FM 969 / EAST MLK, JR. BLVD. CORRIDOR DEVELOPMENT PROGRAM

FEBRUARY 2014

AUSTIN MOBILITY

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EXECUTIVE SUMMARY

1.0 PROGRAM GOALS

The FM 969 / East MLK, Jr. Boulevard Corridor is one of several priority corridors identified in the 2010 City of Austin transportation bond package. This corridor is located in East Austin and extends east through Travis County to Bastrop County. *Imagine Austin*, the city's newly adopted comprehensive plan, has identified the area served by FM 969 / East MLK Jr. Boulevard as a desired growth area. The goal of the FM 969 / East MLK Jr Blvd Corridor Development Program is to develop a set of recommendations to improve safety, mobility and quality of life along FM 969 between US 183 and Webberville.

2.0 PROJECT PURPOSE AND PROCESS

The purpose of the FM 969 Corridor Development Program is to identify short-and long-term projects to address anticipated needs through 2025.

A comprehensive process was used to analyze the existing conditions and needs within the FM 969 Corridor. **Figure 1** provides a graphic representation of the analysis process.

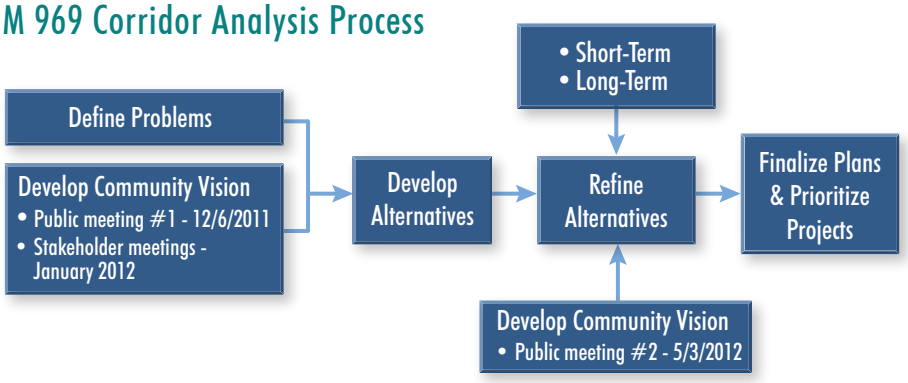
3.0 EXISTING CORRIDOR CHARACTERISTICS AND CONSTRAINTS

For analysis, the 10.9-mile corridor was separated into three character districts:

- Character District 1, Exurban Highway (US 183 to SH 130)
- Character District 2, Rural Village Roadway (SH 130 to Dunlap Road)
- Character District 3, Country Road (Dunlap Road to Webberville)

Character District 1 has small pockets of auto-oriented commercial development, small- and large-lot residential, and civic and institutional uses, along with a significant amount of vacant and undeveloped land. Many new residential developments are planned in this area. The roadway lacks curbs, gutters, sidewalks and bicycle lanes and is lined with drainage ditches and overhead power lines.

FIGURE 1 – FM 969 Corridor Analysis Process



Character District 2 has agricultural and large-lot residential uses. A small section of the corridor is like a village, with small-scale retail, office and civic uses fronting the street. The roadway here also lacks sidewalks and bicycle lanes. Large residential developments are also planned for this area.

Character District 3 is mainly farmland, ranches, large-lot single-family homes, and the City of Austin's new solar energy farm. There are also gravel mining operations present, and they generate significant truck traffic. This area is expected to remain agricultural.

4.0 PROJECT GOALS AND DESIGN CONSIDERATIONS

The project goals are to identify a range of projects, policies, and/or services to:

- Improve safety
- Increase mobility and accessibility for drivers, pedestrians, bicycles, and transit users
- Improve quality of life for the roadway users and neighbors of the FM 969 corridor
- Accommodate future growth

Design Considerations

To determine the design considerations for this project, the existing conditions of the corridor were studied. Although the character of the 10.9-mile corridor varies significantly, it retains common characteristics throughout, including a lack of pedestrian and bicycle facilities, relatively high truck volumes, and a significant amount of undeveloped and agricultural land adjacent to the roadway. Existing conditions were categorized:

- **Land use:** Land use patterns along the FM 969 corridor change dramatically from rural area on the east side to urban area to the west side. There are still much potential for future development on both sides of the corridor.
- **Traffic Conditions:** The corridor in general suffers from less congestion than other corridors in the Austin area, however, a few hot spots are identified with excessive vehicle delays including the segments at US 183 and at Decker Lane.
- **Multimodal Conditions:** Capital Metropolitan Transportation Authority (Capital Metro) and Capital Area Rural Transportation System (CARTS) provide a low amount of service to the corridor.
- **Drainage:** Within the corridor study influence area, FM 969 is crossed approximately 12 times by Walnut Creek, Elm Creek, Decker Creek, Gilleland Creek, and their tributaries. Sections of the FM 969 corridor are also within the 100-year floodplain, and flooding is a problem in several areas.
- **Safety:** A total of 251 crashes were reported between 2008 and 2010 in the corridor. The section that exceeded the statewide average most frequently was that between Decker Lane and FM 973. Traffic patterns indicate a strong commuting pattern. Traffic is heavier westbound in the morning and heavier eastbound in the evening. Traffic congestion in the peak period is rated as unsatisfactory at most of the signalized intersections.

The design considerations to improve the existing conditions are:

- Land use:
  - Break down the corridor into three characteristic districts with different design considerations based on their land use patterns
- Traffic conditions:
  - Evaluate alternative improvements to reduce vehicle delays in certain roadway segments and at hot spot locations

- Multimodal Conditions:
  - Propose improvements that target bicycle and pedestrian access
  - Propose revising the service area for the Capital Metro
- Drainage:
  - Propose curb and gutter on the roadway
  - Improve existing structures
- Safety:
  - Propose improving the safety in the corridor through:
    - Traffic control devices
    - Realignment of skewed intersections
    - Improving sight distances at intersections and along roadway
    - Adding turn lanes
    - Adding metal beam guard fence

5.0 FUTURE CORRIDOR CHARACTERISTICS AND RECOMMENDATIONS

The FM 969 corridor is projected to experience significant growth over the next 25 years. Several large residential and mixed-use developments are planned, as well as some commercial sites. Character District 1 has approximately 1,100 undeveloped single-family lots within existing subdivisions and the potential for another 14,000 residents and 19,000 employees in future developments. Character District 2 has more than 8,000 acres of land with the potential for 40,000 new residents and 18,000 new employees. Additionally, approximately 4,700 acres of undeveloped and un-zoned land are potentially available for future development within the district. Character District 3 has over 14,000 acres of undeveloped and un-zoned land with potential for future development, representing more than 60% of the undeveloped land within the study influence area.

Utilities are also planning to extend lines to the study influence area, including water, wastewater, and a new power substation on Taylor Lane through Austin Energy.

Traffic is expected to increase in the next 15 years between Decker Lane and Webberville, and to decrease slightly between Decker Lane and US 183 due to planned improvements on parallel routes and US 183 that are projected to shift traffic demand to these other routes. An example of ultimate design for FM 969 between US 183 and Decker Lane (FM 3177) is shown in **Figure 2**. The roadway will expand to a 6-lane roadway with a raised median and curb and gutter.

Recommendations were categorized as short-term and long-term improvements. **Table 1** provides a summary of the recommendations.

FIGURE 2 – US 183 to Decker Lane (FM 3177) – Ultimate Typical Section

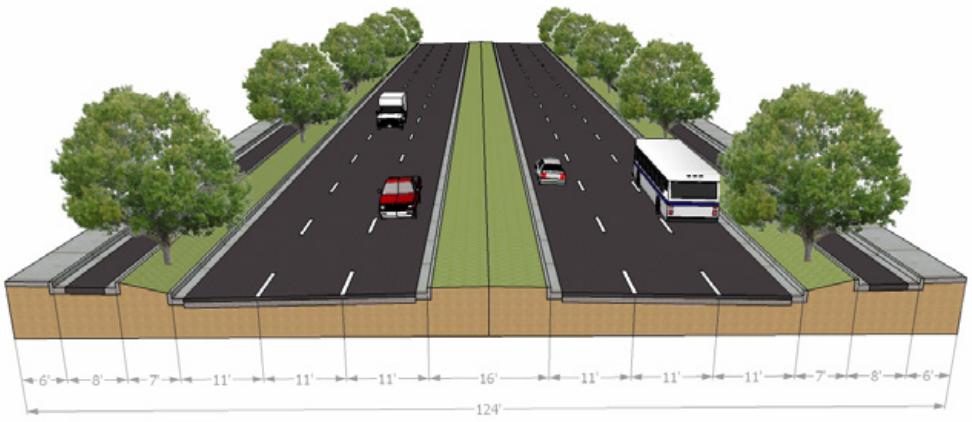


TABLE 1 – Recommended Short-Term and Long-Term Improvements

Target Year	Roadway	Limits	Description	Funding Sponsor
SHORT-TERM IMPROVEMENTS				
2013	FM 969	At Gilbert Road	Widen westbound shoulder to provide a right-turn lane. Signal retiming	County / TxDOT TxDOT
2013	FM 969	At SH 130 Ramps	Install traffic signals (completed)	TxDOT
2014	FM 969	At FM 973	Install safety lighting on existing signal poles	TxDOT
2014	Johnny Morris Road	Loyola Lane to FM 969	Construct shared use path	City
2014	FM 969	Walnut Creek Trail to Johnny Morris Road	Construct sidewalk	City / TxDOT
2014	FM 969	Gilbert Road to Hound Dog Trail	Construct sidewalks	County / TxDOT
2015	FM 969	Regency Drive to Craigwood Drive	Construct pedestrian-activated signal at Regency Drive, sidewalk, modify signal at Craigwood	City
2016	FM 969	US 183 to Decker Lane (FM 3177)	Re-striping for bicycle lane with TxDOT mill and inlay project	TxDOT – paving City – bicycle lane striping
LONG-TERM IMPROVEMENTS				
2020	Taylor Lane	Braker Extension to FM 969	Widen to 4 lanes with bicycle/ped amenities	County
2020	FM 973 Bypass	FM 973 S. of Manor to US 290 E. of Manor	New location, 4 lanes with bicycle/ped amenities	TxDOT / Manor / County
2020	FM 973	SH 130 to Wildhorse Connector	Widen to 4 lanes with bicycle/ped amenities, improve drainage	TxDOT / County
2030	Decker Lake Road	Decker Lane (FM 3177) to FM 973	Widen to 4 lanes with bicycle/ped amenities	Travis County
2023	Burleson Manor Extension	FM 969 to SH 71 via Caldwell Lane	New location, 2 lanes with bicycle/ped amenities	Travis County
2025	FM 969	US 183 to Decker Lane (FM 3177)	Widen to 6 lanes (Superstreet) with bicycle/ped amenities	TxDOT / City
2035	FM 969	Decker Lane (FM 3177) to SH 130	Convert to Superstreet design	TxDOT / County / City
2035	FM 969	Hunters Bend to Webberville	Widen to 4 lanes with two-way left-turn lane with shared use path	TxDOT / County
2035	FM 973	Colorado River to SH 130	Widen to 4 lanes with bicycle/ped amenities	TxDOT

Source: TxDOT, Travis County

6.0 BENEFITS AND RESULTS

An overview of improvement benefits is provided by project type. The projects are categorized as roadway, bicycle and pedestrian, transit, and safety.

- Roadway Improvement Benefits:
  - Two-way left-turn lane: Reduces the risk of rear-end collisions.
  - Additional lanes: Reduce congestion in the peak periods.
  - Superstreet (non-traditional intersection): Improves traffic operations on congested arterials.
- Bicycle and Pedestrian
  - Sidewalks and shared use Paths: Improves safety for pedestrians.
  - Pedestrian-Actuated Traffic Signal: If warranted, improves the safety of pedestrians crossing a major intersection.
  - Cycle Tracks: Provides a physical barrier from vehicular traffic.
- Transit
  - Improving transit service would ultimately reduce traffic congestion. A service transition plan is in development in coordination with TxDOT, FTA, Capital Metro, and CARTS.
- Safety
  - Traffic Signals: Provide a safe gap in the traffic flow on FM 969 during peak periods.
  - Rumble Strips: Alerts drivers on ramps.
  - Flashing Lights: Improves visibility at stop signs.
  - Safety Lighting: Improves visibility at night.

7.0 IMPROVEMENT IMPLEMENTATION COSTS AND STRATEGIES

Conceptual level cost estimates were prepared for the various short- and long-term improvements. Unit prices were derived from TxDOT Austin District average bid prices (as of December 2011) with adjustments made for the relative size of each improvement. **Table 2** provides the summary costs for each of the conceptual improvements. Those

TABLE 2 – FM 969 Preliminary Roadway Project Cost Projection

Project Cost Summary:				
Section:	**Limits:**	**Short Term**	**Long Term**	**Ultimate Cost**
District 1	US 183 to SH 130	$5,593,000	$63,056,000	$68,649,000
District 2	SH 130 to Dunlap	$2,161,000	$15,139,250	$17,300,250
District 3	Dunlap to SH 130	$-	$25,260,750	$25,260,750
Project Cost TOTAL:		**$7,754,000**	**$103,456,000**	**$111,210,000**

NOTE: Unit prices were derived from TxDOT Austin District average bid prices in 2011$. The Engineer has no control over the cost of labor, materials, equipment, or over the contractors methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinion of probable costs.

improvements recommended for implementation are shown in bold text. Conceptual layouts for the long-term improvements are provided in **Appendix I**. Supporting cost information is provided in **Appendix J**.

In today's funding realities it will take several government funding sources to implement the recommendations for the FM 969 Corridor. Traditional federal, State, and local funding sources are among the most attractive alternatives for financing a variety of transportation projects. The traditional funding sources described below include the pertinent sources available from the U.S. Department of Transportation, State and local sources. A more thorough listing of funding sources is provided in **Appendix I**.

- U.S. Department of Transportation Funding Sources
- Federal Highway Administration
- Federal Transit Administration
- Local Funding Sources
- Innovative Financing

8.0 NEXT STEPS

The adoption of the FM 969 Corridor Development Plan by the City of Austin represents the first step to fulfilling the goals of the study. It is also imperative that Travis County and TxDOT begin the coordination process for the FM 969 County Pass-Through Financing. The next steps toward implementation of the FM 969 Corridor Development Plan include:

- Identify and prioritize short-term projects
  - Identify the funding sources
  - Consider them in the city bond fund during the next bond cycle
- Development of a Neighborhood plan for the FM 969 corridor that merges previous planning efforts
- Priority long-term projects
  - Identify funding sources
- Continue with the ongoing public involvement process
- Continue the study of future transit options and opportunities
- Development of a long-term vision beyond the city limits through interagency coordination

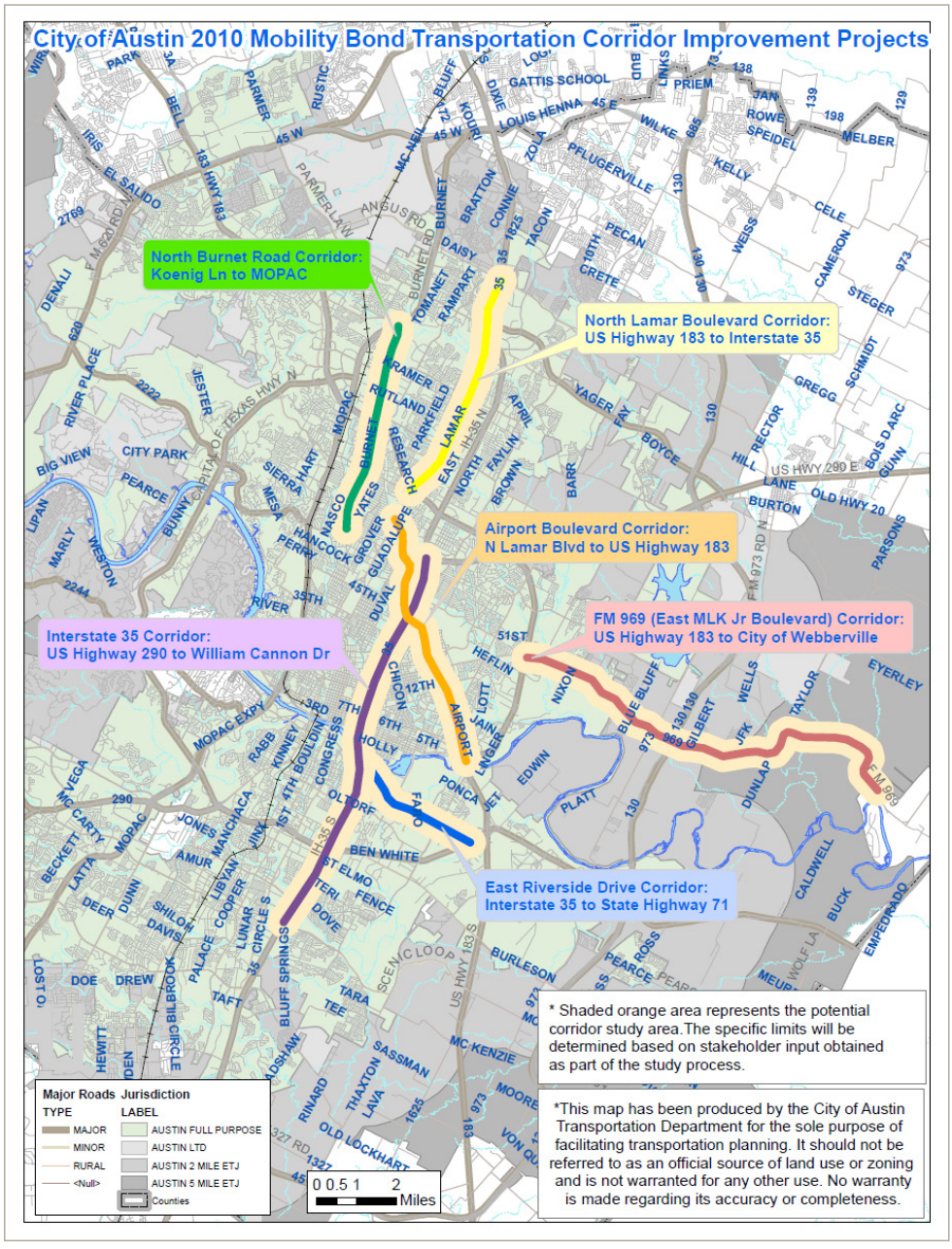
1.0 INTRODUCTION

1.1 PROJECT PURPOSE AND GOALS

On November 2, 2010, Austin voters approved a $90 million bond package intended to fund road, bicycle, pedestrian, and transit improvements throughout Austin. The City of Austin Mobility Corridors Development Program was initiated under this bond package to develop strategies to improve safety, mobility, and quality of life along five corridors identified in the bond package. The five roadway corridors are listed below and their locations are shown in **Figure 1** – City of Austin Mobility Corridors Development Program Map.

- Airport Boulevard (North Lamar Boulevard to US 183)
- East Riverside Drive (IH 35 to US 71)
- FM 969 (US 183 to Webberville)
- North Lamar Boulevard (US 183 to IH 35)
- North Burnet Road (Koenig Lane to MoPac Expressway)

FIGURE 1 – City of Austin Mobility Corridors Development Program Map



Source: City of Austin, 2011.

Project Purpose

Identify short- and long-term projects to address anticipated needs through 2025.

Project Goals

- Improve safety;
- Increase mobility and accessibility for drivers, pedestrians, bicycles, and transit users;
- Improve quality of life for the roadway users and neighbors of the FM 969 corridor; and
- Accommodate future growth.

East Austin and eastern Travis County have been identified as a desired growth area[1] and are poised for substantial growth over the coming decades based on the number and size of planned residential and mixed use developments. The FM 969 Corridor Development Program determined the 1) future transportation impacts of additional development in the area served by FM 969 and identified a range of projects, policies, and/or services to improve mobility and safety in the corridor.

1.2 PROGRAM PARTNERS

The City of Austin funded the development program and partnered with other stakeholder agencies such as Texas Department of Transportation (TxDOT), Capital Area Metropolitan Planning Organization (CAMPO), Travis County, and Capital Metropolitan Transportation Authority (Capital Metro) to determine the relationship between planned projects and those that would be proposed.

The City of Austin Transportation Department retained a team of consultants led by URS Corporation that included Alliance Transportation Group (ATG), Beverly Silas Associates (BSA), CAS Consulting and Services, McCann Adams Studio (MAS), MWM Design Group (MWM), and Pape-Dawson Engineers, Inc. (PDE).

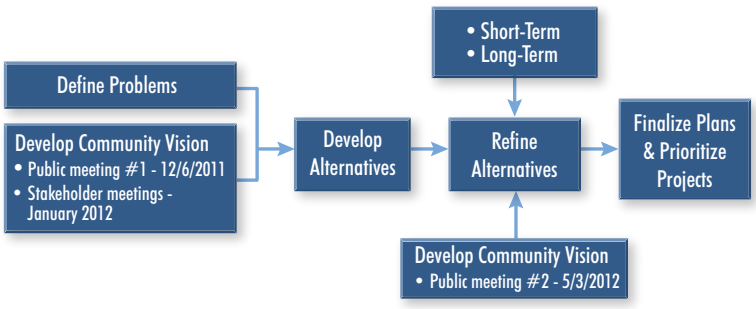
1.3 PROGRAM PROCESS

The FM 969 Corridor Development Program was initiated in October 2011. The team collected data in order to assess existing and current conditions/needs within the corridor, as well as outcomes and recommendations identified in previous studies. The first public meeting was held on December 6, 2011 to introduce the project to the public, to provide the results of the existing conditions analysis, to show the planned future developments in the study influence area, and to obtain input on corridor issues and concerns.

Stakeholder meetings were then held in January 2012 to obtain input from smaller groups of public agencies and corridor users. Public input and the existing conditions analysis were incorporated into the evaluation and development of improvements designed to mitigate any identified mobility issues. The second public meeting was held on May 3, 2012 to obtain feedback on proposed recommendations.

Figure 2 provides a graphic representation of the analysis process.

FIGURE 2 – FM 969 Corridor Analysis Process



[1] *Imagine Austin. City of Austin, Texas, 2012.*

The FM 969 Corridor Development Program included the following elements:

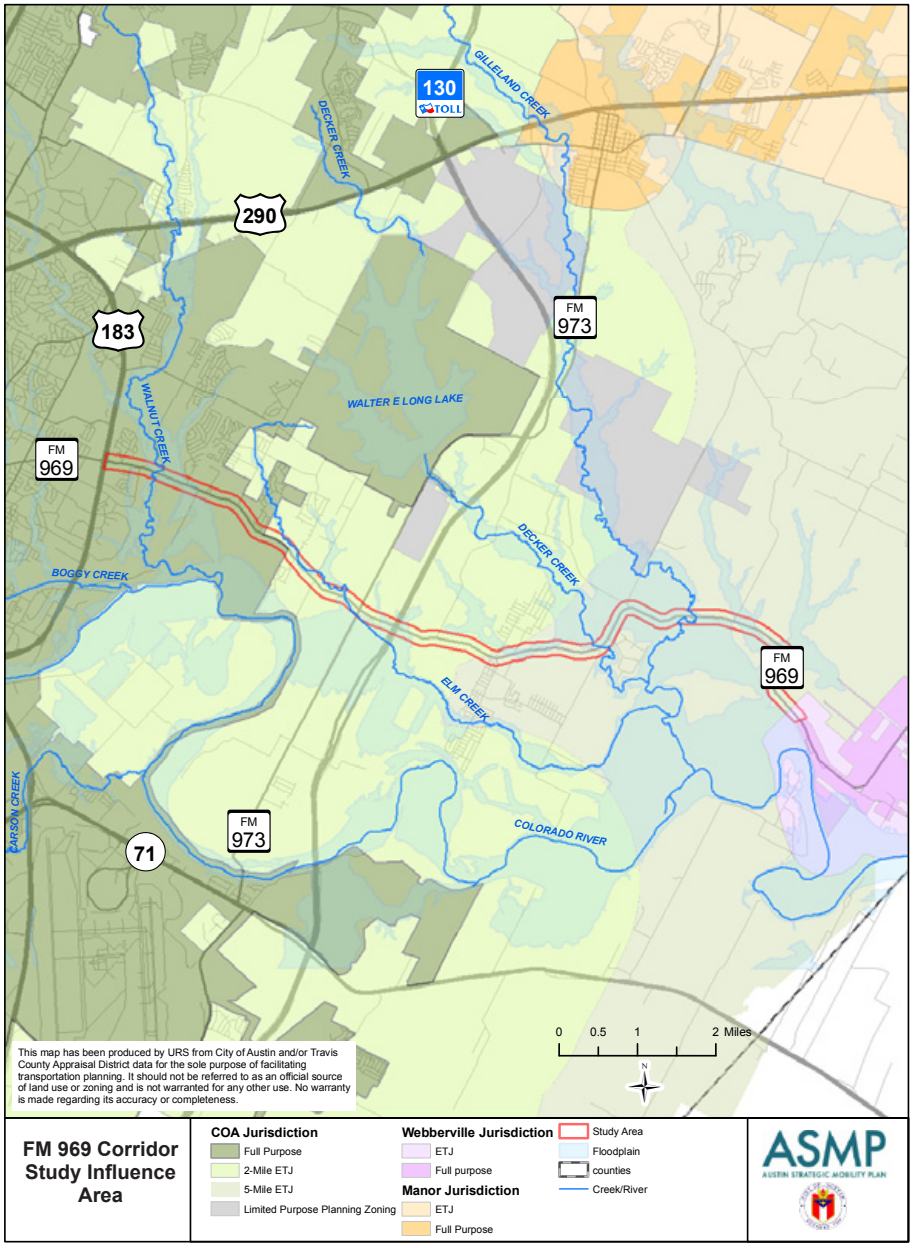
- Collecting data and assessing current conditions in the corridor and planned developments within the study influence area;
- Analyzing the FM 969 corridor to identify key issues and needs and defining the community vision for this corridor through public and stakeholder outreach;
- Defining and prioritizing short-term solutions (typically those that can be implemented in the existing rights-of-way). These could include changes to intersections, medians, signals, sidewalks and bicycle lanes, transit service, and more;
- Defining, costing and evaluating long-term solutions, which generally involve redesigning and rebuilding the current roadway; and
- Identifying and recommending short- and long-term solutions, including changes to ordinances and policies, land-use planning, and improved ways to manage traffic and mobility.

1.4 FM 969 CORRIDOR

1.4.1 Corridor Area Definition

The FM 969 corridor covers approximately 10.9 miles from U.S. Highway 183 to the Webberville city limit. This corridor is only one of three east-west arterial corridors that extend from IH 35 in Austin to Bastrop County. Portions of the corridor fall within the Austin city limits as well as the City's five-mile extra-territorial jurisdiction (ETJ). The area of influence shown in **Figure 3** is bounded by the Bastrop County Line to the east, US 183 to the west, US 290 on the north, and SH 71 on the south, all major highways

FIGURE 3 – FM 969 Study Influence Area



that serve eastern Travis County residents. Signalized cross-streets listed from west to east are:

- US 183,
- Craigwood Drive,
- Johnny Morris Road,
- Decker Lane (FM 3177),
- Imperial Drive,
- FM 973,
- Gilbert Road,
- Hound Dog Trail, and
- Hunters Bend Road.

1.4.2 Corridor and Study Influence Area Characteristics

A variety of land uses are located along the corridor, including commercial, residential, institutional, and industrial. The pattern of land uses along the corridor is fragmented, with large tracts of publicly-owned land (such as Walnut Creek Wastewater Treatment Plant [WC WWTP] and Travis State Jail), partially developed residential subdivisions (such as Agave, The Park at Woodland Hills, and Austin's Colony), resource extraction sites, and agricultural and pasture land.

Within the study influence area lies 85,129 acres of land, with a total population of 45,284 (2010 U.S. Census). By the year 2035, the population is projected to increase to over 113,000 people. The majority of current residents are of Hispanic origin, with African-Americans being the second largest ethnic group. The average median household income in 2008 was $41,072.[2]

The corridor currently has numerous mobility and safety issues that potentially impact motorists, bicyclists, pedestrians, and transit users. Key issues identified within the corridor include:

- Traffic congestion during peak hours;
- Limited transit service;
- Lack of adequate bicycle/pedestrian facilities;
- Drainage issues, such as flooding at stream crossings; and
- Traffic crashes.

As the corridor continues to develop and grow, these issues likely will worsen, creating the need for multimodal solutions that improve and preserve the quality of life for residents along the corridor.

[2] *Manor Expressway Investment Grade Traffic and Revenue Study. Central Texas Regional Mobility Authority, 2011.*

2.0 COMMUNITY OUTREACH

2.1 OUTREACH ACTIVITIES

2.1.1 Outreach Strategy

The FM 969 Corridor Development Program team provided open, proactive communication by engaging the public in the decision-making process for improvements. The objectives for public involvement included:

- Providing users, neighbors, property owners, and other direct stakeholders within the corridor with ample opportunities to contribute their input to help shape the results of the corridor development program;
- Ensuring that traditionally underrepresented and hard-to-reach populations have the opportunity to be included in the corridor evaluation process;
- Maintaining communication and outreach between the corridor development program team and other transportation providers, government agencies, and key public and private partners; and
- Communicating and enabling opportunities for citizen input through engagement and outreach strategies.

A public outreach strategy was developed to allow for effective dissemination of updated project information, as well as providing ample opportunities to interested citizens to participate in project discussions. Outreach activities included stakeholder meetings, public meetings, and print and electronic communication materials. Stakeholder outreach involved targeting activities to specific and defined individual stakeholders and groups of stakeholders, such as neighborhood groups, business groups, adjacent property owners and elected officials. Public meetings were programmed to emphasize the interests and needs of the general public living along the FM 969 corridor. Print and electronic communication materials, such as the project website, electronic newsletters, and fact sheets, provided updates to both general and specific audiences. The Public Involvement Plan is provided in **Appendix A**.

2.1.2 Environmental Justice

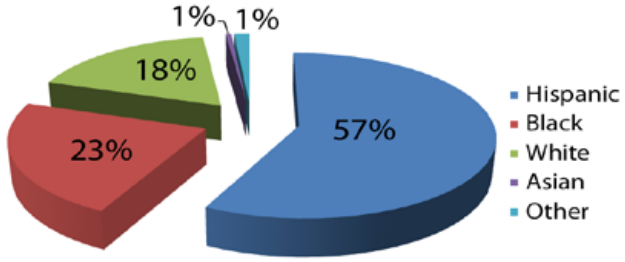
Environmental justice (EJ) is a term used to describe the evaluation of the impacts of federally-funded projects and programs on minority and low-income populations to comply with policy objectives provided in Executive Order 12898 issued in 1994. The analysis is typically performed to determine if there is a disproportionate impact by the federal action on minority and low-income residents. While city bond funds were used for the FM 969 Corridor Development Program, individual projects may be implemented with federal funds.

2.1.2.1 Demographics

Figure 4 shows the demographic distribution from the 2010 U.S. Census for the study influence area.

Typically, participation in public involvement activities is lower for minority and low-income residents for roadway projects. To mitigate this

FIGURE 4 – Racial and Ethnic Distribution



Source: U.S. Census, 2010.

trend, all three school districts within the corridor – Austin, Del Valle, and Manor Independent School Districts (ISD) – were contacted to inform them of the project and the public meetings. The team also attended Manor ISD and Del Valle ISD trustees board meetings in November 2011.

Bilingual backpack flyers were provided for distribution to every child on nine public school campuses that serve the FM 969 corridor. The backpack flyer shown in **Figure 5** was distributed in November 2011 to announce the first public meeting on December 6th. The schools included:

Austin Independent School District

- Jordan Elementary School
- Overton Elementary School
- Garcia Middle School
- LBJ Early College High School

Del Valle Independent School District

- Gilbert Elementary School
- Hornsby-Dunlap Elementary School
- Dailey Middle School

Manor Independent School District

- Bluebonnet Trail Elementary
- Decker Elementary
- Oak Meadows Elementary School
- Decker Middle School

Information on the public meeting was also emailed to KIPP Austin College Preparatory School and Austin Discovery School, both of which are located at FM 969 and Decker Lane.

2.1.2.2 Income

EJ analysis for low-income compares the number of households at or below an established benchmark to the total number of households in a geographic area.

FIGURE 5 – Backpack Flyers Sent to Students in November 2011

Typically for federally funded projects, the national poverty level is used. For an EJ analysis performed in 2010[3] CAMPO also considered the number of households at or below 80% of the median county income.

