	21.5%	105	7.7%	178
15.00	7	32.1	309	61	19.7%	185	22.6%	108
16.00	1	21.2	904	23	2.5%	142	8.1%	150
16.00	2	16.2	367	21	5.7%	136	14.5%	102
16.00	3	19.2	396	6	1.5%	158	12.8%	130
16.00	4	13.2	326	57	17.5%	118	13.3%	124
16.00	6	16.8	285	26	9.1%	103	12.9%	198
17.00	1	24.2	306	13	4.2%	83	9.8%	103
17.00	2	19.8	532	50	9.4%	128	9.4%	109
17.00	3	18.6	607	25	4.1%	222	13.8%	171
17.00	4	27.7	460	34	7.4%	126	9.6%	144
18.00	1	25.0	285	18	6.3%	154	21.0%	130
18.00	4	29.1	275	22	8.0%	134	17.6%	127
19.00	1	13.1	666	59	8.9%	72	5.7%	102
19.00	2	17.1	592	126	21.3%	173	10.4%	232
20.00	2	18.2	436	8	1.8%	195	16.4%	114
20.00	4	17.8	711	24	3.4%	281	14.4%	261
21.00	1	16.8	333	13	3.9%	64	7.8%	27
21.00	2	15.9	640	102	15.9%	104	6.1%	186
21.00	3	17.4	347	46	13.3%	105	14.5%	46
21.00	4	21.3	535	34	6.4%	229	16.4%	198
22.00	1	15.8	362	23	6.4%	155	16.1%	144
22.00	9	25.0	0	0	#DIV/0!	116	35.6%	78
23.01	1	13.0	443	20	4.5%	149	10.6%	134
23.01	2	19.2	586	52	8.9%	224	14.0%	228
23.01	3	15.3	317	42	13.2%	130	14.4%	175
23.01	5	17.0	574	35	6.1%	209	12.6%	247

Tract	Block Group	Average Travel Time to Work (minutes)	Occupied Housing Units	HU with No Vehicle:	Percent with No Vehicle:	Persons Over Age 65	Percent Over Age 65	Persons with a Self-Care or Mobility Disability
23.02	1	12.8	804	48	6.0%	220	14.9%	198
23.02	2	14.9	1006	252	25.0%	118	6.6%	274
23.02	4	17.2	726	18	2.5%	436	24.8%	158
24.98	1	17.1	411	45	10.9%	162	19.2%	86
24.98	2	15.9	444	33	7.4%	164	13.0%	119
24.98	3	15.5	689	46	6.7%	327	20.2%	297
24.98	5	15.5	484	40	8.3%	172	16.9%	109
25.01	1	16.2	694	44	6.3%	353	22.6%	120
25.01	2	13.9	937	85	9.1%	305	16.9%	123
25.01	3	13.8	483	30	6.2%	260	22.8%	87
25.03	1	18.4	599	100	16.7%	535	35.0%	205
25.03	2	13.5	560	22	3.9%	374	27.3%	121
25.03	3	13.8	576	6	1.0%	298	19.8%	37
25.03	4	18.0	562	17	3.0%	201	16.7%	130
25.04	1	15.7	403	8	2.0%	175	15.9%	28
25.04	2	15.4	780	0	0.0%	188	8.6%	52
26.00	1	14.8	316	25	7.9%	174	22.6%	62
26.00	3	23.1	488	26	5.3%	629	58.9%	178
26.00	4	13.9	492	17	3.5%	368	34.4%	88
26.00	5	27.8	602	8	1.3%	430	30.8%	125
26.00	6	14.4	495	0	0.0%	352	32.7%	69
27.00	1	19.4	599	23	3.8%	182	13.6%	153
27.00	3	20.0	445	38	8.5%	129	10.7%	149
27.00	4	16.0	465	35	7.5%	169	15.2%	187
28.00	2	15.8	793	3	0.4%	520	28.1%	168
28.00	3	16.4	573	66	11.5%	427	44.0%	152
28.00	4	13.7	586	15	2.6%	33	3.1%	81
29.00	1	22.3	841	0	0.0%	210	9.0%	167
30.00	1	17.5	848	187	22.1%	502	31.7%	232
30.00	2	14.2	597	62	10.4%	291	22.6%	68
30.00	3	15.4	448	70	15.6%	267	25.2%	117
32.00	1	19.8	511	30	5.9%	132	10.3%	99
32.00	2	19.0	417	18	4.3%	128	12.1%	105
32.00	3	16.1	583	37	6.3%	174	11.3%	211
33.00	3	19.4	619	62	10.0%	4	0.2%	231
33.00	4	26.1	303	16	5.3%	7	0.6%	68
34.00	1	23.3	1071	51	4.8%	269	9.2%	233
34.00	2	22.9	560	11	2.0%	162	9.9%	126

Tract	Block Group	Average Travel Time to Work (minutes)	Occupied Housing Units	HU with No Vehicle:	Percent with No Vehicle:	Persons Over Age 65	Percent Over Age 65	Persons with a Self-Care or Mobility Disability
34.00	3	25.0	522	18	3.4%	164	11.3%	146
35.00	1	28.8	493	19	3.9%	190	14.4%	137
35.00	2	25.2	451	7	1.6%	141	11.5%	116
35.00	3	33.3	461	22	4.8%	129	9.7%	68
36.01	1	29.8	276	17	6.2%	103	13.8%	75
36.01	2	23.6	454	50	11.0%	312	25.1%	139
36.01	3	27.3	406	43	10.6%	171	15.5%	117
36.02	1	26.7	613	38	6.2%	208	12.3%	185
36.02	2	23.4	371	23	6.2%	155	15.7%	72
37.01	1	25.9	610	15	2.5%	191	11.7%	194
37.01	2	18.6	445	0	0.0%	154	12.2%	45
37.03	1	16.9	324	7	2.2%	185	19.9%	68
37.03	2	17.2	342	0	0.0%	72	6.8%	41
37.03	3	21.3	392	0	0.0%	148	13.9%	102
37.06	1	17.2	586	7	1.2%	165	10.1%	179
37.06	2	19.9	415	16	3.9%	77	6.4%	110
37.06	3	18.6	572	9	1.6%	105	6.4%	100
37.06	4	22.7	575	15	2.6%	140	8.1%	119
37.07	1	16.4	568	27	4.8%	104	8.3%	60
37.07	2	16.8	777	8	1.0%	162	7.0%	93
37.07	3	19.4	1580	50	3.2%	256	7.5%	185
37.08	2	18.9	559	9	1.6%	121	7.8%	69
37.08	3	19.3	827	21	2.5%	114	4.6%	135
37.08	4	21.8	494	11	2.2%	96	7.4%	102
38.01	1	22.6	803	5	0.6%	193	8.1%	114
38.01	2	23.6	1100	37	3.4%	316	10.0%	173
38.02	1	28.7	489	22	4.5%	141	10.7%	124
38.02	2	28.7	1044	47	4.5%	282	9.4%	168
38.02	3	29.1	465	46	9.9%	238	19.6%	136
39.00	1	23.4	773	58	7.5%	249	10.7%	244
39.00	2	21.2	537	75	14.0%	186	12.4%	178
39.00	4	25.5	599	19	3.2%	406	23.7%	62
39.00	5	18.4	535	31	5.8%	265	20.1%	246
40.00	1	23.2	719	23	3.2%	243	12.1%	156
40.00	2	22.0	311	4	1.3%	116	13.7%	50
40.00	3	20.9	521	21	4.0%	162	11.0%	96
41.01	1	21.7	1143	26	2.3%	440	13.5%	271
41.02	1	21.1	432	14	3.2%	139	11.1%	31

Tract	Block Group	Average Travel Time to Work (minutes)	Occupied Housing Units	HU with No Vehicle:	Percent with No Vehicle:	Persons Over Age 65	Percent Over Age 65	Persons with a Self-Care or Mobility Disability
41.02	2	26.1	521	19	3.6%	130	8.5%	72
41.02	3	29.6	446	25	5.6%	73	5.6%	45
42.01	1	24.4	516	44	8.5%	231	17.2%	171
42.01	2	29.9	530	35	6.6%	420	29.8%	79
42.01	3	25.4	447	29	6.5%	228	20.8%	189
42.02	1	27.2	687	23	3.3%	200	10.3%	126
42.02	2	27.7	532	34	6.4%	155	10.6%	152
Total Metro Area:		20.0	78849	6714	8.5%	27,468	12.9%	20,852

## Appendix C -

Tract	Block Group	Percent with Disability
1.00	2	5.7%
1.00	6	6.2%
2.00	1	7.0%
2.00	4	2.6%
3.00	1	0.2%
4.00	1	11.2%
4.00	2	3.1%
4.00	3	0.7%
4.00	4	0.0%
4.00	6	11.0%
5.98	1	19.2%
5.98	2	5.9%
5.98	5	10.5%
5.98	6	12.6%
5.98	8	10.9%
7.00	1	13.4%
7.00	2	8.3%
7.00	3	16.8%
7.00	4	9.2%
8.00	1	10.5%
8.00	3	15.6%
9.00	1	7.8%
9.00	2	11.2%
9.00	3	15.6%
9.00	4	14.1%
9.00	6	11.4%
10.00	1	17.1%
10.00	2	8.8%
10.00	3	11.0%
11.00	3	8.4%
11.00	4	8.1%
11.00	5	11.1%
11.00	6	16.1%
11.00	7	6.5%
11.00	8	18.0%
12.00	1	23.4%



Tract	Block Group	Percent with Disability
12.00	2	13.2%
12.00	3	16.4%
13.00	2	6.8%
13.00	3	22.5%
13.00	5	8.9%
14.00	1	15.0%
14.00	2	9.5%
14.00	4	21.5%
14.00	5	31.8%
14.00	7	26.5%
15.00	1	14.5%
15.00	3	13.1%
15.00	7	13.2%
16.00	1	8.6%
16.00	2	10.9%
16.00	3	10.5%
16.00	4	14.0%
16.00	6	24.9%
17.00	1	12.2%
17.00	2	8.0%
17.00	3	10.6%
17.00	4	11.0%
18.00	1	17.8%
18.00	4	16.6%
19.00	1	8.1%
19.00	2	14.0%
20.00	2	9.6%
20.00	4	13.4%
21.00	1	3.3%
21.00	2	10.9%
21.00	3	6.4%
21.00	4	14.2%
22.00	1	14.9%
22.00	9	23.9%
23.01	1	9.6%
23.01	2	14.3%
23.01	3	19.4%
23.01	5	14.8%

Tract	Block Group	Percent with Disability
23.02	1	13.4%
23.02	2	15.3%
23.02	4	9.0%
24.98	1	10.2%
24.98	2	9.5%
24.98	3	18.3%
24.98	5	10.7%
25.01	1	7.7%
25.01	2	6.8%
25.01	3	7.6%
25.03	1	13.4%
25.03	2	8.8%
25.03	3	2.5%
25.03	4	10.8%
25.04	1	2.5%
25.04	2	2.4%
26.00	1	8.1%
26.00	3	16.7%
26.00	4	8.2%
26.00	5	8.9%
26.00	6	6.4%
27.00	1	11.4%
27.00	3	12.3%
27.00	4	16.8%
28.00	2	9.1%
28.00	3	15.7%
28.00	4	7.6%
29.00	1	7.2%
30.00	1	14.6%
30.00	2	5.3%
30.00	3	11.0%
32.00	1	7.7%
32.00	2	9.9%
32.00	3	13.6%
33.00	3	9.9%
33.00	4	6.2%
34.00	1	8.0%
34.00	2	7.7%

Tract	Block Group	Percent with Disability
34.00	3	10.1%
35.00	1	10.4%
35.00	2	9.5%
35.00	3	5.1%
36.01	1	10.1%
36.01	2	11.2%
36.01	3	10.6%
36.02	1	10.9%
36.02	2	7.3%
37.01	1	11.8%
37.01	2	3.6%
37.03	1	7.3%
37.03	2	3.9%
37.03	3	9.6%
37.06	1	10.9%
37.06	2	9.1%
37.06	3	6.1%
37.06	4	6.9%
37.07	1	4.8%
37.07	2	4.0%
37.07	3	5.4%
37.08	2	4.4%
37.08	3	5.5%
37.08	4	7.8%
38.01	1	4.8%
38.01	2	5.5%
38.02	1	9.4%
38.02	2	5.6%
38.02	3	11.2%
39.00	1	10.5%
39.00	2	11.9%
39.00	4	3.6%
39.00	5	18.6%
40.00	1	7.8%
40.00	2	5.9%
40.00	3	6.5%
41.01	1	8.3%
41.02	1	2.5%

<b>Tract</b>	<b>Block Group</b>	<b>Percent with Disability</b>
41.02	2	4.7%
41.02	3	3.5%
42.01	1	12.7%
42.01	2	5.6%
42.01	3	17.3%
42.02	1	6.5%
42.02	2	10.4%
Total Metro Area:		9.8%

## Appendix D Highway Project Evaluation Scores

MTP_ID	Facility	Alternate Name	From	To	Existing	Proposed	Project Type	Proposal Year	Proposer
S025	Loop 396	Valley Mills Dr	Cobbs Dr	Bagby Ave	6 & 8 lane arterial	Construct raised median with left turn bays	Operations	2005	TxDOT
S053	US 84	West Waco Dr	N 8th St	Valley Mills Dr	4 lane arterial	6 lane divided arterial	Mobility	1966	Waco
S004	FM 1695	Hewitt Dr	US 84 (George W Bush Pkwy)	FM 2063 (Sun Valley Dr)	4 lane arterial with center turn lane	6 lane arterial with raised median and left turn bays	Mobility	1987	TxDOT / MPO
S034B	SH 6	W Loop 340	IH-35	US 84 (West Waco Dr)	lane freeway with discontinuous 1-way frontage road	6 lane freeway	Mobility	2000	TxDOT
S036A	SH 6	South Loop 340	Brazos River	SH 6 / Spur 484	2 lane arterial	4 lane divided arterial	Mobility	2005	TxDOT
S037	SH 6	n/a	Roadrunner Trail	McLennan / Falls County Line	One-way pairs through Riesel	Construct grade separation and frontage rds at FM 1860 and relocate NB traffic	Mobility	2005	TxDOT
S035	SH 6	South Loop 340	IH-35	US 77 (Robinson Dr)	4 lane arterial with grade separation at US 77	4 lane freeway with frontage roads	Mobility	1987	TxDOT
S003A	FM 1637	China Spring Rd	FM 3051 (Steinbeck Bend Dr)	FM 2490 (Wortham Bend Rd)	2 lane FM road	4 lane divided arterial	Mobility	1987	TxDOT
S026	Loop 574	M L King Jr Dr	IH-35	Spur 484	no existing facility	4 lane divided with grade separation at US Business 77	Mobility	1966	TxDOT
S005	FM 1695	Hewitt Dr	FM 2063 (Sun Valley Rd)	Ritchie Rd	2 lane FM road	4 lane divided arterial	Mobility	1987	TxDOT
S018	FM 3476	Old Temple Road	FM 2063 (Sun Valley Rd)	Texas Central Pkwy	2 lane FM road	4 lane divided arterial	Mobility	2000	TxDOT
S039A	Spur 298	Franklin Ave	New Rd	Lake Air Dr	4 lane divided arterial with frontage roads	4 lane divided arterial with frontage roads, widen to 6 lanes, add u-turn bays, reconstruct New Rd interchange	Mobility	2005	Waco
S003B	FM 1637	China Spring Rd	FM 2490 (Wortham Bend Rd)	FM 185 (North River Crossing)	2 lane FM road	4 lane divided arterial	Mobility	1987	TxDOT
S054	US 84	East Waco Dr	Dallas St	N 3rd St	4 lane divided arterial	6 lane divided arterial	Mobility	1966	Waco
S034A	SH 6	W Loop 340	IH-35	US 84 (West Waco Dr)	lane freeway with discontinuous 1-way frontage road	Construct frontage road bridges over UP RR & UP RR Spur & realign ramps	Mobility	2009	TxDOT
L012	M L King Jr Dr	n/a	Lake Shore Dr / FM 3051	Herring Ave	2 lane arterial	4 lane divided arterial	Mobility	1987	TxDOT
L013	Mars Dr	n/a	Hewitt Dr (FM 1695)	Texas Central Pkwy	2 lane local road	4 lane divided arterial with traffic circle at Texas Central Pkwy	Mobility	2005	MPO
S001A	East Loop 340	n/a	SH 6 / Spur 484	Williams Rd	2 lane arterial	4 lane divided arterial	Mobility	1966	TxDOT
L030	Texas Central Pkwy	n/a	Imperial Dr (FM 3223)	UP Railroad Spur	2 lane arterial	4 lane divided arterial	Mobility	2009	MPO
L015	Memorial Drive	n/a	Loop 396 (Valley Mills Dr)	New Rd	2 lane arterial	reconstruct road	Maintenance / Rehab	1987	Beverly Hills
L006	Gateway Blvd	Formerly Flat Creek Pkwy	IH-35	FM 3476 (Bagby Ave)	no existing facility	4 lane divided arterial with RR grade separation	Mobility	2000	MPO
S048B	US 84	George W Bush Pkwy	SH 6 (W Loop 340)	FM 1695 (Hewitt Dr)	4 lane freeway	Widen to 6 lane freeway	Mobility	2000	TxDOT
S017	FM 3051	Steinbeck Bend Dr	FM 1637 (China Spring Rd)	Lake Shore Dr / M L King Jr Dr	2 lane FM road	4 lane divided arterial	Mobility	2000	TxDOT
S021	FM 933	Gholson Rd	FM 308 (W Elm Mott Dr)	Fort Graham Rd	2 lane FM road	4 lane divided arterial	Mobility	2000	TxDOT
S010	FM 2113	Spring Valley Road	FM 2837 (Old Lorena Rd)	FM 1695 (Hewitt Dr)	2 lane FM road	4 lane divided arterial	Mobility	2005	TxDOT
S048A	US 84	George W Bush Pkwy	SH 6 (W Loop 340)	FM 1695 (Hewitt Dr)	4 lane freeway	Realign on & off ramps	Operations	2000	TxDOT
S031A	SH 6	n/a	Lady Bird Rd	Spur 412 / Doshier Ln	2 lane arterial	4 lane freeway with frontage roads	Mobility	2000	TxDOT
S043	US 77	n/a	FM 2837 (Rosenthal Pkwy)	Falls / McLennan County Line	2 lane arterial	4 lane divided arterial	Mobility	1987	TxDOT
L022B	Ritchie Rd	n/a	Panther Way	US 84 (George W Bush Pkwy)	2 lane local road	4 lane divided arterial	Mobility	2000	Woodway
S031B	SH 6	n/a	Compton Rd	Lady Bird Rd	2 lane arterial	4 lane divided arterial	Mobility	2000	TxDOT
S029	SH 317	N Lone Star Pkwy	US 84 (George W Bush Pkwy)	FM 3047 (New Windsor Pkwy)	2 lane arterial	4 lane divided arterial	Mobility	2000	TxDOT
S042	US 77	Robinson Dr	SH 6 / S Loop 340	FM 3148 (Moonlight Dr)	4 lane arterial with center turn lane	Construct raised median with left turn bays	Operations	2005	MPO
S002	FM 1637	China Spring Rd	FM 185 (North River Crossing)	Spur 1637	2 lane FM road	4 lane divided arterial	Mobility	2005	TxDOT
L016	N 18th St / N 19th St	n/a	Homan Ave	Vivian Ave	4 lane undivided arterial	Construct raised median with left turn bays	Operations	2005	MPO
L003A	Chapel Rd	n/a	Woodgate Dr	Ritchie Rd	2 lane local road	4 lane divided arterial	Mobility	1987	Waco
S041	US 77	Robinson Dr	Waco Traffic Circle	SH 6 / S Loop 340	4 lane arterial with center turn lane	Construct raised median with left turn bays	Operations	2005	MPO
S059	US 84	Bellmead Dr	Intersection at Aviation Pkwy	n/a	At grade intersection with traffic signals	Construct grade separation	Mobility	2009	TxDOT
S038A	Speegleville Rd	FM 2837 Extension	US 84 (George W Bush Pkwy)	Middle Bosque River	2 lane local road	Widen to 4 lane divided arterial	Mobility	2009	MPO
S011	FM 2113	Spring Valley Road	FM 2063 (Sun Valley Rd)	FM 1695 (Hewitt Dr)	2 lane FM road	4 lane divided arterial	Mobility	1987	TxDOT
S023	Loop 396	Bosque Blvd	Rambler Dr	Valley Mills Dr	4 lane undivided arterial	Construct raised median with left turn bays	Operations	2005	MPO
S055	US 84	n/a	SH 31	FM 1330 (Longhorn Pkwy)	2 lane arterial	4 lane divided arterial	Mobility	2005	TxDOT
L031	Bosque Blvd	n/a	N 32nd St	N Valley Mills Dr (Loop 396)	4 & 6 lane arterial with center turn lane	Construct raised median with left turn bays	Operations	2009	MPO
S012	FM 2490	Wortham Bend Rd	FM 1637 (China Spring Rd)	Garrett Lane	2 lane FM road	4 lane divided arterial	Mobility	2005	TxDOT
S058	US 84	East Waco Dr	FM 933 (Gholson Rd)	Spur 299 (Bellmead Dr)	4 lane freeway with 1-way frontage roads	6 lane arterial with raised median and left turn bays	Mobility	2009	MPO
S014	FM 2837	Old Lorena Road	IH-35	Pilgrim Ln	2 lane FM road	4 In arterial, realign, RR grade separation	Mobility	2005	TxDOT
L024	Sanger Ave	n/a	Valley Mills Dr	Melrose Dr	4 lane undivided arterial	Construct raised median with left turn bays	Operations	2005	MPO
S045	US 84	George W Bush Pkwy	FM 2188 (Cotton Belt Pkwy)	SH 317	4 lane divided arterial	4 lane freeway with frontage roads	Mobility	2000	TxDOT
S009A	FM 2113	Spring Valley Road	FM 2416 (Cotton Belt Pkwy)	FM 2837 (Old Lorena Rd)	2 lane FM road	4 lane divided arterial	Mobility	2005	TxDOT
S030	SH 6	n/a	Bosque / McLennan County Line	Compton Rd	2 lane arterial	Construct passing lanes and left turn bays	Safety	2009	MPO
S046	US 84	George W Bush Pkwy	Ritchie Rd	Bosque Lane	4 lane divided arterial	4 lane freeway with frontage roads	Mobility	2000	TxDOT
L011	Lake Shore Dr	n/a	N 19th St	Mount Carmel Dr	4 lane arterial with center turn lane	Construct raised median with left turn bays	Operations	2005	MPO
S028	SH 317	S Lone Star Pkwy	W 11th St	FM 2671 (Mother Neff Pkwy)	2 lane arterial	4 lane divided arterial	Mobility	2000	TxDOT
S044	US 84	n/a	N Johnson Dr	Coryell / McLennan County Line	2 lane arterial	Construct passing lanes and left turn bays	Safety	2009	MPO
S046A	US 84	George W Bush Pkwy	Bosque Lane	FM 2188 (Cotton Belt Pkwy)	4 lane divided arterial	4 lane freeway with frontage roads	Mobility	2000	TxDOT
S051	US Business 77	n/a	US 84 (E Waco Dr)	IH-35 (At Elm Mott)	4 lane w/ cntr turn ln and discontinuous fntge rds	Remove frontage roads and construct raised center median	Operations	2005	TxDOT
L007	Franklin Ave	n/a	Valley Mills Dr	S 17th St	4 lane arterial with center turn lane	Construct raised median with left turn bays	Operations	2000	MPO
L003B	Chapel Rd	n/a	Ritchie Rd	FM 2837 (Old Lorena Rd)	2 lane local road	4 lane divided arterial	Mobility	2005	MPO
S019	FM 434 / FM 3400	S Univ Parks Dr	US Bus 77 (LaSalle Ave)	SH 6 / S Loop 340	2 lane FM road	4 lane divided arterial	Mobility	1987	Waco
L028	Karl May Dr	n/a	FM 3051 (Steinbeck Bend Dr)	Waco Reg. Airport Terminal	2 lane local road	Add landscaping, reconstruct road, realign intersection with Skeet Eason Rd	Maintenance / Rehab	2005	WRA
S036B	SH 6	South Loop 340	Intersection at SH 6 / Spur 484	n/a	Standard Diamond Interchange	Construct Loop 340 bridge over Spur 484	Mobility	2005	TxDOT
L019	Old Temple Rd	n/a	IH-35	FM 2113 (Spring Valley Rd)	2 lane local road	4 lane divided arterial	Mobility	2000	MPO
L022A	Ritchie Rd	n/a	Panther Way	US 84 (George W Bush Pkwy)	2 lane local road	reconstruct road, eliminate offset at Panther Way	Maintenance / Rehab	2008	Waco
S006	FM 185	North River Crossing	SH 6	FM 1637 (China Spring Rd)	2 lane FM road	4 lane divided arterial	Mobility	2000	TxDOT
S036C	SH 6	South Loop 340	Brazos River	SH 6	No existing direct connection ramps	Construct direct connection ramp from NB SH 6 to NB LP 340 & SB LP 340 to SB S	Mobility	2005	TxDOT
L018	Old McGregor Rd	n/a	FM 1695 (Hewitt Dr)	Ritchie Rd	2 lane local road	4 lane divided arterial	Mobility	2000	Woodway
S038B	Speegleville Rd	FM 2837 Extension	Middle Bosque River	SH 6	2 lane local road	Reconstruct existing road, realign with FM 185	Maintenance / Rehab	2005	TxDOT
S038C	Speegleville Rd	FM 2837 Extension	Middle Bosque River	SH 6	2 lane local road	Widen to 4 lane divided arterial	Mobility	2000	TxDOT
S047B	US 84	George W Bush Pkwy	Intersection at Wickson Rd	n/a	partial at-grade intersection	Construct grade separation	Mobility	1995	Woodway
S047A	US 84	George W Bush Pkwy	FM 1695 (Hewitt Dr)	Ritchie Rd	4 lane freeway	6 lane freeway with frontage rd & ramp improvements	Mobility	2000	TxDOT
L017	Newland Dr	n/a	US 77 (Robinson Dr)	S 12th St Rd	2 lane local road	reconstruct road	Maintenance / Rehab	1987	Robinson
L021	Ritchie Rd	n/a	FM 1695 (Hewitt Dr)	Panther Way	2 lane local road	4 lane divided arterial	Mobility	2000	MPO
L026	Williams Rd	n/a	FM 2837 (Old Lorena Rd)	Country Spring Rd	2 lane local road	reconstruct road, add left turn lane from Old Lorena Rd to Leopard Lr	Maintenance / Rehab	2000	Lorena
S007	FM 185 Extension	n/a	FM 1637 (China Spring Rd)	FM 933 (Gholson Rd)	no existing facility	2 lane FM road	Mobility	1987	McLennan County
S032B	SH 6	n/a	Spur 412 / Doshier Ln	US 84 (West Waco Dr)	4 lane freeway	6 lane freeway	Mobility	2000	TxDOT
L002	Beverly Dr	n/a	New Rd	SH 6 / W Loop 340	2 lane local road	2 lane arterial	Maintenance / Rehab	1987	MPO
L005B	Craven Ave	n/a	FM 933 (Gholson Rd)	US Bus 77	2 lane local road	reconstruct road	Maintenance / Rehab	1966	Lacy-Lakeview
S008	FM 185 Extension	n/a	FM 933 (Gholson Rd)	IH-35	2 lane local road	2 lane FM road	Maintenance / Rehab	1987	McLennan County
S057	US Business 77	North Loop Dr / South Loop D	US 84 (E Waco Dr)	Brazos River	lane freeway with 1-way discontinuous frontage road	6 lane arterial with raised median and left turn bays	Mobility	2009	MPO
L014	McGregor Industrial Road	n/a	US 84	Bluebonnet Pkwy	no existing facility	4 lane divided arterial	Mobility	2005	McGregor
S009B	FM 2113	Spring Valley Road	Intersection at FM 2837 (Old Lorena R	n/a	At grade intersection with traffic signals	Construct grade separation	Mobility	2005	TxDOT

MTP_ID	Facility	Alternate Name	From	To	Existing	Proposed	Project Type	Proposal Year	Proposer
S060	FM 107 Bypass	n/a	Blue Cut Rd	Doss Ln	no existing facility	Construct 2 lane FM Road	Mobility	2009	MPO
L029	McGregor South Bypass	n/a	US 84	SH 317	No existing facility	Construct 2 lane arterial	Mobility	2000	McGregor
S056	FM 1858	Tokio Rd / S Main St	IH-35	FM 2114 (Oak St)	2 lane local road	2 lane FM road, construct overpass at UP RR	Maintenance / Rehab	2009	MPO
S032A	SH 6	n/a	Spur 412 / Doshier Ln	Lake Waco	4 lane freeway with 2-way frontage roads	Convert 2-way frontage rds to 1-way & replace Lk Waco Bridges	Maintenance / Rehab	2009	MPO
L009	Hatch Rd	n/a	IH-35	Old Bethany Rd	2 lane unpaved road	Pave road, widen to 12 ft lanes, construct bridge over UP RR, realign to IH-35	Mobility	2000	Lorena
L027	Panther Way	n/a	FM 1695 (Hewitt Dr)	Panther Run	2 lane local road	4 lane divided collector	Mobility	1995	Hewitt
S001B	East Loop 340	n/a	Orchard Ln	FM 2491	2 lane arterial	Construct grade separations at Orchard LN & FM 2491	Mobility	1966	TxDOT
L004	Country Spring Rd	n/a	FM 2113 (Spring Valley Rd)	Williams Rd	2 lane local road	rehabilitate road	Maintenance / Rehab	2000	Lorena
L025	Walnut St	n/a	FM 2417 (Crest Dr)	Craven Ave	2 lane local road	reconstruct road	Maintenance / Rehab	2000	Citizens
S015	FM 2837	Rosenthal Pkwy	IH-35	Southwinds Dr	2 lane FM road	realign to eliminate offset at IH-35	Mobility	2000	TxDOT
L023	S 12th St	S 16th St	Gurley Ave	SH 6 / S Loop 340	2 lane local road	4 lane divided arterial, realign with S 18th St	Mobility	1987	Waco
L008	Greig Drive	n/a	IH-35	US 77 (Robinson Dr)	2 lane local road	4 lane divided arterial, extend to US 77, realign at IH-35	Mobility	2000	Robinson

# Appendix D

MTP_ID	Facility	Notes	Existing Roads								New Alignment				Regional		
			Existing LOS	Score	Future LOS	Score	LOS Change	Score	Facility Age	Score	Future LOS	Score	Travel Time Change	Score	Connectivity	Score	MTP
S025	Loop 396		D	10	E	10	No Change	0	45	10	n/a	0	n/a	0	2 cities	5	Yes
S053	US 84		F	20	F	20	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
S004	FM 1695		F	20	F	20	-1	10	40	0	n/a	0	n/a	0	2 cities	5	Yes
S034B	SH 6		D	10	F	20	-1	10	45	10	n/a	0	n/a	0	2 cities	5	Yes
S036A	SH 6	Part 1 of 3	E	10	F	20	-2	20	30	0	n/a	0	n/a	0	Other Metro	10	Yes
S037	SH 6		D	10	D	10	No Change	0	45	10	n/a	0	n/a	0	Other Metro	10	Yes
S035	SH 6		D	10	F	20	-2	20	30	0	n/a	0	n/a	0	Other Metro	10	Yes
S003A	FM 1637		F	20	F	20	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
S026	Loop 574		n/a	0	n/a	0	n/a	0	n/a	0	D	45	<10 min improvement	0	Other Metro	10	Yes
S005	FM 1695		B	-5	F	20	-2	20	40	0	n/a	0	n/a	0	No	0	Yes
S018	FM 3476		F	20	F	20	-1	10	30	0	n/a	0	n/a	0	2 cities	5	Yes
S039A	Spur 298		C	0	D	10	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S003B	FM 1637		F	20	F	20	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
S054	US 84		E	10	E	10	-1	10	50	15	n/a	0	n/a	0	No	0	Yes
S034A	SH 6		D	10	F	20	No Change	0	0	0	n/a	0	n/a	0	2 cities	5	Yes
L012	M L King Jr Dr		E	10	F	20	-3	20	40	0	n/a	0	n/a	0	No	0	Yes
L013	Mars Dr	New Midway HS has increased traffic	E	10	F	20	-2	20	45	15	n/a	0	n/a	0	No	0	Yes
S001A	East Loop 340	Originally a full freeway section	E	10	F	20	-3	20	40	0	n/a	0	n/a	0	Other Metro	10	Yes
L030	Texas Central Pkwy		F	20	F	20	-2	20	45	10	n/a	0	n/a	0	2 cities	5	Yes
L015	Memorial Drive	Road condition very poor, important arterial	D	10	E	10	No Change	0	70	15	n/a	0	n/a	0	No	0	Yes
L006	Gateway Blvd		n/a	0	n/a	0	n/a	0	n/a	0	D	45	10 min improvement	10	2 cities	5	Yes
S048B	US 84		D	10	E	10	-1	10	45	10	n/a	0	n/a	0	No	0	Yes
S017	FM 3051		F	20	F	20	-2	20	30	0	n/a	0	n/a	0	No	0	Yes
S021	FM 933		E	10	F	20	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
S010	FM 2113		E	10	F	20	-2	20	45	10	n/a	0	n/a	0	2 cities	5	Yes
S048A	US 84		D	10	E	10	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S031A	SH 6		E	10	D	10	No Change	0	40	0	n/a	0	n/a	0	No	0	Yes
S043	US 77		E	10	F	20	-1	10	45	10	n/a	0	n/a	0	2 cities	5	Yes
L022B	Ritchie Rd	Necessary for N/S traffic between Hew & Wwy	D	10	F	20	-2	20	0	0	n/a	0	n/a	0	2 cities	5	Yes
S031B	SH 6		D	10	D	10	No Change	0	40	0	n/a	0	n/a	0	No	0	Yes
S029	SH 317		E	10	E	10	-1	10	45	10	n/a	0	n/a	0	No	0	Yes
S042	US 77	Originally widened to 6 lanes	E	10	F	20	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S002	FM 1637		E	10	F	20	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
L016	N 18th St / N 19th St	Originally added center turn lane	D	10	E	10	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
L003A	Chapel Rd		F	20	F	20	-1	10	45	10	n/a	0	n/a	0	No	0	Yes
S041	US 77	Originally widened to 6 lanes	C	0	E	10	No Change	0	30	0	n/a	0	n/a	0	2 cities	5	Yes
S059	US 84		E	10	F	20	No Change	0	45	10	n/a	0	n/a	0	No	0	No
S038A	Speepleville Rd		E	10	F	20	-1	10	45	10	n/a	0	n/a	0	No	0	Yes
S011	FM 2113		D	10	F	20	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
S023	Loop 396	Originally added center turn lane	E	10	F	20	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S055	US 84		F	20	F	20	-1	10	45	10	n/a	0	n/a	0	No	0	Yes
L031	Bosque Blvd		D	10	C	0	No Change	0	20	0	n/a	0	n/a	0	No	0	Yes
S012	FM 2490		F	20	F	20	-3	20	45	10	n/a	0	n/a	0	No	0	Yes
S058	US 84		D	10	B	-10	No Change	0	55	15	n/a	0	n/a	0	No	0	Yes
S014	FM 2837		E	10	F	20	-2	20	30	0	n/a	0	n/a	0	No	0	Yes
L024	Sanger Ave	Originally added center turn lane	C	0	E	10	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S045	US 84		E	10	F	20	-1	10	45	10	n/a	0	n/a	0	2 cities	5	Yes
S009A	FM 2113		E	10	F	20	-3	20	45	10	n/a	0	n/a	0	No	0	Yes
S030	SH 6	Originally construct 4 lane divided	D	10	D	10	No Change	0	40	0	n/a	0	n/a	0	No	0	No
S046	US 84		D	10	C	0	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
L011	Lake Shore Dr		D	10	E	10	No Change	0	35	0	n/a	0	n/a	0	No	0	Yes
S028	SH 317		E	10	D	10	-1	10	45	10	n/a	0	n/a	0	No	0	Yes
S044	US 84	Originally construct 4 lane divided	E	10	F	20	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S046A	US 84		C	0	E	10	-2	20	45	10	n/a	0	n/a	0	2 cities	5	Yes
S051	US Business 77		C	0	E	10	No Change	0	55	15	n/a	0	n/a	0	2 Cities	5	Yes
L007	Franklin Ave	Originally widened lanes to 12 ft	C	0	E	10	No Change	0	10	0	n/a	0	n/a	0	No	0	Yes
L003B	Chapel Rd		D	10	D	10	-1	10	45	10	n/a	0	n/a	0	No	0	Yes
S019	FM 434 / FM 3400		D	10	E	10	-1	10	30	0	n/a	0	n/a	0	No	0	Yes
L028	Karl May Dr	Funded through Passenger Facility Charge	D	10	F	20	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S036B	SH 6	Part 2 of 3	n/a	0	n/a	0	n/a	0	n/a	0	B	0	<10 min improvement	0	No	0	Yes
L019	Old Temple Rd		E	10	E	10	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
L022A	Ritchie Rd		D	10	F	20	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S006	FM 185		E	10	F	20	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
S036C	SH 6	Part 3 of 3	n/a	0	n/a	0	n/a	0	n/a	0	B	0	<10 min improvement	0	No	0	Yes
L018	Old McGregor Rd		C	0	E	10	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
S038B	Speepleville Rd	Part 1 of 2	E	10	F	20	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S038C	Speepleville Rd	Part 2 of 2	E	10	F	20	-1	10	0	0	n/a	0	n/a	0	No	0	Yes
S047B	US 84		D	10	C	0	No Change	0	0	0	n/a	0	n/a	0	No	0	Yes
S047A	US 84		B	-10	C	0	No Change	0	30	0	n/a	0	n/a	0	No	0	Yes
L017	Newland Dr		D	10	E	10	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
L021	Ritchie Rd	Necessary for N/S traffic between Hew & Wwy	C	0	E	10	-2	20	45	10	n/a	0	n/a	0	No	0	Yes
L026	Williams Rd		B	-5	D	10	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S007	FM 185 Extension	High priority for McLennan County	n/a	0	n/a	0	n/a	0	n/a	0	B	0	>20 min improvement	15	2 cities	5	Yes
S032B	SH 6		A	-10	B	-5	No Change	0	0	0	n/a	0	n/a	0	No	0	Yes
L002	Beverly Dr		C	0	C	0	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
L005B	Craven Ave	High priority for Lacy-Lakeview	A	-10	C	0	No Change	0	50	10	n/a	0	n/a	0	No	0	Yes
S008	FM 185 Extension	High priority for McLennan County	n/a	0	n/a	0	n/a	0	n/a	0	B	0	<10 min improvement	0	2 cities	5	Yes
S057	US Business 77		A	-20	A	-20	No Change	0	55	15	n/a	0	n/a	0	No	0	Yes
L014	McGregor Industrial Road	Truck access to McGregor Industrial Park poor	n/a	0	n/a	0	n/a	0	n/a	0	B	0	<10 min improvement	0	No	0	Yes
S009B	FM 2113		E	10	B	-5	No Change	0	0	0	n/a	0	n/a	0	No	0	Yes

MTP_ID	Facility	Notes	Existing LOS	Score	Future LOS	Score	LOS Change	Score	Facility Age	Score	Future LOS	Score	Travel Time Change	Score	Regional Connectivity	Score	MTP
S060	FM 107 Bypass		n/a	0	n/a	0	n/a	0	n/a	0	B	-10	<10 min improvement	0	No	0	No
L029	McGregor South Bypass		n/a	0	n/a	0	n/a	0	n/a	0	B	0	<10 min improvement	0	No	0	Yes
S056	FM 1858		n/a	0	n/a	0	n/a	0	n/a	0	B	-10	<10 min improvement	0	No	0	No
S032A	SH 6		A	-10	B	-5	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
L009	Hatch Rd		A	-10	B	-5	No Change	0	60	15	n/a	0	n/a	0	No	0	Yes
L027	Panther Way	Originally extended to Tx Central Pkwy	C	0	C	0	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S001B	East Loop 340		E	10	A	-10	No Change	0	0	0	n/a	0	n/a	0	No	0	Yes
L004	Country Spring Rd		A	-10	B	-5	No Change	0	50	10	n/a	0	n/a	0	No	0	Yes
L025	Walnut St		A	-10	A	-10	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
S015	FM 2837	originally extended to US 77	B	-10	C	0	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes
L023	S 12th St		A	-10	A	-10	No Change	0	5	0	n/a	0	n/a	0	No	0	Yes
L008	Greig Drive		B	-5	C	0	No Change	0	45	10	n/a	0	n/a	0	No	0	Yes



# Appendix D

MTP_ID	Facility	Score	Work Begun	Score	Multi-Modal	Score	Bike / Ped	Score	Landscaping	Score	Local Commitment	Score	Funding Source	Score	% Fed Allocation	Score	Functional Classification	Score	State System
S025	Loop 396	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	7.51%	15	Principal Arterial	30	Yes
S053	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	15.35%	0	Principal Arterial	30	Yes
S004	FM 1695	5	No	0	Yes	5	No - School	-5	No	0	\$0	0	Unknown	0	12.31%	5	Principal Arterial	30	Yes
S034B	SH 6	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	20.45%	-10	Other Expressway	30	Yes
S036A	SH 6	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	10.80%	4	Principal Arterial	30	Yes
S037	SH 6	5	Yes	25	No	0	No	0	No	0	\$0	0	Category 4	20	n/a	n/a	Principal Arterial	30	Yes
S035	SH 6	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	22.11%	-10	Principal Arterial	30	Yes
S003A	FM 1637	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	8.99%	12	Minor Arterial	10	Yes
S026	Loop 574	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	21.81%	-10	Principal Arterial	30	Yes
S005	FM 1695	5	Yes	25	No	0	No - School	-5	No	0	\$0	0	ARRA	20	n/a	0	Principal Arterial	30	Yes
S018	FM 3476	5	Yes	25	Yes	5	No	0	No	0	\$0	0	ARRA	20	n/a	0	Minor Arterial	10	Yes
S039A	Spur 298	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	4.07%	11	Principal Arterial	30	Yes
S003B	FM 1637	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	15.35%	0	Minor Arterial	10	Yes
S054	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	7.01%	8	Principal Arterial	30	Yes
S034A	SH 6	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	11.49%	4	Other Expressway	30	Yes
L012	M L King Jr Dr	5	No	0	No	0	Yes	5	No	0	\$0	0	Unknown	0	9.70%	11	Principal Arterial	30	No
L013	Mars Dr	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	4.69%	20	Urban Collector	0	No
S001A	East Loop 340	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	13.31%	3	Principal Arterial	30	Yes
L030	Texas Central Pkwy	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	1.43%	20	Minor Arterial	10	No
L015	Memorial Drive	5	Yes	25	Yes	5	No	0	No	0	\$0	0	Unknown	0	3.14%	20	Minor Arterial	10	No
L006	Gateway Blvd	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	9.79%	10	Minor Arterial	10	No
S048B	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	12.26%	3	Other Expressway	30	Yes
S017	FM 3051	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	10.95%	8	Minor Arterial	10	Yes
S021	FM 933	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	7.14%	16	Rural Major Collector	0	Yes
S010	FM 2113	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	9.72%	11	Rural Major Collector	0	Yes
S048A	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	3.84%	11	Other Expressway	30	Yes
S031A	SH 6	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	18.19%	0	Principal Arterial	30	Yes
S043	US 77	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	11.86%	3	Principal Arterial	30	Yes
L022B	Ritchie Rd	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	3.70%	20	Urban Collector	0	No
S031B	SH 6	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	10.76%	8	Principal Arterial	30	Yes
S029	SH 317	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	4.48%	20	Minor Arterial	10	Yes
S042	US 77	5	No	0	No	0	No - School	-5	No	0	\$0	0	Unknown	0	7.58%	7	Principal Arterial	30	Yes
S002	FM 1637	5	No	0	No	0	No - School	-5	No	0	\$0	0	Unknown	0	12.62%	5	Rural Major Collector	0	Yes
L016	N 18th St / N 19th St	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	8.26%	13	Minor Arterial	10	No
L003A	Chapel Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	4.79%	20	Minor Arterial	10	No
S041	US 77	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	4.33%	11	Principal Arterial	30	Yes
S059	US 84	0	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	11.65%	3	Principal Arterial	30	Yes
S038A	Speepleville Rd	5	Yes	25	No	0	No - School	-5	No	0	\$0	0	Unknown	0	6.81%	8	Rural Major Collector	0	No
S011	FM 2113	5	No	0	No	0	No - School	-5	No	0	\$0	0	Unknown	0	12.75%	5	Minor Arterial	10	Yes
S023	Loop 396	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	2.44%	20	Minor Arterial	10	Yes
S055	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	13.86%	1	Minor Arterial	10	Yes
L031	Bosque Blvd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	5.72%	19	Minor Arterial	10	No
S012	FM 2490	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	19.48%	0	Rural Major Collector	0	Yes
S058	US 84	5	No	0	No	0	No	0	Yes	5	\$0	0	Unknown	0	11.73%	3	Other Expressway	30	Yes
S014	FM 2837	5	No	0	No	0	No - School	-5	No	0	\$0	0	Unknown	0	7.98%	14	Rural Minor Arterial	10	Yes
L024	Sanger Ave	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	4.73%	20	Minor Arterial	10	No
S045	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	66.38%	-20	Principal Arterial	30	Yes
S009A	FM 2113	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	12.97%	4	Rural Major Collector	0	Yes
S030	SH 6	0	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	7.25%	16	Principal Arterial	30	Yes
S046	US 84	5	Yes	25	No	0	No - School	-5	No	0	\$0	0	Unknown	0	25.53%	-10	Principal Arterial	30	Yes
L011	Lake Shore Dr	5	No	0	No	0	No	0	Yes	5	\$0	0	Unknown	0	7.13%	16	Principal Arterial	30	No
S028	SH 317	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	9.91%	10	Minor Arterial	10	Yes
S044	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	9.63%	5	Minor Arterial	10	Yes
S046A	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	53.88%	-20	Principal Arterial	30	Yes
S051	US Business 77	5	No	0	No	0	Yes	5	Yes	5	\$0	0	Unknown	0	20.12%	-10	Minor Arterial	10	Yes
L007	Franklin Ave	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	5.36%	19	Minor Arterial	10	No
L003B	Chapel Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	9.15%	12	Rural Major Collector	0	No
S019	FM 434 / FM 3400	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	9.95%	10	Minor Arterial	10	Yes
L028	Karl May Dr	5	No	0	Yes	5	No	0	No	0	\$0	0	PFC - Airport	20	n/a	0	Local Street	0	No
S036B	SH 6	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	8.64%	6	Principal Arterial	30	Yes
L019	Old Temple Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	8.46%	13	Urban Collector	0	No
L022A	Ritchie Rd	5	No	0	No	0	No	0	No	0	\$0	0	Fed Earmarks	20	n/a	0	Urban Collector	0	No
S006	FM 185	5	No	0	No	0	No - School	-5	No	0	\$0	0	Unknown	0	33.82%	-20	Minor Arterial	10	Yes
S036C	SH 6	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	24.53%	-10	Principal Arterial	30	Yes
L018	Old McGregor Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	6.25%	18	Urban Collector	0	No
S038B	Speepleville Rd	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	30.56%	-20	Rural Major Collector	0	No
S038C	Speepleville Rd	5	Yes	25	No	0	No	0	No	0	\$0	0	Unknown	0	30.09%	-20	Rural Major Collector	0	No
S047B	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	14.28%	0	Other Expressway	30	Yes
S047A	US 84	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0			Other Expressway	30	Yes
L017	Newland Dr	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	4.09%	20	Urban Collector	0	No
L021	Ritchie Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	10.14%	10	Urban Collector	0	No
L026	Williams Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	3.33%	20	Local Street	0	No
S007	FM 185 Extension	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	47.70%	-20	Minor Arterial	10	Yes
S032B	SH 6	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	25.51%	-10	Other Expressway	30	Yes
L002	Beverly Dr	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	2.28%	20	Minor Arterial	10	No
L005B	Craven Ave	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	2.61%	20	Minor Arterial	10	No
S008	FM 185 Extension	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	23.30%	-10	Minor Arterial	10	Yes
S057	US Business 77	5	No	0	No	0	No	0	Yes	5	\$0	0	Unknown	0	18.28%	0	Other Expressway	30	Yes
L014	McGregor Industrial Road	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	9.06%	12	Rural Major Collector	0	No
S009B	FM 2113	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	10.88%	8	Minor Arterial	10	Yes

MTP_ID	Facility	Score	Work Begun	Score	Multi-Modal	Score	Bike / Ped	Score	Landscaping	Score	Local Commitment	Score	Funding Source	Score	% Fed Allocation	Score	Functional Classification	Score	State System
S060	FM 107 Bypass	0	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	8.92%	6	Rural Major Collector	0	Yes
L029	McGregor South Bypass	5	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	12.80%	4	Rural Major Collector	0	No
S056	FM 1858	0	No	0	Yes	5	No	0	No	0	\$0	0	Unknown	0	5.69%	9	Rural Major Collector	0	No
S032A	SH 6	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	38.60%	-20	Other Expressway	30	Yes
L009	Hatch Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	7.61%	15	Local Street	0	No
L027	Panther Way	5	No	0	Yes	5	No - School	-5	No	0	\$0	0	Unknown	0	3.72%	20	Local Street	0	No
S001B	East Loop 340	5	No	0	No	0	No - School	-5	No	0	\$0	0	Unknown	0	22.15%	-10	Principal Arterial	30	Yes
L004	Country Spring Rd	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	6.25%	18	Local Street	0	No
L025	Walnut St	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	1.93%	20	Urban Collector	0	No
S015	FM 2837	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	13.98%	2	Rural Major Collector	0	Yes
L023	S 12th St	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	7.51%	15	Urban Collector	0	No
L008	Greig Drive	5	No	0	No	0	No	0	No	0	\$0	0	Unknown	0	20.98%	-10	Urban Collector	0	No