The median income for Travis County is $53,326 based on the 2008-2010 American Community Survey 3-year estimates.[4] Using the CAMPO benchmark of 80% of the county median income, low-income households would be defined as those below $42,661. The median household income for the study influence area is $45,847 in 2010 dollars.[5]

2.2 PUBLIC MEETINGS

The corridor development program team held public meetings to involve the community into the decision-making framework and to inform them of the planned developments within the FM 969 corridor. The first public meeting was held on Tuesday, December 6, 2011 at the Center for Child Protection, at 8509 FM 969. The second public meeting was held on Thursday, May 3, 2012 at the

[3] *Capital Area Metropolitan Planning Organization, 2010, Regional Toll Network Analysis.*

[4] *U.S. Census, 2010, American Fact Finder,* http://factfinder2.census.gov/rest/dnldController/deliver?_ts=357488607438, *accessed 6/11/2012.*

[5] *Manor Expressway Investment Grade Traffic and Revenue Study, CTRMA , 2011.*

Travis County East Service Center located at 6011 Blue Bluff Road.

2.2.1 Public Meeting No. 1

The first public meeting provided a 30-minute open house followed by a presentation, allowing attendees to review display boards and maps and present issues and concerns. Alan Hughes from the City of Austin Transportation Department presented the project overview, goals, and key elements of the corridor development program, existing conditions, and key issues. The meeting was structured to gain an understanding of community vision and developing and prioritizing short-term, medium-term, and long-term solutions. The presentation also identified key issues and mobility and safety concerns within the FM 969 corridor, which include the following:

- Congestion between US 183 and Decker Lane;
- Limited transit facilities/ service;
- Lack of adequate bicycle/pedestrian facilities;
- Traffic safety;
- Drainage and flooding at stream crossings;
- Addition of green space and parks; and
- Effect of future developments and plans within the corridor, including the Colorado River Corridor Plan and future transportation plans.

2.2.2 Public Meeting No. 2

The second public meeting discussed the FM 969 Corridor Development process, key issues identified from the first public meeting, planned improvements to the corridor under the Travis County Pass Through Finance (PTF) Project, and proposed projects identified during this planning effort. The meeting format was an open house to share exhibits and converse one-on-one with attendees. A simulation of the non-traditional intersection design at Decker Lane (FM 3177) was running on a continuous PowerPoint loop.

2.2.3 Public Meeting Summary

After both public meetings, the attendees were engaged in a discussion about their concerns for the FM 969 corridor. A summary of their input and concerns are described in **Table 1**. Full responses for both questionnaires are listed in **Appendix A**.

FIGURE 6 – Public Review of Poster Boards at Stakeholder Meeting

TABLE 1 – Summary of Findings from Public Meeting Questionnaires

Public Meeting #1
■ Generally identified automobile, transit, pedestrian, and bicycle as issues within the corridor. In particular, the left turn at Regency Drive / FM 969 is problematic, and Capital Metro Route 323 is difficult to use for transit to Central Austin.
■ Suggested adding additional park and ride stations, lights to slow traffic, shoulder improvements, and parks, sidewalks, walking, and hike/bicycle trails. FM 969 past Decker Lane to SH 130 was identified as a possible location for a future hike/bicycle trail.
■ Suggested expanding transit routes and opportunities through the corridor, particularly from Craigwood to Decker or Loyola route in a circle by way of Decker Lane / FM 969, and adding public entry to park land at Trevino Jr. / Morrison Ranch. Identified need for additional retail / food outlets, grocery stores, and family-friendly locales, as well as additional driving lanes, and middle turning lanes throughout the corridor.
■ Pedestrian improvements along US 183 to SH 130 was generally identified as a short-term goal.
Public Meeting #2
■ Constructing a bicycle lane and sidewalks between US 183 and Decker Lane, a hike/bicycle path between Gilbert Lane and Hound Dog Trail, and intersection improvements at Decker Lane (FM 3177) and Hunters Bend Road were all identified as potential priority near-term projects.
■ Identified intersection at Hornsby Bend / FM 969 as potential location for safety lighting.
■ If given the chance to spend $100,000 on only one additional improvement within the FM 969 corridor, half of the respondents identified adding sidewalks and crosswalks between US 183 / Decker Lane.
■ Most supported idea of planning for a future walkable retail area between Gilbert Road and Hunters Bend / Delta Post Road.
■ Gilbert Road/ FM 969 intersection causes the most AM connectivity issues along the corridor, since drivers are hesitant to use the shoulder to turn right into school; suggested adding right turn lane to reduce confusion and congestion.
■ Requested extending Capital Metro service beyond Johnny Morris Road to Decker Lane or further.

2.3 STAKEHOLDER MEETINGS

As part of the public outreach effort, the FM 969 Corridor Development Program team held five stakeholder meetings. Each meeting focused on a particular topic involving stakeholders with similar interests, including transportation stakeholders, utility stakeholders, neighborhood stakeholders, developers, business, and land planners stakeholders, and school stakeholders. Each meeting is briefly described below, and summarizes key stakeholder findings.

2.3.1 Transportation Stakeholders

The transportation stakeholder meeting held on January 10, 2012, included representatives from Capital Metro, Austin ISD transportation services, League of Bicycling Voters (now Bike Austin), Travis County, and the City of Austin. The stakeholder meeting focused primarily on multimodal improvements to the FM 969 corridor.

2.3.2 Utility Stakeholders

The utility stakeholder meeting, held on January 10, 2012, included representatives from Time Warner Cable, Austin Water, AT&T, Bluebonnet Electric, and Texas Gas Service. The meeting informed the stakeholders about the utility impacts of possible improvement projects. The meeting revealed that all stakeholders present, except Bluebonnet Electric, are likely to be affected by corridor improvements from the current development program or prior committed projects. For budgeting and construction purposes, the utility companies would prefer notice of impacts a year in advance due to costly adjustments and relocations.

2.3.3 Neighborhood Stakeholders

The neighborhood stakeholder meeting, held January 10, 2012, included representatives from Austin's Colony, Imperial Valley, University Hills, and Blacklands neighborhood associations. The stakeholders discussed the challenges that communities relying on the FM 969 corridor experience.

2.3.4 Developers, Businesses, and Land Planners Stakeholders

The developers, businesses, and land planners stakeholder meeting held on January 11, 2012 included representatives from Rainbow Septic and Bosse & Associates, representing TXI's planned Rio de Vida mixed use development. This meeting focused primarily on the specifics of the Rio de Vida community planned around the interchange of Harold Green Road and SH 130. Other general comments focused on traffic shifting to FM 969 from US 290 and SH 71 and discussion of heavy trucks on FM 969.

Future developments discussed include a multimodal transit center planned at the intersection of FM 973 and Harold Green (Park and Ride) for Rio de Vida.

2.3.5 School Stakeholders

The school stakeholder meeting held on January 18, 2012 included representatives from Austin Discovery School, Gilbert Elementary, Garcia Middle School, KIPP Austin College Preparatory School, Dailey Middle School, and Manor ISD. This stakeholder meeting focused mainly on the safety of students and parents due to traffic on FM 969 and improvements needed near schools.

2.3.6 Stakeholder Summary

Table 2 summarizes key findings from all stakeholder meetings.

2.4 PUBLIC INVOLVEMENT SUMMARY

Both public meeting attendees and stakeholders were generally concerned about pedestrian/bicycle safety due to lack of adequate facilities along the corridor, and safety of school children walking and riding their bicycles to school. They also highlighted the need for a more functional transit service for the corridor, though Capital Metro noted that the transit is not compatible with the corridor's high speeds, lack of sidewalks, areas of low ridership potential, and places for buses to turn around. Additionally, the Capital Metro service area extends to the Austin city limit, which is currently Decker Lane (FM 3177). If Austin annexes the area to the east, Capital Metro's service area can be revised accordingly. Stakeholders also highlighted areas within the corridor with particularly high traffic density or dangerous driving habits, along with specific intersections that possibly need traffic signal installations or improvements in the future.

TABLE 2 – Stakeholder Meeting Key Findings

Stakeholder	Conclusions/Recommendations
Capital Metro	■ Desires to have transit service within the limitations of their service area, but corridor currently lacks have sufficient density for service; transit is not compatible with corridor's high speeds, and lack of sidewalks, areas of low ridership potential, and places for buses to turn around. ■ Need for sidewalks and crosswalks between US 183 and Craigwood Drive. ■ New traffic signal at FM 969 and Sendero Hills Parkway would open possibility of better transit service.
League of Bicycle Voters (Bike Austin)	■ High speed nature of roadway impedes bicyclists' safety. ■ Suggest implementing bicycle/pedestrian trails parallel to roads rather than providing on-street amenities.
Austin Water	■ Funding to move a 12-inch sludge main will not be available until 2019 based on projected funding through 2018.
Neighborhood	■ Suggested improvements include safety lighting at intersection of FM 969 and FM 973. ■ Bicycle/pedestrian facilities separate from FM 969. ■ Pedestrian crossing at Regency Drive. ■ Alternative routes parallel to FM 969 east of SH 130. ■ Recreational facilities for neighborhoods. ■ Peak hour transit service to Austin's Colony. ■ Add rumble strips in advance of stop signs on SH 130 ramps.
Schools	■ High volume of traffic due to limited arterial access is problematic. ■ Austin's Colony community has access issue since there is only one ingress/egress. ■ Risky turning onto FM 969 due to excessive traffic at SH 130 and lack of adequate gaps in traffic; traffic signals a necessity at this location. ■ School traffic pattern changed with opening of Gilbert Elementary. ■ Traffic patterns may change again when future Manor ISD campuses open.
General	■ Desire transit service within corridor. ■ General concern over safety (trucks, high speed, and students walking/riding bicycles to school). ■ Propose new river crossing east of SH 130 to provide an alternative route of access for mining trucks. ■ Subsurface utilities engineering would be beneficial. ■ A future sewer plant is anticipated on city-owned land where the solar farm has been built.

3.0 EXISTING CORRIDOR CONDITIONS

3.1 LAND USE

East MLK, Jr. Boulevard/FM 969 extends more than 25 miles from Congress Avenue, along the north edge of the State Capitol in downtown Austin, to SH 71 west of the City of Bastrop. TxDOT's jurisdiction begins at Airport Boulevard (SL 111). The character of the 10.9-mile corridor extending from US 183 to Webberville, varies significantly from urban development within Austin's city limits to agricultural land use in the ETJ. The western portion of the corridor near US 183 is more urban and developed. The land use transitions to primarily rural residential and agricultural use east of Taylor Lane.

The corridor retains common characteristics throughout, including a lack of pedestrian and bicycle facilities, relatively high truck volumes, and a significant amount of undeveloped and agricultural land adjacent to the roadway.

Estimates of future land uses for the FM 969 corridor were prepared to provide demographic inputs for the travel demand forecasting within the study influence area (see **Appendix B**). The data collection analysis considered existing land uses, emerging projects within the study influence area (as of April 2011), properties not likely to develop (i.e., all land within the 100-year floodplain, properties in or projected to be used for resource extraction over the next 15 years, publicly owned parcels and public utilities, and existing and planned parks and open spaces), and developable land.

3.2 MAJOR DEVELOPMENT

Land use along FM 969 is a mix of commercial and residential. While the larger commercial tracts adjacent to FM 969 include Travis State Jail, WC WWTP, the City of Austin's solar farm near Webberville, and Dryden Airport (private), there are other large facilities that indirectly access FM 969. These businesses include BAE Systems near US 183 and aggregate mining operations on FM 973 and near Webberville.

The FM 969 corridor serves several large existing subdivisions both inside the Austin city limits and in the ETJ. Detailed information about existing and planned major residential developments is provided in **Section 3.3, Character Districts**.

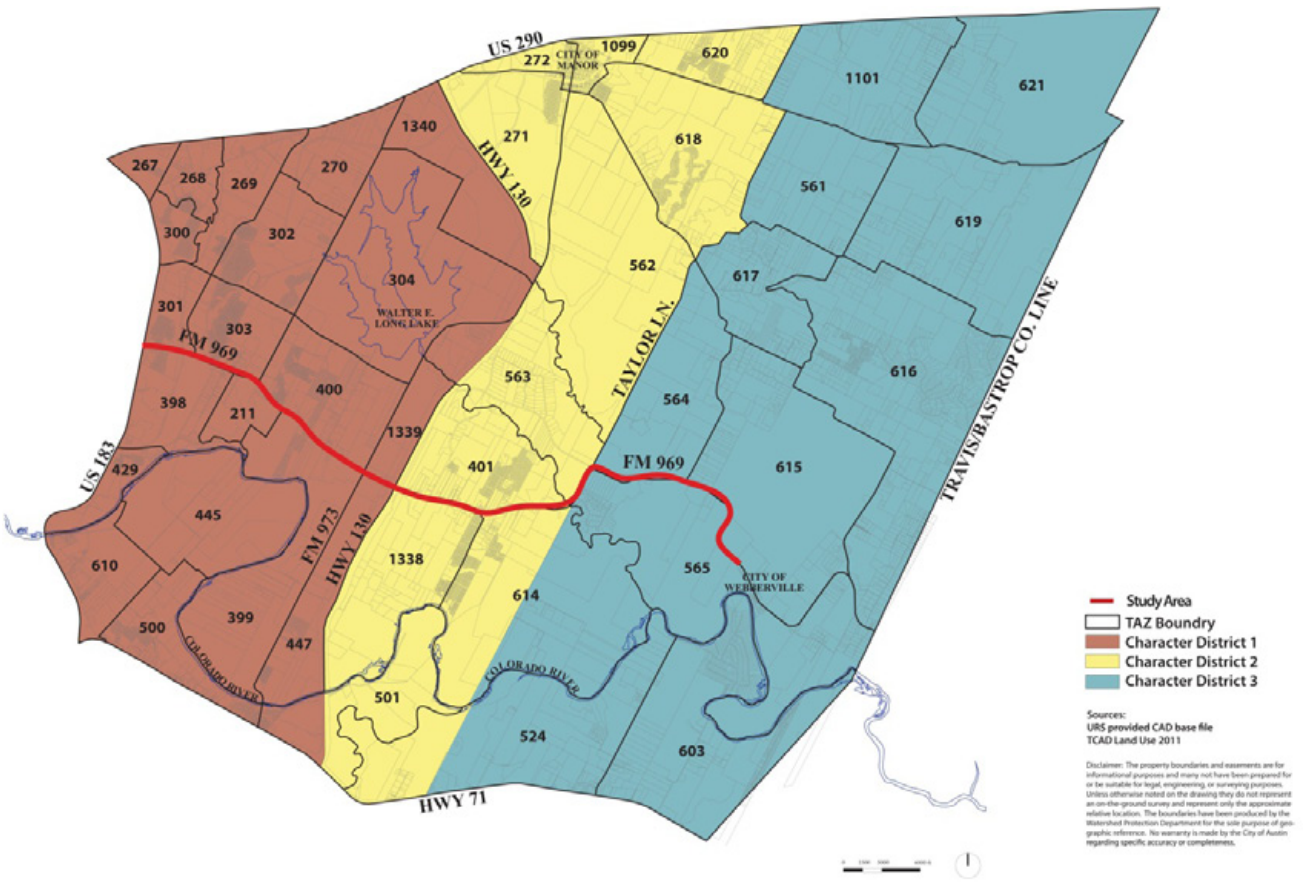
3.3 CHARACTER DISTRICTS

In order to evaluate potential changes in land use, the study influence area was divided into three character districts as shown in **Figure 7**.

- Character District 1, Exurban Highway (US 183 to SH 130)
- Character District 2, Rural Village Roadway (SH 130 to Dunlap Road)
- Character District 3, Country Road (Dunlap Road to Webberville)

The character district boundaries were defined with respect to the traffic analysis zones (TAZ) in CAMPO's travel demand model for the year 2035 to facilitate the input of updated demographic information derived from the future land use analysis described in **Chapter 4, Future Characteristics**.

FIGURE 7 – Depiction of Character Districts in Relation to FM 969 Corridor



Characteristics and representative developments of each district are described in more detail in the following sections.

3.3.1 Character District 1, Exurban Highway (US 183 to SH 130)

Exurban highways reflect a pattern of development that includes a significant amount of vacant and undeveloped land mixed with small pockets of auto-oriented commercial development, small and large-lot residential, and civic and institutional uses. An example of a civic/institutional uses along the FM 969 corridor is the former Travis State School property that now includes a variety of non-profit uses, such as the Center for Child Protection, KIPP Austin College Preparatory School and Austin Discovery School.

Although new development is planned near and on the corridor, the existing character of this district is that of an exurban highway, in contrast with typical patterns of suburban and urban development that can be found along major arterials within the city. The roadway lacks curbs, gutters, sidewalks and bicycle lanes, and is lined with drainage ditches and overhead power lines. Driveways to single-family residential, commercial, and industrial parcels occur frequently along this segment of the corridor.

Approximately 4,300 acres of undeveloped land is within this district, which represents over 19% of the developable land within the overall study influence area. The district has approximately 1,100 undeveloped single-family lots within existing subdivisions, and the potential for another 14,000 residents and 19,000 employees in future

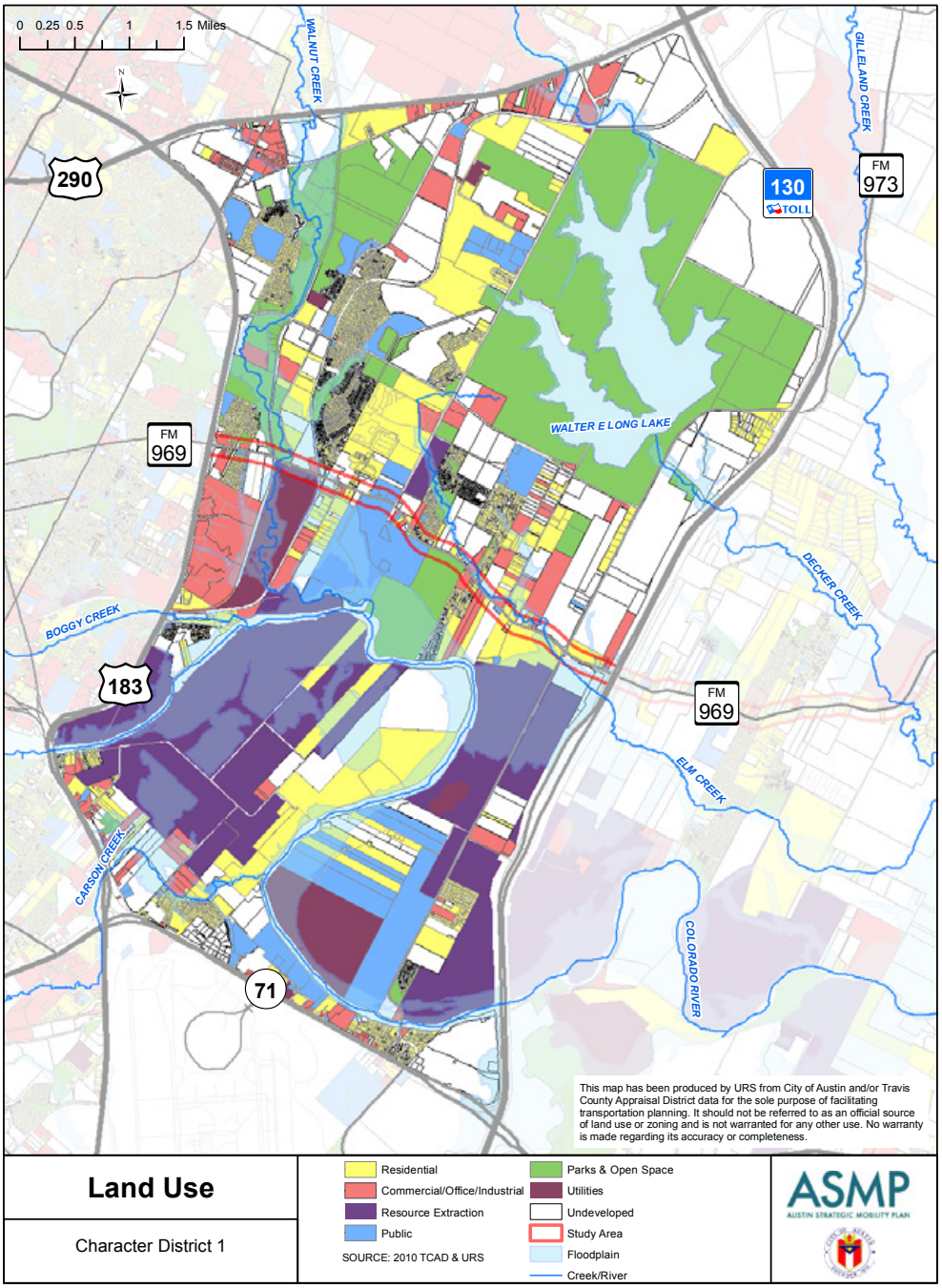
developments including Interport, Wild Horse Ranch, Indian Hills, Rio de Vida, and Colony Park. Land use for Character District 1 is depicted in **Figure 8**.

Major developments within Character District 1 are listed in **Table 3**.

3.3.2 Character District 2 – Rural Village Roadway (SH 130 to Dunlap Road)

East of SH 130, FM 969 is traversing agricultural and large-lot residential uses. The agricultural character of this stretch of FM 969 is interrupted by a fine-grained village fabric between Hound Dog Trail and Hunters Bend Road. Along this 1,700-foot stretch of FM 969, small-scaled retail, office, and civic uses front the street, including several churches and an elementary school. However, like the other character districts in the corridor, there are no sidewalks or bicycle lanes.

FIGURE 8 – Land Use Within Character District 1



Development intensity within this district is expected to increase as Austin's Colony continues to grow and as future planned developments, such as Whisper Valley Ranch to the north and Rio de Vida to the south, are constructed.

Fifteen of sixteen emerging development projects are located in this district, representing more than 8,000 acres of land with the potential for 40,000 new residents and 18,000 new employees. Additionally, approximately 4,700 acres of undeveloped and un-zoned land are potentially available for future

TABLE 3 – Major Developments within Character District 1

Existing Residential Developments	
Oak Forest RV Park	Thunderbird Village
Colony Meadows	The Woodlands
Las Cimas	Imperial Valley
Carson Creek	Colony Park
Knollwood on the Colorado River	Park Place
Richland Estates	Meadows at Trinity Crossing
Commercial Developments	
Austin Motorsports	Bluestein Shopping Center
Industrial	
Railroad	Old Mining Sites
Schools	
KIPP Austin College Preparatory School	Oak Meadows Elementary School
Austin Discovery School	Decker Elementary and Middle School
Garcia Middle School	Overton Elementary School
Lyndon B. Johnson Early College High School	Jordan Elementary School
Parks and Recreation	
Big Walnut Creek Reserve	Colony Park
Davis White Northeast District Park	Austin Tennis Center
Northeast Park	Bluebonnet Hill Golf Course
Daffin Gin Park	Cardinal Stadium
Walter E. Long Lake	Luedecke Arena
AISD ballfields	East Communities Branch YMCA
Burr Field (rugby)	Wilhelmina Delco Center
Henry Penick Golf Campus	Austin Hindu Temple and Community Center
Civic	
Travis County Starflight	Hornsby Cemetery
Oakcrest Manor Nursing Home	Dryden Airport
Walnut Creek Wastewater Treatment Plant	

Note: Table compiled from City of Austin and Travis County data..

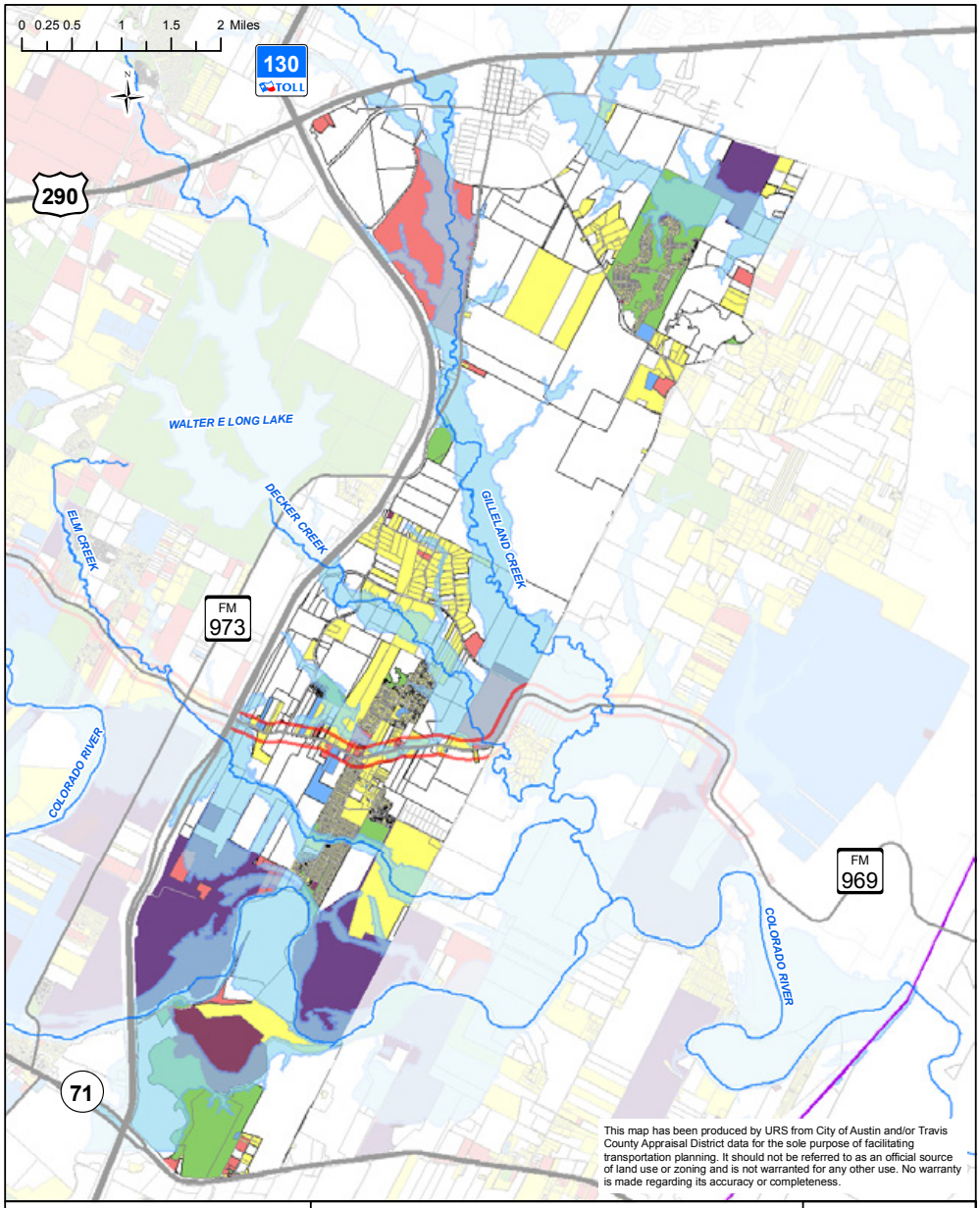
development within the district. Land use for Character District 2 is depicted in **Figure 9**.

Major developments within Character District 2 are listed in **Table 4**.

3.3.3 Character District 3 – Country Road (Dunlap Road to Webberville)

East of Dunlap Road there is little development along the right-of-way (ROW). The dominant character is that of rolling pastureland interrupted only by vegetation along property lines and creek

FIGURE 9 – Land Use Within Character District 2



corridors making their way to the Colorado River to the south. Land uses include farmland, ranches, large lot single-family homes, and the City of Austin's solar energy farm. Gravel mining operations occur on several large properties south of the corridor, which generate significant truck traffic. Apart from the numerous trucks on the road, the actual mining activity is largely out of view.

The district has over 14,000 acres of undeveloped and un-zoned land with potential for future development, representing more than 60% of the undevelopable land within the study influence area. However, this district is expected to remain largely undeveloped over the next 25 years, as there are no significant planned or proposed projects. The City of Austin's Comprehensive Plan (*Imagine Austin*) promotes the preservation of agricultural land in this district. Land use for Character District 3 is depicted in **Figure 10**. Facility and parks located within Character District 3 are listed in **Table 5**.

3.4 ROADWAY CHARACTERISTICS

In general, FM 969 has four travel lanes between US 183 and FM 973 and two travel lanes east of FM 973, with utilities crossing and along both sides

TABLE 4 – Major Developments within Character District 2

Existing Residential Developments	
Wildhorse Creek	Hamilton Point
Decker Creek Estates	Hornsby Bend
Trinity Hill	Forest Bluff
Austin's Colony subdivision	Kennedy Ridge Estates
Twin Creek Meadows	Plan View Estates
Lambert Estates	
Industrial	
Old Mining Sites	Storage
Schools	
Manor Excel High School	Hornsby-Dunlap Elementary School
College Forward	Dailey Middle School
Blake Manor Elementary School	
Parks and Recreation	
Crowes Nest Farm Animal Life Center	Austin's Colony Park
Southeast Metropolitan Park	
Civic	
Manor Library	St. Joseph's Catholic Church
Manor Fire Department	South Austin Regional Wastewater Treatment Plant
Jones Cemetery	

Note: Table compiled from City of Austin and Travis County data.

TABLE 5 – Land Use within Character District 3

Industrial	
Old and new mining sites	
Parks and Recreation	
White Fences Horse Riding Camp	Webberville Park
Little Webberville Park	
Civic	
Mark Houston Recovery Center	City of Austin Solar Energy Farm
Various cemeteries	

Note: Table compiled from City of Austin and Travis County data.

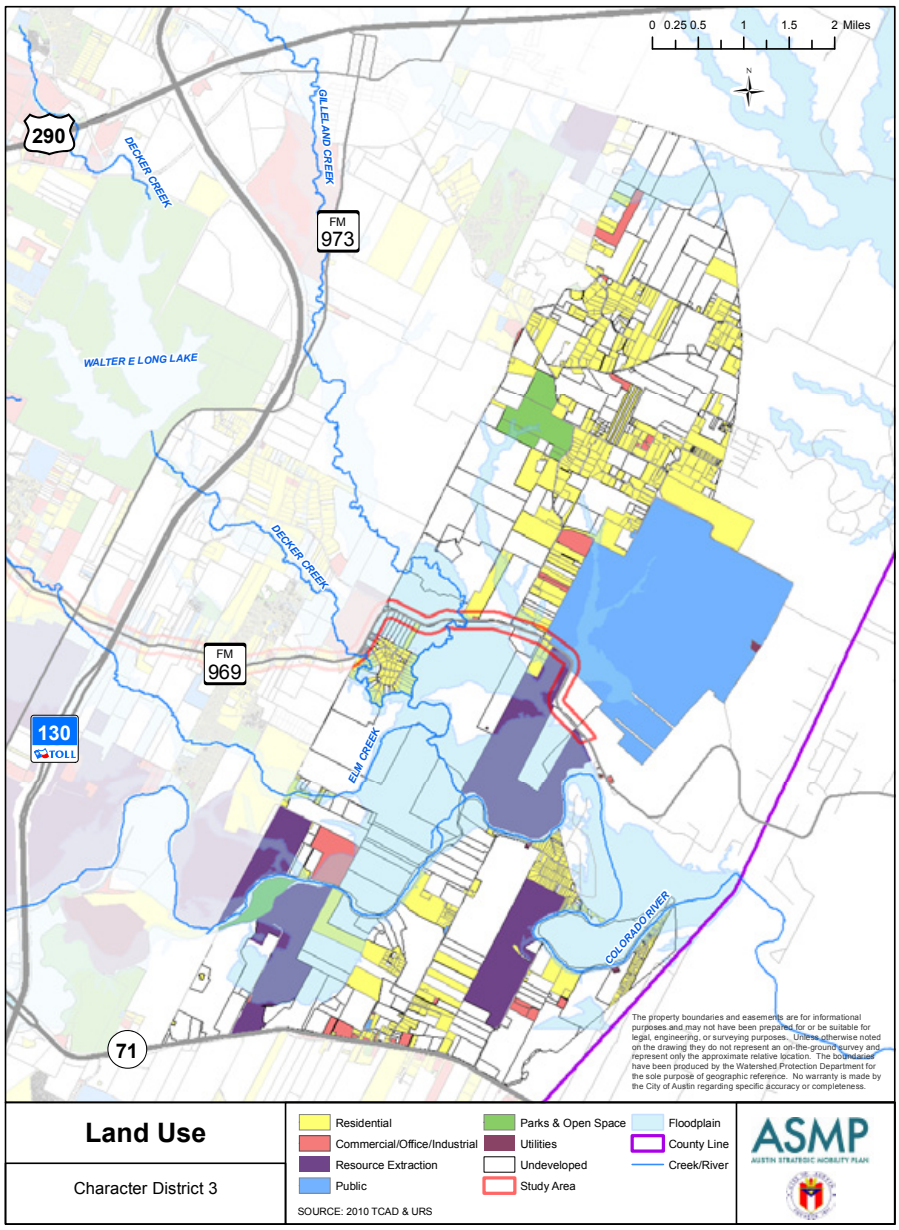
of the roadway. The locations of two-way left-turn lanes and/or turn bays vary along the corridor. **Table 6** provides information on existing ROW width from US 183 to Webberville. The specific roadway configuration within each character district is provided in **Section 3.4.1, Roadway Configuration**.

TABLE 6 – Approximate ROW Widths along FM 969 Corridor

Corridor Section	Approximate ROW Width (feet)
US 183 and SH 130	70 – 100
SH 130 to Taylor Lane	85 – 120
East of Taylor Lane to Webberville	90 – 100

Source: TxDOT, 2011.

FIGURE 10 – Land Use Within Character District 3



Section 3.4.2, Utilities, provides information on the various utilities located along or crossing the corridor.

3.4.1 Roadway Configuration

FM 969 within Character District 1 is at its widest, typically providing four travel lanes. The US 183 and FM 969 interchange is a four-lane facility with a narrow median. Between the US 183 and FM 969 interchange and the intersection of FM 969/ Regency Drive, the configuration shifts to a four-lane facility with a two-way left turn lane functioning as a median. This configuration continues until the minor street Park at Woodlands Drive, east of Decker Lane. East of Park at Woodlands Drive, FM 969 is still a four-lane facility, but only provides left turn bays at a few intersections instead of a continuous two-way left turn lane. Just east of FM 973, the configuration of FM 969 changes again, becoming a two-lane, undivided roadway to just west of SH 130. At the intersection of SH 130 and FM 969, the roadway configuration is four lanes with left-turn bays provided between the ramp intersections.

Table 7 summarizes the roadway configuration at major intersections within Character District 1.

Within Character District 2, and throughout Character District 3, FM 969 returns to a two-lane undivided roadway just east of SH 130 until the Village of Webberville, with the exception of one short segment. The second segment is between Hound Dog Trail and Hunters Bend Road where FM 969 is two lanes with a two-way turn lane. The geometry described is typical, but certain locations may deviate from the typical configuration, particularly at intersections where left- and right-turn bays are provided.

TABLE 7 – Configuration of FM 969 at Major Intersections within Character District 1

Intersection	No. of Lanes	Configuration
FM 969/ US 183	4	Painted median
FM 969/ FM 3177 (Decker Ln)	4	Two-way left lane turn for a median
FM 969 / FM 973	4	Painted median, divided highway
FM 969/ SH 130	4	Four lanes divided by a tapering median (heading east) Four lanes with left-turning bay (heading west)

3.4.2 Utilities

3.4.2.1 Introduction

Many utilities are present within and/or crossing the FM 969 ROW between US 183 and the Village of Webberville. The utilities include:

- Atlas Energy Limited Partnerships
- Atmos Energy
- Austin Energy
- AT&T
- Austin Water Utility
- Enterprise Products
- Greater Austin Area Telecommunications Network (GAATN)
- Texas Gas Service
- Time Warner Cable
- Time Warner Telecom

3.4.2.2 Water and Wastewater

City of Austin water lines run parallel with FM 969 between US 183 and FM 973, predominately within the northern ROW. Existing water lines typically vary in diameter, with sizes varying from 2.5-inch, 6-inch, 8-inch, 12-inch, and 24-inch. City of Austin water lines extend along the northern ROW of FM 969 from US 183 to approximately 2,000 feet west of FM 973.

Small segments of water lines run parallel with FM 969 within the southern ROW near Johnny Morris Road, Nixon Lane, FM 3177, and Imperial Drive.

City of Austin wastewater lines and manholes run parallel along FM 969 between US 183 and FM 3177 predominately within the southern ROW. The WC WWTP is located on the south side of FM 969 at the intersection with Johnny Morris Road. Several in-service gravity lines, with diameters of 12- inch, 18-inch, 30-inch, and 54-inch, are present within the southern ROW between FM 3177 and just west of the WC WWTP. Two 12-inch gravity lines within the northern ROW are present between Sendero Hills Parkway and Rogers Lane. A 96-inch gravity main extends from US 183 to a junction box just west of WC WWTP within the southern ROW. Several wastewater lines are present within the southern ROW between the end of the 96-inch line and the WC WWTP. These lines direct flow to the WC WWTP from the 42-inch line, a line that crosses FM 969 near the east end of the 96-inch line.

A 12-inch sludge line is present within the southern FM 969 ROW, which extends from the WC WWTP to FM 973 and turns south along FM 973 to the Hornsby Bend Biosolid Management Plant.

An existing 36-inch reclaimed water line is present within the southern FM 969 ROW between Johnny

Morris Road and the WC WTTP. The line originates from the north along the old railroad track bed near Walnut Creek and crosses FM 969 approximately 880 feet west of Johnny Morris Road and extends to the east side of the WC WWTP. An abandoned 12-inch gravity wastewater line is present within the paved FM 969 roadway between FM 3177 to just west of FM 3177.

Water and wastewater services are provided by private services along FM 969 between SH 130 and the Village of Webberville. Hornsby Bend Utility Company currently provides water to Austin's Colony, Forest Bluff and Hornsby Bend subdivisions in Travis County. Manville Water Supply serves the rest of the study influence area east of SH 130. Hornsby Bend Utility Company provides wastewater services along FM 969 east of SH 130. A systems map for the Hornsby Bend Utility's private water and wastewater lines within the study influence area was not obtained. Additional information on utilities is provided in **Appendix C**.

3.4.2.3 Transportation

Utilities associated with traffic signals exist along FM 969 within the ROW at the following intersections:

- Johnny Morris Road;
- Decker Lane (FM 3177);
- Craigwood Drive;
- Imperial Drive;
- FM 973;
- Gilbert Road
- Hunters Bend Road; and
- Hound Dog Trail.

These utilities, which vary depending upon the intersection, may include underground conduits and pull boxes and aerial lines on Austin Energy poles.

A railroad line, owned by Capital Metro, crosses FM 969 approximately 1,500 feet east of Johnny Morris Road and the WC WWTP. The railroad crossing has a railroad signal house and signal equipment at-grade and underground signal cables. A timber pile open deck trestle railroad bridge is located 30 feet from the edge of the roadway on the north side of FM 969 at the railroad crossing. The former MOKAN railroad ROW is located on the western side of WC WWTP and is owned by several groups, including Capital Metro, TxDOT, and City of Austin.

3.4.2.4 Telecommunications

GAATN has aerial fiber optic cables (on Austin Energy poles) from US 183 to Johnny Morris Road on the south side of FM 969, from FM 3177 to Dunlap Road on the north side, and from Dunlap Road to Burleson Manor Road on the south side. GAATN does not have utilities between Johnny Morris Road and FM 3177.

AT&T has numerous facilities along FM 969, providing copper wire service to existing, older businesses, and residential users. Fiber optic lines have been installed to address anticipated future development needs. AT&T recently replaced underground facilities and structures between US 183 to FM 3177, including a manhole and a run of fiber and copper on the north side of FM 969. Fiber optic line is present on the north side of FM 969 from FM 3177 to FM 973 and is present on the south side beginning at FM 973 and extending eastward. AT&T has some aerial lines at the intersection of Gilbert Road and along FM 969 from Hunters Bend Road to Burleson Manor Road.

Time Warner Cable has overhead service (fiber optic and coaxial lines) on both sides of FM 969 from US 183 to Cadillac Drive, just east of Hunters Bend Road, on Austin Energy poles.

Time Warner Telcom has overhead service on Austin Energy poles for approximately 1,000 feet along the south side of FM 969 east of US 183.

3.4.2.5 Energy

Austin Energy is present within the study influence area predominately as overhead service lines along on both sides of FM 969. Their poles carry several other utilities, including Time Warner Cable, Time Warner Telecom, GAATN, and traffic signal utilities.

Texas Gas Service is present as underground pipes within the northern ROW of FM 969 between US 183 to Imperial Drive and within the southern ROW between Imperial Drive and Delta Post Drive.

Enterprise Products Company has a natural gas line crossing FM 969 approximately 300 feet west of Johnny Morris Road. The size and depth was not provided by the owner. Atlas Energy Limited Partnership produces, transports and processes natural gas and oil and is present at an undisclosed location(s) within the study influence area. The company will provide information in the design phase as required.

Bluebonnet Electric Cooperative, a private, independent electric-service provider, is not present within the FM 969 ROW. However, the utility company provides service just outside the study influence area.

An Atmos Energy petroleum pipeline was identified on the City of Austin-Water Distribution System Map Sheet Q21 and verified with a site visit. The pipeline crosses FM 969 between FM 973 and SH 130.

3.5 TRANSIT FACILITIES AND CHARACTERISTICS

Existing transit in the FM 969 is provided by Capital Metro and Capital Area Rural Transportation System (CARTS). Service from Capital Metro is provided by local bus, flyer, and crosstown bus. The bus routes available to residents in the study influence area include routes 6, 20, 37, and 323. Of these routes, only Route 323 operates along FM 969, while Route 20 operates along Riverside Drive and Manor Road, Route 6 operates along East 12th Street, and Route 37 operates along Loyola Lane.

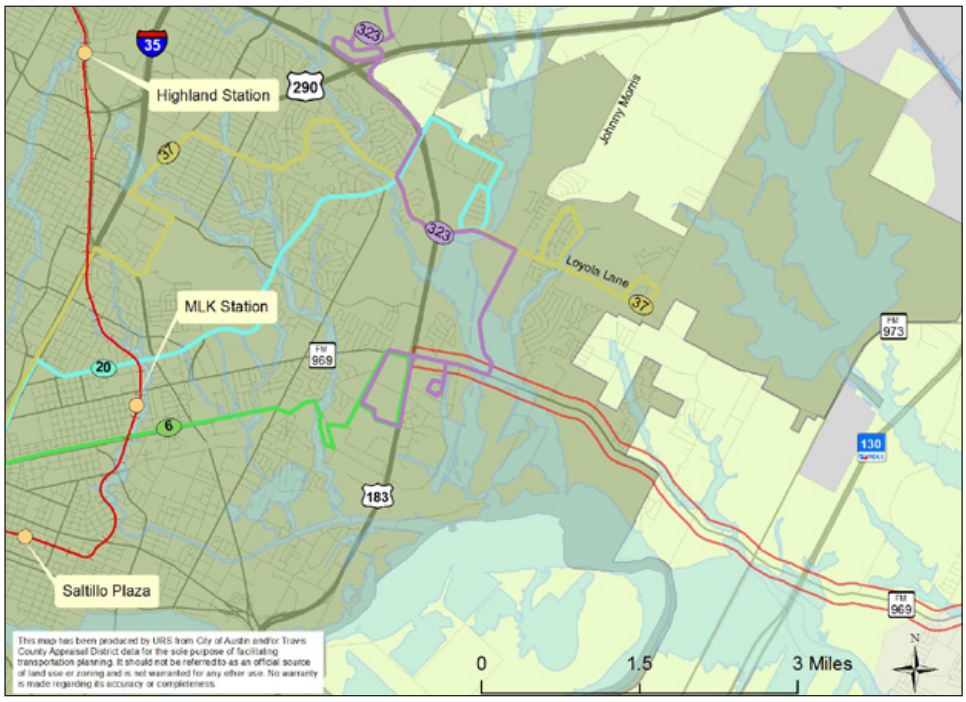
Table 8 and **Figure 11** summarize the existing Capital Metro transit routes.

TABLE 8 – Transit Routes within the Study Corridor

Route	Main Corridor(s)	Areas of Service	Representative Stops Within Study Area	Average Weekday Riders
6	West 11th Street and East 12th Street	Capitol, public schools, recreational centers, single family neighborhoods, multifamily complexes	Techni Center Drive/ Tracor Lane	900
			Techni Center Drive/ Semiconductor Drive	
			2 stops total	
20	Manor Road, Red River Road, and Riverside Drive	Delco Center, recreational, business, and medical centers, public schools, parks, single family neighborhoods, and multifamily complexes	Loyola Lane / Millrace	4,845
			LBJ High School stops	
			8 stops total	
37	Loyola Lane, Cameron Road	University of Texas, Capitol, Hancock Center, medical, shopping, and event centers, and single-family neighborhoods	Loyola Lane / FM 3177 (Decker Lane)	2,842
			Loyola Lane /Johnny Morris Road	
			12 stops total	
323	U.S. 183, FM 969	Transfers to Routes 6, 20, and 37		981

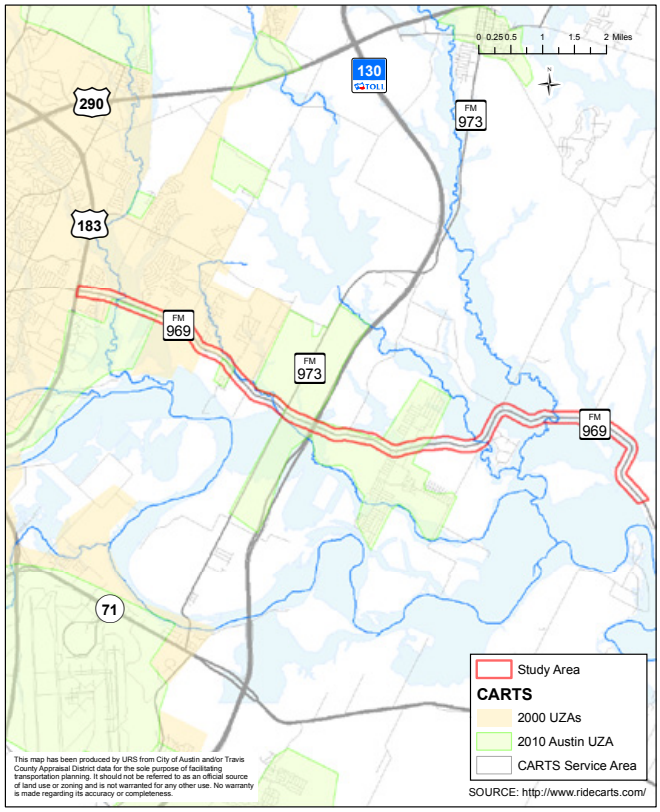
Source: Capital Metro, 2011.

FIGURE 11 – Transit Routes Within the Study Area



Note: Transit routes compiled from Capital Metro information.

FIGURE 12 – CARTS Service Service Area



None of the routes have stops east of US 183 on FM 969 due to the 50 miles per hour (mph) speed limit. Furthermore, travelers headed to Loyola Lane enjoy better access than those travelers whose destination is along FM 969, as only one route travels along FM 969 east of US 183.

CARTS provides service for rural areas outside of the Capital Metro service area as shown in **Figure 12**. CARTS provides a demand response service that is available to the public and those with special needs. The only scheduled east/west service in the study influence area is the CARTS Bastrop Metro Connector, which primarily follows SH 71, staying south of the Colorado River. The locations of stops are as follows:

- Bastrop Bus Station Bastrop Park & Ride
  301 Hospital Drive
  Bastrop, TX 78602
- Garfield Library
  5121 Albert Brown Drive
  Del Valle, TX 78617
- Cedar Creek Exxon
  2061 W. Hwy 71
  Cedar Creek, TX 78621
- Austin Community College
  1020 Grove Boulevard
  Austin, TX 78741

This service provides connection to Capital Metro Routes 4, 20, 271, 331, & 350. Unfortunately, none of these bus routes serve the FM 969 corridor.

The U.S. Census Bureau has changed the 2010 Urbanized Area (UZA) boundary to include nearly all of the FM 969 corridor between US 183 and Cadillac Drive and much of Del Valle. The impact of this change on future transit service is discussed in **Section 4.2.3, Future Transit Options and Opportunities**.

3.6 BICYCLE/PEDESTRIAN FACILITIES AND CHARACTERISTICS

Two key elements in mobility are bicycle and pedestrian facilities. Having an adequate bicycle and sidewalk network for citizens is critical within the FM 969 corridor to provide safe alternative transportation modes, especially if residents are interested in choosing a "green" mode of transportation with a limited environmental footprint. Currently, both pedestrians and bicyclists are underserved within the FM 969 corridor and improvements are a priority.

Improvements to pedestrian and bicycle facilities within the corridor will follow the National Complete Streets Coalition, a movement that asks planners and engineers to design and build road networks that are safer, more livable, and welcoming to everyone. Complete Streets suggests that street design should keep all users in mind, including bicyclists, pedestrians, and public transit, as this type of accessibility and functionality is an important part of creating livable communities.

3.6.1 Existing Bicycle Facilities

FM 969 does not provide desirable bicycle mobility because bicycles must share the rightmost lane with highway traffic. Similarly, Decker Lake Road, Gilbert Road, Johnny Morris Road, and FM 973 all require bicyclists to share the traveled way with cars. The only roadway in the study influence area that currently provides a separate lane for bicycles is Loyola Lane. According to the *Austin 2020 Bicycle Master Plan*, wide paved shoulders are indicated on FM 969 east of FM 973 to Dunlap Road. A wide outside lane is provided between US 183 and Decker Lane (FM 3177), however, **Figure 13** shows the challenge of safely passing a bicyclist at Walnut Creek.

In the fall of 2009, the City of Austin City Council passed an ordinance that requires motorists to give a 3-foot clearance when passing vulnerable road users such as pedestrians, runners, bicyclists, or a physically disabled person. Therefore, existing facilities should be upgraded to permit automobile and trucks adequate distance to pass bicyclists safely, as well as protect them from road traffic.

According to the CAMPO Regional Bicycle Map, most of the corridor FM 969 has been identified as having either low or very low comfort level for riders. Roads with low comfort levels are defined as having important connections with high traffic volumes and

FIGURE 13 – Bicyclist shown trying to navigate over Walnut Creek

speeds but without bicycle accommodations. Roads designated as having very low comfort levels are not recommended for bicycle travel, but may still be necessary for some trips and are only shown where an alternative route is not available.

The only section of the FM 969 corridor designated as having a medium comfort level is a portion generally between FM 973 and Taylor Lane. Roads with medium comfort levels are defined as having bicycle accommodations on wide shoulders on high speed roads; shared lanes on roads with moderate speeds and volumes; or high-speed roads with good sight distances and very little traffic.[6]

Bicycle routes 44 and 444 are located on FM 969. **Table 9** summarizes existing facilities within the corridor as described in the *Austin 2020 Bicycle Master Plan.*

3.6.2 Existing Pedestrian Facilities

Pedestrian mobility is also underserved in the study influence area. While some contiguous sidewalk is available along Loyola Lane and portions of Johnny Morris Road, other roads, such as FM 969, FM 973, and Decker Lane, provide limited sidewalks. Furthermore, pedestrian mobility is hampered by the lack of sidewalks and curb ramps at intersections.

3.6.3 Trails and Corridors

Trail-based connectivity through riverine corridors can help tie together fragmented parklands, natural areas, and communities for future generations to enjoy. Natural corridors and access to these corridors (trails) can help shape the identity of an area while letting communities experience the natural world directly. Preserving natural corridors helps the integrity of local ecologies in regards to water quality, flood control, and wildlife/habitat preservation. Since different species have unique travel patterns (i.e., daily or seasonal), maintaining/providing corridor connectivity is important for the long-term success of species that require any sort of linear movement.

TABLE 9 – Existing Bicycle Facilities within Corridor Limits

Route – Segment #	Street Name	Segment From	Segment To	Existing Facility	Length (ft)
44.15	FM 969	US 183	Johnny Morris Road	Shared Lane	4,191
44.16	FM 969	Johnny Morris Road	Decker	Shared Lane	5,489
44.17	FM 969	Decker Lane	Austin City Limit	Shared Lane	2,638
444.18	FM 969	City Limit	Imperial Drive	Shared Lane	2,778
444.19	FM 969	Imperial Drive	FM 973	Shared Lane	5,963
444.20	FM 969	FM 973	SH 130	Wide Curb*	2,579
444.21	FM 969	SH 130	Gilbert Road	Wide Curb*	3,028
444.22	FM 969	Gilbert Road	Decker Creek	Wide Curb*	12,276
444.23	FM 969	Decker Creek	Burleson Manor Road	Wide Curb*	9,891
444.24	FM 969	Burleson Manor Road	Study Boundary	Shared Lane	9,718

Source: Austin 2020 Bicycle Plan, 2009.
Note: Curb and gutter are intermittent in these sections.

[6] *CAMPO Regional Bicycle Map. CAMPO, 2012.*

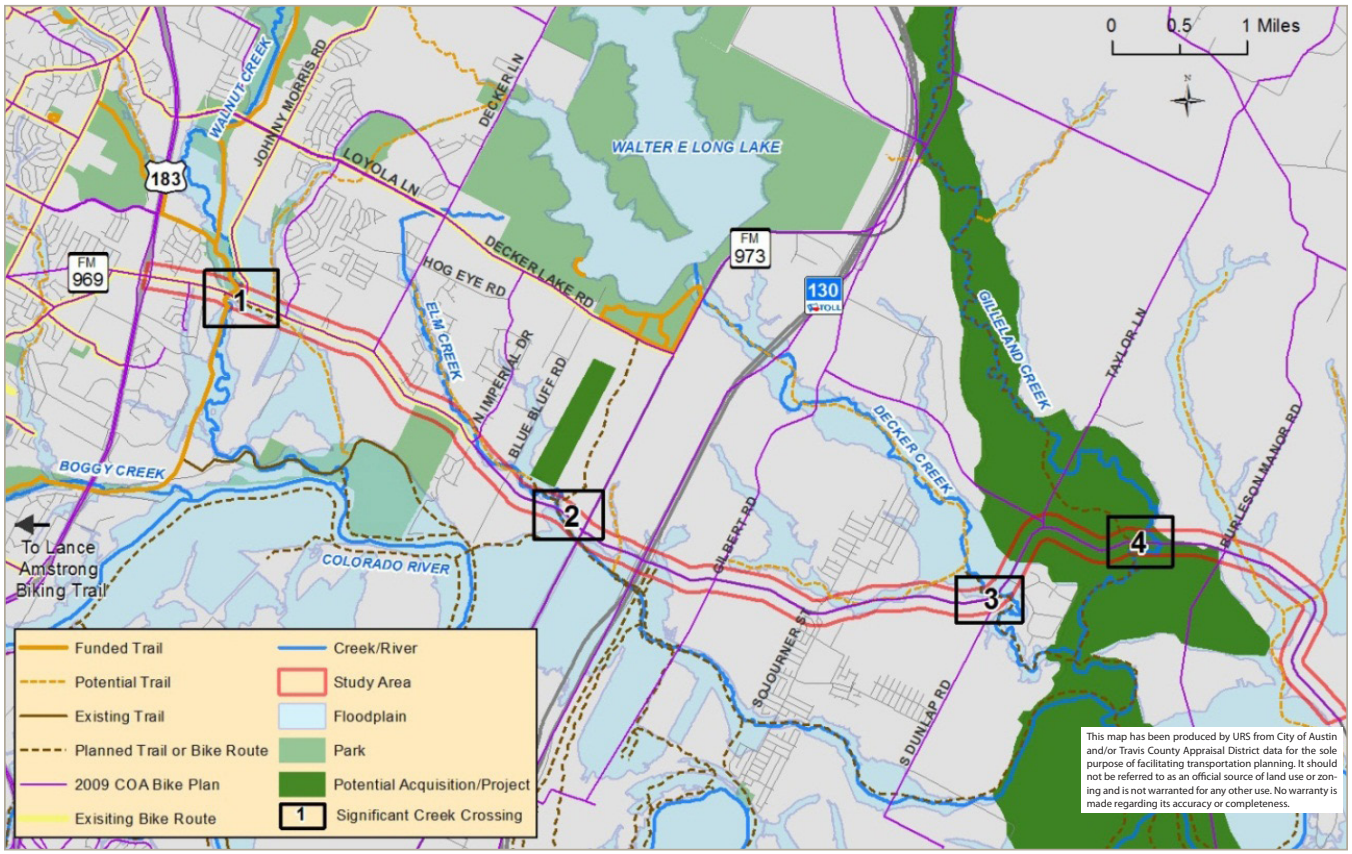
Central Texans celebrates outdoor recreation in many ways, and one of those is through the use of trail systems. How trails (commuter or recreational) tie in to other infrastructures such as roadways/bicycle lanes is important for perceiving efficiency of routes, safety, and enjoyment. Trail systems also allow for educational opportunities through vistas, flora/fauna descriptions, and best management practices of water quality.

Figure 14 shows the study influence area in relation to planned, potential, and funded trails. These graphics were compiled from:

- City of Austin Existing and Potential Trails and Greenways;
- City of Austin Existing and Recommended 2009 Bicycle Facility Document;
- Austin 2020 Bicycle Master Plan;
- 2011 Recommended Bond Projects (July 2011);
- Planned unit development master plans in the corridor program area; and the
- Colorado River Corridor Plan.

The FM 969 corridor crosses over four significant creek systems – Walnut, Elm, Decker, and Gilleland. The existing structures currently serve stream and flood flows as well as wildlife corridors to and from the Colorado River system. Minimum recommended tread/trail widths for non-motorized dual travel is 10 feet. Recommended clearance under bridges or through appropriate culverts for bicycle use is 8 feet.

FIGURE 14 – Trail/Bicycle System and Creek Crossings within Study Influence Area



Source: City of Austin, Travis County, 2011.

3.7 LANDSCAPE CHARACTERISTICS

The terrain throughout the FM 969 corridor is primarily gently rolling hills mixed with creeks and drainage ways, which are slow draining or subject to flooding. Some of the creeks adjacent to the road have been channelized while others remain in a relatively natural state.

Significant portions of the corridor are either used for crops or have not been developed and remain in a natural state. Some of the natural areas appear to be successional growth occurring in locations that have been previously cleared. These areas are typically transitional grassland with moderate to heavy amounts of mesquite located within the tracts.

Areas of natural growth typically include several species of trees such as cottonwood, elm, hackberry, cedar, mesquite, pecan, and oak. In addition to treed natural areas, there are several locations which have significant tree growth, including fence and utility rows and areas developed with residential housing. Trees along the fence and utility rows have been pruned at several locations.

Installed landscapes along the corridor are primarily limited to residential and commercial developments. Residential landscapes typically include trees within individual tracts with shrubs and perennials at houses. Commercial landscapes typically include trees and shrubs at the street frontage and limited landscaping within the development.

The Central Texas region has experienced record drought conditions in the past few years. As a result, communities have been faced with water restrictions and water conservations measures. The use of sustainable landscaping for the FM 969 Corridor is recommended. Sustainable landscaping is the utilization of native plants that is in balance with the local climate and requires minimal resources

FIGURE 15– FM 969 East of US 183

FIGURE 16– FM 969 East of Taylor Lane

FIGURE 17 – FM 969 Near FM 973

FIGURE 18 – Pruned Tree in FM 969 Right-of-Way

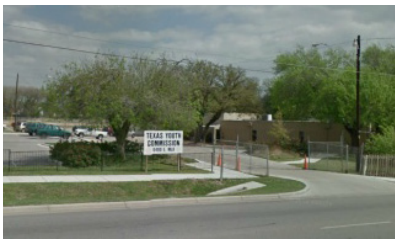


FIGURE 19 – Recent Improvements at Commercial Property

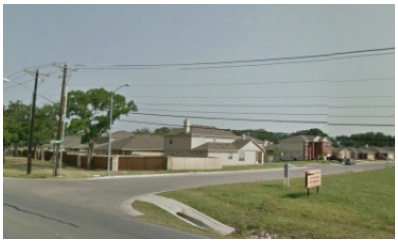


FIGURE 20 – Typical ROW at Subdivision Entrances

such as fertilizer, pesticides, time and water. It is also functional, cost efficient, visually pleasing, and environmentally friendly. Some common examples of sustainable landscaping include bio-swales, rain gardens, xeriscaping, permeable paving, and the use of recycled landscaping materials.

3.8 DRAINAGE CHARACTERISTICS AND ISSUES

3.8.1 Floodplains

Between US 183 and the Village of Webberville, FM 969 is crossed approximately twelve times by Walnut Creek, Elm Creek, Decker Creek, Gilleland Creek, and their tributaries as the creeks drain south to the Colorado River. In several sections of FM 969 creeks run parallel and within the FM 969 ROW.

Drainage within the study influence area has been traditionally poor, especially since the parts of the FM 969 corridor are within a 100-year floodplain as shown in **Figures 21** and **22**. The corridor experiences issues with flooding at many stream crossings. Flooding typically occurs at the following areas:[7]

- Walnut Creek – from the railroad to Johnny Morris Road;
- Near Cadillac Drive – past flooding occurrences have included 2 feet of water over the westbound lane;
- Gilleland Creek – from Dunlap Road to Twin Creek Drive;
- Matthews Corner, west of Webberville; and
- 500 feet east of Burleson Manor Road.

FIGURE 21 – Floodplains, US 183 to SH 130

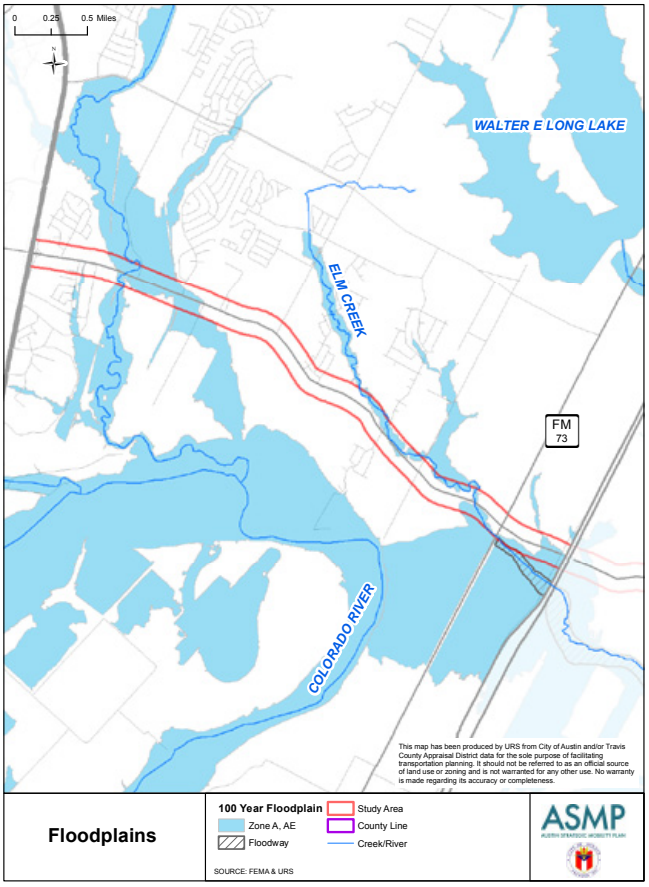
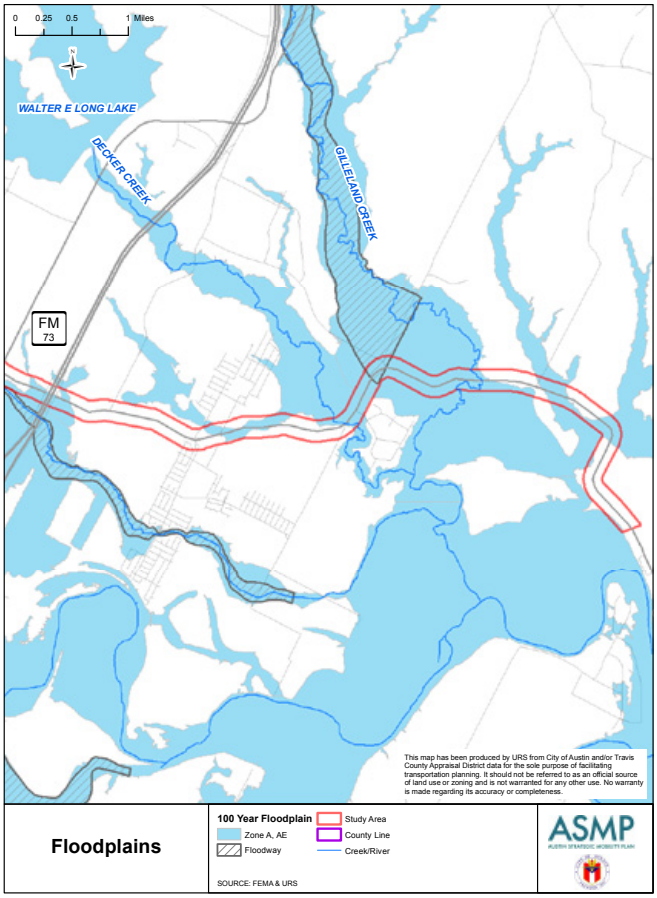


FIGURE 22 – Floodplain, SH 130 to Webberville



[7] *Information obtained from TxDOT maintenance foreman, November 2011.*

3.8.2 Water Quality

Approximately twelve separate segments of FM 969 cross the City of Austin-defined critical water quality zones and water quality transition zones. These zones— buffer areas along streams to limit development encroachment[8]—are sensitive environmental areas with development regulations set by the City of Austin.