# Appendix D

MTP_ID	Facility	Score	Crashes per VMT	Score	Crash Total	Score	Crash Reduction	Score	Fatal Crashes	Score	Serious Injury Crashes	Score	Total Score
S025	Loop 396	5	8.10	15	192	10	>40	25	0	0	35	35	180
S053	US 84	5	4.00	15	114	10	10 to 20	5	1	5	21	21	166
S004	FM 1695	5	4.30	15	121	10	20 to 40	10	0	0	18	18	153
S034B	SH 6	5	1.25	15	63	10	10 to 20	5	1	5	21	21	146
S036A	SH 6	5	1.79	15	9	0	<10	0	0	0	0	0	144
S037	SH 6	5	1.97	15	16	0	<10	0	0	0	2	2	142
S035	SH 6	5	1.64	15	23	0	<10	0	0	0	8	8	138
S003A	FM 1637	5	1.66	0	12	0	<10	0	0	0	8	8	135
S026	Loop 574	5	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	135
S005	FM 1695	5	3.81	15	11	0	<10	0	0	0	2	2	132
S018	FM 3476	5	1.35	0	11	0	<10	0	0	0	3	3	128
S039A	Spur 298	5	3.81	15	23	0	<10	0	0	0	6	6	117
S003B	FM 1637	5	1.71	0	30	0	<10	0	0	0	1	1	116
S054	US 84	5	3.30	15	19	0	<10	0	0	0	7	7	115
S034A	SH 6	5	2.42	15	26	0	10 to 20	5	1	5	2	2	111
L012	M L King Jr Dr	-10	3.28	15	17	0	<10	0	0	0	3	3	109
L013	Mars Dr	-10	6.00	15	14	0	<10	0	1	5	4	4	109
S001A	East Loop 340	5	1.15	0	15	0	<10	0	1	5	1	1	109
L030	Texas Central Pkwy	-10	0.64	0	1	0	<10	0	0	0	2	2	107
L015	Memorial Drive	-10	4.72	15	10	0	<10	0	0	0	1	1	106
L006	Gateway Blvd	-10	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	105
S048B	US 84	5	1.03	15	42	0	<10	0	0	0	5	5	103
S017	FM 3051	5	2.13	0	19	0	<10	0	1	5	4	4	102
S021	FM 933	5	1.79	15	5	0	<10	0	0	0	1	1	102
S010	FM 2113	5	1.78	15	6	0	<10	0	0	0	0	0	101
S048A	US 84	5	1.03	15	42	0	<10	0	0	0	5	5	101
S031A	SH 6	5	2.07	15	13	0	<10	0	0	0	0	0	100
S043	US 77	5	0.14	0	1	0	<10	0	0	0	0	0	98
L022B	Ritchie Rd	-10	1.27	0	2	0	<10	0	0	0	1	1	96
S031B	SH 6	5	0.64	0	5	0	<10	0	0	0	3	3	96
S029	SH 317	5	7.95	15	13	0	<10	0	0	0	0	0	95
S042	US 77	5	1.53	0	34	0	10 to 20	5	0	0	7	7	94
S002	FM 1637	5	1.53	15	10	0	<10	0	1	5	2	2	92
L016	N 18th St / N 19th St	-10	5.85	15	66	10	10 to 20	5	0	0	9	9	87
L003A	Chapel Rd	-10	1.64	0	16	0	<10	0	0	0	1	1	86
S041	US 77	5	2.57	15	26	0	<10	0	0	0	4	4	85
S059	US 84	5	0.92	0	8	0	<10	0	0	0	2	2	85
S038A	Speegleville Rd	0	0.50	0	1	0	<10	0	0	0	1	1	84
S011	FM 2113	5	2.32	0	11	0	<10	0	0	0	2	2	82
S023	Loop 396	5	3.02	0	17	0	<10	0	0	0	1	1	81
S055	US 84	5	0.28	0	3	0	<10	0	0	0	0	0	81
L031	Bosque Blvd	-10	5.23	15	70	10	20 to 40	10	0	0	11	11	80
S012	FM 2490	5	0.76	0	8	0	<10	0	0	0	0	0	80
S058	US 84	5	4.28	15	30	0	<10	0	0	0	2	2	80
S014	FM 2837	5	1.46	0	4	0	<10	0	0	0	0	0	79
L024	Sanger Ave	-10	7.15	15	48	0	10 to 20	5	0	0	13	13	78
S045	US 84	5	0.88	0	18	0	<10	0	0	0	1	1	76
S009A	FM 2113	5	0.79	0	4	0	<10	0	0	0	1	1	75
S030	SH 6	5	0.53	0	11	0	<10	0	0	0	3	3	74
S046	US 84	5	0.58	0	16	0	<10	0	0	0	3	3	73
L011	Lake Shore Dr	-10	1.32	0	31	0	<10	0	0	0	6	6	72
S028	SH 317	5	0.59	0	3	0	<10	0	0	0	1	1	71
S044	US 84	5	0.91	0	11	0	<10	0	1	5	1	1	71
S046A	US 84	5	0.39	0	8	0	<10	0	1	5	1	1	71
S051	US Business 77	5	2.77	0	50	10	10 to 20	5	0	0	5	5	70
L007	Franklin Ave	-10	8.91	15	64	10	<10	0	0	0	7	7	66
L003B	Chapel Rd	-10	3.46	15	12	0	<10	0	0	0	2	2	64
S019	FM 434 / FM 3400	5	2.41	0	10	0	<10	0	0	0	2	2	62
L028	Karl May Dr	-10	2.60	0	2	0	<10	0	0	0	1	1	61
S036B	SH 6	5	5.45	15	6	0	<10	0	0	0	0	0	61
L019	Old Temple Rd	-10	1.58	0	3	0	<10	0	0	0	0	0	58
L022A	Ritchie Rd	-10	1.27	0	2	0	<10	0	0	0	1	1	56
S006	FM 185	5	0.59	0	6	0	<10	0	0	0	1	1	56
S036C	SH 6	5	n/a	15	n/a	10	n/a	0	0	0	0	0	55
L018	Old McGregor Rd	-10	3.28	0	3	0	<10	0	0	0	0	0	53
S038B	Speegleville Rd	0	0.35	0	2	0	<10	0	0	0	1	1	51
S038C	Speegleville Rd	0	0.35	0	2	0	<10	0	0	0	1	1	51
S047B	US 84	5	0.00	0	0	0	<10	0	0	0	0	0	50
S047A	US 84	5	1.50	15	23	0	<10	0	0	0	2	2	47
L017	Newland Dr	-10	0.00	0	0	0	<10	0	0	0	0	0	45
L021	Ritchie Rd	-10	0.00	0	0	0	<10	0	0	0	0	0	45
L026	Williams Rd	-10	1.17	15	1	0	<10	0	0	0	0	0	45
S007	FM 185 Extension	5	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	45
S032B	SH 6	5	0.77	0	58	10	<10	0	3	15	0	4	44
L002	Beverly Dr	-10	0.80	0	1	0	0	0	0	0	0	0	40
L005B	Craven Ave	-10	5.11	15	2	0	<10	0	0	0	0	0	40
S008	FM 185 Extension	5	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	40
S057	US Business 77	5	1.60	15	18	0	<10	0	0	0	4	4	39
L014	McGregor Industrial Road	-10	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	37
S009B	FM 2113	5	0.59	0	2	0	<10	0	0	0	1	1	34

MTP_ID	Facility	Score	Crashes per VMT	Score	Crash Total	Score	Crash Reduction	Score	Fatal Crashes	Score	Serious Injury Crashes	Score	Total Score
S060	FM 107 Bypass	5	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	31
L029	McGregor South Bypass	-10	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	29
S056	FM 1858	0	n/a	15	n/a	10	n/a	0	n/a	0	n/a	0	29
S032A	SH 6	5	0.50	0	16	0	<10	0	2	10	2	2	27
L009	Hatch Rd	-10	19.23	15	5	0	<10	0	0	0	1	1	26
L027	Panther Way	-10	3.77	0	2	0	<10	0	0	0	1	1	26
S001B	East Loop 340	5	0.24	0	2	0	<10	0	0	0	0	0	25
L004	Country Spring Rd	-10	2.20	15	2	0	<10	0	0	0	0	0	23
L025	Walnut St	-10	7.69	15	1	0	<10	0	0	0	0	0	20
S015	FM 2837	5	1.09	0	1	0	<10	0	0	0	0	0	12
L023	S 12th St	-10	11.11	15	3	0	<10	0	0	0	1	1	6
L008	Greig Drive	-10	0.89	0	1	0	<10	0	0	0	1	1	-9

# Appendix E: Highway Cost Calculation Methodology

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## Project Cost Estimations

The MPO has amended the methodology used to estimate construction costs to better reflect existing conditions. These costs reflect 2007 dollars. In addition to the following changes, each project has been given an estimated year of construction and the construction costs have been adjusted at a rate of 4% per year to reflect the effects of inflation.

### Construction Costs

#### STEP 1 - RIGHT OF WAY PREPARATION

$(\text{Length} / 100) * \$1,250$

#### STEP 2 – PAVEMENT REMOVAL (PERMANENT)

$\{(\text{Length} * \text{Current Width}) / 9\} * \$7.00$

#### STEP 3 - REMOVE CURB & GUTTERS & SEWERS

$\text{Length} * \$13.50$

#### STEP 4 - CONSTRUCT ROADWAY (INCLUDES DRAINAGE)

##### SECTION A – FIRST 2 MILES

Add shoulders - \$500,000 per mile

Reconstruction cost - \$400,000 per lane-mile

Widening - \$1,000,000 per mile for each new lane

Center Turn Lane - \$1,700,000 per mile

Widening from 2 lane to 4 lane with CTL - \$2,000,000 per mile

Replace Center Turn Lane with Median - \$700,000 per mile

Diamond Interchanges - \$6,500,000 each

New highways on new alignments

2 lanes with shoulders - \$3,000,000 per mile

4 lanes with center turn lane - \$5,700,000 per mile

4 lanes with raised median - \$5,000,000 per mile

6 lanes with raised median - \$6,000,000 per mile

4 lane expressway, no frontage roads - \$7,000,000 per mile

4 lane expressway with frontage roads - \$9,600,000 per mile

6 lane expressway, no frontage roads - \$10,000,000 per mile

6 lane expressway with frontage roads - \$12,000,000 per mile

**SECTION B – REMAINING MILES**

- Add shoulders - \$375,000 per mile
- Reconstruction cost - \$300,000 per lane-mile
- Widening - \$750,000 per mile for each new lane
- Center Turn Lane - \$1,275,000 per mile
- Replace Center Turn Lane with Median - \$525,000 per mile

New highways on new alignments

- 2 lanes with shoulders - \$2,250,000 per mile
- 4 lanes with center turn lane - \$4,275,000 per mile
- 4 lanes with raised median - \$3,750,000 per mile
- 6 lanes with raised median - \$4,500,000 per mile
- 4 lane expressway, no frontage roads - \$5,250,000 per mile
- 4 lane expressway with frontage roads - \$7,200,000 per mile
- 6 lane expressway, no frontage roads - \$7,500,000 per mile
- 6 lane expressway with frontage roads - \$9,000,000 per mile

**STEP 5 – DRAINAGE (Installation Only – No travel lane construction)**

- Storm Sewers
  - First 2 Miles
  - \$400,000 per mile
  - Remaining Miles
  - \$300,000 per mile
- Bar Ditches - \$50,000 per mile

**STEP 6 - CONSTRUCT BRIDGES AND CULVERTS**

$\{[(\text{proposed width} + 2) * \text{bridge length}] * 65\} * \text{number of water features}$   
Note: Bridge Length includes approaches

**STEP 7 - CONSTRUCT SPECIAL BRIDGES**

$\{(\text{proposed width} + 2) * \text{bridge length}\} * 100$   
Note: Bridge Length includes approaches

**STEP 8 - INSTALL CONTINUOUS LIGHTING (URBAN)**

\$140,000 per mile

**STEP 9 - INSTALL SAFETY LIGHTING (RURAL)**

\$12,000 per intersection

**STEP 10 - INSTALL TRAFFIC SIGNALS**

\$140,000 per intersection

**STEP 11 - INSTALL SIGNS**

Arterials & Collectors - \$12,500 per mile

Rural Expressways - \$50,000 per mile

Urban Expressways - \$100,000 per mile

**STEP 12 - STRIPE ROADWAY**

\$7,000 per lane-mile

**STEP 13 - SW3P**

\$0.12 \* total of steps 1 through 12

**STEP 14 - MOBILIZATION**

\$0.12 \* total of steps 1 through 13

**STEP 15 - TCP**

\$8,000 \* construction time in months

## Engineering & Right of Way Costs

As mentioned previously, engineering costs have been estimated at 10% of the project's construction cost. Right of way, however, is significantly more variable than engineering and requires a more refined estimation process. The following process was developed in cooperation with the Waco District of TxDOT and the results were compared to projects that have gone to construction within the last 2 years. As with construction costs, both engineering and right of way costs are adjusted by 4% per year to reflect the effects of inflation.

### STEP 1 – ESTIMATE NECESSARY RIGHT OF WAY WIDTH

Facility Type	Area	Lanes	Median Type	Frontage Roads	Max Speed	Minimum ROW (Feet)
Collector Major	Rural	2	None	n/a	65	100
Collector Minor	Rural	2	None	n/a	60	100
Collector	Urban	2	None	n/a	30	60
Collector	Urban	4	Center Turn Lane	n/a	30	75
Arterial	Rural	2	None	n/a	65	100
Arterial	Urban	2	None	n/a	30	75
Arterial	Rural	4	Full Restrictive	n/a	70	150
Arterial	Urban	4	Center Turn Lane	n/a	40	90
Arterial	Urban	4	Full Restrictive	n/a	40	100
Arterial	Rural	6	Full Restrictive	n/a	70	175
Arterial	Urban	6	Full Restrictive	n/a	45	120
Arterial	Urban	8	Full Restrictive	n/a	45	150
Arterial	Urban	10	Full Restrictive	n/a	45	175
Expressway	Rural	4	Barrier	No	70	180
Expressway	Rural	4	Barrier	Yes	70	300
Expressway	Urban	4	Barrier	No	60	150
Expressway	Urban	4	Barrier	Yes	60	220
Expressway	Rural	6	Barrier	No	70	210
Expressway	Rural	6	Barrier	Yes	70	325
Expressway	Urban	6	Barrier	No	60	175
Expressway	Urban	6	Barrier	Yes	60	250
Expressway	Urban	8	Barrier	No	60	200
Expressway	Urban	8	Barrier	Yes	60	275

### STEP 2 – IDENTIFY QUANTITY OF LAND USES TO BE ACQUIRED

Assumption: Right of Way will be acquired equally from each side of the proposed centerline, unless an obvious physical barrier exists from acquiring right of way from one or the other side (i.e. railroad, water body, development on one side but none on the other, etc.)



**STEP 3 – CALCULATE COSTS**

<b>Land Use</b>	<b>Cost per Square Foot</b>
Residential	\$5.00
Office / Commercial / Industrial	\$10.00
Platted but undeveloped	\$3.00
Other development (schools, gov't, etc.)	\$4.00
Agricultural within Urban Area	\$1.00
Agricultural outside of Urban Area	\$0.50
All other Land Uses	\$0.25

# Appendix F Highway Project Cost Calculations

MTP_ID	Facility	Alternate Name	From	To	Existing	Proposed	Proposal Year	Proposer	Notes
L002	Beverly Dr	n/a	New Rd	SH 6 / W Loop 340	2 lane local road	2 lane arterial	1987	MPO	
L003A	Chapel Rd	n/a	Woodgate Dr	Ritchie Rd	2 lane local road	4 lane divided arterial	1987	Waco	
L003B	Chapel Rd	n/a	Ritchie Rd	FM 2837 (Old Lorena Rd)	2 lane local road	4 lane divided arterial	2005	MPO	
L004	Country Spring Rd	n/a	FM 2113 (Spring Valley Rd)	Williams Rd	2 lane local road	rehabilitate road	2000	Lorena	
L005B	Craven Ave	n/a	FM 933 (Gholson Rd)	US Bus 77	2 lane local road	reconstruct road	1966	Lacy-Lakeview	High priority for Lacy-Lakeview
L006	Gateway Blvd	Formerly Flat Creek Pkwy	IH-35	FM 3476 (Bagby Ave)	no existing facility	4 lane divided arterial with RR grade separation	2000	MPO	
L007	Franklin Ave	n/a	Valley Mills Dr	S 17th St	4 lane arterial with center turn lane	Construct raised median with left turn bays	2000	MPO	Originally widened lanes to 12 ft
L008	Greig Drive	n/a	IH-35	US 77 (Robinson Dr)	2 lane local road	4 lane divided arterial, extend to US 77, realign at IH-35	2000	Robinson	
L009	Hatch Rd	n/a	IH-35	Old Bethany Rd	2 lane unpaved road	Pave road, widen to 12 ft lanes, construct bridge over UP RR, realign to IH-35	2000	Lorena	
L011	Lake Shore Dr	n/a	N 19th St	Mount Carmel Dr	4 lane arterial with center turn lane	Construct raised median with left turn bays	2005	MPO	
L012	M L King Jr Dr	n/a	Lake Shore Dr / FM 3051	Herring Ave	2 lane arterial	4 lane divided arterial	1987	TxDOT	
L013	Mars Dr	n/a	Hewitt Dr (FM 1695)	Texas Central Pkwy	2 lane local road	4 lane divided arterial with traffic circle at Texas Central Pkwy	2005	MPO	New Midway HS has increased traffic
L014	McGregor Industrial Road	n/a	US 84	Bluebonnet Pkwy	no existing facility	4 lane divided arterial	2005	McGregor	Truck access to McGregor Industrial Park poor
L015	Memorial Drive	n/a	Loop 396 (Valley Mills Dr)	New Rd	2 lane arterial	reconstruct road	1987	Beverly Hills	Road condition very poor, important arterial
L016	N 18th St / N 19th St	n/a	Homan Ave	Vivian Ave	4 lane undivided arterial	Construct raised median with left turn bays	2005	MPO	Originally added center turn lane
L017	Newland Dr	n/a	US 77 (Robinson Dr)	S 12th St Rd	2 lane local road	reconstruct road	1987	Robinson	
L018	Old McGregor Rd	n/a	FM 1695 (Hewitt Dr)	Ritchie Rd	2 lane local road	4 lane divided arterial	2000	Woodway	
L019	Old Temple Rd	n/a	IH-35	FM 2113 (Spring Valley Rd)	2 lane local road	4 lane divided arterial	2000	MPO	
L021	Ritchie Rd	n/a	FM 1695 (Hewitt Dr)	Panther Way	2 lane local road	4 lane divided arterial	2000	MPO	Necessary for N/S traffic between Hew & Wwy
L022A	Ritchie Rd	n/a	Panther Way	US 84 (George W Bush Pkwy)	2 lane local road	reconstruct road, eliminate offset at Panther Way	2008	Waco	
L022B	Ritchie Rd	n/a	Panther Way	US 84 (George W Bush Pkwy)	2 lane local road	4 lane divided arterial	2000	Woodway	Necessary for N/S traffic between Hew & Wwy
L023	S 12th St	S 16th St	Gurley Ave	SH 6 / S Loop 340	2 lane local road	4 lane divided arterial, realign with S 18th St	1987	Waco	
L024	Sanger Ave	n/a	Valley Mills Dr	Melrose Dr	4 lane undivided arterial	Construct raised median with left turn bays	2005	MPO	Originally added center turn lane
L025	Walnut St	n/a	FM 2417 (Crest Dr)	Craven Ave	2 lane local road	reconstruct road	2000	Citizens	
L026	Williams Rd	n/a	FM 2837 (Old Lorena Rd)	Country Spring Rd	2 lane local road	reconstruct road, add left turn lane from Old Lorena Rd to Leopard Lr	2000	Lorena	
L027	Panther Way	n/a	FM 1695 (Hewitt Dr)	Panther Run	2 lane local road	4 lane divided collector	1995	Hewitt	Originally extended to Tx Central Pkwy
L028	Karl May Dr	n/a	FM 3051 (Steinbeck Bend Dr)	Waco Reg. Airport Terminal	2 lane local road	Add landscaping, reconstruct road, realign intersection with Skeet Eason Rd	2005	WRA	Funded through Passenger Facility Charge
L029	McGregor South Bypass	n/a	US 84	SH 317	No existing facility	Construct 2 lane arterial	2000	McGregor	
L030	Texas Central Pkwy	n/a	Imperial Dr (FM 3223)	UP Railroad Spur	2 lane arterial	4 lane divided arterial	2009	MPO	
L031	Bosque Blvd	n/a	N 32nd St	N Valley Mills Dr (Loop 396)	4 & 6 lane arterial with center turn lane	Construct raised median with left turn bays	2009	MPO	
S001A	East Loop 340	n/a	SH 6 / Spur 484	Williams Rd	2 lane arterial	4 lane divided arterial	1966	TxDOT	Originally a full freeway section
S001B	East Loop 340	n/a	Orchard Ln	FM 2491	2 lane arterial	Construct grade separations at Orchard LN & FM 2491	1966	TxDOT	
S002	FM 1637	China Spring Rd	FM 185 (North River Crossing)	Spur 1637	2 lane FM road	4 lane divided arterial	2005	TxDOT	
S003A	FM 1637	China Spring Rd	FM 3051 (Steinbeck Bend Dr)	FM 2490 (Wortham Bend Rd)	2 lane FM road	4 lane divided arterial	1987	TxDOT	
S003B	FM 1637	China Spring Rd	FM 2490 (Wortham Bend Rd)	FM 185 (North River Crossing)	2 lane FM road	4 lane divided arterial	1987	TxDOT	
S004	FM 1695	Hewitt Dr	US 84 (George W Bush Pkwy)	FM 2063 (Sun Valley Dr)	4 lane arterial with center turn lane	6 lane arterial with raised median and left turn bays	1987	TxDOT / MPO	
S005	FM 1695	Hewitt Dr	FM 2063 (Sun Valley Rd)	Ritchie Rd	2 lane FM road	4 lane divided arterial	1987	TxDOT	
S006	FM 185	North River Crossing	SH 6	FM 1637 (China Spring Rd)	2 lane FM road	4 lane divided arterial	2000	TxDOT	
S007	FM 185 Extension	n/a	FM 1637 (China Spring Rd)	FM 933 (Gholson Rd)	no existing facility	2 lane FM road	1987	McLennan County	High priority for McLennan County
S008	FM 185 Extension	n/a	FM 933 (Gholson Rd)	IH-35	2 lane local road	2 lane FM road	1987	McLennan County	High priority for McLennan County
S009A	FM 2113	Spring Valley Road	FM 2416 (Cotton Belt Pkwy)	FM 2837 (Old Lorena Rd)	2 lane FM road	4 lane divided arterials	2005	TxDOT	
S009B	FM 2113	Spring Valley Road	Intersection at FM 2837 (Old Lorena Rd)	n/a	At grade intersection with traffic signals	Construct grade separation	2005	TxDOT	
S010	FM 2113	Spring Valley Road	FM 2837 (Old Lorena Rd)	FM 1695 (Hewitt Dr)	2 lane FM road	4 lane divided arterial	2005	TxDOT	
S011	FM 2113	Spring Valley Road	FM 2063 (Sun Valley Rd)	FM 1695 (Hewitt Dr)	2 lane FM road	4 lane divided arterial	1987	TxDOT	
S012	FM 2490	Wortham Bend Rd	FM 1637 (China Spring Rd)	Garrett Lane	2 lane FM road	4 lane divided arterial	2005	TxDOT	
S014	FM 2837	Old Lorena Road	IH-35	Pilgrim Ln	2 lane FM road	4 In arterial, realign, RR grade separation	2005	TxDOT	
S015	FM 2837	Rosenthal Pkwy	IH-35	Southwinds Dr	2 lane FM road	realign to eliminate offset at IH-35	2000	TxDOT	originally extended to US 77
S017	FM 3051	Steinbeck Bend Dr	FM 1637 (China Spring Rd)	Lake Shore Dr / M L King Jr Dr	2 lane FM road	4 lane divided arterial	2000	TxDOT	
S018	FM 3476	Old Temple Road	FM 2063 (Sun Valley Rd)	Texas Central Pkwy	2 lane FM road	4 lane divided arterial	2000	TxDOT	
S019	FM 434 / FM 3400	S Univ Parks Dr	US Bus 77 (LaSalle Ave)	SH 6 / S Loop 340	2 lane FM road	4 lane divided arterial	1987	Waco	
S021	FM 933	Gholson Rd	FM 308 (W Elm Mott Dr)	Fort Graham Rd	2 lane FM road	4 lane divided arterial	2000	TxDOT	
S023	Loop 396	Bosque Blvd	Rambler Dr	Valley Mills Dr	4 lane undivided arterial	Construct raised median with left turn bays	2005	MPO	Originally added center turn lane
S025	Loop 396	Valley Mills Dr	Cobbs Dr	Bagby Ave	6 & 8 lane arterial	Construct raised median with left turn bays	2005	TxDOT	
S026	Loop 574	M L King Jr Dr	IH-35	Spur 484	no existing facility	4 lane divided with grade separation at US Business 77	1966	TxDOT	
S028	SH 317	S Lone Star Pkwy	W 11th St	FM 2671 (Mother Neff Pkwy)	2 lane arterial	4 lane divided arterial	2000	TxDOT	
S029	SH 317	N Lone Star Pkwy	US 84 (George W Bush Pkwy)	FM 3047 (New Windsor Pkwy)	2 lane arterial	4 lane divided arterial	2000	TxDOT	
S030	SH 6	n/a	Bosque / McLennan County Line	Compton Rd	2 lane arterial	Construct passing lanes and left turn bays	2009	MPO	Originally construct 4 lane divided
S031A	SH 6	n/a	Lady Bird Rd	Spur 412 / Doshier Ln	2 lane arterial	4 lane freeway with frontage roads	2000	TxDOT	
S031B	SH 6	n/a	Compton Rd	Lady Bird Rd	2 lane arterial	4 lane divided arterial	2000	TxDOT	
S032A	SH 6	n/a	Spur 412 / Doshier Ln	Lake Waco	4 lane freeway with 2-way frontage roads	Convert 2-way frontage rds to 1-way & replace Lk Waco Bridges	2009	MPO	
S032B	SH 6	n/a	Spur 412 / Doshier Ln	US 84 (West Waco Dr)	4 lane freeway	6 lane freeway	2000	TxDOT	
S033	SH 6	W Loop 340	Intersection at US 84 & Spur 298	n/a	multi-level limited access interchange	Construct direct connection ramp from NB SH 6 to WB US 84	2009	TxDOT	
S034A	SH 6	W Loop 340	IH-35	US 84 (West Waco Dr)	lane freeway with discontinuous 1-way frontage road	Construct frontage road bridges over UP RR & UP RR Spur & realign ramps	2009	TxDOT	
S034B	SH 6	W Loop 340	IH-35	US 84 (West Waco Dr)	lane freeway with discontinuous 1-way frontage road	6 lane freeway	2000	TxDOT	
S035	SH 6	South Loop 340	IH-35	US 77 (Robinson Dr)	4 lane arterial with grade separation at US 77	4 lane freeway with frontage roads	1987	TxDOT	
S036A	SH 6	South Loop 340	Brazos River	SH 6 / Spur 484	2 lane arterial	4 lane divided arterial	2005	TxDOT	Part 1 of 3
S036B	SH 6	South Loop 340	Intersection at SH 6 / Spur 484	n/a	Standard Diamond Interchange	Construct Loop 340 bridge over Spur 484	2005	TxDOT	Part 2 of 3
S036C	SH 6	South Loop 340	Brazos River	SH 6	No existing direct connection ramps	Construct direct connection ramp from NB SH 6 to NB LP 340 & SB LP 340 to SB S	2005	TxDOT	Part 3 of 3
S038A	Speegleville Rd	FM 2837 Extension	US 84 (George W Bush Pkwy)	Middle Bosque River	2 lane local road	Widen to 4 lane divided arterial	2009	MPO	
S038B	Speegleville Rd	FM 2837 Extension	Middle Bosque River	SH 6	2 lane local road	Reconstruct existing road, realign with FM 185	2005	TxDOT	Part 1 of 2
S038C	Speegleville Rd	FM 2837 Extension	Middle Bosque River	SH 6	2 lane local road	Widen to 4 lane divided arterial	2000	TxDOT	Part 2 of 2
S039A	Spur 298	Franklin Ave	New Rd	Lake Air Dr	4 lane divided arterial with frontage roads	4 lane divided arterial with frontage roads, widen to 6 lanes, add u-turn bays, reconstruct New Rd inter	2005	Waco	
S039B	US 84	West Waco Dr	Intersection at Spur 298 (Franklin Ave)	n/a	Partial grade separated interchange	Construct braided ramps with u-turn before SH 6	2000	TxDOT	
S040	SH 130	n/a	McLennan / Falls County Line	McLennan / Hill County Line	no existing facility	4 lane toll freeway with 2 additional dedicated truck lanes	2009	TxDOT	exact alignment not determined
S041	US 77	Robinson Dr	Waco Traffic Circle	SH 6 / S Loop 340	4 lane arterial with center turn lane	Construct raised median with left turn bays	2005	MPO	Originally widened to 6 lanes
S042	US 77	Robinson Dr	SH 6 / S Loop 340	FM 3148 (Moonlight Dr)	4 lane arterial with center turn lane	Construct raised median with left turn bays	2005	MPO	Originally widened to 6 lanes
S043	US 77	n/a	FM 2837 (Rosenthal Pkwy)	Falls / McLennan County Line	2 lane arterial	4 lane divided arterial	1987	TxDOT	
S044	US 84	n/a	N Johnson Dr	Coryell / McLennan County Line	2 lane arterial	Construct passing lanes and left turn bays	2009	MPO	Originally construct 4 lane divided
S045	US 84	George W Bush Pkwy	FM 2188 (Cotton Belt Pkwy)	SH 317	4 lane divided arterial	4 lane freeway with frontage roads	2000	TxDOT	

MTP_ID	Facility	Alternate Name	From	To	Existing	Proposed	Proposal Year	Proposer	Notes
S046A	US 84	George W Bush Pkwy	Bosque Lane	FM 2188 (Cotton Belt Pkwy)	4 lane divided arterial	4 lane freeway with frontage roads	2000	TxDOT	
S046	US 84	George W Bush Pkwy	South Bosque River	Bosque Lane	4 lane divided arterial	4 lane freeway with frontage roads	2000	TxDOT	
S048A	US 84	George W Bush Pkwy	SH 6 (W Loop 340)	FM 1695 (Hewitt Dr)	4 lane freeway	Realign on & off ramps	2000	TxDOT	
S048B	US 84	George W Bush Pkwy	SH 6 (W Loop 340)	FM 1695 (Hewitt Dr)	4 lane freeway	Widen to 6 lane freeway	2000	TxDOT	
S048C	US 84	George W Bush Pkwy	Intersection at FM 1695 (Hewitt Dr)	n/a	Standard Diamond Interchange	Construct direct connection ramp from WB US 84 to SB FM 1695	2009	MPO	
S051	US Business 77	n/a	US 84 (E Waco Dr)	IH-35 (At Elm Mott)	4 lane w/ cntr turn ln and discontinuous fntge rds	Remove frontage roads and construct rasied center median	2005	TxDOT	
S052	FM 3051	Steinbeck Bend Dr	Intersection at Lake Shore Dr	n/a	At grade intersection	Construct traffic circle	2009	MPO	
S053	US 84	West Waco Dr	N 8th St	Valley Mills Dr	4 lane divided arterial	6 lane divided arterial	1966	Waco	
S054	US 84	East Waco Dr	Dallas St	N 3rd St	4 lane divided arterial	6 lane divided arterial	1966	Waco	
S055	US 84	n/a	SH 31	FM 1330 (Longhorn Pkwy)	2 lane arterial	4 lane divided arterial	2005	TxDOT	
S056	FM 1858	Tokio Rd / S Main St	IH-35	FM 2114 (Oak St)	2 lane local road	2 lane FM road, construct overpass at UP RR	2009	MPO	
S057	US Business 77	North Loop Dr / South Loop D	US 84 (E Waco Dr)	Brazos River	lane freeway with 1-way discontinuous frontage road	6 lane arterial with raised median and left turn bays	2009	MPO	
S058	US 84	East Waco Dr	FM 933 (Gholson Rd)	Spur 299 (Bellmead Dr)	4 lane freeway with 1-way frontage roads	6 lane arterial with raised median and left turn bays	2009	MPO	
S059	US 84	Bellmead Dr	Intersection at Aviation Pkwy	n/a	At grade intersection with traffic signals	Construct grade separation	2009	TxDOT	
S060	FM 107 Bypass	n/a	Blue Cut Rd	Doss Ln	no existing facility	Construct 2 lane FM Road	2009	MPO	

# Appendix F

MTP_ID	Facility	Length (mi)	Proposed Lane-Miles	Current Pavement Width (ft)	Urban / Rural	ROW Preparation	Pavement Removal Cost	Remove Curb & Gutter	Construct Road	Construct Storm Sewer	Construct Bridges	Construct Special Bridges	Urban Street Lights	Rural Safety Lights	Traffic Signals	Signs	Striping	Total (1-12)	SW3P	Total (13+14)	Mobilization	TCP	Total Construction Cost
L002	Beverly Dr	1.100	2.230	24	U	\$0	\$108,416	\$0	\$892,000	\$55,000	\$0	\$0	\$154,000	\$0	\$0	\$13,750	\$15,610	\$1,238,776	\$148,653	\$1,387,429	\$166,491	\$96,000	\$1,649,921
L003A	Chapel Rd	1.000	4.000	24	U	\$66,000	\$98,560	\$71,280	\$2,000,000	\$400,000	\$0	\$0	\$140,000	\$0	\$280,000	\$12,500	\$28,000	\$3,096,340	\$371,561	\$3,467,901	\$416,148	\$96,000	\$3,980,049
L003B	Chapel Rd	2.310	9.240	24	R	\$152,460	\$227,674	\$164,657	\$4,620,000	\$115,500	\$0	\$0	\$0	\$72,000	\$0	\$28,875	\$64,680	\$5,445,845	\$653,501	\$6,099,347	\$731,922	\$144,000	\$6,975,268
L004	Country Spring Rd	4.000	8.000	24	R	\$0	\$394,240	\$0	\$3,200,000	\$200,000	\$0	\$0	\$0	\$60,000	\$0	\$50,000	\$56,000	\$3,960,240	\$475,229	\$4,435,469	\$532,256	\$96,000	\$5,063,725
L005B	Craven Ave	0.929	1.858	20	U	\$0	\$76,302	\$0	\$743,200	\$371,600	\$0	\$0	\$130,060	\$0	\$0	\$11,613	\$13,006	\$1,345,780	\$161,494	\$1,507,274	\$180,873	\$96,000	\$1,784,147
L006	Gateway Blvd	0.863	3.452	New	U	\$56,958	\$0	\$0	\$4,919,100	\$345,200	\$520,000	\$0	\$120,820	\$0	\$140,000	\$10,788	\$24,164	\$6,137,030	\$736,444	\$6,873,473	\$824,817	\$144,000	\$7,842,290
L007	Franklin Ave	1.778	7.112	52	U	\$117,348	\$87,620	\$126,736	\$1,244,600	\$88,900	\$0	\$0	\$248,920	\$0	\$0	\$0	\$49,784	\$1,963,908	\$235,669	\$2,199,577	\$263,949	\$64,000	\$2,527,526
L008	Greig Drive	3.538	14.152	24	U	\$233,508	\$348,705	\$0	\$9,621,500	\$1,415,200	\$520,000	\$0	\$224,000	\$24,000	\$140,000	\$44,225	\$99,064	\$12,670,202	\$1,520,424	\$14,190,627	\$1,702,875	\$192,000	\$16,085,502
L009	Hatch Rd	1.129	2.258	24	R	\$0	\$0	\$0	\$2,819,100	\$56,450	\$286,000	\$1,430,000	\$0	\$36,000	\$0	\$14,113	\$15,806	\$4,657,469	\$558,896	\$5,216,365	\$625,964	\$128,000	\$5,970,328
L011	Lake Shore Dr	3.750	15.000	65	U	\$247,500	\$184,800	\$267,300	\$2,625,000	\$187,500	\$0	\$0	\$525,000	\$0	\$0	\$0	\$105,000	\$4,142,100	\$497,052	\$4,639,152	\$556,698	\$64,000	\$5,259,850
L012	M L King Jr Dr	1.783	7.132	24	U	\$117,678	\$175,732	\$0	\$3,566,000	\$713,200	\$0	\$2,145,000	\$249,620	\$0	\$0	\$22,288	\$49,924	\$7,039,442	\$844,733	\$7,884,175	\$946,101	\$128,000	\$8,958,276
L013	Mars Dr	0.948	3.792	24	U	\$62,568	\$93,435	\$0	\$1,896,000	\$379,200	\$429,000	\$0	\$132,720	\$0	\$0	\$11,850	\$26,544	\$3,031,317	\$363,758	\$3,395,075	\$407,409	\$96,000	\$3,898,484
L014	McGregor Industrial Road	1.648	3.296	New	R	\$108,768	\$0	\$0	\$4,944,000	\$82,400	\$143,000	\$0	\$0	\$48,000	\$140,000	\$20,600	\$23,072	\$5,509,840	\$661,181	\$6,171,021	\$740,522	\$96,000	\$7,007,543
L015	Memorial Drive	1.146	2.292	24	U	\$75,636	\$112,950	\$0	\$916,800	\$458,400	\$0	\$0	\$160,440	\$0	\$0	\$14,325	\$16,044	\$1,754,595	\$210,551	\$1,965,146	\$235,818	\$96,000	\$2,296,964
L016	N 18th St / N 19th St	1.916	7.664	48	U	\$126,456	\$0	\$0	\$3,257,200	\$766,400	\$0	\$0	\$268,240	\$0	\$0	\$23,950	\$53,648	\$4,495,894	\$539,507	\$5,035,401	\$604,248	\$96,000	\$5,735,649
L017	Newland Dr	1.419	2.838	22	U	\$93,654	\$128,202	\$0	\$1,135,200	\$567,600	\$0	\$0	\$198,660	\$0	\$0	\$17,738	\$19,866	\$2,160,919	\$259,310	\$2,420,230	\$290,428	\$96,000	\$2,806,657
L018	Old McGregor Rd	1.246	4.984	22	U	\$82,236	\$112,572	\$0	\$2,093,600	\$498,400	\$0	\$0	\$174,440	\$0	\$140,000	\$15,575	\$34,888	\$3,550,111	\$426,013	\$3,976,124	\$477,135	\$96,000	\$4,549,259
L019	Old Temple Rd	1.766	7.064	24	U	\$116,556	\$174,057	\$0	\$3,532,000	\$706,400	\$442,000	\$0	\$247,240	\$0	\$0	\$22,075	\$49,448	\$5,289,776	\$634,773	\$5,924,549	\$710,946	\$96,000	\$6,731,495
L021	Ritchie Rd	2.248	8.992	22	U	\$113,586	\$155,487	\$0	\$4,496,000	\$899,200	\$221,000	\$0	\$42,000	\$48,000	\$0	\$28,100	\$62,944	\$6,066,317	\$727,958	\$6,794,275	\$815,313	\$96,000	\$7,705,588
L022A	Ritchie Rd	1.836	3.672	22	U	\$121,176	\$165,876	\$0	\$2,093,600	\$734,400	\$0	\$0	\$257,040	\$0	\$140,000	\$22,950	\$25,704	\$3,560,746	\$427,290	\$3,988,036	\$478,564	\$96,000	\$4,562,600
L022B	Ritchie Rd	1.836	7.344	24	U	\$121,176	\$0	\$0	\$1,836,000	\$367,200	\$0	\$0	\$0	\$0	\$0	\$22,950	\$25,704	\$2,373,030	\$284,764	\$2,657,794	\$318,935	\$96,000	\$3,072,729
L023	S 12th St	1.495	5.980	24	U	\$98,670	\$67,218	\$0	\$2,990,000	\$598,000	\$221,000	\$0	\$56,000	\$12,000	\$280,000	\$18,688	\$41,860	\$4,383,435	\$526,012	\$4,909,448	\$589,134	\$96,000	\$5,594,581
L024	Sanger Ave	1.427	5.980	44	U	\$94,182	\$70,323	\$101,717	\$998,900	\$570,800	\$0	\$0	\$199,780	\$0	\$0	\$17,838	\$39,956	\$2,093,495	\$251,219	\$2,344,714	\$281,366	\$64,000	\$2,690,080
L025	Walnut St	0.682	1.364	36	U	\$45,012	\$100,827	\$48,613	\$545,600	\$272,800	\$0	\$0	\$95,480	\$0	\$0	\$8,525	\$9,548	\$1,126,405	\$135,169	\$1,261,573	\$151,389	\$64,000	\$1,476,962
L026	Williams Rd	1.179	2.358	22	R	\$77,814	\$106,519	\$0	\$1,517,800	\$135,200	\$0	\$0	\$47,320	\$12,000	\$0	\$14,738	\$16,506	\$1,927,896	\$231,348	\$2,159,244	\$259,109	\$72,000	\$2,490,353
L027	Panther Way	0.585	2.340	24	U	\$38,610	\$57,658	\$0	\$1,170,000	\$234,000	\$442,000	\$0	\$81,900	\$0	\$0	\$7,313	\$16,380	\$2,047,860	\$245,743	\$2,293,603	\$275,232	\$96,000	\$2,664,836
L028	Kari May Dr	1.032	2.064	24	U	\$68,112	\$101,714	\$0	\$825,600	\$412,800	\$0	\$0	\$144,480	\$0	\$140,000	\$12,900	\$14,448	\$1,720,054	\$206,406	\$1,926,460	\$231,175	\$72,000	\$2,229,636
L029	McGregor South Bypass	2.082	4.164	New	R	\$137,412	\$0	\$0	\$6,246,000	\$104,100	\$990,000	\$0	\$0	\$48,000	\$140,000	\$26,025	\$29,148	\$7,720,685	\$926,482	\$8,647,167	\$1,037,660	\$128,000	\$9,812,827
L030	Texas Central Pkwy	0.300	1.200	24	U	\$19,800	\$29,568	\$21,384	\$600,000	\$120,000	\$0	\$0	\$42,000	\$0	\$0	\$3,750	\$8,400	\$844,902	\$101,388	\$946,290	\$113,555	\$128,000	\$1,187,845
L031	Bosque Blvd	1.934	9.845	73	U	\$127,644	\$579,787	\$0	\$1,353,800	\$0	\$0	\$0	\$270,760	\$0	\$0	\$24,175	\$68,915	\$2,425,081	\$291,010	\$2,716,091	\$325,931	\$64,000	\$3,106,022
S001A	East Loop 340	3.483	13.932	24	U	\$229,878	\$343,284	\$0	\$6,224,500	\$1,244,900	\$0	\$0	\$210,000	\$36,000	\$140,000	#####	\$97,524	\$8,700,236	\$1,044,028	\$9,744,265	\$1,169,312	\$144,000	\$11,057,577
S001B	East Loop 340	n/a	n/a	24	U	\$66,000	\$0	\$0	\$13,000,000	\$0	\$0	\$0	\$140,000	\$0	\$140,000	#####	\$17,500	\$13,463,500	\$1,615,620	\$15,079,120	\$1,809,494	\$192,000	\$17,080,614
S002	FM 1637	3.091	12.364	24	U	\$204,006	\$304,649	\$0	\$5,636,500	\$154,550	\$221,000	\$0	\$432,740	\$0	\$140,000	\$38,638	\$86,548	\$7,218,630	\$866,236	\$8,084,866	\$970,184	\$128,000	\$10,231,295
S003A	FM 1637	2.037	8.148	24	U	\$134,442	\$200,767	\$0	\$4,000,000	\$800,000	0	\$0	\$285,180	\$0	\$140,000	\$25,463	\$57,036	\$5,642,887	\$677,146	\$6,320,034	\$758,404	\$144,000	\$7,222,438
S003B	FM 1637	3.228	12.912	24	U	\$213,048	\$318,152	\$0	\$7,342,750	\$1,468,400	\$221,000	\$0	\$451,920	\$0	\$0	\$40,350	\$90,384	\$10,146,004	\$1,217,520	\$11,363,524	\$1,363,623	\$144,000	\$12,871,147
S004	FM 1695	2.650	15.900	60	U	\$174,900	\$652,960	\$0	\$4,975,000	\$995,000	\$741,000	\$0	\$371,000	\$0	\$0	\$33,125	\$111,300	\$3,252,259	\$966,514	\$4,218,773	\$1,082,496	\$128,000	\$5,301,269
S005	FM 1695	1.365	2.730	24	U	\$90,090	\$134,534	\$0	\$2,730,000	\$546,000	\$331,500	\$0	\$191,100	\$0	\$140,000	\$17,063	\$19,110	\$4,199,397	\$503,928	\$4,703,325	\$564,399	\$96,000	\$5,363,723
S006	FM 185	4.363	17.452	24	R	\$287,958	\$430,017	\$0	\$7,544,500	\$218,150	\$442,000	\$12,614,000	\$168,000	\$60,000	\$0	\$54,538	\$122,164	\$21,941,327	\$2,632,959	\$24,574,286	\$2,948,914	\$192,000	\$27,715,200
S007	FM 185 Extension	7.490	14.980	New	R	\$494,340	\$0	\$0	\$18,352,500	\$374,500	\$286,000	\$10,252,000	\$0	\$96,000	\$140,000	\$93,625	\$104,860	\$30,193,825	\$3,623,259	\$33,817,084	\$4,058,050	\$240,000	\$38,115,134
S008	FM 185 Extension	4.862	9.724	New	R	\$320,892	\$0	\$0	\$12,439,500	\$243,100	\$286,000	\$0	\$0	\$84,000	\$140,000	\$60,775	\$68,068	\$13,642,335	\$1,637,080	\$15,279,415	\$1,833,530	\$160,000	\$17,272,945
S009A	FM 2113	3.411	13.644	24	R	\$225,126	\$336,188	\$0	\$6,116,500	\$170,550	\$773,500	\$0	\$112,000	\$60,000	\$140,000	\$42,638	\$95,508	\$8,072,010	\$968,641	\$9,040,651	\$1,084,878	\$144,000	\$10,269,529
S009B	FM 2113	n/a	n/a	24	R	\$33,000	\$0	\$0	\$6,500,000	\$0	\$0	\$0	\$70,000	\$0	\$140,000	\$50,000	\$8,750	\$6,801,750	\$816,210	\$7,617,960	\$914,155	\$144,000	\$8,676,115
S010	FM 2113	2.097	8.388	24	U	\$138,402	\$206,680	\$0	\$4,194,000	\$838,800	\$331,500	\$0	\$293,580	\$0	\$0	\$26,213	\$58,716	\$6,087,891	\$730,547	\$6,818,438	\$818,213	\$96,000	\$7,732,650
S011	FM 2113	2.525	10.100	24	U	\$166,650	\$248,864	\$0	\$4,787,500	\$957,500	\$884,000	\$0	\$353,500	\$0</									





MTP_ID	Facility	Most Narrow Existing Right of Way Width (ft)	Proposed Right of Way Width (ft)	Max Additional Right of Way (ft)	Residential (sq ft)	Cost (\$5 / sq ft)	Comm / Office / Ind (sq ft)	Cost (\$10 / sq ft)	Undeveloped (sq ft)	Cost (\$3 / sq ft)	Other Development (sq ft)	Cost (\$4 / sq ft)	Urban Agriculture (sq ft)	Cost (\$1 / sq ft)	Rural Agriculture (sq ft)	Cost (\$0.50 / sq ft)	All Other Land (sq ft)	Cost (\$0.25 / sq ft)
S046A	US 84	160	300	140	90,100	\$450,500	100,000	\$1,000,000	202,800	\$608,400	20,500	\$82,000	1,190,700	\$1,190,700	0	\$0	78,000	\$19,500
S046	US 84	210	300	90	127,500	\$637,500	54,600	\$546,000	51,700	\$155,100	75,100	\$300,400	146,500	\$146,500	0	\$0	0	\$0
S048A	US 84	n/a	n/a	n/a	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
S048B	US 84	290	290	n/a	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
S048C	US 84	n/a	varies	varies	0	\$0	11,400	\$114,000	22,800	\$68,400	0	\$0	0	\$0	0	\$0	0	\$0
S051	US Business 77	140	140	n/a	0	\$0	11,400	\$114,000	22,800	\$68,400	0	\$0	0	\$0	0	\$0	0	\$0
S052	FM 3051	n/a	n/a	n/a	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
S053	US 84	80	120	40	43,500	\$217,500	163,700	\$1,637,000	110,700	\$332,100	0	\$0	0	\$0	0	\$0	0	\$0
S054	US 84	100	100	n/a	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
S055	US 84	100	120	20	71,300	\$356,500	0	\$0	0	\$0	0	\$0	0	\$0	200,900	\$100,450	14,200	\$3,550
S056	FM 1858	30	75	45	45,300	\$226,500	2,900	\$29,000	37,700	\$113,100	43,800	\$175,200	0	\$0	78,100	\$39,050	0	\$0
S057	US Business 77	150	150	n/a	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
S058	US 84	150	150	n/a	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
S059	US 84	250	250	n/a	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
S060	FM 107 Bypass	n/a	120	120	142,100	\$710,500	4,500	\$45,000	21,600	\$64,800	16,200	\$64,800	0	\$0	953,000	\$476,500	0	\$0