3.8.3 Storm Drain

Storm drain infrastructure varies along FM 969. Curb and gutter with ditches and storm drain grate inlets are present along the FM 969 ROW between US 183 and FM 3177. These structures are improvements made in 2005 with the TxDOT FM 969 road widening project. From FM 3177 to the Village of Webberville, stormwater is conveyed by roadside ditches and culvert pipes (no curb and gutter).

3.9 CRASH ANALYSIS

3.9.1 Crash Data

Reported traffic crash data for FM 969 between US 183 and Webberville were provided by TxDOT in August 2011. A total of 251 crashes were reported between 2008 and 2010. **Table 10** summarizes the reported historical crash data by severity.

The crashes were mapped based on their location. If a crash was located within the functional area of an intersection, it was identified as intersection related. Otherwise it was identified as non-intersection related. **Table 11** summarizes the reported historical crash data by location.

There were three nighttime crashes on FM 969 between 2008 and 2010. **Table 12** lists the location, time, weather condition, and crash manner of these crashes.

Dailey Middle School is located approximately 2,000 feet south of FM 969 on Westall Street and was opened in August, 2010. The school traffic has access to FM 969 via the two intersections at Hound Dog Trail and Hunters Bend Road/Delta Post Drive. There were four, six, and three reported crashes along FM 969 between the two intersections in 2008, 2009, and 2010, respectively. The dataset did not include 2011 to indicate whether traffic crashes on FM 969 have increased since the school opened.

TABLE 10 – Summary of FM 969 Historical Crash Data by Severity

Year	Fatal	Injury	PDO	Total
2008	3	47	43	93
2009	1	42	38	81
2010	2	38	37	77
Total	6	127	118	251

Source: TxDOT, 2011

TABLE 11 – Summary of FM 969 Historical Crash Data by Location

Location	Fatal	Injury	PDO	Total
Intersection Related	2	73	58	133
Non-Intersection Related	4	54	60	118

Source: TxDOT, 2011.

3.9.2 Crash Rates by Intersection and Roadway Segment

Crash rates are an effective tool to measure traffic safety relative to actual vehicular volumes at a particular location. The combination of crash frequency (crashes per year) and vehicle exposure (traffic volumes or miles traveled) results in a crash rate. Crash rates are expressed as "crashes per Million Entering Vehicles" for intersection locations and as "crashes per Million Vehicle Miles Traveled" for roadway segments.

A crash rate analysis was performed to compare FM 969 intersections and roadway segments to the

[8] *City of Austin, 2012. City of Austin Watershed Protection Regulations Summary Table. http://www.austintexas.gov//sites/default/files/files/watershed/watershed_regs_table.pdf. Accessed July 10, 2012.*

TABLE 12 – Summary of FM 969 Nighttime Crashes

Location	Year	Time	Weather Condition	Traffic Crash Manner
Craigwood Drive	2008	5:21 AM	Clear/Cloudy	Drunken driver
East of Bob Temple Drive	2009	10:50 PM	Rain	Opposite direction, one vehicle on the wrong side
Craigwood Drive	2010	2:23 AM	Clear	Same direction going straight rear-end, one driver under influence

Source: TxDOT, 2011.

TABLE 13 – Top 3 Intersections with High Crash Rate

	Number of Total Crashes			Crash Rate in MEV[1]		
Intersections	2008	2009	2010	2008	2009	2010
FM 969 and Imperial Drive	12	12	3	1.86	1.88	0.48
FM 969 and FM 973	8	12	9	0.80	1.22	0.92
FM 969 and Decker Lane	7	8	6	0.56	0.65	0.49

[1] *MEV: 1,000,000 vehicles entering the intersections.*

statewide average crash rates for similar roadway facilities. The details of our crash analysis are presented in **Appendix D**.

A total of thirteen intersections were analyzed for crash rates, including all signalized intersections and also unsignalized intersections at Sendero Hills Parkway, Blue Bluff Road, SH 130 frontage roads and Taylor Lane. **Table 13** lists the top three intersections identified with high number of crashes and crash rates over the years. Crash rate at the intersection of Imperial Drive was the highest in 2008 and 2009, but dropped significantly in 2010, probably due to the installation of a traffic signal in 2010. It should also be noted that though both Craigwood Drive and SH 130 intersections have low crash rate, they both reported accidents with fatalities within the analysis period.

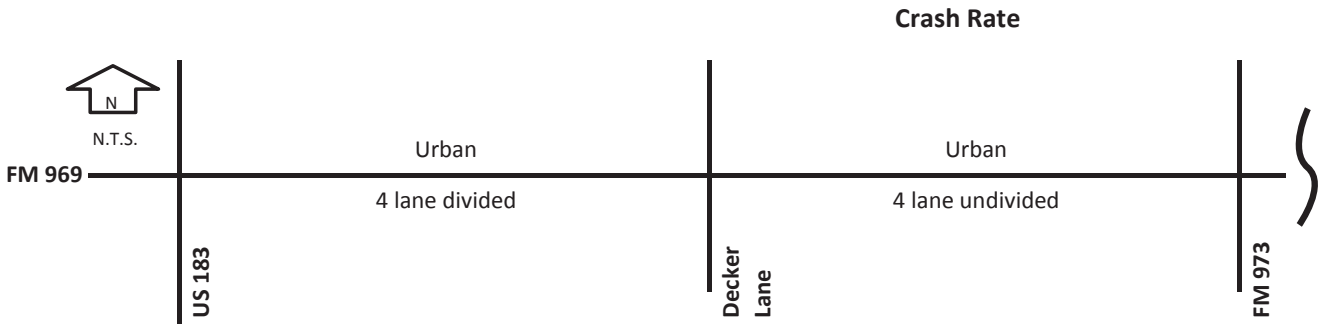
The crash rate for four roadway segments, reported by crashes per 100 million vehicle miles of travel, was compared to the Texas statewide average with similar area and facility type. Details for the analysis are shown in **Appendix D**.

For a comparable facility, the statewide crash rates experienced a downward trend from 2008 to 2010, and the crash rates on FM 969 showed a similar downtrend in the same time period. The crash rates for the segment between Decker Lane/FM 3177 and FM 973 are notably higher than the statewide average in 2008 and 2009, and just below the statewide average in 2010 as shown in **Figure 23**.

3.10 TRAFFIC VOLUMES

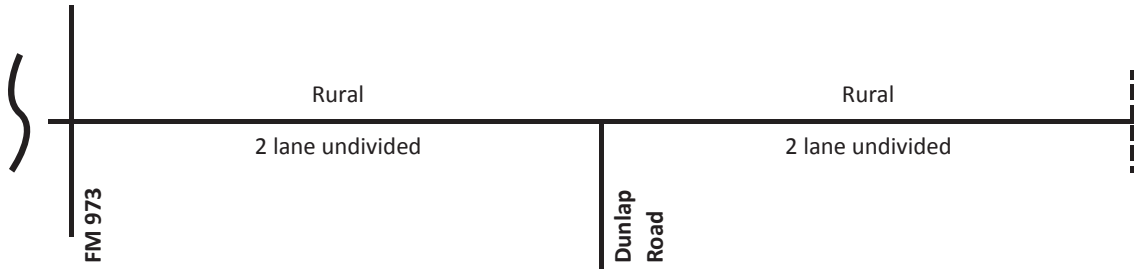
Existing traffic levels in the study of influence area were collected to establish the suitability of the current roadway to handle the traffic demand. Traffic counts were collected from the TxDOT 2010 Annual Average Daily Traffic (AADT) counts and from 2011 Average Daily Traffic (ADT) collected by the

FIGURE 23 – Crash Rates Compared to Statewide Averages



	2008	2009	2010
Crash Rate	115.7	105.2	147.5
Statewide Average	116.7	114.8	112.9

	2008	2009	2010
Crash Rate	353.3	341.0	264.4
Statewide Average	298.9	281.3	268.6

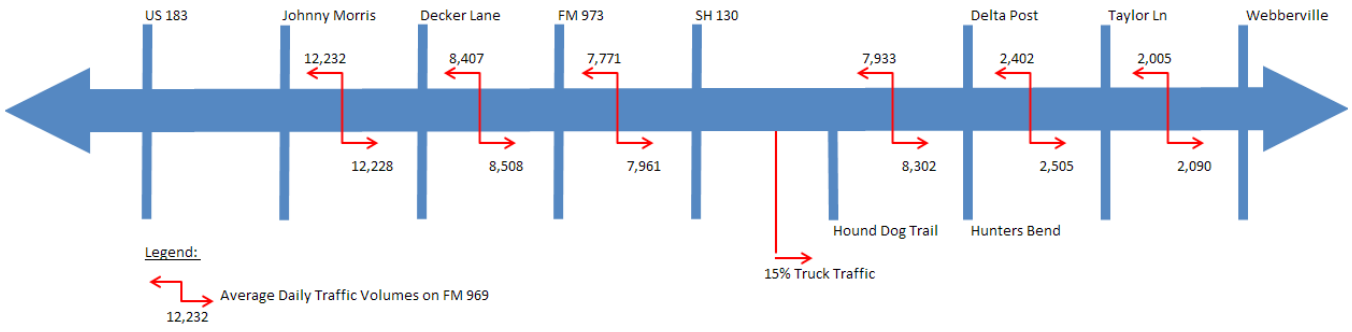


	2008	2009	2010
Crash Rate	102.6	92.7	82.7
Statewide Average	98.1	95.1	95.9

	2008	2009	2010
Crash Rate	145.2	48.9	65.8
Statewide Average	98.1	95.1	95.9

Note: 1. Crash rate is number of accidents per 100 million vehicle miles traveled
2. Statewide avarage is based on data from Texas Department of Transportation

FIGURE 24 – Average Daily Volumes on FM 969



corridor development program team and included in **Appendix E**. The 2011 traffic counts also collected the percentage of heavy vehicles traveling along FM 969 at selected locations. Existing ADT counts on FM 969 show traffic volumes gradually increase from the east to the west. As shown in **Figure 24**, the ADT is less than 5,000 per day close to the Village of Webberville and increases to over 24,000 as the FM 969 corridor approaches US 183. The percentage of trucks decreases from the east to the west from 12% east of Hunters Bend Road to 7% west of Decker Lane.

The 2011 traffic counts on FM 969 show a strong directionality of traffic – with higher westbound traffic during AM peak periods and higher eastbound traffic during PM peak periods. In general, the AM peak hour is between 7 AM and 8 AM and occurs earlier further east of SH 130. The PM peak traffic is not as condensed as that of the AM peak period, and the peak hour is generally between 5 PM and 6 PM.

3.11 TRAFFIC OPERATIONS ANALYSIS

After collecting existing traffic data, the ADTs were used to analyze the peak hour performance of FM 969. Two types of analysis were performed- intersection analysis and multilane highway analysis. For both analyses, the performance of the intersection or highway segment of interest is characterized by a Level of Service (LOS) between A and F. LOS A signifies conditions where vehicles experience very little delay, whereas LOS F refers to a situation where long queues of vehicles experience severe delay and low vehicle speeds.

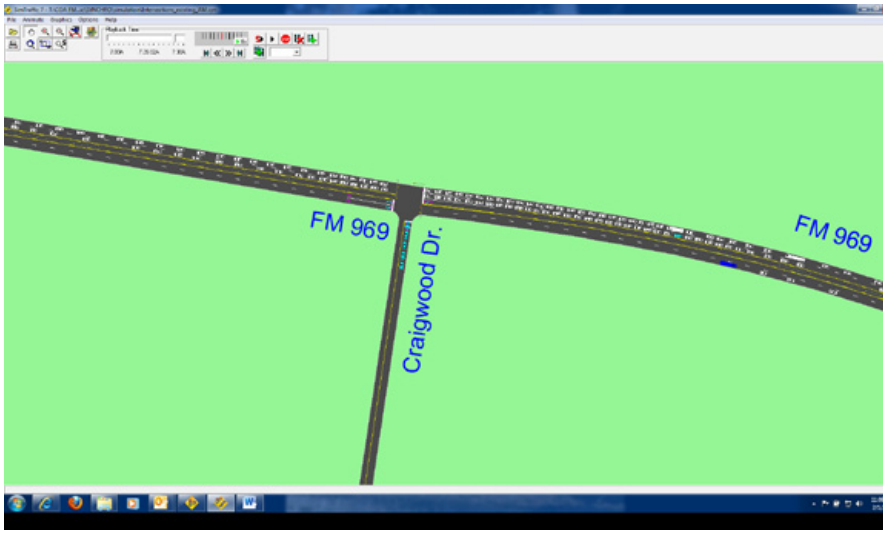
Two methods were used for determining intersection LOS. Signalized intersections analysis used an average delay for all approaches. Unsignalized intersections utilized control delay experienced by a critical minor movement. **Table 14** shows all signalized intersections analyzed, including the LOS for both AM and PM peak hours.

TABLE 14 – Existing Level of Service at Signalized Intersections Within FM 969 Corridor

Signalized Intersections	Existing	
	AM	PM
FM 969 and Tannehill Lane	A	B
FM 969 and US 183 South	C	F
FM 969 and US 183 North	F	F
FM 969 and Craigwood Drive	A	A
FM 969 and Johnny Morris Road	C	C
FM 969 and Decker Lane	F	C
FM 969 and Imperial Drive	A	A
FM 969 and FM 973	B	C
FM 969 and Gilbert Road	A	B
FM 969 and Hound Dog Trail	C	C
FM 969 and Hunters Bend Road	F	D

Based on the calculated LOS, operations at the intersections of FM 969 at US 183 frontage roads, Decker Lane, and Hunters Bend Road are unsatisfactory. Also, the intersections of FM 969 and the SH 130 frontage roads are approaching capacity under stop control, which indicates a traffic signal may be needed. Even though the intersection of FM 969 and Gilbert Road from FM 969 to Westall Street is at a satisfactory LOS, the traffic signal at that location should be changed from peak hour operations to full day operations when the Gilbert Road extension is completed by Travis County. Finally, the LOS at FM 969 and Craigwood Drive is misrepresented due to the limitations within the analysis tool SYNCHRO. The true LOS is unsatisfactory during the AM peak hour as can be seen from the long standing queue shown in **Figure 25**. The queue

FIGURE 25 – Snapshot of SYNCHRO SimTraffic Animation at FM 969 and Craigwood Drive (AM Peak)



at Craigwood Drive is caused by the spillback of traffic from downstream intersection at US 183, not by the geometry of the Craigwood intersection.

From the highway segment analysis shown in **Table 15**, FM 969 is performing at an unsatisfactory LOS between FM 973 and Hunters Bend Road, with the exception of the four-lane segment at the SH 130 interchange. As traffic is projected to increase over time, the entire length of the FM 969 corridor will need to be improved. West of FM 973 and east of Hunters Bend Road, FM 969 is functioning at a satisfactory LOS. See **Appendix F** for the technical memorandum on traffic operational analysis.

3.12 MULTIMODAL LEVEL OF SERVICE

The existing FM 969 corridor mainly functions as a highway corridor with limited facilities for transit patrons, bicyclist, and pedestrians. The traditional LOS analysis is applicable in this setting.

A common theme that emerged throughout the public meetings and stakeholder discussions for the FM 969 corridor was the desire to add multimodal capabilities to facilitate the movement of pedestrians and bicyclists in addition to automobile traffic. As transit service increases, and the pedestrian and bicycle amenities are constructed, a quantitative analysis with platforms such as Highway Capacity Manual's Multimodal Level of Service will be applicable.

TABLE 15 – Highway Capacity Analysis for Existing Condition (2011)

Roadway Segment	Number of Lanes	ADT Volume[3]	Peak Hour Volume		LOS
			AM	PM	
Between Johnny Morris and Decker Lane	4 lanes[1]	24,460	2,181	2,210	C
Between Decker Lane (FM 3177) and FM 973	4 lanes[1]	16,915	1,576	1,652	B
Between FM 973 and SH 130	2 lanes	15,732	1,414	1,388	E
Between SH 130 and Hunters Bend Road	2 lanes[2]	16,235	1,336	1,462	E
Between Taylor Lane and Webberville	2 lanes	4,095	423	384	C

[1] Some sections with an additional two-way left-turn lane.
[2] The two-lane section between Hound Dog Trail and Hunters Bend Road has a two-way-left-turn-lane.
[3] Traffic counts, 2011.

4.0 FUTURE CHARACTERISTICS

4.1 PLANNED DEVELOPMENT

Many planned improvements are currently in development within the FM 969 corridor area, including several planned residential developments, commercial properties and Rio De Vida, a large mixed use development south of the corridor. **Figure 26,** on the following page, highlights several of these planned improvements, and the sections below describe them in more detail.

4.1.1 Development Summary

The FM 969 corridor is projected to experience significant growth over the next 25 years. There are 16 planned developments within the study influence area. Some of these projects are already under construction (i.e., active projects), some have obtained their entitlements (i.e., approved projects), and others are still in the planning process (i.e., proposed projects). **Table 16** provides a summary of the combined development potential of these active, approved and proposed projects, which could result in over 60,000 new residents and 35,000 employees by 2025.

Emerging projects within the FM 969 corridor include several large tracts that could support a variety of residential, commercial, and industrial development. **Table 17** provides a detailed breakdown by planned development.

4.1.2 Austin's Colony Activity Center

Over the past ten years, a new neighborhood has emerged just east of SH 130 within the City of Austin's ETJ. This community is comprised of several subdivisions north and south of FM 969 including: Austin's Colony, Forest Bluff, Kennedy Ridge Estates, and Chapparal Crossing as shown on **Figure 27**.

TABLE 16 – FM 969 Future Land Use Projections

Program / Land Use	Active	Approved	Proposed	Total	Residents / Employees
Single Family (lots)	2,940	10,792	2,863	16,595	38,500
Multifamily (units)	-	7,479	7,370	14,849	22,274
Non-Residential (square footage)	-	9,635,343	6,538,500	16,173,843	32,347
Industrial (square footage)	-	2,230,707	1,184,800	3,415,507	6,831
Hotel (square footage)	-	540,000	-	540,000	324

Notes/Sources:

1. *City of Austin's Emerging Projects – Austin April 2011 used to determine status of some projects.*
2. *Project Programs split and intercepted as needed to obtain uniform comparison and units.*
3. *Non-residential program includes retail, commercial, office.*
4. *Industrial program includes Research & Development.*
5. *Site Plans and City of Austin Ordinances used to obtain program information in many cases.*
6. *Resident/Employee conversion factors provided by URS, 2.32 People/SF Lot, 1.5 People/MF Unit, 1 Employee/500 square footage Non-Residential.*

Source: City of Austin.

FIGURE 26 – Planned Development Within Study Influence Area

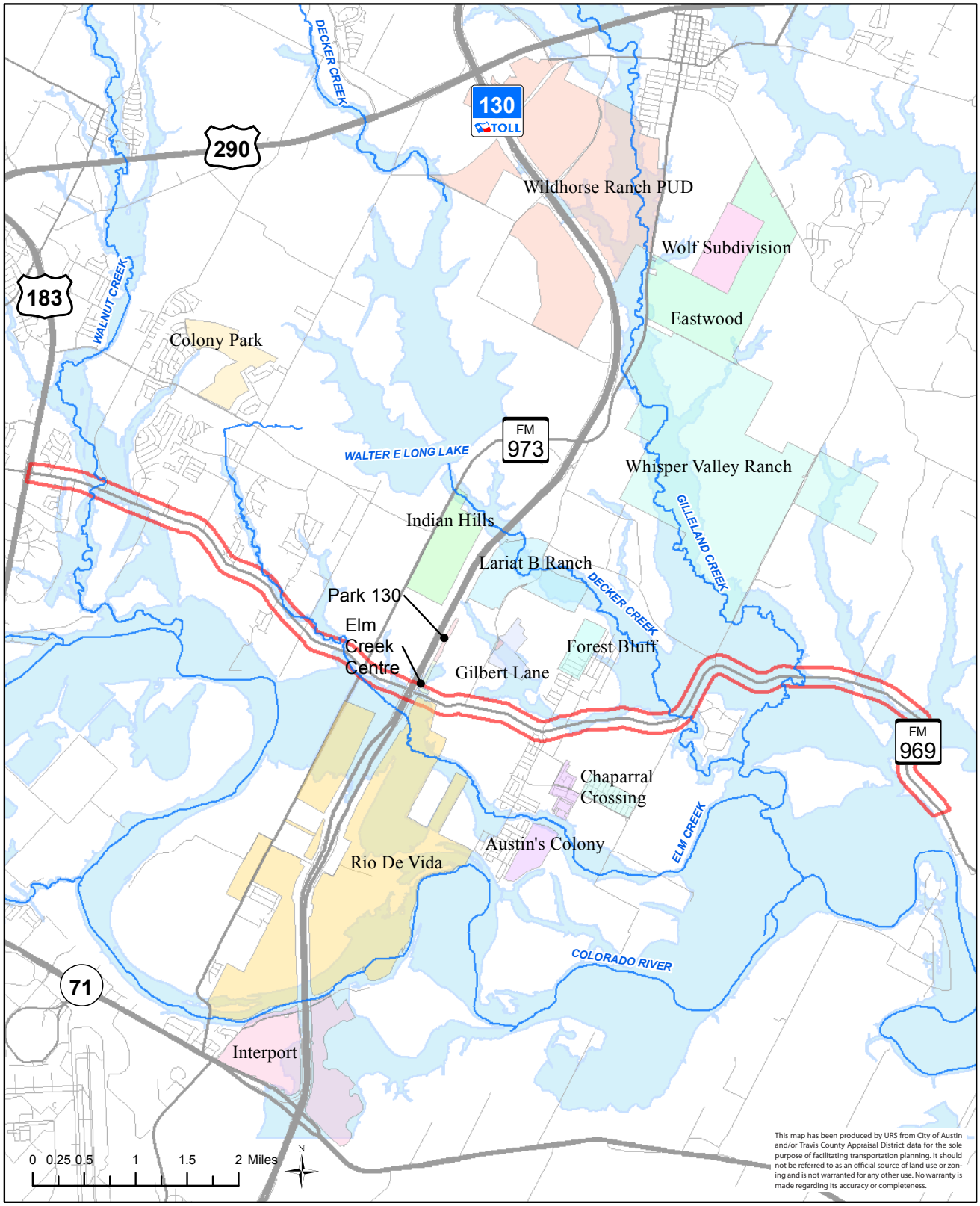
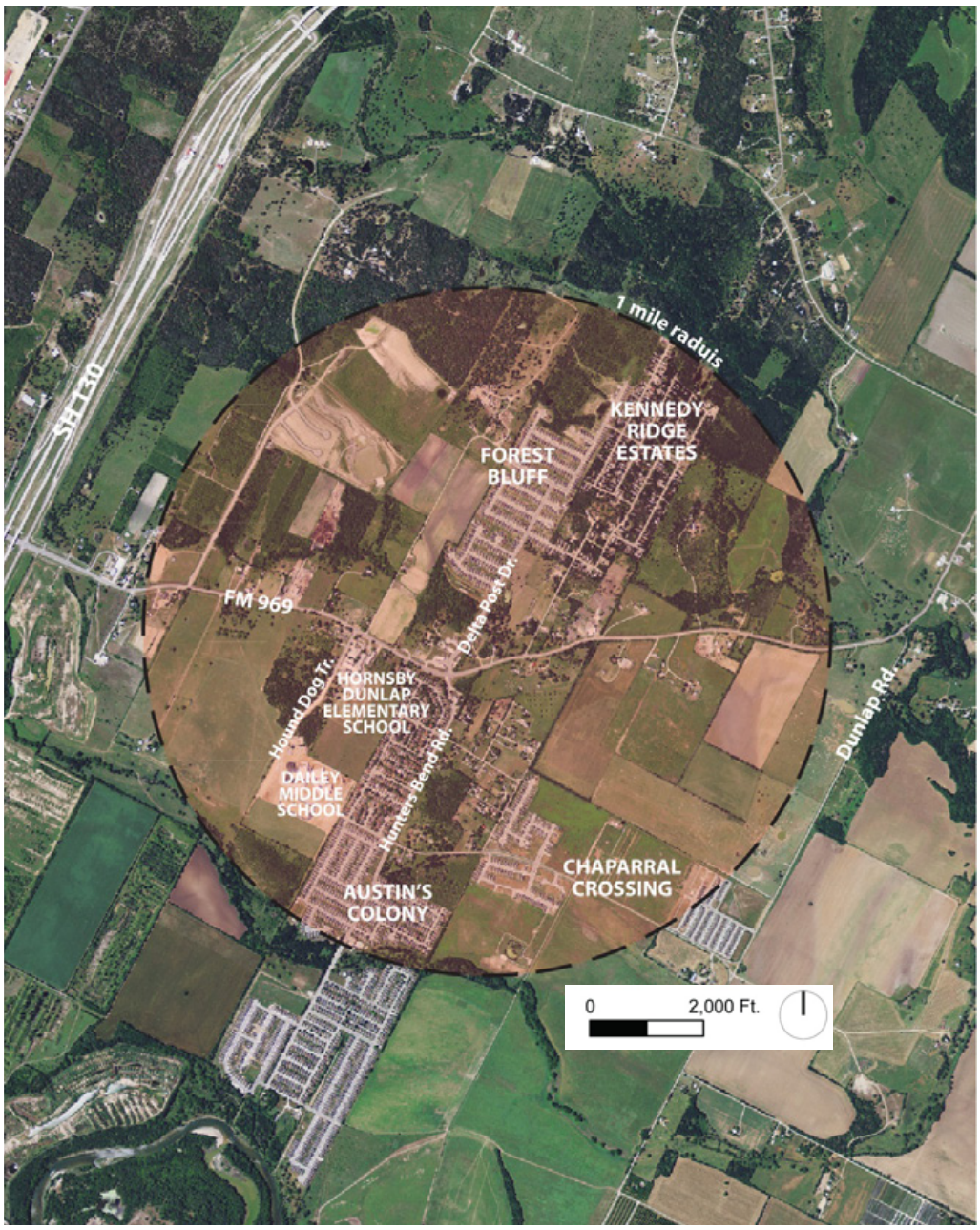


TABLE 17 – List of Planned Developments Within Study Influence Area

Project Name	Location	Size and Type	Major Access
Chaparral Crossing	FM 969 and N Dunlap Road	Single Family Home – 121 Units	Dunlap (1) and Hunters Bend (3)
Austin's Colony 7B	FM 973 and Clear View Drive	Single Family Home – 92 Units	Hunters Bend Road
Austin's Colony Sec 6A	FM 973 and Clear View Drive	Single Family Home – 88 Units	Hunters Bend Road
Austin's Colony Sec 7A	FM 973 and Clear View Drive	Single Family Home – 93 Units	Hunters Bend Road
Whisper Valley Ranch Ph 1 Sec 1	FM 973 and Gilbert Lane	Single Family Home – 121 Units	FM 973
Whisper Valley Ranch Ph 1 Sec 2	FM 973 and Gilbert Lane	Single Family Home – 84 Units	FM 973
Eastwood	FM 973 and Blake Manor Road	Single Family Home – 2,500 Units	Blake Manor (2) and FM 973 (1)
Wolf Subdivision	FM 973 and Blake Manor Road	Single Family Home – 734 Units	Blake Manor (2) and FM 973 (1)
Lariat B Ranch	Decker Lake Road and Gilbert Lane	Single Family Home Commercial	Gilbert Lane
Gilbert Lane Phase 2	Gilbert Lane and Breve Cove	Single Family Home – 119 Units	Gilbert Lane
Gilbert Lane Phase 1	Gilbert Lane and Breve Cove	Single Family Home – 61 Units	Gilbert Lane
Forest Bluff Section 5	FM 969 and Delta Post Drive	Single Family Home – 63 Units	Delta Post Drive (1), Belafonte Blvd (1)
Forest Bluff Sec 4	FM 969 and Delta Post Drive	Single Family Home – 122 Units	Delta Post Drive (1), Belafonte Blvd (1)
Forest Bluff	FM 969 and Delta Post Drive	Single Family Home – 116 Units	Delta Post Drive (1), Belafonte Blvd (1)
Elm Creek Centre (preliminary plat)	SH 130 and FM 969	Commercial – Retail – 8.3 acres	SH 130 and FM 969
Park 130 Preliminary Plan	SH 130 and FM 973	Commercial – Retail – 12.82 acres	SH 130 and FM 973
Indian Hills	Decker Lake Road and N FM 973	Multifamily / office / industrial / retail – 239.99 Acres	FM 973 and Decker Lake Road Extension
Heritage Crossing	SH 130 and FM 973	TBD	FM 973
Rio de Vida	SH 130 and FM 973	2,130-acre mixed-use development	FM 973 and SH 130 via Harold Green Rd
Interport	Highway 71 at SH 130	Retail / Commercial – 95.85 ac Multifamily – 59.84 ac	Hwy 71, SH 130, and Falwell Lane
Wildhorse Ranch PUD	2,400 feet south of Hwy 290 at SH 130	1,899 acre mixed use Planned Unit Development	FM 973 and SH 130

Source: City of Austin, 2011.

FIGURE 27 – Location of Future Activity Center



Along FM 969 between Hound Dog Trail and Hunters Bend Road, a town center is emerging with a cluster of commercial and civic uses (e.g., Hornsby Dunlap Elementary School, St. Elmo's Baptist Church, Dragon Express Restaurant, and Kincaid Coffee) and a recently completed grocery store.

The 2010 census recorded the population of the area at 7,042 residents, with 192 employees near this town center.[9] Over the next 15 years it is projected that this population could more than double. In 2010, the median household income of the area was approximately $41,075, compared with $50,520 for the City of Austin.[10] The median home price for the same period was approximately $135,000, compared with $190,000 in the Austin metro area.[11]

The emerging town center area is served by three schools within the Del Valle Independent School District: Hornsby Dunlap Elementary, Gilbert Elementary, and Dailey Middle School with a combined student population of approximately 1,825 pupils.[12] The majority of the student population is minority, either Hispanic ethnicity or African-American race, reflecting the demographics of the emerging community.

The pattern of development has been guided by Travis County's Transportation and Natural Resources Department and the City of Austin's Planning

9 *U.S. Census 2010.*
10 *Manor Expressway Investment Grade Traffic and Revenue Study. CTRMA 2011.*
11 *Austin Chamber of Commerce, 2011. www.austinchamber.com/the-chamber/media/ei-archive/ei121311.php*
12 *Del Valle ISD, 2012.*

and Development Review through subdivision and platting standards related to stormwater management and water quality, protection and conservation of environmental resources, provision of utilities and the design of roadways. While the County has proactively planned for regional open space and conservation as well as mining operations in the area, as evidenced by the recently adopted *Colorado River Corridor Plan*, State law precludes it from regulating land use. As such the Austin's Colony Activity Center has not enjoyed the level of coordinated neighborhood planning that occurs within the Austin city limits. The subdivision neighborhoods have a lack of parks and recreational amenities, and substandard and discontinuous pedestrian facilities.

As the area continues to urbanize, there is an increasing need for coordinated planning, so that the neighborhoods can establish themselves as a complete community with an appropriate balance and distribution of land uses, public open spaces and streets that promote a safe, healthful and livable environment. This is particularly evident along FM 969, where there are no sidewalks or bicycle lanes that can serve students wishing to walk or bicycle to school, or residents wishing to access the commercial or civic uses along the roadway. There are few natural places for residents of the adjacent subdivisions to have gatherings or celebrations, and no places that establish a strong sense of place and community.

4.1.3 Commercial Development

In addition to the commercial development listed as part of master planned developments, there are planned commercial sites along FM 969. This includes Park 130 and the Elm Creek Centre at the northeast corner of SH 130 and FM 969 as shown in **Table 17**. Additional commercial properties, or redevelopment of existing commercial properties, are anticipated in response to the planned residential developments.