## Appendix F

MTP_ID	Facility	Right of Way Total Cost	Preliminary Engineering Cost	Construction Engineering Cost	Contingencies Cost	Indirect Cost	Total Project Cost
L002	Beverly Dr	\$312,700	\$164,992	\$82,496	\$115,494	\$74,246	\$2,399,850
L003A	Chapel Rd	\$0	\$398,005	\$199,002	\$278,603	\$179,102	\$5,034,762
L003B	Chapel Rd	\$790,000	\$697,527	\$348,763	\$488,269	\$313,887	\$9,613,715
L004	Country Spring Rd	\$159,150	\$506,373	\$253,186	\$354,461	\$227,868	\$6,564,762
L005B	Craven Ave	\$483,100	\$178,415	\$89,207	\$124,890	\$80,287	\$2,740,046
L006	Gateway Blvd	\$366,375	\$784,229	\$392,114	\$548,960	\$352,903	\$10,286,872
L007	Franklin Ave	\$2,440,000	\$252,753	\$126,376	\$176,927	\$113,739	\$5,637,320
L008	Greig Drive	\$1,705,475	\$1,608,550	\$804,275	\$1,125,985	\$723,848	\$22,053,635
L009	Hatch Rd	\$443,425	\$597,033	\$298,516	\$417,923	\$268,665	\$7,995,891
L011	Lake Shore Dr	\$835,300	\$525,985	\$262,993	\$368,190	\$236,693	\$7,489,011
L012	M L King Jr Dr	\$0	\$895,828	\$447,914	\$627,079	\$403,122	\$11,332,219
L013	Mars Dr	\$0	\$389,848	\$194,924	\$272,894	\$175,432	\$4,931,582
L014	McGregor Industrial Road	\$655,900	\$700,754	\$350,377	\$490,528	\$315,339	\$9,520,442
L015	Memorial Drive	\$389,600	\$229,696	\$114,848	\$160,787	\$103,363	\$3,295,259
L016	N 18th St / N 19th St	\$1,423,900	\$573,565	\$286,782	\$401,495	\$258,104	\$8,679,497
L017	Newland Dr	\$749,900	\$280,666	\$140,333	\$196,466	\$126,300	\$4,300,322
L018	Old McGregor Rd	\$816,725	\$454,926	\$227,463	\$318,448	\$204,717	\$6,571,538
L019	Old Temple Rd	\$372,500	\$673,149	\$336,575	\$471,205	\$302,917	\$8,887,841
L021	Ritchie Rd	\$906,875	\$770,559	\$385,279	\$539,391	\$346,751	\$10,654,443
L022A	Ritchie Rd	\$448,775	\$456,260	\$228,130	\$319,382	\$205,317	\$6,220,464
L022B	Ritchie Rd	\$0	\$307,273	\$153,636	\$215,091	\$138,273	\$3,887,002
L023	S 12th St	\$813,600	\$559,458	\$279,729	\$391,621	\$251,756	\$7,890,745
L024	Sanger Ave	\$1,567,200	\$269,008	\$134,504	\$188,306	\$121,054	\$4,970,151
L025	Walnut St	\$158,000	\$147,696	\$73,848	\$103,387	\$66,463	\$2,026,357
L026	Williams Rd	\$346,450	\$249,035	\$124,518	\$174,325	\$112,066	\$3,496,747
L027	Panther Way	\$538,500	\$266,484	\$133,242	\$186,538	\$119,918	\$3,909,517
L028	Karl May Dr	\$0	\$222,964	\$111,482	\$156,074	\$100,334	\$2,820,489
L029	McGregor South Bypass	\$1,039,850	\$981,283	\$490,641	\$686,898	\$441,577	\$13,453,076
L030	Texas Central Pkwy	\$0	\$118,785	\$59,392	\$83,149	\$53,453	\$1,502,624
L031	Bosque Blvd	\$2,085,600	\$310,602	\$155,301	\$217,422	\$139,771	\$6,014,718
S001A	East Loop 340	\$0	\$1,105,758	\$552,879	\$774,030	\$497,591	\$13,987,834
S001B	East Loop 340	\$1,677,025	\$1,708,061	\$854,031	\$1,195,643	\$768,628	\$23,284,002
S002	FM 1637	\$1,647,100	\$918,305	\$459,153	\$642,814	\$413,237	\$13,263,658
S003A	FM 1637	\$907,600	\$722,244	\$361,122	\$505,571	\$325,010	\$10,043,984
S003B	FM 1637	\$863,850	\$1,287,115	\$643,557	\$900,980	\$579,202	\$17,145,851
S004	FM 1695	\$0	\$1,023,130	\$511,565	\$716,191	\$460,408	\$12,942,588
S005	FM 1695	\$432,400	\$536,372	\$268,186	\$375,461	\$241,368	\$7,217,510
S006	FM 185	\$488,800	\$2,771,520	\$1,385,760	\$1,940,064	\$1,247,184	\$35,548,528
S007	FM 185 Extension	\$1,918,100	\$3,811,513	\$1,905,757	\$2,668,059	\$1,715,181	\$50,133,745
S008	FM 185 Extension	\$2,641,750	\$1,727,295	\$863,647	\$1,209,106	\$777,283	\$24,492,025
S009A	FM 2113	\$642,450	\$1,026,953	\$513,476	\$718,867	\$462,129	\$13,633,404
S009B	FM 2113	\$462,750	\$867,612	\$433,806	\$607,328	\$390,425	\$11,438,036
S010	FM 2113	\$430,050	\$773,265	\$386,633	\$541,286	\$347,969	\$10,211,853
S011	FM 2113	\$1,378,775	\$950,435	\$475,217	\$665,304	\$427,696	\$13,401,774
S012	FM 2490	\$852,375	\$1,550,836	\$775,418	\$1,085,585	\$697,876	\$20,470,445
S014	FM 2837	\$465,175	\$626,379	\$313,190	\$438,466	\$281,871	\$8,388,875
S015	FM 2837	\$754,375	\$1,102,175	\$551,088	\$771,523	\$495,979	\$14,696,890
S017	FM 3051	\$0	\$909,746	\$454,873	\$636,822	\$409,386	\$11,508,283
S018	FM 3476	\$0	\$858,744	\$429,372	\$601,121	\$386,435	\$10,863,111
S019	FM 434 / FM 3400	\$0	\$826,447	\$413,224	\$578,513	\$371,901	\$10,454,559
S021	FM 933	\$1,118,575	\$504,985	\$252,492	\$353,489	\$227,243	\$7,506,632
S023	Loop 396	\$432,500	\$168,479	\$84,240	\$117,935	\$75,816	\$2,563,760
S025	Loop 396	\$1,198,700	\$529,422	\$264,711	\$370,595	\$238,240	\$7,895,889
S026	Loop 574	\$1,877,200	\$1,000,000	\$500,000	\$700,000	\$450,000	\$14,527,200
S028	SH 317	\$1,045,850	\$740,859	\$370,430	\$518,602	\$333,387	\$10,417,721
S029	SH 317	\$261,000	\$351,260	\$175,630	\$245,882	\$158,067	\$4,704,438
S030	SH 6	\$0	\$602,424	\$301,212	\$421,697	\$271,091	\$7,620,668
S031A	SH 6	\$2,502,600	\$1,313,368	\$656,684	\$919,358	\$591,016	\$19,116,704
S031B	SH 6	\$291,100	\$870,602	\$435,301	\$609,421	\$391,771	\$11,304,213
S032A	SH 6	\$804,475	\$3,142,437	\$1,571,218	\$2,199,706	\$1,414,097	\$40,556,301
S032B	SH 6	\$923,200	\$2,045,400	\$1,022,700	\$1,431,780	\$920,430	\$26,797,506
S033	SH 6	\$1,361,300	\$1,090,957	\$545,478	\$763,670	\$490,931	\$15,161,904
S034A	SH 6	\$968,300	\$877,487	\$438,744	\$614,241	\$394,869	\$12,068,513
S034B	SH 6	\$0	\$1,698,732	\$849,366	\$1,189,112	\$764,429	\$21,488,959
S035	SH 6	\$0	\$1,836,372	\$918,186	\$1,285,460	\$826,367	\$23,230,100
S036A	SH 6	\$0	\$896,945	\$448,473	\$627,862	\$403,625	\$11,346,355
S036B	SH 6	\$0	\$717,287	\$358,644	\$502,101	\$322,779	\$9,073,684
S036C	SH 6	\$286,050	\$2,014,666	\$1,007,333	\$1,410,266	\$906,600	\$25,771,570
S038A	Speegleville Rd	\$405,225	\$533,897	\$266,948	\$373,728	\$240,254	\$7,159,021
S038B	Speegleville Rd	\$5,043,750	\$2,139,639	\$1,069,819	\$1,497,747	\$962,837	\$32,110,179
S038C	Speegleville Rd	\$0	\$2,498,787	\$1,249,393	\$1,749,151	\$1,124,454	\$31,609,655
S039A	Spur 298	\$0	\$337,716	\$168,858	\$236,401	\$151,972	\$4,272,109
S039B	US 84	\$0	\$817,574	\$408,787	\$572,302	\$367,908	\$10,342,315
S040	SH 130	\$63,445,400	\$38,799,666	\$19,399,833	\$27,159,766	\$17,459,850	\$554,261,169
S041	US 77	\$0	\$359,470	\$179,735	\$251,629	\$161,762	\$4,547,298
S042	US 77	\$678,800	\$575,870	\$287,935	\$403,109	\$259,141	\$7,963,551
S043	US 77	\$1,148,500	\$894,039	\$447,020	\$625,827	\$402,318	\$12,458,094
S044	US 84	\$192,375	\$784,290	\$392,145	\$549,003	\$352,931	\$10,113,647
S045	US 84	\$4,815,550	\$5,132,363	\$2,566,181	\$3,592,654	\$2,309,563	\$69,739,936



MTP_ID	Facility	Right of Way Total Cost	Preliminary Engineering Cost	Construction Engineering Cost	Contingencies Cost	Indirect Cost	Total Project Cost
S046A	US 84	\$3,351,100	\$4,210,200	\$2,105,100	\$2,947,140	\$1,894,590	\$56,610,133
S046	US 84	\$1,785,500	\$1,978,703	\$989,352	\$1,385,092	\$890,416	\$26,816,096
S048A	US 84	\$0	\$319,171	\$159,586	\$223,420	\$143,627	\$4,037,514
S048B	US 84	\$0	\$1,018,046	\$509,023	\$712,632	\$458,121	\$12,878,285
S048C	US 84	\$182,400	\$720,015	\$360,008	\$504,011	\$324,007	\$9,290,595
S051	US Business 77	\$182,400	\$1,656,597	\$828,298	\$1,159,618	\$745,469	\$21,138,351
S052	FM 3051	\$0	\$113,218	\$56,609	\$79,252	\$50,948	\$1,432,205
S053	US 84	\$2,186,600	\$1,101,654	\$550,827	\$771,158	\$495,744	\$16,122,520
S054	US 84	\$0	\$582,322	\$291,161	\$407,625	\$262,045	\$7,366,375
S055	US 84	\$460,500	\$1,114,859	\$557,429	\$780,401	\$501,686	\$14,563,461
S056	FM 1858	\$582,850	\$426,078	\$213,039	\$298,255	\$191,735	\$5,972,735
S057	US Business 77	\$0	\$1,518,119	\$759,059	\$1,062,683	\$683,153	\$19,204,200
S058	US 84	\$0	\$974,471	\$487,235	\$682,130	\$438,512	\$12,327,058
S059	US 84	\$0	\$967,421	\$483,710	\$677,195	\$435,339	\$12,237,875
S060	FM 107 Bypass	\$1,361,600	\$633,175	\$316,588	\$443,223	\$284,929	\$9,371,268
		\$134,304,875	\$130,284,644	\$65,142,322	\$91,199,250	\$58,628,090	\$1,782,405,615

**Appendix G**

**Transit Need Index**

		<b>WEIGHT</b>	<b>0.5</b>				<b>1.0</b>		<b>1.0</b>	
<b>TRACT</b>	<b>BG</b>	<b>County</b>	<b>POPULATION</b>	<b>Area</b>	<b>Pop Density</b>	<b>Size Class</b>	<b>% Minority</b>	<b>Index</b>	<b>Median HH Income</b>	<b>Index</b>
<i>HOTCOG Region</i>			<i>321,536</i>	<i>5,623.70</i>	<i>57.18</i>	<i>1</i>	<i>16.2%</i>	<i>1.00</i>	<i>\$32,606</i>	<i>1.00</i>
9501.00	1	Bosque	887	142.43	6.23	1	6.4%	0.40	\$27,679	1.18
9501.00	2	Bosque	1,050	210.81	4.98	1	11.7%	0.72	\$41,417	0.79
9501.00	3	Bosque	750	1.66	451.81	1	32.3%	1.99	\$23,952	1.36
9501.00	4	Bosque	480	0.68	705.88	2	44.6%	2.75	\$21,875	1.49
9501.00	5	Bosque	872	57.43	15.18	1	7.1%	0.44	\$31,607	1.03
9502.00	1	Bosque	1,549	3.65	424.38	1	29.4%	1.81	\$32,875	0.99
9503.00	1	Bosque	552	94.33	5.85	1	8.0%	0.49	\$35,547	0.92
9503.00	2	Bosque	934	48.04	19.44	1	8.5%	0.52	\$32,292	1.01
9504.00	1	Bosque	2,348	183.91	12.77	1	10.1%	0.62	\$45,357	0.72
9504.00	2	Bosque	1,073	124.67	8.61	1	3.0%	0.19	\$40,600	0.80
9505.00	1	Bosque	758	0.48	1,579.17	3	7.5%	0.46	\$35,313	0.92
9505.00	2	Bosque	472	0.54	874.07	2	40.5%	2.50	\$18,333	1.78
9505.00	3	Bosque	917	0.79	1,160.76	3	39.8%	2.46	\$28,636	1.14
9505.00	4	Bosque	947	0.22	4,304.55	4	20.0%	1.23	\$26,741	1.22
9506.00	1	Bosque	1,746	23.29	74.97	1	3.6%	0.22	\$35,135	0.93
9507.00	1	Bosque	719	108.48	6.63	1	13.8%	0.85	\$44,318	0.74
9507.00	2	Bosque	715	0.83	861.45	2	9.9%	0.61	\$33,438	0.98
9507.00	3	Bosque	435	0.38	1,144.74	3	18.2%	1.12	\$27,212	1.20
9901.00	1	Falls	802	89.80	8.93	1	8.1%	0.50	\$34,423	0.95
9901.00	2	Falls	2,644	103.68	25.50	1	11.6%	0.72	\$33,859	0.96
9902.00	1	Falls	1,735	113.58	15.28	1	19.1%	1.18	\$36,950	0.88
9902.00	2	Falls	1,050	22.77	46.11	1	54.4%	3.36	\$26,250	1.24
9903.00	3	Falls	4,101	2.51	1,633.86	3	50.7%	3.13	\$27,255	1.20
9904.00	1	Falls	914	0.86	1,062.79	3	83.4%	5.15	\$11,467	2.84
9904.00	2	Falls	446	0.20	2,230.00	3	97.5%	6.02	\$17,614	1.85
9904.00	3	Falls	458	0.34	1,347.06	3	100.0%	6.17	\$16,250	2.01
9904.00	4	Falls	220	1.36	161.76	1	84.1%	5.19	\$13,365	2.44
9904.00	5	Falls	337	0.60	561.67	2	100.0%	6.17	\$15,670	2.08
9904.00	6	Falls	123	1.16	106.03	1	53.7%	3.31	\$9,327	3.50
9905.00	1	Falls	1,418	115.50	12.28	1	18.3%	1.13	\$31,667	1.03
9905.00	2	Falls	662	0.78	848.72	2	39.1%	2.41	\$25,536	1.28
9906.00	1	Falls	731	176.95	4.13	1	17.5%	1.08	\$18,750	1.74
9907.00	1	Falls	1,337	141.72	9.43	1	14.6%	0.90	\$34,813	0.94
9907.00	2	Falls	561	1.32	425.00	1	29.9%	1.85	\$33,000	0.99
9907.00	3	Falls	826	0.29	2,848.28	3	56.7%	3.50	\$21,042	1.55

		WEIGHT	0.5				1.0		1.0	
TRACT	BG	County	POPULATION	Area	Pop Density	Size Class	% Minority	Index	Median HH Income	Index
<i>HOTCOG Region</i>			<i>321,536</i>	<i>5,623.70</i>	<i>57.18</i>	<i>1</i>	<i>16.2%</i>	<i>1.00</i>	<i>\$32,606</i>	<i>1.00</i>
9907.00	4	Falls	211	0.23	917.39	2	88.2%	5.44	\$15,000	2.17
9801.00	1	Freestone	1,924	154.99	12.41	1	23.7%	1.46	\$28,523	1.14
9801.00	2	Freestone	2,174	126.99	17.12	1	12.7%	0.78	\$39,583	0.82
9802.00	1	Freestone	521	1.66	313.86	1	14.6%	0.90	\$39,000	0.84
9802.00	2	Freestone	557	1.04	535.58	2	14.4%	0.89	\$42,656	0.76
9802.00	3	Freestone	217	0.38	571.05	2	16.1%	0.99	\$24,250	1.34
9803.00	1	Freestone	755	1.61	468.94	1	17.6%	1.09	\$23,125	1.41
9803.00	2	Freestone	632	1.06	596.23	2	95.3%	5.88	\$30,833	1.06
9804.00	1	Freestone	1,033	100.11	10.32	1	17.2%	1.06	\$40,000	0.82
9804.00	2	Freestone	217	0.92	235.87	1	18.9%	1.17	\$19,531	1.67
9804.00	3	Freestone	905	4.93	183.57	1	21.2%	1.31	\$23,421	1.39
9806.00	1	Freestone	775	71.13	10.90	1	8.3%	0.51	\$51,583	0.63
9806.00	2	Freestone	1,568	162.08	9.67	1	9.7%	0.60	\$29,702	1.10
9806.00	3	Freestone	774	59.70	12.96	1	32.9%	2.03	\$30,750	1.06
9807.00	1	Freestone	916	2.01	455.72	1	51.5%	3.18	\$29,632	1.10
9807.00	2	Freestone	1,959	0.79	2,479.75	3	48.7%	3.01	\$39,063	0.83
9807.00	3	Freestone	402	1.13	355.75	1	78.4%	4.84	\$18,553	1.76
9807.00	4	Freestone	607	1.12	541.96	2	10.2%	0.63	\$24,904	1.31
9807.00	5	Freestone	509	0.76	669.74	2	16.5%	1.02	\$49,531	0.66
9809.00	1	Freestone	570	94.53	6.03	1	34.7%	2.14	\$28,942	1.13
9809.00	2	Freestone	852	105.02	8.11	1	48.6%	3.00	\$29,917	1.09
9601.00	1	Hill	818	0.31	2,638.71	3	27.5%	1.70	\$33,450	0.97
9601.00	2	Hill	498	0.39	1,276.92	3	79.3%	4.90	\$23,750	1.37
9601.00	3	Hill	2,381	134.82	17.66	1	17.5%	1.08	\$39,688	0.82
9602.00	1	Hill	1,153	44.93	25.66	1	6.6%	0.41	\$40,395	0.81
9602.00	2	Hill	1,036	50.45	20.54	1	11.9%	0.73	\$35,284	0.92
9602.00	3	Hill	1,580	60.39	26.16	1	3.5%	0.22	\$38,542	0.85
9604.00	1	Hill	779	3.79	205.54	1	8.6%	0.53	\$29,750	1.10
9604.00	2	Hill	841	1.07	785.98	2	5.8%	0.36	\$30,250	1.08
9605.00	1	Hill	1,461	29.59	49.37	1	12.5%	0.77	\$28,500	1.14
9605.00	2	Hill	2,138	49.49	43.20	1	6.7%	0.41	\$33,214	0.98
9605.00	3	Hill	1,550	74.20	20.89	1	7.6%	0.47	\$38,026	0.86
9606.00	1	Hill	1,309	0.81	1,616.05	3	19.3%	1.19	\$23,462	1.39
9607.00	1	Hill	671	47.38	14.16	1	1.6%	0.10	\$32,353	1.01
9607.00	2	Hill	784	58.77	13.34	1	15.7%	0.97	\$31,923	1.02
9607.00	3	Hill	511	29.44	17.36	1	18.4%	1.14	\$38,333	0.85
9608.00	1	Hill	982	1.49	659.06	2	14.0%	0.86	\$40,169	0.81

		WEIGHT	0.5				1.0		1.0	
TRACT	BG	County	POPULATION	Area	Pop Density	Size Class	% Minority	Index	Median HH Income	Index
<i>HOTCOG Region</i>			<i>321,536</i>	<i>5,623.70</i>	<i>57.18</i>	<i>1</i>	<i>16.2%</i>	<i>1.00</i>	<i>\$32,606</i>	<i>1.00</i>
9608.00	2	Hill	1,167	0.48	2,431.25	3	35.3%	2.18	\$31,786	1.03
9608.00	3	Hill	1,141	0.56	2,037.50	3	10.5%	0.65	\$29,063	1.12
9609.00	1	Hill	588	1.82	323.08	1	53.2%	3.28	\$26,696	1.22
9609.00	2	Hill	1,123	0.34	3,302.94	4	78.5%	4.85	\$16,552	1.97
9609.00	3	Hill	393	1.28	307.03	1	60.3%	3.72	\$14,813	2.20
9610.00	1	Hill	1,079	0.28	3,853.57	4	50.9%	3.14	\$22,305	1.46
9610.00	2	Hill	824	0.69	1,194.20	3	65.7%	4.06	\$21,838	1.49
9610.00	3	Hill	370	1.21	305.79	1	100.0%	6.17	\$21,042	1.55
9611.00	4	Hill	1,494	70.75	21.12	1	21.9%	1.35	\$36,131	0.90
9611.00	5	Hill	1,730	120.90	14.31	1	11.7%	0.72	\$40,300	0.81
9612.00	1	Hill	1,170	103.19	11.34	1	20.9%	1.29	\$30,357	1.07
9613.00	1	Hill	1,710	95.85	17.84	1	15.9%	0.98	\$33,403	0.98
9613.00	2	Hill	568	0.84	676.19	2	32.0%	1.98	\$22,273	1.46
9613.00	3	Hill	472	0.20	2,360.00	3	22.7%	1.40	\$30,938	1.05
9701.00	1	Limestone	1,249	241.80	5.17	1	22.2%	1.37	\$28,289	1.15
9701.00	2	Limestone	736	1.71	430.41	1	57.6%	3.56	\$24,318	1.34
9702.00	1	Limestone	1,197	50.66	23.63	1	17.7%	1.09	\$37,500	0.87
9702.00	2	Limestone	2,262	43.23	52.32	1	19.5%	1.20	\$32,898	0.99
9702.00	3	Limestone	793	15.71	50.48	1	48.8%	3.01	\$25,329	1.29
9703.00	1	Limestone	621	0.98	633.67	2	57.3%	3.54	\$29,327	1.11
9703.00	2	Limestone	1,186	3.14	377.71	1	43.6%	2.69	\$33,625	0.97
9703.00	3	Limestone	465	0.19	2,447.37	3	52.5%	3.24	\$23,964	1.36
9704.00	1	Limestone	564	0.54	1,044.44	3	86.9%	5.36	\$18,429	1.77
9704.00	2	Limestone	1,020	0.97	1,051.55	3	58.8%	3.63	\$19,950	1.63
9705.00	1	Limestone	1,009	0.38	2,655.26	3	30.4%	1.88	\$24,500	1.33
9705.00	2	Limestone	955	0.84	1,136.90	3	49.3%	3.04	\$24,625	1.32
9706.00	1	Limestone	1,793	161.76	11.08	1	19.2%	1.19	\$38,750	0.84
9706.00	2	Limestone	595	3.83	155.35	1	33.1%	2.04	\$21,094	1.55
9706.00	3	Limestone	803	0.75	1,070.67	3	50.1%	3.09	\$23,661	1.38
9706.00	4	Limestone	536	0.83	645.78	2	65.9%	4.07	\$14,904	2.19
9706.00	5	Limestone	1,532	0.39	3,928.21	4	48.6%	3.00	\$34,167	0.95
9706.00	6	Limestone	474	1.50	316.00	1	18.6%	1.15	\$26,719	1.22
9707.00	1	Limestone	802	67.29	11.92	1	15.1%	0.93	\$36,389	0.90
9707.00	2	Limestone	720	62.67	11.49	1	5.0%	0.31	\$48,846	0.67
9708.00	1	Limestone	1,643	262.92	6.25	1	8.8%	0.54	\$39,631	0.82
9708.00	2	Limestone	568	4.66	121.89	1	21.1%	1.30	\$25,893	1.26
9708.00	3	Limestone	528	6.18	85.44	1	20.6%	1.27	\$25,455	1.28

		WEIGHT	0.5				1.0		1.0	
TRACT	BG	County	POPULATION	Area	Pop Density	Size Class	% Minority	Index	Median HH Income	Index
<i>HOTCOG Region</i>			321,536	5,623.70	57.18	1	16.2%	1.00	\$32,606	1.00
1.00	2	McLennan	672	0.38	1,768.42	3	20.8%	1.28	\$7,243	4.50
1.00	6	McLennan	1,795	0.78	2,301.28	3	57.0%	3.52	\$21,708	1.50
2.00	1	McLennan	1,117	1.23	908.13	2	29.5%	1.82	\$10,278	3.17
2.00	4	McLennan	1,040	0.08	13,000.00	5	27.8%	1.72	\$10,213	3.19
3.00	1	McLennan	3,510	0.67	5,238.81	4	23.5%	1.45	\$11,196	2.91
4.00	1	McLennan	659	0.18	3,661.11	4	75.9%	4.69	\$12,801	2.55
4.00	2	McLennan	1,644	0.12	13,700.00	5	21.7%	1.34	\$5,796	5.63
4.00	3	McLennan	2,049	0.12	17,075.00	5	24.1%	1.49	\$6,099	5.35
4.00	4	McLennan	806	0.15	5,373.33	4	36.0%	2.22	\$9,861	3.31
4.00	6	McLennan	1,385	0.26	5,326.92	4	90.3%	5.57	\$18,750	1.74
5.98	1	McLennan	1,920	0.34	5,647.06	4	89.9%	5.55	\$27,522	1.18
5.98	2	McLennan	1,463	0.23	6,360.87	5	83.9%	5.18	\$27,045	1.21
5.98	5	McLennan	807	0.41	1,968.29	3	87.6%	5.41	\$25,046	1.30
5.98	6	McLennan	720	0.17	4,235.29	4	83.5%	5.15	\$25,859	1.26
5.98	8	McLennan	982	0.48	2,045.83	3	82.7%	5.10	\$19,451	1.68
7.00	1	McLennan	524	0.14	3,742.86	4	69.3%	4.28	\$25,972	1.26
7.00	2	McLennan	791	0.14	5,650.00	4	74.8%	4.62	\$26,667	1.22
7.00	3	McLennan	1,283	0.17	7,547.06	5	78.2%	4.83	\$23,333	1.40
7.00	4	McLennan	902	0.56	1,610.71	3	42.4%	2.62	\$19,648	1.66
8.00	1	McLennan	1,072	0.16	6,700.00	5	74.3%	4.59	\$27,500	1.19
8.00	3	McLennan	1,867	0.33	5,657.58	4	55.1%	3.40	\$25,531	1.28
9.00	1	McLennan	1,187	0.20	5,935.00	4	67.4%	4.16	\$25,956	1.26
9.00	2	McLennan	1,298	0.28	4,635.71	4	34.2%	2.11	\$41,806	0.78
9.00	3	McLennan	1,048	0.18	5,822.22	4	63.6%	3.93	\$24,550	1.33
9.00	4	McLennan	761	0.15	5,073.33	4	46.4%	2.86	\$31,607	1.03
9.00	6	McLennan	773	0.16	4,831.25	4	42.3%	2.61	\$37,697	0.86
10.00	1	McLennan	899	0.14	6,421.43	5	74.5%	4.60	\$16,953	1.92
10.00	2	McLennan	937	0.13	7,207.69	5	81.3%	5.02	\$19,554	1.67
10.00	3	McLennan	1,262	0.21	6,009.52	5	71.8%	4.43	\$26,630	1.22
11.00	3	McLennan	727	0.13	5,592.31	4	88.3%	5.45	\$25,426	1.28
11.00	4	McLennan	1,440	0.26	5,538.46	4	80.8%	4.99	\$23,182	1.41
11.00	5	McLennan	799	0.13	6,146.15	5	75.2%	4.64	\$17,679	1.84
11.00	6	McLennan	922	0.17	5,423.53	4	78.4%	4.84	\$26,127	1.25
11.00	7	McLennan	1,423	0.28	5,082.14	4	60.0%	3.70	\$22,575	1.44
11.00	8	McLennan	716	0.17	4,211.76	4	54.5%	3.36	\$26,635	1.22
12.00	1	McLennan	1,137	0.23	4,943.48	4	96.0%	5.93	\$23,563	1.38
12.00	2	McLennan	719	0.08	8,987.50	5	98.7%	6.09	\$8,158	4.00

		WEIGHT	0.5				1.0		1.0	
TRACT	BG	County	POPULATION	Area	Pop Density	Size Class	% Minority	Index	Median HH Income	Index
<i>HOTCOG Region</i>			<i>321,536</i>	<i>5,623.70</i>	<i>57.18</i>	<i>1</i>	<i>16.2%</i>	<i>1.00</i>	<i>\$32,606</i>	<i>1.00</i>
12.00	3	McLennan	1,801	0.30	6,003.33	5	94.8%	5.85	\$15,109	2.16
13.00	2	McLennan	828	1.25	662.40	2	31.4%	1.94	\$41,534	0.79
13.00	3	McLennan	497	0.48	1,035.42	3	93.0%	5.74	\$27,946	1.17
13.00	5	McLennan	1,045	0.21	4,976.19	4	67.2%	4.15	\$27,963	1.17
14.00	1	McLennan	1,635	3.70	441.89	1	56.6%	3.49	\$22,969	1.42
14.00	2	McLennan	1,488	0.73	2,038.36	3	69.2%	4.27	\$16,912	1.93
14.00	4	McLennan	1,022	0.24	4,258.33	4	95.2%	5.88	\$7,314	4.46
14.00	5	McLennan	1,200	0.34	3,529.41	4	81.5%	5.03	\$10,875	3.00
14.00	7	McLennan	1,460	0.41	3,560.98	4	99.1%	6.12	\$21,288	1.53
15.00	1	McLennan	853	0.34	2,508.82	3	99.2%	6.12	\$13,443	2.43
15.00	3	McLennan	1,362	0.98	1,389.80	3	85.4%	5.27	\$13,821	2.36
15.00	7	McLennan	818	0.72	1,136.11	3	96.8%	5.98	\$22,679	1.44
16.00	1	McLennan	1,753	1.39	1,261.15	3	38.4%	2.37	\$27,308	1.19
16.00	2	McLennan	936	0.39	2,400.00	3	40.7%	2.51	\$24,487	1.33
16.00	3	McLennan	1,239	0.22	5,631.82	4	37.6%	2.32	\$32,986	0.99
16.00	4	McLennan	885	0.85	1,041.18	3	54.0%	3.33	\$19,677	1.66
16.00	6	McLennan	796	0.59	1,349.15	3	39.8%	2.46	\$25,903	1.26
17.00	1	McLennan	847	0.69	1,227.54	3	20.8%	1.28	\$32,750	1.00
17.00	2	McLennan	1,367	0.90	1,518.89	3	51.1%	3.15	\$37,406	0.87
17.00	3	McLennan	1,610	5.57	289.05	1	33.4%	2.06	\$30,462	1.07
17.00	4	McLennan	1,308	1.60	817.50	2	44.8%	2.77	\$27,772	1.17
18.00	1	McLennan	732	0.84	871.43	2	25.0%	1.54	\$35,893	0.91
18.00	4	McLennan	763	13.24	57.63	1	30.4%	1.88	\$33,542	0.97
19.00	1	McLennan	1,261	0.23	5,482.61	4	45.8%	2.83	\$10,605	3.07
19.00	2	McLennan	1,656	4.07	406.88	1	81.7%	5.04	\$15,208	2.14
20.00	2	McLennan	1,192	2.18	546.79	2	11.5%	0.71	\$39,318	0.83
20.00	4	McLennan	1,954	3.19	612.54	2	13.8%	0.85	\$51,071	0.64
21.00	1	McLennan	817	0.37	2,208.11	3	47.4%	2.93	\$13,700	2.38
21.00	2	McLennan	1,704	1.62	1,051.85	3	73.1%	4.51	\$22,457	1.45
21.00	3	McLennan	722	0.78	925.64	2	44.7%	2.76	\$21,989	1.48
21.00	4	McLennan	1,395	0.31	4,500.00	4	41.1%	2.54	\$28,611	1.14
22.00	1	McLennan	965	0.24	4,020.83	4	49.9%	3.08	\$27,276	1.20
22.00	9	McLennan	326	0.71	459.15	1	34.7%	2.14	\$32,606	1.00
23.01	1	McLennan	1,403	0.33	4,251.52	4	65.2%	4.02	\$29,643	1.10
23.01	2	McLennan	1,595	0.93	1,715.05	3	56.4%	3.48	\$26,979	1.21
23.01	3	McLennan	900	0.20	4,500.00	4	59.7%	3.69	\$30,300	1.08
23.01	5	McLennan	1,665	1.00	1,665.00	3	52.4%	3.23	\$31,480	1.04

		WEIGHT	0.5				1.0		1.0	
TRACT	BG	County	POPULATION	Area	Pop Density	Size Class	% Minority	Index	Median HH Income	Index
<i>HOTCOG Region</i>			<i>321,536</i>	<i>5,623.70</i>	<i>57.18</i>	<i>1</i>	<i>16.2%</i>	<i>1.00</i>	<i>\$32,606</i>	<i>1.00</i>
23.02	1	McLennan	1,473	0.24	6,137.50	5	37.1%	2.29	\$25,781	1.26
23.02	2	McLennan	1,792	1.08	1,659.26	3	55.6%	3.43	\$17,386	1.88
23.02	4	McLennan	1,757	0.50	3,514.00	4	36.8%	2.27	\$34,007	0.96
24.98	1	McLennan	844	0.20	4,220.00	4	31.9%	1.97	\$29,345	1.11
24.98	2	McLennan	1,258	0.44	2,859.09	3	43.3%	2.67	\$35,444	0.92
24.98	3	McLennan	1,619	0.40	4,047.50	4	30.9%	1.91	\$37,699	0.86
24.98	5	McLennan	1,020	0.31	3,290.32	4	25.4%	1.57	\$40,595	0.80
25.01	1	McLennan	1,562	0.38	4,110.53	4	28.3%	1.75	\$33,188	0.98
25.01	2	McLennan	1,809	0.42	4,307.14	4	28.6%	1.77	\$35,156	0.93
25.01	3	McLennan	1,141	1.30	877.69	2	13.4%	0.83	\$46,625	0.70
25.03	1	McLennan	1,530	1.09	1,403.67	3	10.4%	0.64	\$44,875	0.73
25.03	2	McLennan	1,370	0.77	1,779.22	3	16.2%	1.00	\$43,242	0.75
25.03	3	McLennan	1,504	0.61	2,465.57	3	6.0%	0.37	\$90,474	0.36
25.03	4	McLennan	1,207	0.49	2,463.27	3	9.5%	0.59	\$45,662	0.71
25.04	1	McLennan	1,099	0.46	2,389.13	3	8.0%	0.49	\$61,150	0.53
25.04	2	McLennan	2,178	2.46	885.37	2	7.5%	0.46	\$92,758	0.35
26.00	1	McLennan	770	0.29	2,655.17	3	16.9%	1.04	\$43,977	0.74
26.00	3	McLennan	1,068	0.39	2,738.46	3	6.7%	0.41	\$38,667	0.84
26.00	4	McLennan	1,070	0.30	3,566.67	4	9.2%	0.57	\$46,167	0.71
26.00	5	McLennan	1,398	1.03	1,357.28	3	5.1%	0.31	\$73,571	0.44
26.00	6	McLennan	1,077	0.45	2,393.33	3	7.1%	0.44	\$53,750	0.61
27.00	1	McLennan	1,340	0.24	5,583.33	4	38.7%	2.39	\$28,628	1.14
27.00	3	McLennan	1,208	0.27	4,474.07	4	52.1%	3.22	\$31,136	1.05
27.00	4	McLennan	1,112	0.56	1,985.71	3	45.6%	2.81	\$21,760	1.50
28.00	2	McLennan	1,850	0.89	2,078.65	3	15.1%	0.93	\$51,774	0.63
28.00	3	McLennan	971	0.46	2,110.87	3	4.0%	0.25	\$50,708	0.64
28.00	4	McLennan	1,066	0.13	8,200.00	5	20.4%	1.26	\$28,036	1.16
29.00	1	McLennan	2,327	36.32	64.07	1	10.3%	0.64	\$51,462	0.63
30.00	1	McLennan	1,585	0.42	3,773.81	4	21.5%	1.33	\$20,810	1.57
30.00	2	McLennan	1,285	0.62	2,072.58	3	26.1%	1.61	\$35,500	0.92
30.00	3	McLennan	1,061	1.60	663.13	2	51.0%	3.15	\$14,844	2.20
32.00	1	McLennan	1,283	2.66	482.33	1	36.6%	2.26	\$34,489	0.95
32.00	2	McLennan	1,057	0.32	3,303.13	4	35.4%	2.19	\$40,116	0.81
32.00	3	McLennan	1,546	2.11	732.70	2	31.3%	1.93	\$32,386	1.01
33.00	3	McLennan	2,343	2.77	845.85	2	29.7%	1.83	\$11,909	2.74
33.00	4	McLennan	1,101	0.29	3,796.55	4	35.1%	2.17	\$24,318	1.34
34.00	1	McLennan	2,929	13.17	222.40	1	11.5%	0.71	\$39,969	0.82

		WEIGHT	0.5				1.0		1.0	
TRACT	BG	County	POPULATION	Area	Pop Density	Size Class	% Minority	Index	Median HH Income	Index
<i>HOTCOG Region</i>			<i>321,536</i>	<i>5,623.70</i>	<i>57.18</i>	<i>1</i>	<i>16.2%</i>	<i>1.00</i>	<i>\$32,606</i>	<i>1.00</i>
34.00	2	McLennan	1,632	10.30	158.45	1	14.3%	0.88	\$49,141	0.66
34.00	3	McLennan	1,450	22.16	65.43	1	13.4%	0.83	\$46,667	0.70
35.00	1	McLennan	1,320	41.02	32.18	1	8.9%	0.55	\$43,686	0.75
35.00	2	McLennan	1,227	20.41	60.12	1	9.0%	0.56	\$39,861	0.82
35.00	3	McLennan	1,325	46.08	28.75	1	12.8%	0.79	\$45,469	0.72
36.01	1	McLennan	745	36.06	20.66	1	11.3%	0.70	\$37,396	0.87
36.01	2	McLennan	1,245	3.08	404.22	2	32.7%	2.02	\$27,717	1.18
36.01	3	McLennan	1,101	2.93	375.77	2	33.6%	2.07	\$26,793	1.22
36.02	1	McLennan	1,693	47.30	35.79	1	17.5%	1.08	\$37,625	0.87
36.02	2	McLennan	988	9.33	105.89	1	10.3%	0.64	\$34,338	0.95
37.01	1	McLennan	1,639	44.49	36.84	1	29.0%	1.79	\$41,534	0.79
37.01	2	McLennan	1,264	6.74	187.54	1	12.7%	0.78	\$52,708	0.62
37.03	1	McLennan	929	0.30	3,096.67	4	14.0%	0.86	\$50,813	0.64
37.03	2	McLennan	1,054	10.22	103.13	1	12.5%	0.77	\$54,702	0.60
37.03	3	McLennan	1,065	12.83	83.01	1	11.7%	0.72	\$37,619	0.87
37.06	1	McLennan	1,638	5.61	291.98	1	13.7%	0.85	\$61,413	0.53
37.06	2	McLennan	1,203	0.44	2,734.09	3	15.8%	0.98	\$53,375	0.61
37.06	3	McLennan	1,652	2.19	754.34	2	18.6%	1.15	\$68,889	0.47
37.06	4	McLennan	1,728	0.88	1,963.64	3	17.6%	1.09	\$65,588	0.50
37.07	1	McLennan	1,257	3.57	352.10	1	26.5%	1.64	\$37,123	0.88
37.07	2	McLennan	2,299	5.31	432.96	1	12.1%	0.75	\$67,596	0.48
37.07	3	McLennan	3,426	0.98	3,495.92	4	30.6%	1.89	\$41,616	0.78
37.08	2	McLennan	1,561	7.08	220.48	1	14.4%	0.89	\$59,356	0.55
37.08	3	McLennan	2,471	1.04	2,375.96	3	23.7%	1.46	\$52,295	0.62
37.08	4	McLennan	1,304	0.32	4,075.00	4	22.2%	1.37	\$48,820	0.67
38.01	1	McLennan	2,384	21.10	112.99	1	7.6%	0.47	\$60,114	0.54
38.01	2	McLennan	3,148	31.44	100.13	1	9.6%	0.59	\$47,480	0.69
38.02	1	McLennan	1,319	45.47	29.01	1	17.5%	1.08	\$32,634	1.00
38.02	2	McLennan	2,996	18.64	160.73	1	17.7%	1.09	\$36,875	0.88
38.02	3	McLennan	1,213	18.52	65.50	1	22.4%	1.38	\$32,083	1.02
39.00	1	McLennan	2,318	21.93	105.70	1	26.0%	1.60	\$48,851	0.67
39.00	2	McLennan	1,496	21.01	71.20	1	45.7%	2.82	\$50,536	0.65
39.00	4	McLennan	1,715	38.15	44.95	1	17.4%	1.07	\$41,853	0.78
39.00	5	McLennan	1,320	0.74	1,783.78	3	39.1%	2.41	\$28,750	1.13
40.00	1	McLennan	2,009	52.60	38.19	1	10.4%	0.64	\$56,838	0.57
40.00	2	McLennan	847	69.75	12.14	1	8.6%	0.53	\$39,063	0.83
40.00	3	McLennan	1,474	48.57	30.35	1	12.1%	0.75	\$52,417	0.62



		WEIGHT	0.5				1.0		1.0	
TRACT	BG	County	POPULATION	Area	Pop Density	Size Class	% Minority	Index	Median HH Income	Index
<i>HOTCOG Region</i>			<i>321,536</i>	<i>5,623.70</i>	<i>57.18</i>	<i>1</i>	<i>16.2%</i>	<i>1.00</i>	<i>\$32,606</i>	<i>1.00</i>
41.01	1	McLennan	3,267	35.78	91.31	1	9.7%	0.60	\$48,506	0.67
41.02	1	McLennan	1,248	9.32	133.91	1	11.9%	0.73	\$36,450	0.89
41.02	2	McLennan	1,537	17.10	89.88	1	4.6%	0.28	\$62,368	0.52
41.02	3	McLennan	1,302	26.22	49.66	1	7.9%	0.49	\$53,125	0.61
42.01	1	McLennan	1,344	36.00	37.33	1	9.8%	0.60	\$34,286	0.95
42.01	2	McLennan	1,410	0.84	1,678.57	3	8.7%	0.54	\$41,042	0.79
42.01	3	McLennan	1,094	0.59	1,854.24	3	16.3%	1.01	\$27,643	1.18
42.02	1	McLennan	1,935	39.96	48.42	1	5.7%	0.35	\$45,903	0.71
42.02	2	McLennan	1,459	27.09	53.86	1	17.9%	1.10	\$36,542	0.89

## Appendix G

		WEIGHT	2.0		2.0		2.0		1.5	
TRACT	BG	County	% Below Poverty	Index	% over 65	Index	% HU with no autos	Index	% Disabled	Index
<i>HOTCOG Region</i>			16.37%	1.00	14.47%	1.00	7.87%	1.00	10.16%	1.00
9501.00	1	Bosque	13.19%	0.81	20.52%	1.42	2.37%	0.30	9.58%	0.94
9501.00	2	Bosque	11.43%	0.70	15.62%	1.08	1.03%	0.13	9.43%	0.93
9501.00	3	Bosque	29.80%	1.82	11.33%	0.78	8.30%	1.05	9.60%	0.94
9501.00	4	Bosque	27.71%	1.69	11.25%	0.78	10.43%	1.33	15.42%	1.52
9501.00	5	Bosque	15.25%	0.93	15.60%	1.08	2.92%	0.37	13.88%	1.37
9502.00	1	Bosque	13.17%	0.80	20.08%	1.39	5.84%	0.74	9.49%	0.93
9503.00	1	Bosque	13.41%	0.82	25.91%	1.79	1.67%	0.21	7.07%	0.70
9503.00	2	Bosque	9.21%	0.56	21.95%	1.52	2.08%	0.26	11.56%	1.14
9504.00	1	Bosque	6.60%	0.40	19.38%	1.34	2.31%	0.29	8.94%	0.88
9504.00	2	Bosque	6.62%	0.40	17.99%	1.24	2.80%	0.36	13.89%	1.37
9505.00	1	Bosque	6.86%	0.42	42.08%	2.91	5.88%	0.75	13.85%	1.36
9505.00	2	Bosque	29.66%	1.81	15.89%	1.10	10.18%	1.29	8.90%	0.88
9505.00	3	Bosque	19.30%	1.18	14.83%	1.02	5.21%	0.66	4.03%	0.40
9505.00	4	Bosque	3.17%	0.19	34.21%	2.36	12.89%	1.64	6.86%	0.68
9506.00	1	Bosque	12.49%	0.76	24.40%	1.69	3.31%	0.42	8.99%	0.88
9507.00	1	Bosque	11.96%	0.73	8.90%	0.62	8.45%	1.07	6.68%	0.66
9507.00	2	Bosque	6.99%	0.43	19.58%	1.35	6.55%	0.83	8.81%	0.87
9507.00	3	Bosque	10.80%	0.66	27.36%	1.89	6.62%	0.84	8.51%	0.84
9901.00	1	Falls	9.73%	0.59	21.10%	1.46	9.38%	1.19	14.46%	1.42
9901.00	2	Falls	7.22%	0.44	9.46%	0.65	10.23%	1.30	6.69%	0.66
9902.00	1	Falls	13.72%	0.84	14.87%	1.03	4.75%	0.60	10.61%	1.04
9902.00	2	Falls	32.67%	2.00	13.14%	0.91	10.26%	1.30	12.57%	1.24
9903.00	3	Falls	23.46%	1.43	12.56%	0.87	10.85%	1.38	23.09%	2.27
9904.00	1	Falls	23.74%	1.45	13.79%	0.95	15.91%	2.02	11.49%	1.13
9904.00	2	Falls	37.89%	2.31	4.71%	0.33	25.85%	3.28	12.78%	1.26
9904.00	3	Falls	41.92%	2.56	17.90%	1.24	28.78%	3.66	26.64%	2.62
9904.00	4	Falls	45.00%	2.75	25.00%	1.73	52.10%	6.62	38.64%	3.80
9904.00	5	Falls	43.62%	2.66	10.09%	0.70	42.90%	5.45	8.01%	0.79
9904.00	6	Falls	45.53%	2.78	38.20%	2.64	16.98%	2.16	21.95%	2.16
9905.00	1	Falls	13.26%	0.81	16.93%	1.17	5.59%	0.71	8.53%	0.84
9905.00	2	Falls	25.98%	1.59	11.18%	0.77	13.49%	1.71	16.77%	1.65
9906.00	1	Falls	24.49%	1.50	21.48%	1.48	6.84%	0.87	9.85%	0.97
9907.00	1	Falls	5.76%	0.35	17.13%	1.18	4.88%	0.62	8.23%	0.81
9907.00	2	Falls	15.51%	0.95	28.88%	2.00	9.91%	1.26	13.37%	1.32
9907.00	3	Falls	27.24%	1.66	16.59%	1.15	18.88%	2.40	16.46%	1.62

		WEIGHT	2.0		2.0		2.0		1.5	
TRACT	BG	County	% Below Poverty	Index	% over 65	Index	% HU with no autos	Index	% Disabled	Index
<i>HOTCOG Region</i>			16.37%	1.00	14.47%	1.00	7.87%	1.00	10.16%	1.00
9907.00	4	Falls	47.39%	2.89	25.59%	1.77	26.88%	3.42	30.33%	2.99
9801.00	1	Freestone	17.05%	1.04	15.33%	1.06	2.68%	0.34	11.64%	1.15
9801.00	2	Freestone	6.72%	0.41	12.47%	0.86	4.11%	0.52	7.64%	0.75
9802.00	1	Freestone	8.45%	0.52	11.71%	0.81	9.72%	1.24	4.03%	0.40
9802.00	2	Freestone	7.72%	0.47	34.65%	2.39	1.60%	0.20	9.34%	0.92
9802.00	3	Freestone	9.22%	0.56	32.26%	2.23	8.60%	1.09	13.82%	1.36
9803.00	1	Freestone	22.91%	1.40	14.30%	0.99	8.19%	1.04	12.72%	1.25
9803.00	2	Freestone	26.58%	1.62	10.60%	0.73	12.90%	1.64	7.44%	0.73
9804.00	1	Freestone	11.24%	0.69	13.94%	0.96	3.44%	0.44	5.91%	0.58
9804.00	2	Freestone	9.68%	0.59	23.50%	1.62	8.74%	1.11	11.98%	1.18
9804.00	3	Freestone	18.90%	1.15	17.79%	1.23	11.87%	1.51	14.36%	1.41
9806.00	1	Freestone	8.90%	0.54	17.03%	1.18	1.89%	0.24	12.26%	1.21
9806.00	2	Freestone	16.39%	1.00	18.43%	1.27	4.40%	0.56	13.84%	1.36
9806.00	3	Freestone	15.50%	0.95	21.58%	1.49	4.51%	0.57	26.74%	2.63
9807.00	1	Freestone	19.87%	1.21	10.37%	0.72	13.24%	1.68	10.37%	1.02
9807.00	2	Freestone	3.78%	0.23	4.54%	0.31	0.00%	0.00	3.32%	0.33
9807.00	3	Freestone	23.88%	1.46	37.80%	2.61	7.05%	0.90	16.42%	1.62
9807.00	4	Freestone	11.86%	0.72	30.15%	2.08	14.12%	1.79	19.93%	1.96
9807.00	5	Freestone	3.14%	0.19	18.07%	1.25	4.65%	0.59	11.20%	1.10
9809.00	1	Freestone	13.86%	0.85	20.00%	1.38	10.53%	1.34	25.79%	2.54
9809.00	2	Freestone	15.26%	0.93	22.07%	1.53	6.44%	0.82	17.02%	1.68
9601.00	1	Hill	11.00%	0.67	22.98%	1.59	6.93%	0.88	10.27%	1.01
9601.00	2	Hill	30.72%	1.88	12.45%	0.86	12.79%	1.63	9.84%	0.97
9601.00	3	Hill	13.48%	0.82	12.14%	0.84	3.98%	0.51	6.55%	0.64
9602.00	1	Hill	6.24%	0.38	11.54%	0.80	1.64%	0.21	5.90%	0.58
9602.00	2	Hill	14.86%	0.91	11.97%	0.83	1.52%	0.19	6.85%	0.67
9602.00	3	Hill	12.15%	0.74	21.65%	1.50	3.39%	0.43	11.33%	1.12
9604.00	1	Hill	17.20%	1.05	22.21%	1.53	2.59%	0.33	10.53%	1.04
9604.00	2	Hill	9.39%	0.57	18.19%	1.26	1.44%	0.18	25.21%	2.48
9605.00	1	Hill	16.77%	1.02	16.84%	1.16	5.28%	0.67	8.62%	0.85
9605.00	2	Hill	13.80%	0.84	17.40%	1.20	4.11%	0.52	12.35%	1.22
9605.00	3	Hill	11.10%	0.68	14.58%	1.01	3.04%	0.39	11.61%	1.14
9606.00	1	Hill	20.56%	1.26	26.74%	1.85	10.81%	1.37	11.69%	1.15
9607.00	1	Hill	2.98%	0.18	13.71%	0.95	1.18%	0.15	6.71%	0.66
9607.00	2	Hill	8.80%	0.54	23.47%	1.62	5.06%	0.64	19.64%	1.93
9607.00	3	Hill	7.24%	0.44	15.46%	1.07	4.62%	0.59	5.68%	0.56
9608.00	1	Hill	3.26%	0.20	20.98%	1.45	0.00%	0.00	6.01%	0.59