4.1.4 Utility Development

Water main extension construction is dependent on development in the area. Several utility projects within the FM 969 corridor have been proposed or are currently in the planning/design stages. The *Colorado River Corridor Plan* identifies water and wastewater improvements that are planned. Conceptual City of Austin water transmission mains will extend east along FM 969, and paralleling SH 130 both north and south. The City of Austin BAE Reclaimed Water Line project proposes an 8-inch reuse water line that will extend from BAE Systems along Tracor Lane, Marcel Gres Drive, McBee Drive, the southern ROW of FM 969 and connect to the 36-inch existing reclaimed waterline near Walnut Creek.

According to Austin Water Utility representatives, the 12-inch sludge main (from WC WWTP to Hornsby Bend) is currently slated to enter design for upgrade in Fiscal Year (FY) 2014 and will be completed by FY 2019. Austin Water Utility will reevaluate the sludge main project's start date once more is known about the scope and schedule of any improvements that result from the FM 969 Corridor Development Plan.

Permanent regional wastewater treatment facilities outside of the Village of Webberville are planned to serve the City's northeast region. This Northeast Regional WWTP is planned to generally serve Austin's wastewater areas that are serviced under Certificates of Convenience and Necessity (CCN) in the northeast including Harris Branch, Gilleland Creek, Wilbarger, Decker, Lockwood, and Colorado River basins. Flexibility exists in the timing and phasing for this and other northeast wastewater facilities

that will allow Austin Water Utility to adapt to and accommodate potential growth of this area.

Austin Energy has no major plans for the FM 969 corridor area that would increase future development or traffic. Austin Energy currently does not have plans to build any major transmission poles along FM 969, but notes that the area has been underserved. A solar farm was energized in December of 2011 just north of Webberville. Austin Energy has plans to build a 20-acre substation off Taylor Lane, approximately 1.6 miles north of FM 969, in 2014, the Dunlap substation. The initial feeders out of the new substation will pick up the existing overhead lines in the area. As the area develops new feeders are expected to be routed along Taylor Lane and FM 969. Due to the proximity of the proposed new substation, provisions should be made to accommodate feeders on both sides of FM 969.

4.2 PLANNED MULTIMODAL IMPROVEMENTS

4.2.1 Future Traffic Demand

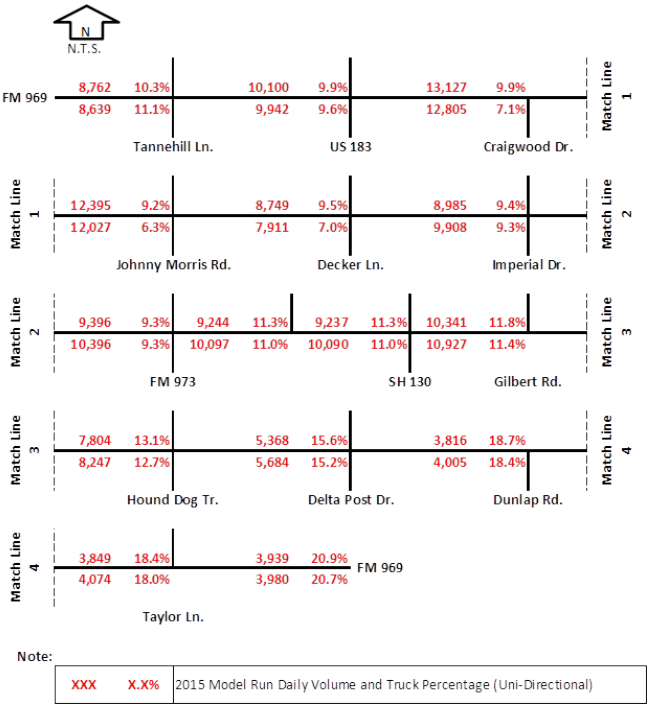
Future traffic volumes in the FM 969 corridor were projected to evaluate the need for improvements to meet future demands on the roadway network. The latest CAMPO Travel Demand Model (TDM) was used to project near-term (Year 2015) and long-term (Year 2025) traffic volumes.

The demographic data from the proposed future land use in the study influence area was used to update the CAMPO TDM. The roadway networks were also updated based on previous similar studies and proposed local developments. Due to the uncertainty associated with the timing of the various planned developments, three models were developed for the Year 2025 — low-growth, medium-growth, and high-growth scenarios. The traffic along FM 969 is not projected to change significantly by 2015 because the study influence area will only experience a 2% increase in population and very little change in the amount of employment.[13]

4.2.2 Future Roadway Network

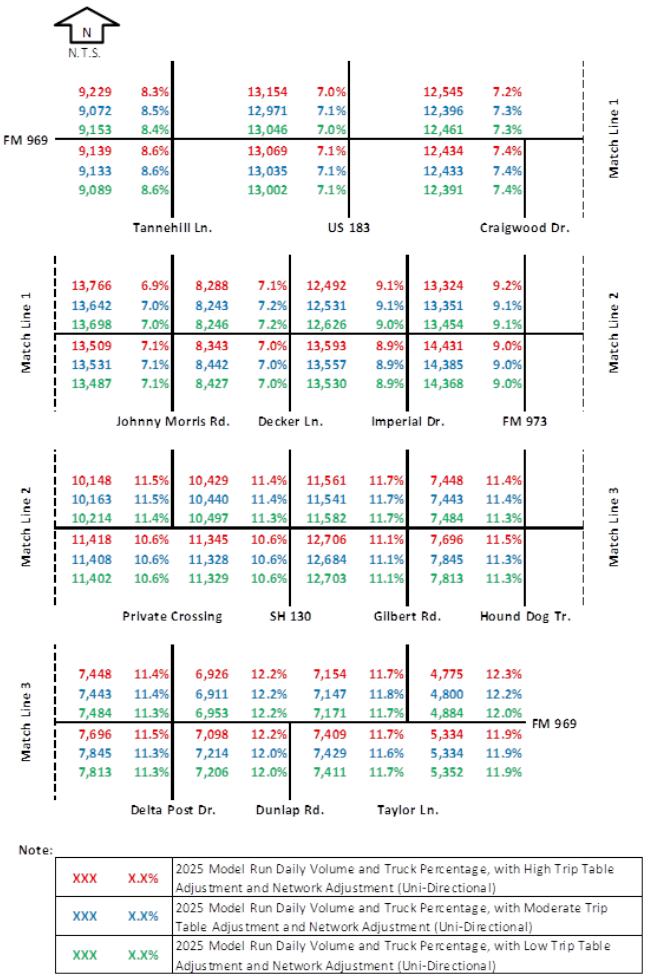
Figure 28 and **Figure 29** illustrate the modeling results of year 2015 and 2025 model runs, showing the predicted daily volumes, with truck percentages on FM 969 corridor. In general, the projected traffic volumes are only slightly higher than the existing traffic counts collected in 2010. More specifically, the Year 2025 CAMPO TDM depicts two trends. The first trend is an increase in traffic between the Village of Webberville and Decker Lane (FM 3177), and appears consistent with the future land use projections. The second trend is a small decline in traffic volumes between US 183 and Decker Lane (FM 3177) compared to those collected in 2010. While a

FIGURE 28 – Year 2015 Model Run Results – Daily Volumes and Truck Percentages



[13] *Manor Expressway Investment Grade Traffic and Revenue Study, CTRMA 2011.*

FIGURE 29 – Year 2025 Model Run Results – Daily Volumes and Truck Percentages



Note:

XXX X.X%	2025 Model Run Daily Volume and Truck Percentage, with High Trip Table Adjustment and Network Adjustment (Uni-Directional)
XXX X.X%	2025 Model Run Daily Volume and Truck Percentage, with Moderate Trip Table Adjustment and Network Adjustment (Uni-Directional)
XXX X.X%	2025 Model Run Daily Volume and Truck Percentage, with Low Trip Table Adjustment and Network Adjustment (Uni-Directional)

decrease in traffic volume appears to be in conflict with the increase of residential population and employment, the model assumes the future roadway network shown in **Figure 30**. The TDM includes the planned reconstruction of US 183 into a tolled managed lane facility. The improvements to US 183 include replacing the signalized intersection at Loyola Lane with an interchange, which will improve traffic operations. The TDM predicts that traffic will shift from FM 969 to Loyola Lane since FM 969 is congested. The increases seen on Loyola Lane east of US 183 and on Decker Lane (FM 3177) between Loyola Lane and FM 969 are large enough that they explain the decrease of traffic on FM 969.

Capacity needs for FM 969 future conditions were evaluated based on projected traffic volumes and the volume-to-capacity (v/c) ratio for each roadway segment from the travel demand model results. The details of the modeling results are located in **Appendix G**.

4.2.2.1 FM 969 Pass Through Financing

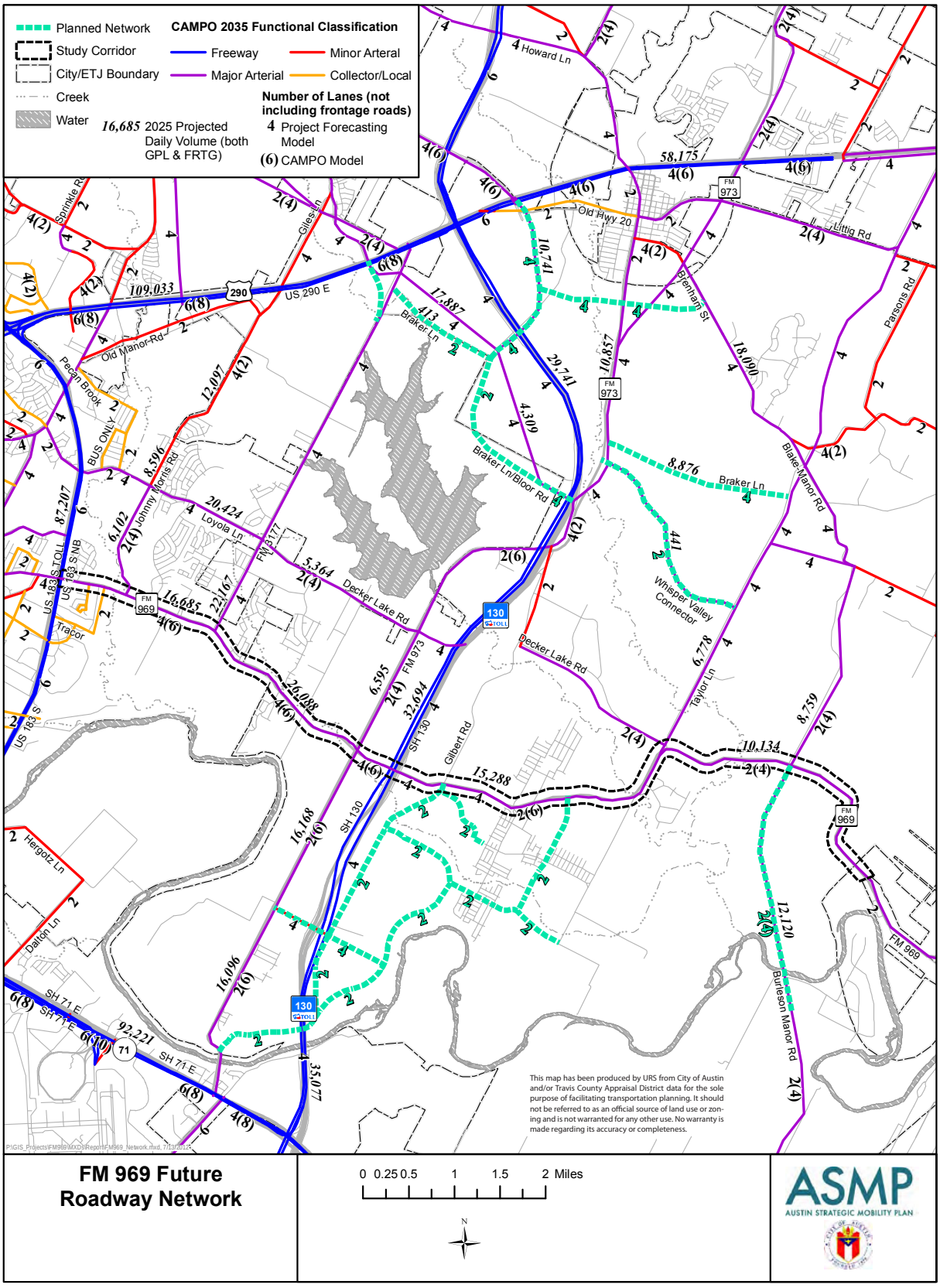
PTF is a tool created by the State and administered by TxDOT to stretch limited highway tax dollars by allowing communities to fund the upfront costs for constructing local high-priority projects, such as a state highway. TxDOT then reimburses a portion of the project's construction cost to the community over time by paying a fee for each vehicle that drives on the new highway for a specified period of time.

The FM 969 Travis County PTF project will be developed in two phases and is separate from the needs analysis that is provided in this document. The PTF projects may be considered as interim improvements.

Phase I improvements between Park at Woodland Hills Drive and FM 973 will provide a continuous two-way left-turning lane, paved shoulders and sidewalk on one side of the highway. Phase II improvements between FM 973 and Hunters Bend Road will add two travel lanes, paved shoulders, a continuous two-way left-turn lane and a sidewalk on one side of the highway.

Travis County will begin the planning, environmental and design effort in Fall 2012. It is anticipated that 30 to 36 months will be needed to perform the preliminary engineering, environmental analyses, final design, ROW acquisition, and utility adjustments. Construction is estimated at 24 months, which leads to an opening date in 2017.

FIGURE 30 – FM 969 Future Roadway Network



Source: City of Austin, CAMPO, URS.

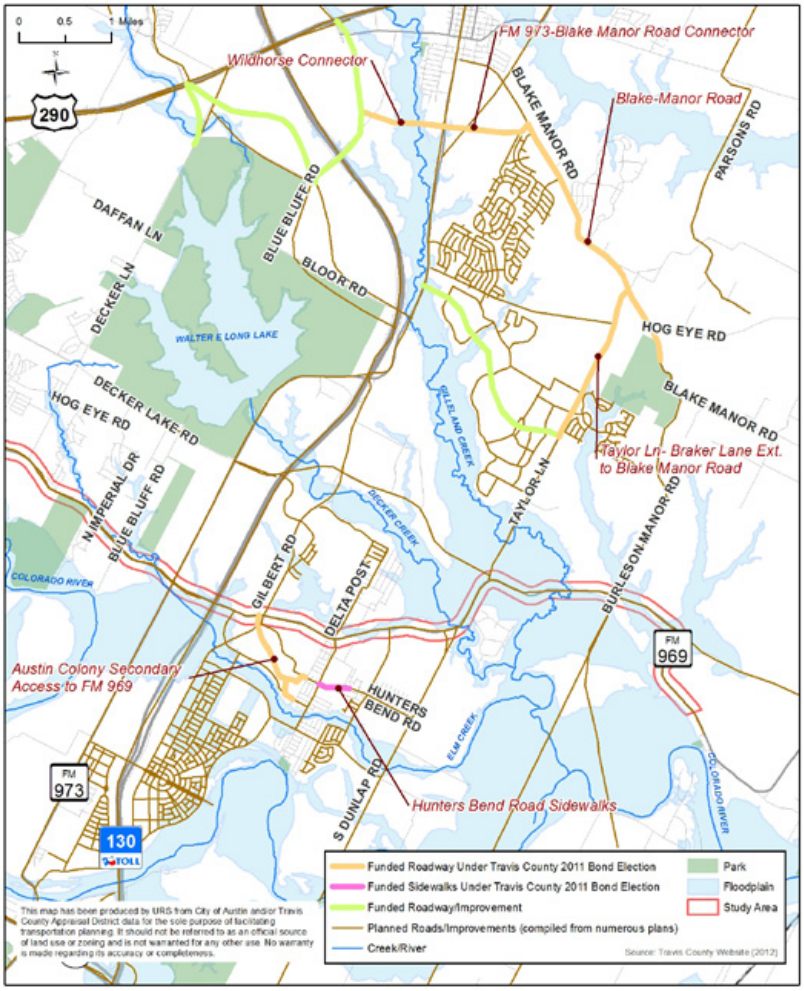
4.2.2.2 *Travis County Bond Projects*

Travis County residents approved two propositions in the bond election on November 8, 2011. The bonds, which can be sold to borrow money to pay for improvement projects, are general obligation bonds and will be repaid over the next two decades via property taxes. Both Propositions 1 and 2 were approved in the November 2011 election and included improvements in the FM 969 corridor. **Figure 31** and **Figure 32** show those improvements in both propositions related to FM 969.

4.2.3 Future Transit Options and Opportunities

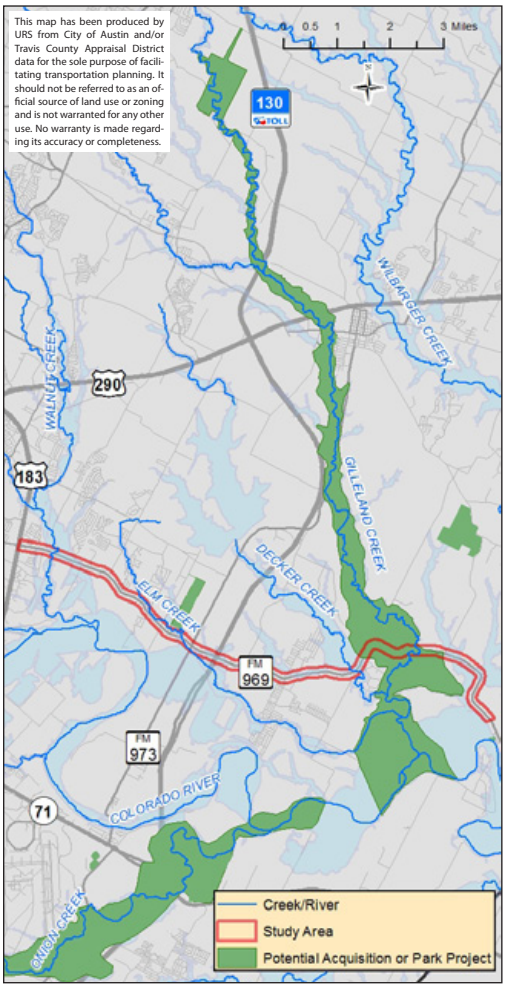
In order to ensure that the FM 969 Corridor Development Plan meets all future needs, planned improvements for transit, bicycle, and pedestrian mobility were reviewed. For transit, the review included the *CAMPO 2035 Regional Transportation Plan (RTP)*, *Capital Metro All Systems Go Long Range Plan*, and the *Capital Metro 2020 Service Plan*, and the ongoing Project Connect effort. Based on the recommendations from these plans, service will be added to the study influence area over the twenty-five year planning horizon.

FIGURE 31 – Proposition 1 Improvements



Source: Travis County, 2011.

FIGURE 32 – Potential Gilleland Parkland Acquisition in Proposition 2



Source: Travis County, 2011.

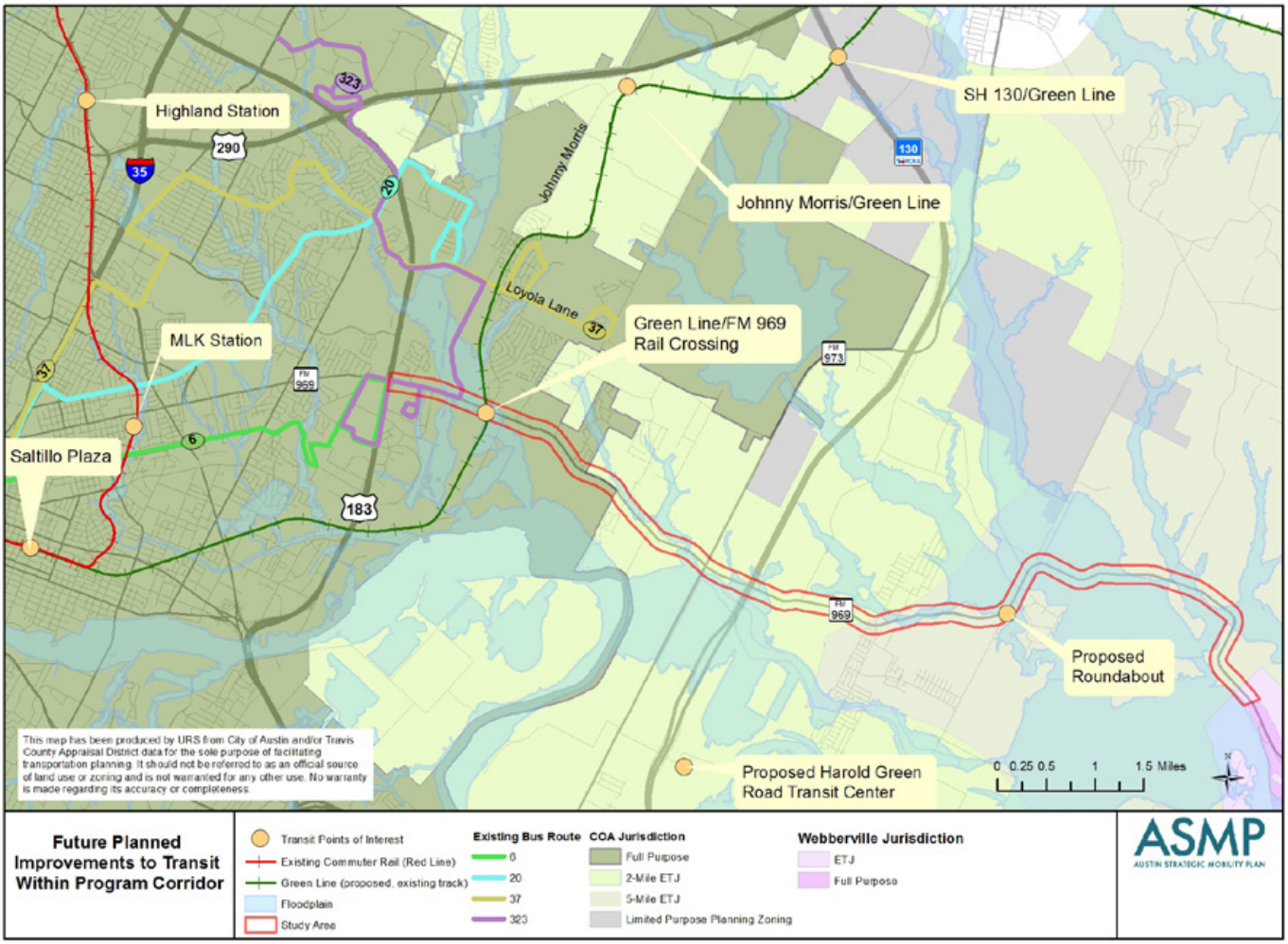
4.2.3.1 Capital Metro

The current land use along the FM 969 corridor is a mix of low density commercial, retail, and residential, and community facilities, such as schools and churches. This mix of development does not provide the number of potential transit users necessary to support expanded service at this time. Based on the number of planned residential and mixed use projects, it is anticipated that in the study influence area, a population base for potential ridership will develop. Future expansion of the Capital Metro service area would require annexation by the City of Austin. There are several options to improve transit along the FM 969 corridor within the existing plans. **Figure 33** shows some possible improvements (but not bus routes) that cumulatively would improve access to transit, and more importantly, provide options for current residents of the corridor. These items include:

- Future Green Line commuter rail to Manor
- Future Green Line station near FM 969 or Loyola Lane

New transit service to the Austin's Colony Activity Center and improvements to the existing service were reoccurring comments throughout the public

FIGURE 33 – Potential Future Planned Improvements to Transit Within Study Corridor



Source: Capital Metro, 2011.

meeting and stakeholder process. A roundabout at Dunlap Road would facilitate bus U-turns at the eastern end of the route.

CARTS service is available but most of the residents are not aware of the service or feel the CARTS route would not make appropriate connections with Capital Metro for their needs.

Capital Metro policy requires access by sidewalks to new bus stops. Since sidewalks are discontinuous or non-existent along FM 969, close coordination between Capital Metro, TxDOT, and the City of Austin will be needed to match new sidewalks to future bus stops.

4.2.3.1.1 MetroRail Green Line

The most significant increase in transit capacity could come from the MetroRail Green Line. The existing freight rail corridor from downtown Austin to Manor and Elgin has been identified as a high-growth area experiencing increasing traffic congestion in the US 290, IH 35, and US 183 South corridors, requiring proactive commute travel options between communities. Capital Metro's long-term plan proposes an extension to existing commuter rail service, connecting Austin, Manor, and Elgin to develop and operate passenger rail in the East Austin area to provide transportation choices, improved mobility, and enhanced regional growth.

As shown in **Figure 33**, the 28 mile route would be constructed on already-existing rail lines purchased by Capital Metro in 1986, with 8 total stations. Possible station locations include the existing stations in downtown Austin Convention Center, Plaza Saltillo, and new stations at Loyola Lane, Johnny Morris Road/US 290, SH 130, Downtown Manor, East Manor/West Elgin, and Downtown Elgin.

The preliminary concept of Metro Rail Green Line would utilize five trains and two spares, with 20 minute peak period headways, and could be operational within 36 – 48 months from project authorization and financing. Benefits of rail implementation include providing an additional 450 passenger spaces per hour, as well as improving corridor air and water quality with the reduction of vehicles operating within the FM 969 corridor.[14] The Green Line is still in the early planning stages with a begin service date of 2017.

Of the preliminary station locations that have been suggested by Capital Metro, Loyola Lane is the closest to FM 969. An alternative location for serving this corridor would be just north of FM 969. Flooding is a concern in this area, and the ability to provide parking may be limited by the adjacent residential developments. **Figure 34** shows the railroad crossing and vacant land, just west of Sendero Hills Parkway. This vacant 2 acres of land continues up the considerable hill to the foot of the Agave development. Just east of Sendero Hills Parkway is an additional acre of land with a similar slope.

FIGURE 34 – Intersection of Sendero Hills and FM 969

[14] *Austin-Manor-Elgin Transit Corridor: A Preliminary Review, September 2008.*

4.2.3.1.2 Metro Rail Red Line and High Capacity Bus

The closest stop to the Capital Metro Red Line to the FM 969 corridor is the MLK Station located approximately 2.7 miles west of US 183. Currently no bus routes show direct connectivity for residents to use the Red Line from the FM 969 corridor, although a planned high capacity bus lane along the East MLK, Jr. / FM 969 corridor as far east as the intersection of FM 969 and SH 130 has been suggested in the *CAMPO 2035 RTP* documents. This infers that new bus service would be provided between Decker Lane (FM 3177) and SH 130.

The FM 969 corridor was considered in the ongoing Project Connect high capacity transit study, but not identified as a high priority. New bus service is currently unsponsored and no date of completion has been proposed.

4.2.3.1.3 Other Bus Plans

Other planned bus improvements include the implementation of a deviated fixed-route bus (service that travels to a major destination at a set point and time, but then provides on-demand service within a defined region) between FM 969 and US 290 to serve the residential communities along Decker Lane. The service is proposed to begin in Fall 2014 by Capital Metro.

Since FM 969 will likely remain posted at current speed limits, "bus bays" shown in **Figure 35** have been proposed for safety in conjunction with any future bus service with stops along FM 969. Allowing the buses to exit the flow of traffic will minimize the effect of bus service on traffic flow and increase safety.

Since Capital Metro has a policy for all bus stops to have sidewalks, the long-term improvements for this corridor includes sidewalks on both sides of the roadway. Should Capital Metro extend their services through the FM 969 corridor to the Austin's Colony Activity Center a proposed roundabout at Dunlap Road would offer an efficient bus turnaround, saving time for commuters, minimizing air quality effects, and minimizing the route length.

FIGURE 35 – Proposed Bus Bays Along FM 969

4.2.3.1.4 Proposed Harold Green Road Transit Center

Just east of SH 130 and south of FM 969 is the master planned development of Rio de Vida. Primary access to the development will be from FM 973 using Harold Green Road. The developer is reserving land at the intersection of FM 973 and Harold Green Road for a future transit center. Should Capital Metro extend their services to area, this transit node would not only serve the residents of Rio De Vida to provide a link to the aforementioned Metro Rail Green Line and other bus networks, but may also serve as a transfer point for those going south of the Colorado River to destinations such as the Austin-Bergstrom International Airport.

This transit node would also be available to CARTS and complement the existing demand response service and commuter service currently provided between Smithville, Bastrop, Del Valle, and Austin.

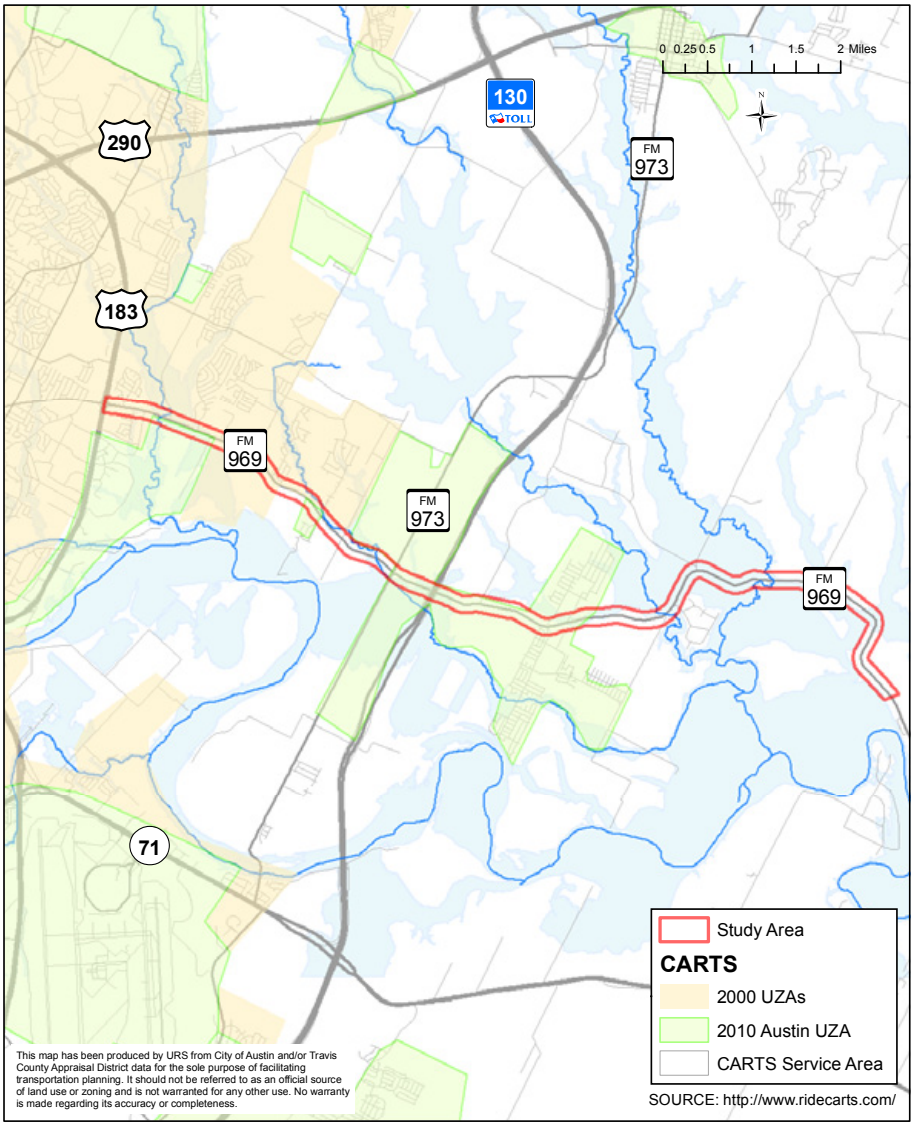
The transit center could initially be a park and ride facility, with the potential for future high capacity bus as demand increases over time.

4.2.3.2 CARTS

As urban areas experience growth, fringe rural areas become urbanized. On March 26th, 2012, the U.S. Census report on UZAs included most of the FM 969 corridor studied in this report. Austin's Colony, Kennedy Estates, Chaparral Crossing, Forest Bluff have been added to the UZA as shown in **Figure 36.** This change in the UZA makes these areas ineligible for federal rural transit funds.

According to the CARTS website (www.ridecarts.com), CARTS is not expecting any change in service for the next fiscal year (Sept. 1, 2012-Aug. 31, 2013). The Federal Transit Administration (FTA), TxDOT, Capital Metro and CARTS are all actively engaged in looking for solutions that will prevent any disruption of service to their CARTS customers. Transit Points of

FIGURE 36 – 2010 Austin Urbanized Boundary Changes



Source: Texas Transportation Institute, 2012.

Interests (previously shown in **Figure 33**) may help interagency coordination in determining how and where overlap and opportunity exists in and around the budding communities of the FM 969 corridor.