		WEIGHT	2.0		2.0		2.0		1.5	
TRACT	BG	County	% Below Poverty	Index	% over 65	Index	% HU with no autos	Index	% Disabled	Index
<i>HOTCOG Region</i>			16.37%	1.00	14.47%	1.00	7.87%	1.00	10.16%	1.00
9608.00	2	Hill	20.82%	1.27	13.11%	0.91	4.31%	0.55	5.74%	0.56
9608.00	3	Hill	10.25%	0.63	35.06%	2.42	2.95%	0.37	8.76%	0.86
9609.00	1	Hill	27.04%	1.65	8.16%	0.56	15.95%	2.03	5.27%	0.52
9609.00	2	Hill	24.10%	1.47	10.77%	0.74	15.04%	1.91	10.24%	1.01
9609.00	3	Hill	41.73%	2.55	11.45%	0.79	26.02%	3.31	25.95%	2.55
9610.00	1	Hill	30.40%	1.86	9.45%	0.65	13.65%	1.73	15.01%	1.48
9610.00	2	Hill	20.87%	1.27	11.89%	0.82	12.83%	1.63	21.84%	2.15
9610.00	3	Hill	24.32%	1.49	6.22%	0.43	26.15%	3.32	19.46%	1.92
9611.00	4	Hill	14.26%	0.87	18.27%	1.26	4.30%	0.55	15.93%	1.57
9611.00	5	Hill	11.04%	0.67	20.29%	1.40	3.78%	0.48	10.58%	1.04
9612.00	1	Hill	17.18%	1.05	15.47%	1.07	5.79%	0.74	13.08%	1.29
9613.00	1	Hill	13.51%	0.83	17.31%	1.20	7.85%	1.00	9.53%	0.94
9613.00	2	Hill	25.35%	1.55	14.61%	1.01	9.84%	1.25	9.33%	0.92
9613.00	3	Hill	17.16%	1.05	27.97%	1.93	9.76%	1.24	8.90%	0.88
9701.00	1	Limestone	24.74%	1.51	18.57%	1.28	7.63%	0.97	10.89%	1.07
9701.00	2	Limestone	25.82%	1.58	11.14%	0.77	11.65%	1.48	8.02%	0.79
9702.00	1	Limestone	6.10%	0.37	18.80%	1.30	4.63%	0.59	14.20%	1.40
9702.00	2	Limestone	17.73%	1.08	17.60%	1.22	5.61%	0.71	15.21%	1.50
9702.00	3	Limestone	4.04%	0.25	4.29%	0.30	6.10%	0.78	3.53%	0.35
9703.00	1	Limestone	10.79%	0.66	23.03%	1.59	9.17%	1.17	16.10%	1.58
9703.00	2	Limestone	26.14%	1.60	20.57%	1.42	13.45%	1.71	7.00%	0.69
9703.00	3	Limestone	6.67%	0.41	7.96%	0.55	11.41%	1.45	18.71%	1.84
9704.00	1	Limestone	29.79%	1.82	18.97%	1.31	18.14%	2.30	26.42%	2.60
9704.00	2	Limestone	26.47%	1.62	12.35%	0.85	9.81%	1.25	9.02%	0.89
9705.00	1	Limestone	14.17%	0.87	11.79%	0.81	14.21%	1.81	13.38%	1.32
9705.00	2	Limestone	22.41%	1.37	18.64%	1.29	3.38%	0.43	11.41%	1.12
9706.00	1	Limestone	6.25%	0.38	14.84%	1.03	1.86%	0.24	8.59%	0.85
9706.00	2	Limestone	32.27%	1.97	16.64%	1.15	17.42%	2.21	11.26%	1.11
9706.00	3	Limestone	19.93%	1.22	18.31%	1.27	10.21%	1.30	10.96%	1.08
9706.00	4	Limestone	38.25%	2.34	15.67%	1.08	13.50%	1.72	16.98%	1.67
9706.00	5	Limestone	7.05%	0.43	15.54%	1.07	10.37%	1.32	2.42%	0.24
9706.00	6	Limestone	4.85%	0.30	12.45%	0.86	2.69%	0.34	6.75%	0.66
9707.00	1	Limestone	13.47%	0.82	13.84%	0.96	7.52%	0.96	9.45%	0.93
9707.00	2	Limestone	7.50%	0.46	24.17%	1.67	2.20%	0.28	10.97%	1.08
9708.00	1	Limestone	11.20%	0.68	18.87%	1.30	3.40%	0.43	12.36%	1.22
9708.00	2	Limestone	16.20%	0.99	14.44%	1.00	4.95%	0.63	12.15%	1.20
9708.00	3	Limestone	23.67%	1.45	21.59%	1.49	12.38%	1.57	21.21%	2.09

		WEIGHT	2.0		2.0		2.0		1.5	
TRACT	BG	County	% Below Poverty	Index	% over 65	Index	% HU with no autos	Index	% Disabled	Index
HOTCOG Region			16.37%	1.00	14.47%	1.00	7.87%	1.00	10.16%	1.00
1.00	2	McLennan	78.57%	4.80	1.19%	0.08	6.34%	0.81	5.65%	0.56
1.00	6	McLennan	13.76%	0.84	18.83%	1.30	45.88%	5.83	6.24%	0.61
2.00	1	McLennan	52.28%	3.19	5.28%	0.36	22.83%	2.90	6.98%	0.69
2.00	4	McLennan	67.88%	4.15	0.67%	0.05	4.26%	0.54	2.60%	0.26
3.00	1	McLennan	8.12%	0.50	0.91%	0.06	21.23%	2.70	0.17%	0.02
4.00	1	McLennan	41.43%	2.53	8.04%	0.56	10.45%	1.33	11.23%	1.11
4.00	2	McLennan	64.96%	3.97	1.09%	0.08	15.00%	1.91	3.10%	0.31
4.00	3	McLennan	76.23%	4.66	1.27%	0.09	10.45%	1.33	0.73%	0.07
4.00	4	McLennan	57.20%	3.49	4.71%	0.33	5.54%	0.70	0.00%	0.00
4.00	6	McLennan	45.34%	2.77	7.73%	0.53	39.25%	4.99	11.05%	1.09
5.98	1	McLennan	28.96%	1.77	7.14%	0.49	19.25%	2.45	19.22%	1.89
5.98	2	McLennan	30.62%	1.87	8.13%	0.56	6.07%	0.77	5.95%	0.59
5.98	5	McLennan	19.33%	1.18	13.26%	0.92	17.44%	2.22	10.53%	1.04
5.98	6	McLennan	36.53%	2.23	10.97%	0.76	23.86%	3.03	12.64%	1.24
5.98	8	McLennan	23.63%	1.44	7.94%	0.55	10.17%	1.29	10.90%	1.07
7.00	1	McLennan	19.27%	1.18	5.73%	0.40	15.56%	1.98	13.36%	1.31
7.00	2	McLennan	38.56%	2.36	4.93%	0.34	17.47%	2.22	8.34%	0.82
7.00	3	McLennan	38.35%	2.34	6.70%	0.46	7.63%	0.97	16.76%	1.65
7.00	4	McLennan	26.39%	1.61	8.87%	0.61	8.51%	1.08	9.20%	0.91
8.00	1	McLennan	20.34%	1.24	5.78%	0.40	13.86%	1.76	10.54%	1.04
8.00	3	McLennan	30.64%	1.87	9.64%	0.67	6.04%	0.77	15.59%	1.53
9.00	1	McLennan	22.66%	1.38	8.26%	0.57	9.07%	1.15	7.75%	0.76
9.00	2	McLennan	5.39%	0.33	27.89%	1.93	3.70%	0.47	11.25%	1.11
9.00	3	McLennan	25.67%	1.57	8.49%	0.59	11.39%	1.45	15.55%	1.53
9.00	4	McLennan	12.88%	0.79	11.56%	0.80	8.86%	1.13	14.06%	1.38
9.00	6	McLennan	16.95%	1.04	11.64%	0.80	10.85%	1.38	11.38%	1.12
10.00	1	McLennan	25.47%	1.56	27.70%	1.91	17.72%	2.25	17.13%	1.69
10.00	2	McLennan	51.65%	3.16	5.02%	0.35	21.88%	2.78	8.75%	0.86
10.00	3	McLennan	21.71%	1.33	6.18%	0.43	12.09%	1.54	11.01%	1.08
11.00	3	McLennan	42.50%	2.60	7.43%	0.51	21.40%	2.72	8.39%	0.83
11.00	4	McLennan	23.89%	1.46	7.78%	0.54	19.26%	2.45	8.06%	0.79
11.00	5	McLennan	37.42%	2.29	6.76%	0.47	7.92%	1.01	11.14%	1.10
11.00	6	McLennan	27.77%	1.70	5.97%	0.41	21.33%	2.71	16.05%	1.58
11.00	7	McLennan	26.99%	1.65	10.96%	0.76	5.59%	0.71	6.47%	0.64
11.00	8	McLennan	10.20%	0.62	9.64%	0.67	3.98%	0.51	18.02%	1.77
12.00	1	McLennan	29.02%	1.77	9.32%	0.64	13.20%	1.68	23.39%	2.30
12.00	2	McLennan	82.06%	5.01	5.15%	0.36	55.86%	7.10	13.21%	1.30

		WEIGHT	2.0		2.0		2.0		1.5	
TRACT	BG	County	% Below Poverty	Index	% over 65	Index	% HU with no autos	Index	% Disabled	Index
<i>HOTCOG Region</i>			16.37%	1.00	14.47%	1.00	7.87%	1.00	10.16%	1.00
12.00	3	McLennan	36.04%	2.20	7.05%	0.49	42.69%	5.42	16.38%	1.61
13.00	2	McLennan	6.04%	0.37	14.25%	0.98	0.00%	0.00	6.76%	0.67
13.00	3	McLennan	21.33%	1.30	12.88%	0.89	7.82%	0.99	22.54%	2.22
13.00	5	McLennan	14.93%	0.91	10.05%	0.69	15.11%	1.92	8.90%	0.88
14.00	1	McLennan	19.76%	1.21	16.64%	1.15	16.49%	2.10	14.98%	1.47
14.00	2	McLennan	24.06%	1.47	17.74%	1.23	10.55%	1.34	9.54%	0.94
14.00	4	McLennan	65.36%	3.99	6.85%	0.47	58.55%	7.44	21.53%	2.12
14.00	5	McLennan	53.67%	3.28	14.25%	0.98	18.39%	2.34	31.75%	3.13
14.00	7	McLennan	21.64%	1.32	24.04%	1.66	24.63%	3.13	26.51%	2.61
15.00	1	McLennan	46.78%	2.86	20.63%	1.43	29.55%	3.75	14.54%	1.43
15.00	3	McLennan	28.78%	1.76	7.71%	0.53	21.46%	2.73	13.07%	1.29
15.00	7	McLennan	21.52%	1.31	22.62%	1.56	19.74%	2.51	13.20%	1.30
16.00	1	McLennan	11.64%	0.71	8.10%	0.56	2.54%	0.32	8.56%	0.84
16.00	2	McLennan	20.19%	1.23	14.53%	1.00	5.72%	0.73	10.90%	1.07
16.00	3	McLennan	13.72%	0.84	12.75%	0.88	1.52%	0.19	10.49%	1.03
16.00	4	McLennan	48.93%	2.99	13.33%	0.92	17.48%	2.22	14.01%	1.38
16.00	6	McLennan	25.75%	1.57	12.94%	0.89	9.12%	1.16	24.87%	2.45
17.00	1	McLennan	15.70%	0.96	9.80%	0.68	4.25%	0.54	12.16%	1.20
17.00	2	McLennan	14.41%	0.88	9.36%	0.65	9.40%	1.19	7.97%	0.78
17.00	3	McLennan	6.34%	0.39	13.79%	0.95	4.12%	0.52	10.62%	1.05
17.00	4	McLennan	21.56%	1.32	9.63%	0.67	7.39%	0.94	11.01%	1.08
18.00	1	McLennan	3.42%	0.21	21.04%	1.45	6.32%	0.80	17.76%	1.75
18.00	4	McLennan	12.71%	0.78	17.56%	1.21	8.00%	1.02	16.64%	1.64
19.00	1	McLennan	63.84%	3.90	5.71%	0.39	8.86%	1.13	8.09%	0.80
19.00	2	McLennan	48.49%	2.96	10.45%	0.72	21.28%	2.70	14.01%	1.38
20.00	2	McLennan	5.70%	0.35	16.36%	1.13	1.83%	0.23	9.56%	0.94
20.00	4	McLennan	5.32%	0.32	14.38%	0.99	3.38%	0.43	13.36%	1.31
21.00	1	McLennan	40.88%	2.50	7.83%	0.54	3.90%	0.50	3.30%	0.32
21.00	2	McLennan	30.11%	1.84	6.10%	0.42	15.94%	2.03	10.92%	1.07
21.00	3	McLennan	25.07%	1.53	14.54%	1.00	13.26%	1.68	6.37%	0.63
21.00	4	McLennan	18.28%	1.12	16.42%	1.13	6.36%	0.81	14.19%	1.40
22.00	1	McLennan	15.34%	0.94	16.06%	1.11	6.35%	0.81	14.92%	1.47
22.00	9	McLennan	10.43%	0.64	35.58%	2.46	0.00%	0.00	23.93%	2.36
23.01	1	McLennan	25.37%	1.55	10.62%	0.73	4.51%	0.57	9.55%	0.94
23.01	2	McLennan	11.79%	0.72	14.04%	0.97	8.87%	1.13	14.29%	1.41
23.01	3	McLennan	10.22%	0.62	14.44%	1.00	13.25%	1.68	19.44%	1.91
23.01	5	McLennan	11.65%	0.71	12.55%	0.87	6.10%	0.78	14.83%	1.46

		WEIGHT	2.0		2.0		2.0		1.5	
TRACT	BG	County	% Below Poverty	Index	% over 65	Index	% HU with no autos	Index	% Disabled	Index
<i>HOTCOG Region</i>			16.37%	1.00	14.47%	1.00	7.87%	1.00	10.16%	1.00
23.02	1	McLennan	14.19%	0.87	14.94%	1.03	5.97%	0.76	13.44%	1.32
23.02	2	McLennan	38.84%	2.37	6.58%	0.45	25.05%	3.18	15.29%	1.50
23.02	4	McLennan	6.15%	0.38	24.82%	1.72	2.48%	0.32	8.99%	0.88
24.98	1	McLennan	9.00%	0.55	19.19%	1.33	10.95%	1.39	10.19%	1.00
24.98	2	McLennan	4.21%	0.26	13.04%	0.90	7.43%	0.94	9.46%	0.93
24.98	3	McLennan	5.31%	0.32	20.20%	1.40	6.68%	0.85	18.34%	1.81
24.98	5	McLennan	11.27%	0.69	16.86%	1.17	8.26%	1.05	10.69%	1.05
25.01	1	McLennan	7.75%	0.47	22.60%	1.56	6.34%	0.81	7.68%	0.76
25.01	2	McLennan	7.24%	0.44	16.86%	1.17	9.07%	1.15	6.80%	0.67
25.01	3	McLennan	4.12%	0.25	22.79%	1.57	6.21%	0.79	7.62%	0.75
25.03	1	McLennan	9.48%	0.58	34.97%	2.42	16.69%	2.12	13.40%	1.32
25.03	2	McLennan	6.86%	0.42	27.30%	1.89	3.93%	0.50	8.83%	0.87
25.03	3	McLennan	2.06%	0.13	19.81%	1.37	1.04%	0.13	2.46%	0.24
25.03	4	McLennan	1.00%	0.06	16.65%	1.15	3.02%	0.38	10.77%	1.06
25.04	1	McLennan	0.00%	0.00	15.92%	1.10	1.99%	0.25	2.55%	0.25
25.04	2	McLennan	0.83%	0.05	8.63%	0.60	0.00%	0.00	2.39%	0.24
26.00	1	McLennan	2.86%	0.17	22.60%	1.56	7.91%	1.01	8.05%	0.79
26.00	3	McLennan	3.84%	0.23	58.90%	4.07	5.33%	0.68	16.67%	1.64
26.00	4	McLennan	0.84%	0.05	34.39%	2.38	3.46%	0.44	8.22%	0.81
26.00	5	McLennan	1.93%	0.12	30.76%	2.13	1.33%	0.17	8.94%	0.88
26.00	6	McLennan	9.56%	0.58	32.68%	2.26	0.00%	0.00	6.41%	0.63
27.00	1	McLennan	16.27%	0.99	13.58%	0.94	3.84%	0.49	11.42%	1.12
27.00	3	McLennan	19.95%	1.22	10.68%	0.74	8.54%	1.09	12.33%	1.21
27.00	4	McLennan	18.97%	1.16	15.20%	1.05	7.53%	0.96	16.82%	1.66
28.00	2	McLennan	6.32%	0.39	28.11%	1.94	38.00%	4.83	9.08%	0.89
28.00	3	McLennan	0.62%	0.04	43.98%	3.04	11.52%	1.46	15.65%	1.54
28.00	4	McLennan	26.74%	1.63	3.10%	0.21	2.56%	0.33	7.60%	0.75
29.00	1	McLennan	1.72%	0.11	9.02%	0.62	0.00%	0.00	7.18%	0.71
30.00	1	McLennan	17.22%	1.05	31.67%	2.19	22.05%	2.80	14.64%	1.44
30.00	2	McLennan	16.03%	0.98	22.65%	1.57	10.39%	1.32	5.29%	0.52
30.00	3	McLennan	45.62%	2.79	25.16%	1.74	15.63%	1.99	11.03%	1.09
32.00	1	McLennan	17.61%	1.08	10.29%	0.71	5.87%	0.75	7.72%	0.76
32.00	2	McLennan	7.57%	0.46	12.11%	0.84	4.32%	0.55	9.93%	0.98
32.00	3	McLennan	4.59%	0.28	11.25%	0.78	6.35%	0.81	13.65%	1.34
33.00	3	McLennan	46.39%	2.83	17.00%	1.17	10.02%	1.27	9.86%	0.97
33.00	4	McLennan	44.32%	2.71	0.64%	0.04	5.28%	0.67	6.18%	0.61
34.00	1	McLennan	7.85%	0.48	9.18%	0.63	4.76%	0.60	7.95%	0.78

		WEIGHT	2.0		2.0		2.0		1.5	
TRACT	BG	County	% Below Poverty	Index	% over 65	Index	% HU with no autos	Index	% Disabled	Index
<i>HOTCOG Region</i>			16.37%	1.00	14.47%	1.00	7.87%	1.00	10.16%	1.00
34.00	2	McLennan	4.90%	0.30	9.93%	0.69	1.96%	0.25	7.72%	0.76
34.00	3	McLennan	4.41%	0.27	11.31%	0.78	3.45%	0.44	10.07%	0.99
35.00	1	McLennan	7.80%	0.48	14.39%	0.99	3.85%	0.49	10.38%	1.02
35.00	2	McLennan	5.95%	0.36	11.49%	0.79	1.55%	0.20	9.45%	0.93
35.00	3	McLennan	6.04%	0.37	9.74%	0.67	4.77%	0.61	5.13%	0.50
36.01	1	McLennan	9.66%	0.59	13.83%	0.96	6.16%	0.78	10.07%	0.99
36.01	2	McLennan	13.09%	0.80	25.06%	1.73	11.01%	1.40	11.16%	1.10
36.01	3	McLennan	23.07%	1.41	15.53%	1.07	10.59%	1.35	10.63%	1.05
36.02	1	McLennan	9.51%	0.58	12.29%	0.85	6.20%	0.79	10.93%	1.08
36.02	2	McLennan	9.82%	0.60	15.69%	1.08	6.20%	0.79	7.29%	0.72
37.01	1	McLennan	6.47%	0.40	11.65%	0.81	2.46%	0.31	11.84%	1.17
37.01	2	McLennan	4.03%	0.25	12.18%	0.84	0.00%	0.00	3.56%	0.35
37.03	1	McLennan	1.94%	0.12	19.91%	1.38	2.16%	0.27	7.32%	0.72
37.03	2	McLennan	0.19%	0.01	6.83%	0.47	0.00%	0.00	3.89%	0.38
37.03	3	McLennan	4.41%	0.27	13.90%	0.96	0.00%	0.00	9.58%	0.94
37.06	1	McLennan	1.40%	0.09	10.07%	0.70	1.19%	0.15	10.93%	1.08
37.06	2	McLennan	2.66%	0.16	6.40%	0.44	3.86%	0.49	9.14%	0.90
37.06	3	McLennan	0.79%	0.05	6.36%	0.44	1.57%	0.20	6.05%	0.60
37.06	4	McLennan	3.53%	0.22	8.10%	0.56	2.61%	0.33	6.89%	0.68
37.07	1	McLennan	13.05%	0.80	8.27%	0.57	4.75%	0.60	4.77%	0.47
37.07	2	McLennan	1.83%	0.11	7.05%	0.49	1.03%	0.13	4.05%	0.40
37.07	3	McLennan	3.30%	0.20	7.47%	0.52	3.16%	0.40	5.40%	0.53
37.08	2	McLennan	1.47%	0.09	7.75%	0.54	1.61%	0.20	4.42%	0.44
37.08	3	McLennan	3.32%	0.20	4.61%	0.32	2.54%	0.32	5.46%	0.54
37.08	4	McLennan	2.22%	0.14	7.36%	0.51	2.23%	0.28	7.82%	0.77
38.01	1	McLennan	2.27%	0.14	8.10%	0.56	0.62%	0.08	4.78%	0.47
38.01	2	McLennan	3.56%	0.22	10.04%	0.69	3.36%	0.43	5.50%	0.54
38.02	1	McLennan	14.03%	0.86	10.69%	0.74	4.50%	0.57	9.40%	0.93
38.02	2	McLennan	10.45%	0.64	9.41%	0.65	4.50%	0.57	5.61%	0.55
38.02	3	McLennan	11.05%	0.68	19.62%	1.36	9.89%	1.26	11.21%	1.10
39.00	1	McLennan	6.04%	0.37	10.74%	0.74	7.50%	0.95	10.53%	1.04
39.00	2	McLennan	11.36%	0.69	12.43%	0.86	13.97%	1.78	11.90%	1.17
39.00	4	McLennan	10.38%	0.63	23.67%	1.64	3.17%	0.40	3.62%	0.36
39.00	5	McLennan	18.11%	1.11	20.08%	1.39	5.79%	0.74	18.64%	1.83
40.00	1	McLennan	1.89%	0.12	12.10%	0.84	3.20%	0.41	7.77%	0.76
40.00	2	McLennan	6.97%	0.43	13.70%	0.95	1.29%	0.16	5.90%	0.58
40.00	3	McLennan	4.27%	0.26	10.99%	0.76	4.03%	0.51	6.51%	0.64