4.2.4 Bicycle and Pedestrian Facilities

Proposed improvements for bicycle and pedestrian facilities were found in the *CAMPO 2035 RTP*, the *Austin 2020 Bike Plan Update*, the *Austin 2009 Sidewalk Master Plan*, and *Imagine Austin*. From the *CAMPO 2035 RTP*, a total of $444 million is proposed over the 25-year planning horizon to use on bicycle and pedestrian projects.

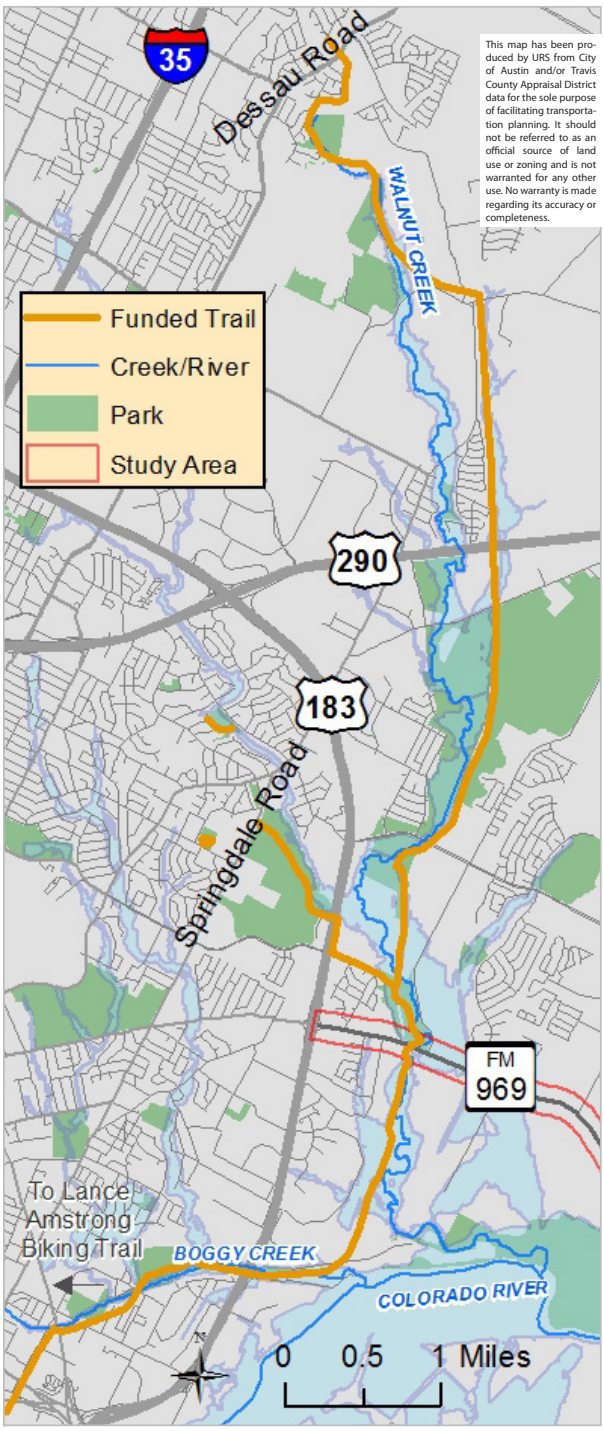
These suggested/planned improvements and developments include:

- A wide shoulder be provided along FM 969 from U.S. 183 to Webberville;
- A bicycle lane for Johnny Morris Road between FM 969 and Point North Drive;
- Widening the shoulder along Decker Lane (FM 3177) to replace a shared lane from US 290 East to the Decker Power Plant;
- Improvements to FM 973 including wide shoulders to move bicyclists to the shoulder rather than using a shared lane; and
- A continuous bicycle lane along Gilbert Road from FM 973 to Falwell Lane.*

A funded trail system exists along Walnut Creek from Dessau Road all the way to the Colorado River, then up Boggy Creek towards downtown Austin. The funded trail, as shown in **Figure 37**, will also connect Little Walnut Creek and cross under US 183 to Springdale Road. The Walnut Trail will connect to the Lance Armstrong Bikeway that travels through east and west Austin and terminates along Lady Bird Lake at Austin High School.

As for pedestrian improvements, a sidewalk on one side of FM 969 is proposed as part of the Travis County PTF project (described in **Section 4.2.2.1**) that extends from east of Decker Lane (FM 3177) to Hunters Bend Road. Sidewalks are proposed on both

FIGURE 37 – Walnut Creek Trail



* *This improvement, found in the 2009 Bicycle Plan Update, assumes future construction of Gilbert Road.*

sides of FM 973 as part of the Colorado River bridge replacement project described in **Section 4.2.5.1**. No other projects are planned for the study influence area, but the *CAMPO 2035 RTP* classified the study influence area as a region of medium importance for pedestrian facilities.

4.2.5 Road Network Plans

4.2.5.1 TxDOT Projects

4.2.5.1.1 Programmed Projects

TxDOT has two rehabilitation projects programmed on FM 969 to be constructed in the FY 2015/FY 2016 timeframe. Neither project will add travel lanes.

- FM 969, From US 183 to Decker Lane: Mill surface and inlay with new asphalt concrete pavement.
- FM 969, From Taylor Lane to Webberville: Rehabilitate pavement and widen crown width to provide 4-foot paved shoulder.

A third programmed project in the study influence area is a bridge replacement on FM 973 at the Colorado River and associated roadway widening south to SH 71.

- FM 973 From 1.2 miles north of Colorado River to SH 71

Two three-lane bridges will be constructed at the existing crossing. Since funding for the widening of the remainder of FM 973 north to FM 969 has not yet been identified, the roadway work will transition back to the existing two lanes south of Harold Green Drive. This project is expected to be let in FY 2013.

4.2.5.1.2 Planning Projects

TxDOT suspended work on two planning studies that were evaluating the impacts for widening FM 969 and FM 973 to six-lane divided arterials as shown in the *CAMPO 2035 RTP*.

- FM 973 Corridor Study: From US 290 in Manor to US 183 south of Austin
- FM 969: From Decker Lane (FM 3177) to SH 130

Work on both of these projects was suspended in 2008.

4.2.5.2 Travis County Projects

The *Colorado River Corridor Plan* identifies the following short-, medium-, and long-term goals:

- Short term (0 to 10 years) – expanding FM 969 to a 4 lane major arterial divided from FM 3177 to Hunters Bend Road;
- Medium term (10 to 15 years) – expanding the remaining roadway to a 4 lane major arterial from US 183 to Webberville; and
- Long term (15 to 25 years) – creating a bus only/high capacity lane from Lamar/US 290 to SH 130/FM 969.

The document also prioritizes constructing dual left turn lanes on Hunters Bend Road to westbound FM 969 to improve safety, as well as developing "Colorado River Parkway" design guidelines to create an aesthetic corridor along FM 969.

4.3 SUMMARIES OF PREVIOUS STUDIES

The FM 969 corridor has been included in several previous planning efforts, which define visions and goals with respect to future growth in the study influence area. A thorough review of previous visions and goals was conducted to gain an understanding of the various neighborhoods, and to further the findings of these previous studies relative to improvements on FM 969 for the current effort. The results of this review have been summarized and provided below.

4.3.1 East MLK Combined Neighborhood Plan

The *East MLK Combined Neighborhood Plan*, adopted in November 2002, comprises three individual planning areas: MLK, MLK 183, and Pecan Springs/ Springdale. The goals for the listed planning areas are to preserve established residential areas and to promote rehabilitation of housing while promoting the development and enhancement of major intersections.

The Plan recommended the following improvements affecting the corridor:

- Widening the curb lane to 15 feet along FM 969 from Airport Boulevard to Johnny Morris Road to provide a bicycle lane; and
- Constructing sidewalks east of the intersection of US 183 / FM 969 that will extend east to the railroad.[15]

4.3.2 CAMPO 2035 Regional Transportation Plan

The *CAMPO 2035 RTP*, adopted in May 2010, aims to coordinate the transportation system throughout the region by developing a plan that balances transportation, land use, and natural resources by assessing future needs and guiding the development of the transportation system. **Table 18** lists the proposed improvements in the corridor.[16]

4.3.3 Colorado River Corridor Plan

The *Colorado River Corridor Plan*, adopted by Travis County in the spring of 2012, provides a policy framework for the preservation and enhancement of environmental, economic, recreational and cultural resources along the river between FM 969 and SH 71. The Plan includes objectives for improved protection of local bio-diversity; preservation and restoration of floodplains and natural areas; the creation of parks, open spaces and greenways; enhancement of corridor quality of life through the long-term restoration and reclamation of mined sites; and enhancement of mobility through capital project development and new design alternatives.

The Plan identifies areas of the corridor suitable for urban, suburban and rural development, natural and riparian areas for preservation, recreation and open space, and a hierarchy of roadway improvements.

TABLE 18 – Proposed CAMPO 2035 Regional Transportation Plan Improvements

Corridor Location	Proposed Improvements	Funding Source	Construction Implementation
Lamar/US 290 to SH 130/ FM 969	Priority lane for buses	Currently unsponsored	Between 2026 – 2035
FM 969: SH 130 to SH 71	Expanding arterial to 4 lane major divided arterial	TxDOT	Between 2026 – 2035
Westgate to FM 969/ SH 130	Rapid bus implementation along South Lamar and MLK connecting Westgate, Downtown, and SH 130	Capital Metro	2020
Braker Lane extension from Parmer Lane to Burleson Manor Road	Widen existing 2 lane road to 4 lane major divided arterial with bicycle lanes and sidewalk	Travis County and City of Austin	Between 2020 – 2025

Source: CAMPO 2035 Regional Transportation Plan

[15] *East MLK Combined Neighborhood Plan, City of Austin, 2002.*
[16] *CAMPO 2035 Regional Transportation Plan, CAMPO, 2010.*

The recommended improvements included the following:

- A new river crossing connecting SH 71 with FM 969 along a southern extension of Burleson Manor Road;
- Expanding FM 969 to a 4-lane major divided arterial from FM 3177 to Hunters Bend Road;
- Expanding remaining sections of FM 969 to a 4-lane major divided arterial to Webberville;
- Creating a bus only/high capacity lane from Lamar/US 290 to SH 130/FM 969.
- Constructing two left turn lanes on Hunters Bend Road to FM 969 to improve safety; and
- Developing a "Colorado River Parkway" design guideline to create an aesthetic corridor along FM 969.

Water and wastewater improvements were also planned within the study influence area. Conceptually, City of Austin water transmission mains will extend east along FM 969, and paralleling SH 130 north-south. Water main extension construction is dependent on development in the area.[17]

4.3.4 Travis County Parks and Natural Areas Master Plan

The *Travis County Parks and Natural Areas Master Plan*, adopted in 2006, presents a ten-year planning timeframe to develop a sustainable system of parks and natural areas in unincorporated regions of Travis County by focusing on development of a system of greenways and riparian corridors that link parks and natural areas within the county.

For planning purposes, Travis County is divided into four quadrants. The FM 969 corridor area falls within the Northeast Planning Area, the most populated planning area with the largest number of residents per square mile. Likewise, this area has the greatest demand for parks and open areas, as the eastern half of the county has lower acreage and percentage of parks and natural areas than the western half of the county.

Existing recreational facilities within the study influence area include access to the Colorado River at Webberville and Little Webberville Parks, an outdoor swimming pool at East Metro Park, and facilities for soccer, basketball, and baseball games.

Local experts were asked to identify recreational needs within the County. Recommendations that affect the FM 969 corridor include the following:

- Provide bicycle/pedestrian access along and across the SH 130 corridor and work to preserve its scenic quality;
- Develop greenbelts along the Colorado River and eastern creeks to connect newly acquired parkland with existing parkland on the Colorado River;
- Maintain Webberville and Little Webberville Parks as host sites for annual Easter Egg Hunt and Fort Webber Day; and
- Install a pool at Webberville Park.

Priorities for the Northeast Planning Area include completing improvements to East Metro Park and acquiring land along waterways to develop a greenway system along the Colorado River and eastern creeks. The Gilleland-Wilbarger Greenway South 18-mile trail system will connect Manor, East Metro Park, Colorado Forest and Wetlands, and Webberville. It will be developed along creeks and roads where riparian ecosystems and bottomland forests have been preserved or will be restored.[18]

4.3.5 Long Range Plan for Land, Facilities, and Programs

The Austin Parks and Recreation Department's *Long Range Plan for Land, Facilities, and Programs*, adopted

[17] *Colorado River Corridor Plan. Travis County, 2012.*
[18] *Travis County Parks and Natural Areas Master Plan. Travis County, 2006.*

in 2010, is a strategy for addressing the recreational needs of Austin's citizens within the next five years due to booming residential growth.

The plan prioritized needs for park improvements within the Austin metropolitan area. Program specific recommendations include connecting existing greenways such as the Gilleland Creek System. Gilleland and its tributaries compose a large creek system that traverses over 30 miles from Pflugerville to the Colorado River, and is crossed by SH 130. The plan highlights the need to capture a continuous greenway system prior to further development while the creek system's riparian corridor is still within a natural state. A master plan for John Trevino Jr. Metropolitan Park at Morrison Ranch is listed in the Plan, but it ranks as a lower priority.[19]

4.3.6 City of Austin Sidewalk Master Plan

The *City of Austin Sidewalk Master Plan*, adopted in March 2009, outlines policies encouraging walking as a viable form of transportation, improving pedestrian safety, and providing safe facilities allowing transit passengers to walk to and from transit stops.

The Plan identified and ranked gaps in the existing sidewalk network based on criteria such as facilities on the street, residential population, proximity to attractors, and proximity to core transit corridors.

The Plan was reviewed to locate information on the FM 969 corridor. The section from US 183 to just west of Nixon Lane was identified as a "high priority absent sidewalk section," while the remaining portion of FM 969 to the Austin city limit was identified as a "medium priority absent sidewalk section."[20]

4.3.7 Austin 2020 Bicycle Master Plan

The City of Austin's *Austin 2020 Bicycle Master Plan*, adopted in June 2009, outlines goals and objectives to improve the roadway and trails network in Austin and the ETJ to improve accessibility and safety for all levels of bicycle riders. The Plan identifies current conditions, future needs, and barriers and gaps in the existing network.

The Plan was reviewed for information and recommendations on FM 969 within the study influence area. The recommendation is to provide a wide paved shoulder rather than shared lanes between US 183 and Webberville.[21]

4.3.8 *Imagine Austin*

Imagine Austin, adopted June 15, 2012, is a comprehensive plan for city officials to guide development over the next 25 years. The city has been experiencing substantial growth over the last 20 years and the trend is expected to continue for the next 25 years. Austin is well-known for its distinctive vibe, outdoor recreational opportunities, thriving live music scene, and resilient economy. However, the city also experiences serious issues as traffic congestion and loss of natural and open space due to urban sprawl. *Imagine Austin* addresses these issues by focusing on community needs, values, people, and places by outlining key challenges, opportunities, and priority goals.

Imagine Austin identifies planning and completing street improvements to the FM 969 corridor – such as separated bicycle lanes, wider sidewalks, and improved transit infrastructure with more user friendly bus stations – as a short-term (1-3 years) priority goal. *Imagine Austin* also recommends partnering with local businesses and artists to add amenities to demonstration corridors, and plans on continually implementing the *Austin Strategic Mobility Plan*, *Austin 2020 Bicycle Master Plan*, and *CAMPO 2035 RTP*.[22]

[19] *Long Range Plan for Land, Facilities, and Programs. City of Austin, 2010.*
[20] *Sidewalk Master Plan. City of Austin, 2009.*
[21] *Austin 2020 Bicycle Master Plan. City of Austin, 2009.*
[22] *Imagine Austin. City of Austin, 2012.*

4.3.9 Travis County Greenprint for Growth

In 2002, Envision Central Texas, a nonprofit organization created to assist in the development and implementation of a regional vision addressing growth in Central Texas, started a public input process aimed at identifying critical resources in the region. *The Travis County Greenprint for Growth*, completed in 2006 and based on broad input from the community and stakeholders, focused on land conservation, water quality and quantity, recreational opportunities, and cultural resources by applying Geographic Information System (GIS) modeling to assist local governments and communities with making informed decisions about land conservation policies.

The report identifies the Colorado River corridor (east of IH 35 to Bastrop County) and southwest Travis County as areas needing special focus for future parkland acquisition investments, as well as identifying the need to protect floodplains along major creeks such as Gilleland. The report generally highlights portions of the FM 969 corridor as having moderate to high priority of conserving water quality and quantity, rare and sensitive environmental features, and cultural resources.[23]

4.3.10 The 2025 Austin Metropolitan Area Transportation Plan

The *2025 Austin Metropolitan Area Transportation Plan (AMATP)*, adopted in June 2000, served as a comprehensive, coordinated regional transportation long-term plan that identified roadways within the Austin metropolitan area requiring congestion and transit management, and bicycle and pedestrian improvements. The plan encouraged changing existing transportation conditions and trends by examining alternatives to promote development by both transportation policy and land use patterns.

Existing roadway networks were analyzed to determine added future capacity necessary to ensure that roadways would have a reasonable LOS and a safe driving environment by 2025. The FM 969 corridor was identified as requiring upgrades to meet projected LOS. **Table 19** below highlights each section analyzed. The "Existing 1997" column denotes roadway conditions existing as of 1997, three years prior to the adoption of this Plan. The "Adopted 2025

TABLE 19 – 2025 AMATP - FM 969 Improvements

Roadway Segment	Existing 1997	Adopted 2025 Plan	2025 Needs
US 183 (S) – Johnny Morris Road	4-lane major undivided arterial	Existing	8-lane major divided arterial
Johnny Morris Road – Decker Lane	4-lane major undivided arterial	6-lane major divided arterial	
Decker Lane (FM 3177) – FM 973	4-lane major undivided arterial	6-lane major divided arterial	
FM 973 – Taylor Lane	2-lane major undivided arterial	4-lane major divided arterial	
Taylor Lane – Study Boundary	2-lane major undivided arterial	Existing	

Source: City of Austin.

[23] *Travis County Greenprint for Growth. Travis County, 2006.*

Plan" column lists the recommended improvements per plan, while the "2025 Needs" column clarifies any additional improvements needed to meet the actual expected future demand.

While most segments within the FM 969 corridor have been recommended for expansion, the segment from US 183 to Johnny Morris Road was recommended as keeping its existing 4-lane undivided arterial structure, though the segment actually would need to expand to an 8-lane divided arterial to meet future demand. Additional ROW would be needed to widen FM 969 to six lanes.

Additionally, the Plan suggested upgrading the bicycle and pedestrian system, both for safety and to encourage bicycling and walking as alternative forms of transportation.[24]

4.3.11 Summary of Previous Plans

While each plan reviewed may differ in its specific recommendations, several clear, consistent visions and goals have emerged:

- Open areas should be developed into a system of parks and greenways to link other parks and natural areas in the county, particularly along Gilleland Creek;
- Pedestrian and bicycle facilities must be upgraded for safe, efficient multimodal transportation within the FM 969 corridor; and
- Roadways need to be widened and improved to meet projected LOS and travel demand within the next 25 years.

[24] *2025 Austin Metropolitan Area Transportation Plan. City of Austin, 2000.*

5.0 IMPROVEMENT TOOLS

5.1 MULTIMODAL ACCESSIBILITY

Multimodal accessibility improvements focus on removing obstacles to transit service, bicycling, and walking. Since transit service has limited points of access, an extra emphasis for multimodal accessibility is the promotion of bicycling and walking.

One improvement that would facilitate pedestrian trips is the addition of sidewalks. Sidewalks benefit access because residents with access to sidewalks typically are less car dependent than residents who do not have sidewalk and would have to walk in the street instead.

Planned improvements that target bicycle and pedestrian access include :

- FM 969 PTF which will provide two 6-foot paved shoulders for bicyclists and a sidewalk on one side of FM 969.
- Restriping of FM 969 between US 183 and Decker Lane (FM 3177) to provide bicycle lanes in conjunction with TxDOT preventive maintenance project.
- Retrofit sidewalks in vicinity of crosswalks and intersections.

RECOMMENDATION: Proposed improvements that target bicycle and pedestrian access include:

- Provide shared use path on Johnny Morris Road between FM 969 and Loyola Lane.
- Provide bicycle lanes on FM 969 between US 183 and Decker Lane (FM 3177) in conjunction with project to widen roadway to 6 lanes.
- Provide bicycle lanes on FM 969 between Decker Lane (FM 3177) and Dunlap Road proposed as long-term improvements.
- Provide shared use path between Dunlap Road and Webberville proposed as long-term improvements.
- While accommodating increased vehicular capacity with a widening of FM 969 from two to four lanes, equal attention needs to be given to improving pedestrian and bicycle facilities. See **Section 8.1.2**, **Urban Design**, for a suggested village street concept.
  - Bicycle lanes or separated cycle tracks are recommended to safely accommodate the experienced and inexperienced cyclist.
  - A landscaped median should be provided to enhance the identity of the Austin's Colony Activity Center, to reduce the scale of the roadway, to help calm traffic and to provide a refuge for pedestrians crossing the street.
  - Street trees and pedestrian-scaled lighting should be provided along the roadway to promote a comfortable and protected pedestrian environment.

5.2 SAFETY

Improvements that address safety are aimed at reducing car versus pedestrian conflicts, car versus bicycle conflicts, car versus car conflicts, or all three types of conflict.

Focusing on car versus pedestrian conflicts, a number of improvements have the potential to increase pedestrian safety. One such improvement is the construction of sidewalks. Sidewalks help move pedestrians to a separate space rather than forcing them to share the same space as fast-moving cars. Another pedestrian safety improvement is the construction of pedestrian signal heads and pavement markings, such as crosswalks and stop bars.

By adding these treatments to intersections that do not currently have them, pedestrians can be better informed of appropriate times to cross the street and vehicles are directed to stop in a location that leaves enough space for pedestrians to cross in front of the vehicles.

Improvements can also be added to reduce the likelihood of car versus bicycle collisions. One treatment for protecting bicyclists is the creation of a bicycle lane or construction of a paved shoulder. A bicycle lane can be created by restriping the pavement to reduce lane widths, but when there is a large difference in travel speeds between cars and bicycles, a bicycle lane may be separated from the travel lanes by a curb or median. Both separated and un-separated bicycle lanes have been included in the short-term and long-term alternatives.

The final type of safety improvement aims to reduce the incidence of car versus car collisions. These types of safety improvements include:

- Traffic control devices.
- Realignment of skewed intersections.
- Improving sight distance at intersections.
- Adding two-way left-turn lanes or medians.
- Adding metal beam guard fence.
- Improving sight distance along roadway (vertical and/or horizontal alignment).

RECOMMENDATION: Travis County and City of Austin should evaluate all reasonable options to improve safety in the corridor.

5.3 OPERATIONAL

Operational improvements are based on creating more capacity or shifting traffic demand to other corridors.

Capacity can be increased by improving operations at signalized intersections (i.e., reducing delay), as well as adding travel lanes.

When adding travel lanes to a corridor is not a viable option, traffic demand shifts to other parallel corridors as travel time delay increases.

Improvements to parallel corridors may attract more drivers when connections to major intersecting highways are improved, as shown by the increase in traffic on Loyola Lane in conjunction with the managed lanes on US 183.[25]

RECOMMENDATION: Travis County, City of Austin, and TxDOT should evaluate all reasonable options to improve operations in the corridor. Two specific locations that should be further evaluated in a detailed safety study are "Park at Woodlands Drive"

[25] *See Appendix D.*

and "Bantom Woods Bend." Both are unsignalized intersections situated on horizontal and vertical curves. There were 21 reported crashes between 2008 and 2010 along the short segment (nearly 800 feet) between the two intersections.

5.4 POLICY REVISIONS

5.4.1 Capital Metro Service Area

As noted in **Section 4.2.3**, the Capital Metro service area is updated based on its member entities' boundaries. At three stakeholder meetings and both public meetings, residents expressed the need for bus service to the neighborhoods located between Decker Lane (FM 3177) and Cadillac Drive. The planned Rio de Vida development includes space for a future transit center at the intersection of FM 973 and Harold Green Drive.

The sales tax rate outside of Austin's city limits along the FM 969 corridor ranges from 6.75% to 7.25%. The difference in sales tax rate is due to the difference in sales tax rates between Emergency Service District No. 12 (0.5%) and Emergency Service District No. 4 (1.0%). Since Travis County does not impose a county sales tax, there would be an ability to collect an additional 1% sales tax for Capital Metro if the service area were expanded to serve the neighborhoods in this portion of Travis County.

RECOMMENDATION:

- The service area for Capital Metro should be revised to align with the recently adopted urbanized area boundary.
- Funding for the additional service area should be from the 1% sales tax assessed for Capital Metro or some other funding mechanism that may be provided by the legislature in the future.

6.0 RECOMMENDATIONS

Certain projects are recommended in the short-term to address current deficiencies, while others are provided as long-term solutions to address future needs. The FM 969 PTF improvements are considered as interim long-term improvements due to the time needed to perform the design work, purchase ROW, and build the project.

In addition, some projects would need to be delivered in phases. These improvements would impact utilities, and therefore utility impacts of the ultimate configuration should be considered early. Funding sources for these potential improvements are provided in **Section 7.3, Funding Sources.**

6.1 SHORT-TERM RECOMMENDATIONS

6.1.1 Initial Alternatives

After gathering stakeholder feedback and analyzing existing corridor conditions, projects were developed to address current corridor deficiencies while also promoting the long-term vision sought by stakeholders.

Table 20 includes the initial list of alternative short-term improvements. Overlapping elements and/or project limits were not addressed at this stage as the improvements were viewed as individual projects for consideration by the 2012 City of Austin Bond Election Advisory Task Force.

6.1.2 Interim Alternatives

Several of the improvements can be implemented sequentially to improve the corridor as funding becomes available. All short-term improvements need to be compatible with the ultimate typical sections described in **Section 6.2**, **Long-Term Improvements**. One example of project sequencing is provided in **Table 21**.

6.1.3 Recommended Short-Term Improvements

Based on the timing of the planned projects, potential timing of future funds, and the implementation costs provided in **Chapter 7, Program Implementation**, the initial list of 13 alternative projects was reduced to nine recommended projects listed in **Table 22**. Installation of new traffic signals is contingent upon the results of the traffic warrant study that will be performed for each proposed location. Establishing the priority within this group of nine projects will need to be done in collaboration with TxDOT.

6.2 LONG-TERM RECOMMENDATIONS

6.2.1 Initial Alternatives

Even with the proposed short-term projects, larger scale improvements are needed for the FM 969 corridor to operate efficiently in the future. The initial long-term alternative improvements for FM 969 and FM 973 are listed in **Table 23**. Four lanes on FM 973 will serve the travel demand anticipated in 2025 but six lanes will be needed in 2035. Therefore design effort for expanding FM 973 should be for the ultimate 6-lane facility so that all ROW acquisitions and utility adjustments are done for the final configuration. Construction can be phased to provide the 4-lane roadway until travel demand requires expansion to six lanes.

TABLE 20 – Initial Short-Term Improvement Alternatives

Corridor Section	Recommended Improvements
FM 969 (US 183 to Decker Lane)	■ Construction of a new sidewalk (one side, 6-feet wide) ■ Pavement overlay (by TxDOT) and restriping to provide bicycle lane (by City)
Full FM 969 Corridor	■ Bicycle lane to separate cyclists and automobiles
Johnny Morris Road (FM 969 to Loyola Lane)	■ Construction of a 10-foot wide shared use path
FM 969 (Gilbert Road to Hound Dog Trail)	■ Bicycle lanes and sidewalk
Decker Lane (FM 3177) / FM 969 intersection	■ Reconfigure intersection (dedicated right turn bays for southbound, eastbound, and westbound movements and add safety lighting at the intersection)
SH 130 frontage roads / FM 969 intersections	■ Install traffic signals (completed by TxDOT March 2013)
Hunters Bend Road / Delta Post Road / FM 969 intersection	■ Add third lane for northbound movement to allow for dual dedicated left-turn lanes
Gilbert Road / FM 969 intersection	■ Reprogram traffic signal to extend afternoon operations until 6 PM ■ Reprogram signal upon completion of Gilbert Road extension to provide full-day operations
FM 973 / FM 969 intersection	■ Add safety lighting to existing signal poles
Regency Drive to Craigwood Drive	■ Construct crosswalk on FM 969 at Regency Drive with pedestrian-actuated signal, sidewalk on south side from Regency Drive to Craigwood Drive and add crosswalk and ped head signal to existing signal at Craigwood Drive
Walnut Creek Trail to Johnny Morris Road	■ Add sidewalk on north side between Walnut Creek Trail and proposed shared use path on Johnny Morris Road

TABLE 21 – Potential Sequencing of Short-Term Improvements on MLK, US 183 to Decker Lane

Limits	Description	Jurisdiction
US 183 to Decker Lane	Resurface and stripe bicycle lanes	TxDOT (paving) and City (bicycle lane markings)
Regency Drive to Craigwood Drive	Construct crosswalk on FM 969 at Regency Drive with pedestrian- actuated signal, sidewalk on south side from Regency Drive to Craigwood Drive and add crosswalk and ped head signal to existing signal at Craigwood Drive	City of Austin and TxDOT
Walnut Creek Trail to Johnny Morris Road	Add sidewalk on north side between Walnut Creek Trail and proposed shared use path on Johnny Morris Road	City of Austin and TxDOT

TABLE 22 – Recommended Short-Term Improvements

Corridor Section	Recommended Improvements
FM 969 (US 183 to Decker Lane)	1. Pavement overlay (by TxDOT) and restriping to provide bicycle lane (by City)
Johnny Morris Road (FM 969 to Loyola Lane)	2. Construction of a 10-foot wide shared use path
FM 969 (Gilbert Road to Hound Dog Trail)	3. Bicycle lanes and sidewalk (if needed before 2017)
SH 130 frontage roads / FM 969 intersections	4. Install traffic signals (completed by TxDOT March 2013)
Gilbert Road / FM 969 intersection	5. Reprogram traffic signal to extend afternoon operations until 6 PM 6a. Widen westbound shoulder to provide right-turn lane AND 6b. Reprogram signal upon completion of Gilbert Road extension to provide full-day operations
FM 973 / FM 969 intersection	7. Add safety lighting to existing signal poles
Regency Drive to Craigwood Drive	8. Construct crosswalk on FM 969 at Regency Drive with pedestrian-actuated signal, sidewalk on south side from Regency Drive to Craigwood Drive and add crosswalk and ped head signal to existing signal at Craigwood Drive
Walnut Creek Trail to Johnny Morris Road	9. Add sidewalk on north side between Walnut Creek Trail and proposed shared use path on Johnny Morris Road

TABLE 23 –Long-Term Improvements

Corridor Section	Recommended Improvements
FM 969 (US 183 to Decker Lane)*	■ Widen to six lanes with raised median (MAD+ 6)
FM 969 (Decker Lane to SH130)*	■ Widen to four lanes with raised median (MAD 4, with MAD 6 ultimate)
FM 969 (SH 130 to Hunters Bend Road)	■ Widen to four lanes with raised median (MAD 4)
FM 969 (Hunters Bend Road to Webberville)*	■ Widen to four lanes with raised or flush median (MAD 4)
FM 973 (SH 130 to FM 969)*	■ Widen to MAD 4 (MAD 6 ultimate)
FM 973 (FM 969 to Thyone Drive)*	■ Widen to MAD 4 (MAD 6 ultimate)

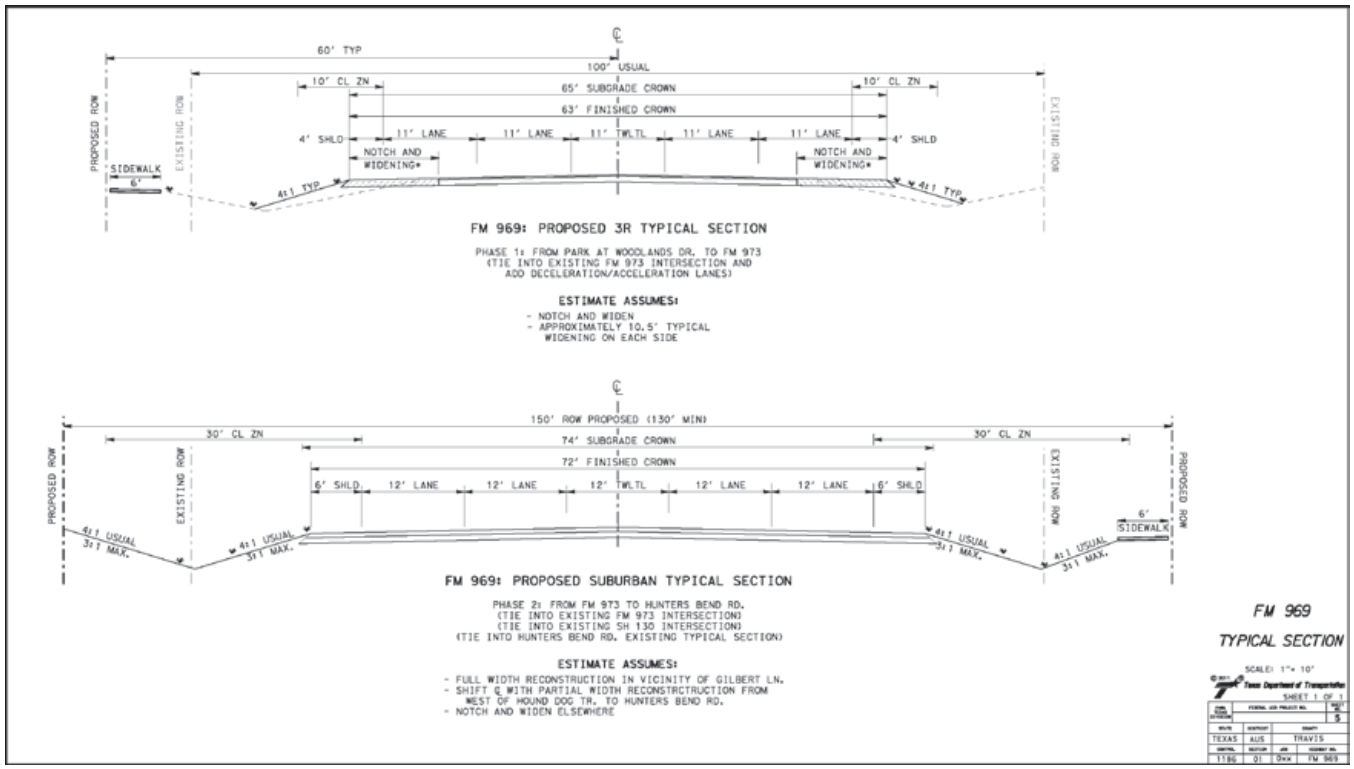
**These projects will require additional ROW and utility adjustments*
+ Major arterial divided

6.2.2 Interim Long-Term Improvements

As described in **Section 4.2.2.1**, Travis County has a PTF agreement with TxDOT for improvements to FM 969 that is separate from this planning effort. The time needed to perform the engineering, environmental studies, and final design pushes this project into the long-term timeframe. However, the typical section does not match the *CAMPO 2035 RTP*. Consequently, the PTF project shown in **Figure 38** can be considered as an interim long-term improvement toward ultimate typical sections described in **Table 23** and shown in **Figure 39**.