		<b>WEIGHT</b>	<b>2.0</b>		<b>2.0</b>		<b>2.0</b>		<b>1.5</b>	
<b>TRACT</b>	<b>BG</b>	<b>County</b>	<b>% Below Poverty</b>	<b>Index</b>	<b>% over 65</b>	<b>Index</b>	<b>% HU with no autos</b>	<b>Index</b>	<b>% Disabled</b>	<b>Index</b>
<i>HOTCOG Region</i>			<i>16.37%</i>	<i>1.00</i>	<i>14.47%</i>	<i>1.00</i>	<i>7.87%</i>	<i>1.00</i>	<i>10.16%</i>	<i>1.00</i>
41.01	1	McLennan	5.48%	0.33	13.47%	0.93	2.27%	0.29	8.30%	0.82
41.02	1	McLennan	12.50%	0.76	11.14%	0.77	3.24%	0.41	2.48%	0.24
41.02	2	McLennan	1.69%	0.10	8.46%	0.58	3.65%	0.46	4.68%	0.46
41.02	3	McLennan	7.53%	0.46	5.61%	0.39	5.61%	0.71	3.46%	0.34
42.01	1	McLennan	16.89%	1.03	17.19%	1.19	8.53%	1.08	12.72%	1.25
42.01	2	McLennan	8.65%	0.53	29.79%	2.06	6.60%	0.84	5.60%	0.55
42.01	3	McLennan	17.18%	1.05	20.84%	1.44	6.49%	0.82	17.28%	1.70
42.02	1	McLennan	4.81%	0.29	10.34%	0.71	3.35%	0.43	6.51%	0.64
42.02	2	McLennan	11.10%	0.68	10.62%	0.73	6.39%	0.81	10.42%	1.03

## Appendix G

			WEIGHT
TRACT	BG	County	Transit Need Index
<i>HOTCOG Region</i>			<i>10.00</i>
9501.00	1	Bosque	8.54
9501.00	2	Bosque	7.22
9501.00	3	Bosque	12.59
9501.00	4	Bosque	15.11
9501.00	5	Bosque	8.78
9502.00	1	Bosque	10.58
9503.00	1	Bosque	8.60
9503.00	2	Bosque	8.43
9504.00	1	Bosque	7.23
9504.00	2	Bosque	7.55
9505.00	1	Bosque	13.08
9505.00	2	Bosque	15.00
9505.00	3	Bosque	11.42
9505.00	4	Bosque	13.86
9506.00	1	Bosque	8.72
9507.00	1	Bosque	7.91
9507.00	2	Bosque	9.11
9507.00	3	Bosque	11.86
9901.00	1	Falls	10.57
9901.00	2	Falls	7.96
9902.00	1	Falls	9.07
9902.00	2	Falls	15.37
9903.00	3	Falls	16.59
9904.00	1	Falls	20.04
9904.00	2	Falls	23.11
9904.00	3	Falls	28.52
9904.00	4	Falls	36.03
9904.00	5	Falls	28.06
9904.00	6	Falls	25.71
9905.00	1	Falls	9.30
9905.00	2	Falls	15.31
9906.00	1	Falls	12.47
9907.00	1	Falls	7.86
9907.00	2	Falls	13.71
9907.00	3	Falls	19.40

		WEIGHT	
TRACT	BG	County	Transit Need Index
<i>HOTCOG Region</i>			<i>10.00</i>
9907.00	4	Falls	29.25
9801.00	1	Freestone	9.71
9801.00	2	Freestone	6.82
9802.00	1	Freestone	7.95
9802.00	2	Freestone	10.17
9802.00	3	Freestone	13.15
9803.00	1	Freestone	11.73
9803.00	2	Freestone	17.03
9804.00	1	Freestone	7.42
9804.00	2	Freestone	11.76
9804.00	3	Freestone	13.11
9806.00	1	Freestone	7.38
9806.00	2	Freestone	9.91
9806.00	3	Freestone	13.56
9807.00	1	Freestone	13.54
9807.00	2	Freestone	6.92
9807.00	3	Freestone	19.45
9807.00	4	Freestone	15.09
9807.00	5	Freestone	8.39
9809.00	1	Freestone	14.71
9809.00	2	Freestone	13.65
9601.00	1	Hill	11.97
9601.00	2	Hill	17.95
9601.00	3	Hill	7.71
9602.00	1	Hill	5.36
9602.00	2	Hill	7.03
9602.00	3	Hill	8.57
9604.00	1	Hill	9.51
9604.00	2	Hill	10.19
9605.00	1	Hill	9.41
9605.00	2	Hill	8.85
9605.00	3	Hill	7.68
9606.00	1	Hill	14.76
9607.00	1	Hill	5.16
9607.00	2	Hill	11.00
9607.00	3	Hill	7.52
9608.00	1	Hill	6.86

		WEIGHT	
TRACT	BG	County	Transit Need Index
<i>HOTCOG Region</i>			<i>10.00</i>
9608.00	2	Hill	11.00
9608.00	3	Hill	11.41
9609.00	1	Hill	14.27
9609.00	2	Hill	18.58
9609.00	3	Hill	23.55
9610.00	1	Hill	17.31
9610.00	2	Hill	17.73
9610.00	3	Hill	21.57
9611.00	4	Hill	10.47
9611.00	5	Hill	8.71
9612.00	1	Hill	10.50
9613.00	1	Hill	9.90
9613.00	2	Hill	13.43
9613.00	3	Hill	13.71
9701.00	1	Limestone	12.16
9701.00	2	Limestone	14.24
9702.00	1	Limestone	9.08
9702.00	2	Limestone	10.96
9702.00	3	Limestone	7.96
9703.00	1	Limestone	14.86
9703.00	2	Limestone	14.65
9703.00	3	Limestone	13.68
9704.00	1	Limestone	23.41
9704.00	2	Limestone	15.53
9705.00	1	Limestone	13.65
9705.00	2	Limestone	13.73
9706.00	1	Limestone	7.08
9706.00	2	Limestone	16.42
9706.00	3	Limestone	15.15
9706.00	4	Limestone	20.03
9706.00	5	Limestone	11.96
9706.00	6	Limestone	6.86
9707.00	1	Limestone	9.19
9707.00	2	Limestone	7.91
9708.00	1	Limestone	8.53
9708.00	2	Limestone	10.09
9708.00	3	Limestone	15.21

		WEIGHT	
TRACT	BG	County	Transit Need Index
<i>HOTCOG Region</i>			<i>10.00</i>
1.00	2	McLennan	19.49
1.00	6	McLennan	23.39
2.00	1	McLennan	19.94
2.00	4	McLennan	17.26
3.00	1	McLennan	12.90
4.00	1	McLennan	19.72
4.00	2	McLennan	21.82
4.00	3	McLennan	21.59
4.00	4	McLennan	16.58
4.00	6	McLennan	27.53
5.98	1	McLennan	20.99
5.98	2	McLennan	16.17
5.98	5	McLennan	18.39
5.98	6	McLennan	22.32
5.98	8	McLennan	16.46
7.00	1	McLennan	16.61
7.00	2	McLennan	18.90
7.00	3	McLennan	18.75
7.00	4	McLennan	13.75
8.00	1	McLennan	16.63
8.00	3	McLennan	15.59
9.00	1	McLennan	14.78
9.00	2	McLennan	12.01
9.00	3	McLennan	16.75
9.00	4	McLennan	13.39
9.00	6	McLennan	13.59
10.00	1	McLennan	22.99
10.00	2	McLennan	23.04
10.00	3	McLennan	16.36
11.00	3	McLennan	21.63
11.00	4	McLennan	18.47
11.00	5	McLennan	18.15
11.00	6	McLennan	20.10
11.00	7	McLennan	14.34
11.00	8	McLennan	12.84
12.00	1	McLennan	20.95
12.00	2	McLennan	39.47

		<b>WEIGHT</b>	
<b>TRACT</b>	<b>BG</b>	<b>County</b>	<b>Transit Need Index</b>
<i>HOTCOG Region</i>			<i>10.00</i>
12.00	3	McLennan	29.15
13.00	2	McLennan	7.43
13.00	3	McLennan	18.11
13.00	5	McLennan	15.68
14.00	1	McLennan	16.53
14.00	2	McLennan	17.18
14.00	4	McLennan	39.32
14.00	5	McLennan	27.92
14.00	7	McLennan	25.79
15.00	1	McLennan	28.27
15.00	3	McLennan	21.10
15.00	7	McLennan	21.63
16.00	1	McLennan	9.52
16.00	2	McLennan	12.88
16.00	3	McLennan	10.68
16.00	4	McLennan	20.82
16.00	6	McLennan	16.14
17.00	1	McLennan	9.93
17.00	2	McLennan	12.15
17.00	3	McLennan	8.93
17.00	4	McLennan	12.41
18.00	1	McLennan	11.01
18.00	4	McLennan	11.82
19.00	1	McLennan	19.94
19.00	2	McLennan	22.53
20.00	2	McLennan	7.37
20.00	4	McLennan	7.96
21.00	1	McLennan	14.36
21.00	2	McLennan	17.65
21.00	3	McLennan	14.62
21.00	4	McLennan	13.89
22.00	1	McLennan	14.19
22.00	9	McLennan	13.37
23.01	1	McLennan	14.25
23.01	2	McLennan	13.93
23.01	3	McLennan	16.24
23.01	5	McLennan	12.67

		WEIGHT	
TRACT	BG	County	Transit Need Index
<i>HOTCOG Region</i>			<i>10.00</i>
23.02	1	McLennan	13.35
23.02	2	McLennan	21.09
23.02	4	McLennan	11.37
24.98	1	McLennan	13.12
24.98	2	McLennan	10.69
24.98	3	McLennan	12.62
24.98	5	McLennan	11.76
25.01	1	McLennan	11.54
25.01	2	McLennan	11.22
25.01	3	McLennan	8.88
25.03	1	McLennan	15.08
25.03	2	McLennan	10.17
25.03	3	McLennan	5.85
25.03	4	McLennan	7.58
25.04	1	McLennan	5.61
25.04	2	McLennan	3.46
26.00	1	McLennan	9.96
26.00	3	McLennan	15.18
26.00	4	McLennan	10.22
26.00	5	McLennan	8.40
26.00	6	McLennan	9.18
27.00	1	McLennan	12.05
27.00	3	McLennan	14.17
27.00	4	McLennan	14.63
28.00	2	McLennan	18.72
28.00	3	McLennan	13.78
28.00	4	McLennan	10.39
29.00	1	McLennan	4.29
30.00	1	McLennan	19.14
30.00	2	McLennan	12.54
30.00	3	McLennan	21.00
32.00	1	McLennan	9.91
32.00	2	McLennan	10.16
32.00	3	McLennan	9.68
33.00	3	McLennan	17.59
33.00	4	McLennan	13.26
34.00	1	McLennan	6.64

		<b>WEIGHT</b>	
<b>TRACT</b>	<b>BG</b>	<b>County</b>	<b>Transit Need Index</b>
<i>HOTCOG Region</i>			<i>10.00</i>
34.00	2	McLennan	5.66
34.00	3	McLennan	6.49
35.00	1	McLennan	7.25
35.00	2	McLennan	5.98
35.00	3	McLennan	6.06
36.01	1	McLennan	8.21
36.01	2	McLennan	13.70
36.01	3	McLennan	13.52
36.02	1	McLennan	8.50
36.02	2	McLennan	8.11
37.01	1	McLennan	7.85
37.01	2	McLennan	4.60
37.03	1	McLennan	8.12
37.03	2	McLennan	3.41
37.03	3	McLennan	5.96
37.06	1	McLennan	5.36
37.06	2	McLennan	6.63
37.06	3	McLennan	4.89
37.06	4	McLennan	6.31
37.07	1	McLennan	7.66
37.07	2	McLennan	3.79
37.07	3	McLennan	7.71
37.08	2	McLennan	4.25
37.08	3	McLennan	6.08
37.08	4	McLennan	7.05
38.01	1	McLennan	3.77
38.01	2	McLennan	5.27
38.02	1	McLennan	8.30
38.02	2	McLennan	7.03
38.02	3	McLennan	11.13
39.00	1	McLennan	8.46
39.00	2	McLennan	12.38
39.00	4	McLennan	8.23
39.00	5	McLennan	14.26
40.00	1	McLennan	5.58
40.00	2	McLennan	5.81
40.00	3	McLennan	5.89



		<b>WEIGHT</b>	
<b>TRACT</b>	<b>BG</b>	<b>County</b>	<b>Transit Need Index</b>
<i>HOTCOG Region</i>			<i>10.00</i>
41.01	1	McLennan	6.10
41.02	1	McLennan	6.39
41.02	2	McLennan	4.30
41.02	3	McLennan	5.23
42.01	1	McLennan	10.54
42.01	2	McLennan	10.51
42.01	3	McLennan	12.87
42.02	1	McLennan	5.39
42.02	2	McLennan	8.48

# Appendix H – Public Comments

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## Transcript of Public Hearing – February 3, 2010

Speaker: Tommy Brashier  
Address: 900 N. Valley Mills Dr  
City: Waco  
Comments: The purpose of this thing has not been made clear. There was an accident on Valley Mills Dr 4 years ago but those pedestrians were jaywalking. Need to use the money to build sidewalks on Valley Mills and crosswalks. Police patrols are needed in the area to reduce speed, especially at night. The growth on Valley Mills was a result of commerce. All we have to do is go back to 1967, where the City of Waco adopted urban Renewal – killed pedestrian traffic and businesses moved to Valley Mills Drive.

Speaker: Stephanie Lambring  
Address: 824 Horseshoe Dr  
City: Beverly Hills  
Comments: I've been a resident of Beverly Hills since 1958. I do business up and down Valley Mills Dr and Hewitt Dr and putting in a median on Valley Mills Dr really is not feasible and will do no good. The traffic study needs to be directed to speed on VMD. I agree with Mr. Brashear regarding pedestrian crosswalks. The only sidewalk on VMD is in front of the CVS Pharmacy on Valley Mills Dr. Hewitt Dr is much the same thing. I witnessed a traffic accident in front of Goodwill – once again, speed was the issue, not a median.

Speaker: Andy Sheehy  
Address: 6700 Sanger Ave  
City: Waco  
Comments: I'm representing ReMAX realty speak specifically regarding the proposed medians on Valley Mills Dr and Hewitt Dr. Restricting traffic in front of a business will reduce the appraisal of the building. This is a bad long-term policy. Don't even give a committee the power to study this. Strongly urge you just to drop this. I think it's a bad idea all the way through.

Speaker: Dale Mathews  
Address: 1106 S. Valley Mills Dr  
City: Beverly Hills  
Comments: I own Champion Fast Lube and Car Wash. I agree with the previous comments on Valley Mills Drive. I suggest the study be made available to the merchants so that we have a chance to meet and prepare for the next meeting.

Speaker: John Wessler  
Address: 6801 Sanger Ave, Suite 180  
City: Waco  
Comments: I own a business on Sanger, if you put in a median, this will give pedestrians a safe-haven which will encourage pedestrians to cross. Second thing I see is you have less space

for cars to go, which will start discussions about widening Valley Mills Dr. We need to focus on alternative safety.

Speaker: Daniel Palmer  
Address: 510 N. Valley Mills Dr, Suite 600  
City: Waco  
Comments: I'm an attorney from Haley & Olson speaking on behalf of Bush's Chicken & Schlotsky's. I strongly recommend that the Board follow the staff's recommendation to do the study and not priority #3.

Speaker: Kyle Nielsen  
Address: 916 N. Valley Mills Dr  
City: Waco  
Comments: I own Genie Carwash. I agree with what has been said, I drive up and down Valley Mills to the Bank down towards Cobbs. The median on Valley Mills Dr causes more problems; the existing median does nothing to solve the problems. I am adamantly opposed to the medians on both Valley Mills Dr and Hewitt Dr. Lets take some time to look at speed. In 15 years on Valley Mills, we have had 1.2 million cars pull out of Genie Car Wash. That's a lot of cars going both ways. I would like to recommend that you take some time and really think about this.

Speaker: Wes Shriber  
Address:  
City: Waco  
Comments: I have interests on both Hewitt Dr & Valley Mills Dr. I wondered about how you are going to put a median on a 6 lane highway. You're going to have to close some lanes. Valley Mills into Beverly Hills, you're going to lose all your left hands turns. Speed is the problem. The Traffic is absolutely absurd, reduce the speed limit to 30 mph.

Received from: Waco City Secretary's Office

Caller:

Joyce White

Keep valley mills the way it is

Suggested contact Longview, TX about their exp. re: medians

Dear Chris Evilla and members of the Waco Metropolitan Planning Organization,

I respectfully object to building of traffic medians on Valley Mills Drive. I'm sure there are valid reasons for supporting such a move, I think they are heavily outweighed by the disruption of commerce this will cause on Waco's number-one commercial street. The end result would be that of turning Valley Mills Drive into a one-way street, as far as accessing businesses is concerned.

I would respectfully request an opportunity to address your group at the 2 p. m. meeting on Wednesday, if possible. I will keep my comments brief and directly to the point.

Thank you for your consideration.

Sincerely,

Tommy Brashier  
Tommy B's  
900 N. Valley Mills Drive  
Waco, Texas 76712  
254.717.3333

## **Visitor contact from the Waco-Texas.com web site**

**Name:** Skip Londos

**Address:**

**City:**

**State:**

**Phone:** 254-776-1572

**Email:** slondos@aol.com

**Message:**

Just a quick note to make Chris Evilia and city staff aware that I fully support MPO plan to create raised medians on Valley Mills Drive. This will make that stretch Waco safer for pedestrians and more aesthetically pleasing. I hope the city will also consider lowering the speed limit on Valley Mills -- 40 MPH is much too fast to permit safe and comfortable pedestrian activity.



## Waco Metropolitan Planning Organization

### Proposed Priorities to the 2035 Metropolitan Transportation Plan

Your Name: Bianca Valentine  
Address: 800 Lewis St.  
Waco, Texas 76705

The Waco Metropolitan Transportation Plan (MTP) outlines the transportation needs for the metropolitan area through the year 2035 and the projects required to address those needs. Recommended priorities within the MTP must be constrained to a realistic estimate of future revenues. The MTP is updated every 5 years. The MPO has identified fiscally constrained transportation priorities to address the regional transportation needs and is soliciting public comment regarding these priorities.

All comments will be presented to the MPO Policy Board and given full consideration prior to adoption. You may return this form by mailing it to the address on the back, faxing it to (254) 750-1605 or e-mailing us at [mpo@ci.waco.tx.us](mailto:mpo@ci.waco.tx.us). Comments must be received by February 1, 2010 to be included as part of the official record. **Thank you for your participation.**

(To mail, please fold in half with this page on the inside and affix a postage stamp. The postal service will not deliver without proper postage. Please tape closed, do not staple.)

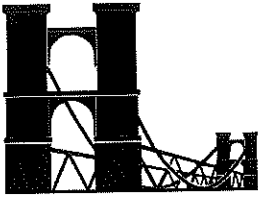
#### General Comments, Concerns or Suggestions:

- x - <sup>gas</sup> 12¢ tax increase
- x - 25% increase in vehicle registration fees
- Eliminate 75% of State gas tax diversions
- x - 3¢ gas tax
- x - \$10 vehicle registration fee

These are small monetary inconveniences compared to:

- not having adequate roads to drive on.
- losing lives on overly congested roads (China Spring Rd)
- NO pedestrian crosswalks on Valley Mills Dr.

Widen I-35! Widen China Spring Rd! Add a landscaped median on Valley Mills Dr!



# Waco Metropolitan Planning Organization

## Proposed Priorities to the 2035 Metropolitan Transportation Plan

Your Name: Roy Walthall  
Address: 1936 Post Oak  
WACO, TEXAS 76705

The Waco Metropolitan Transportation Plan (MTP) outlines the transportation needs for the metropolitan area through the year 2035 and the projects required to address those needs. Recommended priorities within the MTP must be constrained to a realistic estimate of future revenues. The MTP is updated every 5 years. The MPO has identified fiscally constrained transportation priorities to address the regional transportation needs and is soliciting public comment regarding these priorities.

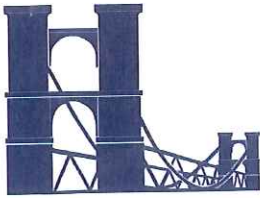
All comments will be presented to the MPO Policy Board and given full consideration prior to adoption. You may return this form by mailing it to the address on the back, faxing it to (254) 750-1605 or e-mailing us at [mpo@ci.waco.tx.us](mailto:mpo@ci.waco.tx.us). Comments must be received by February 1, 2010 to be included as part of the official record. **Thank you for your participation.**

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### General Comments, Concerns or Suggestions:

ENCOURAGE AMTRAK TO REROUTE THEIR NEW DAILY "TEXAS EAST" (CHICAGO -  
LOS ANGELES TRAIN) WHICH IS TO BEGIN SERVICE BEFORE SUMMER, TO COME THROUGH  
WACO. IT WOULD BOTH SAVE TIME, FUEL, AND DISTANCE FOR AMTRAK PLUS PROVIDE  
MORE PASSENGERS (AS MCGREGOR SCORED THE HIGHEST PERCENT INCREASES IN PASSENGERS IN  
BOTH 2008 AND 2009) AND ALL OF THAT IS WACO ORIENTED. IF AMTRAK CAN NOT SEE  
FIT TO COME TO WACO (AT OUR INTERMODAL CENTER) THEN FROM THAT CENTER THE  
WACO MPO NEEDS TO PROVIDE DAILY BUS SERVICE TO MCGREGOR FROM FT. HOOD  
TO WACO TO COINCIDE WITH THE TWO NEW TIMES THAT AMTRAK COMES TO  
MCGREGOR.





## Waco Metropolitan Planning Organization

### Proposed Priorities to the 2035 Metropolitan Transportation Plan

Your Name:

Bob + Janice Gillen

Address:

1305 Windstone Dr.  
Waco TX 76712

The Waco Metropolitan Transportation Plan (MTP) outlines the transportation needs for the metropolitan area through the year 2035 and the projects required to address those needs. Recommended priorities within the MTP must be constrained to a realistic estimate of future revenues. The MTP is updated every 5 years. The MPO has identified fiscally constrained transportation priorities to address the regional transportation needs and is soliciting public comment regarding these priorities.

All comments will be presented to the MPO Policy Board and given full consideration prior to adoption. You may return this form by mailing it to the address on the back, faxing it to (254) 750-1605 or e-mailing us at [mpo@ci.waco.tx.us](mailto:mpo@ci.waco.tx.us). Comments must be received by February 1, 2010 to be included as part of the official record. **Thank you for your participation.**

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#### General Comments, Concerns or Suggestions:

It is our concern that placing medians down the middle of Valley Mills + Hewitt drive to make it safer will create more wrecks from people making U turns. If you do this for people being hit crossing the roads it is against the law to cross where there is not a light so you are telling them to break the law. We feel the money spent on this could be used to resurface the streets in Waco which are in terrible shape. If you insist on the medians please landscape them. Waco does very little to improve its image to attract business. Austin Ave looks terrible. 11 cars have been totaled from the circles. AND had been instead of concrete if something had been placed in the middle you would see them.



January 19, 2010  
Waco Transit Administration Center

## Visitor Sign In Public Comment Period 2035 Metropolitan Transportation Plan

Name	Address	Zip Code
Kurt Lockman	Pop Anderson	
Mark Smith	601 Franklin	76701
Roy Walthall	1936 Post Oak Dr. WACO	76705
B.ice WINTOGER	922 Fuld	79605
MICHAEL SHAPIRO	900 Franklin	76701
JOHN L. HENDERICKSON	301 S. 8 <sup>TH</sup> STREET SUITE 100	76701
Jack Stewart	600 Arist - Ave Suite 29	76701
Ed Kabobel	Tx DOT	76504
GREG MALATEK	TX DOT	76504
WALTER REEVES	City of McGregor	76657
Steve White	171 Dove Hill China Spring	76633





January 21, 2010  
Lacy-Lakeview Community Center

## Visitor Sign In Public Comment Period 2035 Metropolitan Transportation Plan

Name	Address	Zip Code
Doreen Plott	5608 Boquey Ln	76708
KARAN SOBE	P.O. Box 20006	76702
Ed Kabobel	TxDOT	76704





January 25, 2010  
Hewitt Community Center

## Visitor Sign In Public Comment Period

### 2035 Metropolitan Transportation Plan

Name	Address	Zip Code
Janice Sellen	1305 Wundstone Dr	76712
Paul Holroyd, Jr	1116 Ridgeview Dr	76643
Ray MEADOWS	25 Pointview	76710
Gladyshotson	3705 T View	76707
Nancy Cagle	4017 Meadow Brook Rd	76710
Ed Kabobel	TxDOT	76704
Adam Miles	Hewitt City Hall	76643





## Visitor Sign In Public Comment Period 2035 Metropolitan Transportation Plan

Name	Address	Zip Code
Ed Kabobel	TxDOT	76704
Larry Knapke	The West News	76691
Gene Lednicki	NEEL ASSOC	76705
B D Pierce	PO Box 26 WEST TX	76651
Jim Jaska	P.O. Box 24 Ross, Texas	76684
Rick Jaska	P.O. Box 16 Ross, TX.	76684