Table 24 summarizes the design criteria for the interim long-term improvement projects.

FIGURE 38 – Pass-Through Financing Typical Sections



Source: TxDOT, FM 969 Pass-Through Finance Agreement, 2012.

TABLE 24 – Interim Long-Term Improvements Design Criteria

	US 183 TO DECKER LN (FM 3177)		DECKER LN (FM 3177) TO SH 130	
	Minimums	Provided/Desired	Minimums	Provided/Desired
AREA TYPE/FACILITY TYPE	**URBAN ARTERIAL**		**SUBURBAN ARTERIAL**	
DESIGN SPEED (Recommended/Minimum)	45	50	50	50
MINIMUM RADIUS (Usual Minimum)	960	1762	960	1100
SUPER ELEVATION MAXIMUM	N/A	8%	8%	8%
K Values (Crest/Sag)+	(84/96)		(84/96)	
LANE WIDTH (Minimum)	11	11	11	12
MEDIAN WIDTH (inside edge of travel lanes)	N/A	N/A	N/A	N/A
TWO-WAY LEFT-TURN LANE	11	12	11	12
CLEAR ZONE	1.5	3	10	30
BORDER WIDTH++	10	10	15	20
BICYCLE LANE *	5	6	N/A	N/A
SHOULDERS (outside)	N/A	N/A	4	6
SIDEWALK	5	6**	5	6***

* *Proposed striped or signed area for cyclists.*
** *Sidewalks adjacent to crosswalks (not continuous).*
*** *Sidewalk on one side of FM 969 only.*
\+ *Length of vertical curve per percent change in the algebraic difference in grades*
++ *Distance between edge of roadway and ROW line.*
Source: TxDOT Roadway Design Manual, 2010.

6.2.3 Proposed Long-Term Improvements

The proposed long-term improvements to FM 969 for 2025 are based on the continuing urbanization of the corridor. Deviations from the typical sections may be required during preliminary engineering for the project due to ROW and/or utility constraints. The design criteria used to develop the conceptual designs are provided in **Table 25**. Companion improvements will be needed to FM 973 as well as the county roads, as shown in the *CAMPO 2035 RTP*, to serve the anticipated development.

The roadway design speed was evaluated at 50 mph between US 183 and Decker Lane (FM 3177) because that is the current speed of the roadway and the design speed used in previous planning efforts. The minimum radius shown is the tightest radius for the existing roadway and is well above the minimum required radius. The roadway section between US 183 and Decker Lane (FM 3177) was designed with 11-foot lanes due to ROW restrictions. The clear zone listed is for a design speed of 50 mph versus the conceptual TxDOT design speed of 45 mph.

6.2.3.1 US 183 to Decker Lane (FM 3177)

The ultimate design for FM 969 between US 183 and Decker Lane (FM 3177) will expand the roadway to a 6-lane roadway with a raised median and curb and gutter as shown in **Figure 39**. The design will include continuous sidewalk and a bicycle lane or cycle track on both sides of the roadway. The design speed will remain at 50 mph. The typical ROW width will be expanded to 124 feet.

6.2.3.2 Decker Lane (FM 3177) to Dunlap Road

The year 2025 design for FM 969 between Decker Lane (FM 3177) and Dunlap Road will expand the

TABLE 25– Long-Term Improvements Design Criteria

	US 183 TO DECKER LN (FM 3177)		DECKER LN (FM 3177) TO SH 130	
	Minimums	Provided/Desired	Minimums	Provided/Desired
AREA TYPE/FACILITY TYPE	**URBAN ARTERIAL**		**SUBURBAN ARTERIAL**	
DESIGN SPEED (Recommended/Minimum)	45	50	50	50
MINIMUM RADIUS (Usual Minimum)	960	1762	960	1100
SUPER ELEVATION MAXIMUM	N/A	8%	8%	8%
K Values (Crest/Sag)+	(84/96)	––	(84/96)	––
LANE WIDTH (Minimum)	11	11	11	12
MEDIAN WIDTH (inside edge of travel lanes)	4	4 thru 16	4	4 thru 16
TWO-WAY LEFT-TURN LANE	N/A	N/A	N/A	N/A
CLEAR ZONE	10	20	10	20
BORDER WIDTH++	0	0	5	8
BICYCLE LANE/CYCLE TRACK*	5	8	5	8
SHOULDERS (outside)	N/A	N/A	N/A	N/A
SIDEWALK	5	6	5	6

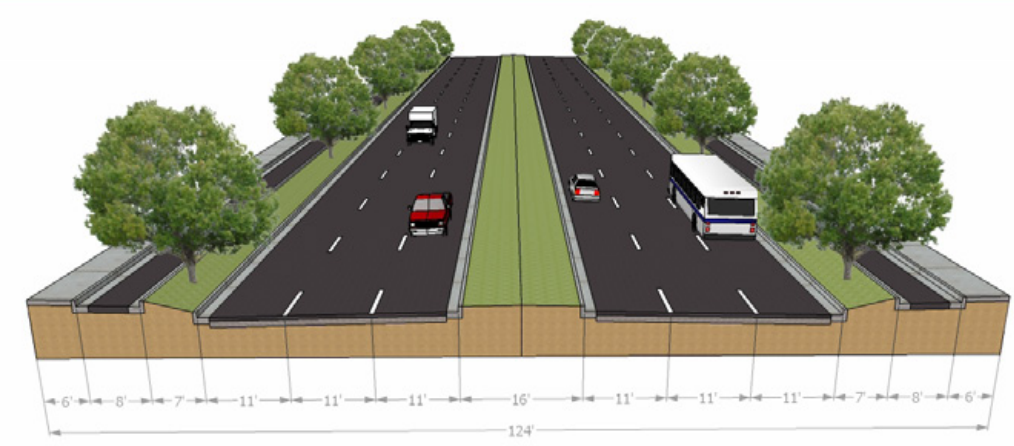
* *Proposed striped or signed area for cyclists.*

\+ *Length of vertical curve per percent change in the algebraic difference in grades*

++ *Distance between edge of roadway and ROW line.*

Source: TxDOT Roadway Design Manual, 2010.

FIGURE 39 – US 183 to Decker Lane (FM 3177) – Ultimate Typical Section



section to a 4-lane roadway with a raised median, bicycle lanes, and curb and gutter. The design will include continuous sidewalk on both sides of the roadway. The design speed will remain at 50 mph. The ROW width may need to increase from 120 feet proposed in the PTF project to 140 feet or more in order to provide the second sidewalk between Decker Lane (FM 3177) and FM 973 as shown in **Figure 40**.

No additional ROW is anticipated between FM 973 and SH 130 (**Figure 41**) since additional ROW will be obtained for the PTF project. Additional ROW will be needed between Hunters Bend Road and Dunlap Road.

The 2025 design for FM 969 between SH 130 and Dunlap Road is similar to the section between Decker Lane and SH 130 with 150-foot ROW. Optional "Village Street" configurations are proposal and discussed in **Section 8.1.2.1, Activity Center**.

FM 969 will need to expand to six lanes with a raised median between Decker Lane (FM 3177) and SH 130 at some point beyond 2025 to carry anticipated traffic.

6.2.3.3 Dunlap Road to Webberville

The ultimate design from FM 969 between Dunlap Road and Webberville is a 4-lane roadway with either a two-way left-turn lane or a raised median and a shared use path on one side of the roadway as shown in **Figure 42**. Bicyclists would be encouraged to use the shared use path rather than the shoulder.

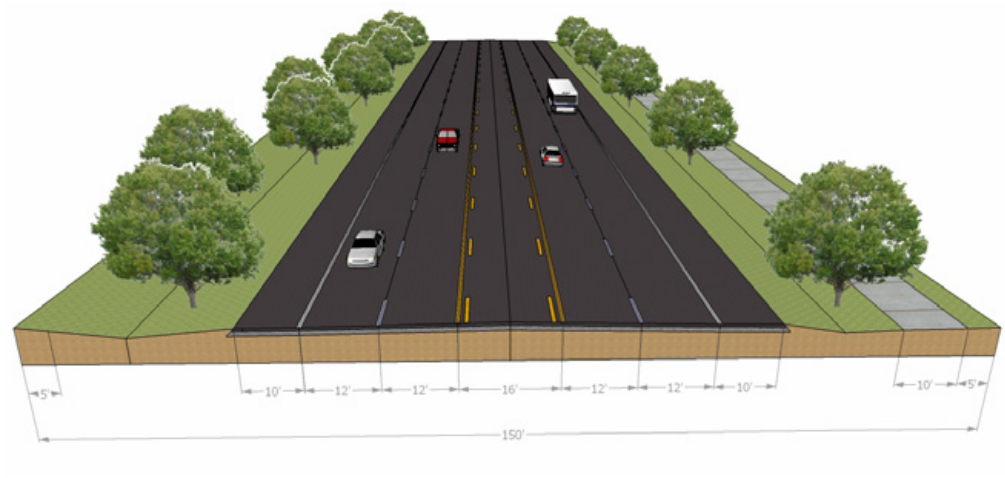
FIGURE 40 – Decker Lane (FM 3177) to FM 973 – 2025 Typical Section

6.2.3.4 Alternate Bicycle Facilities from U.S. 183 to Webberville

An alternate ultimate design for the bicycle facilities for the entire

FIGURE 41 – FM 973 to Dunlap Road – 2025 Typical Section

FIGURE 42 – Dunlap Road to Webberville – Ultimate Typical Section, Two-Way Left-Turn Lane Option



corridor would be a shared use path on one side of the street, similar to the one proposed between Dunlap Road and Webberville. Because of the high speeds and volumes on this suburban arterial/rural highway, potential bicyclists may feel uncomfortable using wide shoulders as previously proposed in the ultimate typical sections between U.S. 183 and Dunlap Road. A shared use path would provide a higher level of comfort and increase the separation from motor vehicle traffic for bicyclists of all skill levels. Access management strategies to limit the number of driveways and to encourage access to FM 969 by using cross streets will be considered as development occurs. This approach would be compatible with the shared use path. The proposed shared use path can take the place of a sidewalk unless passing through an activity center with adjacent active uses, in which case the shared use path should have an adjacent sidewalk. Shared use paths should be set back a minimum of 5 feet from the roadway and should have a minimum width of 10 feet, with a preferred width of 12 feet. Since this facility would take the place of the sidewalk and cycle tracks in the proposed sections, the need for additional ROW may be reduced. The shared use path should be consistently located on the same side of the corridor and continuity at intersections should be carefully considered. Quality crossings would have to be provided to cross streets and major destinations along the corridor.

7.0 PROGRAM IMPLEMENTATION

Numerous factors must be considered in creating a program development plan when three jurisdictions are involved. Identifying potential funding sources and the timing in which those funds may be available influences the improvements. As discussed **Sections 6.1, Short-Term Recommendations**, and **5.3, Long-Term Recommendations**, there are overlapping elements (i.e., sidewalks, bicycle facilities) between the short-term and long-term improvements. Ideally, the placement of these improvements, as well as any utility adjustments for short-term improvements, would be compatible with the vision for long-term improvements. The development plan needs to be flexible to respond to the changes in future funding at the city, county, and State level.

This chapter provides a summary of the conceptual cost estimates for the roadway, bicycle, and pedestrian improvements listed in **Chapter 6.** An overview of improvement benefits is provided by project type. In today's funding realities it will take several government funding sources to implement the recommendations for the FM 969 Corridor. An overview of potential funding sources including all relevant potential sources based on federal, State, and local funding programs is provided in **Appendix H.** Summary information regarding the changes resulting from the new federal surface transportation bill (Moving Ahead for Progress in the 21st Century (MAP-21) enacted in July 6, 2012) is included in the funding overview.

7.1 CONCEPTUAL COST ESTIMATES

Conceptual level cost estimates were prepared for the various short- and long-term improvements. Unit prices were derived from TxDOT Austin District average bid prices (as of December 2011) with adjustments made for the relative size of each improvement. The major assumptions used for the construction cost estimates are listed below:

- Long-term improvements will be constructed after the Travis County PTF projects between Decker Lane (FM 3177) and Hunters Bend Road.
- Flexible pavement was assumed for widening and all reconstruction work.
- Street lights cost assumed at $100,000 per mile (long-term projects only).
- Landscaping/streetscape, irrigation, and water meter costs are only included in the long-term improvements.
- Sidewalk only projects will not require new ROW.
- ROW costs based on Travis County appraisal district assessed values.
- Utility relocation costs based on location data provided by the various utility companies.
- A contingency factor of 20% was assumed.
- A factor of 35% was assumed to cover mobilization (15%) and other bid items not specifically quantified (20%).
- The cost of engineering the construction plans was assumed at 10%.

Table 26 provides the summary costs for each of the conceptual improvements. Those improvements recommended for implementation are shown in bold text. Conceptual layouts for the long-term improvements are provided in **Appendix I**. Supporting cost information is provided in **Appendix J**.

TABLE 26 – Conceptual Cost Estimate Summary

Project No.	Project Description	Short-/ Long-Term Improv.	Improv. Type	ROW Requirement	Construction Cost	ROW[1]	Utility Cost	Contingency 20%	Engineering Cost 10%	Total Project Cost
Bicycle/Pedestrian Improvements										
7	US 183 to Decker Lane (FM 3177), 6-foot sidewalk north side	Short	Safety	None	$1,701,000	NA	$170,000	$340,000	$221,000	$2,432,000
6	**Johnny Morris Road, 10-foot hike/bicycle path from FM 969 to Loyola**	**Short**	**Safety**	**None**	**$799,000**	**NA**	**$59,000**	**$160,000**	**$102,000**	**$1,120,000**
5-A	Restripe for bicycle lanes, US 183 to Decker Lane	Short	Safety	None	$86,000	NA	NA	$17,000	$10,000	$113,000
OR										
5-B	**Overlay and restripe, US 183 to Decker Lane**	**Short**	**Safety**	**None**	**$565,000**	**NA**	**NA**	**$113,000**	**$68,000**	**$746,000**
10	**Bicycle/Ped between Gilbert and Hound Dog Trail**	**Short**	**Safety**	**Minor**	**$687,000**	**NA**	**$95,000**	**$138,000**	**$92,000**	**$1,012,000**
Intersection Improvements										
1	Decker Lane (add southbound right turn bay)	Short	Operational	Minor	$308,000	$125,000	$70,000	$62,000	$56,000	$621,000
2	**Regency Drive to Craigwood Drive, add sidewalk and pedestrian-actuated signal at Regency Drive with crosswalk improvements at Craigwood Drive**	**Short**	**Safety**	**None**	**$394,000**	**NA**	**$39,000**	**$79,000**	**$51,000**	**$563,000**
4	**SH 130 frontage roads - add signals**	**Short**	**Operational**	**None**	**Completed**	**NA**	**NA**	**NA**	**NA**	**NA**
9	Hunters Bend, add third lane northbound for dedicated left-turn lane, sidewalks to Hound Dog Trail	Short	Operational	Minor	$640,000	$150,000	$95,000	$128,000	$101,000	$1,114,000
11	**At Gilbert Road, right turn lane enhancements**	**Short**	**Operational**	**None**	**$27,000**	**NA**	**NA**	**$5,000**	**$3,000**	**$35,000**
12	**Safety lighting at FM 973/ FM 969 intersection**	**Short**	**Safety**	**None**	**$84,000**	**NA**	**NA**	**$17,000**	**$10,000**	**$111,000**
Arterial Improvements										
8-A	**Hunters Bend to Webberville, widen to 5 lanes**	**Long**	**Operational**	**Major**	**$21,582,000**	**$2,350,000**	**$2,371,000**	**$4,316,000**	**$3,062,000**	**$33,681,000**
3-A	FM 969: From US 183 to SH 130 (Conventional)	Long	Operational	Major	$42,581,000	$500,000	$2,500,000	$8,516,000	$5,410,000	$59,507,000
OR										
3-B	**FM 969: From US 183 to SH 130 (Superstreet)**	**Long**	**Operational**	**Major**	**$45,061,000**	**$750,000**	**$2,500,000**	**$9,012,000**	**$5,732,000**	**$63,056,000**
8-B	**SH 130 to Hunters Bend, 4-lane ultimate section**	**Long**	**Operational**	**None**	**$5,090,000**	**NA[3]**	**NA[3]**	**$1,018,000**	**$611,000**	**$6,719,000**
					Total Cost of All Improvements[2]					$111,210,000
					Total Cost of Recommended Improvements					$107,043,000

[1] ROW cost varies based on location. Travis Co. Appraisal District data for potentially impacted parcels reviewed.
[2] Does not include project 3-A or 5-A.
[3] All necessary ROW/utility adjustments under Travis County Pass-Through Finance project.
NOTE: Bold text indicates recommended projects.
Unit prices were derived from TxDOT Austin District average bid prices (December 2011).

7.1.1 Committed Projects

There are four funded roadway improvements scheduled for FM 969 that will go to construction between FY 2014 and FY 2016, as summarized in **Table 27**.

In addition to the projects on FM 969, there are several other roadway improvements scheduled for construction by Travis County **(Table 28)** within the corridor study influence area as shown previously in **Figure 31.**

TABLE 27 – Programmed Projects on FM 969

Letting Year	Roadway	Sponsor	Limits	Project Description
2015	FM 969	TxDOT	Taylor Lane to Bastrop County Line	Widen pavement to add 4-foot paved shoulders
2016	FM 969	TxDOT	US 183 to Decker Lane (FM 3177)	Mill surface and inlay with asphaltic concrete pavement
2015	FM 969	County	East of Decker Lane (FM 3177) to FM 973	PTF Phase 1, widen pavement to add two-way left-turn lane and sidewalk
2016	FM 969	County	FM 973 to Hunters Bend Road	PTF Phase 2, widen to 4 lanes with two-way left-turn lane and sidewalk

Source: TxDOT, Travis County

TABLE 28 – Other Programmed Projects

Letting Year	Roadway	Sponsor	Limits	Project Description
2013	Austin Colony Secondary Access to FM 969	County	Westall Street, Sandifer Street to FM 969 at Gilbert Lane	New 2-lane collector roadway, bicycle lanes/sidewalks
2013	Hunters Bend Road Sidewalks	County	Austin Colony Boulevard to Red Tails Drive	Creating Sidewalks on Hunters Bend Road from Austin Colony Boulevard to Red Tails Drive
2014	Wildhorse Connector	County/ PPP*	Parmer Ext to FM 973	New 4-lane divided arterial, bike lanes/sidewalks
2015	FM 973 to Blake-Manor Road Connector	County/ PPP*	FM 973 to Blake-Manor Road	New 4-lane divided arterial, bike lanes/sidewalks
2015	Blake-Manor Road	County	Wildhorse Connector to East Metro Park entrance	Widen 2-lane to 4-lane divided arterial, bike lanes/sidewalks
2016	Taylor Lane-Braker Lane Ext to Blake-Manor Road	County	Braker Lane extension to Blake-Manor Road	Widen 2-lane to 4-lane divided arterial, bicycle lanes/sidewalks

** Public-Private Partnership*

Source: TxDOT, Travis County.

7.1.2 Proposed Projects

7.1.2.1 Short-Term

Table 29 provides the list of recommended short-term projects that will need to be considered and prioritized with the other potential projects within the City of Austin and Travis County in future bond elections. Sidewalk improvements would be eligible for the potential sidewalk/trail set-aside that was included in the approved 2012 City of Austin Bond Election. TxDOT funding for traffic operational improvements is by an annual allocation to each district with projects programmed by TxDOT Austin District staff.

7.1.2.2 Long-Term

The forecast 2025 traffic volumes on FM 969 are dependent upon the assumptions made regarding the other roadway network improvements by Travis County shown in **Figure 31**. These other planned

TABLE 29 – Recommended Short-Term Improvements

Target Year	Roadway	Limits	Description	Potential Sponsor	Comments
2013	FM 969	At Gilbert Road	Widen westbound shoulder to provide a right-turn lane. Signal retiming	County/TxDOT TxDOT	Could be included with County's Gilbert Lane construction project By maintenance forces
2013	FM 969	At SH 130 Ramps	Install traffic signals	TxDOT	Completed March 2013
2014	FM 969	At FM 973	Install safety lighting on existing signal poles	TxDOT	Could be deferred to County PTF project
2014	Johnny Morris Road	Loyola Lane to FM 969	Construct shared use path	City	Connection to Walnut Creek Trail
2014	FM 969	Walnut Creek Trail to Johnny Morris Road	Construct sidewalk	City/TxDOT	Provides connection between trail and proposed shared use path
2014	FM 969	Gilbert Road to Hound Dog Trail	Construct sidewalks	County/TxDOT	Would provide interim sidewalks if warranted by pedestrian counts
2015	FM 969	Regency Drive to Craigwood Drive	Construct pedestrian-activated signal at Regency Drive, sidewalk, modify signal at Craigwood	City	Signal warrant study required
2016	FM 969	US 183 to Decker Lane (FM 3177)	Re-striping for bicycle lane with TxDOT mill and inlay project	TxDOT – paving City – bicycle lane striping	City could participate in striping cost for bicycle lane

Source: TxDOT, Travis County

projects include the collector network within the various planned residential and mixed-use developments as well as the proposed extension of Burleson Manor Road to SH 71, which includes a new Colorado River crossing.

The forecast 2025 volume on the Blake-Burleson Road extension is over 12,000 vehicles per day. If construction of this project is delayed beyond 2025, the expansion of FM 969 to four lanes between Hunters Bend Road and Webberville would need to be constructed by 2025 to accommodate the traffic that would have used the Burleson Manor Road extension.

Table 30 provides the list of long-term improvements (2020 and after) that should be considered to address the mobility needs with in the corridor study influence area.

7.1.3 Utility Relocation and Future Utility Considerations

Relocation of utilities can be costly in terms of money and time. Utilities prefer advance notification to plan the utility adjustments and budget for relocation. Several utilities requested at least an advance notice of a year for budgeting purposes at the utility stakeholder meeting.

As a TxDOT roadway, utilities are prohibited from running parallel under the FM 969 pavement. Existing utilities within the ROW will be required to relocate to accommodate road widening and/or sidewalk construction. Limited ROW and steep topography may pose as challenges for the relocation process. Horizontal and vertical clearances with other utilities and existing structures are major considerations with utility placement and relocation. In some areas, the existing shoulders of FM 969 drop

TABLE 30 – Recommended Long-Term Improvements in the Study Influence Area

Target Letting Year	Roadway	Limits	Description	Potential Sponsor
2020	Taylor Lane	Braker Extension to FM 969	Widen to 4 lanes with bicycle/ped amenities	County
2020	FM 973 Bypass	FM 973 S. of Manor to US 290 E. of Manor	New location, 4 lanes with bicycle/ped amenities	TxDOT/Manor/County
2020	FM 973	SH 130 to Wildhorse Connector	Widen to 4 lanes with bicycle/ped amenities, improve drainage	TxDOT/County
2030	Decker Lake Road	Decker Lane (FM 3177) to FM 973	Widen to 4 lanes with bicycle/ped amenities	Travis County
2023	Burleson Manor Extension	FM 969 to SH 71 via Caldwell Lane	New location, 2 lanes with bicycle/ped amenities	Travis County
2025	FM 969	US 183 to Decker Lane (FM 3177)	Widen to 6 lanes (Superstreet) with bicycle/ped amenities	TxDOT/City
2035	FM 969	Decker Lane (FM 3177) to SH 130	Convert to Superstreet design	TxDOT/County/City
2035	FM 969	Hunters Bend to Webberville	Widen to 4 lanes with two-way left-turn lane with shared use path	TxDOT/County
2035	FM 973	Colorado River to SH 130	Widen to 4 lanes with bicycle/ped amenities	TxDOT

off sharply, which may create difficulty in meeting depth of cover requirements for underground utilities. Several existing businesses along FM 969, particularly between US 183 to Decker Lane (FM 3177) are situated close to the roadway, leaving little space for horizontal relocation.

Limited space within the ROW may prevent or limit sidewalk and curb ramp construction along FM 969. Sidewalks provide an accessible route to all people, a requirement under the Americans with Disabilities Act to offer public services, such as bus transportation.

General considerations for planning the utility relocations and the utility adjustment cost estimates are included in **Appendix C**.

7.2 BENEFITS OF IMPROVEMENTS

7.2.1 Roadway

7.2.1.1 Short-Term Improvements

The recommended short-term improvements address immediate needs related to bicycle and pedestrian safety. Bicyclists are trying to use the wider outside travel lane between US 183 and Decker Lane (FM 3177), but the width does not provide the 3-foot clearance required by city ordinance. Restriping FM 969 for the bicycle lane could be accomplished with the TxDOT resurfacing project in 2016.

7.2.1.2 Long-Term Improvements

7.2.1.2.1 Interim Projects

The Travis County PTF projects should be viewed as interim long-term improvements. Adding the two-way left-turn lane from east of Decker Lane to FM 973 will provide a refuge for left-turning traffic, thereby reducing the risk of rear-end collisions. The other PTF project from FM 973 to Hunters Bend Road will provide four lanes with a continuous two-way left-turn lane.

7.2.1.2.2 Ultimate Projects

The recommended long-term improvements to fully address future traffic volumes in 2025 require adding a third travel lane in each direction between US 183 and SH 130. The additional lanes will reduce congestion in the peak periods but will require additional ROW and significant utility adjustments.

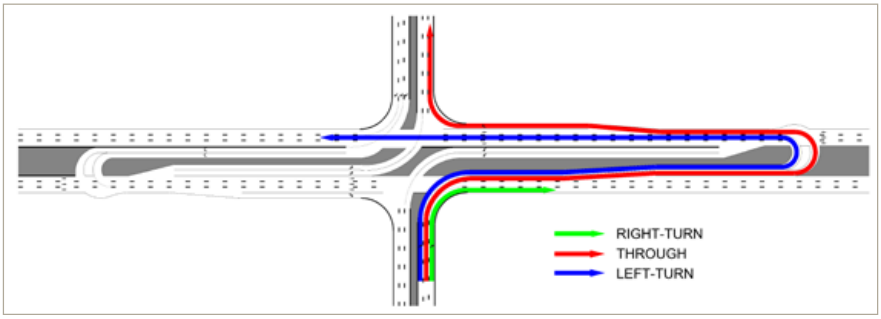
Four travel lanes will be required from SH 130 to Webberville to provide the necessary capacity in the peak periods and to provide a shared use path on one side of the roadway.

7.2.1.2.3 Superstreet Alternative

"Superstreet" is a term used for non-traditional intersection treatments that improve traffic operations on congested arterials, such as the configuration shown in **Figure 43**. The three intersections that are candidates for a Superstreet alternative treatment are Johnny Morris Road, Decker Lane (FM 3177), and FM 973.

The Superstreet sections on FM 969 would include six lanes with a raised median and curb and gutter. The proposed long-term bicycle and pedestrian facilities for each corridor will be retained. Additional

FIGURE 43 – Superstreet Intersection Example



ROW width is needed to accommodate the wider raised median at the intersections. **Table 31** summarizes the Superstreet improvements design criteria.

LOS comparison of the long-term and Superstreet delay was analyzed for these intersections. **Table 32** summarizes the delays for the conventional and Superstreet design for the three intersections selected for this analysis.

The Superstreet at Johnny Morris Road increased the delay 11 and 20 seconds for the AM and PM peak hours, respectively. However, the Superstreet decreased the delay for the other two intersections. At Decker Lane, the delay decreased 22 and 3 seconds for the AM and PM peak hours, and at FM 973, the delay decreased 7 and 4 seconds for the AM and PM peak hours.

TABLE 31 – Superstreet Improvements Design Criteria

	US 183 TO DECKER LN (FM 3177)		DECKER LN (FM 3177) TO SH 130	
	Minimums	Provided/Desired	Minimums	Provided/Desired
AREA TYPE/FACILITY TYPE	**URBAN ARTERIAL**		**SUBURBAN ARTERIAL**	
DESIGN SPEED (Recommended/Minimum)	45	50	50	50
MINIMUM RADIUS (Usual Minimum)	960	1806	960	1973
SUPER ELEVATION MAXIMUM	N/A	8%	8%	8%
K Values (Crest/Sag)[+]	(84/96)	––	(84/96)	––
LANE WIDTH (Minimum)	11	12	11	12
MEDIAN WIDTH (inside edge of travel lanes)	4	12 thru 60	4	12 thru 74
TWO-WAY LEFT-TURN LANE	N/A	N/A	N/A	N/A
CLEAR ZONE	10	20	10	20
BORDER WIDTH[++]	0	0	5	8
BICYCLE LANE/CYCLE TRACK*	5	8	5	8
SHOULDERS (outside)	N/A	N/A	N/A	N/A
SIDEWALK	5	6	5	6

* *Proposed striped or signed area for cyclists.*
[+] *Length of vertical curve per percent change in the algebraic difference in grades*
[++] *Distance between edge of roadway and ROW line.*
Source: FHWA, Alternative Intersections/Interchanges: Informational Report (AIIR)

TABLE 32 – Delay Analysis

Intersection	Peak Hour	Total Volume	Average Delay (sec/veh) Conventional	Superstreet
Johnny Morris	AM	3,694	18.7	29.3
	PM	4,316	24.0	43.9
Decker Lane (FM3177)	AM	4,193	61.0	39.3
	PM	3,576	35.2	32.4
FM 973	AM	3,225	35.7	28.3
	PM	3,332	28.3	24.2

7.2.2 Bicycle and Pedestrian

As noted previously, the current outside lane width between US 183 and Decker Lane does not provide sufficient space to provide the required clearance between traffic and bicyclists. The short-term restriping project that would reduce lane widths for the two-way left-turn lane and each of the four travel lanes would provide adequate room to stripe a dedicated bicycle lane in each direction.

Short-term sidewalk projects will improve safety for pedestrians by providing a paved surface to walk on that is away from traffic. The short-term shared use path on Johnny Morris Road is recommended to address an observed existing need. There is a proposed trail project along Walnut Creek through the Parks and Recreation Department. As these projects move to implementation, an analysis should be performed to see if the Walnut Creek trail is a suitable alternative to improvements along Johnny Morris Road.

The proposed improvement to add a pedestrian-actuated traffic signal at Regency Drive and a sidewalk between Regency Drive and Craigwood Drive was in response to public comments about residents walking to the convenience store located at the corner of Craigwood Drive and FM 969. The project will need additional analysis to see if the traffic signal meets warrants for installation.

The long-term roadway projects include either sidewalks and cycle tracks or a shared use path on one side of FM 969. Cycle tracks provide a physical barrier from vehicular traffic and would be beneficial on a major commuter corridor like FM 969. The long-term roadway projects provided in **Appendix I** include sidewalks and landscaping on both sides of FM 969 between US 183 and Hunters Bend Road. East of Hunters Bend Road, a shared use path would be provided on one side of the roadway. The type of bicycle and pedestrian facilities to be provided will be determined during project development.

7.2.3 Transit

Proposed projects for improving bus transit service are limited by operational considerations at Capital Metro. Capital Metro requires that sidewalks are provided to new bus stops. The proposed sidewalk projects and the FM 969 PTF may partially address this requirement since improvements are limited to one side of the roadway. No bus stops are currently located on FM 969 due to the high posted speed limit which makes it unsafe to stop a bus in the outside travel lane. Bus bays would need to be provided in the long-term improvements to remove buses from traffic flow. When the ultimate long-term roadway projects are implemented, the development along FM 969 may evolve and warrant a lower speed limit and/or high-capacity bus transit.

CARTS is the rural transit provider for those residents outside of the Capital Metro service area, which currently only extends to Decker Lane. As of March 29, 2012, the U.S. Census included the rural subdivisions of Austin's Colony, Kennedy Estates, Forest Bluff, and Chaparral Crossing in the Austin urbanized boundary. This change makes these areas ineligible for CARTS service beginning September 1, 2013. A service transition plan is in development in coordination with TxDOT, FTA, Capital Metro, and CARTS.

7.2.4 Safety

There are several proposed short-term improvements that may be implemented by TxDOT to improve safety. Installation of traffic signals at the SH 130 ramps will be needed to provide a safe gap in the traffic flow on FM 969 during peak periods. The intersection will need to be evaluated to be sure it meets traffic signal warrants. A low-cost project

that could be done with TxDOT forces would be to install rumble strips on the ramps in advance of the intersection and to place flashing lights on the stop signs.

A second project would be to install safety lighting (i.e., street lights) at the intersection of FM 969 and FM 973. While there were not any nighttime crashes at this intersection between 2008 and 2010, the chances of occurrence will increase as the planned subdivisions east of SH 130 move to construction.

7.3 FUNDING SOURCES

Traditional federal, State, and local funding sources are among the most attractive alternatives for financing a variety of transportation projects. These funding sources generally provide a definable, predictable flow of financial resources as well as a clearly defined set of rules, requirements, and how-to manuals to secure the funds. They also provide established institutional forums with clear lines of authority for achieving and carrying out stakeholder consensus.

The federal transportation funding program administered by CAMPO requires projects be included in a financially constrained long-range transportation plan that defines project and programmatic use of the anticipated federal funding.

To a similar extent, certain local funding resources, such as bond offerings, are also bound by programmatic constraints as most jurisdictions have bond caps or are limited by bond ratings that can make general obligation bond financing for large projects difficult.

The traditional funding sources described below include a summary of the pertinent sources available from the U.S. Department of Transportation, State and local sources. A more thorough listing of funding sources is provided in **Appendix I**.

7.3.1 U.S. Department of Transportation Funding Sources

There are various federal transportation resources available for the funding of street and highway, public transit, and bicycle and pedestrian improvements. The U.S. Department of Transportation channels financial assistance for transportation facilities and operations for those proposed for FM 969 through the Federal Highway Administration (FHWA) and the FTA. Most of these programs require an 80% federal share and 20% non-federal match.

The distribution of federal transportation funds is the responsibility of the CAMPO Policy Board. Being part of the CAMPO region means that federal funds for transportation projects can only be obtained if those projects are part of the financially constrained long-range transportation plan, and if they have been programmed for implementation in the Transportation Improvement Program (TIP). For projects to be considered for inclusion in the TIP, each project is ranked based on systematic procedures to determine whether the project provides the greatest achievement of desired regional outcomes for every dollar expended. Since federal funding is limited, the competition among regional transportation improvement projects is high.

7.3.1.1 Federal Highway Administration

Federal and State roadways are maintained by TxDOT and coordination of funding for vehicular transportation services must occur with the appropriate TxDOT Austin District staff. Listed below are the relevant FHWA funding sources based on preliminary summaries of the new federal surface transportation programs provided in the new federal

surface transportation bill, MAP-21, enacted July 6, 2012. Current allocation of the various FY 2012 FHWA funds to TxDOT Districts, metropolitan planning organizations, and projects is described in detail in TxDOT's 2012 *Unified Transportation Program* and amendments.[26]

Transportation Mobility Program[27] – This program replaces the previous Surface Transportation Program but retains the same block grant funding program with subcategories for states and urban areas. These funds can be used for any road that is not functionally classified as a local road or rural minor collector. The funding ratio has been 80 federal/20 local. As mentioned above, projects are prioritized and selected by the CAMPO Policy Board for this program.

Transportation Alternatives Program[28] – This program encompasses the previous Transportation Enhancements, Safe Routes to School, Recreational Trails and Scenic Byways programs into a subset of the Congestion Mitigation and Air Quality Program.

7.3.1.2 Federal Transit Administration

Capital Metro provides service within its designated service boundary and CARTS provides the bus service in the rural areas and between rural areas and the City of Austin. FTA provides transportation planning assistance, financial assistance to transit operators in urban communities and rural areas, as well as capital improvement funding. These resources are formula based and distributed according to population size and density. MAP-21 includes modifications to FTA programs as noted.

Urbanized Area – FTA Section 5307 – The Urbanized Area Formula Funding Program makes federal resources available to urbanized areas for transit planning, transit capital and operating assistance in urbanized areas with a population of 50,000 or more (FTA, 2011a). As previously mentioned in **Section 4.2.3,2**, the UZA boundaries were updated by the U.S. Census in March 2012. The boundary changes will reduce the CARTS service area. To fill the gap between the Capital Metro service area and the new UZA boundary, Travis County or another entity may need to request a sub-allocation of these funds to provide transit service. As an example, Harris County Transit provides service to those areas in Harris County that are not a part of the METRO service area. MAP-21 moves the Job Access and Reverse Commute program to this section.[29]

Elderly and Disabled – FTA Section 5310 – This funding provides support the special transportation needs of elderly individuals and individuals with disabilities.[30] MAP-21 merges this program with New Freedom (FTA Section 5317) and increases the funding levels compared to current levels.[31]

New Freedom – FTA Section 5317 – This funding was available for transportation projects that support new public transportation services and alternatives beyond those required by the Americans with Disabilities Act that are designed to assist individuals with disabilities with accessing transportation service, including transportation to and from jobs, and employment support services.[32] This program has

26 *TxDOT (Texas Department of Transportation), 2012.* 2012 Unified Transportation Program*, http://www.txdot.gov/business/governments/unified_transportation.htm Website accessed June 26, 2012.*

27 *U.S. Senate, 2012. Committee on Environment and Public Works. Summary of Moving Ahead for Progress in the 21st Century (MAP-21). http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=6d1e2690-6bc7-4e13-9169-0e7bc2ca0098. Website accessed July 1, 2012.*

28 *U.S. Senate, 2012. Committee on Environment and Public Works. Summary of Moving Ahead for Progress in the 21st Century (MAP-21). http://epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=6d1e2690-6bc7-4e13-9169-0e7bc2ca0098. Website accessed July 1, 2012.*

29 *Ibid*

30 *FTA Formula Grants for Section 5305, 5307, 5310, 5316, and 5317. FTA, 2012. http://www.fta.dot.gov/grants/13093.html. Website accessed May 12, 2012.*

31 *U.S. House of Representatives, 2012. Committee of the Conference. Joint Explanatory Statement. http://docs.house.gov/billsthisweek/20120625/HR4348crJESih.pdf. Website accessed July 1, 2012.*

32 *FTA Formula Grants for Section 5305, 5307, 5310, 5316, and 5317. FTA, 2012. http://www.fta.dot.gov/grants/13093.html. Website accessed May 12, 2012.*

been merged with FTA Section 5310 program serving elderly and disabled populations.[33]

7.3.2 Local Funding Sources

Any costs for street and highway, public transit, and bicycle and pedestrian improvements not covered by federal and/or State programs are the responsibility of the local governmental jurisdictions. Local funding can come from a variety of sources including property taxes, sales taxes, user fees, special assessments, and impact fees. The most common potential sources are discussed below.

Property Taxes – Property taxation has historically been the primary source of revenue for local governments in the United States. Property taxes account for more than 80% of all local tax revenues. Property is not subject to federal government taxation, and state governments have, in recent years, shown an increasing willingness to leave this important source of funding to local governments.

General Sales Taxes – The general sales tax is also an important revenue source for local governments. The most commonly known form of the general sales tax is the retail sales tax, which is imposed on a wide range of commodities. The rate is usually a uniform percentage of the selling price. The City of Austin collects a 2% sales tax, with 1% dedicated to Capital Metro.

User Fees – User fees are fees collected from those who utilize a service or facility. The fees are collected to pay for the cost of a facility, finance the cost of operations, and/or generate revenue for other uses. User fees are commonly charged for public parks, water and sewer services, transit systems, and solid waste facilities. The theory behind the user fee is that those who directly benefit from these public improvements pay for the associated cost.

State funding for highway projects is used primarily as match for federal funding. Highway projects that are built with 100% state funds are generally preventative maintenance or rehabilitation projects.

Special Assessments – Special assessment is a method of generating funds for public improvements, whereby the cost of a public improvement is collected from those who directly benefit from it. In many instances, new streets are financed by special assessment. The owners of property located adjacent to the new streets are assessed a portion of the cost of the roadway, based on the amount of footage they own adjacent to the transportation improvement. Special assessments have also been used to generate funds for general improvements within special districts, such as central business districts. In some cases, these assessments are paid over a period of time, rather than as a lump sum payment.

Impact Fees – Development impact fees have been generally well received in other states and municipalities in the United States. New developments create increased traffic volumes on the streets around them. Development impact fees are a way of attempting to place a portion of the financial burden on developers who are creating or adding to the need for improvements.

Bond Issues – Property tax and sales tax funds can be used on a pay-as-you-go basis, or the revenues from them can be used to pay off general obligation or revenue bonds. Bonds are issued by local governments upon approval of the voting public. The Travis County PTF project will be financed

[33] *U.S. House of Representatives, 2012. Committee of the Conference. Joint Explanatory Statement. http://docs.house.gov/billsthisweek/20120625/HR4348crJESih.pdf. Website accessed July 1, 2012.*

through certificates of obligations, a form of bond financing. The proposed improvements included in this report were considered by the City of Austin's Bond Election Advisory Task Force for the proposed 2012 bond package.

7.3.3 Innovative Financing

7.3.3.1 Direct or Indirect User Fees

Non-federal sources of revenue to provide a funding stream for bonding or other debt strategies include user fees such as tolls or value capture. The following group of potential funding sources often requires cooperation and voluntary participation of other governmental entities.

Tolls – Tolls are considered a direct user fee and provide a reliable, predictable revenue stream for repayment over time. Except for projects where volumes are high and alternative routes are inconvenient due to distance or high levels of congestion, tolls typically provide only a portion of the total revenue needed to fully fund a project. For this reason, most toll projects are either in heavily congested urban areas, or are associated with a bridge across a river or other physical constraint.

Indirect user fees such as pass-through tolls through which per vehicle amounts paid to a facility operator by a third party such as a sponsoring governmental entity and not by facility users. Travis County has executed a PTF agreement with TxDOT as described in **Section 4.2.5.2, Travis County Projects**. TxDOT will reimburse Travis County for 71% of the construction cost as a negotiated cost per vehicle using the improved roadway.

Value Capture – If a project is being billed as an economic development project, then by definition, some sector of the community should benefit economically by the implementation of the project. Value capture strategies leverage the increase in economic value that the project brings to the community and apply this increase to paying for the transportation improvements. A common mechanism in this category is described below.

Tax increment financing mechanisms use future gains in taxes, usually ad valorem property taxes, to finance the current improvements that will create those gains. This strategy works best in an environment where development levels are low or where development is taking place at a relatively slow pace. This strategy is most effective when the development that brings about the incremental increase in tax revenue would clearly not have taken place without the existence of the roadway, such as the development of office or industrial parks in a previously rural area.

Tax increment financing mechanisms are most commonly associated with land use development or redevelopment projects. While transportation improvements can be included as they benefit the land use projects, they are not the sole focus as transportation projects do not generate ad valorem property taxes.

Value capture strategies are among the hardest to carry out, but may be a viable option for generating local funds to help with major projects, such as a transit oriented development project. They require the cooperation of more government entities and the consensus of a broader set of stakeholders than any of the other approaches. Typically, a tax referendum is required. Value capture strategies also require an in-depth understanding of the potential economic impacts of the project. This deeper understanding is required both to:

- Mitigate risks that would accrue if the anticipated tax revenues do not materialize.
- Quantify the anticipated increase in tax revenue or economic benefit, and to demonstrate to the

stakeholders that this benefit is not only real, but is derived directly and exclusively from the implementation of the transportation project.

Despite the higher hurdles, when associated with a well thought-out project, value capture strategies are among the most sustainable because they are community based and do not dip into existing programmatic resources or revenue streams to the detriment of other initiatives. The value capture strategies are particularly powerful and persuasive when combined with State Infrastructure Bank Financing.

7.3.3.2 Municipal Economic Development Tools

Similar to previously discussed indirect user fees, there are additional economic development tools available to the City of Austin to finance improvements within the city limits, including venue project taxes, interlocal agreements, or various economic development districts.

Interlocal Agreements – Rather than undertaking individual initiatives, city and county leaders can work together to try to attract and retain business development. Such cooperation is formalized with an interlocal agreement, which outlines each entity's respective duties. The Interlocal Cooperation Act (Government Code – Chapter 791) also allows local governments to contract with the State or a council of governments to allow for the joint pursuit of governmental functions often related to economic development.

Public Improvement District – Similar to the previously discussed value capture strategy, the Public Improvement District Assessment Act (Local Government Code - Chapter 372) allows a city to finance needed public improvements by levying and collecting special assessments on property within its jurisdiction. By forming a Public Improvement Districts, cities can establish a funding source for the upgrade of substandard utility and public services as well as public facilities, including street, sidewalk, and transit improvements. The Public Improvement District must be petitioned, an improvement plan developed, and a resolution adopted which authorizes the creation of the Public Improvement District.

Municipal Management District – Municipal Management Districts (Local Government Code - Chapter 375) are fairly new and are created within an existing commercial area to finance facilities and infrastructure enhancements beyond those already provided by the governing entity. Improvements are paid for by assessment, property tax, or impact fee charged to property owners located within the district. Municipal Management Districts are petitioned by affected property owners. There are additional revenue vehicles available, such as Municipal Development Districts (Local Government Code - Chapter 377), Neighborhood Empowerment Zones (Local Government Code - Chapter 378), or Local Government Corporations (Texas Transportation Code - Section 431.101).

8.0 FUTURE LAND USE MANAGEMENT STRATEGIES

The City of Austin has 29 adopted Neighborhood Plans that cover a majority of the city as shown in **Figure 44.** The MLK-183 Neighborhood Plan shown in **Figure 45** includes the two subdivisions that access FM 969 by way of Craigwood Drive and Regency Drive. The FM 969 corridor east of the old MOKAN railroad ROW has not yet been included in a formal neighborhood planning process.

While the area outside of the Austin city limits has not gone through a neighborhood planning effort, the *Colorado River Corridor Plan* prepared by Travis County provides a long-term concept plan for property located between FM 969 and SH 71.

8.1 FUTURE CORRIDOR NEEDS

8.1.1 Corridor Land Use Plan

The existing land uses along FM 969 are an inconsistent mix of industrial, commercial, community facilities, and residential. Future development and/or redevelopment along the corridor inside of the Austin city limits should be guided by a community-based vision of how the corridor should evolve.

The city has limited ability to guide land use in the ETJ. Travis County does not have the authority to establish zoning in the unincorporated areas of the county. Travis County and the City of Austin should encourage the residents of Austin's Colony, Forest Bluff and Kennedy Ridge Estates to undertake a voluntary land use planning effort for the corridor between SH 130 and Dunlap Road that would guide the future development of the emerging activity center in a manner that is consistent with the *Colorado River Corridor Plan*.

8.1.2 Urban Design

The *CAMPO 2035 RTP* shows a future activity center at the intersection of FM 969 and SH 130. Because the area is outside of the Austin city limits, there is no mechanism to create a neighborhood land use plan to guide future development in this area. Counties have not been granted land use control by the State legislature. Legislation has been introduced in previous sessions, but none have been successful.

RECOMMENDATION: Travis County and the City of Austin should support efforts in the 2013 legislative session to obtain land use controls (i.e., planning/zoning) for counties for those areas located within ETJs.

8.1.2.1 Activity Center

It is recommended that the activity center shift eastward to the emerging commercial area between Hound Dog Trail and Hunters Bend Road/Delta Post Drive. If the concept of an activity center between Gilbert Road and Hunters Bend Road moves forward, alternative typical sections shown in **Figure 46** and **Figure 47** could be considered. These typical sections reflect the desired emphasis on pedestrian and bicycle activities as described in **Section 4.1.2**. Ideally, the proposed alternative typical sections would be confirmed through a community driven land use or neighborhood plan in coordination with Travis County, City of Austin, and TxDOT.

The long-term goal is for FM 969 to become a more pedestrian-friendly multimodal corridor. One way to accomplish this goal is to establish new guidelines for development or redevelopment of property within the Austin city limits and its ETJ. The sections

FIGURE 44 – City of Austin Neighborhood Plans

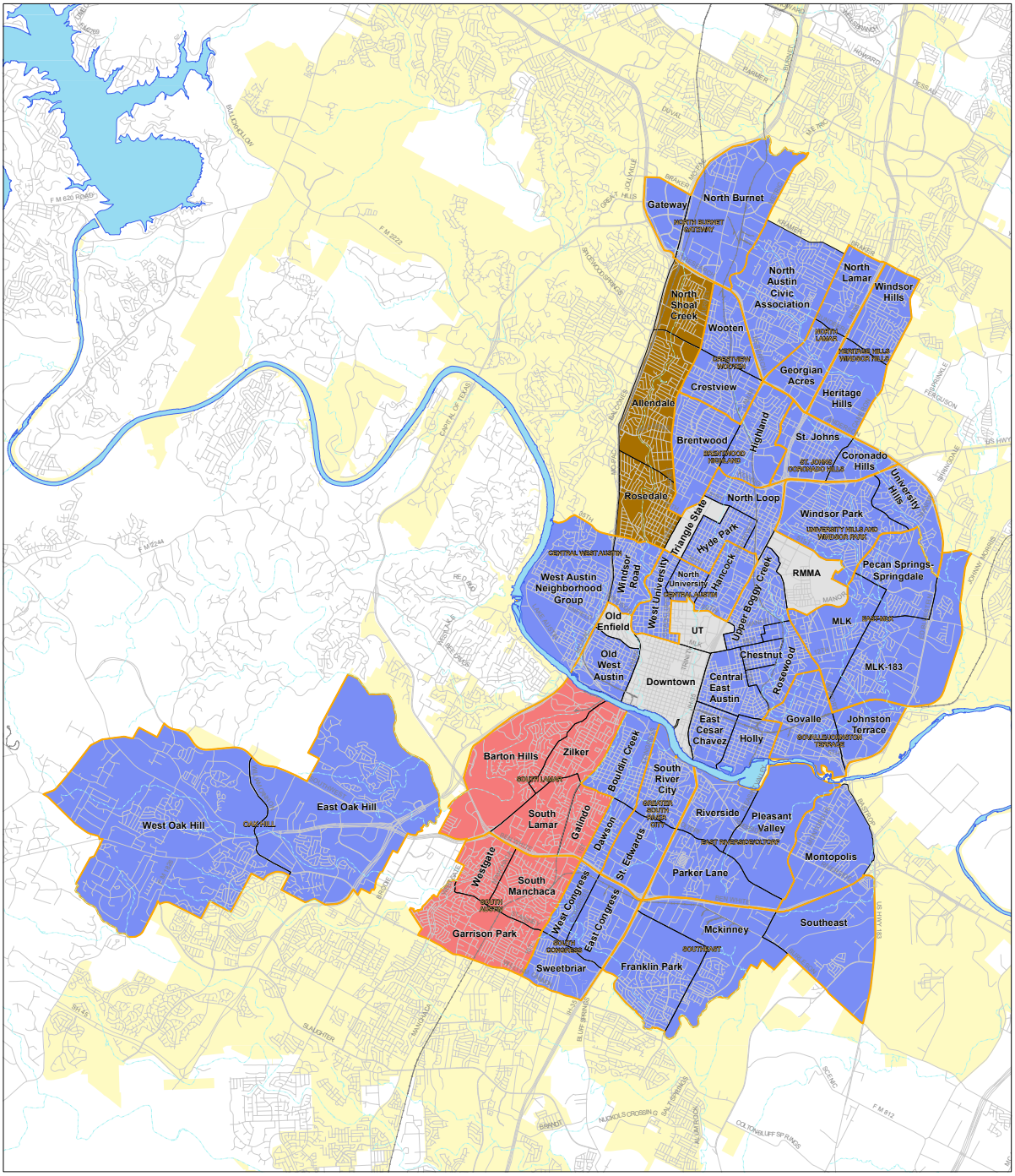
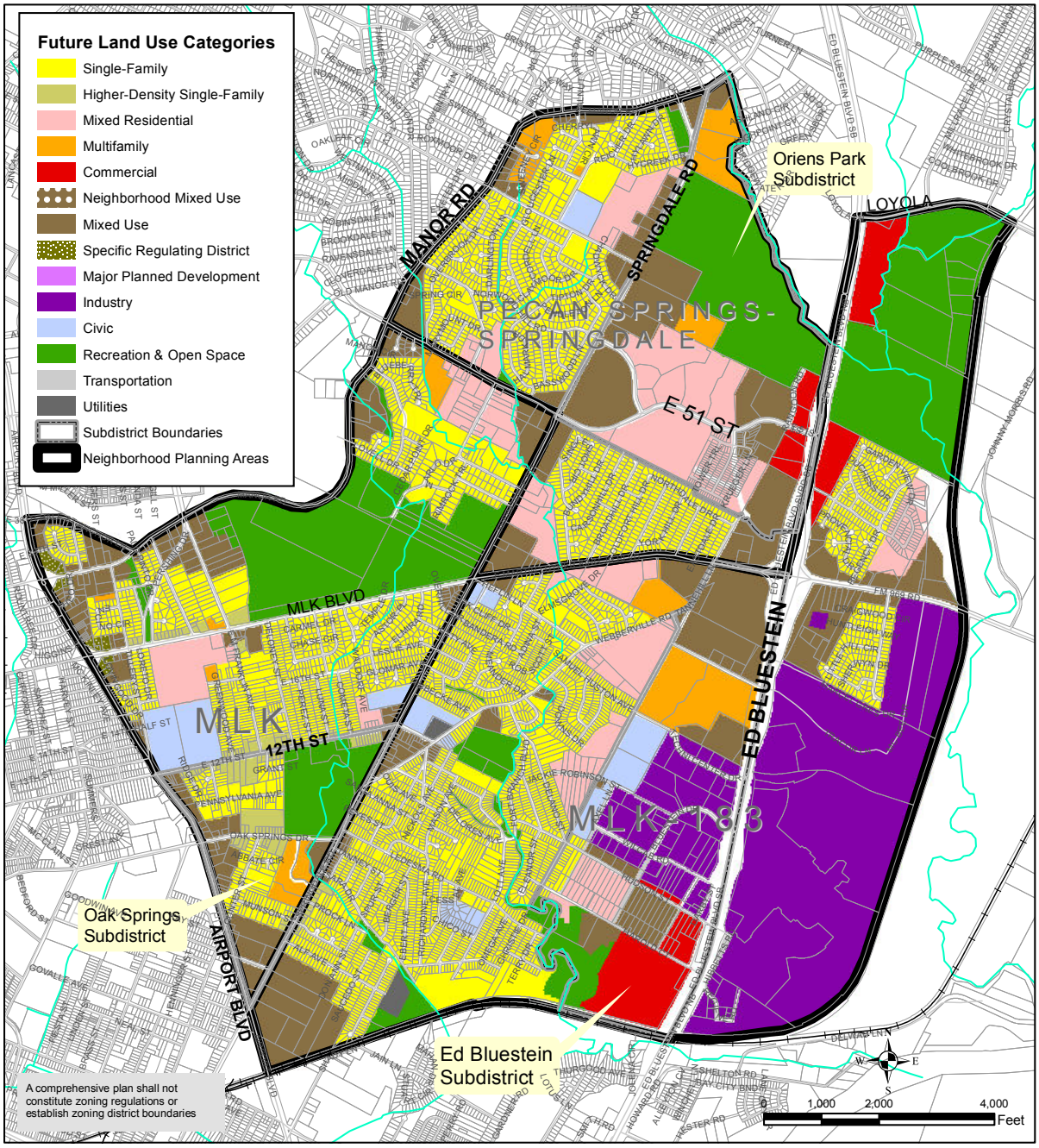


FIGURE 45 – The MLK-183 Neighborhood Plan



East MLK Combined Neighborhood Planning Area Future Land Use Map

City of Austin
Planning and Development Review Department

Updated: June 25, 2012

FIGURE 46 – Village Street (Hound Dog Trail to Hunters Bend Road) Basic Section

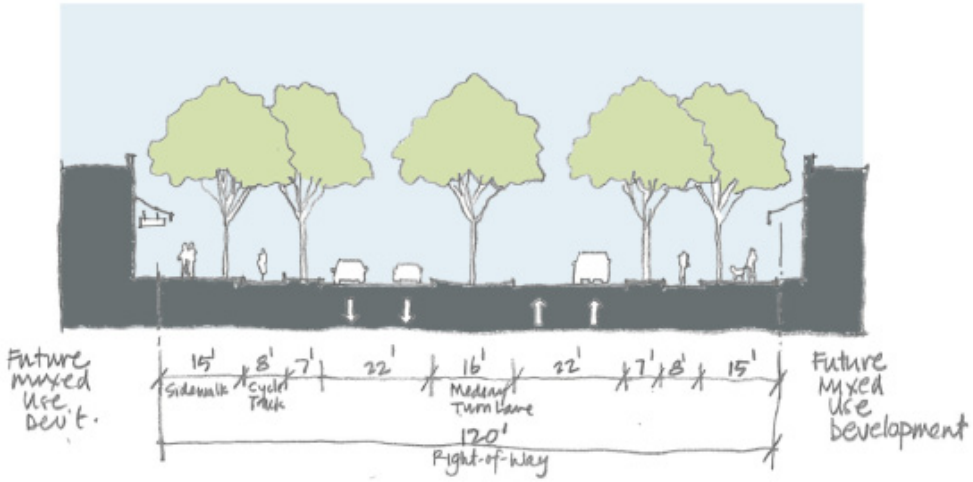
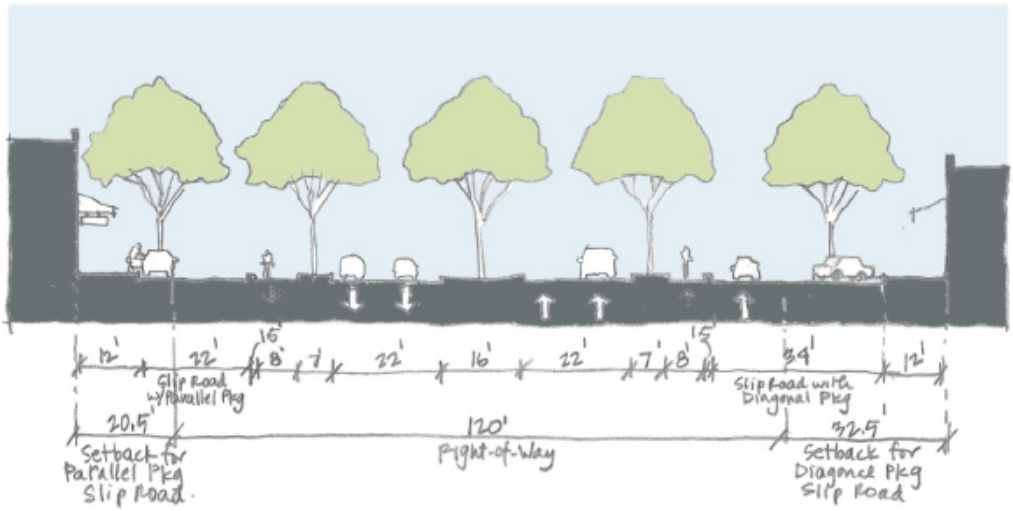


FIGURE 47 – Village Street with Slip Roads



below provide examples of how urban design elements could be addressed.

8.1.2.2 Landcape Elements

Landscape development of the FM 969 corridor should be a collaborative effort with local stakeholders, transit providers, TxDOT, and County and City agencies. Recommendations from previous studies* could be incorporated into the landscape development program for the FM 969 corridor, and coordinated with the development of open spaces that will be an integrated system of parks, greenways, and natural areas as identified by Travis County and City of Austin. Multimodal transportation (trails, sidewalks, bikeways, etc.) may be integrated into the park and transportation system and developed in a manner that supports preservation of open space and natural areas.

Landscape design within the corridor should reflect the framework of the overall project goals and should not be placed where future roadway widening, drainage improvements or utility expansion, including overhead utilities, require the future removal of installed landscapes. Planning the location of potential landscape areas may allow early installation of trees or other landscape areas without a negative impact to future corridor development. Early tree and landscape improvements will have a positive impact to the corridor, allowing trees to mature and become appropriately scaled for future corridor improvements.

** Colorado River Corridor Plan; Travis County Parks and Natural Areas Master Plan; Long Range Plan for Land, Facilities, and Programs; Travis County Greenprint for Growth*

In addition to planning for corridor expansion, the landscape should also be designed in accordance with applicable regulations within the corridor including the City of Austin Land Development Code and the TxDOT Landscape and Aesthetics Design Manual. Proper sight distances and safety sight triangles should be maintained at all times with an understanding of how plants mature and may impact future corridor improvements. Future improvements that require root barriers, or other devices, should have those installed at the time of landscape installation instead of waiting until the installation of future improvements.

Appropriate selection of plant materials should reflect the typical climatic and geologic conditions (i.e., weather and soil) present along the corridor. Climatic conditions are not anticipated to vary significantly over the length of the corridor. However, soil conditions should be expected to vary from one end to the other. Although the soils are anticipated to be clayey, the textural composition of the soil is likely to change from lowland to upland areas. As a result, the changing soil conditions will impact landscape design.

RECOMMENDATION:
Prepare a Corridor Land Use Development Plan from US 183 to Hunters Bend to establish a community-based vision for land use and redevelopment, including landscape guidelines.

8.2 POLICY RECOMMENDATIONS

Development in the Austin ETJ is controlled through the city's development code and subdivision standards. The *Imagine Austin* plan and *CAMPO 2035 RTP* identify the SH 130 interchange as a future activity center.

RECOMMENDATION: Relocate the activity center from the SH 130 interchange to the area between Gilbert Road and Hunters Bend Road based on the recent commercial development at Hunters Bend Road and the proximity to existing neighborhoods and schools.

8.3 IMPLEMENTATION STRATEGIES

A comprehensive neighborhood plan for the FM 969 corridor would synthesize the future land use goals in the area.

RECOMMENDATION:

- Develop a Neighborhood plan for the FM 969 corridor
  - The neighborhood planning section of the planning and development review department should develop a neighborhood plan for the FM 969 corridor between the MOKAN row and the east city limits that extends from Loyola lane to the Colorado River. This effort would merge the previous planning efforts for parks and recreation, Travis County's Colorado River Corridor Plan, and transportation into a comprehensive document.
- Interagency coordination beyond city limits
  - Outside of the city limits, a collaborative effort supported by Travis County, the City of Austin, existing neighborhood associations, and the school districts should consider developing a community-based long-term vision for land use along FM 969. This effort may be coordinated through the Capital Area Council of Governments (CAPCOG).